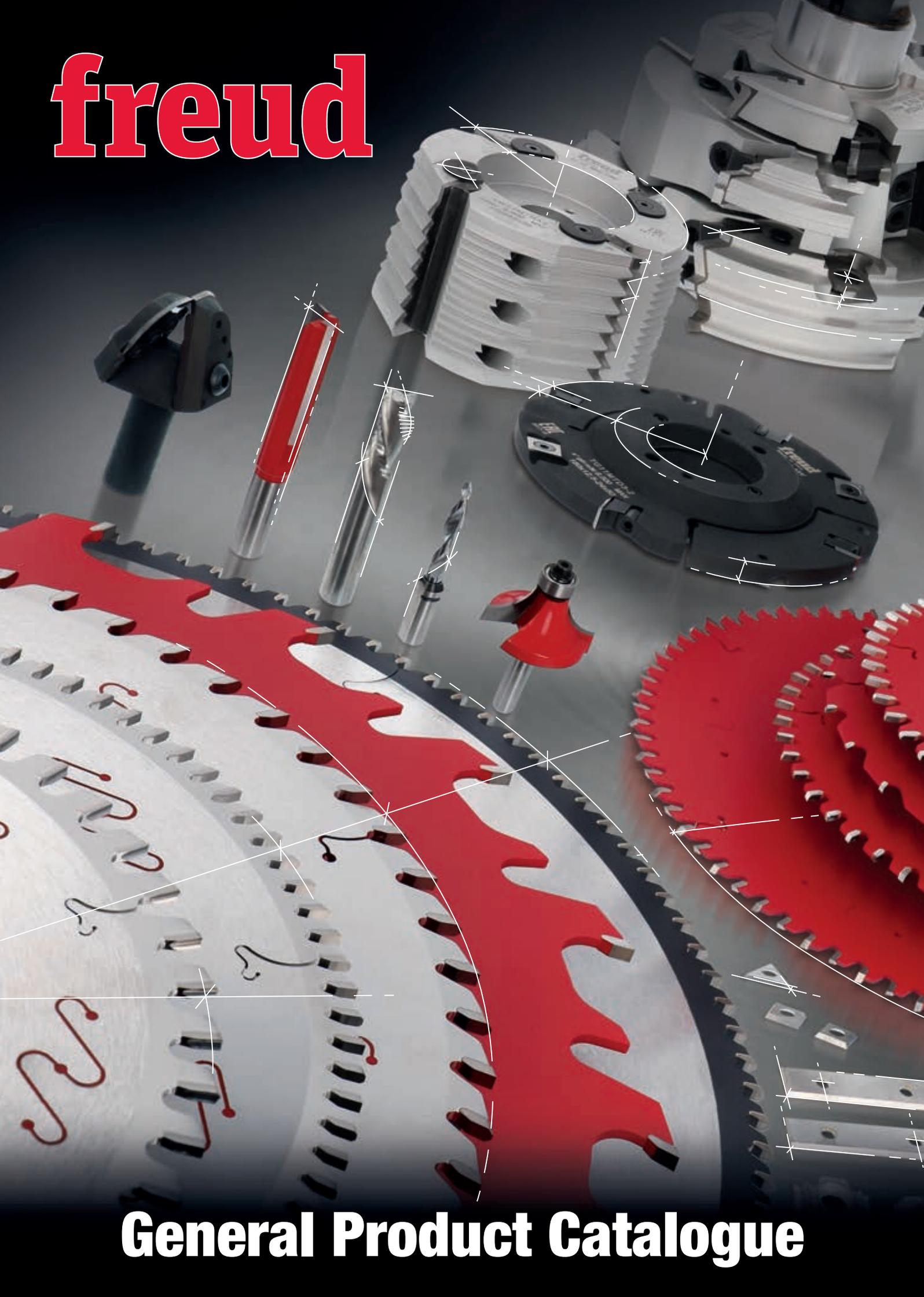


freud



General Product Catalogue

INDEX

FREUD - LEADING TECHNOLOGY 3

CIRCULAR SAW BLADES FOR STATIONARY MACHINES 5

CIRCULAR SAW BLADES FOR PORTABLE MACHINES 110

ROUTING TOOLS FOR CNC MACHINES 143

ROUTING TOOLS FOR PORTABLE MACHINES 237

CUTTERHEADS AND BRAZED CUTTERS 332

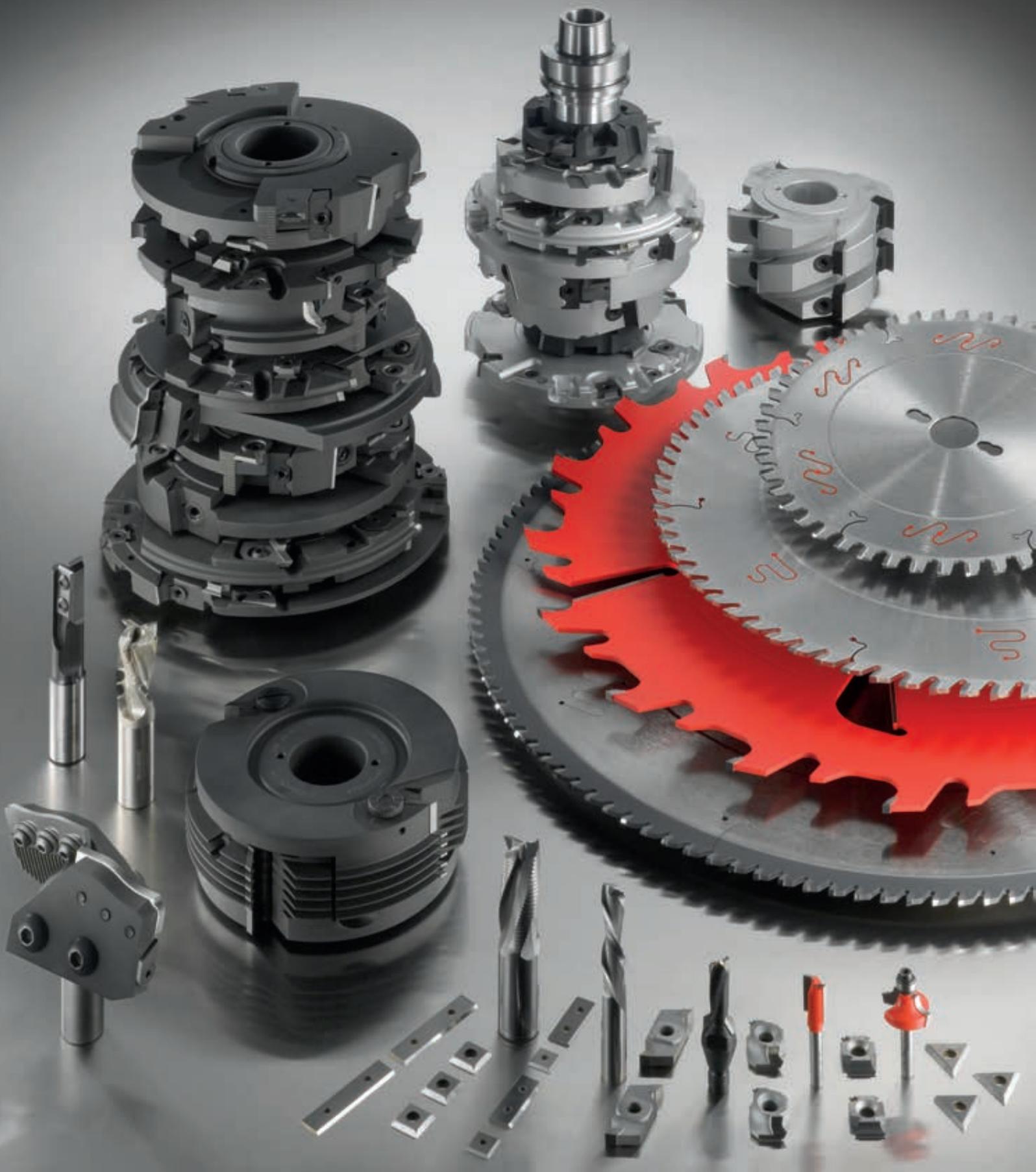
WINDOW TOOLING 446

KNIVES AND INSERTS IN HW AND HSS 483

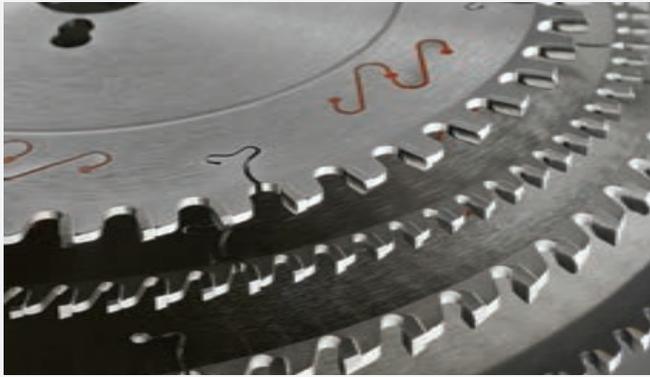
ACCESSORIES AND SPARE PARTS 530

EXPLANATION OF SYMBOLS AND ABBREVIATIONS 562

Precisely the best



LEADING TECHNOLOGY



Freud - Leading the industrial market since 1962

Freud is a worldwide leader in the cutting tool industry and the biggest manufacturer of premium circular saw blades. Since 1962, Freud designs and produces an extensive range of superior quality circular saw blades, cutter heads & router bits, drilling, routing & CNC tools as well as knives and accessories.

Freud's technologies and solutions Perfection crafted for your needs

Freud's premium quality cutting tools are produced with unique and innovative features. The company owns and controls the entire tool manufacturing process, with a full and strict monitoring over quality, across its plants in Italy. The continuous investment in Research & Development, combined with Freud's strong engineering competence and advanced technologies, results in products with innovative features, extreme precision and extended lifetime, always offering the right solution for any application need.



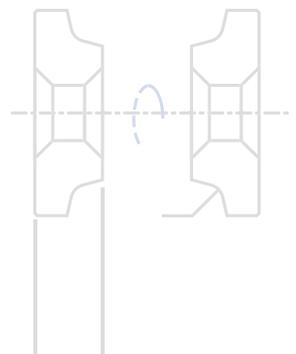
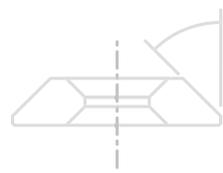
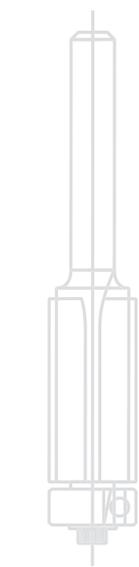
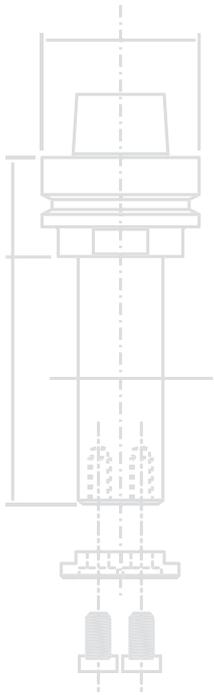
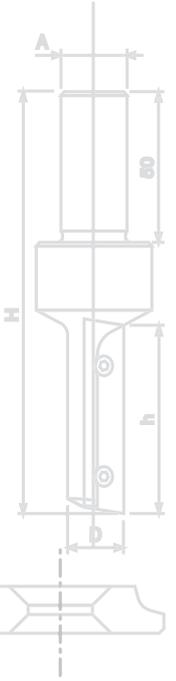
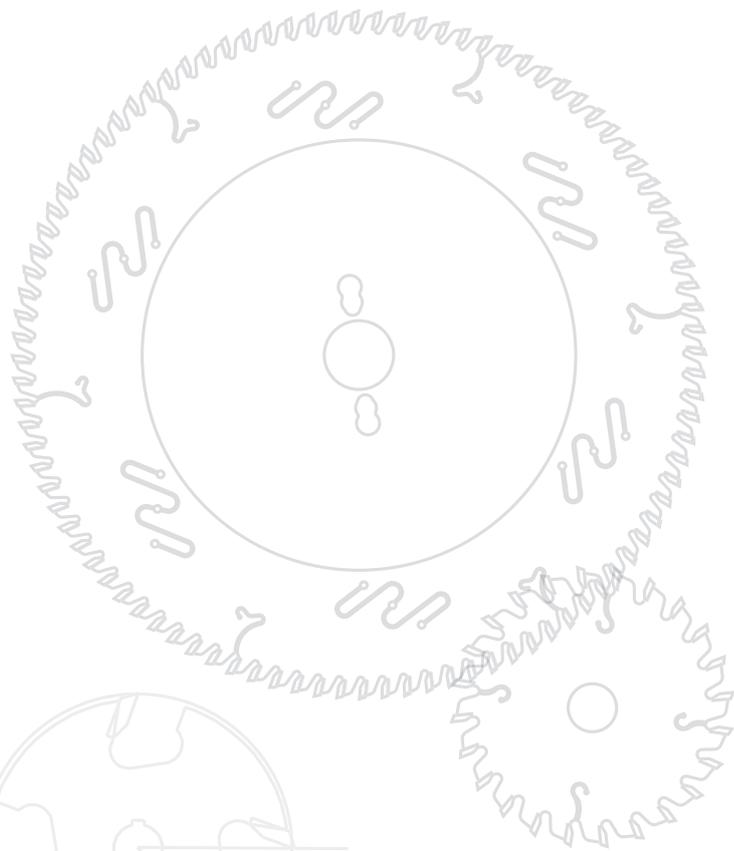
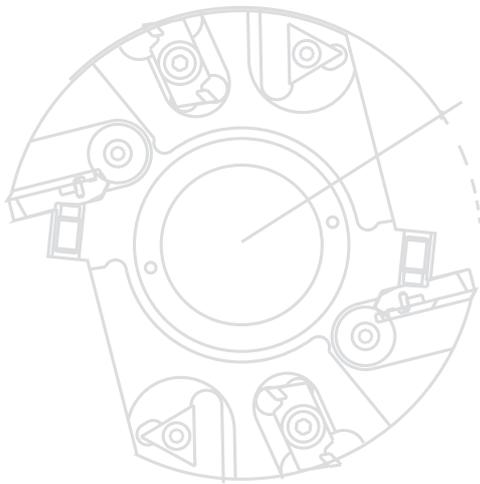
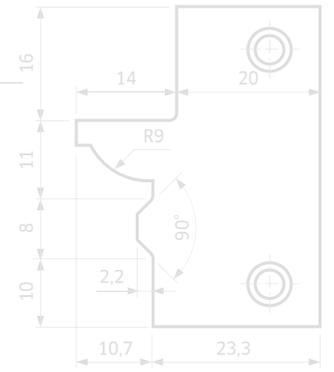
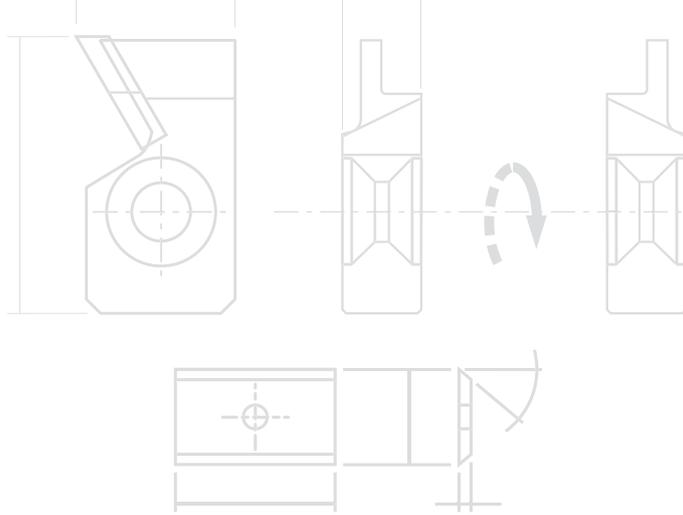
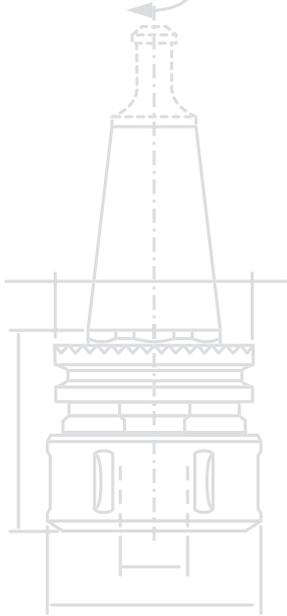
Technological supremacy In-house Carbide production since 1980

Freud prides itself of a unique in the world in-house production and sintering of Carbide components, for superior quality cutting tools. Freud TiCo Carbide, a specially formulated, highly compact combination of Titanium and Cobalt Carbide, deliver maximum precision and long lasting sharpness of the cutting edge. The ability to formulate dedicated recipes, for standard and customised applications, grants the highest tool performance.

Global distribution network and extensive local support

Freud's belief in 'think global and act local' led the company to develop an extensive network of selected partners and subsidiaries, in over 90 countries worldwide. This to better support its customers wherever they are.





Circular Saw Blades for Stationary Machines



Freud's circular saw blades are crafted using premium materials, innovative designs and the industry's most sophisticated manufacturing processes and technologies.

Every blade is specifically engineered to deliver superior performance and maximum lifetime. The premium portfolio offers a wide variety of solutions for stationary machines and for specific applications, dedicated to solid wood, wood based panels, ferrous or non-ferrous metals, plastic materials and composites. All circular saw blades feature Freud's unique and industry-first attributes.

| | |
|---|---------|
| Leading technology for circular saw blades..... | Page 8 |
| Circular saw blades teeth shapes | Page 10 |
| Quick search by diameter | Page 12 |
| Circular saw blades for stationary machines | Page 22 |

SOLID WOOD

| | |
|--|---------|
| LM01 Thin kerf multiripping saw blades with rakers..... | Page 24 |
| LM02 Reduced kerf multiripping saw blades with rakers | Page 25 |
| LM03 Reduced kerf multiripping saw blades with rakers | Page 26 |
| LM04 Multiripping saw blades with rakers..... | Page 27 |
| LM05 Multiripping saw blades with rakers..... | Page 28 |
| LM06 Increased kerf multiripping saw blades with rakers | Page 29 |
| LM07 Shoulder thick kerf saw blades with rakers..... | Page 30 |
| LM08 Ultra-thin kerf multiripping saw blades | Page 31 |
| LM10 Multiripping saw blades with rakers for soft wet wood..... | Page 32 |
| LU1A Saw blades for radial and pendulum machines | Page 33 |
| LU1B Saw blades for carpentry works..... | Page 34 |
| LP70M Saw blades for on-site jobs..... | Page 35 |
| LU1C Saw blades for solid wood ripping..... | Page 36 |
| LU1D Saw blades for solid wood ripping..... | Page 37 |
| LU1E Think kerf saw blades for solid wood ripping..... | Page 38 |
| LU1F Think kerf saw blades for solid wood ripping..... | Page 39 |
| LU1G Saw blades with rounded teeth sides to cut solid wood | Page 40 |
| LU1H Think kerf saw blades for solid wood ripping & crosscutting | Page 41 |
| LU1I Saw blades to cut solid wood frames | Page 42 |
| LU1L Saw blades with axial angle to cut solid wood frames | Page 43 |
| LU1M Saw blades for optimising machines | Page 44 |
| LG1C Saw blades for solid wood ripping..... | Page 45 |

WOOD BASED PANELS

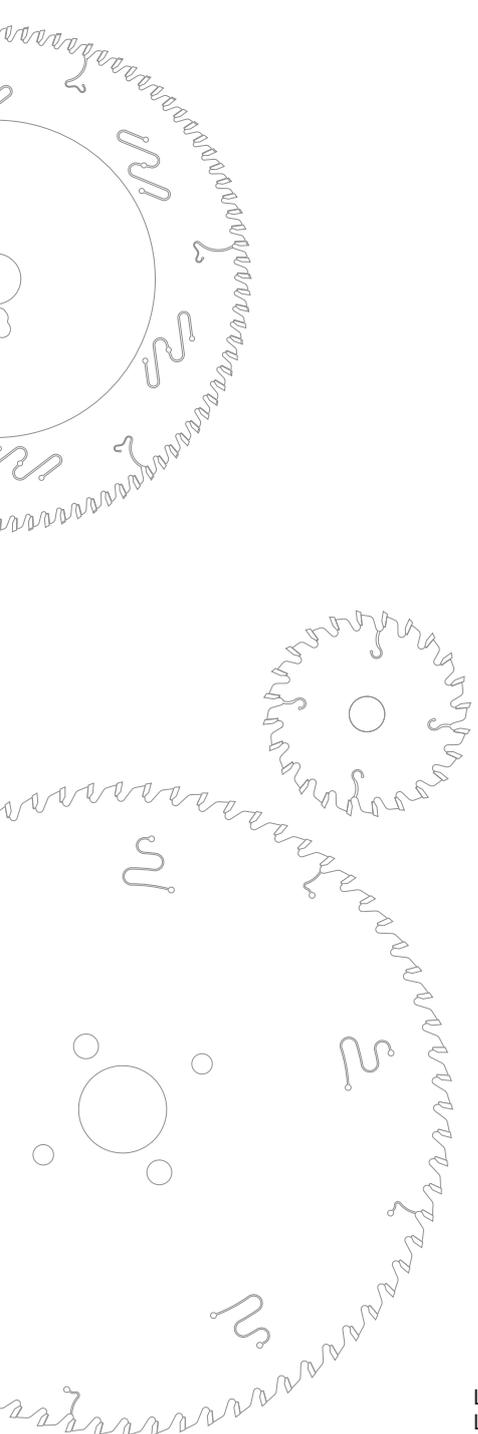
| | |
|--|---------|
| LU2A Saw blades for wood based panels ripping & crosscutting..... | Page 47 |
| LU2B Saw blades for wood based panels ripping & crosscutting..... | Page 48 |
| LU2C Saw blades for wood based panels crosscutting | Page 49 |
| LU2D Thin kerf saw blades for wood based panels crosscutting..... | Page 50 |
| LU2E Saw blades to cut exotic abrasive wood and panels..... | Page 51 |
| LU2F Saw blades to cut wood based panels, composites and plastic materials | Page 52 |
| LG2A Saw blades for wood based panels ripping & crosscutting..... | Page 53 |
| LG2B Saw blades for wood based panels ripping & crosscutting..... | Page 54 |
| LG2C Saw blades for wood based panels crosscutting | Page 55 |

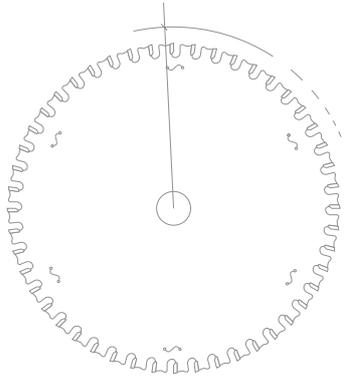
LAMINATED PANELS

| | |
|---|---------|
| Reference table of saw blades for panel sizing machines | Page 57 |
| LSB X Industrial panel sizing saw blades..... | Page 66 |
| LSC "Supercut" panel sizing saw blades with variable pitch..... | Page 69 |
| LU3A Saw blades to cut bilaminated panels | Page 70 |
| LU3B Saw blades to cut bilaminated panels | Page 71 |
| LU3C Saw blades to cut bilaminated panels | Page 72 |
| LU3D Saw blades to cut bilaminated panels | Page 73 |
| LU3E Saw blades to cut bilaminated panels | Page 74 |
| LU3F Saw blades to cut bilaminated panels and plastic materials | Page 75 |
| LG3D Saw blades to cut bilaminated panels | Page 76 |
| LU34M Saw blades for grooving and sizing on CNC units..... | Page 77 |
| LI25M Conical scoring saw blades | Page 78 |
| DLI25M Polycrystalline Diamond conical scoring saw blades (H4 - H6) | Page 80 |
| LI16M Adjustable scoring saw blades..... | Page 81 |
| DLI16M Polycrystalline Diamond adjustable scoring saw blades (H6)..... | Page 82 |
| LI27M Postforming scoring saw blades..... | Page 83 |
| LI20M Flat tooth scoring saw blades | Page 83 |
| LI17M Flat tooth scoring saw blades | Page 84 |
| LI22MD-LI22MS Inclined tooth scoring saw blades..... | Page 84 |
| LI13MD-LI13MS Inclined tooth scoring saw blades..... | Page 85 |
| LI14MD-LI14MS End trim unit for panels with banded edges | Page 85 |
| LT16MD-LT16MS Saw blades for Freud hogging units | Page 86 |
| LT12MD-LT12MS Saw blades for hogging units..... | Page 86 |
| LT14MD-LT14MS Saw blades for hogging units - customised..... | Page 87 |
| LT18MD-LT18MS Saw blades for Freud hogging units | Page 88 |
| LT20MD-LT20MS Saw blades for Leuco hogging units..... | Page 88 |
| TR16MD-TR16MS Hogging units with SR06M interchangeable inserts | Page 89 |
| MT01M Mounting sleeves for hogging units | Page 89 |

POLYMERIC MATERIALS

| | |
|--|---------|
| LU4A Saw blades to cut plastic materials | Page 91 |
| LU4B Thin kerf saw blades to cut plastic materials and plexiglas - axial angle | Page 92 |
| LU4D Saw blades to cut solid surfaces | Page 93 |





NON-FERROUS METALS

LU5A Saw blades to cut non-ferrous metals Page 95
 LU5B Saw blades to cut non-ferrous metals and plastics..... Page 96
 LU5C Saw blades to cut non-ferrous metals Page 97
 LU5D Saw blades to cut non-ferrous metals and plastics..... Page 98
 LU5E Reduced kerf saw blades to cut non-ferrous metals Page 99
 LU5F Saw blades to cut non-ferrous metals and plastics..... Page 100

FERROUS METALS

LU6A Saw blades to cut ferrous metals..... Page 102

BLA Standard reduction rings for saw blades Page 103
 OPT06 Optional workings - Standard keyways Page 103
 OPT07 Optional workings - Special keyways Page 103
 OPT08 Optional workings - Special reboring..... Page 103
 OPTF0 Optional workings - Safety pin holes for saw blades..... Page 103

Tips for the correct use of a circular saw blade Page 104
 Explanation of symbols and abbreviations Page 109

LEADING TECHNOLOGY

TiCo CARBIDE TECHNOLOGY

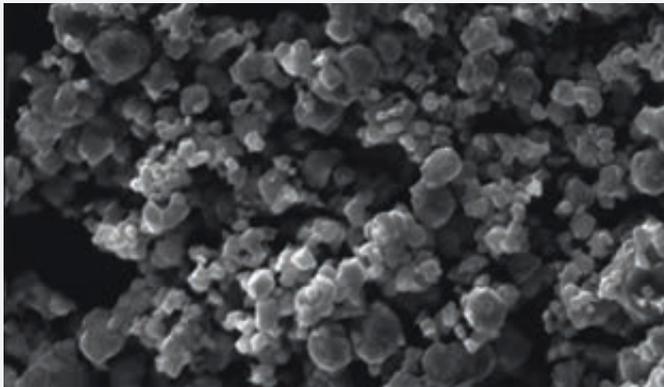
Freud's ownership and control of the entire Carbide production cycle ensures that the correct formula is used for the specific application needs, to constantly maximise the saw blade performance.



TiCo Carbide

A specially formulated, highly compact Titanium Cobalt Carbide, engineered and manufactured by Freud.

It provides a sharper edge and flawless finish with a dramatically longer cutting life.



DESIGN INNOVATION

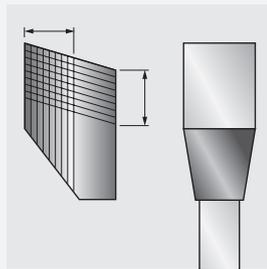
Freud's special tooth designs and geometries are engineered to perform perfect cuts and deliver extraordinary durability on industrial applications. Freud's tooth designs include: Super Square Tooth (below), Pyramid Tooth and SilenTip - each delivering outstanding precision and maximum lifetime.



Super Square Tooth

Extended lifetime - up to 25 resharpenings.

Tip thickness higher than standard for extra value for money.

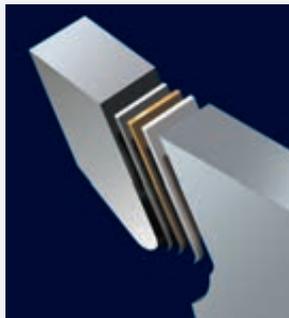


EXTREME SHOCK RESISTANCE



All Freud's circular saw blades undergo an innovative **Tri-Metal Brazing**

process that bonds the Carbide tips to the steel blade body. This special method consists of copper alloy sandwiched between layers of silver alloy, for extra flexibility and maximum impact resistance.





COATING TECHNOLOGY

All Freud's circular saw blades feature an industry-first premium coating for superior protection from heat, resin build-up and corrosion. Freud's coatings for industrial blades include: Silver I.C.E. (below); Perma-SHIELD and Black Exrim - each providing the highest performance on specific applications.



Silver I.C.E. Coating

A high performing and anticorrosive coating to maintain the blade temperature low during the working process.

The non-stick feature improves chip ejection and notably reduces resin build-up, significantly reducing friction and extending the lifetime of the blade.

ANTI-VIBRATION SOLUTIONS

A wide selection of Freud's premium circular saw blades displays advanced features for the perfect finishing.

Anti-vibration slots

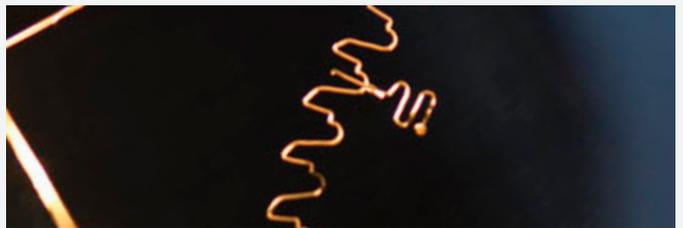


Body slots laser cut with freud innovative technology.

Also available with thermoplastic polyurethane filling, that considerably reduces vibration and minimizes noise.

LASER-CUT EXPANSION SLOTS

Special laser-cut expansion slots enable heat dispersion and prevent the blade deformation caused by overheating, granting the greatest blade stability.



TENSIONING



Freud's circular saw blades include a tensioning ring to maintain the blade flat, maximising cutting precision and performance.

PREMIUM MATERIAL

Premium Steel

Freud's circular saw blades for stationary machines are made from pre-hardened and pre-flattened superior quality steel (from 40 HRC to 48 HRC) that ensures the highest precision, performance and durability.

Saw blades teeth shape

| FLAT TOOTH | DOUBLE TRIPLE CHIP TOOTH | CONICAL TOOTH | BEVELED TOOTH |
|---|--------------------------|----------------|---------------|
| LM01 - LM02 - LM05 - LM06 - LM07 - LM08 - LM10 - LU1E - LI20M - LI17M - LT18M - LT20M | LSC - LU4D - LU6A | LI25M - DLI25M | LU1B |



| Suitable for | Suitable for | Suitable for | Suitable for |
|--|---|--|--|
|  Ripping of softwood |  Laminates / bilaminates |  Laminates (scoring saw blades) |  Ripping and crosscutting of softwood |
|  Ripping of hardwood |  Solid surfaces | |  Ripping and crosscutting of hardwood |
| |  Ferrous metals | |  Chipboard |
| | | |  Solid wood and composites with nails and impurities |

| FLAT-TRIPLE CHIP TOOTH | INCLINED TOOTH | PYRAMID TOOTH | AXIAL TOOTH |
|---|---|---------------|-------------|
| LSB X - LU3D - LU3E - LU3F - LG3D - LU4A - LU5A - LU5B - LU5C - LU5D - LU5E | LI22M - LI13M - LI14M - LT16M - LT12M - LT14M | LU5F | LU1L - LU4B |



| Suitable for | Suitable for | Suitable for | Suitable for |
|--|---|--|--|
|  Laminates / bilaminates |  Crosscutting of softwood |  Non-ferrous metals |  Crosscutting of softwood |
|  Chipboard |  Crosscutting of hardwood |  PVC |  Crosscutting of hardwood |
|  MDF |  Laminates / bilaminates | |  Picture frames |
|  Plywood |  Plywood | |  Plexiglas |
|  Plexiglas |  Scoring saw blades, for laminates | |  Plastic materials |
|  Plastic materials | | | |
|  Non-ferrous metals | | | |

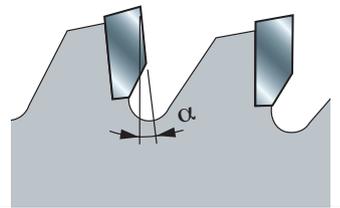
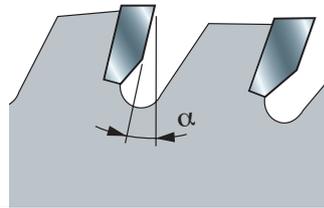
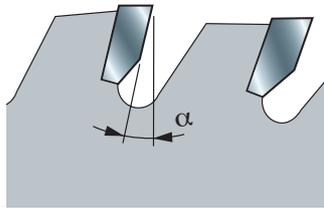
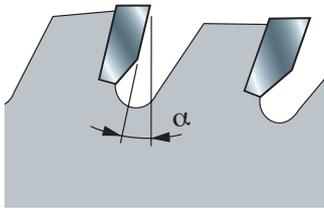
| CONCAVE TOOTH | ROUNDED TOOTH | ALTERNATE TOP BEVEL TOOTH |
|---------------|---------------|--|
| LU3B - LU3C | LU1G | LM03 - LM04 - LM08 - LU1A/C/D/F/H/I - LU1M - LP70M - LU2A/B/C/D/E/F - LG1C - LG2A - LG2B - LG2C - LU3A - LU34M - LI16M - DL16M - LI27M - |



| Suitable for | Suitable for | Suitable for |
|-------------------------|---------------------|--------------------------------------|
| Laminates / bilaminates | Ripping of softwood | Ripping and crosscutting of softwood |
| | | Ripping and crosscutting of hardwood |
| | | Chipboard |
| | | MDF |
| | | Plywood |
| | | Picture frames |

HOOK ANGLES

(α) $15^\circ \div 25^\circ$ (α) $5^\circ \div 15^\circ$ (α) $0^\circ \div 5^\circ$ (α) $0^\circ \div -10^\circ$



| Suitable for | Suitable for | Suitable for | Suitable for |
|--------------------------|-------------------------|--------------------|-------------------------|
| Crosscutting of softwood | Chipboard | Chipboard | Plexiglas |
| Crosscutting of hardwood | Plywood | Non-ferrous metals | Plastic materials |
| Solid surfaces | Laminates / bilaminates | Ferrous metals | Non-ferrous metals |
| | PVC | | Laminates / bilaminates |

Quick search by diameter

| D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page | D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page |
|-----|---------|-----|------|---------|----------|--------------|------------|----------|------|-----|---------|-----|----|---------|----------|--------------|------------|----------|------|
| mm | mm | mm | mm | | | | | | | mm | mm | mm | mm | | | | | | |
| 80 | 2,8-3,6 | - | 20 | 10 + 10 | ATB 11° | LI16M HA3 | F03FS02502 | LP | 81 | 120 | 3,4-4,6 | 2,2 | 20 | 24 | ATB 0° | LI25M34EA3 | F03FS02632 | LP | 78 |
| 80 | 2,8-3,6 | - | 20 | 12 + 12 | ATB 11° | LI16M GA3 | F03FS02501 | LP | 81 | 120 | 4,0-5,0 | - | 50 | 12 + 12 | ATB 11° | LI16M IF3 | F03FS02504 | LP | 81 |
| 80 | 3,1-4,3 | 2,2 | 20 | 12 | ATB 0° | LI25M31AA3 | F03FS02606 | LP | 78 | 125 | 3,2 | 2,2 | 20 | 30 | ATB 10° | LI13MD BA3 | F03FS02455 | LP | 85 |
| 80 | 3,1-4,3 | 2,2 | 22 | 12 | ATB 0° | LI25M31AB3 | F03FS02608 | LP | 78 | 125 | 3,2 | 2,2 | 20 | 30 | ATB 10° | LI13MS BA3 | F03FS02470 | LP | 85 |
| 100 | 3,2 | 2,2 | 20 | 24 | ATB 10° | LI13MD AA3 | F03FS02452 | LP | 85 | 125 | 2,8-3,6 | - | 20 | 12 + 12 | ATB 11° | LI16M FA3 | F03FS02500 | LP | 81 |
| 100 | 3,2 | 2,2 | 20 | 24 | ATB 10° | LI13MS AA3 | F03FS02466 | LP | 85 | 125 | 2,8-3,6 | - | 20 | 14 + 14 | ATB 11° | LI16M EA3 | F03FS02498 | LP | 81 |
| 100 | 3,2 | 2,2 | 22 | 24 | ATB 10° | LI13MD AB3 | F03FS02454 | LP | 85 | 125 | 2,8-3,6 | - | 22 | 14 + 14 | ATB 11° | LI16M EB3 | F03FS02499 | LP | 81 |
| 100 | 3,2 | 2,2 | 22 | 24 | ATB 10° | LI13MS AB3 | F03FS02468 | LP | 85 | 125 | 3,1-3,9 | 2,2 | 20 | 24 | FLAT 6° | DLI25M31FAH4 | F03FS09619 | LP | 80 |
| 100 | 2,8-3,6 | - | 20 | 12 + 12 | ATB 11° | LI16M BA3 | F03FS02491 | LP | 81 | 125 | 3,1-3,9 | 2,2 | 20 | 24 | FLAT 6° | DLI25M31FAH6 | F03FS09620 | LP | 80 |
| 100 | 2,8-3,6 | - | 20 | 12 + 12 | ATB 10° | DLI16MBAH6 | F03FS09635 | LP | 82 | 125 | 3,1-4,3 | 2,2 | 20 | 24 | ATB 0° | LI25M31FA3 | F03FS02623 | LP | 78 |
| 100 | 2,8-3,6 | - | 22 | 12 + 12 | ATB 11° | LI16M BB3 | F03FS02493 | LP | 81 | 125 | 3,1-4,3 | 2,2 | 22 | 24 | ATB 0° | LI25M31FB3 | F03FS02625 | LP | 78 |
| 100 | 2,8-3,6 | - | 25,4 | 12 + 12 | ATB 11° | LI16M BR3 | F03FS07433 | LP | 81 | 125 | 3,1-4,3 | 2,5 | 20 | 24 | ATB 0° | LI25M31FC3 | F03FS05932 | LP | 78 |
| 100 | 3,1-4,3 | 2,2 | 20 | 24 | ATB 0° | LI25M31BA3 | F03FS02610 | LP | 78 | 125 | 3,4-4,6 | 2,2 | 20 | 24 | ATB 0° | LI25M34FA3 | F03FS02634 | LP | 78 |
| 100 | 3,1-4,3 | 2,2 | 22 | 24 | ATB 0° | LI25M31BB3 | F03FS02612 | LP | 78 | 125 | 3,4-4,6 | 2,2 | 45 | 24 | ATB 0° | LI25M34FE3 | F03FS02636 | LP | 78 |
| 100 | 3,1-4,3 | 2,5 | 20 | 20 | ATB 0° | LI25M31BC3 | F03FS06099 | LP | 78 | 125 | 4,0-4,7 | - | 20 | 20 + 20 | ATB 11° | LI16M DA3 | F03FS02496 | LP | 81 |
| 105 | 2,8-3,6 | - | 20 | 10 + 10 | ATB 11° | LI16M CA3 | F03FS02495 | LP | 81 | 125 | 4,0-5,0 | - | 45 | 12 + 12 | ATB 11° | LI16M KE3 | F03FS02506 | LP | 81 |
| 110 | 3,1-4,3 | 2,2 | 20 | 24 | ATB 0° | LI25M31CA3 | F03FS02614 | LP | 78 | 125 | 4,3-5,5 | 3,2 | 20 | 24 | ATB 0° | LI25M43FA3 | F03FS02643 | LP | 78 |
| 110 | 3,1-4,3 | 2,2 | 22 | 24 | ATB 0° | LI25M31CB3 | F03FS02615 | LP | 78 | 125 | 4,3-5,5 | 3,2 | 45 | 24 | ATB 0° | LI25M43FE3 | F03FS02645 | LP | 78 |
| 115 | 3,2 | 2,2 | 20 | 30 | FLAT 10° | LI17M FA3 | F03FS02572 | LP | 84 | 125 | 4,5-5,7 | 3 | 20 | 24 | ATB 0° | LI25M45FA3 | F03FS02697 | LP | 78 |
| 115 | 3,1-4,3 | 2,2 | 20 | 24 | ATB 0° | LI25M31DA3 | F03FS02616 | LP | 78 | 125 | 4,5-5,7 | 3 | 45 | 24 | ATB 0° | LI25M45FE3 | F03FS02699 | LP | 78 |
| 115 | 3,1-4,3 | 2,2 | 22 | 24 | ATB 0° | LI25M31DB3 | F03FS02618 | LP | 78 | 130 | 2,4 | 1,6 | 20 | 24 | ATB 15° | FR03W001H | F03FS09665 | WO | 116 |
| 115 | 4,1-5,3 | 3 | 45 | 24 | ATB 0° | LI25M41DE3 | F03FS08039 | LP | 78 | 130 | 2,4 | 1,6 | 20 | 36 | ATB 5° | FR03W002H | F03FS09666 | WO | 116 |
| 120 | 1,7 | 1,2 | 20 | 24 | ATB 20° | FR02W003HC | F03FS10043 | WO | 117 | 136 | 1,5 | 1 | 20 | 24 | ATB 20° | FR03W003HC | F03FS10044 | WO | 117 |
| 120 | 1,8 | 1,3 | 20 | 12 | ATB 15° | FR02W001H | F03FS09663 | WO | 116 | 136 | 1,6 | 1 | 20 | 48 | HLCG 0° | FR03A001HC | F03FS10082 | AL | 129 |
| 120 | 1,8 | 1,3 | 20 | 40 | ATB 5° | FR02W002H | F03FS09664 | WO | 116 | 140 | 1,8 | 1,3 | 20 | 24 | ATB 15° | FR04W001H | F03FS09667 | WO | 116 |
| 120 | 3,2 | 2,2 | 20 | 30 | FLAT 10° | LI17M GA3 | F03FS02574 | LP | 84 | 140 | 1,8 | 1,3 | 20 | 36 | ATB 10° | FR04W002H | F03FS09668 | WO | 116 |
| 120 | 4 | 3 | 20 | 30 | ATB 10° | LU34M40EA3 | F03FS06367 | WP | 77 | 140 | 1,8 | 1,3 | 20 | 42 | ATB 5° | FR04W003H | F03FS09669 | WO | 116 |
| 120 | 4 | 3 | 30 | 18 | ATB 10° | LU34M40AC3 | F03FS06095 | WP | 77 | 140 | 1,8 | 1,3 | 20 | 42 | ATB -5° | FR04L001H | F03FS09797 | LP | 124 |
| 120 | 4 | 3 | 35 | 30 | ATB 10° | LU34M40EC3 | F03FS05141 | WP | 77 | 140 | 1,8 | 1,3 | 20 | 42 | HLCG -5° | FR04A001H | F03FS09806 | AL | 129 |
| 120 | 5 | 3 | 30 | 18 | ATB 10° | LU34M50AC3 | F03FS06096 | WP | 77 | 140 | 1,8 | 1,3 | 20 | 4 | TCG 10° | FR04F001H | F03FS09836 | FC | 133 |
| 120 | 5 | 3 | 35 | 30 | ATB 10° | LU34M50EC3 | F03FS05143 | WP | 77 | 140 | 1,8 | 1,3 | 20 | 42 | HLCG 0° | FR04H001H | F03FS09864 | HPL | 127 |
| 120 | 6 | 3 | 30 | 18 | ATB 10° | LU34M60AC3 | F03FS06097 | WP | 77 | 140 | 1,8 | 1,3 | 20 | 24 | ATB 15° | FR04W004HC | F03FS10045 | WO | 117 |
| 120 | 6 | 3 | 35 | 30 | ATB 10° | LU34M60EC3 | F03FS05145 | WP | 77 | 140 | 1,8 | 1,3 | 20 | 42 | ATB 5° | FR04W005HC | F03FS10046 | WO | 117 |
| 120 | 2,8-3,6 | 2,2 | 20 | 24 | FLAT 6° | DLI25M28EAH4 | F03FS09613 | LP | 80 | 140 | 1,8 | 1,3 | 20 | 48 | HLCG -5° | FR04A002HC | F03FS10083 | AL | 129 |
| 120 | 2,8-3,6 | 2,2 | 20 | 24 | FLAT 6° | DLI25M28EAH6 | F03FS09614 | LP | 80 | 140 | 3,2 | 2,2 | 30 | 28 + 4 | ATB 10° | LI14MD CA3 | F03FS02481 | LP | 85 |
| 120 | 2,8-3,6 | 2,2 | 22 | 24 | FLAT 6° | DLI25M28EBH4 | F03FS09615 | LP | 80 | 140 | 3,2 | 2,2 | 30 | 28 + 4 | ATB 10° | LI14MS CA3 | F03FS02483 | LP | 85 |
| 120 | 2,8-3,6 | 2,2 | 22 | 24 | FLAT 6° | DLI25M28EBH6 | F03FS09616 | LP | 80 | 140 | 3,1-4,3 | 2,2 | 16 | 28 | ATB 8° | LI25M31HM3 | F03FS02627 | LP | 78 |
| 120 | 2,8-3,6 | - | 20 | 12 + 12 | ATB 11° | LI16M AA3 | F03FS02485 | LP | 81 | 140 | 3,4-4,6 | 3 | 45 | 24 | ATB 8° | LI25M34HE3 | F03FS02638 | LP | 78 |
| 120 | 2,8-3,6 | - | 20 | 12 + 12 | ATB 10° | DLI16MAAH6 | F03FS09636 | LP | 82 | 140 | 4,3-5,5 | 3,2 | 45 | 28 | ATB 8° | LI25M43HE3 | F03FS02647 | LP | 78 |
| 120 | 2,8-3,6 | - | 22 | 12 + 12 | ATB 11° | LI16M AB3 | F03FS02488 | LP | 81 | 140 | 4,5-5,7 | 3 | 45 | 24 | ATB 8° | LI25M45HE3 | F03FS02701 | LP | 78 |
| 120 | 2,8-3,6 | - | 22 | 12 + 12 | ATB 10° | DLI16MABH6 | F03FS09637 | LP | 82 | 145 | 4,3-5,5 | 3,2 | 45 | 30 | ATB 8° | LI25M43WE3 | F03FS08015 | LP | 78 |
| 120 | 2,8-3,6 | - | 50 | 12 + 12 | ATB 11° | LI16M PF3 | F03FS02512 | LP | 81 | 150 | 1,8 | 1,3 | 20 | 48 | HLCG 0° | FR05A002HC | F03FS10084 | AL | 129 |
| 120 | 2,8-3,6 | - | 50 | 12 + 12 | ATB 11° | LI16M RF3 | F03FS06512 | LP | 81 | 150 | 2 | 1,4 | 30 | 48 | ATB 5° | LU2D 0100 | F03FS04944 | WP | 50 |
| 120 | 2,8-4,0 | 2,2 | 20 | 24 | ATB 0° | LI25M28EA3 | F03FS02604 | LP | 78 | 150 | 2,4 | 1,6 | 16 | 24 | ATB 15° | FR05W001H | F03FS09670 | WO | 116 |
| 120 | 2,8-4,0 | 2,2 | 22 | 24 | ATB 0° | LI25M28EB3 | F03FS02605 | LP | 78 | 150 | 2,4 | 1,6 | 20 | 24 | ATB 15° | FR05W002H | F03FS09671 | WO | 116 |
| 120 | 3,1-3,9 | 2,2 | 20 | 24 | FLAT 6° | DLI25M31EAH4 | F03FS09617 | LP | 80 | 150 | 2,4 | 1,6 | 20 | 42 | ATB 5° | FR05W003H | F03FS09672 | WO | 116 |
| 120 | 3,1-3,9 | 2,2 | 20 | 24 | FLAT 6° | DLI25M31EAH6 | F03FS09618 | LP | 80 | 150 | 2,5 | 1,6 | 20 | 42 | HLCG -5° | FR05A001H | F03FS09807 | AL | 129 |
| 120 | 3,1-4,3 | 2,2 | 20 | 24 | ATB 0° | LI25M31EA3 | F03FS02620 | LP | 78 | 150 | 3,2 | 2,2 | 30 | 24 | ATB 15° | LU2A 0100 | F03FS04806 | WP | 47 |
| 120 | 3,1-4,3 | 2,2 | 22 | 24 | ATB 0° | LI25M31EB3 | F03FS02622 | LP | 78 | 150 | 3,2 | 2,2 | 30 | 36 | ATB 10° | LU2B 0100 | F03FS04869 | WP | 48 |
| 120 | 3,1-4,3 | 2,5 | 20 | 24 | ATB 0° | LI25M31EC3 | F03FS05978 | LP | 78 | 150 | 3,2 | 2,2 | 30 | 48 | ATB 5° | LU2C 0100 | F03FS04908 | WP | 49 |

WO: Solid wood - LP: Chipboard and laminated panels - WP: Wood Based Panel - PM: Polymeric Materials - AL: Aluminium & Non-ferrous metals - ST: Steel - CW: Construct Wood - FC: Fibre Cement - HPL: High Pressure Laminate - SP: Sandwich Panel - MM: Multi Material

| D mm | B mm | b mm | d mm | Z | Teeth | Freud Code | Art. No. | Material | Page |
|---------|---------|---------|---------|----|---------------|------------|------------|----------|------|
| 150 | 3,2 | 2,2 | 30 | 36 | ATB 10° | LI22MD KC3 | F03FS02581 | LP | 84 |
| 150 | 3,2 | 2,2 | 30 | 36 | ATB 10° | LI22MS KC3 | F03FS02592 | LP | 84 |
| 150 | 3,2 | 2,2 | 30 | 48 | ATB 10° | LI13MD DA3 | F03FS02459 | LP | 85 |
| 150 | 3,2 | 2,2 | 30 | 48 | ATB 10° | LI13MS DA3 | F03FS02474 | LP | 85 |
| 150 | 3,2 | 2,2 | 55 | 36 | ATB 10° | LI22MD KG3 | F03FS02583 | LP | 84 |
| 150 | 3,2 | 2,2 | 55 | 36 | ATB 10° | LI22MS KG3 | F03FS02594 | LP | 84 |
| 150 | 3,2 | 2,2 | 55 | 48 | ATB 10° | LI13MD DB3 | F03FS02461 | LP | 85 |
| 150 | 3,2 | 2,2 | 55 | 48 | ATB 10° | LI13MS DB3 | F03FS02476 | LP | 85 |
| 150 | 3,2 | 2,2 | 60 | 36 | ATB 10° | LI22MD KH3 | F03FS02584 | LP | 84 |
| 150 | 3,2 | 2,2 | 60 | 36 | ATB 10° | LI22MS KH3 | F03FS02595 | LP | 84 |
| 150 | 3,1-4,3 | 2,2 | 30 | 36 | ATB 8° | LI25M31KC3 | F03FS02628 | LP | 78 |
| 150 | 3,4-4,6 | 2,2 | 30 | 36 | ATB 8° | LI25M34KC3 | F03FS02639 | LP | 78 |
| 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB 8° | LI25M43KC3 | F03FS02649 | LP | 78 |
| 150 | 4,3-5,6 | 3,2 | 45 | 36 | ATB 8° | LI25M43KE3 | F03FS02651 | LP | 78 |
| 150 | 4,5-5,8 | 3 | 30 | 36 | ATB 8° | LI25M45KC3 | F03FS02702 | LP | 78 |
| 150 | 4,5-5,8 | 3 | 45 | 36 | ATB 8° | LI25M45KE3 | F03FS02704 | LP | 78 |
| 160 | 1,5 | 1 | 20 | 24 | ATB 25° | FR05W015HC | F03FS10048 | WO | 117 |
| 160 | 1,5 | 1 | 20 | 36 | ATB 15° | FR05W016HC | F03FS10049 | WO | 117 |
| 160 | 1,5 | 1 | 20 | 48 | ATB 10° | FR05W017HC | F03FS10050 | WO | 117 |
| 160 | 1,8 | 1,2 | 20 | 48 | ATB -5° | FR06L003HC | F03FS10075 | LP | 124 |
| 160 | 1,8 | 1,2 | 20 | 4 | TCG 10° | FR06F002HC | F03FS10095 | FC | 133 |
| 160 | 1,8 | 1,3 | 20 | 24 | ATB 15° | FR06W003H | F03FS09675 | WO | 117 |
| 160 | 1,8 | 1,3 | 20 | 36 | ATB 10° | FR06W004H | F03FS09676 | WO | 117 |
| 160 | 1,8 | 1,3 | 20 | 48 | ATB 5° | FR06W005H | F03FS09677 | WO | 117 |
| 160 | 1,8 | 1,3 | 20 | 54 | HLTCG 0° | FR06A002HC | F03FS10085 | AL | 129 |
| 160 | 2 | 1,3 | 20 | 14 | ATB 18° | FR06C001H | F03FS09788 | CW | 122 |
| 160 | 2 | 1,6 | 20 | 30 | DTCG 0° | LU6A 0100 | F03FS05343 | ST | 102 |
| 160 | 2 | 1,6 | 20 | 30 | HLTCG (Ch) 0° | FR06X001H | F03FS09852 | SP | 136 |
| 160 | 2 | 1,6 | 20 | 30 | HLTCG (Ch) 0° | FR06M001H | F03FS10114 | MM | 138 |
| 160 | 2,2 | 1,6 | 20 | 24 | ATB 15° | LU2A 0301 | F03FS09233 | WP | 47 |
| 160 | 2,2 | 1,6 | 20 | 48 | ATB 5° | LU2C 0001 | F03FS09065 | WP | 49 |
| 160 | 2,2 | 1,6 | 20 | 48 | ATB -2° | LU3A 0001 | F03FS07411 | LP | 70 |
| 160 | 2,2 | 1,6 | 20 | 24 | ATB 15° | FR06W006H | F03FS09678 | WO | 117 |
| 160 | 2,2 | 1,6 | 20 | 36 | ATB 10° | FR06W007H | F03FS09679 | WO | 117 |
| 160 | 2,2 | 1,6 | 20 | 48 | ATB 5° | FR06W008H | F03FS09680 | WO | 118 |
| 160 | 2,2 | 1,6 | 20 | 48 | ATB -5° | FR06L001H | F03FS09798 | LP | 124 |
| 160 | 2,2 | 1,6 | 20 | 48 | HLTCG -5° | FR06L002H | F03FS09799 | LP | 124 |
| 160 | 2,2 | 1,6 | 20 | 52 | HLTCG -5° | FR06A001H | F03FS09808 | AL | 129 |
| 160 | 2,2 | 1,6 | 20 | 4 | TCG 10° | FR06F001H | F03FS09837 | FC | 133 |
| 160 | 2,2 | 1,6 | 20 | 48 | HLTCG 0° | FR06H001H | F03FS09865 | HPL | 127 |
| 160 | 2,4 | 1,6 | 16 | 24 | ATB 15° | FR06W001H | F03FS09673 | WO | 116 |
| 160 | 2,4 | 1,6 | 16 | 48 | ATB 5° | FR06W002H | F03FS09674 | WO | 116 |
| 160 | 2,4 | 1,6 | 20 | 24 | ATB 15° | FR06W009H | F03FS09681 | WO | 116 |
| 160 | 2,4 | 1,6 | 20 | 36 | ATB 10° | FR06W010H | F03FS09682 | WO | 116 |
| 160 | 2,4 | 1,6 | 20 | 48 | ATB 5° | FR06W011H | F03FS09683 | WO | 116 |
| 160 | 2,4 | 1,6 | 30 | 24 | ATB 15° | FR06W012H | F03FS09684 | WO | 116 |
| 160 | 2,4 | 1,6 | 30 | 48 | ATB 5° | FR06W013H | F03FS09685 | WO | 116 |
| 160 | 2,8 | 2,2 | 20 | 42 | TCG -6° | LU5D 0100 | F03FS05288 | PM AL | 98 |
| 160 | 3,2 | 2,2 | 20 | 24 | ATB 15° | LU2A 0300 | F03FS04809 | WP | 47 |
| 160 | 3,2 | 2,2 | 20 | 18 | ATB 15° | LU2A 0200 | F03FS04808 | WP | 47 |
| 160 | 3,2 | 2,2 | 20 | 48 | ATB 5° | LU2C 0200 | F03FS04910 | WP | 49 |
| 160 | 3,1-4,3 | 2,2 | 20 | 36 | ATB 8° | LI25M31LA3 | F03FS02630 | LP | 78 |
| 160 | 3,4-4,6 | 2,2 | 25,4 | 36 | ATB 8° | LI25M34LR3 | F03FS02641 | LP | 78 |
| 160 | 4,3-5,5 | 3,2 | 25,4 | 36 | ATB 8° | LI25M43LR3 | F03FS02660 | LP | 78 |
| 160 | 4,3-5,5 | 3,2 | 30 | 36 | ATB 8° | LI25M43LC3 | F03FS02653 | LP | 78 |
| 160 | 4,3-5,5 | 3,2 | 45 | 36 | ATB 8° | LI25M43LE3 | F03FS02655 | LP | 78 |
| 160 | 4,3-5,5 | 3,2 | 55 | 36 | ATB 8° | LI25M43LG3 | F03FS02657 | LP | 79 |
| 160 | 4,3-5,5 | 3,2 | 60 | 36 | ATB 8° | LI25M43LH3 | F03FS02659 | LP | 79 |
| 160 | 4,5-5,7 | 3 | 45 | 36 | ATB 8° | LI25M45LE3 | F03FS02706 | LP | 79 |
| 160 | 4,5-5,7 | 3 | 55 | 36 | ATB 8° | LI25M45LG3 | F03FS02708 | LP | 79 |
| 165 | 1,5 | 1 | 20 | 12 | ATB 25° | FR07W009HC | F03FS10051 | WO | 118 |
| 165 | 1,5 | 1 | 20 | 24 | ATB 25° | FR07W010HC | F03FS10052 | WO | 118 |
| 165 | 1,5 | 1 | 20 | 36 | ATB 15° | FR07W011HC | F03FS10053 | WO | 118 |
| 165 | 1,5 | 1 | 20 | 48 | ATB 10° | FR07W012HC | F03FS10054 | WO | 118 |
| 165 | 1,7 | 1,3 | 20 | 12 | ATB 20° | FR07W009H | F03FS10040 | WO | 118 |
| 165 | 1,7 | 1,3 | 20 | 24 | ATB 15° | FR07W001H | F03FS09686 | WO | 118 |
| 165 | 1,7 | 1,3 | 20 | 40 | ATB 18° | FR07W002H | F03FS09687 | WO | 118 |

| D mm | B mm | b mm | d mm | Z | Teeth | Freud Code | Art. No. | Material | Page |
|---------|---------|---------|---------|------|---------------|--------------|------------|----------|------|
| 165 | 1,8 | 1,2 | 20 | 48 | ATB -5° | FR07L002HC | F03FS10076 | LP | 124 |
| 165 | 1,8 | 1,2 | 20 | 4 | TCG 10° | FR07F002HC | F03FS10096 | FC | 133 |
| 165 | 1,8 | 1,3 | 20 | 54 | HLTCG 0° | FR07A002HC | F03FS10086 | AL | 129 |
| 165 | 2 | 1,3 | 20 | 14 | ATB 18° | FR07C001H | F03FS09789 | CW | 122 |
| 165 | 2 | 1,6 | 20 | 30 | HLTCG (Ch) 0° | FR07X001H | F03FS09853 | SP | 136 |
| 165 | 2,2 | 1,6 | 20 | 4 | TCG 10° | FR07F001H | F03FS09838 | FC | 133 |
| 165 | 2,4 | 1,6 | 20 | 24 | ATB 15° | FR07W003H | F03FS09688 | WO | 116 |
| 165 | 2,4 | 1,6 | 20 | 36 | ATB 10° | FR07W004H | F03FS09689 | WO | 116 |
| 165 | 2,4 | 1,6 | 20 | 48 | ATB 5° | FR07W005H | F03FS09690 | WO | 116 |
| 165 | 2,4 | 1,6 | 20 | 56 | ATB 5° | FR07W013H | F03FS11505 | WO | 116 |
| 165 | 2,4 | 1,6 | 30 | 24 | ATB 15° | FR07W006H | F03FS09691 | WO | 116 |
| 165 | 2,4 | 1,6 | 30 | 36 | ATB 10° | FR07W007H | F03FS09692 | WO | 116 |
| 165 | 2,4 | 1,6 | 30 | 48 | ATB 5° | FR07W008H | F03FS09693 | WO | 116 |
| 165 | 2,5 | 1,6 | 20 | 52 | HLTCG -5° | FR07A001H | F03FS09809 | AL | 129 |
| 165 | 2,5 | 1,6 | 30 | 52 | HLTCG -5° | FR07A002H | F03FS09810 | AL | 129 |
| 165 | 2,6 | 1,6 | 20 | 48 | ATB -5° | FR07L001H | F03FS09800 | LP | 124 |
| 165 | 2,6 | 1,6 | 20 | 48 | HLTCG 0° | FR07H001H | F03FS09866 | HPL | 127 |
| 170 | 2,4 | 1,6 | 30 | 40 | ATB 10° | FR08W002H | F03FS09695 | WO | 116 |
| 175 | 4,3-5,5 | 3,2 | 75 | 36 | ATB 8° | LI25M43WT3 | F03FS07816 | LP | 79 |
| 178 | 1,5 | 1 | 25,4 | 80 | AXL 15° | LU4B 0500 | F03FS05173 | PM | 92 |
| 180 | 1,5 | 1 | 30 | 40 | ATB 15° | LU1H 0100 | F03FS04649 | WO | 41 |
| 180 | 1,5 | 1 | 40 | 24 | FLAT 20° | LM08 0100 | F03FS03169 | WO | 31 |
| 180 | 1,5 | 1 | 60 | 24 | FLAT 20° | LM08 0200 | F03FS03171 | WO | 31 |
| 180 | 2 | 1,3 | 30 | 14 | ATB 18° | FR09C001H | F03FS09790 | CW | 122 |
| 180 | 2 | 1,4 | 30 | 56 | ATB 5° | LU2D 0200 | F03FS04948 | WP | 50 |
| 180 | 2 | 1,4 | 40 | 56 | ATB 5° | LU2D 0300 | F03FS04950 | WP | 50 |
| 180 | 2,2 | 1,6 | 40 | 16+2 | FLAT 20° | LM01 0100 | F03FS02751 | WO | 24 |
| 180 | 2,4 | 1,6 | 20 | 24 | ATB 15° | FR09W001H | F03FS09696 | WO | 116 |
| 180 | 2,4 | 1,6 | 20 | 48 | ATB 5° | FR09W002H | F03FS09697 | WO | 116 |
| 180 | 2,4 | 1,6 | 30 | 24 | ATB 15° | FR09W003H | F03FS09698 | WO | 116 |
| 180 | 2,4 | 1,6 | 30 | 48 | ATB 5° | FR09W004H | F03FS09699 | WO | 116 |
| 180 | 2,5 | 1,6 | 30 | 56 | HLTCG -5° | FR09A001H | F03FS09811 | AL | 129 |
| 180 | 2,8 | 2,2 | 20 | 42 | TCG -6° | LU5C 0100 | F03FS07195 | AL | 97 |
| 180 | 2,8 | 2,2 | 30 | 42 | TCG -6° | LU5C 0200 | F03FS05261 | AL | 97 |
| 180 | 3,2 | 2,2 | 20 | 24 | ATB 10° | LU2A 0400 | F03FS04810 | WP | 47 |
| 180 | 3,2 | 2,2 | 20 | 56 | ATB 5° | LU2C 0300 | F03FS04911 | WP | 49 |
| 180 | 3,2 | 2,2 | 30 | 30 | ATB 15° | LU2A 0500 | F03FS04811 | WP | 47 |
| 180 | 3,2 | 2,2 | 30 | 42 | ATB 10° | LU2B 0200 | F03FS04871 | WP | 48 |
| 180 | 3,2 | 2,2 | 30 | 56 | ATB 5° | LU2C 0400 | F03FS04912 | WP | 49 |
| 180 | 3,2 | 2,2 | 30 | 42 | ATB 10° | LI22MD NC3 | F03FS02585 | LP | 84 |
| 180 | 3,2 | 2,2 | 30 | 42 | ATB 10° | LI22MS NC3 | F03FS02596 | LP | 84 |
| 180 | 3,2 | 2,2 | 50 | 54 | FLAT 10° | LI20M BB3 | F03FS02579 | LP | 83 |
| 180 | 3,2 | 2,2 | 55 | 42 | ATB 10° | LI22MD NG3 | F03FS02586 | LP | 84 |
| 180 | 3,2 | 2,2 | 55 | 42 | ATB 10° | LI22MS NG3 | F03FS02598 | LP | 84 |
| 180 | 4 | 3 | 35 | 44 | ATB 10° | LU34M40NC3 | F03FS05142 | WP | 77 |
| 180 | 5 | 3 | 35 | 44 | ATB 10° | LU34M50NC3 | F03FS05144 | WP | 77 |
| 180 | 6 | 3 | 35 | 44 | ATB 10° | LU34M60NC3 | F03FS05146 | WP | 77 |
| 180 | 3,1-4,3 | 2,2 | 16 | 42 | ATB 8° | LI25M31NM3 | F03FS02631 | LP | 79 |
| 180 | 3,4-4,6 | 2,2 | 25,4 | 36 | ATB 8° | LI25M34NR3 | F03FS02642 | LP | 79 |
| 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT 6° | DLI25M43NEH4 | F03FS09621 | LP | 80 |
| 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT 6° | DLI25M43NEH6 | F03FS09622 | LP | 80 |
| 180 | 4,3-5,5 | 3,2 | 20 | 28 | ATB 8° | LI25M43NA3 | F03FS02661 | LP | 79 |
| 180 | 4,3-5,5 | 3,2 | 20 | 36 | ATB 8° | LI25M43XA3 | F03FS06372 | LP | 79 |
| 180 | 4,3-5,5 | 3,2 | 30 | 28 | ATB 8° | LI25M43NC3 | F03FS02663 | LP | 79 |
| 180 | 4,3-5,5 | 3,2 | 30 | 36 | ATB 8° | LI25M43XN3 | F03FS06373 | LP | 79 |
| 180 | 4,3-5,5 | 3,2 | 45 | 36 | ATB 8° | LI25M43NE3 | F03FS02664 | LP | 79 |
| 180 | 4,3-5,5 | 3,2 | 50 | 36 | ATB 8° | LI25M43NF3 | F03FS02666 | LP | 79 |
| 180 | 4,5-5,7 | 3 | 20 | 36 | ATB 8° | LI25M45NA3 | F03FS02710 | LP | 79 |
| 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT 6° | DLI25M47NEH4 | F03FS09623 | LP | 80 |
| 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT 6° | DLI25M47NEH6 | F03FS09624 | LP | 80 |
| 180 | 4,7-5,9 | 3,5 | 45 | 36 | ATB 8° | LI25M47NE3 | F03FS02715 | LP | 79 |
| 180 | 5,1-6,3 | 3,5 | 55 | 36 | ATB 8° | LI25M51NG3 | F03FS02724 | LP | 79 |
| 180 | 5,7-6,9 | 4 | 20 | 36 | ATB 8° | | | | |

| D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page | D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page |
|-----|-----|-----|-------------|-----------|---------------|------------|------------|----------|------|-----------|-----------|-----|------|---------|--------------|--------------|------------|----------|------|
| mm | mm | mm | mm | | | | | | | mm | mm | mm | mm | | | | | | |
| 182 | 1,7 | 1,3 | 25,4 | 40 | ATB 15° | FR10W005H | F03FS11508 | WO | 116 | 200 | 2 | 1,3 | 30 | 16 | ATB 18° | FR14C001H | F03FS09793 | CW | 122 |
| 182 | 1,7 | 1,3 | 25,4 | 60 | ATB 15° | FR10W006H | F03FS11509 | WO | 116 | 200 | 2,2 | 1,6 | 30 | 64 | ATB 5° | LU2D 0400 | F03FS04952 | WP | 50 |
| 182 | 2 | 1,6 | 19,05 | 36 | HLTCG (Ch) 0° | FR10X001H | F03FS11510 | SP | 136 | 200 | 2,2 | 1,6 | 40 | 16+2 | FLAT 20° | LM01 0200 | F03FS02753 | WO | 24 |
| 182 | 2,2 | 1,6 | 19,05 | 4 | TCG 10° | FR10F001H | F03FS11506 | FC | 133 | 200 | 2,2 | 1,6 | 50 | 16+2 | FLAT 20° | LM01 0250 | F03FS09968 | WO | 24 |
| 184 | 1,6 | 1 | 20 | 24 | ATB 25° | FR11W010HC | F03FS10055 | WO | 118 | 200 | 2,2 | 1,6 | 60 | 16+2 | FLAT 20° | LM01 0300 | F03FS02755 | WO | 24 |
| 184 | 1,6 | 1 | 20 | 48 | ATB 10° | FR11W011HC | F03FS10056 | WO | 118 | 200 | 2,2 | 1,6 | 70 | 16+2 | FLAT 20° | LM01 0400 | F03FS02757 | WO | 24 |
| 184 | 2 | 1,3 | 16 | 14 | ATB 18° | FR11C001H | F03FS09791 | CW | 122 | 200 | 2,4 | 1,6 | 30 | 24 | ATB 15° | FR14W001H | F03FS09721 | WO | 117 |
| 184 | 2 | 1,6 | 15,88 | 38 | DTCG 0° | LU6A 0200 | F03FS05344 | ST | 102 | 200 | 2,4 | 1,6 | 30 | 48 | ATB 10° | FR14W002H | F03FS09722 | WO | 117 |
| 184 | 2 | 1,6 | 15,88 | 48 | DTCG 0° | LU6A 1900 | F03FS06586 | ST | 102 | 200 | 2,5 | 1,8 | 30 | 64 | ATB -2° | FR14L001T | F03FS09803 | LP | 125 |
| 184 | 2 | 1,6 | 30 | 36 | HLTCG (Ch) 0° | FR11M001H | F03FS10113 | MM | 138 | 200 | 2,8 | 1,8 | 30 | 60 | HLTCG -5° | FR14A001H | F03FS09816 | AL | 129 |
| 184 | 2,2 | 1,6 | 30 | 4 | TCG 10° | FR11F001H | F03FS09840 | FC | 133 | 200 | 2,8 | 2,2 | 30 | 54 | TCG 10° | LU5A 0100 | F03FS05181 | AL | 95 |
| 184 | 2,4 | 1,6 | 16 | 24 | ATB 15° | FR11W001H | F03FS09703 | WO | 116 | 200 | 2,8 | 2,2 | 30 | 64 | TCG 5° | LU5B 0100 | F03FS05217 | PM AL | 96 |
| 184 | 2,4 | 1,6 | 16 | 40 | ATB 10° | FR11W002H | F03FS09704 | WO | 116 | 200 | 2,8 | 2,2 | 30 | 48 | TCG -6° | LU5C 0300 | F03FS05262 | AL | 97 |
| 184 | 2,4 | 1,6 | 25,4 | 24 | ATB 15° | FR11W012H | F03FS11511 | WO | 116 | 200 | 2,8 | 2,2 | 30 | 60 | TCG -6° | LU5D 0300 | F03FS05290 | PM AL | 98 |
| 184 | 2,4 | 1,6 | 30 | 24 | ATB 15° | FR11W007H | F03FS09709 | WO | 116 | 200 | 3 | 2,5 | 30 | 64 | ATB 10° | LU11 0100 | F03FS04673 | WO | 42 |
| 185 | 1,5 | 1 | 25,4 | 40 | ATB 15° | LU1H 0200 | F03FS04650 | WO | 41 | 200 | 3,2 | 2,2 | 30 | 34 | ATB 15° | LU2A 0800 | F03FS04817 | WP | 47 |
| 185 | 2 | 1,6 | 20 | 36 | HLTCG (Ch) 0° | FR12M001H | F03FS11512 | MM | 138 | 200 | 3,2 | 2,2 | 30 | 24 | ATB 15° | LU2A 0700 | F03FS04814 | WP | 47 |
| 185 | 2,4 | 1,6 | 20 | 60 | ATB -5° | FR12L001H | F03FS09801 | LP | 124 | 200 | 3,2 | 2,2 | 30 | 48 | ATB 10° | LU2B 0300 | F03FS04873 | WP | 48 |
| 185 | 2,4 | 1,6 | 20 | 24 | ATB 15° | FR12W001H | F03FS11513 | WO | 116 | 200 | 3,2 | 2,2 | 30 | 64 | ATB 5° | LU2C 0600 | F03FS04915 | WP | 49 |
| 185 | 2,4 | 1,6 | 20 | 48 | ATB 10° | FR12W002H | F03FS11514 | WO | 116 | 200 | 3,2 | 2,2 | 30 | 64 | TCG 5° | LU3D 0100 | F03FS05081 | LP | 73 |
| 190 | 1,5 | 1 | 30 | 18 | ATB 25° | FR13W010HC | F03FS10057 | WO | 118 | 200 | 3,2 | 2,2 | 30 | 48 | ATB 10° | LI22MD PC3 | F03FS02589 | LP | 84 |
| 190 | 1,5 | 1 | 30 | 24 | ATB 25° | FR13W011HC | F03FS10058 | WO | 118 | 200 | 3,2 | 2,2 | 30 | 48 | ATB 10° | LI22MS PC3 | F03FS02601 | LP | 84 |
| 190 | 1,5 | 1 | 30 | 48 | ATB 15° | FR13W012HC | F03FS10059 | WO | 118 | 200 | 3,2 | 2,2 | 35 | 34 | ATB 15° | LU2A 0900 | F03FS04819 | WP | 47 |
| 190 | 1,5 | 1 | 30 | 60 | ATB 10° | FR13W013HC | F03FS10060 | WO | 118 | 200 | 3,2 | 2,2 | 40 | 64 | ATB 5° | LU2C 0640 | F03FS09972 | WP | 49 |
| 190 | 1,8 | 1,2 | 30 | 4 | TCG 10° | FR13F003HC | F03FS10097 | FC | 133 | 200 | 3,2 | 2,2 | 60 | 48 | ATB 10° | LI22MD PH3 | F03FS02590 | LP | 84 |
| 190 | 1,8 | 1,3 | 30 | 54 | HLTCG 0° | FR13A003HC | F03FS10088 | AL | 129 | 200 | 3,2 | 2,2 | 60 | 48 | ATB 10° | LI22MS PH3 | F03FS02602 | LP | 84 |
| 190 | 2 | 1,3 | 30 | 24 | ATB 15° | FR13W001T | F03FS09767 | WO | 119 | 200 | 4,2 | 3 | 30 | 48 | ATB 10° | LT14MD AA3 | F03FS04378 | LP | 87 |
| 190 | 2 | 1,3 | 30 | 48 | ATB 5° | FR13W002T | F03FS09768 | WO | 119 | 200 | 4,2 | 3 | 30 | 48 | ATB 10° | LT14MS AA3 | F03FS04389 | LP | 87 |
| 190 | 2 | 1,3 | 30 | 14 | ATB 18° | FR13C001H | F03FS09792 | CW | 122 | 200 | 4,7 | 3,5 | 80 | 42 | ATB 15° | LI27M FA3 | F03FS02749 | LP | 83 |
| 190 | 2 | 1,6 | 30 | 38 | DTCG 0° | LU6A 0300 | F03FS05345 | ST | 102 | 200 | 4,0 - 5,2 | - | 50 | 28 + 28 | ATB 11° | LI16M OF3 | F03FS02511 | LP | 81 |
| 190 | 2 | 1,6 | 30 | 36 | HLTCG (Ch) 0° | FR13X001H | F03FS09854 | SP | 136 | 200 | 4,3 - 5,1 | 3,2 | 65 | 36 | FLAT 6° | DLI25M43PIH4 | F03FS09625 | LP | 80 |
| 190 | 2 | 1,6 | 30 | 38 | HLTCG (Ch) 0° | FR13M001H | F03FS10041 | MM | 138 | 200 | 4,3 - 5,1 | 3,2 | 65 | 36 | FLAT 6° | DLI25M43PIH6 | F03FS09626 | LP | 80 |
| 190 | 2,1 | 1,4 | 30 | 60 | ATB -5° | FR13L002HC | F03FS10077 | LP | 124 | 200 | 4,3 - 5,1 | 3,2 | 80 | 36 | FLAT 6° | DLI25M43PLH4 | F03FS09627 | LP | 80 |
| 190 | 2,2 | 1,6 | 20 | 4 | TCG 10° | FR13F001H | F03FS09841 | FC | 133 | 200 | 4,3 - 5,1 | 3,2 | 80 | 36 | FLAT 6° | DLI25M43PLH6 | F03FS09628 | LP | 80 |
| 190 | 2,2 | 1,6 | 30 | 4 | TCG 10° | FR13F002H | F03FS09842 | FC | 133 | 200 | 4,3 - 5,5 | 3,2 | 20 | 36 | ATB 8° | LI25M43PA3 | F03FS02670 | LP | 79 |
| 190 | 2,4 | 1,6 | 16 | 24 | ATB 15° | FR13W001H | F03FS09712 | WO | 116 | 200 | 4,3 - 5,5 | 3,2 | 22 | 36 | ATB 8° | LI25M43PB3 | F03FS02673 | LP | 79 |
| 190 | 2,4 | 1,6 | 16 | 48 | ATB 10° | FR13W002H | F03FS09713 | WO | 117 | 200 | 4,3 - 5,5 | 3,2 | 30 | 36 | ATB 8° | LI25M43PC3 | F03FS02674 | LP | 79 |
| 190 | 2,4 | 1,6 | 20 | 24 | ATB 15° | FR13W003H | F03FS09714 | WO | 117 | 200 | 4,3 - 5,5 | 3,2 | 45 | 36 | ATB 8° | LI25M43PE3 | F03FS02676 | LP | 79 |
| 190 | 2,4 | 1,6 | 20 | 48 | ATB 10° | FR13W004H | F03FS09715 | WO | 117 | 200 | 4,3 - 5,5 | 3,2 | 50 | 36 | ATB 8° | LI25M43PF3 | F03FS02679 | LP | 79 |
| 190 | 2,4 | 1,6 | 20 | 56 | ATB 5° | FR13W005H | F03FS09716 | WO | 117 | 200 | 4,3 - 5,5 | 3,2 | 65 | 36 | ATB 8° | LI25M43PI3 | F03FS02681 | LP | 79 |
| 190 | 2,4 | 1,6 | 30 | 24 | ATB 15° | FR13W006H | F03FS09717 | WO | 117 | 200 | 4,3 - 5,5 | 3,2 | 75 | 36 | ATB 8° | LI25M43PT3 | F03FS07755 | LP | 79 |
| 190 | 2,4 | 1,6 | 30 | 40 | ATB 10° | FR13W007H | F03FS09718 | WO | 117 | 200 | 4,3 - 5,5 | 3,2 | 80 | 36 | ATB 8° | LI25M43PL3 | F03FS02683 | LP | 79 |
| 190 | 2,4 | 1,6 | 30 | 48 | ATB 10° | FR13W008H | F03FS09719 | WO | 117 | 200 | 4,5 - 5,7 | 3 | 22 | 36 | ATB 8° | LI25M45PB3 | F03FS02712 | LP | 79 |
| 190 | 2,4 | 1,6 | 30 | 56 | ATB 5° | FR13W009H | F03FS09720 | WO | 117 | 200 | 4,5 - 5,7 | 3 | 65 | 36 | ATB 8° | LI25M45PI3 | F03FS02714 | LP | 79 |
| 190 | 2,4 | 1,6 | Fast Fix 24 | ATB 15° | FR13W003T | F03FS09769 | WO | 119 | 200 | 4,7 - 5,5 | 3,5 | 45 | 36 | FLAT 6° | DLI25M47PEH4 | F03FS09629 | LP | 80 | |
| 190 | 2,4 | 1,6 | Fast Fix 48 | ATB 5° | FR13W004T | F03FS09770 | WO | 119 | 200 | 4,7 - 5,5 | 3,5 | 45 | 36 | FLAT 6° | DLI25M47PEH6 | F03FS09630 | LP | 80 | |
| 190 | 2,5 | 1,6 | 20 | 56 | HLTCG -5° | FR13A001H | F03FS09814 | AL | 129 | 200 | 4,7 - 5,5 | 3,5 | 65 | 36 | FLAT 6° | DLI25M47PIH4 | F03FS09631 | LP | 80 |
| 190 | 2,5 | 1,6 | 30 | 56 | HLTCG -5° | FR13A002H | F03FS09815 | AL | 129 | 200 | 4,7 - 5,5 | 3,5 | 65 | 36 | FLAT 6° | DLI25M47PIH6 | F03FS09632 | LP | 80 |
| 190 | 2,5 | 1,8 | 30 | 48 | ATB -2° | LU3A 0002 | F03FS07412 | LP | 70 | 200 | 4,7 - 5,9 | 3,5 | 20 | 36 | ATB 8° | LI25M47PA3 | F03FS02716 | LP | 79 |
| 190 | 2,6 | 1,6 | 20 | 56 | HLTCG 0° | FR13H001H | F03FS09867 | HPL | 127 | 200 | 4,7 - 5,9 | 3,5 | 22 | 36 | ATB 8° | LI25M47PB3 | F03FS02717 | LP | 79 |
| 190 | 2,6 | 1,6 | 30 | 60 | ATB -5° | FR13L001H | F03FS09802 | LP | 124 | 200 | 4,7 - 5,9 | 3,5 | 30 | 36 | ATB 8° | LI25M47PC3 | F03FS02718 | LP | 79 |
| 190 | 2,6 | 1,6 | 30 | 56 | HLTCG 0° | FR13H002H | F03FS09868 | HPL | 127 | 200 | 4,7 - 5,9 | 3,5 | 45 | 36 | ATB 8° | LI25M47PE3 | F03FS02719 | LP | 79 |
| 190 | 2,6 | 1,8 | Fast Fix 58 | HLTCG -5° | FR13A001T | F03FS09833 | AL | 130 | 200 | 4,7 - 5,9 | 3,5 | 65 | 36 | ATB 8° | LI25M47PI3 | F03FS02720 | LP | 79 | |
| 190 | 2,8 | 2,2 | 30 | 54 | TCG -6° | LU5D 0200 | F03FS05289 | PM AL | 98 | 200 | 5,4 - 6,6 | 4 | 20 | 36 | ATB 8° | LI25M54PA3 | F03FS02726 | LP | 79 |
| 190 | 3,2 | 2,2 | 30 | 30 | ATB 15° | LU2A 0600 | F03FS04813 | WP | 47 | 200 | 5,7 - 6,9 | 3,5 | 65 | 36 | ATB 8° | LI25M57PI3BS | F03FS08165 | LP | 79 |
| 190 | 3,2 | 2,2 | 30 | 56 | ATB 5° | LU2C 0500 | F03FS04914 | WP | 49 | 200 | 5,7 - 6,9 | 4 | 45 | 36 | ATB 8° | LI25M57PE3 | F03FS02728 | LP | 79 |
| 200 | 1,5 | 1 | 30 | 40 | ATB 15° | LU1H 0300 | F03FS07131 | WO | 41 | 200 | 6,1 - 7,3 | 4 | 20 | 36 | ATB 8° | LI25M61PA3 | F03FS02730 | LP | 79 |
| 200 | 1,5 | 1 | 30 | 60 | ATB 15° | LU1H 0400 | F03FS04651 | WO | 41 | 203 | 2 | 1,4 | 25,4 | 90 | AXL 15° | LU4B 0100 | F03FS05167 | PM | 92 |
| 200 | 1,5 | 1 | 40 | 28 | FLAT 20° | LM08 0300 | F03FS03173 | WO | 31 | 205 | 1,5 | 1 | 25,4 | 40 | ATB 15° | LU1H 0500 | F03FS04652 | WO | 41 |
| 200 | 1,5 | 1 | 60 | 28 | FLAT 20° | LM08 0400 | F03FS03176 | WO | 31 | 205 | 1,5 | 1 | 25,4 | 60 | ATB 15° | LU1H 0600 | F03FS04653 | WO | 41 |
| 200 | 1,5 | 1 | 60 | 36 | ATB 20° | LM08 0500 | F03FS03179 | WO | 31 | 210 | 2 | 1,3 | 30 | 16 | ATB 18° | FR15C001H | F03FS09794 | CW | 122 |
| 200 | 1,7 | 1,2 | 25,4 | 40 | ATB 15° | FR14W003H | F03FS11515 | WO | 117 | 210 | 2 | 1,4 | 30 | 24 | ATB 25° | FR15W001TC | F03FS10068 | WO | 120 |
| 200 | 1,7 | 1,2 | 50 | 36 | ATB 20° | LM08 0600 | F03FS03182 | WO | 31 | 210 | 2 | 1,4 | 30 | 48 | ATB 15° | FR15W002TC | F03FS10069 | WO | 120 |
| 200 | 1,7 | 1,2 | 60 | 36 | ATB 20° | LM08 2800 | F03FS03240 | WO | 31 | 210 | 2 | 1,4 | 30 | 66 | HLTCG 0° | FR15A001TC | F03FS10092 | AL | 131 |

WO: Solid wood - LP: Chipboard and laminated panels - WP: Wood Based Panel - PM: Polymeric Materials - AL: Aluminium & Non-ferrous metals - ST: Steel - CW: Construct Wood - FC: Fibre Cement - HPL: High Pressure Laminate - SP: Sandwich Panel - MM: Multi Material

| D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page | D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page |
|-----|-----------|-----|------|----|------------------|--------------|------------|----------|------|-----|-----|-----|------|--------|------------------|------------|------------|----------|------|
| mm | mm | mm | mm | | | | | | | mm | mm | mm | mm | | | | | | |
| 210 | 2 | 1,6 | 25,4 | 40 | HLTCG (Ch) 0° | FR15M002M | F03FS11516 | MM | 138 | 225 | 1,5 | 1 | 60 | 28 | FLAT 20° | LM08 0800 | F03FS03188 | WO | 31 |
| 210 | 2 | 1,6 | 30 | 40 | DTCG 0° | LU6A 0400 | F03FS05346 | ST | 102 | 225 | 1,5 | 1 | 60 | 36 | ATB 20° | LM08 1100 | F03FS03197 | WO | 31 |
| 210 | 2 | 1,6 | 30 | 40 | HLTCG (Ch) 0° | FR15M001M | F03FS09886 | MM | 138 | 225 | 1,5 | 1 | 70 | 28 | FLAT 20° | LM08 0900 | F03FS03191 | WO | 31 |
| 210 | 2,1 | 1,4 | 30 | 66 | ATB -5° | FR15L001TC | F03FS10078 | LP | 125 | 225 | 1,5 | 1 | 70 | 36 | ATB 20° | LM08 1200 | F03FS03200 | WO | 31 |
| 210 | 2,2 | 1,6 | 30 | 6 | TCG 10° | FR15F001H | F03FS09843 | FC | 133 | 225 | 1,7 | 1,2 | 65 | 36 | ATB 20° | LM08 1300 | F03FS03203 | WO | 31 |
| 210 | 2,3 | 1,8 | 30 | 72 | HLTCG -5° | FR15A001H | F03FS09817 | AL | 129 | 225 | 2,2 | 1,6 | 70 | 16+2 | FLAT 20° | LM01 0500 | F03FS02759 | WO | 24 |
| 210 | 2,4 | 1,8 | 25,4 | 24 | ATB -5 | FR15W002M | F03FS11566 | WO | 118 | 225 | 2,5 | 1,8 | 70 | 16+2+2 | ATB 20° | LM03 0100 | F03FS02843 | WO | 26 |
| 210 | 2,4 | 1,8 | 25,4 | 48 | ATB -5 | FR15W003M | F03FS11517 | WO | 119 | 225 | 2,6 | 1,6 | 30 | 32 | ATB 15° | FR18W001T | F03FS09772 | WO | 119 |
| 210 | 2,4 | 1,8 | 30 | 24 | ATB 15° | FR15W003H | F03FS09723 | WO | 117 | 225 | 2,6 | 1,6 | 30 | 48 | ATB 10° | FR18W002T | F03FS09773 | WO | 119 |
| 210 | 2,4 | 1,8 | 30 | 40 | ATB 15° | FR15W001H | F03FS09723 | WO | 117 | 225 | 2,6 | 1,8 | 30 | 68 | HLTCG -5° | FR18A001T | F03FS09834 | AL | 130 |
| 210 | 2,4 | 1,8 | 30 | 48 | ATB 10° | FR15W004H | F03FS09726 | WO | 117 | 230 | 2 | 1,6 | 30 | 48 | DTCG 0° | LU6A 0600 | F03FS05348 | ST | 102 |
| 210 | 2,4 | 1,8 | 30 | 56 | ATB 5° | FR15W002H | F03FS09724 | WO | 117 | 230 | 2,2 | 1,6 | 25,4 | 100 | AXL 15° | LU4B 0200 | F03FS05169 | PM | 92 |
| 210 | 2,4 | 1,8 | 30 | 48 | ATB -5° | FR15W001M | F03FS09747 | WO | 118 | 230 | 2,2 | 1,6 | 30 | 20 | ATB 18° | FR19C001H | F03FS09795 | CW | 122 |
| 210 | 2,4 | 2 | 30 | 36 | HLTCG (Ch) 0° | FR15X001H | F03FS09855 | SP | 136 | 230 | 2,2 | 1,6 | 30 | 6 | TCG 10° | FR19F001H | F03FS09844 | FC | 133 |
| 210 | 2,5 | 1,8 | 30 | 54 | ATB -2° | LU3A 0003 | F03FS07413 | LP | 70 | 230 | 2,2 | 1,8 | 30 | 48 | HLTCG (Ch) 0° | FR19X001H | F03FS09856 | SP | 136 |
| 210 | 2,5 | 1,8 | 30 | 54 | HLTCG -5° | FR15A001M | F03FS09820 | AL | 130 | 230 | 2,4 | 2 | 25,4 | 44 | DTCG 0° | LU6A 0700 | F03FS05349 | ST | 102 |
| 210 | 2,8 | 1,8 | 30 | 60 | HLTCG 0° | FR15H001H | F03FS09869 | HPL | 127 | 230 | 2,4 | 2 | 30 | 44 | HLTCG (Ch) 0° | FR19M001H | F03FS10042 | MM | 138 |
| 210 | 2,8 | 2,2 | 30 | 60 | TCG -6° | LU5D 0400 | F03FS05291 | PM AL | 98 | 230 | 2,8 | 1,8 | 30 | 24 | ATB 15° | FR19W001H | F03FS09728 | WO | 117 |
| 210 | 3,2 | 2,2 | 30 | 34 | ATB 15° | LU2A 1100 | F03FS04822 | WP | 47 | 230 | 2,8 | 1,8 | 30 | 36 | ATB 15° | FR19W002H | F03FS09729 | WO | 117 |
| 210 | 3,2 | 2,2 | 30 | 24 | ATB 15° | LU2A 1000 | F03FS04821 | WP | 47 | 230 | 2,8 | 1,8 | 30 | 48 | ATB 15° | FR19W003H | F03FS09730 | WO | 117 |
| 210 | 3,2 | 2,2 | 30 | 64 | ATB 5° | LU2C 0700 | F03FS04917 | WP | 49 | 230 | 2,8 | 1,8 | 30 | 64 | HLTCG -5° | FR19A001H | F03FS09818 | AL | 129 |
| 215 | 4,3 - 5,1 | 3,2 | 50 | 42 | FLAT 6° | DLI25M43QFH4 | F03FS09633 | LP | 80 | 230 | 3 | 2,5 | 30 | 64 | TCG -6° | LU5D 0700 | F03FS05294 | PM AL | 98 |
| 215 | 4,3 - 5,1 | 3,2 | 50 | 42 | FLAT 6° | DLI25M43QFH6 | F03FS09634 | LP | 80 | 230 | 3,2 | 2,2 | 30 | 34 | ATB 15° | LU2A 1500 | F03FS04827 | WP | 47 |
| 215 | 4,3 - 5,5 | 3,2 | 50 | 42 | ATB 8° | LI25M43QF3 | F03FS02685 | LP | 79 | 230 | 3,2 | 2,2 | 30 | 24 | ATB 15° | LU2A 1400 | F03FS04826 | WP | 47 |
| 215 | 4,5 - 5,7 | 3,2 | 50 | 42 | ATB 8° | LI25M45PF3 | F03FS02713 | LP | 79 | 230 | 3,2 | 2,2 | 30 | 64 | ATB 5° | LU2C 1000 | F03FS04921 | WP | 49 |
| 216 | 1,7 | 1,2 | 30 | 24 | ATB 5° | FR16W006MC | F03FS10061 | WO | 119 | 235 | 2,2 | 1,6 | 25,4 | 60 | ATB 10° | FR20W007H | F03FS11521 | WO | 117 |
| 216 | 1,7 | 1,2 | 30 | 48 | ATB 5° | FR16W007MC | F03FS10062 | WO | 119 | 235 | 2,2 | 1,6 | 30 | 20 | ATB 18° | FR20C001H | F03FS09796 | CW | 122 |
| 216 | 2 | 1,4 | 30 | 24 | ATB 25° | FR16W001TC | F03FS10070 | WO | 120 | 235 | 2,2 | 1,6 | 30 | 6 | TCG 10° | FR20F001H | F03FS09845 | FC | 133 |
| 216 | 2 | 1,4 | 30 | 48 | ATB 15° | FR16W002TC | F03FS10071 | WO | 120 | 235 | 2,2 | 1,8 | 30 | 50 | HLTCG (Ch) 0° | FR20X001H | F03FS09857 | SP | 136 |
| 216 | 2 | 1,4 | 30 | 66 | HLTCG 0° | FR16A002MC | F03FS10089 | AL | 130 | 235 | 2,5 | 1,8 | 30 | 80 | HLTCG -5° | FR20A001H | F03FS09819 | AL | 129 |
| 216 | 2 | 1,4 | 30 | 66 | HLTCG 0° | FR16A001TC | F03FS10093 | AL | 131 | 235 | 2,8 | 1,8 | 30 | 24 | ATB 15° | FR20W003H | F03FS09733 | WO | 117 |
| 216 | 2 | 1,4 | 30 | 6 | TCG 10° | FR16F002MC | F03FS10098 | FC | 134 | 235 | 2,8 | 1,8 | 30 | 36 | ATB 15° | FR20W004H | F03FS09734 | WO | 117 |
| 216 | 2 | 1,6 | 30 | 40 | DTCG 0° | LU6A 0500 | F03FS05347 | ST | 102 | 235 | 2,8 | 1,8 | 30 | 48 | ATB 15° | FR20W005H | F03FS09735 | WO | 117 |
| 216 | 2 | 1,6 | 30 | 40 | HLTCG (Ch) 0° | FR16M001M | F03FS09887 | MM | 138 | 235 | 2,8 | 1,8 | 30 | 56 | ATB 10° | FR20W006H | F03FS09736 | WO | 117 |
| 216 | 2,1 | 1,4 | 30 | 66 | ATB -5° | FR16L001TC | F03FS10079 | LP | 125 | 235 | 2,8 | 1,8 | 30 | 64 | HLTCG 0° | FR20H001H | F03FS09871 | HPL | 127 |
| 216 | 2,2 | 1,6 | 30 | 6 | TCG 10° | FR16F001M | F03FS09846 | FC | 134 | 237 | 2,5 | 1,8 | 30 | 24 | ATB 15° | FR21W001H | F03FS09737 | WO | 117 |
| 216 | 2,4 | 1,8 | 25,4 | 48 | ATB -5° | FR16W004M | F03FS09751 | WO | 118 | 237 | 2,5 | 1,8 | 30 | 56 | ATB 10° | FR21W002H | F03FS09738 | WO | 117 |
| 216 | 2,4 | 1,8 | 25,4 | 64 | ATB -5° | FR16W005M | F03FS09752 | WO | 118 | 240 | 2,6 | 1,6 | 30 | 48 | HLTCG (Ch) 0° | FR22X001H | F03FS09858 | SP | 136 |
| 216 | 2,4 | 1,8 | 30 | 24 | ATB -5° | FR16W001M | F03FS09748 | WO | 118 | 240 | 2,8 | 1,8 | 30 | 48 | ATB 15° | FR22W001H | F03FS09739 | WO | 117 |
| 216 | 2,4 | 1,8 | 30 | 40 | ATB -5° | FR16W002M | F03FS09749 | WO | 118 | 250 | 1,7 | 1,2 | 40 | 24 | FLAT 20° | LM08 1400 | F03FS03206 | WO | 31 |
| 216 | 2,4 | 1,8 | 30 | 48 | ATB -5° | FR16W003M | F03FS09750 | WO | 118 | 250 | 1,7 | 1,2 | 40 | 36 | ATB 20° | LM08 1700 | F03FS03215 | WO | 31 |
| 216 | 2,4 | 1,8 | 30 | 24 | ATB 15° | FR16W003T | F03FS11519 | WO | 119 | 250 | 1,7 | 1,2 | 60 | 24 | FLAT 20° | LM08 1500 | F03FS03209 | WO | 31 |
| 216 | 2,4 | 1,8 | 30 | 48 | ATB 10° | FR16W004T | F03FS11520 | WO | 119 | 250 | 1,7 | 1,2 | 60 | 36 | ATB 20° | LM08 1800 | F03FS03218 | WO | 31 |
| 216 | 2,5 | 1,8 | 30 | 64 | HLTCG -5° | FR16A001M | F03FS09821 | AL | 130 | 250 | 1,7 | 1,2 | 70 | 24 | FLAT 20° | LM08 1600 | F03FS03212 | WO | 31 |
| 216 | 2,5 | 1,8 | 30 | 60 | HLTCG 5° | FR16L002T | F03FS11518 | LP | 125 | 250 | 1,7 | 1,2 | 70 | 36 | ATB 20° | LM08 1900 | F03FS03223 | WO | 31 |
| 216 | 2,8 | 1,8 | 30 | 64 | HLTCG -3° | FR16H001M | F03FS09872 | HPL | 126 | 250 | 2,1 | 1,6 | 30 | 24 | ATB 5° | FR23W003MC | F03FS10063 | WO | 119 |
| 216 | 2,8 | 2 | 30 | 24 | ATB -5° | LU2F 0100 | F03FS06304 | LP WP PM | 52 | 250 | 2,1 | 1,6 | 30 | 48 | ATB 5° | FR23W004MC | F03FS10064 | WO | 118 |
| 216 | 2,8 | 2 | 30 | 48 | ATB -5° | LU2F 0200 | F03FS04971 | LP WP PM | 52 | 250 | 2,2 | 1,6 | 30 | 20+2 | FLAT 20° | LM01 0600 | F03FS02763 | WO | 24 |
| 216 | 2,8 | 2 | 30 | 60 | ATB -5° | LU2F 0300 | F03FS04972 | LP WP PM | 52 | 250 | 2,2 | 1,6 | 30 | 100 | AXL 15° | LU4B 0300 | F03FS05170 | PM | 92 |
| 216 | 2,8 | 2,2 | 30 | 60 | TCG -6° | LU5D 0500 | F03FS05292 | PM AL | 98 | 250 | 2,2 | 1,6 | 30 | 6 | TCG 10° | FR23F002MC | F03FS10099 | FC | 134 |
| 216 | 3,2 | 2,2 | 30 | 34 | ATB 15° | LU2A 1200 | F03FS04823 | WP | 47 | 250 | 2,2 | 1,6 | 50 | 24+2 | FLAT 20° | LM01 1400 | F03FS02780 | WO | 24 |
| 216 | 3,2 | 2,2 | 30 | 48 | ATB 10° | LU2B 0400 | F03FS04876 | WP | 48 | 250 | 2,2 | 1,6 | 50 | 30 | ATB 20° | LM08 2500 | F03FS03237 | WO | 31 |
| 216 | 3,2 | 2,2 | 30 | 64 | ATB 5° | LU2C 0800 | F03FS04918 | WP | 49 | 250 | 2,2 | 1,6 | 60 | 20+2 | FLAT 20° | LM01 0700 | F03FS02765 | WO | 24 |
| 220 | 2,6 | 1,6 | 30 | 48 | ATB 10° | FR17W001T | F03FS09771 | WO | 119 | 250 | 2,2 | 1,6 | 60 | 24+2 | FLAT 20° | LM01 1500 | F03FS02781 | WO | 24 |
| 220 | 3 | 2,5 | 30 | 64 | TCG -6° | LU5D 0600 | F03FS05293 | PM AL | 98 | 250 | 2,2 | 1,6 | 60 | 30 | ATB 20° | LM08 2600 | F03FS03238 | WO | 31 |
| 220 | 3,2 | 2,2 | 30 | 34 | ATB 15° | LU2A 1300 | F03FS04824 | WP | 47 | 250 | 2,2 | 1,6 | 70 | 20+2 | FLAT 20° | LM01 0800 | F03FS02767 | WO | 24 |
| 220 | 3,2 | 2,2 | 30 | 64 | ATB 5° | LU2C 0900 | F03FS04919 | WP | 49 | 250 | 2,2 | 1,6 | 70 | 24+2 | FLAT 20° | LM01 1600 | F03FS02700 | WO | 24 |
| 220 | 3,2 | 2,2 | 30 | 64 | ATB -5° | LU3A 0100 | F03FS05059 | LP | 70 | 250 | 2,2 | 1,6 | 70 | 30 | ATB 20° | LM08 2700 | F03FS03239 | WO | 31 |
| 220 | 3,2 | 2,2 | 30 | 42 | CON 10° | LU3B 0100 | F03FS05069 | LP | 71 | 250 | 2,2 | 1,6 | 80 | 20+2 | FLAT 20° | LM01 0900 | F03FS02769 | WO | 24 |
| 220 | 3,2 | 2,2 | 30 | 42 | CON -5° | LU3C 0100 | F03FS05076 | LP | 72 | 250 | 2,4 | 1,8 | 25,4 | 48 | ATB 15° | FR23W005T | F03FS11641 | WO | 119 |
| 220 | 3,2 | 2,2 | 30 | 64 | TCG 5° | LU3D 0200 | F03FS05083 | LP | 73 | 250 | 2,4 | 1,8 | 25,4 | 60 | ATB 15° | FR23W006T | F03FS11642 | WO | 119 |
| 220 | 3,2 | 2,2 | 30 | 56 | TCG -6° | LU3E 0100 | F03FS05109 | LP | 74 | 250 | 2,4 | 1,8 | 25,4 | 80 | ATB 15° | FR23W007T | F03FS11643 | WO | 119 |
| 220 | 3,2 | 2,2 | 30 | 64 | TCG -3° | LU3F 0100 | F03FS05117 | LP PM | 75 | 250 | 2,4 | 1,8 | 25,4 | 100 | ATB 15° | FR23W008T | F03FS11644 | WO | 119 |
| 220 | 3,4 | 2,2 | 30 | 48 | ATB 15° | LI27M AA3 | F03FS02733 | LP | 83 | 250 | 2,4 | 1,8 | 30 | 40 | ATB -5° | FR23W001M | F03FS09753 | WO | 118 |
| 220 | 6,3 - 7,5 | 4,4 | 20 | 36 | ATB 8° | LI25M63UA3 | F03FS02732 | LP | 79 | 250 | 2,4 | 1,8 | 30 | 60 | ATB -5° | FR23W002M | F03FS09754 | WO | 118 |
| 225 | 1,5 | 1 | 40 | 28 | FLAT 20° | LM08 0700 | F03FS03185 | WO | 31 | 250 | 2,4 | 1,8 | 30 | 6 | TCG 10° | FR23F001M | F03FS09847 | FC | 134 |
| 225 | 1,5 | 1 | 40 | 36 | ATB 20° | LM08 1000 | F03 | | | | | | | | | | | | |

| D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page | D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page |
|-----|-----|-----|----|--------|---------------|------------|------------|----------|------|-----|---------|-----|------|--------|---------------|------------|------------|----------|------|
| mm | mm | mm | mm | | | | | | | mm | mm | mm | mm | | | | | | |
| 250 | 2,4 | 2 | 30 | 48 | DTCG 0° | LU6A 0800 | F03FS05350 | ST | 102 | 250 | 3,2 | 2,2 | 70 | 20+2+2 | ATB 20° | LM04 0300 | F03FS02895 | WO | 27 |
| 250 | 2,4 | 2 | 30 | 48 | HLTCG (Ch) 0° | FR23M001M | F03FS09888 | MM | 138 | 250 | 3,2 | 2,2 | 70 | 22 | ATB 20° | LU1C 0200 | F03FS04592 | WO | 36 |
| 250 | 2,5 | 1,6 | 30 | 24 | FLAT 15° | LU1E 0100 | F03FS04630 | WO | 38 | 250 | 3,2 | 2,2 | 70 | 24 | ATB 20° | LU1D 0200 | F03FS04617 | WO | 37 |
| 250 | 2,5 | 1,6 | 30 | 24 | ATB 22° | LU1F 0100 | F03FS04640 | WO | 39 | 250 | 3,2 | 2,2 | 80 | 20+2+2 | ATB 20° | LM04 0400 | F03FS02897 | WO | 27 |
| 250 | 2,5 | 1,6 | 30 | 48 | ATB 15° | LU1H 0700 | F03FS04655 | WO | 41 | 250 | 3,2 | 2,2 | 80 | 40 | ATB 15° | LU2A 1880 | F03FS09971 | WP | 47 |
| 250 | 2,5 | 1,6 | 30 | 60 | ATB 15° | LU1H 0800 | F03FS04657 | WO | 41 | 250 | 3,2 | 2,5 | 30 | 80 | DTCG 5° | LU4D 0100 | F03FS07294 | PM | 93 |
| 250 | 2,5 | 1,8 | 20 | 80 | ATB 5° | LU2D 0500 | F03FS04954 | WP | 50 | 250 | 3,4 | 2,2 | 30 | 16+2+2 | FLAT 25° | LM05 0100 | F03FS02973 | WO | 28 |
| 250 | 2,5 | 1,8 | 30 | 80 | ATB 5° | LU2D 0700 | F03FS04957 | WP | 50 | 250 | 3,4 | 2,2 | 30 | 18 | BEV 15° | LU1B 0100 | F03FS04579 | WO | 34 |
| 250 | 2,8 | 1,8 | 30 | 24 | ATB 20° | FR23W001T | F03FS09774 | WO | 119 | 250 | 3,4 | 2,2 | 60 | 16+2+2 | FLAT 25° | LM05 0200 | F03FS02975 | WO | 28 |
| 250 | 2,8 | 1,8 | 30 | 40 | ATB 15° | FR23W002T | F03FS09775 | WO | 119 | 250 | 3,4 | 2,2 | 70 | 16+2+2 | FLAT 25° | LM05 0300 | F03FS02977 | WO | 28 |
| 250 | 2,8 | 1,8 | 30 | 60 | ATB 10° | FR23W003T | F03FS09776 | WO | 119 | 250 | 3,4 | 2,2 | 80 | 16+2+2 | FLAT 25° | LM05 0400 | F03FS02979 | WO | 28 |
| 250 | 2,8 | 1,8 | 30 | 80 | ATB 5° | FR23W004T | F03FS09777 | WO | 119 | 250 | 3,4 | 2,4 | 30 | 54 | CON -2° | LU3C 0204 | F03FS09537 | LP | 72 |
| 250 | 2,8 | 1,8 | 30 | 80 | ATB -2° | FR23L001T | F03FS09804 | LP | 125 | 250 | 3,5 | 3 | 30 | 60 | TCG 10° | LU5A 0200 | F03FS05182 | AL | 95 |
| 250 | 2,8 | 1,8 | 30 | 80 | HLTCG -3° | FR23H001M | F03FS09873 | HPL | 126 | 250 | 3,5 | 3 | 30 | 80 | TCG 5° | LU5B 0200 | F03FS05218 | PM AL | 96 |
| 250 | 2,8 | 1,8 | 30 | 80 | HLTCG 10° | FR23H001T | F03FS09877 | HPL | 127 | 250 | 3,5 | 3 | 30 | 54 | TCG -6° | LU5C 0400 | F03FS05263 | AL | 97 |
| 250 | 2,8 | 2 | 30 | 16+2 | FLAT 20° | LM02 0100 | F03FS02797 | WO | 25 | 250 | 3,5 | 3 | 30 | 80 | TCG -6° | LU5D 0800 | F03FS05295 | PM AL | 98 |
| 250 | 2,8 | 2 | 30 | 16+2+2 | ATB 20° | LM03 0200 | F03FS02845 | WO | 26 | 250 | 3,5 | 3 | 32 | 60 | TCG 10° | LU5A 0300 | F03FS05183 | AL | 95 |
| 250 | 2,8 | 2 | 30 | 30 | FLAT 15° | LU1H 1500 | F03FS04670 | WO | 41 | 250 | 3,5 | 3 | 32 | 80 | TCG 5° | LU5B 0300 | F03FS05221 | PM AL | 96 |
| 250 | 2,8 | 2 | 30 | 40 | FLAT 15° | LU1H 1600 | F03FS07127 | WO | 41 | 250 | 3,5 | 3 | 32 | 80 | TCG -6° | LU5D 0900 | F03FS05297 | PM AL | 98 |
| 250 | 2,8 | 2 | 30 | 48 | ATB -5° | LU2F 0400 | F03FS04973 | LP WP PM | 52 | 250 | 3,5 | 3 | 40 | 80 | TCG -6° | LU5D 1000 | F03FS05299 | PM AL | 98 |
| 250 | 2,8 | 2 | 30 | 60 | ATB -5° | LU2F 0500 | F03FS04974 | LP WP PM | 52 | 250 | 4 | 3 | 100 | 72 | FLAT 12° | LT20MD BB3 | F03FS04421 | LP | 88 |
| 250 | 2,8 | 2 | 30 | 80 | HLTCG -5° | FR23A001M | F03FS09822 | AL | 130 | 250 | 4 | 3 | 100 | 72 | FLAT 12° | LT20MS BB3 | F03FS04422 | LP | 88 |
| 250 | 2,8 | 2 | 30 | 68 | HLTCG -5° | FR23A001T | F03FS09835 | AL | 130 | 250 | 4,2 | 3 | 30 | 16+2+2 | FLAT 25° | LM06 0100 | F03FS03104 | WO | 29 |
| 250 | 2,8 | 2 | 60 | 16+2 | FLAT 20° | LM02 0200 | F03FS02799 | WO | 25 | 250 | 4,2 | 3 | 30 | 60 | TCG 15° | LSB25003X | F03FS10212 | LP PM | 66 |
| 250 | 2,8 | 2 | 60 | 16+2+2 | ATB 20° | LM03 0300 | F03FS02847 | WO | 26 | 250 | 4,2 | 3 | 30 | 60 | ATB 10° | LT14MD BA3 | F03FS04380 | LP | 87 |
| 250 | 2,8 | 2 | 70 | 16+2 | FLAT 20° | LM02 0300 | F03FS02801 | WO | 25 | 250 | 4,2 | 3 | 30 | 60 | ATB 10° | LT14MS BA3 | F03FS04391 | LP | 87 |
| 250 | 2,8 | 2 | 70 | 16+2+2 | ATB 20° | LM03 0400 | F03FS02849 | WO | 26 | 250 | 4,2 | 3 | 50 | 60 | TCG 15° | LSB25005X | F03FS10214 | LP PM | 66 |
| 250 | 2,8 | 2 | 80 | 16+2 | FLAT 20° | LM02 0400 | F03FS02803 | WO | 25 | 250 | 4,2 | 3 | 55 | 60 | TCG 15° | LSB25002X | F03FS10211 | LP PM | 66 |
| 250 | 2,8 | 2 | 80 | 16+2+2 | ATB 20° | LM03 0500 | F03FS02851 | WO | 26 | 250 | 4,2 | 3 | 60 | 16+2+2 | FLAT 25° | LM06 0200 | F03FS03106 | WO | 29 |
| 250 | 2,8 | 2,2 | 30 | 80 | TCG -3° | LU4A 0100 | F03FS05163 | PM | 91 | 250 | 4,2 | 3 | 70 | 16+2+2 | FLAT 25° | LM06 0300 | F03FS03108 | WO | 29 |
| 250 | 2,8 | 2,2 | 30 | 100 | TCG 5° | LU5E 0100 | F03FS05324 | AL | 99 | 250 | 4,2 | 3 | 80 | 16+2+2 | FLAT 25° | LM06 0400 | F03FS03110 | WO | 29 |
| 250 | 2,8 | 2,2 | 32 | 100 | TCG 5° | LU5E 0200 | F03FS05325 | AL | 99 | 250 | 4,2 | 3 | 130 | 56 | ATB 10° | LT16MD BD3 | F03FS04401 | LP | 86 |
| 250 | 3 | 2 | 30 | 40 | RND 20° | LU1G 0100 | F03FS04646 | WO | 40 | 250 | 4,2 | 3 | 130 | 56 | ATB 10° | LT16MS BD3 | F03FS04409 | LP | 86 |
| 250 | 3 | 2,2 | 30 | 100 | AXL 15° | LU1L 0100 | F03FS04690 | WO PM | 43 | 250 | 4,2 | 3 | 130 | 60 | ATB 10° | LT12MD BB3 | F03FS04372 | LP | 86 |
| 250 | 3 | 2,2 | 30 | 120 | AXL 15° | LU1L 0200 | F03FS04691 | WO PM | 43 | 250 | 4,2 | 3 | 130 | 60 | ATB 10° | LT12MS BB3 | F03FS07063 | LP | 86 |
| 250 | 3 | 2,5 | 20 | 80 | ATB 10° | LU1I 0200 | F03FS04675 | WO | 42 | 250 | 4,2 | 3 | 130 | 60 | ATB 10° | LT14MD BB3 | F03FS04382 | LP | 87 |
| 250 | 3 | 2,5 | 30 | 80 | ATB 10° | LU1I 0300 | F03FS04677 | WO | 42 | 250 | 4,2 | 3 | 130 | 60 | ATB 10° | LT14MS BB3 | F03FS04393 | LP | 87 |
| 250 | 3 | 2,5 | 30 | 96 | ATB 10° | LU1I 0400 | F03FS04679 | WO | 42 | 250 | 4,2 | 3 | 130 | 72 | FLAT 10° | LT18MD BB3 | F03FS04415 | LP | 88 |
| 250 | 3,2 | 2,2 | 30 | 20+2+2 | ATB 20° | LM04 0100 | F03FS02891 | WO | 27 | 250 | 4,2 | 3 | 130 | 72 | FLAT 10° | LT18MS BB3 | F03FS04417 | LP | 88 |
| 250 | 3,2 | 2,2 | 30 | 22 | ATB 20° | LU1C 0100 | F03FS04590 | WO | 36 | 250 | 4,4 | 3 | 30 | 80 | TCG 15° | LSB25004X | F03FS10213 | LP PM | 66 |
| 250 | 3,2 | 2,2 | 30 | 24 | ATB 20° | LU1D 0100 | F03FS04615 | WO | 37 | 250 | 4,6 | 3 | 30 | 48 | ATB 15° | LI27M BA3 | F03FS02734 | LP | 83 |
| 250 | 3,2 | 2,2 | 30 | 40 | ATB 15° | LU2A 1700 | F03FS04830 | WP | 47 | 250 | 5,5 | 3,5 | 30 | 16+2+2 | FLAT 20° | LM07 0100 | F03FS03141 | WO | 30 |
| 250 | 3,2 | 2,2 | 30 | 30 | ATB 10° | LU2A 1600 | F03FS04828 | WP | 47 | 250 | 5,5 | 3,5 | 60 | 16+2+2 | FLAT 20° | LM07 0200 | F03FS03143 | WO | 30 |
| 250 | 3,2 | 2,2 | 30 | 48 | ATB 10° | LU2B 0500 | F03FS04877 | WP | 48 | 250 | 5,5 | 3,5 | 70 | 16+2+2 | FLAT 20° | LM07 0300 | F03FS03145 | WO | 30 |
| 250 | 3,2 | 2,2 | 30 | 60 | ATB 10° | LU2B 0700 | F03FS04880 | WP | 48 | 250 | 5,5 | 3,5 | 80 | 16+2+2 | FLAT 20° | LM07 0400 | F03FS03147 | WO | 30 |
| 250 | 3,2 | 2,2 | 30 | 80 | ATB 5° | LU2C 1200 | F03FS04922 | WP | 49 | 250 | 3,1-4,3 | 2,2 | 30 | 54 | ATB 8° | LI25M310C3 | F03FS07595 | LP | 79 |
| 250 | 3,2 | 2,2 | 30 | 100 | ATB 5° | LU2C 1300 | F03FS04924 | WP | 49 | 250 | 4,3-5,5 | 3,2 | 50 | 48 | ATB 8° | LI25M430F3 | F03FS02669 | LP | 79 |
| 250 | 3,2 | 2,2 | 30 | 80 | ATB -2° | LU3A 0200 | F03FS05061 | LP | 70 | 250 | 4,3-5,5 | 3,2 | 30 | 48 | ATB 8° | LI25M430C3 | F03FS02668 | LP | 79 |
| 250 | 3,2 | 2,2 | 30 | 48 | CON 10° | LU3B 0200 | F03FS05071 | LP | 71 | 254 | 2,1 | 1,6 | 30 | 24 | ATB 25° | FR24W005TC | F03FS10072 | WO | 120 |
| 250 | 3,2 | 2,2 | 30 | 48 | CON -5° | LU3C 0200 | F03FS05077 | LP | 72 | 254 | 2,1 | 1,6 | 30 | 40 | ATB 20° | FR24W006TC | F03FS10073 | WO | 120 |
| 250 | 3,2 | 2,2 | 30 | 80 | TCG 5° | LU3D 0400 | F03FS05088 | LP | 73 | 254 | 2,1 | 1,6 | 30 | 60 | ATB 15° | FR24W007TC | F03FS10074 | WO | 120 |
| 250 | 3,2 | 2,2 | 30 | 60 | TCG 10° | LU3D 1100 | F03FS05100 | LP | 73 | 254 | 2,1 | 1,6 | 30 | 24 | ATB 5° | FR24W002MC | F03FS11527 | WO | 119 |
| 250 | 3,2 | 2,2 | 30 | 60 | TCG -6° | LU3E 0200 | F03FS05111 | LP | 74 | 254 | 2,1 | 1,6 | 30 | 48 | ATB 5° | FR24W003MC | F03FS11528 | WO | 119 |
| 250 | 3,2 | 2,2 | 30 | 80 | TCG -3° | LU3F 0200 | F03FS05119 | LP PM | 75 | 254 | 2,4 | 1,8 | 30 | 60 | ATB -5° | FR24W001M | F03FS09755 | WO | 118 |
| 250 | 3,2 | 2,2 | 30 | 22 | ATB 20° | LG1C 0100 | F03FS07559 | WO | 44 | 254 | 2,4 | 1,8 | 30 | 6 | TCG 10° | FR24F001M | F03FS09848 | FC | 134 |
| 250 | 3,2 | 2,2 | 30 | 40 | ATB 15° | LG2A 1700 | F03FS07562 | WP | 53 | 254 | 2,4 | 1,8 | 30 | 78 | HLTCG 0° | FR24A002MC | F03FS11526 | AL | 130 |
| 250 | 3,2 | 2,2 | 30 | 60 | ATB 10° | LG2B 0700 | F03FS07566 | WP | 54 | 254 | 2,4 | 2 | 25,4 | 50 | DTCG 0° | LU6A 0900 | F03FS05351 | ST | 102 |
| 250 | 3,2 | 2,2 | 30 | 80 | ATB 5° | LG2C 1200 | F03FS07570 | WP | 55 | 254 | 2,4 | 2 | 25,4 | 60 | DTCG 0° | LU6A 1000 | F03FS05352 | ST | 102 |
| 250 | 3,2 | 2,2 | 30 | 80 | TCG 5° | LG3D 0400 | F03FS07438 | LP | 76 | 254 | 2,4 | 2 | 30 | 48 | HLTCG (Ch) 0° | FR24M001M | F03FS09889 | MM | 138 |
| 250 | 3,2 | 2,2 | 35 | 40 | ATB 15° | LU2A 1800 | F03FS04832 | WP | 47 | 254 | 2,6 | 1,8 | 30 | 24 | ATB 20° | FR24W001T | F03FS09778 | WO | 119 |
| 250 | 3,2 | 2,2 | 35 | 60 | ATB 10° | LU2B 0800 | F03FS04882 | WP | 48 | 254 | 2,6 | 1,8 | 30 | 40 | ATB 15° | FR24W002T | F03FS09779 | WO | 119 |
| 250 | 3,2 | 2,2 | 55 | 80 | TCG 5° | LU3D 0455 | F03FS09973 | LP | 73 | 254 | 2,6 | 1,8 | 30 | 60 | ATB 10° | FR24W003T | F03FS09780 | WO | 119 |
| 250 | 3,2 | 2,2 | 60 | 20+2+2 | ATB 20° | LM04 0200 | F03FS02893 | WO | 27 | 254 | 2,6 | 1,8 | 30 | 80 | ATB 5° | FR24W004T | F03FS09781 | WO | 119 |
| 250 | 3,2 | 2,2 | 60 | 60 | TCG 10° | LU3D 1160 | F03FS09974 | LP | 73 | 254 | 2,8 | 1,8 | 30 | 80 | HLTCG -3° | FR24H001M | F03FS09874 | HPL | 126 |

WO: Solid wood - LP: Chipboard and laminated panels - WP: Wood Based Panel - PM: Polymeric Materials - AL: Aluminium & Non-ferrous metals - ST: Steel - CW: Construct Wood - FC: Fibre Cement - HPL: High Pressure Laminate - SP: Sandwich Panel - MM: Multi Material

| D mm | B mm | b mm | d mm | Z | Teeth | Freud Code | Art. No. | Material | Page | D mm | B mm | b mm | d mm | Z | Teeth | Freud Code | Art. No. | Material | Page |
|---------|---------|---------|---------|--------|------------------|------------|------------|----------|------|---------|---------|---------|---------|--------|-----------|------------|------------|----------|------|
| 254 | 2,8 | 2 | 30 | 80 | HLTCG -5° | FR24A001M | F03FS09823 | AL | 130 | 300 | 2,8 | 2 | 70 | 20+2+2 | ATB 20° | LM03 0900 | F03FS02859 | WO | 26 |
| 255 | 1,7 | 1,2 | 70 | 24 | FLAT 20° | LM08 2400 | F03FS03236 | WO | 31 | 300 | 2,8 | 2 | 80 | 20+2 | FLAT 20° | LM02 0900 | F03FS02813 | WO | 25 |
| 255 | 2,2 | 1,6 | 25,4 | 100 | AXL 15° | LU4B 0400 | F03FS05172 | PM | 92 | 300 | 2,8 | 2 | 80 | 20+2+2 | ATB 20° | LM03 1000 | F03FS02861 | WO | 26 |
| 255 | 2,8 | 1,8 | 25,4 | 40 | ATB 15° | FR25W002T | F03FS10134 | WO | 120 | 300 | 2,8 | 2,2 | 30 | 96 | TCG -3° | LU4A 0200 | F03FS05165 | PM | 91 |
| 255 | 2,8 | 1,8 | 25,4 | 60 | ATB 15° | FR25W003T | F03FS10135 | WO | 120 | 300 | 3 | 2 | 30 | 48 | RND 20° | LU1G 0200 | F03FS04647 | WO | 40 |
| 255 | 2,8 | 1,8 | 25,4 | 80 | ATB 15° | FR25W004T | F03FS10136 | WO | 120 | 300 | 3 | 2,2 | 30 | 100 | AXL 15° | LU1L 0500 | F03FS04694 | WO PM | 43 |
| 255 | 2,8 | 2,2 | 25,4 | 100 | TCG 5° | LU5E 0300 | F03FS05327 | AL | 99 | 300 | 3 | 2,2 | 30 | 120 | AXL 15° | LU1L 0600 | F03FS04695 | WO PM | 43 |
| 255 | 2,8 | 2,2 | 25,4 | 120 | TCG 5° | LU5E 0400 | F03FS05329 | AL | 99 | 300 | 3 | 2,5 | 30 | 96 | ATB 10° | LU1I 0600 | F03FS04682 | WO | 42 |
| 255 | 3 | 2,2 | 25,4 | 100 | AXL 15° | LU1L 0300 | F03FS04692 | WO PM | 43 | 300 | 3 | 2,5 | 30 | 112 | ATB 10° | LU1I 0700 | F03FS04684 | WO | 42 |
| 255 | 3 | 2,2 | 25,4 | 120 | AXL 15° | LU1L 0400 | F03FS04693 | WO PM | 43 | 300 | 3 | 2,5 | 30 | 100 | TCG 5° | LU5E 0500 | F03FS05331 | AL | 99 |
| 255 | 4,2 | 3 | 80 | 60 | ATB 10° | LT14MD FA3 | F03FS04387 | LP | 87 | 300 | 3 | 2,5 | 30 | 120 | TCG 5° | LU5E 0700 | F03FS05334 | AL | 99 |
| 255 | 4,2 | 3 | 80 | 60 | ATB 10° | LT14MS FA3 | F03FS04398 | LP | 87 | 300 | 3 | 2,5 | 32 | 120 | TCG 5° | LU5E 0800 | F03FS05337 | AL | 99 |
| 260 | 2,3 | 1,8 | 30 | 80 | HLTCG -5° | FR26A001M | F03FS09827 | AL | 130 | 300 | 3,2 | 2,2 | 25,4 | 96 | ATB 2° | LU3A 0600 | F03FS05807 | LP | 70 |
| 260 | 2,4 | 1,8 | 30 | 60 | ATB -5° | FR26W001M | F03FS09760 | WO | 118 | 300 | 3,2 | 2,2 | 30 | 24+2+2 | ATB 20° | LM04 0500 | F03FS02899 | WO | 27 |
| 260 | 2,4 | 1,8 | 30 | 6 | TCG 10° | FR26F001M | F03FS09849 | FC | 134 | 300 | 3,2 | 2,2 | 30 | 26 | ATB 20° | LU1C 0400 | F03FS04595 | WO | 36 |
| 260 | 2,6 | 1,8 | 30 | 60 | ATB 10° | FR26W001T | F03FS09782 | WO | 120 | 300 | 3,2 | 2,2 | 30 | 28 | ATB 20° | LU1D 0500 | F03FS04620 | WO | 37 |
| 260 | 2,6 | 1,8 | 30 | 80 | ATB 5° | FR26W002T | F03FS09783 | WO | 120 | 300 | 3,2 | 2,2 | 30 | 48 | ATB 15° | LU2A 2100 | F03FS04840 | WP | 47 |
| 270 | 2,4 | 2 | 30 | 60 | HLTCG (Ch) 0° | FR27X001H | F03FS09859 | SP | 136 | 300 | 3,2 | 2,2 | 30 | 36 | ATB 10° | LU2A 1900 | F03FS04834 | WP | 47 |
| 270 | 2,8 | 1,8 | 30 | 60 | ATB 10° | FR27W001H | F03FS09740 | WO | 117 | 300 | 3,2 | 2,2 | 30 | 60 | ATB 10° | LU2B 0900 | F03FS04884 | WP | 48 |
| 270 | 4,2 | 3 | 55 | 60 | TCG 15° | LSB27001X | F03FS10215 | LP PM | 66 | 300 | 3,2 | 2,2 | 30 | 72 | ATB 10° | LU2B 1100 | F03FS04887 | WP | 48 |
| 275 | 3 | 2,5 | 20 | 84 | ATB 10° | LU1I 0500 | F03FS04681 | WO | 42 | 300 | 3,2 | 2,2 | 30 | 96 | ATB 5° | LU2C 1500 | F03FS04927 | WP | 49 |
| 275 | 3,5 | 3 | 40 | 68 | TCG 10° | LU5A 0400 | F03FS05185 | AL | 95 | 300 | 3,2 | 2,2 | 30 | 120 | ATB 5° | LU2C 1700 | F03FS04932 | WP | 49 |
| 275 | 3,5 | 3 | 40 | 84 | TCG 5° | LU5B 0400 | F03FS05223 | PM AL | 96 | 300 | 3,2 | 2,2 | 30 | 60 | ATB 10° | LU2E 0200 | F03FS04965 | WP | 51 |
| 275 | 3,5 | 3 | 40 | 60 | TCG -6° | LU5C 0600 | F03FS05264 | AL | 97 | 300 | 3,2 | 2,2 | 30 | 72 | ATB 10° | LU2E 0400 | F03FS04967 | WP | 51 |
| 275 | 3,5 | 3 | 40 | 84 | TCG -6° | LU5D 1100 | F03FS05300 | PM AL | 98 | 300 | 3,2 | 2,2 | 30 | 96 | ATB 2° | LU3A 0300 | F03FS05064 | LP | 70 |
| 280 | 2,2 | 1,6 | 60 | 36 | ATB 20° | LM08 2200 | F03FS03232 | WO | 31 | 300 | 3,2 | 2,2 | 30 | 96 | TCG 5° | LU3D 0600 | F03FS05093 | LP | 73 |
| 280 | 2,5 | 1,8 | 30 | 64 | ATB 10° | FR27W001T | F03FS11530 | WO | 120 | 300 | 3,2 | 2,2 | 30 | 72 | TCG 10° | LU3D 2100 | F03FS05810 | LP | 73 |
| 280 | 2,8 | 2 | 30 | 84 | HLTCG -5 | FR27A001T | F03FS11529 | AL | 130 | 300 | 3,2 | 2,2 | 30 | 84 | TCG 10° | LU3D 1300 | F03FS05101 | LP | 73 |
| 280 | 2,8 | 2 | 80 | 18+2 | FLAT 20° | LM02 0500 | F03FS02805 | WO | 25 | 300 | 3,2 | 2,2 | 30 | 96 | TCG 10° | LU3D 1500 | F03FS05104 | LP | 73 |
| 280 | 2,8 | 2 | 80 | 18+2+2 | ATB 20° | LM03 0600 | F03FS02853 | WO | 26 | 300 | 3,2 | 2,2 | 30 | 72 | TCG -6° | LU3E 0300 | F03FS05113 | LP | 74 |
| 280 | 4,4 | 3,2 | 55 | 60 | TCG 15° | LSB28001X | F03FS10216 | LP PM | 66 | 300 | 3,2 | 2,2 | 30 | 96 | TCG -3° | LU3F 0300 | F03FS05121 | LP PM | 75 |
| 280 | 4,7 | 3,2 | 80 | 72 | ATB 15° | LI27M47VL3 | F03FS08014 | LP | 83 | 300 | 3,2 | 2,2 | 30 | 26 | ATB 20° | LG1C 0400 | F03FS07560 | WO | 44 |
| 280 | 5 | 3,5 | 45 | 84 | ATB 15° | LI27M CA3 | F03FS02736 | LP | 83 | 300 | 3,2 | 2,2 | 30 | 36 | ATB 15° | LG2A 1900 | F03FS07563 | WP | 53 |
| 280 | 4,3-5,5 | 3,2 | 30 | 48 | ATB 12° | LI25M43VC3 | F03FS07419 | LP | 79 | 300 | 3,2 | 2,2 | 30 | 48 | ATB 15° | LG2A 2100 | F03FS07564 | WP | 53 |
| 290 | 4,2 | 3 | 55 | 60 | TCG 15° | LSB29001X | F03FS10217 | LP PM | 66 | 300 | 3,2 | 2,2 | 30 | 60 | ATB 10° | LG2B 0900 | F03FS07567 | WP | 54 |
| 300 | 2,2 | 1,6 | 50 | 36 | ATB 20° | LM08 2000 | F03FS03226 | WO | 31 | 300 | 3,2 | 2,2 | 30 | 72 | ATB 10° | LG2B 1100 | F03FS07439 | WP | 54 |
| 300 | 2,2 | 1,6 | 70 | 36 | ATB 20° | LM08 2300 | F03FS03235 | WO | 31 | 300 | 3,2 | 2,2 | 30 | 96 | ATB 5° | LG2C 1500 | F03FS07571 | WP | 55 |
| 300 | 2,4 | 1,8 | 30 | 72 | ATB -5° | FR28W001M | F03FS09761 | WO | 118 | 300 | 3,2 | 2,2 | 30 | 96 | TCG 5° | LG3D 0600 | F03FS07436 | LP | 76 |
| 300 | 2,4 | 1,8 | 30 | 8 | TCG 10° | FR28F001M | F03FS09850 | FC | 134 | 300 | 3,2 | 2,2 | 30 | 72 | TCG 10° | LG3D 2100 | F03FS07574 | LP | 76 |
| 300 | 2,5 | 1,8 | 30 | 24+2 | FLAT 20° | LM01 1000 | F03FS02772 | WO | 24 | 300 | 3,2 | 2,2 | 30 | 96 | HLTCG 10° | FR28H001T | F03FS09878 | HPL | 127 |
| 300 | 2,5 | 1,8 | 30 | 48 | ATB 15° | FR28W001T | F03FS09784 | WO | 120 | 300 | 3,2 | 2,2 | 35 | 26 | ATB 20° | LU1C 0500 | F03FS04597 | WO | 36 |
| 300 | 2,5 | 1,8 | 30 | 72 | ATB 10° | FR28W002T | F03FS09785 | WO | 120 | 300 | 3,2 | 2,2 | 35 | 48 | ATB 15° | LU2A 2300 | F03FS04843 | WP | 47 |
| 300 | 2,5 | 1,8 | 30 | 100 | ATB 5° | FR28W003T | F03FS09786 | WO | 120 | 300 | 3,2 | 2,2 | 35 | 72 | ATB 10° | LU2B 1200 | F03FS04889 | WP | 48 |
| 300 | 2,5 | 1,8 | 60 | 24+2 | FLAT 20° | LM01 1100 | F03FS02774 | WO | 24 | 300 | 3,2 | 2,2 | 35 | 96 | ATB 5° | LU2C 1600 | F03FS04930 | WP | 49 |
| 300 | 2,5 | 1,8 | 70 | 24+2 | FLAT 20° | LM01 1200 | F03FS02776 | WO | 24 | 300 | 3,2 | 2,2 | 35 | 96 | TCG 5° | LU3D 0700 | F03FS05096 | LP | 73 |
| 300 | 2,5 | 1,8 | 80 | 24+2 | FLAT 20° | LM01 1300 | F03FS02778 | WO | 24 | 300 | 3,2 | 2,2 | 60 | 24+2+2 | ATB 20° | LM04 0600 | F03FS02901 | WO | 27 |
| 300 | 2,6 | 1,8 | 25 | 24 | ATB 15° | LP70M 004P | F03FS03766 | WO | 35 | 300 | 3,2 | 2,2 | 60 | 28 | ATB 20° | LU1D 0600 | F03FS04622 | WO | 37 |
| 300 | 2,6 | 1,8 | 30 | 24 | FLAT 15° | LU1E 0500 | F03FS04638 | WO | 38 | 300 | 3,2 | 2,2 | 70 | 24+2+2 | ATB 20° | LM04 0700 | F03FS02903 | WO | 27 |
| 300 | 2,6 | 2 | 30 | 80 | HLTCG (Ch) 0° | FR28M001M | F03FS09890 | MM | 138 | 300 | 3,2 | 2,2 | 70 | 26 | ATB 20° | LU1C 0700 | F03FS04599 | WO | 36 |
| 300 | 2,6 | 2,2 | 30 | 60 | DTCG 0° | LU6A 1700 | F03FS05359 | ST | 102 | 300 | 3,2 | 2,2 | 70 | 28 | ATB 20° | LU1D 0800 | F03FS04624 | WO | 37 |
| 300 | 2,6 | 2,2 | 30 | 80 | DTCG 0° | LU6A 1800 | F03FS05360 | ST | 102 | 300 | 3,2 | 2,2 | 80 | 24+2+2 | ATB 20° | LM04 0800 | F03FS02906 | WO | 27 |
| 300 | 2,7 | 1,8 | 25 | 28 | FLAT 15° | LU1E 0200 | F03FS04632 | WO | 38 | 300 | 3,2 | 2,5 | 30 | 96 | DTCG 5° | LU4D 0200 | F03FS07295 | PM | 93 |
| 300 | 2,7 | 1,8 | 30 | 28 | FLAT 15° | LU1E 0300 | F03FS04634 | WO | 38 | 300 | 3,4 | 2,2 | 30 | 20+2+2 | FLAT 25° | LM05 0500 | F03FS02981 | WO | 28 |
| 300 | 2,7 | 1,8 | 30 | 28 | ATB 22° | LU1F 0200 | F03FS04642 | WO | 39 | 300 | 3,4 | 2,2 | 30 | 20 | BEV 15° | LU1B 0200 | F03FS04580 | WO | 34 |
| 300 | 2,7 | 1,8 | 30 | 96 | ATB 5° | LU2D 0900 | F03FS04959 | WP | 50 | 300 | 3,4 | 2,2 | 60 | 20+2+2 | FLAT 25° | LM05 0600 | F03FS02983 | WO | 28 |
| 300 | 2,8 | 1,8 | 30 | 24 | FLAT 15° | LP70M 001P | F03FS03762 | WO | 35 | 300 | 3,4 | 2,2 | 70 | 20+2+2 | FLAT 25° | LM05 0700 | F03FS02985 | WO | 28 |
| 300 | 2,8 | 1,8 | 30 | 96 | ATB -2° | FR28L001T | F03FS09805 | LP | 125 | 300 | 3,4 | 2,2 | 80 | 20+2+2 | FLAT 25° | LM05 0800 | F03FS02990 | WO | 28 |
| 300 | 2,8 | 2 | 30 | 20+2 | FLAT 20° | LM02 0600 | F03FS02807 | WO | 25 | 300 | 3,5 | 2,5 | 70 | 20+2+2 | FLAT 25° | LM06 1500 | F03FS03133 | WO | 29 |
| 300 | 2,8 | 2 | 30 | 20+2+2 | ATB 20° | LM03 0700 | F03FS02855 | WO | 26 | 300 | 3,5 | 2,5 | 80 | 20+2+2 | FLAT 25° | LM06 1600 | F03FS03135 | WO | 29 |
| 300 | 2,8 | 2 | 30 | 36 | ATB 15° | LU1H 1400 | F03FS04668 | WO | 41 | 300 | 3,5 | 3 | 30 | 72 | TCG 10° | LU5A 0500 | F03FS05186 | AL | 95 |
| 300 | 2,8 | 2 | 30 | 54 | ATB 15° | LU1H 0900 | F03FS04659 | WO | 41 | 300 | 3,5 | 3 | 30 | 88 | TCG 5° | LU5B 0500 | F03FS05224 | PM AL | 96 |
| 300 | 2,8 | 2 | 30 | 72 | ATB 15° | LU1H 1100 | F03FS04663 | WO | 41 | 300 | 3,5 | 3 | 30 | 96 | TCG 5° | LU5B 0800 | F03FS05228 | PM AL | 96 |
| 300 | 2,8 | 2 | 30 | 96 | HLTCG -5° | FR28A001M | F03FS09828 | AL | 130 | 300 | 3,5 | 3 | 30 | 72 | TCG -6° | LU5C 0700 | F03FS05265 | AL | 97 |
| 300 | 2,8 | 2 | 35 | 54 | ATB 15° | LU1H 1000 | F03FS04661 | WO | 41 | 300 | 3,5 | 3 | 30 | 96 | TCG -6° | LU5D 1200 | F03FS05301 | PM AL | 98 |
| 300 | 2,8 | 2 | 60 | 20+2 | FLAT 20° | LM02 0700 | F03FS02809 | WO | 25 | 300 | 3,5 | 3 | 32 | 72 | TCG 10° | LU5A 0600 | F03FS05187 | AL | 95 |
| 300 | 2,8 | 2 | 60 | 20+2+2 | ATB 20° | LM03 0800 | F03FS02857 | WO | 26 | 300 | 3,5 | 3 | 32 | 88 | TCG 5° | LU5B 0600 | F03FS05225 | PM AL | 96 |
| 300 | 2,8 | 2 | 70 | 20+2 | FLAT 20° | LM02 0800 | F03FS02811 | WO | 25 | 300 | 3,5 | 3 | 32 | 96 | TCG 5° | LU5B 0900 | F03FS05230 | PM AL | 96 |

| D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page |
|-----|---------|-----|------|--------|-----------------|------------|------------|----------|------|
| mm | mm | mm | mm | | | | | | |
| 300 | 3,5 | 3 | 32 | 72 | TCG -6° | LU5C 0800 | F03FS05266 | AL | 97 |
| 300 | 3,5 | 3 | 32 | 96 | TCG -6° | LU5D 1300 | F03FS05303 | PM AL | 98 |
| 300 | 3,5 | 3 | 40 | 88 | TCG 5° | LU5B 0700 | F03FS05227 | PM AL | 96 |
| 300 | 3,5 | 3 | 40 | 96 | TCG 5° | LU5B 1000 | F03FS05232 | PM AL | 96 |
| 300 | 3,5 | 3 | 40 | 72 | TCG -6° | LU5C 0900 | F03FS05267 | AL | 97 |
| 300 | 3,5 | 3 | 40 | 96 | TCG -6° | LU5D 1400 | F03FS05305 | PM AL | 98 |
| 300 | 4,2 | 3 | 30 | 20+2+2 | FLAT 25° | LM06 0500 | F03FS03113 | WO | 29 |
| 300 | 4,2 | 3 | 60 | 20+2+2 | FLAT 25° | LM06 0600 | F03FS03115 | WO | 29 |
| 300 | 4,2 | 3 | 70 | 20+2+2 | FLAT 25° | LM06 0700 | F03FS03117 | WO | 29 |
| 300 | 4,2 | 3 | 80 | 20+2+2 | FLAT 25° | LM06 0800 | F03FS03119 | WO | 29 |
| 300 | 4,2 | 3 | 130 | 68 | ATB 10° | LI16MD CD3 | F03FS04404 | LP | 86 |
| 300 | 4,2 | 3 | 130 | 68 | ATB 10° | LI16MS CD3 | F03FS04412 | LP | 86 |
| 300 | 4,4 | 3 | 30 | 36 | ATB -5° | LU1A 0100 | F03FS04572 | WO | 33 |
| 300 | 4,4 | 3 | 30 | 60 | TCG 15° | LSB30001X | F03FS07802 | LP PM | 66 |
| 300 | 4,4 | 3 | 30 | 72 | TCG 15° | LSB30005X | F03FS07803 | LP PM | 66 |
| 300 | 4,4 | 3 | 30 | 60 | DTCG 10° | LSC30001 | F03FS06322 | LP | 69 |
| 300 | 4,4 | 3 | 65 | 60 | TCG 15° | LSB30002X | F03FS09159 | LP PM | 66 |
| 300 | 4,4 | 3 | 65 | 72 | TCG 15° | LSB30006X | F03FS09158 | LP PM | 66 |
| 300 | 4,4 | 3 | 65 | 60 | DTCG 10° | LSC30002 | F03FS06325 | LP | 69 |
| 300 | 4,4 | 3 | 75 | 60 | TCG 15° | LSB30003X | F03FS10218 | LP PM | 66 |
| 300 | 4,4 | 3 | 75 | 72 | TCG 15° | LSB30007X | F03FS10219 | LP PM | 66 |
| 300 | 4,4 | 3 | 75 | 96 | TCG 15° | LSB30010X | F03FS10220 | LP PM | 66 |
| 300 | 4,4 | 3 | 75 | 60 | DTCG 10° | LSC30003 | F03FS06326 | LP | 69 |
| 300 | 4,4 | 3 | 80 | 60 | TCG 15° | LSB30004X | F03FS09157 | LP PM | 66 |
| 300 | 4,4 | 3 | 80 | 72 | TCG 15° | LSB30008X | F03FS07804 | LP PM | 66 |
| 300 | 4,4 | 3 | 80 | 60 | DTCG 10° | LSC30004 | F03FS06327 | LP | 69 |
| 300 | 4,4 | 3,2 | 60 | 72 | TCG 15° | LSB30012X | F03FS09207 | LP PM | 66 |
| 300 | 4,55 | 3 | 30 | 72 | ATB 15° | LI27M DF3 | F03FS02745 | LP | 83 |
| 300 | 4,6 | 3,2 | 50 | 72 | ATB 15° | LI27M DD3 | F03FS02743 | LP | 83 |
| 300 | 4,6 | 3,2 | 65 | 72 | ATB 15° | LI27M DA3 | F03FS02737 | LP | 83 |
| 300 | 4,7 | 3,2 | 80 | 72 | ATB 15° | LI27M DC3 | F03FS02741 | LP | 83 |
| 300 | 4,95 | 3 | 65 | 72 | ATB 15° | LI27M DB3 | F03FS02739 | LP | 83 |
| 300 | 5,5 | 3,5 | 30 | 20+2+2 | FLAT 20° | LM07 0500 | F03FS03149 | WO | 30 |
| 300 | 5,5 | 3,5 | 60 | 20+2+2 | FLAT 20° | LM07 0600 | F03FS03151 | WO | 30 |
| 300 | 5,5 | 3,5 | 70 | 20+2+2 | FLAT 20° | LM07 0700 | F03FS03153 | WO | 30 |
| 300 | 5,5 | 3,5 | 80 | 20+2+2 | FLAT 20° | LM07 0800 | F03FS03155 | WO | 30 |
| 300 | 4,3-5,5 | 3,2 | 65 | 72 | ATB 12° | LI25M43RI3 | F03FS02689 | LP | 79 |
| 300 | 4,3-5,5 | 3,2 | 80 | 72 | ATB 12° | LI25M43RL3 | F03FS02691 | LP | 79 |
| 300 | 4,3-5,5 | 3,5 | 50 | 48 | ATB 12° | LI25M43RM3 | F03FS02693 | LP | 79 |
| 300 | 4,3-5,5 | 3 | 65 | 48 | ATB 12° | LI25M43RX3 | F03FS07616 | LP | 79 |
| 300 | 4,3-5,5 | 3,2 | 30 | 48 | ATB 12° | LI25M43RC3 | F03FS07577 | LP | 79 |
| 300 | 4,7-5,9 | 3,5 | 65 | 48 | ATB 6° | LI25M47RX3 | F03FS07744 | LP | 79 |
| 303 | 3,2 | 2,2 | 30 | 60 | CON 10° | LU3B 0300 | F03FS05073 | LP | 71 |
| 303 | 3,2 | 2,2 | 30 | 60 | CON 10° | LU3B 1300 | F03FS06478 | LP | 71 |
| 303 | 3,2 | 2,2 | 30 | 60 | CON -5° | LU3C 0300 | F03FS05078 | LP | 72 |
| 303 | 3,4 | 2,4 | 30 | 66 | CON 0° | LU3C 0302 | F03FS09038 | LP | 72 |
| 305 | 2,2 | 1,6 | 30 | 42 | ATB 5° | FR29W004MC | F03FS10065 | WO | 119 |
| 305 | 2,2 | 1,6 | 30 | 60 | ATB 5° | FR29W005MC | F03FS10066 | WO | 119 |
| 305 | 2,2 | 1,6 | 30 | 96 | ATB 5° | FR29W006MC | F03FS10067 | WO | 119 |
| 305 | 2,2 | 1,6 | 30 | 8 | TCG 10° | FR29F002MC | F03FS10100 | FC | 134 |
| 305 | 2,4 | 1,8 | 30 | 48 | ATB -5° | FR29W001M | F03FS09762 | WO | 118 |
| 305 | 2,4 | 1,8 | 30 | 72 | ATB -5° | FR29W002M | F03FS09763 | WO | 118 |
| 305 | 2,4 | 1,8 | 30 | 8 | TCG 10° | FR29F001M | F03FS09851 | FC | 134 |
| 305 | 2,4 | 1,8 | 30 | 96 | HLCG 0° | FR29A004MC | F03FS10091 | AL | 130 |
| 305 | 2,6 | 2 | 30 | 80 | HLCG (Ch) 0° | FR29M001M | F03FS09891 | MM | 138 |
| 305 | 2,6 | 2,2 | 25,4 | 60 | DTCG 0° | LU6A 1100 | F03FS05353 | ST | 102 |
| 305 | 2,6 | 2,2 | 25,4 | 80 | DTCG 0° | LU6A 1200 | F03FS05354 | ST | 102 |
| 305 | 2,8 | 1,8 | 25,4 | 96 | ATB 15° | FR29W002T | F03FS10138 | WO | 120 |
| 305 | 2,8 | 1,8 | 30 | 100 | ATB 5° | FR29W001T | F03FS09787 | WO | 120 |
| 305 | 2,8 | 1,8 | 30 | 96 | HLCG 5° | FR29L001T | F03FS11533 | LP | 125 |
| 305 | 2,8 | 2 | 30 | 96 | HLCG -5° | FR29A001M | F03FS09829 | AL | 130 |
| 305 | 3 | 2,2 | 25,4 | 100 | AXL 15° | LU1L 0700 | F03FS04696 | WO PM | 43 |
| 305 | 3 | 2,2 | 25,4 | 120 | AXL 15° | LU1L 0800 | F03FS04697 | WO PM | 43 |
| 305 | 3 | 2,2 | 30 | 100 | AXL 15° | LU1L 1100 | F03FS06410 | WO PM | 43 |

| D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page |
|-----|---------|-----|------|--------|-----------------|------------|------------|----------|------|
| mm | mm | mm | mm | | | | | | |
| 305 | 3 | 2,5 | 25,4 | 120 | TCG 5° | LU5E 0600 | F03FS05333 | AL | 99 |
| 305 | 3,2 | 2,2 | 30 | 96 | HLCG -3° | FR29H001M | F03FS09876 | HPL | 126 |
| 305 | 4,4 | 3 | 30 | 60 | TCG 15° | LSB30501X | F03FS10221 | LP PM | 66 |
| 310 | 4,4 | 3,2 | 60 | 72 | TCG 15° | LSB31001X | F03FS09949 | LP PM | 66 |
| 315 | 2,4 | 1,8 | 30 | 72 | ATB -5° | FR30W001M | F03FS09766 | WO | 118 |
| 315 | 2,8 | 2,2 | 30 | 96 | HLCG -5° | FR30A001M | F03FS09832 | AL | 130 |
| 315 | 3,2 | 2,2 | 25 | 48 | ATB 15° | LP70M 006P | F03FS03768 | WO | 35 |
| 315 | 3,2 | 2,2 | 30 | 24 | ATB 15° | LP70M 003P | F03FS03765 | WO | 35 |
| 315 | 3,2 | 2,2 | 30 | 28 | ATB 20° | LU1C 0800 | F03FS04601 | WO | 36 |
| 315 | 3,2 | 2,2 | 30 | 48 | ATB 15° | LU2A 2400 | F03FS04844 | WP | 47 |
| 315 | 3,2 | 2,2 | 30 | 72 | ATB 10° | LU2B 1300 | F03FS04891 | WP | 48 |
| 315 | 3,4 | 2,2 | 30 | 20 | BEV 15° | LU1B 0300 | F03FS04582 | WO | 34 |
| 320 | 3 | 2,2 | 30 | 20+2+2 | FLAT 20° | LM02 1000 | F03FS02815 | WO | 25 |
| 320 | 3 | 2,2 | 30 | 20+2+2 | ATB 20° | LM03 1100 | F03FS02863 | WO | 26 |
| 320 | 3 | 2,2 | 80 | 20+2+2 | FLAT 20° | LM02 1100 | F03FS02817 | WO | 25 |
| 320 | 3 | 2,2 | 80 | 20+2+2 | ATB 20° | LM03 1200 | F03FS02865 | WO | 26 |
| 320 | 3,2 | 2,2 | 30 | 24+2+2 | ATB 20° | LM04 0900 | F03FS02908 | WO | 27 |
| 320 | 3,2 | 2,2 | 80 | 24+2+2 | ATB 20° | LM04 1000 | F03FS02910 | WO | 27 |
| 320 | 3,4 | 2,2 | 30 | 20+2+2 | FLAT 25° | LM05 0900 | F03FS02993 | WO | 28 |
| 320 | 3,4 | 2,2 | 80 | 20+2+2 | FLAT 25° | LM05 1000 | F03FS02995 | WO | 28 |
| 320 | 4,2 | 3 | 30 | 20+2+2 | FLAT 25° | LM06 0900 | F03FS03121 | WO | 29 |
| 320 | 4,2 | 3 | 70 | 20+2+2 | FLAT 25° | LM06 1900 | F03FS03140 | WO | 29 |
| 320 | 4,2 | 3 | 80 | 20+2+2 | FLAT 25° | LM06 1000 | F03FS03123 | WO | 29 |
| 320 | 4,4 | 3,2 | 30 | 60 | TCG 15° | LSB32005X | F03FS09160 | LP PM | 66 |
| 320 | 4,4 | 3,2 | 50 | 60 | TCG 15° | LSB32004X | F03FS10222 | LP PM | 66 |
| 320 | 4,4 | 3,2 | 50 | 60 | DTCG 10° | LSC32004 | F03FS06328 | LP | 69 |
| 320 | 4,4 | 3,2 | 60 | 72 | TCG 15° | LSB32008X | F03FS10268 | LP PM | 66 |
| 320 | 4,4 | 3,2 | 65 | 60 | TCG 15° | LSB32003X | F03FS09161 | LP PM | 66 |
| 320 | 4,4 | 3,2 | 65 | 72 | TCG 15° | LSB32001X | F03FS07805 | LP PM | 66 |
| 320 | 4,4 | 3,2 | 65 | 60 | DTCG 10° | LSC32003 | F03FS06329 | LP | 69 |
| 320 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB32002X | F03FS09162 | LP PM | 66 |
| 320 | 4,4 | 3,2 | 80 | 60 | TCG 15° | LSB32006X | F03FS10101 | LP PM | 66 |
| 320 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB32007X | F03FS10267 | LP PM | 66 |
| 320 | 5,5 | 3,5 | 30 | 20+2+2 | FLAT 20° | LM07 0900 | F03FS03157 | WO | 30 |
| 320 | 5,5 | 3,5 | 80 | 20+2+2 | FLAT 20° | LM07 1000 | F03FS03159 | WO | 30 |
| 320 | 4,3-5,5 | 3 | 45 | 48 | ATB 12° | LI25M43SE3 | F03FS02696 | LP | 79 |
| 320 | 4,3-5,5 | 3,2 | 45 | 48 | ATB 12° | LI25M43SA3 | F03FS02695 | LP | 79 |
| 330 | 3,2 | 2,2 | 20 | 96 | ATB 5° | LU2C 1800 | F03FS04934 | WP | 49 |
| 330 | 3,5 | 3 | 30 | 96 | ATB 10° | LU11 0800 | F03FS04686 | WO | 42 |
| 330 | 3,5 | 3 | 30 | 84 | TCG 10° | LU5A 0800 | F03FS05190 | AL | 95 |
| 330 | 3,5 | 3 | 30 | 104 | TCG 5° | LU5B 1100 | F03FS05233 | PM AL | 96 |
| 330 | 3,5 | 3 | 30 | 80 | TCG -6° | LU5C 1000 | F03FS05268 | AL | 97 |
| 330 | 3,5 | 3 | 30 | 104 | TCG -6° | LU5D 1500 | F03FS05306 | PM AL | 98 |
| 330 | 3,5 | 3 | 32 | 84 | TCG 10° | LU5A 0900 | F03FS05192 | AL | 95 |
| 330 | 3,5 | 3 | 32 | 104 | TCG 5° | LU5B 1200 | F03FS05234 | PM AL | 96 |
| 330 | 3,5 | 3 | 32 | 80 | TCG -6° | LU5C 1100 | F03FS05269 | AL | 97 |
| 330 | 3,5 | 3 | 32 | 104 | TCG -6° | LU5D 1600 | F03FS05308 | PM AL | 98 |
| 340 | 5 | 3,5 | 45 | 48 | ATB 15° | LI27M EA3 | F03FS02746 | LP | 83 |
| 340 | 5 | 3,5 | 45 | 108 | ATB 15° | LI27M EB3 | F03FS02747 | LP | 83 |
| 340 | 4,7-5,9 | 3,5 | 45 | 72 | ATB 12° | LI25M47TE3 | F03FS02722 | LP | 79 |
| 350 | 2,5 | 1,8 | 50 | 40 | ATB 20° | LM08 2100 | F03FS03229 | WO | 31 |
| 350 | 2,6 | 2,2 | 30 | 72 | DTCG 0° | LU6A 1300 | F03FS05355 | ST | 102 |
| 350 | 2,6 | 2,2 | 30 | 90 | DTCG 0° | LU6A 1400 | F03FS05356 | ST | 102 |
| 350 | 2,9 | 2,5 | 30 | 60 | HLCG (Ch) 0° | FR32X001H | F03FS09861 | SP | 136 |
| 350 | 3 | 2,2 | 30 | 24+2+2 | FLAT 20° | LM02 1200 | F03FS02819 | WO | 25 |
| 350 | 3 | 2,2 | 30 | 24+2+2 | ATB 20° | LM03 1300 | F03FS02867 | WO | 26 |
| 350 | 3 | 2,2 | 30 | 28 | FLAT 15° | LP70M 002P | F03FS03763 | WO | 35 |
| 350 | 3 | 2,2 | 30 | 32 | FLAT 15° | LU1E 0400 | F03FS04636 | WO | 38 |
| 350 | 3 | 2,2 | 30 | 32 | ATB 22° | LU1F 0300 | F03FS04644 | WO | 39 |
| 350 | 3 | 2,2 | 30 | 60 | ATB 15° | LU1H 1200 | F03FS04665 | WO | 41 |
| 350 | 3 | 2,2 | 30 | 84 | ATB 15° | LU1H 1300 | F03FS04667 | WO | 41 |
| 350 | 3 | 2,2 | 30 | 120 | AXL 15° | LU1L 0900 | F03FS04698 | WO PM | 43 |
| 350 | 3 | 2,2 | 30 | 108 | ATB 5° | LU2D 1100 | F03FS04963 | WP | 50 |
| 350 | 3 | 2,2 | 30 | 108 | HLCG 5° | FR32A001M | F03FS11534 | AL | 130 |

WO: Solid wood - LP: Chipboard and laminated panels - WP: Wood Based Panel - PM: Polymeric Materials - AL: Aluminium & Non-ferrous metals - ST: Steel - CW: Construct Wood - FC: Fibre Cement - HPL: High Pressure Laminate - SP: Sandwich Panel - MM: Multi Material

| D mm | B mm | b mm | d mm | Z | Teeth | Freud Code | Art. No. | Material | Page |
|---------|---------|---------|---------|--------|----------|------------|------------|----------|------|
| 350 | 3 | 2,2 | 60 | 24+2+2 | FLAT 20° | LM02 1300 | F03FS02821 | WO | 25 |
| 350 | 3 | 2,2 | 60 | 24+2+2 | ATB 20° | LM03 1400 | F03FS02869 | WO | 26 |
| 350 | 3 | 2,2 | 70 | 24+2+2 | FLAT 20° | LM02 1400 | F03FS02823 | WO | 25 |
| 350 | 3 | 2,2 | 70 | 24+2+2 | ATB 20° | LM03 1500 | F03FS02871 | WO | 26 |
| 350 | 3 | 2,2 | 80 | 24+2+2 | FLAT 20° | LM02 1500 | F03FS02825 | WO | 25 |
| 350 | 3 | 2,2 | 80 | 24+2+2 | ATB 20° | LM03 1600 | F03FS02873 | WO | 26 |
| 350 | 3 | 2,2 | 90 | 24+2+2 | ATB 20° | LM03 1700 | F03FS05808 | WO | 26 |
| 350 | 3 | 2,5 | 30 | 100 | TCG 5° | LU5E 0900 | F03FS05339 | AL | 99 |
| 350 | 3 | 2,5 | 30 | 120 | TCG 5° | LU5E 1100 | F03FS05341 | AL | 99 |
| 350 | 3 | 2,5 | 32 | 100 | TCG 5° | LU5E 1000 | F03FS05340 | AL | 99 |
| 350 | 3 | 2,5 | 32 | 120 | TCG 5° | LU5E 1200 | F03FS05342 | AL | 99 |
| 350 | 3,2 | 2,2 | 30 | 60 | RND 20° | LU1G 0300 | F03FS04648 | WO | 40 |
| 350 | 3,2 | 2,2 | 30 | 72 | CON 10° | LU3B 0400 | F03FS05075 | LP | 71 |
| 350 | 3,2 | 2,2 | 30 | 72 | CON -5° | LU3C 0400 | F03FS05080 | LP | 72 |
| 350 | 3,5 | 2,2 | 30 | 24 | ATB 20° | FR32W001H | F03FS09742 | WO | 117 |
| 350 | 3,5 | 2,5 | 30 | 28+2+4 | ATB 20° | LM04 1100 | F03FS02912 | WO | 27 |
| 350 | 3,5 | 2,5 | 30 | 30 | ATB 20° | LU1C 1000 | F03FS04603 | WO | 36 |
| 350 | 3,5 | 2,5 | 30 | 32 | ATB 20° | LU1D 1100 | F03FS04628 | WO | 37 |
| 350 | 3,5 | 2,5 | 30 | 54 | ATB 15° | LU2A 2800 | F03FS04849 | WP | 47 |
| 350 | 3,5 | 2,5 | 30 | 42 | ATB 15° | LU2A 2500 | F03FS04845 | WP | 47 |
| 350 | 3,5 | 2,5 | 30 | 72 | ATB 10° | LU2B 1400 | F03FS04893 | WP | 48 |
| 350 | 3,5 | 2,5 | 30 | 84 | ATB 10° | LU2B 1600 | F03FS04895 | WP | 48 |
| 350 | 3,5 | 2,5 | 30 | 108 | ATB 5° | LU2C 2000 | F03FS04936 | WP | 49 |
| 350 | 3,5 | 2,5 | 30 | 72 | ATB 10° | LU2E 0500 | F03FS04970 | WP | 51 |
| 350 | 3,5 | 2,5 | 30 | 108 | ATB 5° | LU3A 0400 | F03FS05066 | LP | 70 |
| 350 | 3,5 | 2,5 | 30 | 108 | TCG 5° | LU3D 0900 | F03FS05098 | LP | 73 |
| 350 | 3,5 | 2,5 | 30 | 72 | TCG 10° | LU3D 2000 | F03FS05108 | LP | 73 |
| 350 | 3,5 | 2,5 | 30 | 108 | TCG 10° | LU3D 1700 | F03FS05105 | LP | 73 |
| 350 | 3,5 | 2,5 | 30 | 84 | TCG -6° | LU3E 0400 | F03FS05115 | LP | 74 |
| 350 | 3,5 | 2,5 | 30 | 108 | TCG -3° | LU3F 0400 | F03FS05124 | LP PM | 75 |
| 350 | 3,5 | 2,5 | 30 | 30 | ATB 20° | LG1C 1000 | F03FS07561 | WO | 44 |
| 350 | 3,5 | 2,5 | 30 | 54 | ATB 15° | LG2A 2800 | F03FS07565 | WP | 53 |
| 350 | 3,5 | 2,5 | 30 | 72 | ATB 10° | LG2B 1400 | F03FS07568 | WP | 54 |
| 350 | 3,5 | 2,5 | 30 | 84 | ATB 10° | LG2B 1600 | F03FS07569 | WP | 54 |
| 350 | 3,5 | 2,5 | 30 | 108 | ATB 5° | LG2C 2000 | F03FS07572 | WP | 55 |
| 350 | 3,5 | 2,5 | 30 | 108 | TCG 5° | LG3D 0900 | F03FS07437 | LP | 76 |
| 350 | 3,5 | 2,5 | 30 | 72 | TCG 10° | LG3D 2000 | F03FS07573 | LP | 76 |
| 350 | 3,5 | 2,5 | 35 | 30 | ATB 20° | LU1C 1100 | F03FS04605 | WO | 36 |
| 350 | 3,5 | 2,5 | 35 | 54 | ATB 15° | LU2A 3000 | F03FS04851 | WP | 47 |
| 350 | 3,5 | 2,5 | 35 | 42 | ATB 15° | LU2A 2600 | F03FS04847 | WP | 47 |
| 350 | 3,5 | 2,5 | 35 | 84 | ATB 10° | LU2B 2400 | F03FS04905 | WP | 48 |
| 350 | 3,5 | 2,5 | 60 | 28+2+4 | ATB 20° | LM04 1200 | F03FS02914 | WO | 27 |
| 350 | 3,5 | 2,5 | 70 | 24+2+4 | ATB 20° | LM04 2400 | F03FS06243 | WO | 27 |
| 350 | 3,5 | 2,5 | 70 | 28+2+4 | ATB 20° | LM04 1300 | F03FS02916 | WO | 27 |
| 350 | 3,5 | 2,5 | 70 | 30 | ATB 20° | LU1C 1200 | F03FS04607 | WO | 36 |
| 350 | 3,5 | 2,5 | 70 | 32 | ATB 20° | LU1D 1000 | F03FS04626 | WO | 37 |
| 350 | 3,5 | 2,5 | 80 | 24+2+4 | ATB 20° | LM04 2500 | F03FS06244 | WO | 27 |
| 350 | 3,5 | 2,5 | 80 | 28+2+4 | ATB 20° | LM04 1400 | F03FS02919 | WO | 27 |
| 350 | 3,5 | 2,5 | 90 | 28+2+4 | ATB 20° | LM04 2200 | F03FS02935 | WO | 27 |
| 350 | 3,5 | 2,8 | 30 | 108 | DTCG 5° | LU4D 0300 | F03FS07296 | PM | 93 |
| 350 | 3,5 | 3 | 30 | 108 | ATB 10° | LU1I 0900 | F03FS04688 | WO | 42 |
| 350 | 3,5 | 3 | 30 | 84 | TCG 10° | LU5A 1000 | F03FS05193 | AL | 95 |
| 350 | 3,5 | 3 | 30 | 96 | TCG 5° | LU5B 1300 | F03FS05235 | PM AL | 96 |
| 350 | 3,5 | 3 | 30 | 108 | TCG 5° | LU5B 1600 | F03FS05239 | PM AL | 96 |
| 350 | 3,5 | 3 | 30 | 84 | TCG -6° | LU5C 1200 | F03FS05270 | AL | 97 |
| 350 | 3,5 | 3 | 30 | 108 | TCG -6° | LU5D 1700 | F03FS05309 | PM AL | 98 |
| 350 | 3,5 | 3 | 32 | 84 | TCG 10° | LU5A 1100 | F03FS05194 | AL | 95 |
| 350 | 3,5 | 3 | 32 | 96 | TCG 5° | LU5B 1400 | F03FS05236 | PM AL | 96 |
| 350 | 3,5 | 3 | 32 | 108 | TCG 5° | LU5B 1700 | F03FS05240 | PM AL | 96 |
| 350 | 3,5 | 3 | 32 | 84 | TCG -6° | LU5C 1300 | F03FS05271 | AL | 97 |
| 350 | 3,5 | 3 | 32 | 108 | TCG -6° | LU5D 1800 | F03FS05311 | PM AL | 98 |
| 350 | 3,5 | 3 | 40 | 84 | TCG 10° | LU5A 1200 | F03FS05196 | AL | 95 |
| 350 | 3,5 | 3 | 40 | 96 | TCG 5° | LU5B 1500 | F03FS05238 | PM AL | 96 |
| 350 | 3,5 | 3 | 40 | 108 | TCG 5° | LU5B 1800 | F03FS05242 | PM AL | 96 |
| 350 | 3,5 | 3 | 40 | 84 | TCG -6° | LU5C 1400 | F03FS05272 | AL | 97 |
| 350 | 3,5 | 3 | 40 | 108 | TCG -6° | LU5D 1900 | F03FS05313 | PM AL | 98 |
| 350 | 3,7 | 2,5 | 30 | 20+2+4 | FLAT 25° | LM05 1100 | F03FS02997 | WO | 28 |

| D mm | B mm | b mm | d mm | Z | Teeth | Freud Code | Art. No. | Material | Page |
|---------|---------|---------|---------|--------|---------------|------------|------------|----------|------|
| 350 | 3,7 | 2,5 | 30 | 24 | BEV 15° | LU1B 0400 | F03FS04583 | WO | 34 |
| 350 | 3,7 | 2,5 | 50 | 20+2+4 | FLAT 25° | LM05 1200 | F03FS02999 | WO | 28 |
| 350 | 3,7 | 2,5 | 60 | 20+2+4 | FLAT 25° | LM05 1300 | F03FS03001 | WO | 28 |
| 350 | 3,7 | 2,5 | 70 | 20+2+4 | FLAT 25° | LM05 1400 | F03FS03003 | WO | 28 |
| 350 | 3,7 | 2,5 | 80 | 20+2+4 | FLAT 25° | LM05 1500 | F03FS03005 | WO | 28 |
| 350 | 3,7 | 2,5 | 90 | 20+2+4 | FLAT 25° | LM05 4100 | F03FS03060 | WO | 28 |
| 350 | 3,9 | 2,5 | 50 | 18+2+2 | FLAT 21° | LM1035001 | F03FS07701 | WO | 32 |
| 350 | 4,2 | 3 | 30 | 20+2+4 | FLAT 25° | LM06 1100 | F03FS03125 | WO | 29 |
| 350 | 4,2 | 3 | 30 | 84 | ATB 10° | LT14MD DA3 | F03FS04386 | LP | 87 |
| 350 | 4,2 | 3 | 30 | 84 | ATB 10° | LT14MS DA3 | F03FS04397 | LP | 87 |
| 350 | 4,2 | 3 | 50 | 20+2+4 | FLAT 25° | LM06 1800 | F03FS03138 | WO | 29 |
| 350 | 4,2 | 3 | 60 | 20+2+4 | FLAT 25° | LM06 1200 | F03FS03127 | WO | 29 |
| 350 | 4,2 | 3 | 70 | 20+2+4 | FLAT 25° | LM06 1300 | F03FS03129 | WO | 29 |
| 350 | 4,2 | 3 | 80 | 20+2+4 | FLAT 25° | LM06 1400 | F03FS03131 | WO | 29 |
| 350 | 4,2 | 3,2 | 80 | 96 | TCG 15° | LSB35011X | F03FS10225 | LP PM | 67 |
| 350 | 4,4 | 3 | 30 | 42 | ATB -5° | LU1A 0200 | F03FS04573 | WO | 33 |
| 350 | 4,4 | 3,2 | 30 | 54 | TCG 15° | LSB35001X | F03FS10223 | LP PM | 67 |
| 350 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB35003X | F03FS07630 | LP PM | 67 |
| 350 | 4,4 | 3,2 | 30 | 72 | DTCG 15° | LSC35003 | F03FS06305 | LP | 69 |
| 350 | 4,4 | 3,2 | 50 | 72 | TCG 15° | LSB35006X | F03FS07709 | LP PM | 67 |
| 350 | 4,4 | 3,2 | 50 | 72 | DTCG 15° | LSC35006 | F03FS06309 | LP | 69 |
| 350 | 4,4 | 3,2 | 60 | 54 | TCG 15° | LSB35002X | F03FS10224 | LP PM | 67 |
| 350 | 4,4 | 3,2 | 60 | 72 | TCG 15° | LSB35004X | F03FS07636 | LP PM | 67 |
| 350 | 4,4 | 3,2 | 60 | 72 | DTCG 15° | LSC35004 | F03FS06310 | LP | 69 |
| 350 | 4,4 | 3,2 | 65 | 72 | TCG 15° | LSB35013X | F03FS09659 | LP PM | 67 |
| 350 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB35008X | F03FS07634 | LP PM | 67 |
| 350 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB35005X | F03FS07635 | LP PM | 67 |
| 350 | 4,4 | 3,2 | 80 | 72 | DTCG 15° | LSC35005 | F03FS06311 | LP | 69 |
| 350 | 5,5 | 3,5 | 30 | 24+2+4 | FLAT 20° | LM07 1100 | F03FS03161 | WO | 30 |
| 350 | 5,5 | 3,5 | 60 | 24+2+4 | FLAT 20° | LM07 1200 | F03FS03163 | WO | 30 |
| 350 | 5,5 | 3,5 | 70 | 24+2+4 | FLAT 20° | LM07 1300 | F03FS03165 | WO | 30 |
| 350 | 5,5 | 3,5 | 80 | 24+2+4 | FLAT 20° | LM07 1400 | F03FS03167 | WO | 30 |
| 355 | 2,6 | 2,2 | 25,4 | 72 | DTCG 0° | LU6A 1500 | F03FS05357 | ST | 102 |
| 355 | 2,6 | 2,2 | 25,4 | 90 | DTCG 0° | LU6A 1600 | F03FS05358 | ST | 102 |
| 355 | 2,6 | 2,2 | 30 | 80 | HLTCG (Ch) 0° | FR33X001H | F03FS09862 | SP | 136 |
| 355 | 3 | 2,2 | 25,4 | 120 | AXL 15° | LU1L 1000 | F03FS04699 | WO PM | 43 |
| 355 | 3 | 2,2 | 25,4 | 108 | ATB 15° | FR33W001T | F03FS10137 | WO | 120 |
| 355 | 3 | 2,2 | 30 | 60 | ATB 15° | FR33W001H | F03FS09743 | WO | 117 |
| 355 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB35504X | F03FS07674 | LP PM | 67 |
| 355 | 4,4 | 3,2 | 30 | 72 | DTCG 15° | LSC35504 | F03FS06306 | LP | 69 |
| 355 | 4,4 | 3,2 | 65 | 72 | TCG 15° | LSB35508X | F03FS08740 | LP PM | 67 |
| 355 | 4,4 | 3,2 | 65 | 72 | DTCG 15° | LSC35508BS | F03FS07869 | LP | 69 |
| 355 | 4,4 | 3,2 | 75 | 54 | TCG 15° | LSB35502X | F03FS10226 | LP PM | 67 |
| 355 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB35505X | F03FS07633 | LP PM | 67 |
| 355 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB35507X | F03FS07710 | LP PM | 67 |
| 355 | 4,4 | 3,2 | 75 | 72 | DTCG 15° | LSC35505 | F03FS06307 | LP | 69 |
| 355 | 4,4 | 3,2 | 80 | 54 | TCG 15° | LSB35503X | F03FS09205 | LP PM | 67 |
| 355 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB35506X | F03FS09163 | LP PM | 67 |
| 360 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB36003X | F03FS09341 | LP PM | 67 |
| 360 | 4,4 | 3,2 | 65 | 60 | TCG 15° | LSB36001X | F03FS10227 | LP PM | 67 |
| 360 | 4,4 | 3,2 | 65 | 72 | TCG 15° | LSB36002X | F03FS07673 | LP PM | 67 |
| 360 | 4,4 | 3,2 | 65 | 72 | DTCG 15° | LSC36002 | F03FS06308 | LP | 69 |
| 370 | 3,5 | 3 | 30 | 90 | TCG 10° | LU5A 1300 | F03FS05197 | AL | 95 |
| 370 | 3,5 | 3 | 30 | 112 | TCG 5° | LU5B 1900 | F03FS07745 | PM AL | 96 |
| 370 | 3,5 | 3 | 30 | 90 | TCG -6° | LU5C 1500 | F03FS05273 | AL | 97 |
| 370 | 3,5 | 3 | 30 | 108 | TCG -6° | LU5D 2000 | F03FS05314 | PM AL | 98 |
| 370 | 3,5 | 3 | 50 | 90 | TCG 10° | LU5A 1400 | F03FS05198 | AL | 95 |
| 370 | 3,5 | 3 | 50 | 112 | TCG 5° | LU5B 2000 | F03FS05243 | PM AL | 96 |
| 370 | 3,5 | 3 | 50 | 90 | TCG -6° | LU5C 1600 | F03FS05274 | AL | 97 |
| 370 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB37001X | F03FS10228 | LP PM | 67 |
| 370 | 4,4 | 3,2 | 30 | 72 | DTCG 15° | LSC37001 | F03FS06312 | LP | 69 |
| 380 | 3,5 | 3 | 32 | 96 | TCG 10° | LU5A 1500 | F03FS05199 | AL | 95 |
| 380 | 3,5 | 3 | 32 | 112 | TCG 5° | LU5B 2100 | F | | |

| D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page | D | B | b | d | Z | Teeth | Freud Code | Art. No. | Material | Page |
|-----|-----|-----|------|--------|----------|------------|------------|----------|------|-----|-----|-----|----|--------|----------|------------|------------|----------|------|
| mm | mm | mm | mm | | | | | | | mm | mm | mm | mm | | | | | | |
| 380 | 4 | 2,8 | 80 | 20+2+4 | FLAT 25° | LM05 1800 | F03FS03011 | WO | 28 | 400 | 4,4 | 3,2 | 60 | 72 | TCG 15° | LSB40017X | F03FS09272 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB38011X | F03FS10231 | LP PM | 67 | 400 | 4,4 | 3,2 | 60 | 84 | TCG 15° | LSB40021X | F03FS09255 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 50 | 60 | TCG 15° | LSB38007X | F03FS10230 | LP PM | 67 | 400 | 4,4 | 3,2 | 65 | 72 | TCG 15° | LSB40016X | F03FS09172 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 50 | 72 | TCG 15° | LSB38008X | F03FS09165 | LP PM | 67 | 400 | 4,4 | 3,2 | 65 | 72 | DTCG 15° | LSC40016BS | F03FS07870 | LP | 69 |
| 380 | 4,4 | 3,2 | 50 | 72 | DTCG 15° | LSC38008 | F03FS06343 | LP | 69 | 400 | 4,4 | 3,2 | 75 | 60 | TCG 15° | LSB40005X | F03FS09170 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 60 | 60 | TCG 15° | LSB38001X | F03FS07806 | LP PM | 67 | 400 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB40008X | F03FS07726 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 60 | 72 | TCG 15° | LSB38002X | F03FS07631 | LP PM | 67 | 400 | 4,4 | 3,2 | 75 | 84 | TCG 15° | LSB40019X | F03FS08990 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 60 | 84 | TCG 15° | LSB38015X | F03FS08989 | LP PM | 67 | 400 | 4,4 | 3,2 | 75 | 72 | DTCG 15° | LSC40008 | F03FS06317 | LP | 69 |
| 380 | 4,4 | 3,2 | 60 | 72 | DTCG 15° | LSC38002 | F03FS06313 | LP | 69 | 400 | 4,4 | 3,2 | 80 | 48 | TCG 15° | LSB40010X | F03FS10233 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 65 | 72 | TCG 15° | LSB38014X | F03FS09166 | LP PM | 67 | 400 | 4,4 | 3,2 | 80 | 60 | TCG 15° | LSB40006X | F03FS10232 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB38012X | F03FS07672 | LP PM | 67 | 400 | 4,4 | 3,2 | 80 | 60 | TCG 15° | LSB40011X | F03FS09171 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 80 | 48 | TCG 15° | LSB38009X | F03FS09164 | LP PM | 67 | 400 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB40009X | F03FS07810 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB38010X | F03FS07808 | LP PM | 67 | 400 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB40012X | F03FS09173 | LP PM | 67 |
| 380 | 4,4 | 3,2 | 80 | 96 | TCG 15° | LSB38013X | F03FS07809 | LP PM | 67 | 400 | 4,4 | 3,2 | 80 | 72 | DTCG 15° | LSC40009 | F03FS06319 | LP | 69 |
| 380 | 4,4 | 3,2 | 80 | 72 | DTCG 15° | LSC38010 | F03FS06314 | LP | 69 | 400 | 4,4 | 3,2 | 80 | 72 | DTCG 15° | LSC40012 | F03FS06320 | LP | 69 |
| 380 | 4,8 | 3,5 | 60 | 60 | TCG 15° | LSB38003X | F03FS10229 | LP PM | 67 | 400 | 4,8 | 3,5 | 60 | 72 | TCG 15° | LSB40013X | F03FS07711 | LP PM | 67 |
| 380 | 4,8 | 3,5 | 60 | 72 | TCG 15° | LSB38004X | F03FS07632 | LP PM | 67 | 420 | 3,5 | 3 | 30 | 96 | TCG 10° | LU5A 2000 | F03FS05207 | AL | 95 |
| 380 | 4,8 | 3,5 | 60 | 84 | TCG 15° | LSB38005X | F03FS07807 | LP PM | 67 | 420 | 3,5 | 3 | 30 | 120 | TCG 5° | LU5B 2600 | F03FS05250 | PM AL | 96 |
| 380 | 4,8 | 3,5 | 60 | 72 | DTCG 15° | LSC38004 | F03FS06332 | LP | 69 | 420 | 3,5 | 3 | 30 | 100 | PYR 7° | LU5F42001 | F03FS07687 | PM AL | 100 |
| 390 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB39001X | F03FS09167 | LP PM | 67 | 420 | 3,5 | 3 | 32 | 100 | PYR 7° | LU5F42002 | F03FS07688 | PM AL | 100 |
| 400 | 3,5 | 3 | 30 | 96 | TCG 10° | LU5A 1600 | F03FS05200 | AL | 95 | 420 | 4 | 3,2 | 30 | 96 | TCG -6° | LU5C 2200 | F03FS05280 | AL | 97 |
| 400 | 3,5 | 3 | 30 | 120 | TCG 5° | LU5B 2200 | F03FS05245 | PM AL | 96 | 420 | 4 | 3,2 | 30 | 120 | TCG -6° | LU5D 2700 | F03FS05320 | PM AL | 98 |
| 400 | 3,5 | 3 | 30 | 96 | TCG -6° | LU5C 1800 | F03FS05276 | AL | 97 | 420 | 4 | 3,2 | 40 | 96 | TCG -6° | LU5C 2300 | F03FS05281 | AL | 97 |
| 400 | 3,5 | 3 | 30 | 120 | TCG -6° | LU5D 2300 | F03FS05316 | PM AL | 98 | 420 | 4 | 3,2 | 40 | 120 | TCG -6° | LU5D 2800 | F03FS05321 | PM AL | 98 |
| 400 | 3,5 | 3 | 30 | 96 | PYR 7° | LU5F40001 | F03FS07683 | PM AL | 100 | 420 | 4,4 | 3,2 | 50 | 72 | TCG 15° | LSB42006X | F03FS09174 | LP PM | 67 |
| 400 | 3,5 | 3 | 30 | 120 | PYR 7° | LU5F40003 | F03FS07685 | PM AL | 100 | 420 | 4,4 | 3,2 | 80 | 60 | TCG 15° | LSB42004X | F03FS10235 | LP PM | 67 |
| 400 | 3,5 | 3 | 32 | 96 | TCG 10° | LU5A 1700 | F03FS05202 | AL | 95 | 420 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB42005X | F03FS09175 | LP PM | 67 |
| 400 | 3,5 | 3 | 32 | 120 | TCG 5° | LU5B 2300 | F03FS05246 | PM AL | 96 | 420 | 4,8 | 3,5 | 60 | 60 | TCG 15° | LSB42001X | F03FS10234 | LP PM | 67 |
| 400 | 3,5 | 3 | 32 | 96 | TCG -6° | LU5C 1900 | F03FS05277 | AL | 97 | 420 | 4,8 | 3,5 | 60 | 84 | TCG 15° | LSB42002X | F03FS09176 | LP PM | 67 |
| 400 | 3,5 | 3 | 32 | 120 | TCG -6° | LU5D 2400 | F03FS05317 | PM AL | 98 | 430 | 4,4 | 3,2 | 30 | 48 | TCG 15° | LSB43001X | F03FS10236 | LP PM | 67 |
| 400 | 3,5 | 3 | 32 | 96 | PYR 7° | LU5F40002 | F03FS07684 | PM AL | 100 | 430 | 4,4 | 3,2 | 30 | 60 | TCG 15° | LSB43004X | F03FS10238 | LP PM | 67 |
| 400 | 3,5 | 3 | 32 | 120 | PYR 7° | LU5F40004 | F03FS07686 | PM AL | 100 | 430 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB43007X | F03FS09177 | LP PM | 67 |
| 400 | 3,5 | 3 | 40 | 96 | TCG 10° | LU5A 1800 | F03FS05205 | AL | 95 | 430 | 4,4 | 3,2 | 65 | 72 | TCG 15° | LSB43012X | F03FS09178 | LP PM | 67 |
| 400 | 3,5 | 3 | 40 | 120 | TCG 5° | LU5B 2400 | F03FS05248 | PM AL | 96 | 430 | 4,4 | 3,2 | 75 | 48 | TCG 15° | LSB43002X | F03FS10237 | LP PM | 67 |
| 400 | 3,5 | 3 | 40 | 96 | TCG -6° | LU5C 2000 | F03FS05278 | AL | 97 | 430 | 4,4 | 3,2 | 75 | 60 | TCG 15° | LSB43005X | F03FS10239 | LP PM | 67 |
| 400 | 3,5 | 3 | 40 | 120 | TCG -6° | LU5D 2500 | F03FS05318 | PM AL | 98 | 430 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB43008X | F03FS07908 | LP PM | 67 |
| 400 | 3,5 | 3 | 50 | 96 | TCG 10° | LU5A 1900 | F03FS05206 | AL | 95 | 430 | 4,4 | 3,2 | 75 | 96 | TCG 15° | LSB43010X | F03FS09179 | LP PM | 67 |
| 400 | 3,5 | 3 | 50 | 120 | TCG 5° | LU5B 2500 | F03FS05249 | PM AL | 96 | 430 | 4,4 | 3,2 | 75 | 72 | DTCG 15° | LSC43008 | F03FS06316 | LP | 69 |
| 400 | 3,5 | 3 | 50 | 96 | TCG -6° | LU5C 2100 | F03FS05279 | AL | 97 | 430 | 4,4 | 3,2 | 80 | 60 | TCG 15° | LSB43006X | F03FS10240 | LP PM | 67 |
| 400 | 3,5 | 3 | 50 | 120 | TCG -6° | LU5D 2600 | F03FS05319 | PM AL | 98 | 430 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB43009X | F03FS07909 | LP PM | 67 |
| 400 | 3,5 | 3 | 75 | 120 | TCG 5° | LU5B 2275 | F03FS09967 | PM AL | 96 | 430 | 4,4 | 3,2 | 80 | 72 | DTCG 15° | LSC43009 | F03FS06321 | LP | 69 |
| 400 | 3,8 | 2,8 | 30 | 28 | ATB 15° | LP70M 008P | F03FS03770 | WO | 35 | 430 | 4,8 | 3,5 | 70 | 72 | TCG 15° | LSB43013X | F03FS09180 | LP PM | 67 |
| 400 | 3,8 | 2,8 | 30 | 120 | ATB 5° | LU2C 2100 | F03FS04938 | WP | 49 | 450 | 3,5 | 3 | 30 | 108 | PYR 7° | LU5F45001 | F03FS07689 | PM AL | 100 |
| 400 | 4 | 2,8 | 30 | 28+2+4 | FLAT 20° | LM04 1500 | F03FS02921 | WO | 27 | 450 | 3,5 | 3 | 32 | 108 | PYR 7° | LU5F45002 | F03FS07690 | PM AL | 100 |
| 400 | 4 | 2,8 | 30 | 24+2+4 | FLAT 25° | LM05 1900 | F03FS03013 | WO | 28 | 450 | 4 | 3 | 30 | 128 | TCG 5° | LU5B 2700 | F03FS05251 | PM AL | 96 |
| 400 | 4 | 2,8 | 30 | 28 | BEV 15° | LU1B 0500 | F03FS04585 | WO | 34 | 450 | 4 | 3 | 32 | 128 | TCG 5° | LU5B 2800 | F03FS05252 | PM AL | 96 |
| 400 | 4 | 2,8 | 30 | 34 | ATB 20° | LU1C 1300 | F03FS04609 | WO | 36 | 450 | 4 | 3,2 | 30 | 108 | TCG 10° | LU5A 2100 | F03FS05208 | AL | 95 |
| 400 | 4 | 2,8 | 30 | 60 | ATB 15° | LU2A 3300 | F03FS04856 | WP | 47 | 450 | 4 | 3,2 | 30 | 108 | TCG -6° | LU5C 2400 | F03FS05282 | AL | 97 |
| 400 | 4 | 2,8 | 30 | 48 | ATB 15° | LU2A 3100 | F03FS04853 | WP | 47 | 450 | 4 | 3,2 | 30 | 128 | TCG -6° | LU5D 2900 | F03FS05322 | PM AL | 98 |
| 400 | 4 | 2,8 | 30 | 96 | ATB 10° | LU2B 1900 | F03FS04897 | WP | 48 | 450 | 4 | 3,2 | 32 | 108 | TCG 10° | LU5A 2200 | F03FS05210 | AL | 95 |
| 400 | 4 | 2,8 | 35 | 60 | ATB 15° | LU2A 3400 | F03FS04858 | WP | 47 | 450 | 4 | 3,2 | 32 | 108 | TCG -6° | LU5C 2500 | F03FS05283 | AL | 97 |
| 400 | 4 | 2,8 | 50 | 24+2+4 | FLAT 25° | LM05 2000 | F03FS03015 | WO | 28 | 450 | 4 | 3,2 | 40 | 108 | TCG 10° | LU5A 2300 | F03FS08047 | AL | 95 |
| 400 | 4 | 2,8 | 50 | 48 | ATB 15° | LU2A 3150 | F03FS09578 | WP | 47 | 450 | 4 | 3,2 | 40 | 108 | TCG -6° | LU5C 2600 | F03FS05284 | AL | 97 |
| 400 | 4 | 2,8 | 70 | 28+2+4 | ATB 20° | LM04 1600 | F03FS02923 | WO | 27 | 450 | 4 | 3,2 | 50 | 108 | TCG 10° | LU5A 2400 | F03FS07420 | AL | 95 |
| 400 | 4 | 2,8 | 70 | 24+2+4 | FLAT 25° | LM05 2100 | F03FS03017 | WO | 28 | 450 | 4 | 3,2 | 50 | 108 | TCG -6° | LU5C 2700 | F03FS05285 | AL | 97 |
| 400 | 4 | 2,8 | 80 | 28+2+4 | ATB 20° | LM04 1700 | F03FS02926 | WO | 27 | 450 | 4,2 | 3 | 30 | 32 | BEV 15° | LU1B 0600 | F03FS04586 | WO | 34 |
| 400 | 4 | 2,8 | 80 | 24+2+4 | FLAT 25° | LM05 2200 | F03FS03019 | WO | 28 | 450 | 4,4 | 3 | 30 | 24+2+4 | FLAT 25° | LM05 2400 | F03FS03023 | WO | 28 |
| 400 | 4,4 | 3 | 30 | 48 | ATB -5° | LU1A 0300 | F03FS04574 | WO | 33 | 450 | 4,4 | 3 | 30 | 54 | ATB -5° | LU1A 0400 | F03FS04575 | WO | 33 |
| 400 | 4,4 | 3 | 50 | 18+2+2 | FLAT 21° | LM1040001 | F03FS07702 | WO | 32 | 450 | 4,4 | 3 | 30 | 38 | ATB 20° | LU1C 1400 | F03FS04611 | WO | 36 |
| 400 | 4,4 | 3,2 | 30 | 48 | TCG 15° | LSB40001X | F03FS09168 | LP PM | 67 | 450 | 4,4 | 3 | 30 | 66 | ATB 15° | LU2A 3600 | F03FS04862 | WP | 47 |
| 400 | 4,4 | 3,2 | 30 | 60 | TCG 15° | LSB40004X | F03FS09169 | LP PM | 67 | 450 | 4,4 | 3 | 30 | 54 | ATB 10° | LU2A 3500 | F03FS04860 | WP | 47 |
| 400 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB40007X | F03FS07725 | LP PM | 67 | 450 | 4,4 | 3 | 30 | 96 | ATB 10° | LU2B 2000 | F03FS04899 | WP | 48 |
| 400 | 4,4 | 3,2 | 30 | 72 | DTCG 15° | LSC40007 | F03FS06315 | LP | 69 | 450 | 4,4 | 3 | 30 | 132 | ATB 5° | LU2C 2200 | F03FS04939 | WP | 49 |
| 400 | 4,4 | 3,2 | 50,8 | 72 | TCG 10° | LSB40018X | F03FS08957 | LP PM | 67 | 450 | 4,4 | 3 | 50 | 24+2+4 | FLAT 25° | LM05 2500 | F03FS03025 | WO | 28 |

WO: Solid wood - LP: Chipboard and laminated panels - WP: Wood Based Panel - PM: Polymeric Materials - AL: Aluminium & Non-ferrous metals - ST: Steel - CW: Construct Wood - FC: Fibre Cement - HPL: High Pressure Laminate - SP: Sandwich Panel - MM: Multi Material

| D mm | B mm | b mm | d mm | Z | Teeth | Freud Code | Art. No. | Material | Page |
|---------|---------|---------|---------|--------|----------|------------|------------|----------|------|
| 450 | 4,4 | 3 | 70 | 24+2+4 | FLAT 25° | LM05 2600 | F03FS03027 | WO | 28 |
| 450 | 4,4 | 3 | 80 | 24+2+4 | FLAT 25° | LM05 2700 | F03FS03029 | WO | 28 |
| 450 | 4,4 | 3,2 | 30 | 48 | TCG 15° | LSB45001X | F03FS10241 | LP PM | 68 |
| 450 | 4,4 | 3,2 | 30 | 60 | TCG 15° | LSB45004X | F03FS10243 | LP PM | 68 |
| 450 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB45007X | F03FS09181 | LP PM | 68 |
| 450 | 4,4 | 3,2 | 60 | 48 | TCG 15° | LSB45002X | F03FS10242 | LP PM | 68 |
| 450 | 4,4 | 3,2 | 60 | 60 | TCG 15° | LSB45005X | F03FS10244 | LP PM | 68 |
| 450 | 4,4 | 3,2 | 60 | 72 | TCG 15° | LSB45008X | F03FS09182 | LP PM | 68 |
| 450 | 4,4 | 3,2 | 60 | 72 | DTCG 15° | LSC45008 | F03FS06318 | LP | 69 |
| 450 | 4,4 | 3,2 | 80 | 60 | TCG 15° | LSB45006X | F03FS10245 | LP PM | 68 |
| 450 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB45009X | F03FS07811 | LP PM | 68 |
| 450 | 4,8 | 3 | 50 | 18+2+4 | FLAT 21° | LM1045001 | F03FS07703 | WO | 32 |
| 450 | 4,8 | 3,5 | 30 | 72 | TCG 15° | LSB45016X | F03FS10246 | LP PM | 68 |
| 450 | 4,8 | 3,5 | 60 | 72 | TCG 15° | LSB45017X | F03FS07391 | LP PM | 68 |
| 450 | 4,8 | 3,5 | 60 | 84 | TCG 15° | LSB45019X | F03FS10247 | LP PM | 68 |
| 450 | 4,8 | 3,5 | 60 | 72 | DTCG 15° | LSC45017 | F03FS06323 | LP | 69 |
| 450 | 4,8 | 3,5 | 80 | 72 | TCG 15° | LSB45018X | F03FS07812 | LP PM | 68 |
| 450 | 4,8 | 3,5 | 80 | 72 | DTCG 15° | LSC45018 | F03FS06324 | LP | 69 |
| 460 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB46001X | F03FS08922 | LP PM | 68 |
| 460 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB46002X | F03FS07914 | LP PM | 68 |
| 460 | 4,4 | 3,2 | 80 | 72 | TCG 15° | LSB46003X | F03FS09950 | LP PM | 68 |
| 470 | 4,4 | 3,2 | 75 | 48 | TCG 15° | LSB47001X | F03FS10248 | LP PM | 68 |
| 470 | 4,4 | 3,2 | 75 | 60 | TCG 15° | LSB47002X | F03FS10249 | LP PM | 68 |
| 470 | 4,4 | 3,2 | 75 | 72 | TCG 15° | LSB47003X | F03FS09183 | LP PM | 68 |
| 470 | 4,4 | 3,2 | 75 | 96 | TCG 15° | LSB47004X | F03FS09184 | LP PM | 68 |
| 470 | 4,8 | 3,5 | 70 | 72 | TCG 15° | LSB47005X | F03FS09185 | LP PM | 68 |
| 480 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB48007X | F03FS09914 | LP PM | 68 |
| 480 | 4,8 | 3,5 | 30 | 72 | TCG 15° | LSB48004X | F03FS09187 | LP PM | 68 |
| 480 | 4,8 | 3,5 | 60 | 72 | TCG 15° | LSB48006X | F03FS10269 | LP PM | 68 |
| 480 | 4,8 | 3,5 | 80 | 60 | TCG 15° | LSB48003X | F03FS09186 | LP PM | 68 |
| 480 | 4,8 | 3,5 | 80 | 72 | TCG 15° | LSB48001X | F03FS09188 | LP PM | 68 |
| 500 | 4 | 3,2 | 30 | 120 | TCG 10° | LU5A 2500 | F03FS05212 | AL | 95 |
| 500 | 4 | 3,2 | 30 | 140 | TCG 5° | LU5B 3100 | F03FS05254 | PM AL | 96 |
| 500 | 4 | 3,2 | 30 | 120 | TCG -6° | LU5C 2800 | F03FS06110 | AL | 97 |
| 500 | 4 | 3,2 | 32 | 120 | TCG 10° | LU5A 2600 | F03FS05214 | AL | 95 |
| 500 | 4 | 3,2 | 32 | 140 | TCG 5° | LU5B 3200 | F03FS05255 | PM AL | 96 |
| 500 | 4 | 3,2 | 32 | 120 | TCG -6° | LU5C 2900 | F03FS05286 | AL | 97 |
| 500 | 4 | 3,2 | 32 | 140 | TCG -6° | LU5D 3400 | F03FS05323 | PM AL | 98 |
| 500 | 4 | 3,2 | 50 | 120 | TCG 10° | LU5A 2700 | F03FS08244 | AL | 95 |
| 500 | 4 | 3,5 | 30 | 120 | PYR 7° | LU5F50001 | F03FS07691 | PM AL | 100 |
| 500 | 4 | 3,5 | 32 | 120 | PYR 7° | LU5F50002 | F03FS07692 | PM AL | 100 |
| 500 | 4,4 | 3,2 | 30 | 36 | BEV 15° | LU1B 0700 | F03FS04587 | WO | 34 |
| 500 | 4,4 | 3,2 | 30 | 36 | ATB 15° | LP70M 010P | F03FS03772 | WO | 35 |
| 500 | 4,4 | 3,2 | 30 | 42 | ATB 20° | LU1C 1500 | F03FS04612 | WO | 36 |
| 500 | 4,4 | 3,2 | 30 | 72 | ATB 15° | LU2A 3800 | F03FS04865 | WP | 47 |
| 500 | 4,4 | 3,2 | 30 | 60 | ATB 15° | LU2A 3700 | F03FS04864 | WP | 47 |
| 500 | 4,4 | 3,2 | 30 | 108 | ATB 10° | LU2B 2100 | F03FS04901 | WP | 48 |
| 500 | 4,4 | 3,2 | 30 | 144 | ATB 5° | LU2C 2300 | F03FS04940 | WP | 49 |
| 500 | 4,4 | 3,2 | 30 | 60 | TCG 15° | LSB50003X | F03FS10250 | LP PM | 68 |
| 500 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB50005X | F03FS10251 | LP PM | 68 |
| 500 | 4,4 | 3,2 | 35 | 144 | ATB 5° | LU2C 2335 | F03FS09975 | WP | 49 |
| 500 | 4,4 | 3,5 | 30 | 120 | TCG 10° | LU5A 3000 | F03FS07543 | AL | 95 |
| 500 | 4,8 | 3,2 | 30 | 60 | ATB -5° | LU1A 0500 | F03FS04576 | WO | 33 |
| 500 | 4,8 | 3,5 | 30 | 28+2+4 | FLAT 25° | LM05 2900 | F03FS03033 | WO | 28 |
| 500 | 4,8 | 3,5 | 30 | 144 | AXL 10° | LU1M50030 | F03FS09370 | WO | 44 |
| 500 | 4,8 | 3,5 | 50 | 28+2+4 | FLAT 25° | LM05 3000 | F03FS03036 | WO | 28 |
| 500 | 4,8 | 3,5 | 60 | 60 | TCG 15° | LSB50009X | F03FS09189 | LP PM | 68 |
| 500 | 4,8 | 3,5 | 60 | 72 | TCG 15° | LSB50011X | F03FS09191 | LP PM | 68 |
| 500 | 4,8 | 3,5 | 70 | 28+2+4 | FLAT 25° | LM05 3100 | F03FS03039 | WO | 28 |
| 500 | 4,8 | 3,5 | 75 | 60 | TCG 15° | LSB50010X | F03FS09190 | LP PM | 68 |
| 500 | 4,8 | 3,5 | 80 | 28+2+4 | FLAT 25° | LM05 3200 | F03FS03041 | WO | 28 |
| 500 | 5,2 | 3,5 | 50 | 18+2+4 | FLAT 21° | LM1050001 | F03FS07704 | WO | 32 |
| 510 | 4,8 | 3,5 | 80 | 72 | TCG 15° | LSB51001X | F03FS09984 | LP PM | 68 |
| 520 | 4,4 | 3,2 | 30 | 54 | TCG 15° | LSB52005X | F03FS10253 | LP PM | 68 |
| 520 | 4,4 | 3,2 | 30 | 72 | TCG 15° | LSB52008X | F03FS09602 | LP PM | 68 |
| 520 | 4,8 | 3,5 | 30 | 72 | TCG 15° | LSB52007X | F03FS09319 | LP PM | 68 |
| 520 | 4,8 | 3,5 | 30 | 72 | DTCG 18° | LSC52007 | F03FS07879 | LP | 69 |

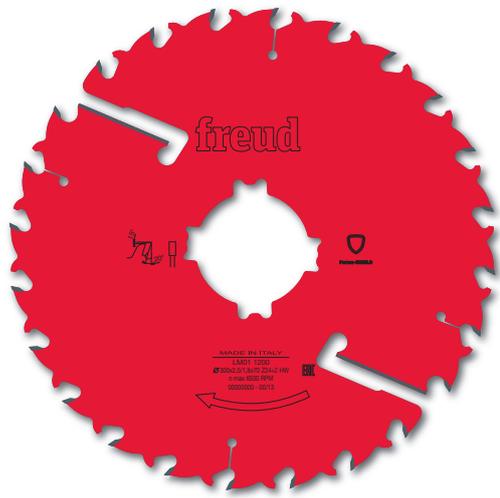
| D mm | B mm | b mm | d mm | Z | Teeth | Freud Code | Art. No. | Material | Page |
|---------|---------|---------|---------|--------|----------|------------|------------|----------|------|
| 520 | 4,8 | 3,5 | 60 | 60 | TCG 15° | LSB52002X | F03FS10252 | LP PM | 68 |
| 520 | 4,8 | 3,5 | 60 | 72 | TCG 15° | LSB52003X | F03FS09192 | LP PM | 68 |
| 520 | 4,8 | 3,5 | 70 | 60 | TCG 15° | LSB52009X | F03FS09958 | LP PM | 68 |
| 520 | 4,8 | 3,5 | 70 | 72 | TCG 15° | LSB52006X | F03FS09193 | LP PM | 68 |
| 530 | 4 | 3,5 | 30 | 126 | PYR 7° | LU5F53001 | F03FS07693 | PM AL | 100 |
| 530 | 4 | 3,5 | 32 | 126 | PYR 7° | LU5F53002 | F03FS07694 | PM AL | 100 |
| 530 | 4,2 | 3,5 | 30 | 126 | TCG 10° | LU5A 2800 | F03FS06607 | AL | 95 |
| 530 | 4,8 | 3,5 | 75 | 72 | TCG 15° | LSB53004X | F03FS09651 | LP PM | 68 |
| 530 | 5,2 | 3,5 | 30 | 60 | TCG 15° | LSB53001X | F03FS09194 | LP PM | 68 |
| 530 | 5,2 | 3,5 | 100 | 60 | TCG 15° | LSB53003X | F03FS09195 | LP PM | 68 |
| 530 | 5,8 | 4 | 60 | 60 | TCG 15° | LSB53002X | F03FS10254 | LP PM | 68 |
| 540 | 4,8 | 3,5 | 60 | 60 | TCG 15° | LSB54002X | F03FS10255 | LP PM | 68 |
| 540 | 4,8 | 3,5 | 60 | 72 | TCG 15° | LSB54003X | F03FS10256 | LP PM | 68 |
| 550 | 4 | 3,5 | 30 | 132 | PYR 7° | LU5F55001 | F03FS07695 | PM AL | 100 |
| 550 | 4 | 3,5 | 32 | 132 | PYR 7° | LU5F55002 | F03FS07696 | PM AL | 100 |
| 550 | 4,2 | 3,5 | 30 | 132 | TCG 10° | LU5A 2900 | F03FS06608 | AL | 95 |
| 550 | 4,2 | 3,5 | 30 | 148 | TCG 5° | LU5B 3500 | F03FS05257 | PM AL | 96 |
| 550 | 4,2 | 3,5 | 32 | 148 | TCG 5° | LU5B 3800 | F03FS05260 | PM AL | 96 |
| 550 | 4,4 | 3,5 | 30 | 48 | ATB 20° | LU1C 1600 | F03FS04613 | WO | 36 |
| 550 | 4,8 | 3,2 | 30 | 72 | ATB -5° | LU1A 0600 | F03FS04577 | WO | 33 |
| 550 | 4,8 | 3,5 | 30 | 28+2+4 | FLAT 25° | LM05 3400 | F03FS03045 | WO | 28 |
| 550 | 4,8 | 3,5 | 30 | 44 | BEV 15° | LU1B 0800 | F03FS04588 | WO | 34 |
| 550 | 4,8 | 3,5 | 30 | 84 | ATB 15° | LU2A 3900 | F03FS04867 | WP | 47 |
| 550 | 4,8 | 3,5 | 30 | 120 | ATB 10° | LU2B 2200 | F03FS04903 | WP | 48 |
| 550 | 4,8 | 3,5 | 30 | 156 | ATB 5° | LU2C 2400 | F03FS04942 | WP | 49 |
| 550 | 4,8 | 3,5 | 50 | 28+2+4 | FLAT 25° | LM05 3500 | F03FS03047 | WO | 28 |
| 550 | 4,8 | 3,5 | 70 | 28+2+4 | FLAT 25° | LM05 3600 | F03FS03050 | WO | 28 |
| 550 | 4,8 | 3,5 | 80 | 28+2+4 | FLAT 25° | LM05 3700 | F03FS03052 | WO | 28 |
| 550 | 5 | 3,5 | 40 | 72 | TCG 15° | LSB55007X | F03FS09216 | LP PM | 68 |
| 550 | 5,2 | 3,5 | 40 | 72 | TCG 15° | LSB55009X | F03FS09915 | LP PM | 68 |
| 550 | 5,2 | 3,5 | 60 | 60 | TCG 15° | LSB55002X | F03FS09196 | LP PM | 68 |
| 550 | 5,2 | 3,5 | 75 | 60 | TCG 15° | LSB55010X | F03FS10030 | LP PM | 68 |
| 550 | 5,2 | 3,5 | 80 | 48 | TCG 15° | LSB55005X | F03FS10257 | LP PM | 68 |
| 550 | 5,2 | 3,5 | 80 | 60 | TCG 15° | LSB55006X | F03FS09197 | LP PM | 68 |
| 550 | 5,2 | 3,5 | 90 | 60 | TCG 15° | LSB55008X | F03FS09970 | LP PM | 68 |
| 560 | 5,5 | 3,5 | 50 | 18+2+4 | FLAT 21° | LM1056001 | F03FS07705 | WO | 32 |
| 565 | 5 | 3,5 | 100 | 72 | TCG 15° | LSB56504X | F03FS09215 | LP PM | 68 |
| 565 | 5,2 | 3,5 | 100 | 60 | TCG 15° | LSB56502X | F03FS09198 | LP PM | 68 |
| 570 | 4,8 | 3,5 | 60 | 60 | TCG 15° | LSB57001X | F03FS09199 | LP PM | 68 |
| 600 | 4,7 | 4 | 30 | 144 | PYR 7° | LU5F60001 | F03FS07697 | PM AL | 100 |
| 600 | 4,7 | 4 | 30 | 156 | PYR 7° | LU5F60003 | F03FS07699 | PM AL | 100 |
| 600 | 4,7 | 4 | 32 | 144 | PYR 7° | LU5F60002 | F03FS07698 | PM AL | 100 |
| 600 | 4,7 | 4 | 32 | 156 | PYR 7° | LU5F60004 | F03FS07700 | PM AL | 100 |
| 600 | 4,8 | 3,8 | 30 | 156 | TCG 5° | LU5B 3600 | F03FS05258 | PM AL | 96 |
| 600 | 5 | 3,5 | 30 | 72 | ATB -5° | LU1A 0700 | F03FS04578 | WO | 33 |
| 600 | 5,2 | 3,5 | 30 | 32+2+4 | FLAT 25° | LM05 4200 | F03FS05860 | WO | 28 |
| 600 | 5,2 | 3,5 | 35 | 32+2+4 | FLAT 25° | LM05 4235 | F03FS09976 | WO | 28 |
| 600 | 5,2 | 3,5 | 80 | 32+2+4 | FLAT 25° | LM05 3900 | F03FS03056 | WO | 28 |
| 600 | 5,2 | 4 | 30 | 48 | BEV 15° | LU1B 0900 | F03FS04589 | WO | 34 |
| 600 | 5,2 | 4 | 30 | 48 | ATB 15° | LP70M 012P | F03FS03774 | WO | 35 |
| 600 | 5,4 | 4 | 30 | 96 | ATB 15° | LU2A 4000 | F03FS04868 | WP | 47 |
| 600 | 5,4 | 4 | 30 | 132 | ATB 10° | LU2B 2300 | F03FS04904 | WP | 48 |
| 600 | 5,4 | 4 | 30 | 168 | ATB 5° | LU2C 2500 | F03FS04943 | WP | 49 |
| 600 | 5,8 | 4 | 60 | 60 | TCG 15° | LSB60001X | F03FS09200 | LP PM | 68 |
| 600 | 5,8 | 4 | 60 | 72 | TCG 15° | LSB60002X | F03FS09201 | LP PM | 68 |
| 600 | 5,8 | 4 | 70 | 60 | TCG 15° | LSB60004X | F03FS10258 | LP PM | 68 |
| 600 | 5,8 | 4 | 75 | 60 | TCG 15° | LSB60006X | F03FS10259 | LP PM | 68 |
| 650 | 5,6 | 4,2 | 30 | 54 | BEV 15° | LU1B 1000 | F03FS08324 | WO | 34 |
| 670 | 6,2 | 4,2 | 40 | 60 | TCG 18° | LSB67003X | F03FS09202 | LP PM | 68 |
| 670 | 6,2 | 4,2 | 40 | 72 | TCG 18° | LSB67004X | F03FS10260 | LP PM | 68 |
| 680 | 6,2 | 4,2 | 40 | 60 | TCG 18° | LSB68001X | F03FS09203 | LP PM | 68 |
| 700 | 5,6 | 4,2 | 30 | 60 | BEV 15° | LU1B 1100 | F03FS05892 | WO | 34 |
| 720 | 6,4 | 4,4 | | | | | | | |

Circular saw blades for stationary machines

| | SUITABLE FOR | PERFORMANCE | | |
|--------------------|--|--|--|-------------|
| | | Ultimate | High | Good |
| Solid wood |  Multirip saw blades for ripping | LM01 - LM10 | LM02 - LM03 - LM04 - LM05 - LM06 - LM07 - LM08 | |
| |  Ripping | LU1F - LU1G | LU1C - LU1D - LU1E - LU2A - LU2B - LG1C | |
| |  Crosscutting | LU2A - LU2B - LU2C- LU2D - LU2F - LU1M | LU2E - LG2C | LU1A - LU1E |
| |  Ripping and crosscutting | | LG2A - LG2B - LU1H - LU34M | LU1B |
| Laminated |  Saw blades for cutting laminates | LSB X LU3A - LU3B - LU3C - LU3D - LU3E - LU3F | LG3D - LU34M | |
| |  Scoring saw blades for laminates | LI13MD - LI13MS - LI14MD - LI14MS - LI16M - DLI16M - LI17M - LI20M - LI22MD - LI22MS - LI25M - DLI25M - LI27M | | |
| Wood composites |  | LSB X LU2C - LU2D - LU2E - LU2F - LU3A - LU3B - LU3C - LU3D - LU3F | LU2A - LU2B - LU3E - LG2A - LG2B - LG2C - LG3D - LU34M | LU1E-LU1H |
| Veneered |  | LU3A - LU3B - LU3C - LU3D - LU3E - LU3F | LG3D - LU34M | |
| Picture frames |  | LU1I - LU1L | | |
| Non-ferrous metals |  | LU5F LU5A - LU5B - LU5C - LU5D - LU5E | | |
| Ferrous metals |  | LU6A | | |
| Plexiglas |  | LU4A - LU4B | | |
| Plastic materials |  | LU5F LU4A - LU4B - LU5D - LU5B | LU2C - LU2D - LU2F - LG2C - LU3F | |
| PVC |  | LU5F | LU5B - LU5D | |
| Solid surfaces |  | LU4D | | |

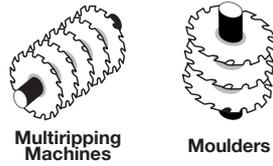
Solid Wood





LM01

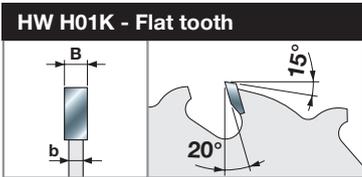
Thin kerf multiripping saw blades with rakers



Multiripping



●●● Ultimate ●● High ● Good



Machines:
Multiripping machines and moulders.

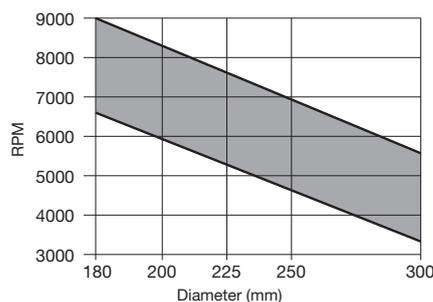
Materials:
Softwood and hardwood, both dried at max 10-12% humidity rate.

Applications:
Multiripping and moulding.

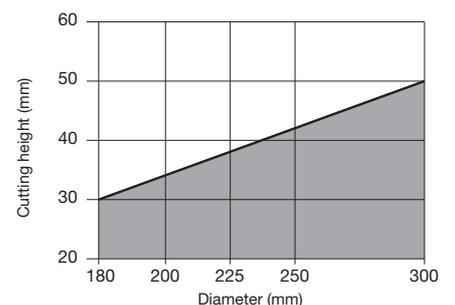
Technical information:
Ripping saw blades where the thin kerf minimises material wastes.
Not suitable for twisted timber.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|------|---------------------|------------|------------|
| mm | mm | mm | mm | | | | |
| 180 | 2,2 | 1,6 | 40 | 16+2 | 2CH 12x5 | LM01 0100 | F03FS02751 |
| 200 | 2,2 | 1,6 | 40 | 16+2 | 2CH 12x5 | LM01 0200 | F03FS02753 |
| 200 | 2,2 | 1,6 | 50 | 16+2 | 2CH 21x5 | LM01 0250 | F03FS09968 |
| 200 | 2,2 | 1,6 | 60 | 16+2 | 2CH 21x5 | LM01 0300 | F03FS02755 |
| 200 | 2,2 | 1,6 | 70 | 16+2 | 2CH 21x5 | LM01 0400 | F03FS02757 |
| 225 | 2,2 | 1,6 | 70 | 16+2 | 4CH 21x5 | LM01 0500 | F03FS02759 |
| 250 | 2,2 | 1,6 | 30 | 20+2 | 2CH 10x4 + FT02 | LM01 0600 | F03FS02763 |
| 250 | 2,2 | 1,6 | 60 | 20+2 | 4CH 21x5 | LM01 0700 | F03FS02765 |
| 250 | 2,2 | 1,6 | 70 | 20+2 | 4CH 21x5 | LM01 0800 | F03FS02767 |
| 250 | 2,2 | 1,6 | 80 | 20+2 | 2CH 13x5 + 2CH 21x5 | LM01 0900 | F03FS02769 |
| 250 | 2,2 | 1,6 | 50 | 24+2 | 4CH 21x5 | LM01 1400 | F03FS02780 |
| 250 | 2,2 | 1,6 | 60 | 24+2 | 4CH 21x5 | LM01 1500 | F03FS02781 |
| 250 | 2,2 | 1,6 | 70 | 24+2 | 4CH 21x5 | LM01 1600 | F03FS07200 |
| 300 | 2,5 | 1,8 | 30 | 24+2 | 2CH 10x4 + FT02 | LM01 1000 | F03FS02772 |
| 300 | 2,5 | 1,8 | 60 | 24+2 | 4CH 21x5 | LM01 1100 | F03FS02774 |
| 300 | 2,5 | 1,8 | 70 | 24+2 | 4CH 21x5 | LM01 1200 | F03FS02776 |
| 300 | 2,5 | 1,8 | 80 | 24+2 | 2CH 13x5 + 2CH 21x5 | LM01 1300 | F03FS02778 |

FT02 : 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LM02

Reduced kerf multiripping saw blades with rakers



Multiripping Machines



Moulders



Softwood



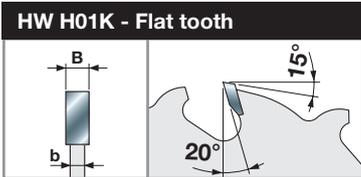
Hardwood



Multiripping



●●● Ultimate ●● High ● Good



Machines:
Multiripping machines and moulders.

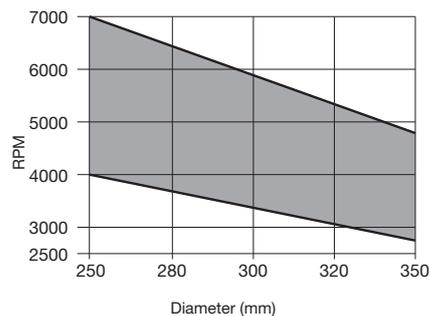
Materials:
Softwood and hardwood, both dried at max 15% humidity rate.

Applications:
Multiripping and moulding.

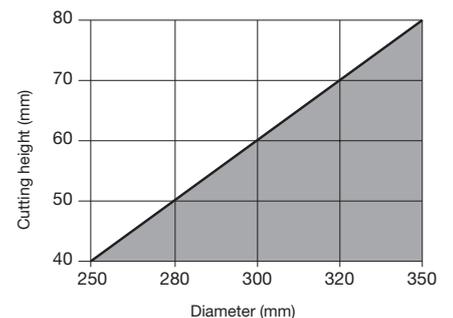
Technical information:
Ripping saw blades where the reduced kerf minimises material wastes.
Not suitable for twisted timber.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|--------|---------------------|------------|------------|
| mm | mm | mm | mm | | | | |
| 250 | 2,8 | 2,0 | 30 | 16+2 | 2CH 10x4 + FT02 | LM02 0100 | F03FS02797 |
| 250 | 2,8 | 2,0 | 60 | 16+2 | 4CH 21x5 | LM02 0200 | F03FS02799 |
| 250 | 2,8 | 2,0 | 70 | 16+2 | 4CH 21x5 | LM02 0300 | F03FS02801 |
| 250 | 2,8 | 2,0 | 80 | 16+2 | 2CH 13x5 + 2CH 21x5 | LM02 0400 | F03FS02803 |
| 280 | 2,8 | 2,0 | 80 | 18+2 | 2CH 13x5 + 2CH 21x5 | LM02 0500 | F03FS02805 |
| 300 | 2,8 | 2,0 | 30 | 20+2 | 2CH 10x4 + FT02 | LM02 0600 | F03FS02807 |
| 300 | 2,8 | 2,0 | 60 | 20+2 | 4CH 21x5 | LM02 0700 | F03FS02809 |
| 300 | 2,8 | 2,0 | 70 | 20+2 | 4CH 21x5 | LM02 0800 | F03FS02811 |
| 300 | 2,8 | 2,0 | 80 | 20+2 | 2CH 13x5 + 2CH 21x5 | LM02 0900 | F03FS02813 |
| 320 | 3,0 | 2,2 | 30 | 20+2+2 | 2CH 10x4 + FT02 | LM02 1000 | F03FS02815 |
| 320 | 3,0 | 2,2 | 80 | 20+2+2 | 2CH 13x5 + 2CH 21x5 | LM02 1100 | F03FS02817 |
| 350 | 3,0 | 2,2 | 30 | 24+2+2 | 2CH 10x4 + FT02 | LM02 1200 | F03FS02819 |
| 350 | 3,0 | 2,2 | 60 | 24+2+2 | 4CH 21x5 | LM02 1300 | F03FS02821 |
| 350 | 3,0 | 2,2 | 70 | 24+2+2 | 4CH 21x5 | LM02 1400 | F03FS02823 |
| 350 | 3,0 | 2,2 | 80 | 24+2+2 | 2CH 13x5 + 2CH 21x5 | LM02 1500 | F03FS02825 |

FT02 : 2/9/46,4 + 2/10/60

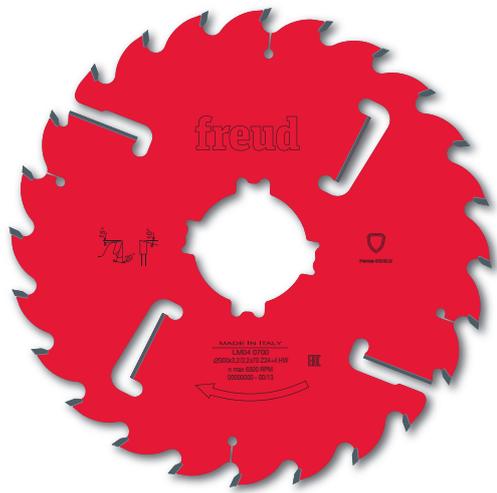


Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LM04

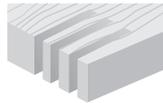
Multiripping saw blades with rakers



Multiripping Machines



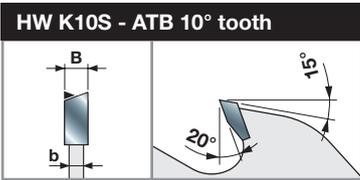
Softwood Hardwood



Multiripping



●●● Ultimate ●● High ● Good



Machines:
Multiripping machines.

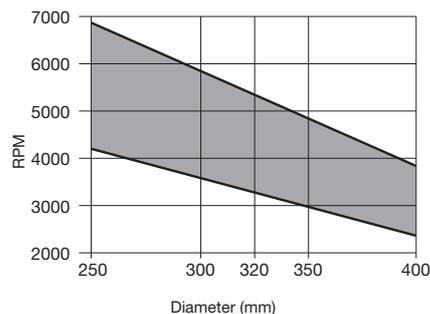
Materials:
Softwood and hardwood, both dried at max 15% humidity rate.

Applications:
Multiripping.

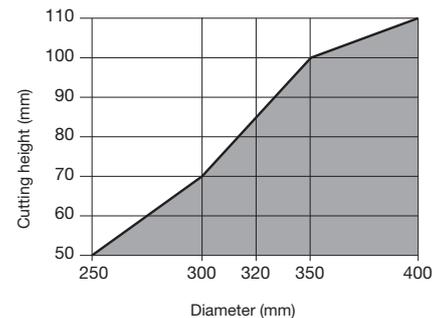
Technical information:
Saw blades suitable for ripping.

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|--------|---------------------|------------|------------|
| 250 | 3,2 | 2,2 | 30 | 20+2+2 | 2CH 10x4 + FT02 | LM04 0100 | F03FS02891 |
| 250 | 3,2 | 2,2 | 60 | 20+2+2 | 4CH 21x5 | LM04 0200 | F03FS02893 |
| 250 | 3,2 | 2,2 | 70 | 20+2+2 | 4CH 21x5 | LM04 0300 | F03FS02895 |
| 250 | 3,2 | 2,2 | 80 | 20+2+2 | 2CH 13x5 + 2CH 21x5 | LM04 0400 | F03FS02897 |
| 300 | 3,2 | 2,2 | 30 | 24+2+2 | 2CH 10x4 + FT02 | LM04 0500 | F03FS02899 |
| 300 | 3,2 | 2,2 | 60 | 24+2+2 | 4CH 21x5 | LM04 0600 | F03FS02901 |
| 300 | 3,2 | 2,2 | 70 | 24+2+2 | 4CH 21x5 | LM04 0700 | F03FS02903 |
| 300 | 3,2 | 2,2 | 80 | 24+2+2 | 2CH 13x5 + 2CH 21x5 | LM04 0800 | F03FS02906 |
| 320 | 3,2 | 2,2 | 30 | 24+2+2 | 2CH 10x4 + FT02 | LM04 0900 | F03FS02908 |
| 320 | 3,2 | 2,2 | 80 | 24+2+2 | 2CH 13x5 + 2CH 21x5 | LM04 1000 | F03FS02910 |
| 350 | 3,5 | 2,5 | 70 | 24+2+4 | 4CH 21x5 | LM04 2400 | F03FS06243 |
| 350 | 3,5 | 2,5 | 80 | 24+2+4 | 2CH 13x5 + 2CH 21x5 | LM04 2500 | F03FS06244 |
| 350 | 3,5 | 2,5 | 30 | 28+2+4 | 2CH 10x4 + FT02 | LM04 1100 | F03FS02912 |
| 350 | 3,5 | 2,5 | 60 | 28+2+4 | 4CH 21x5 | LM04 1200 | F03FS02914 |
| 350 | 3,5 | 2,5 | 70 | 28+2+4 | 4CH 21x5 | LM04 1300 | F03FS02916 |
| 350 | 3,5 | 2,5 | 80 | 28+2+4 | 2CH 13x5 + 2CH 21x5 | LM04 1400 | F03FS02919 |
| 350 | 3,5 | 2,5 | 90 | 28+2+4 | 4CH 21x5 | LM04 2200 | F03FS02935 |
| 400 | 4,0 | 2,8 | 30 | 28+2+4 | 2CH 10x4 + FT02 | LM04 1500 | F03FS02921 |
| 400 | 4,0 | 2,8 | 70 | 28+2+4 | 4CH 21x5 | LM04 1600 | F03FS02923 |
| 400 | 4,0 | 2,8 | 80 | 28+2+4 | 2CH 13x5 + 2CH 21x5 | LM04 1700 | F03FS02926 |

FT02 : 2/9/46,4 + 2/10/60

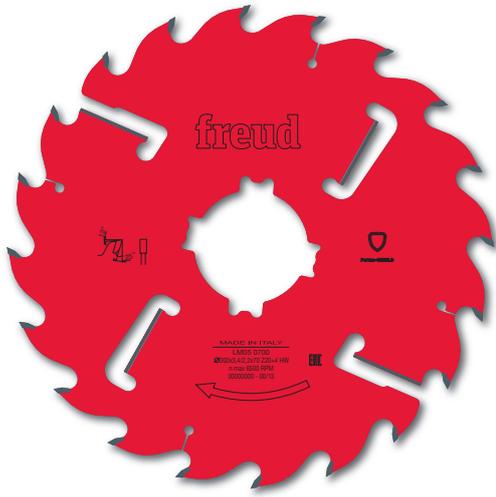


Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LM05

Multiripping saw blades with rakers



Multiripping Machines



Softwood



Hardwood



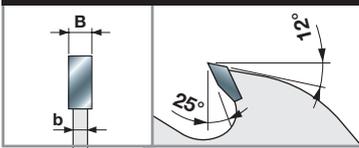
Multiripping



●●● Ultimate ●● High ● Good



HW K10S - Flat tooth



Machines:

Multiripping machines.

Materials:

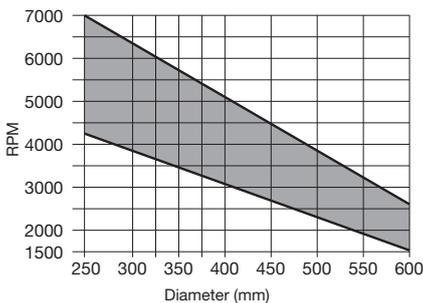
Softwood and hardwood and long fibre wood.

Applications:

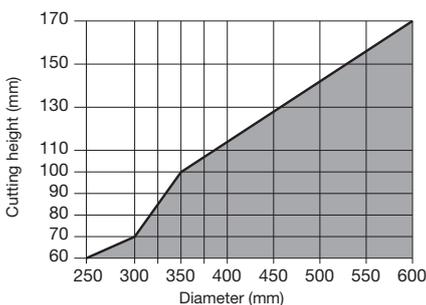
Multiripping.

Technical information:

Saw blades for ripping extra thick timber. Most suitable for cutting wood with humidity rate over 10%.



Minimum and maximum RPM based on the blade diameter.

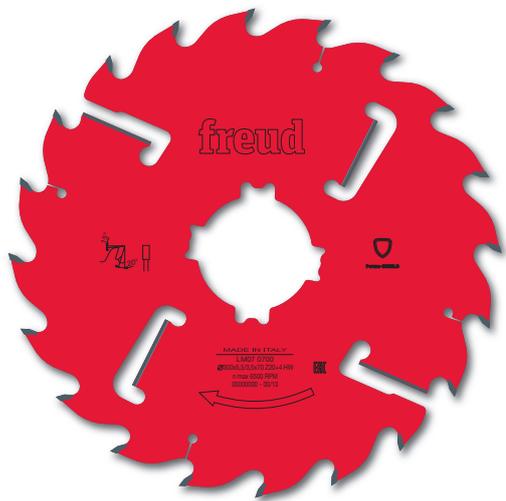


Maximum depth of rip and crosscut based on the blade diameter.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|--------|---------------------|------------|------------|
| mm | mm | mm | mm | | | | |
| 250 | 3,4 | 2,2 | 30 | 16+2+2 | 2CH 10x4 + FT02 | LM05 0100 | F03FS02973 |
| 250 | 3,4 | 2,2 | 60 | 16+2+2 | 4CH 21x5 | LM05 0200 | F03FS02975 |
| 250 | 3,4 | 2,2 | 70 | 16+2+2 | 4CH 21x5 | LM05 0300 | F03FS02977 |
| 250 | 3,4 | 2,2 | 80 | 16+2+2 | 2CH 13x5 + 2CH 21x5 | LM05 0400 | F03FS02979 |
| 300 | 3,4 | 2,2 | 30 | 20+2+2 | 2CH 10x4 + FT02 | LM05 0500 | F03FS02981 |
| 300 | 3,4 | 2,2 | 60 | 20+2+2 | 4CH 21x5 | LM05 0600 | F03FS02983 |
| 300 | 3,4 | 2,2 | 70 | 20+2+2 | 4CH 21x5 | LM05 0700 | F03FS02985 |
| 300 | 3,4 | 2,2 | 80 | 20+2+2 | 2CH 13x5 + 2CH 21x5 | LM05 0800 | F03FS02990 |
| 320 | 3,4 | 2,2 | 30 | 20+2+2 | 2CH 10x4 + FT02 | LM05 0900 | F03FS02993 |
| 320 | 3,4 | 2,2 | 80 | 20+2+2 | 2CH 13x5 + 2CH 21x5 | LM05 1000 | F03FS02995 |
| 350 | 3,7 | 2,5 | 30 | 20+2+4 | 2CH 10x4 + FT02 | LM05 1100 | F03FS02997 |
| 350 | 3,7 | 2,5 | 50 | 20+2+4 | 2CH 10x4 | LM05 1200 | F03FS02999 |
| 350 | 3,7 | 2,5 | 60 | 20+2+4 | 4CH 21x5 | LM05 1300 | F03FS03001 |
| 350 | 3,7 | 2,5 | 70 | 20+2+4 | 4CH 21x5 | LM05 1400 | F03FS03003 |
| 350 | 3,7 | 2,5 | 80 | 20+2+4 | 2CH 13x5 + 2CH 21x5 | LM05 1500 | F03FS03005 |
| 350 | 3,7 | 2,5 | 90 | 20+2+4 | 4CH 21x5 | LM05 4100 | F03FS03060 |
| 380 | 4,0 | 2,8 | 30 | 20+2+4 | 2CH 10x4 + FT02 | LM05 1600 | F03FS03007 |
| 380 | 4,0 | 2,8 | 70 | 20+2+4 | 4CH 21x5 | LM05 1700 | F03FS03009 |
| 380 | 4,0 | 2,8 | 80 | 20+2+4 | 2CH 13x5 + 2CH 21x5 | LM05 1800 | F03FS03011 |
| 400 | 4,0 | 2,8 | 30 | 24+2+4 | 2CH 10x4 + FT02 | LM05 1900 | F03FS03013 |
| 400 | 4,0 | 2,8 | 50 | 24+2+4 | 2CH 10x4 | LM05 2000 | F03FS03015 |
| 400 | 4,0 | 2,8 | 70 | 24+2+4 | 4CH 21x5 | LM05 2100 | F03FS03017 |
| 400 | 4,0 | 2,8 | 80 | 24+2+4 | 2CH 13x5 + 2CH 21x5 | LM05 2200 | F03FS03019 |
| 450 | 4,4 | 3,0 | 30 | 24+2+4 | 2CH 10x4 + FT02 | LM05 2400 | F03FS03023 |
| 450 | 4,4 | 3,0 | 50 | 24+2+4 | 2 CH 10x4 | LM05 2500 | F03FS03025 |
| 450 | 4,4 | 3,0 | 70 | 24+2+4 | 4CH 21x5 | LM05 2600 | F03FS03027 |
| 450 | 4,4 | 3,0 | 80 | 24+2+4 | 2CH 13x5 + 2CH 21x5 | LM05 2700 | F03FS03029 |
| 500 | 4,8 | 3,5 | 30 | 28+2+4 | FT02+2CH 10x4 | LM05 2900 | F03FS03033 |
| 500 | 4,8 | 3,5 | 50 | 28+2+4 | 2CH 10x4 | LM05 3000 | F03FS03036 |
| 500 | 4,8 | 3,5 | 70 | 28+2+4 | 4CH 21x5 | LM05 3100 | F03FS03039 |
| 500 | 4,8 | 3,5 | 80 | 28+2+4 | 2CH 13x5 + 2CH 21x5 | LM05 3200 | F03FS03041 |
| 550 | 4,8 | 3,5 | 30 | 28+2+4 | 2CH 10x4 + FT02 | LM05 3400 | F03FS03045 |
| 550 | 4,8 | 3,5 | 50 | 28+2+4 | 2CH 10x4 | LM05 3500 | F03FS03047 |
| 550 | 4,8 | 3,5 | 70 | 28+2+4 | 4CH 21x5 | LM05 3600 | F03FS03050 |
| 550 | 4,8 | 3,5 | 80 | 28+2+4 | 2CH 13x5 + 2CH 21x5 | LM05 3700 | F03FS03052 |
| 600 | 5,2 | 3,5 | 30 | 32+2+4 | 2CH 10x4 | LM05 4200 | F03FS05860 |
| 600 | 5,2 | 3,5 | 35 | 32+2+4 | 2CH 21x5 | LM05 4235 | F03FS09976 |
| 600 | 5,2 | 3,5 | 80 | 32+2+4 | 4CH 21x5 | LM05 3900 | F03FS03056 |

FT02 : 2/9/46,4 + 2/10/60

● Solid wood



LM07

Shoulder thick kerf saw blades with rakers



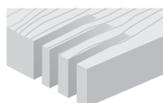
Multiripping
Machines



Softwood



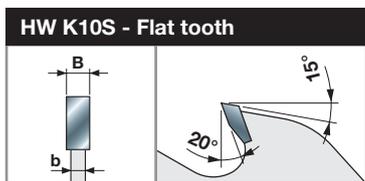
Hardwood



Multiripping



●●● Ultimate ●● High ● Good



Machines:

Multiripping machines.

Materials:

Softwood and hardwood.

Applications:

Multiripping.

Technical information:

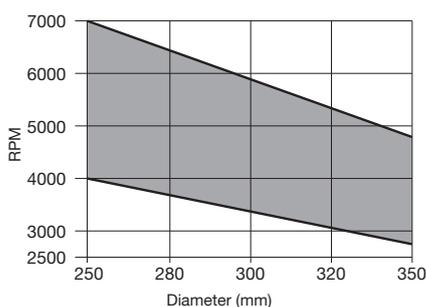
Ripping saw blades for the correct distribution of lateral forces, created by crooked plank in heavy duty use.

Mounted on multiripping machines as "shoulder blades".

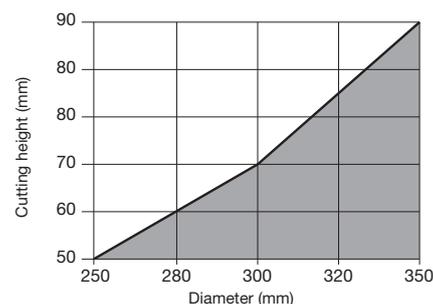
Suitable for dry and wet wood.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|--------|---------------------|------------|------------|
| mm | mm | mm | mm | | | | |
| 250 | 5,5 | 3,5 | 30 | 16+2+2 | 2CH 10x4 + FT02 | LM07 0100 | F03FS03141 |
| 250 | 5,5 | 3,5 | 60 | 16+2+2 | 4CH 21x5 | LM07 0200 | F03FS03143 |
| 250 | 5,5 | 3,5 | 70 | 16+2+2 | 4CH 21x5 | LM07 0300 | F03FS03145 |
| 250 | 5,5 | 3,5 | 80 | 16+2+2 | 2CH 13x5 + 2CH 21x5 | LM07 0400 | F03FS03147 |
| 300 | 5,5 | 3,5 | 30 | 20+2+2 | 2CH 10x4 + FT02 | LM07 0500 | F03FS03149 |
| 300 | 5,5 | 3,5 | 60 | 20+2+2 | 4CH 21x5 | LM07 0600 | F03FS03151 |
| 300 | 5,5 | 3,5 | 70 | 20+2+2 | 4CH 21x5 | LM07 0700 | F03FS03153 |
| 300 | 5,5 | 3,5 | 80 | 20+2+2 | 2CH 13x5 + 2CH 21x5 | LM07 0800 | F03FS03155 |
| 320 | 5,5 | 3,5 | 30 | 20+2+2 | 2CH 10x4 + FT02 | LM07 0900 | F03FS03157 |
| 320 | 5,5 | 3,5 | 80 | 20+2+2 | 2CH 13x5 + 2CH 21x5 | LM07 1000 | F03FS03159 |
| 350 | 5,5 | 3,5 | 30 | 24+2+4 | 2CH 10x4 + FT02 | LM07 1100 | F03FS03161 |
| 350 | 5,5 | 3,5 | 60 | 24+2+4 | 4CH 21x5 | LM07 1200 | F03FS03163 |
| 350 | 5,5 | 3,5 | 70 | 24+2+4 | 4CH 21x5 | LM07 1300 | F03FS03165 |
| 350 | 5,5 | 3,5 | 80 | 24+2+4 | 4CH 21x5 | LM07 1400 | F03FS03167 |

FT02 : 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LM08

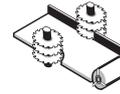
Ultra-thin kerf multiripping saw blades



Multiripping
Machines



Moulders



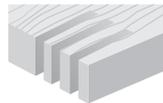
Cleaving
Machines



Softwood



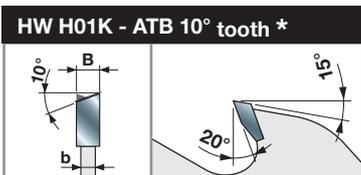
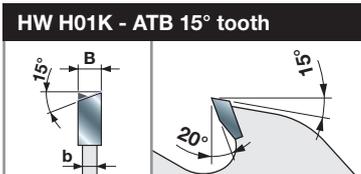
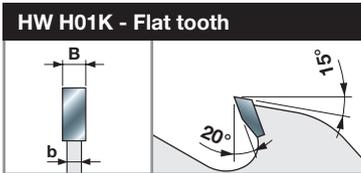
Hardwood



Multiripping



●●● Ultimate ●● High ● Good



Machines:

Multiripping machines and cleaving machines.

Materials:

Softwood and hardwood, both dried at max 10% humidity rate.

Applications:

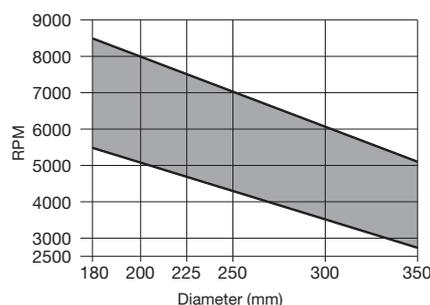
Multiripping and moulding.

Technical information:

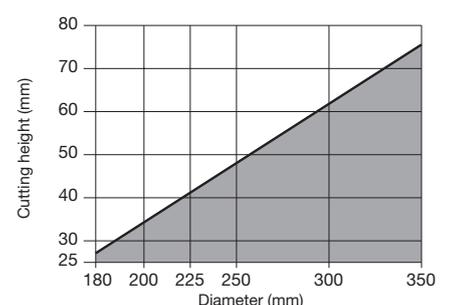
Ripping saw blades for minimum material waste. Reboring and optional keyways not available. A frequent blade cleaning is highly recommended to remove resin deposit.

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|------------|------------|------------|
| 180 | 1,5 | 1,0 | 40 | 24 P | 2CH 12x5 | LM08 0100 | F03FS03169 |
| 180 | 1,5 | 1,0 | 60 | 24 P | FT 3/10/75 | LM08 0200 | F03FS03171 |
| 200 | 1,5 | 1,0 | 40 | 28 P | 2CH 12x5 | LM08 0300 | F03FS03173 |
| 200 | 1,5 | 1,0 | 60 | 28 P | FT 3/10/75 | LM08 0400 | F03FS03176 |
| 200 | 1,5 | 1,0 | 60 | 36 ATB* | FT 3/10/75 | LM08 0500 | F03FS03179 |
| 200 | 1,7 | 1,2 | 50 | 36 ATB* | - | LM08 0600 | F03FS03182 |
| 200 | 1,7 | 1,2 | 60 | 36 ATB* | FT 3/10/75 | LM08 2800 | F03FS03240 |
| 225 | 1,5 | 1,0 | 40 | 28 P | 2CH 12x5 | LM08 0700 | F03FS03185 |
| 225 | 1,5 | 1,0 | 60 | 28 P | FT 3/10/75 | LM08 0800 | F03FS03188 |
| 225 | 1,5 | 1,0 | 70 | 28 P | 2CH 21x5 | LM08 0900 | F03FS03191 |
| 225 | 1,5 | 1,0 | 40 | 36 ATB | 2CH 12x5 | LM08 1000 | F03FS03194 |
| 225 | 1,5 | 1,0 | 60 | 36 ATB | FT 3/10/75 | LM08 1100 | F03FS03197 |
| 225 | 1,5 | 1,0 | 70 | 36 ATB | 2CH 21x5 | LM08 1200 | F03FS03200 |
| 225 | 1,7 | 1,2 | 65 | 36 ATB | FT 3/10/80 | LM08 1300 | F03FS03203 |
| 250 | 1,7 | 1,2 | 40 | 24 P | 2CH 12x5 | LM08 1400 | F03FS03206 |
| 250 | 1,7 | 1,2 | 60 | 24 P | FT 3/10/75 | LM08 1500 | F03FS03209 |
| 250 | 1,7 | 1,2 | 70 | 24 P | 2CH 21x5 | LM08 1600 | F03FS03212 |
| 250 | 1,7 | 1,2 | 40 | 36 ATB* | 2CH 12x5 | LM08 1700 | F03FS03215 |
| 250 | 1,7 | 1,2 | 60 | 36 ATB* | FT 3/10/75 | LM08 1800 | F03FS03218 |
| 250 | 1,7 | 1,2 | 70 | 36 ATB* | 2CH 21x5 | LM08 1900 | F03FS03223 |
| 250 | 2,2 | 1,6 | 50 | 30 ATB* | 2CH 21x5 | LM08 2500 | F03FS03237 |
| 250 | 2,2 | 1,6 | 60 | 30 ATB* | 2CH 21x5 | LM08 2600 | F03FS03238 |
| 250 | 2,2 | 1,6 | 70 | 30 ATB* | 2CH 21x5 | LM08 2700 | F03FS03239 |
| 255 | 1,7 | 1,2 | 70 | 24 P | 2CH 21x5 | LM08 2400 | F03FS03236 |
| 280 | 2,2 | 1,6 | 60 | 36 ATB | FT 3/10/75 | LM08 2200 | F03FS03232 |
| 300 | 2,2 | 1,6 | 50 | 36 ATB | - | LM08 2000 | F03FS03226 |
| 300 | 2,2 | 1,6 | 70 | 36 ATB | 2CH 21x5 | LM08 2300 | F03FS03235 |
| 350 | 2,5 | 1,8 | 50 | 40 ATB | - | LM08 2100 | F03FS03229 |

FT03 : 2/7/42 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LU1A

Saw blades for radial and pendulum machines



Radial Arm Saws



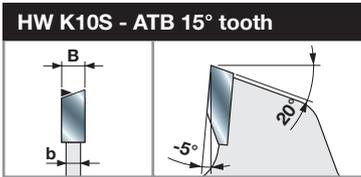
Softwood Hardwood



Crosscutting



●●● Ultimate ●● High ● Good



| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|---------|------------|------------|
| mm | mm | mm | mm | | | | |
| 300 | 4,4 | 3,0 | 30 | 36 | FT02 | LU1A 0100 | F03FS04572 |
| 350 | 4,4 | 3,0 | 30 | 42 | 2/10/60 | LU1A 0200 | F03FS04573 |
| 400 | 4,4 | 3,0 | 30 | 48 | FT02 | LU1A 0300 | F03FS04574 |
| 450 | 4,4 | 3,0 | 30 | 54 | FT03 | LU1A 0400 | F03FS04575 |
| 500 | 4,8 | 3,2 | 30 | 60 | 2/10/60 | LU1A 0500 | F03FS04576 |
| 550 | 4,8 | 3,2 | 30 | 72 | FT03 | LU1A 0600 | F03FS04577 |
| 600 | 5,0 | 3,5 | 30 | 72 | FT02 | LU1A 0700 | F03FS04578 |

FT02 : 2/9/46,4 + 2/10/60 - FT03 : 2/7/42 + 2/10/60

Machines:

Radial arm saws.

Materials:

Softwood and hardwood.

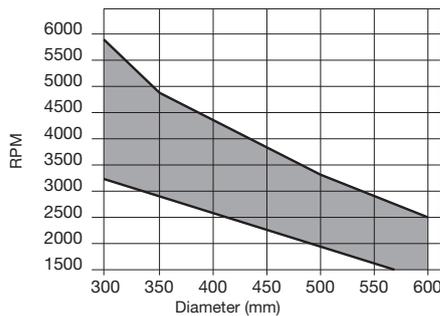
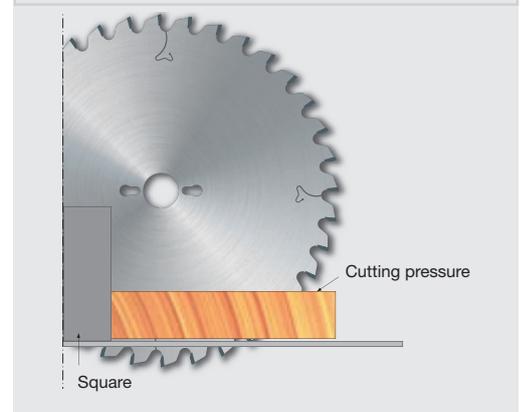
Applications:

Crosscutting.

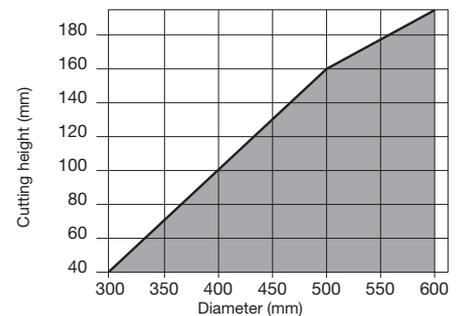
Technical information:

Saw blades suitable for crosscutting. To be mounted on radial saws and pendulum cutting machines.

Working with spindle over the working plane



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LU1B Saw blades for carpentry works



Squaring Saws



Table Saws



Softwood



Hardwood



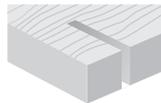
Construction Timber



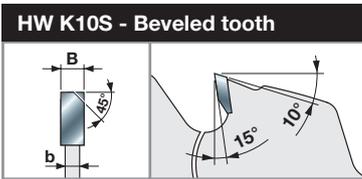
Shuttering Board



Ripping



Crosscutting



Machines:

Table and squaring saws.

Materials:

Softwood, hardwood and construct wood.

Applications:

Ripping and crosscutting.

Technical information:

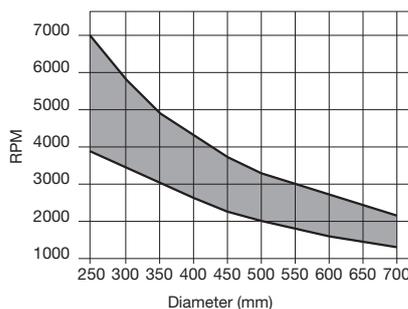
Saw blades suitable for ripping and crosscutting.

Optimised tooth shape to cut also construct wood with nails or metal clips.

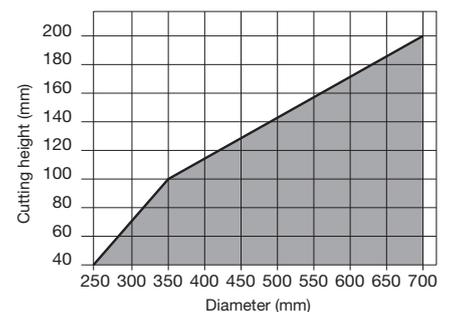
●●● Ultimate ●● High ● Good

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|---------|------------------|------------|
| 250 | 3,4 | 2,2 | 30 | 18 | FT01 | LU1B 0100 | F03FS04579 |
| 300 | 3,4 | 2,2 | 30 | 20 | FT01 | LU1B 0200 | F03FS04580 |
| 315 | 3,4 | 2,2 | 30 | 20 | FT01 | LU1B 0300 | F03FS04582 |
| 350 | 3,7 | 2,5 | 30 | 24 | FT02 | LU1B 0400 | F03FS04583 |
| 400 | 4,0 | 2,8 | 30 | 28 | 2/10/60 | LU1B 0500 | F03FS04585 |
| 450 | 4,2 | 3,0 | 30 | 32 | FT03 | LU1B 0600 | F03FS04586 |
| 500 | 4,4 | 3,2 | 30 | 36 | FT03 | LU1B 0700 | F03FS04587 |
| 550 | 4,8 | 3,5 | 30 | 44 | 2/10/60 | LU1B 0800 | F03FS04588 |
| 600 | 5,2 | 4,0 | 30 | 48 | FT03 | LU1B 0900 | F03FS04589 |
| 650 | 5,6 | 4,2 | 30 | 54 | FT02 | LU1B 1000 | F03FS08324 |
| 700 | 5,6 | 4,2 | 30 | 60 | 2/10/60 | LU1B 1100 | F03FS05892 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - **FT02:** 2/9/46,4 + 2/10/60 - **FT03:** 2/7/42 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LP70M

Saw blades for on-site jobs



Table Saws



Softwood



Hardwood



Construction
Timber



Shuttering
Board



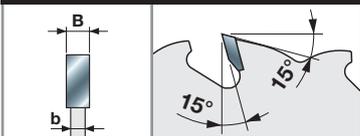
Ripping



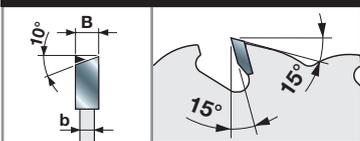
Crosscutting



HW K10S - Flat tooth *



HW K10S - ATB 10° tooth



Machines:

Table saws.

Materials:

Softwood, hardwood and construct wood.

Applications:

Ripping and crosscutting also for on-site job.

Technical information:

Saw blades suitable for ripping and crosscutting, even construction wood with nails or metal clips.

| D | B | b | d | Z | NL - KN | Freud Code | Art. No. |
|-----|-----|-----|----|----|---------|-------------|------------|
| mm | mm | mm | mm | | | | |
| 300 | 2,8 | 1,8 | 30 | 24 | 2/10/60 | LP70M 001P* | F03FS03762 |
| 350 | 3,0 | 2,2 | 30 | 28 | 2/10/60 | LP70M 002P* | F03FS03763 |

| D | B | b | d | Z | NL - KN | Freud Code | Art. No. |
|-----|-----|-----|----|----|---------|------------|------------|
| mm | mm | mm | mm | | | | |
| 300 | 2,6 | 1,8 | 25 | 24 | - | LP70M 004P | F03FS03766 |
| 315 | 3,2 | 2,2 | 30 | 24 | 2/10/50 | LP70M 003P | F03FS03765 |
| 315 | 3,2 | 2,2 | 25 | 48 | - | LP70M 006P | F03FS03768 |
| 400 | 3,8 | 2,8 | 30 | 28 | 2/10/60 | LP70M 008P | F03FS03770 |
| 500 | 4,4 | 3,2 | 30 | 36 | 2/10/60 | LP70M 010P | F03FS03772 |
| 600 | 5,2 | 4,0 | 30 | 48 | 2/10/60 | LP70M 012P | F03FS03774 |



LU1C

Saw blades for solid wood ripping



Squaring Saws



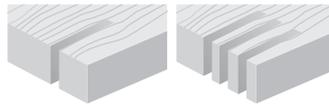
Multiripping Machines



Softwood



Hardwood

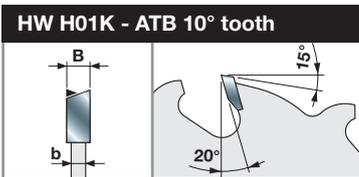


Ripping

Multiripping



●●● Ultimate ●● High ● Good



Machines:
Squaring saws and multiripping machines.

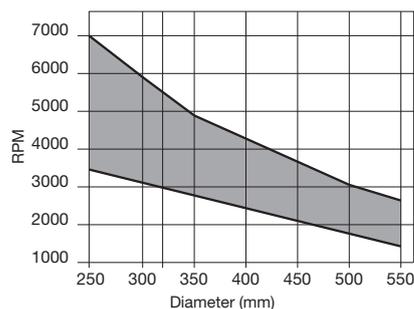
Materials:
Softwood and hardwood.

Applications:
Ripping and multiripping.

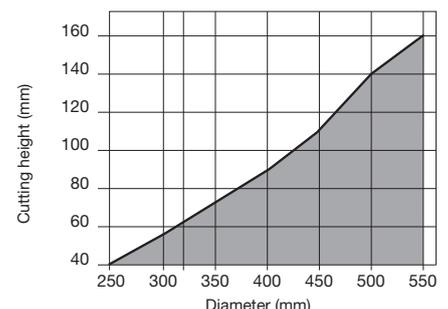
Technical information:
Saw blades with anti-kickback technology, suitable for ripping soft and hardwood also with loose knots.

| D | B | b | d | Z | NL - KN | Freud Code | Art. No. |
|-----|-----|-----|----|----|----------|------------|----------------------|
| mm | mm | mm | mm | | | | |
| 250 | 3,2 | 2,2 | 30 | 22 | FT01 | | LU1C 0100 F03FS04590 |
| 250 | 3,2 | 2,2 | 70 | 22 | 4CH 21x5 | | LU1C 0200 F03FS04592 |
| 300 | 3,2 | 2,2 | 30 | 26 | FT01 | | LU1C 0400 F03FS04595 |
| 300 | 3,2 | 2,2 | 35 | 26 | - | | LU1C 0500 F03FS04597 |
| 300 | 3,2 | 2,2 | 70 | 26 | 4CH 21x5 | | LU1C 0700 F03FS04599 |
| 315 | 3,2 | 2,2 | 30 | 28 | FT01 | | LU1C 0800 F03FS04601 |
| 350 | 3,5 | 2,5 | 30 | 30 | FT02 | | LU1C 1000 F03FS04603 |
| 350 | 3,5 | 2,5 | 35 | 30 | - | | LU1C 1100 F03FS04605 |
| 350 | 3,5 | 2,5 | 70 | 30 | 4CH 21x5 | | LU1C 1200 F03FS04607 |
| 400 | 4,0 | 2,8 | 30 | 34 | 2/10/60 | | LU1C 1300 F03FS04609 |
| 450 | 4,4 | 3,0 | 30 | 38 | 2/10/60 | | LU1C 1400 F03FS04611 |
| 500 | 4,4 | 3,2 | 30 | 42 | 2/10/60 | | LU1C 1500 F03FS04612 |
| 550 | 4,4 | 3,5 | 30 | 48 | 2/10/60 | | LU1C 1600 F03FS04613 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LU1D

Saw blades for solid wood ripping



Squaring Saws



Multiripping Machines



Softwood



Hardwood



Ripping

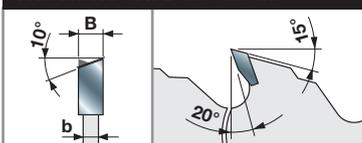
Multiripping



●●● Ultimate ●● High ● Good



HW H01K - ATB 10° tooth



| D | B | b | d | Z | NL - KN | Freud Code | Art. No. |
|-----|-----|-----|----|----|----------|------------|----------------------|
| mm | mm | mm | mm | | | | |
| 250 | 3,2 | 2,2 | 30 | 24 | FT01 | | LU1D 0100 F03FS04615 |
| 250 | 3,2 | 2,2 | 70 | 24 | 4CH 21x5 | | LU1D 0200 F03FS04617 |
| 300 | 3,2 | 2,2 | 30 | 28 | FT01 | | LU1D 0500 F03FS04620 |
| 300 | 3,2 | 2,2 | 60 | 28 | 4CH 21x5 | | LU1D 0600 F03FS04622 |
| 300 | 3,2 | 2,2 | 70 | 28 | 4CH 21x5 | | LU1D 0800 F03FS04624 |
| 350 | 3,5 | 2,5 | 30 | 32 | FT02 | | LU1D 1100 F03FS04628 |
| 350 | 3,5 | 2,5 | 70 | 32 | 4CH 21x5 | | LU1D 1000 F03FS04626 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60

Machines:

Squaring saws and multiripping machines.

Materials:

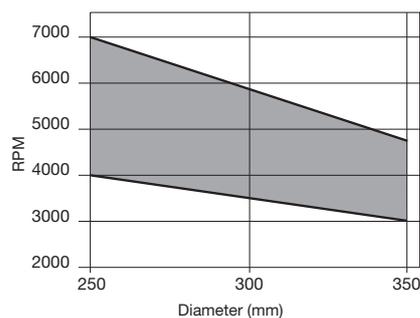
Softwood and hardwood.

Applications:

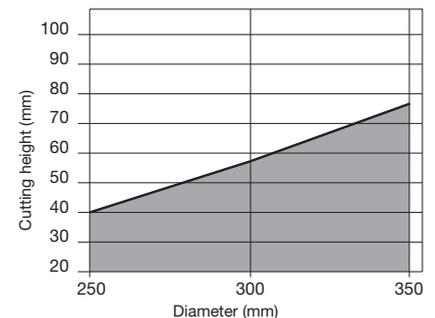
Ripping and multiripping.

Technical information:

Saw blades suitable for ripping soft and hardwood also with loose knots.



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LU1E

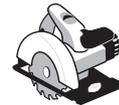
Think kerf saw blades for solid wood ripping



Squaring Saws



Table Saws



Hand-held Circular Saws



Softwood



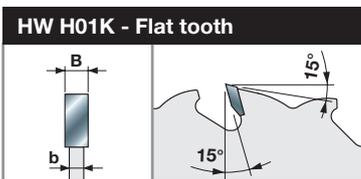
Hardwood



Ripping



●●● Ultimate ●● High ● Good



| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|---|------------|
| mm | mm | mm | mm | | | | |
| 250 | 2,5 | 1,6 | 30 | 24 | FT01 |  LU1E 0100 | F03FS04630 |
| 300 | 2,6 | 1,8 | 30 | 24 | - |  LU1E 0500 | F03FS04638 |
| 300 | 2,7 | 1,8 | 25 | 28 | - |  LU1E 0200 | F03FS04632 |
| 300 | 2,7 | 1,8 | 30 | 28 | FT01 |  LU1E 0300 | F03FS04634 |
| 350 | 3,0 | 2,2 | 30 | 32 | FT01 |  LU1E 0400 | F03FS04636 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60

Machines:

Squaring saws and table saws, hand-held circular saws.

Materials:

Softwood and hardwood.

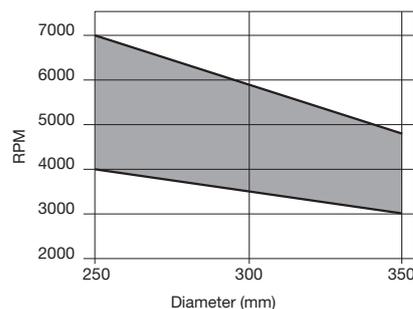
Applications:

Ripping.

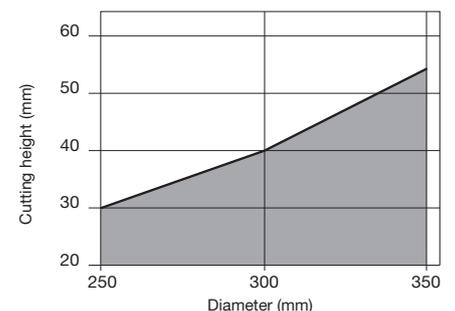
Technical information:

The thin kerf design makes the workpiece feed easy when ripping soft and hard drywood, also with loose knots.

Anti-kickback technology.



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LU1F

Think kerf saw blades for solid wood ripping



Squaring Saws



Table Saws



Hand-held Circular Saws



Softwood



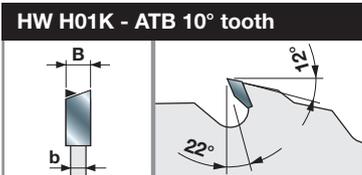
Hardwood



Ripping



●●● Ultimate ●● High ● Good



| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------|------------|------------|
| 250 | 2,5 | 1,6 | 30 | 24 | FT01 | LU1F 0100 | F03FS04640 |
| 300 | 2,7 | 1,8 | 30 | 28 | FT01 | LU1F 0200 | F03FS04642 |
| 350 | 3,0 | 2,2 | 30 | 32 | FT01 | LU1F 0300 | F03FS04644 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60

Machines:

Squaring saws and table saws, hand-held circular saws.

Materials:

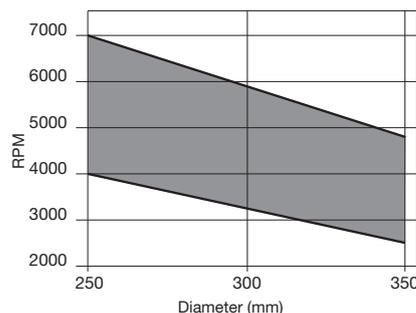
Softwood and hardwood.

Applications:

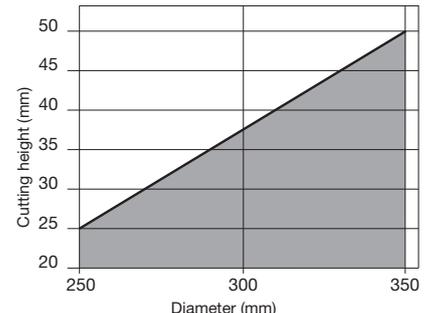
Ripping.

Technical information:

The thin kerf design makes the workpiece feed easy when ripping soft and hard drywood without loose knots.



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LU1G

Saw blades with rounded teeth sides to cut solid wood



Squaring Saws



Softwood



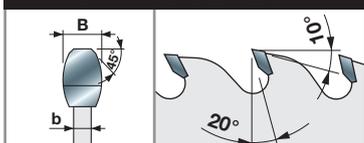
Ripping



●●● Ultimate ●● High ● Good



HW H01K - Rounded tooth



Machines:

Squaring saws.

Materials:

Softwood.

Applications:

Ripping.

Technical information:

Saw blades suitable for ripping with scratchless finishing.

Ideal to achieve a perfectly smooth surface on softwood.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|------------|------------|
| mm | mm | mm | mm | | | | |
| 250 | 3,0 | 2,0 | 30 | 40 | FT01 | LU1G 0100 | F03FS04646 |
| 300 | 3,0 | 2,0 | 30 | 48 | FT01 | LU1G 0200 | F03FS04647 |
| 350 | 3,2 | 2,2 | 30 | 60 | FT01 | LU1G 0300 | F03FS04648 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60

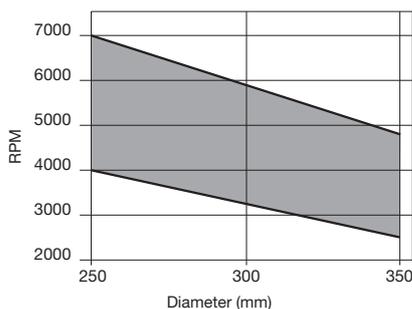
Comparison between the cut of a conventional saw blade and a saw blade equipped with teeth that are rounded on the side.



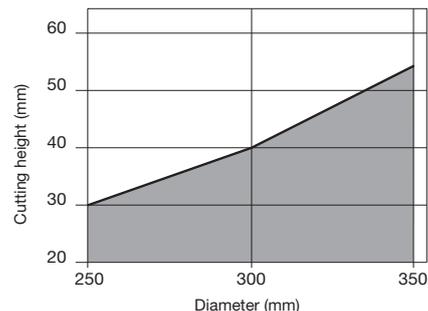
Conventional saw blades



LU1G saw blades



Minimum and maximum RPM based on the blade diameter.



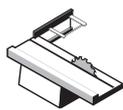
Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LU1H

Think kerf saw blades for solid wood ripping and crosscutting



Squaring Saws



Table Saws



Multiripping Machines



Hand-held Circular Saws



Softwood



Hardwood



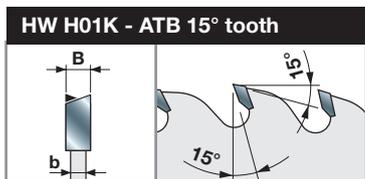
Ripping

Crosscutting

Multiripping



●●● Ultimate ●● High ● Good



Machines:

Squaring saws, table saws and multiripping machines, hand-held circular saws.

Materials:

Softwood and hardwood.

Applications:

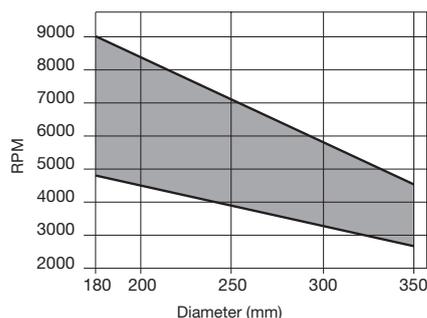
Ripping, crosscutting and multiripping.

Technical information:

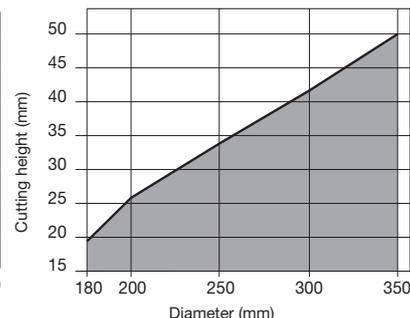
The thin kerf design makes the workpiece feed easy when ripping soft and hard drywood, minimising at the same time material waste.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|------|----|---------|------------|------------|
| mm | mm | mm | mm | | | | |
| 180 | 1,5 | 1,0 | 30 | 40 | 2/7/42 | LU1H 0100 | F03FS04649 |
| 185 | 1,5 | 1,0 | 25,4 | 40 | - | LU1H 0200 | F03FS04650 |
| 200 | 1,5 | 1,0 | 30 | 40 | 2/7/42 | LU1H 0300 | F03FS07131 |
| 200 | 1,5 | 1,0 | 30 | 60 | 2/7/42 | LU1H 0400 | F03FS04651 |
| 205 | 1,5 | 1,0 | 25,4 | 40 | - | LU1H 0500 | F03FS04652 |
| 205 | 1,5 | 1,0 | 25,4 | 60 | - | LU1H 0600 | F03FS04653 |
| 250 | 2,5 | 1,6 | 30 | 48 | FT01 | LU1H 0700 | F03FS04655 |
| 250 | 2,5 | 1,6 | 30 | 60 | FT01 | LU1H 0800 | F03FS04657 |
| 250 | 2,8 | 2,0 | 30 | 30 | 2/10/60 | LU1H 1500 | F03FS04670 |
| 250 | 2,8 | 2,0 | 30 | 40 | 2/10/60 | LU1H 1600 | F03FS07127 |
| 300 | 2,8 | 2,0 | 30 | 36 | FT01 | LU1H 1400 | F03FS04668 |
| 300 | 2,8 | 2,0 | 30 | 54 | FT01 | LU1H 0900 | F03FS04659 |
| 300 | 2,8 | 2,0 | 35 | 54 | - | LU1H 1000 | F03FS04661 |
| 300 | 2,8 | 2,0 | 30 | 72 | FT01 | LU1H 1100 | F03FS04663 |
| 350 | 3,0 | 2,2 | 30 | 60 | FT01 | LU1H 1200 | F03FS04665 |
| 350 | 3,0 | 2,2 | 30 | 84 | FT01 | LU1H 1300 | F03FS04667 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood

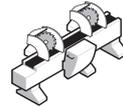


LU11

Saw blades to cut solid wood frames



Squaring Saws



Double Head Cutting Machines



Softwood



Hardwood



MDF



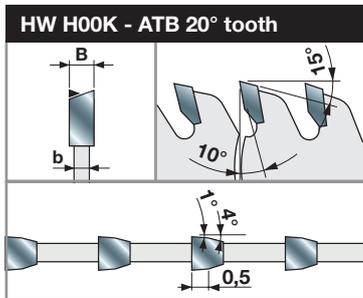
Crosscutting



Frames Cutting



●●● Ultimate ●● High ● Good



| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|------|-----|----|-----|--------|------------|------------|
| mm | mm | mm | mm | | | | |
| 200 | 2,95 | 2,5 | 30 | 64 | 2/7/42 | LU11 0100 | F03FS04673 |
| 250 | 2,95 | 2,5 | 20 | 80 | 2/6/32 | LU11 0200 | F03FS04675 |
| 250 | 2,95 | 2,5 | 30 | 80 | FT02 | LU11 0300 | F03FS04677 |
| 250 | 2,95 | 2,5 | 30 | 96 | FT02 | LU11 0400 | F03FS04679 |
| 275 | 2,95 | 2,5 | 20 | 84 | 2/6/32 | LU11 0500 | F03FS04681 |
| 300 | 2,95 | 2,5 | 30 | 96 | FT02 | LU11 0600 | F03FS04682 |
| 300 | 2,95 | 2,5 | 30 | 112 | FT02 | LU11 0700 | F03FS04684 |
| 330 | 3,45 | 3,0 | 30 | 96 | FT02 | LU11 0800 | F03FS04686 |
| 350 | 3,45 | 3,0 | 30 | 108 | FT02 | LU11 0900 | F03FS04688 |

FT02: 2/9/46,4 + 2/10/60

Machines:

Squaring saws and double head cutting machines.

Materials:

Softwood, hardwood and MDF.

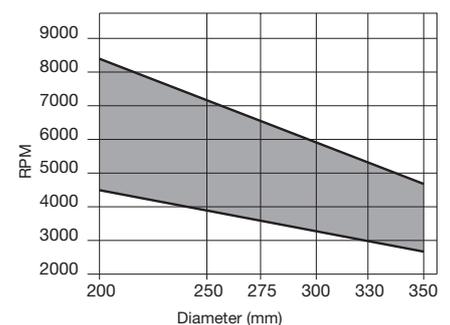
Applications:

Crosscutting and wood frames cutting.

Technical information:

Saw blades suitable for crosscutting of wooden frames or profiled items.

Splintering-free surface and perfect matching of the cut parts guaranteed also if painted, covered by chalk or other delicate and abrasive coatings.

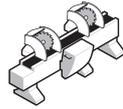


Minimum and maximum RPM based on the blade diameter.



LU1L

Saw blades with axial angle to cut solid wood frames



Double Head Cutting Machines



Squaring Saws



Softwood



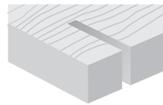
Hardwood



MDF



Plexiglas



Crosscutting



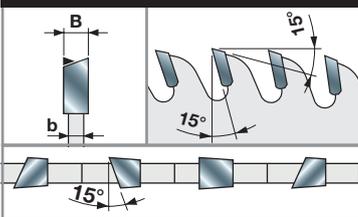
Frames Cutting



●●● Ultimate ●● High ● Good



HW H00K - Flat-ATB 10° axial tooth



Machines:

Double head cutting machines and squaring saws.

Materials:

Softwood, hardwood, MDF and plexiglas.

Applications:

Crosscutting, wood and wood derivatives frames cutting.

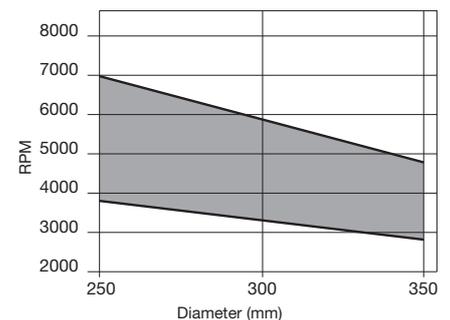
Technical information:

Saw blades ideal for wooden frames and profiles end trims whose front-end cut stays visible.

The axial angle grants splinter-free surfacing, with a perfect matching of the parts, also when painted or covered in chalk and abrasive coatings.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|------|-----|------|------------|------------|
| mm | mm | mm | mm | | | | |
| 250 | 3,0 | 2,2 | 30 | 100 | FT01 | LU1L 0100 | F03FS04690 |
| 250 | 3,0 | 2,2 | 30 | 120 | FT01 | LU1L 0200 | F03FS04691 |
| 255 | 3,0 | 2,2 | 25,4 | 100 | - | LU1L 0300 | F03FS04692 |
| 255 | 3,0 | 2,2 | 25,4 | 120 | - | LU1L 0400 | F03FS04693 |
| 300 | 3,0 | 2,2 | 30 | 100 | FT01 | LU1L 0500 | F03FS04694 |
| 300 | 3,0 | 2,2 | 30 | 120 | FT01 | LU1L 0600 | F03FS04695 |
| 305 | 3,0 | 2,2 | 25,4 | 100 | - | LU1L 0700 | F03FS04696 |
| 305 | 3,0 | 2,2 | 25,4 | 120 | - | LU1L 0800 | F03FS04697 |
| 305 | 3,0 | 2,2 | 30 | 100 | - | LU1L 1100 | F03FS06410 |
| 350 | 3,0 | 2,2 | 30 | 120 | FT01 | LU1L 0900 | F03FS04698 |
| 355 | 3,0 | 2,2 | 25,4 | 120 | - | LU1L 1000 | F03FS04699 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.

LU1M

Saw blades for optimising machines



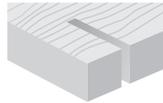
Optimising Machines



Softwood



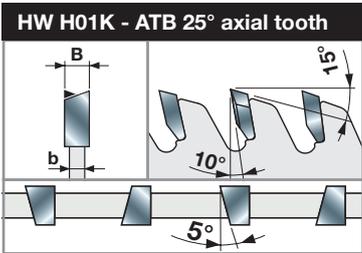
Hardwood



Crosscutting



●●● Ultimate ●● High ● Good



Machines:

Optimising machines.

Materials:

Softwood and hard drywood.

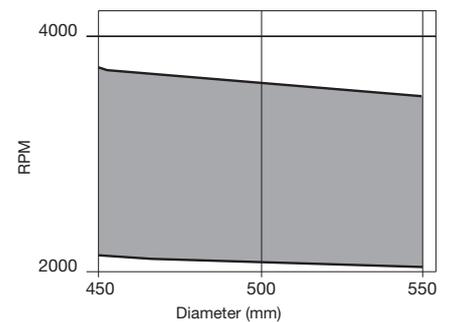
Applications:

Crosscutting at high feedrate.

Technical information:

Saw blades suitable for high feedrate and precise crosscutting of single boards of soft and hardwood.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|-----|---------|------------|------------|
| mm | mm | mm | mm | | | | |
| 500 | 4,8 | 3,5 | 30 | 144 | 2/15/63 | LU1M50030 | F03FS09370 |



Minimum and maximum RPM based on the blade diameter.



LG1C

Saw blades for solid wood ripping



Squaring Saws



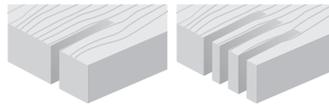
Multiripping Machines



Softwood



Hardwood

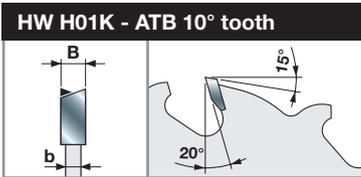


Ripping

Multiripping



●●● Ultimate ●● High ● Good



| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|------------|----------------------|
| mm | mm | mm | mm | | | | |
| 250 | 3,2 | 2,2 | 30 | 22 | FT01 | | LG1C 0100 F03FS07559 |
| 300 | 3,2 | 2,2 | 30 | 26 | FT01 | | LG1C 0400 F03FS07560 |
| 350 | 3,5 | 2,5 | 30 | 30 | FT02 | | LG1C 1000 F03FS07561 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60

Machines:

Squaring saws and multiripping machines.

Materials:

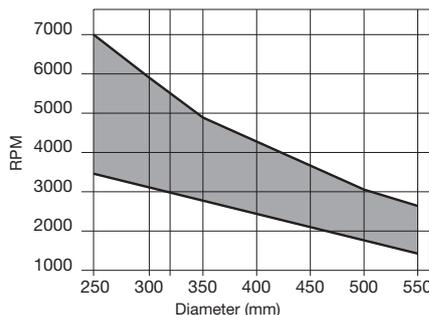
Softwood and hardwood.

Applications:

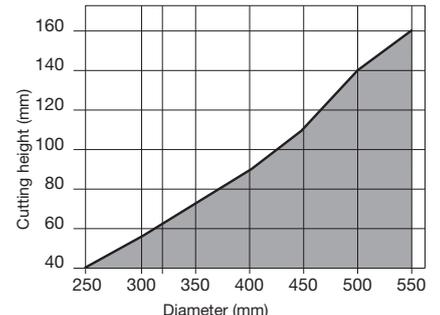
Ripping and multiripping.

Technical information:

Saw blades with anti-kickback technology suitable for ripping soft and hardwood also with loose knots.



Minimum and maximum RPM based on the blade diameter.

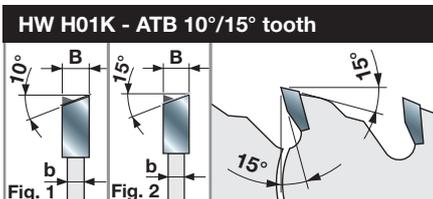


Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood

Wood Based Panels





Machines:

Squaring saws and horizontal panel sizing machines, hand-held circular saws.

Materials:

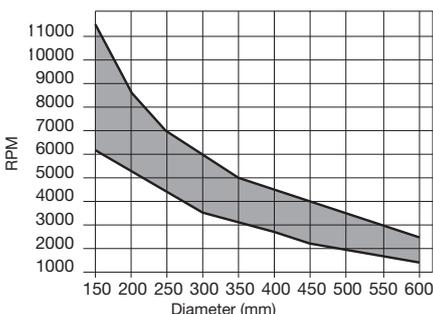
Softwood, hardwood, chipboard, plywood and MDF.

Applications:

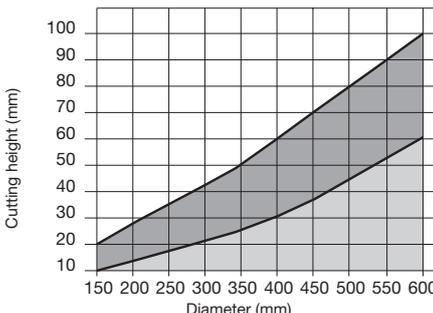
Ripping and crosscutting.

Technical information:

Saw blades suitable for ripping and crosscutting.



Minimum and maximum RPM based on the blade diameter.

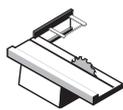


Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood ● Wood-based materials

LU2A

Saw blades for wood based panels ripping and crosscutting



Squaring Saws



Horizontal Panel Sizing Machines



Hand-held Circular Saws



Softwood



Hardwood



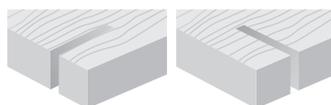
Chipboard



Plywood



MDF



Ripping

Crosscutting



●●● Ultimate ●● High ● Good

ATB 10° tooth (Fig. 1)

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|-------------------|------------|------------|
| 150 | 3,2 | 2,2 | 30 | 24 | 2/7/42 | LU2A 0100 | F03FS04806 |
| 160 | 3,2 | 2,2 | 20 | 24 | 2/6/32 | LU2A 0300 | F03FS04809 |
| 180 | 3,2 | 2,2 | 20 | 24 | 2/6/32 | LU2A 0400 | F03FS04810 |
| 180 | 3,2 | 2,2 | 30 | 30 | 2/7/42 | LU2A 0500 | F03FS04811 |
| 190 | 3,2 | 2,2 | 30 | 30 | 2/7/42 | LU2A 0600 | F03FS04813 |
| 200 | 3,2 | 2,2 | 30 | 34 | 2/7/42 | LU2A 0800 | F03FS04817 |
| 200 | 3,2 | 2,2 | 35 | 34 | - | LU2A 0900 | F03FS04819 |
| 210 | 3,2 | 2,2 | 30 | 34 | 2/7/42 | LU2A 1100 | F03FS04822 |
| 216 | 3,2 | 2,2 | 30 | 34 | - | LU2A 1200 | F03FS04823 |
| 220 | 3,2 | 2,2 | 30 | 34 | 2/7/42 | LU2A 1300 | F03FS04824 |
| 230 | 3,2 | 2,2 | 30 | 34 | 2/7/42 | LU2A 1500 | F03FS04827 |
| 250 | 3,2 | 2,2 | 30 | 30 | FT01 | LU2A 1600 | F03FS04828 |
| 250 | 3,2 | 2,2 | 30 | 40 | FT01 | LU2A 1700 | F03FS04830 |
| 250 | 3,2 | 2,2 | 35 | 40 | - | LU2A 1800 | F03FS04832 |
| 250 | 3,2 | 2,2 | 80 | 40 | - | LU2A 1880 | F03FS09971 |
| 300 | 3,2 | 2,2 | 30 | 36 | FT01 | LU2A 1900 | F03FS04834 |
| 300 | 3,2 | 2,2 | 30 | 48 | FT01 | LU2A 2100 | F03FS04840 |
| 300 | 3,2 | 2,2 | 35 | 48 | - | LU2A 2300 | F03FS04843 |
| 315 | 3,2 | 2,2 | 30 | 48 | FT01 | LU2A 2400 | F03FS04844 |
| 350 | 3,5 | 2,5 | 30 | 54 | FT02 | LU2A 2800 | F03FS04849 |
| 350 | 3,5 | 2,5 | 35 | 54 | - | LU2A 3000 | F03FS04851 |
| 400 | 4,0 | 2,8 | 30 | 60 | 2/10/60 | LU2A 3300 | F03FS04856 |
| 400 | 4,0 | 2,8 | 35 | 60 | - | LU2A 3400 | F03FS04858 |
| 450 | 4,4 | 3,0 | 30 | 54 | 2/10/60 | LU2A 3500 | F03FS04860 |
| 450 | 4,4 | 3,0 | 30 | 66 | 2/10/60 | LU2A 3600 | F03FS04862 |
| 500 | 4,4 | 3,2 | 30 | 72 | 2/10/60 + 2/10/80 | LU2A 3800 | F03FS04865 |
| 550 | 4,8 | 3,5 | 30 | 84 | 2/10/60 + 2/10/80 | LU2A 3900 | F03FS04867 |
| 600 | 5,4 | 4 | 30 | 96 | 2/10/80 | LU2A 4000 | F03FS04868 |
| 735 | 6,0 | 4,4 | 30 | 72 | 2/8,5/90 | LU2A 4200* | F03FS05908 |
| 760 | 6,2 | 4,5 | 30 | 72 | 2/8,5/90 | LU2A 4300* | F03FS05903 |

* HW K10S

ATB 15° tooth (Fig. 2)

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|-------------------|------------|------------|
| 160 | 3,2 | 2,2 | 20 | 18 | 2/6/32 | LU2A 0200 | F03FS04808 |
| 160 | 2,2 | 1,6 | 20 | 24 | - | LU2A 0301 | F03FS09233 |
| 200 | 3,2 | 2,2 | 30 | 24 | 2/7/42 | LU2A 0700 | F03FS04814 |
| 210 | 3,2 | 2,2 | 30 | 24 | 2/7/42 | LU2A 1000 | F03FS04821 |
| 230 | 3,2 | 2,2 | 30 | 24 | 2/7/42 | LU2A 1400 | F03FS04826 |
| 350 | 3,5 | 2,5 | 30 | 42 | FT02 | LU2A 2500 | F03FS04845 |
| 350 | 3,5 | 2,5 | 35 | 42 | - | LU2A 2600 | F03FS04847 |
| 400 | 4,0 | 2,8 | 30 | 48 | 2/10/60 | LU2A 3100 | F03FS04853 |
| 400 | 4,0 | 2,8 | 50 | 48 | 6/5,5/80 + 1/6/80 | LU2A 3150 | F03FS09578 |
| 500 | 4,4 | 3,2 | 30 | 60 | 2/10/60 + 2/10/80 | LU2A 3700 | F03FS04864 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



LU2B

Saw blades for wood based panels ripping & crosscutting



Squaring Saws



Horizontal Panel Sizing Machines



Hand-held Circular Saws



Softwood



Hardwood



Chipboard



Plywood



MDF



Ripping

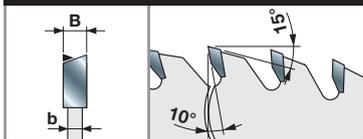
Crosscutting



●●● Ultimate ●● High ● Good



HW H00K - ATB 15° tooth



Machines:

Squaring saws and horizontal panel sizing machines, hand-held circular saws.

Materials:

Softwood, hardwood, chipboard, plywood and MDF.

Applications:

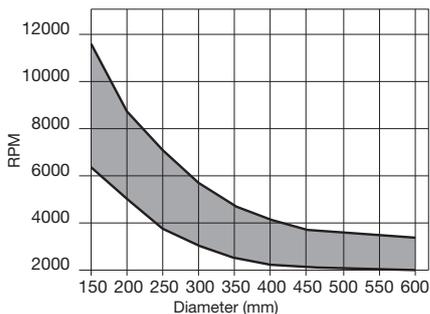
Ripping and crosscutting.

Technical information:

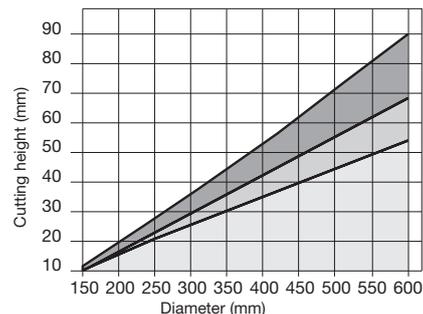
Saw blades suitable for ripping and crosscutting.

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 150 | 3,2 | 2,2 | 30 | 36 | 2/7/42 | LU2B 0100 | F03FS04869 |
| 180 | 3,2 | 2,2 | 30 | 42 | 2/7/42 | LU2B 0200 | F03FS04871 |
| 200 | 3,2 | 2,2 | 30 | 48 | 2/7/42 | LU2B 0300 | F03FS04873 |
| 216 | 3,2 | 2,2 | 30 | 48 | - | LU2B 0400 | F03FS04876 |
| 250 | 3,2 | 2,2 | 30 | 48 | FT01 | LU2B 0500 | F03FS04877 |
| 250 | 3,2 | 2,2 | 30 | 60 | FT01 | LU2B 0700 | F03FS04880 |
| 250 | 3,2 | 2,2 | 35 | 60 | - | LU2B 0800 | F03FS04882 |
| 300 | 3,2 | 2,2 | 30 | 60 | FT01 | LU2B 0900 | F03FS04884 |
| 300 | 3,2 | 2,2 | 30 | 72 | FT01 | LU2B 1100 | F03FS04887 |
| 300 | 3,2 | 2,2 | 35 | 72 | - | LU2B 1200 | F03FS04889 |
| 315 | 3,2 | 2,2 | 30 | 72 | FT01 | LU2B 1300 | F03FS04891 |
| 350 | 3,5 | 2,5 | 30 | 72 | FT02 | LU2B 1400 | F03FS04893 |
| 350 | 3,5 | 2,5 | 30 | 84 | FT02 | LU2B 1600 | F03FS04895 |
| 350 | 3,5 | 2,5 | 35 | 84 | - | LU2B 2400 | F03FS04905 |
| 400 | 4,0 | 2,8 | 30 | 96 | 2/10/60 | LU2B 1900 | F03FS04897 |
| 450 | 4,4 | 3,0 | 30 | 96 | 2/10/60 | LU2B 2000 | F03FS04899 |
| 500 | 4,4 | 3,2 | 30 | 108 | 2/10/60 + 2/10/80 | LU2B 2100 | F03FS04901 |
| 550 | 4,8 | 3,5 | 30 | 120 | 2/10/60 + 2/10/80 | LU2B 2200 | F03FS04903 |
| 600 | 5,4 | 4,0 | 30 | 132 | 2/10/80 | LU2B 2300 | F03FS04904 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



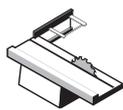
Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood ● Wood-based materials ● Plywood



LU2C

Saw blades for wood based panels crosscutting



Squaring Saws



Hand-held Circular Saws



Softwood



Hardwood



Chipboard



Laminated
MDF



Thermoplastic
Composites



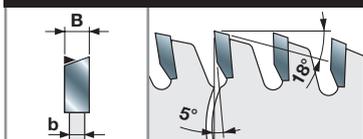
Crosscutting



●●● Ultimate ●● High ● Good



HW H00K - ATB 15° tooth



Machines:

Squaring saws, hand-held circular saws.

Materials:

Softwood, hardwood, chipboard, laminated MDF and thermoplastic composites.

Applications:

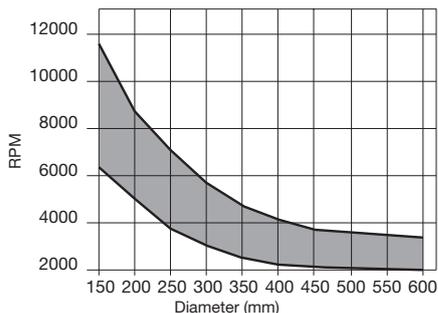
Crosscutting.

Technical information:

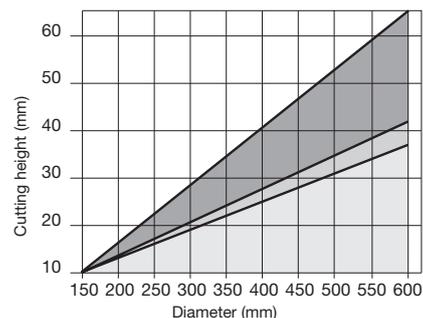
Saw blades suitable for crosscutting.

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 150 | 3,2 | 2,2 | 30 | 48 | 2/7/42 | LU2C 0100 | F03FS04908 |
| 160 | 2,2 | 1,6 | 20 | 48 | 2/6/32 | LU2C 0001 | F03FS09065 |
| 160 | 3,2 | 2,2 | 20 | 48 | 2/6/32 | LU2C 0200 | F03FS04910 |
| 180 | 3,2 | 2,2 | 20 | 56 | 2/6/32 | LU2C 0300 | F03FS04911 |
| 180 | 3,2 | 2,2 | 30 | 56 | 2/7/42 | LU2C 0400 | F03FS04912 |
| 190 | 3,2 | 2,2 | 30 | 56 | 2/7/42 | LU2C 0500 | F03FS04914 |
| 200 | 3,2 | 2,2 | 30 | 64 | 2/7/42 | LU2C 0600 | F03FS04915 |
| 200 | 3,2 | 2,2 | 40 | 64 | - | LU2C 0640 | F03FS09972 |
| 210 | 3,2 | 2,2 | 30 | 64 | 2/7/42 | LU2C 0700 | F03FS04917 |
| 216 | 3,2 | 2,2 | 30 | 64 | 2/7/42 | LU2C 0800 | F03FS04918 |
| 220 | 3,2 | 2,2 | 30 | 64 | 2/7/42 | LU2C 0900 | F03FS04919 |
| 230 | 3,2 | 2,2 | 30 | 64 | 2/7/42 | LU2C 1000 | F03FS04921 |
| 250 | 3,2 | 2,2 | 30 | 80 | FT01 | LU2C 1200 | F03FS04922 |
| 250 | 3,2 | 2,2 | 30 | 100 | FT01 | LU2C 1300 | F03FS04924 |
| 300 | 3,2 | 2,2 | 30 | 96 | FT01 | LU2C 1500 | F03FS04927 |
| 300 | 3,2 | 2,2 | 35 | 96 | - | LU2C 1600 | F03FS04930 |
| 300 | 3,2 | 2,2 | 30 | 120 | FT01 | LU2C 1700 | F03FS04932 |
| 330 | 3,2 | 2,2 | 20 | 96 | 2/6/32 | LU2C 1800 | F03FS04934 |
| 350 | 3,5 | 2,5 | 30 | 108 | FT02 | LU2C 2000 | F03FS04936 |
| 400 | 3,8 | 2,8 | 30 | 120 | 2/10/60 | LU2C 2100 | F03FS04938 |
| 450 | 4,4 | 3,0 | 30 | 132 | FT02 | LU2C 2200 | F03FS04939 |
| 500 | 4,4 | 3,2 | 30 | 144 | 2/10/60 + 2/10/80 | LU2C 2300 | F03FS04940 |
| 500 | 4,4 | 3,2 | 35 | 144 | - | LU2C 2335 | F03FS09975 |
| 550 | 4,8 | 3,5 | 30 | 156 | 2/10/60 + 2/10/80 | LU2C 2400 | F03FS04942 |
| 600 | 5,4 | 4,0 | 30 | 168 | 2/10/80 | LU2C 2500 | F03FS04943 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



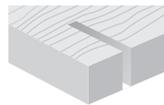
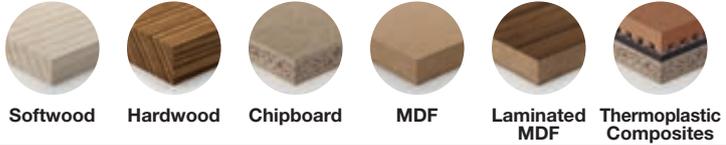
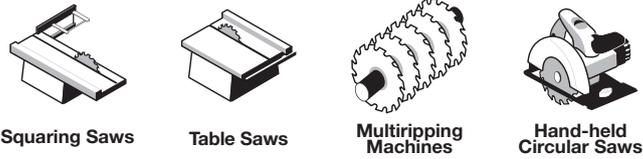
Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood ● Wood-based materials ● Plywood



LU2D

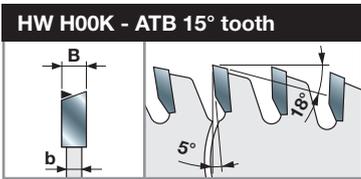
Thin kerf saw blades for wood based panels crosscutting



Crosscutting



●●● Ultimate ●● High ● Good



| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|--------|------------|------------|
| 150 | 2,0 | 1,4 | 30 | 48 | 2/7/42 | LU2D 0100 | F03FS04944 |
| 180 | 2,0 | 1,4 | 30 | 56 | 2/7/42 | LU2D 0200 | F03FS04948 |
| 180 | 2,0 | 1,4 | 40 | 56 | - | LU2D 0300 | F03FS04950 |
| 200 | 2,2 | 1,6 | 30 | 64 | 2/7/42 | LU2D 0400 | F03FS04952 |
| 250 | 2,5 | 1,8 | 20 | 80 | 2/6/32 | LU2D 0500 | F03FS04954 |
| 250 | 2,5 | 1,8 | 30 | 80 | FT01 | LU2D 0700 | F03FS04957 |
| 300 | 2,7 | 1,8 | 30 | 96 | FT01 | LU2D 0900 | F03FS04959 |
| 350 | 3,0 | 2,2 | 30 | 108 | FT01 | LU2D 1100 | F03FS04963 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60

Machines:

Squaring saws, table saws and multiripping machines, hand-held circular saws.

Materials:

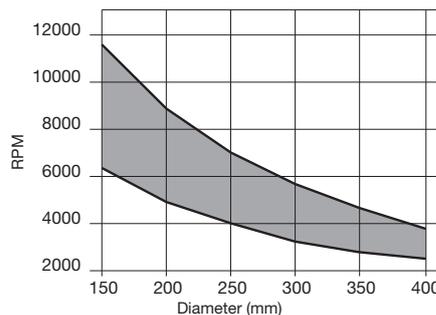
Softwood, hardwood, chipboard, laminated MDF and thermoplastic composites.

Applications:

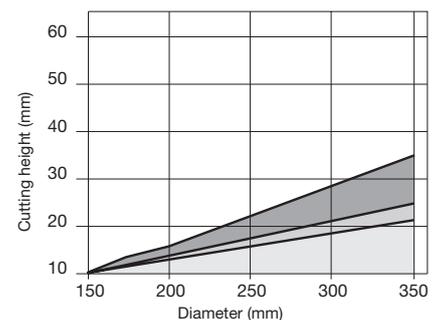
Crosscutting.

Technical information:

The thin kerf design makes the workpiece feed easy when crosscutting soft and hard drywood, minimising at the same time material wastes.



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood ● Wood-based materials ● Plywood



LU2E

Saw blades to cut exotic abrasive wood and panels



Squaring Saws



Table Saws



Horizontal Panel Sizing Machines



Softwood



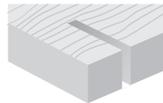
Hardwood



Laminated Chipboard



Laminated MDF



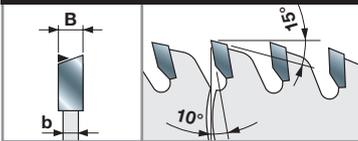
Crosscutting



●●● Ultimate ●● High ● Good



HW H00XA - ATB 15° tooth



Machines:

Squaring saws, table saws and horizontal panel sizing machines.

Materials:

Softwood, hardwood, laminated chipboard and laminated MDF.

Applications:

Crosscutting and panel sizing.

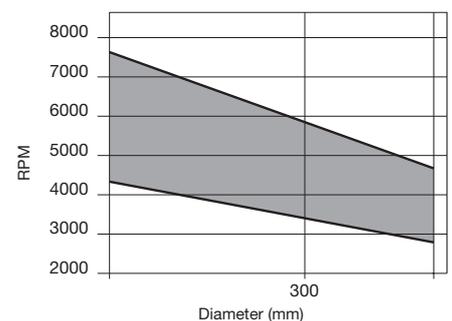
Technical information:

Good finishing in softwood and hardwood crosscutting.

Suitable also for chipboard (up to 50 mm thickness) and single-side laminated MDF (up to 30 mm thickness).

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------|------------|------------|
| 300 | 3,2 | 2,2 | 30 | 60 | FT01 | LU2E 0200 | F03FS04965 |
| 300 | 3,2 | 2,2 | 30 | 72 | FT01 | LU2E 0400 | F03FS04967 |
| 350 | 3,5 | 2,5 | 30 | 72 | FT02 | LU2E 0500 | F03FS04970 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



Maximum depth of rip and crosscut based on the blade diameter.



LU2F

Saw blades to cut wood based panels, composites and plastic materials



Squaring Saws



Table Saws



Hand-held Circular Saws



Mitre Saws



Softwood



Hardwood



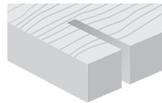
Laminated Chipboard



Laminated MDF



Thermoplastic Composites



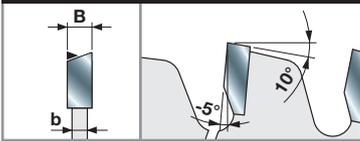
Crosscutting



●●● Ultimate ●● High ● Good



HW H00K - ATB 10° tooth



Machines:

Squaring saws and table saws, hand-held circular saws and mitre saws.

Materials:

Softwood, hardwood, laminated chipboard panels, laminated MDF and thermoplastic composites.

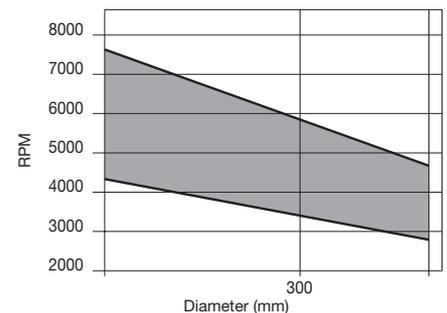
Applications:

Crosscutting and panel sizing.

Technical information:

To size bilaminated single panels without the use of the scoring saw blade, with good finishing and long cutting life.

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|----|------------|------------|
| 216 | 2,8 | 2,0 | 30 | 24 | - | LU2F 0100 | F03FS06304 |
| 216 | 2,8 | 2,0 | 30 | 48 | - | LU2F 0200 | F03FS04971 |
| 216 | 2,8 | 2,0 | 30 | 60 | - | LU2F 0300 | F03FS04972 |
| 250 | 2,8 | 2,0 | 30 | 48 | - | LU2F 0400 | F03FS04973 |
| 250 | 2,8 | 2,0 | 30 | 60 | - | LU2F 0500 | F03FS04974 |



Minimum and maximum RPM based on the blade diameter.



LG2A

Saw blades for wood based panels ripping & crosscutting



Squaring Saws

Table Saws



Softwood



Hardwood



Plywood



Chipboard



MDF



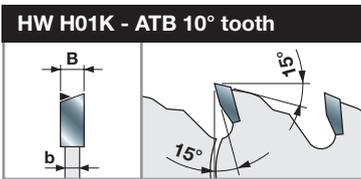
Ripping



Crosscutting



●●● Ultimate ●● High ● Good



| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|------------|----------------------|
| mm | mm | mm | mm | | | | |
| 250 | 3,2 | 2,2 | 30 | 40 | FT01 | | LG2A 1700 F03FS07562 |
| 300 | 3,2 | 2,2 | 30 | 36 | FT01 | | LG2A 1900 F03FS07563 |
| 300 | 3,2 | 2,2 | 30 | 48 | FT01 | | LG2A 2100 F03FS07564 |
| 350 | 3,5 | 2,5 | 30 | 54 | FT02 | | LG2A 2800 F03FS07565 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60

Machines:

Squaring saws and table saws.

Materials:

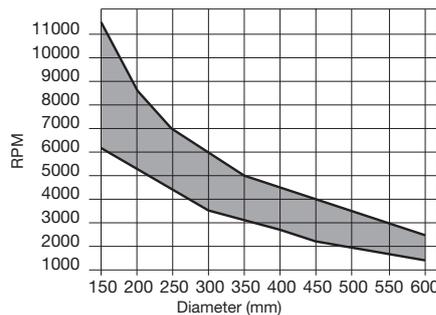
Softwood, hardwood, plywood, chipboard and MDF.

Applications:

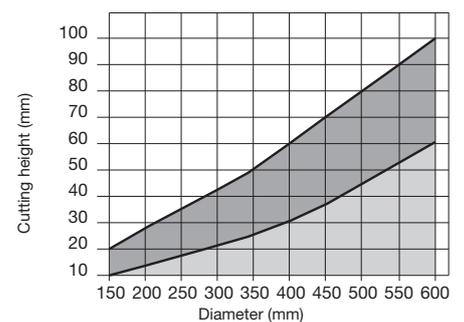
Ripping and crosscutting.

Technical information:

Saw blades suitable for ripping and crosscutting.



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood



LG2B

Saw blades for wood based panels ripping and crosscutting



Squaring Saws

Table Saws



Softwood



Hardwood



Plywood



Chipboard



MDF



Ripping

Crosscutting



●●● Ultimate ●● High ● Good

TiCo Carbide

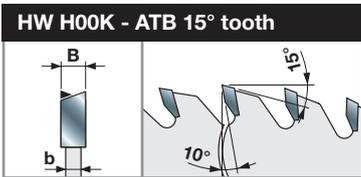
MADE BY Freud

Silver I.C.E.

COATING

Anti-vibration

TECHNOLOGY



| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------|------------|-----------------------------|
| 250 | 3,2 | 2,2 | 30 | 60 | FT01 | | LG2B 0700 F03FS07566 |
| 300 | 3,2 | 2,2 | 30 | 60 | FT01 | | LG2B 0900 F03FS07567 |
| 300 | 3,2 | 2,2 | 30 | 72 | FT01 | | LG2B 1100 F03FS07439 |
| 350 | 3,5 | 2,5 | 30 | 72 | FT02 | | LG2B 1400 F03FS07568 |
| 350 | 3,5 | 2,5 | 30 | 84 | FT02 | | LG2B 1600 F03FS07569 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60

Machines:

Squaring saws and table saws.

Materials:

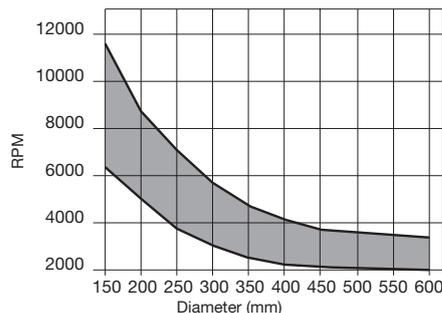
Softwood, hardwood, plywood, chipboard and MDF.

Applications:

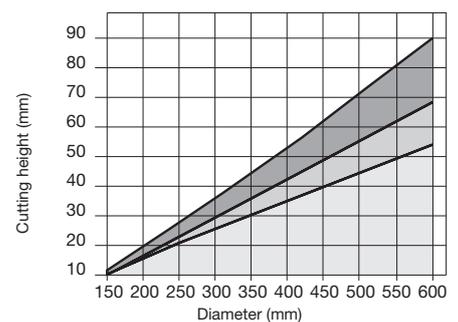
Ripping and crosscutting.

Technical information:

Saw blades suitable for ripping and crosscutting.



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood ● Wood-base materials ● Plywood



LG2C

Saw blades for wood based panels crosscutting



Squaring Saws



Table Saws



Softwood



Hardwood



Chipboard



MDF



Laminated
MDF



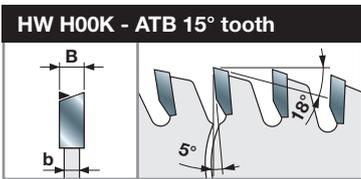
Thermoplastic
Composites



Crosscutting



●●● Ultimate ●● High ● Good



| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|------|------------|------------|
| 250 | 3,2 | 2,2 | 30 | 80 | FT01 | LG2C 1200 | F03FS07570 |
| 300 | 3,2 | 2,2 | 30 | 96 | FT01 | LG2C 1500 | F03FS07571 |
| 350 | 3,5 | 2,5 | 30 | 108 | FT02 | LG2C 2000 | F03FS07572 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60

Machines:

Squaring saws and table saws.

Materials:

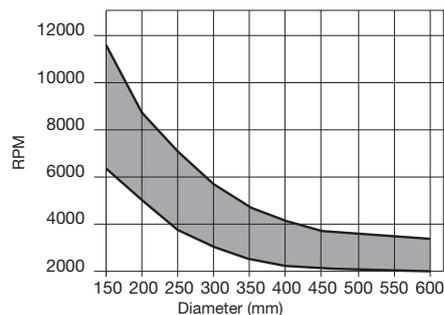
Softwood, hardwood, chipboard, MDF, laminated MDF and thermoplastic composites.

Applications:

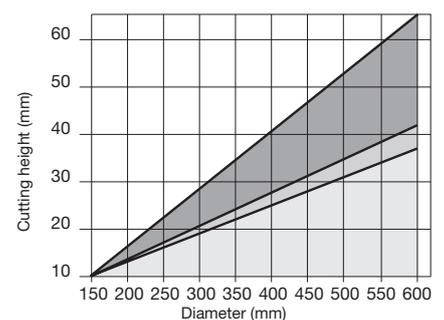
Crosscutting.

Technical information:

The thin kerf design makes the workpiece feed easy when crosscutting soft and hard drywood, minimising at the same time material wastes.



Minimum and maximum RPM based on the blade diameter.



Maximum depth of rip and crosscut based on the blade diameter.

● Solid wood ● Wood-based materials ● Plywood

Laminated Panels



Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|---|---------------|---------|---------|-----|----|------|------------|----------|-------------------|-------------------------------|--------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| BIESSE-SELCO | | | | | | | | | | | | |
| EB 70 (L) | Main blade | 300 | 4,4 | 3,0 | 65 | 60 | TCG | 15° | 15° | 2/9/110 | LSB30002X | F03FS09159 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,0 | 65 | 48 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RX3 | F03FS07616 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| | Postf. scorer | 300 | 4,55 | 3,2 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DA3 | F03FS02737 |
| EB 70 (KIT 80), 75 (SEKTOR 430), 80 (SEKTOR 450), SK350, SK450 | Main blade | 320 | 4,4 | 3,2 | 65 | 60 | TCG | 15° | 15° | 2/9/110 | LSB32003X | F03FS09161 |
| | Main blade | 320 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB32001X | F03FS07805 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,0 | 65 | 48 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RX3 | F03FS07616 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| WN2, WN230, SK230 | Postf. scorer | 300 | 4,55 | 3,2 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DA3 | F03FS02737 |
| | Main blade | 320 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB32001X | F03FS07805 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| WN 250 | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| | Main blade | 350 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/110 | LSB35013X | F03FS09659 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| EB 95, SEKTOR 470, K470, SK370 | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| | Main blade | 355 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB35508X | F03FS08740 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,0 | 65 | 48 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RX3 | F03FS07616 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| EB100 | Postf. scorer | 300 | 4,55 | 3,2 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DA3 | F03FS02737 |
| | Main blade | 360 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB36002X | F03FS07673 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,0 | 65 | 48 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RX3 | F03FS07616 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| WN-WNA 610, WN-WNA 610 (PFS) | Postf. scorer | 300 | 4,55 | 3,2 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DA3 | F03FS02737 |
| | Main blade | 380 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/110 | LSB38014X | F03FS09166 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,0 | 65 | 48 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RX3 | F03FS07616 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| EB108, EB110, EB120 | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| | Main blade | 400 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 2/15/105 + 2/9/130 + 4/19/120 | LSB40009X | F03FS07810 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,0 | 65 | 48 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RX3 | F03FS07616 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| WN-WNA 630, WN-WNA 630 (PFS) | Postf. scorer | 300 | 4,55 | 3,2 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DA3 | F03FS02737 |
| | Main blade | 400 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/110 | LSB40016X | F03FS09172 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,0 | 65 | 48 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RX3 | F03FS07616 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 | |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.

Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|---------------------------------|---------------|-----|---------|-----|----|----|------------|-----|-----|-------------------------------|--------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| EB/EBT 120, WN 125 | Main blade | 430 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | LSB43009X | F03FS07909 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,2 | 65 | 72 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RI3 | F03FS02689 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| | Postf. scorer | 300 | 4,55 | 3,2 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DA3 | F03FS02737 |
| WN-WNA 650, WN-WNA 650 (PFS) | Main blade | 430 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/110 | LSB43012X | F03FS09178 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | HW Scorer | 300 | 4,3-5,5 | 3,0 | 65 | 48 | ATB | 12° | 15° | 2/9/100 + 2/9/110 | LI25M43RX3 | F03FS07616 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH4 | F03FS09625 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M43PIH6 | F03FS09626 |
| WN 710, WN 710 (PFS) | Main blade | 430 | 4,8 | 3,5 | 70 | 72 | TCG | 15° | 15° | 4/11/130 | LSB43013X | F03FS09180 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M47PI3 | F03FS02720 |
| | HW Scorer | 300 | 4,7-5,9 | 3,5 | 65 | 48 | ATB | 6° | 15° | 2/9/110 | LI25M47RX3 | F03FS07744 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH4 | F03FS09631 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH6 | F03FS09632 |
| WN 600/132, WN 200 | Main blade | 450 | 4,8 | 3,5 | 80 | 72 | TCG | 15° | 15° | 2/14/125 + 2/9/130 + 4/19/120 | LSB45018X | F03FS07812 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M47PI3 | F03FS02720 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH4 | F03FS09631 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH6 | F03FS09632 |
| | Postf. scorer | 300 | 4,95 | 3,0 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DB3 | F03FS02739 |
| WN 600/132, WN 200 | Main blade | 450 | 4,8 | 3,5 | 80 | 72 | TCG | 15° | 15° | 2/14/125 + 2/9/130 + 4/19/120 | LSB45018X | F03FS07812 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M47PI3 | F03FS02720 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH4 | F03FS09631 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH6 | F03FS09632 |
| | Postf. scorer | 300 | 4,95 | 3,0 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DB3 | F03FS02739 |
| WN-WNA 730, WN-WNA 730 (PFS) | Main blade | 470 | 4,8 | 3,5 | 70 | 72 | TCG | 15° | 15° | 4/11/130 | LSB47005X | F03FS09185 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M47PI3 | F03FS02720 |
| | HW Scorer | 300 | 4,7-5,9 | 3,5 | 65 | 48 | ATB | 6° | 15° | 2/9/110 | LI25M47RX3 | F03FS07744 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH4 | F03FS09631 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH6 | F03FS09632 |
| WN-WNA 750, WN-WNA 750 (PFS) | Main blade | 470 | 4,8 | 3,5 | 70 | 72 | TCG | 15° | 15° | 4/11/130 | LSB47005X | F03FS09185 |
| | Main blade | 520 | 4,8 | 3,5 | 70 | 72 | TCG | 15° | 15° | 4/11/130 | LSB52006X | F03FS09193 |
| | HW Scorer | 200 | 5,7-6,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/110 | LI25M57PI3BS | F03FS08165 |
| WN 600/145, WN 512 | Main blade | 480 | 4,8 | 3,5 | 80 | 72 | TCG | 15° | 15° | 2/9/130 + 4/19/120 | LSB48001X | F03FS09188 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M47PI3 | F03FS02720 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH4 | F03FS09631 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH6 | F03FS09632 |
| | Postf. scorer | 300 | 4,55 | 3,2 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DA3 | F03FS02737 |
| WNA600/162 | Main blade | 510 | 4,8 | 3,5 | 80 | 72 | TCG | 15° | 15° | 2/9/130 + 4/19/120 | LSB51001X | F03FS09984 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M47PI3 | F03FS02720 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH4 | F03FS09631 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 65 | 36 | FLAT | 6° | 14° | 2/9/100 + 2/9/110 | DLI25M47PIH6 | F03FS09632 |
| | Postf. scorer | 300 | 4,95 | 3,0 | 65 | 72 | ATB | 15° | 15° | 2/9/100 + 2/9/110 | LI27M DB3 | F03FS02739 |
| WN-WNA 850 | Main blade | 600 | 5,8 | 4,0 | 70 | 60 | TCG | 15° | 15° | 4/11/130 | LSB60004X | F03FS10258 |
| | Main blade | 600 | 5,8 | 4,0 | 75 | 60 | TCG | 15° | 15° | 4/6,5/130 + 4/11/130 | LSB60006X | F03FS10259 |
| | HW Scorer | 200 | 5,7-6,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/110 | LI25M57PI3BS | F03FS08165 |
| AES | | | | | | | | | | | | |
| ALPHA PS-03 | Main blade | 320 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB32009X | F03FS10296 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/10/60 + 2/9/62 + 2/11/66 | LI25M43PA3 | F03FS02670 |
| ALPHA PS-05 | Main blade | 430 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB43007X | F03FS09177 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.

Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|-------------------------------|-------------|---------|---------|-----|----|----|------------|-----|-----|----------------------------|------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| ALPHA PS-06 | Main blade | 460 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB46001X | F03FS08922 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| ANTHON | | | | | | | | | | | | |
| LN (90) | 400 | 4,4 | 3,2 | 60 | 72 | 72 | TCG | 15° | 15° | 2/14/100 + 2/11/85 | LSB40017X | F03FS09272 |
| | 180 | 4,3-5,5 | 3,2 | 20 | 28 | 28 | ATB | 8° | 15° | - | LI25M43NA3 | F03FS02661 |
| | 180 | 4,3-5,5 | 3,2 | 20 | 36 | 36 | ATB | 8° | 15° | - | LI25M43XA3 | F03FS06372 |
| PORTA 100 | 400 | 4,4 | 3,2 | 60 | 72 | 72 | TCG | 15° | 15° | 2/14/100 + 2/11/85 | LSB40017X | F03FS09272 |
| | 180 | 4,3-5,5 | 3,2 | 20 | 36 | 36 | ATB | 8° | 15° | - | LI25M43XA3 | F03FS06372 |
| LNA (100), LN (120) | 450 | 4,4 | 3,2 | 60 | 72 | 72 | TCG | 15° | 15° | 2/14/125 | LSB45008X | F03FS09182 |
| | 180 | 4,3-5,5 | 3,2 | 20 | 36 | 36 | ATB | 8° | 15° | - | LI25M43XA3 | F03FS06372 |
| PORTA 150 | 500 | 4,8 | 3,5 | 60 | 60 | 60 | TCG | 15° | 15° | 2/11/115 | LSB50009X | F03FS09189 |
| | 180 | 4,3-5,5 | 3,2 | 20 | 36 | 36 | ATB | 8° | 15° | - | LI25M43XA3 | F03FS06372 |
| AYZA MIZRAK | | | | | | | | | | | | |
| LANZA P3 | Main blade | 320 | 4,4 | 3,2 | 65 | 60 | TCG | 15° | 15° | 2/9/110 | LSB32003X | F03FS09161 |
| | Main blade | 320 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB32001X | F03FS07805 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| | Main blade | 360 | 4,4 | 3,2 | 65 | 60 | TCG | 15° | 15° | 2/9/110 | LSB36001X | F03FS10227 |
| | Main blade | 360 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB36002X | F03FS07673 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| LANZA P4 | Main blade | 380 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/110 | LSB38014X | F03FS09166 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| LANZA P5 | Main blade | 400 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/110 | LSB40016X | F03FS09172 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| LANZA P5 CARRERA | Main blade | 400 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/110 | LSB40016X | F03FS09172 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| FELDER MAYER | | | | | | | | | | | | |
| KAPPA AUTOMATIC 80 | Main blade | 320 | 4,4 | 3,2 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB32005X | F03FS09160 |
| | Main blade | 320 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB32009X | F03FS10296 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| KAPPA AUTOMATIC 80 EDITION | Main blade | 320 | 4,4 | 3,2 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB32005X | F03FS09160 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| KAPPA AUTOMATIC CLASSIC | Main blade | 320 | 4,4 | 3,2 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB32005X | F03FS09160 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| PS80 | Main blade | 320 | 4,4 | 3,2 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB32005X | F03FS09160 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| KAPPA AUTOMATIC 100 | Main blade | 355 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35504X | F03FS07674 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| PS80 PREMIUM | Main blade | 355 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35504X | F03FS07674 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| KAPPA AUTOMATIC 120 | Main blade | 400 | 4,4 | 3,2 | 30 | 48 | TCG | 15° | 15° | 2/10/60 | LSB40001X | F03FS09168 |
| | Main blade | 400 | 4,4 | 3,2 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB40004X | F03FS09169 |
| | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| PS100 | Main blade | 400 | 4,4 | 3,2 | 30 | 48 | TCG | 15° | 15° | 2/10/60 | LSB40001X | F03FS09168 |
| | Main blade | 400 | 4,4 | 3,2 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB40004X | F03FS09169 |
| | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| PS2 Z | Main blade | 450 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/14/95 | LSB45007X | F03FS09181 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| KAPPA AUTOMATIC 140 | Main blade | 450 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/14/95 | LSB45007X | F03FS09181 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.

Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|--|---------------|-----|---------|-----|----|----|------------|----------|---------|-------------------------------|--------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| FIMAL | | | | | | | | | | | | |
| CONCEPT 350 | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | Main blade | 300 | 4,4 | 3,0 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB30001X | F03FS07802 |
| KR32 | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| KR43 | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| GIBEN | | | | | | | | | | | | |
| MK, GAMMA, N, ST, SE, TREND | Main blade | 355 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | 4/15/105 + 2/7/110 | LSB35505X | F03FS07633 |
| | HW Scorer | 125 | 4,3-5,5 | 3,2 | 45 | 24 | ATB | 0° | 15° | - | LI25M43FE3 | F03FS02645 |
| SMART SP105, ICON 105 | Main blade | 380 | 4,4 | 3,2 | 50 | 72 | TCG | 15° | 15° | 4/13/80 | LSB38008X | F03FS09165 |
| | HW Scorer | 250 | 4,3-5,5 | 3,2 | 50 | 48 | ATB | 8° | 15° | 3/13/80 | LI25M430F3 | F03FS02669 |
| G 2000 STARMATIC | Main blade | 400 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | 4/15/105 + 2/7/110 + 2/14/100 | LSB40008X | F03FS07726 |
| | Main blade | 400 | 4,4 | 3,2 | 75 | 84 | TCG | 15° | 15° | 4/15/105 + 2/7/110 | LSB40019X | F03FS08990 |
| | HW Scorer | 125 | 4,5-5,7 | 3,0 | 45 | 24 | ATB | 0° | 15° | - | LI25M45FE3 | F03FS02699 |
| PRISMATIC 101 | Main blade | 400 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | 4/15/105 + 2/7/110 + 2/14/100 | LSB40008X | F03FS07726 |
| | HW Scorer | 160 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | 3/11/70 | LI25M43LE3 | F03FS02655 |
| PRISMATIC 201 | Main blade | 400 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | 4/15/105 + 2/7/110 + 2/14/100 | LSB40008X | F03FS07726 |
| | Main blade | 430 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | 4/15/105 + 2/7/110 | LSB43008X | F03FS07908 |
| | HW Scorer | 215 | 4,3-5,5 | 3,2 | 50 | 42 | ATB | 8° | 15° | 2/7/80 + 3/15/80 | LI25M430F3 | F03FS02685 |
| | HW Scorer | 300 | 4,3-5,5 | 3,5 | 50 | 48 | ATB | 12° | 15° | 3/15/80 | LI25M43RM3 | F03FS02693 |
| | DP Scorer | 215 | 4,3-5,1 | 3,2 | 50 | 42 | FLAT | 6° | 14° | 2/7/80 + 3/15/80 | DLI25M43QFH4 | F03FS09633 |
| | DP Scorer | 215 | 4,3-5,1 | 3,2 | 50 | 42 | FLAT | 6° | 14° | 2/7/80 + 3/15/80 | DLI25M43QFH6 | F03FS09634 |
| PRISMATIC 2, 3 | Postf. Scorer | 300 | 4,55 | 3,2 | 50 | 72 | ATB | 15° | 15° | 3/15/80 | LI27M DD3 | F03FS02743 |
| | Main blade | 470 | 4,4 | 3,2 | 75 | 96 | TCG | 15° | 15° | 4/15/105 | LSB47004X | F03FS09184 |
| | HW Scorer | 215 | 4,3-5,5 | 3,2 | 50 | 42 | ATB | 8° | 15° | 2/7/80 + 3/15/80 | LI25M430F3 | F03FS02685 |
| | HW Scorer | 215 | 4,5-5,7 | 3,2 | 50 | 42 | ATB | 8° | 15° | 3/15/80 | LI25M45PF3 | F03FS02713 |
| | HW Scorer | 300 | 4,3-5,5 | 3,5 | 50 | 48 | ATB | 12° | 15° | 3/15/80 | LI25M43RM3 | F03FS02693 |
| | DP Scorer | 215 | 4,3-5,1 | 3,2 | 50 | 42 | FLAT | 6° | 14° | 2/7/80 + 3/15/80 | DLI25M43QFH4 | F03FS09633 |
| ICONFAST LM D-816 | DP Scorer | 215 | 4,3-5,1 | 3,2 | 50 | 42 | FLAT | 6° | 14° | 2/7/80 + 3/15/80 | DLI25M43QFH6 | F03FS09634 |
| | Postf. Scorer | 300 | 4,55 | 3,2 | 50 | 72 | ATB | 15° | 15° | 3/15/80 | LI27M DD3 | F03FS02743 |
| | Main blade | 530 | 4,8 | 3,5 | 75 | 72 | TCG | 15° | 15° | 2/7/110 | LSB53004X | F03FS09651 |
| | HW Scorer | 215 | 4,7-5,9 | 3,5 | 50 | 42 | ATB | 8° | 15° | 2/7/80 | LI25M47QF3 | F03FS09650 |
| HOLZHER | | | | | | | | | | | | |
| CUT 85, 82 | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | ATB | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 36 | ATB | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43XN3 | F03FS06373 |
| | Postf. scorer | 250 | 4,60 | 3,0 | 30 | 48 | ATB | 15° | 15° | - | LI27M BA3 | F03FS02734 |
| TECTRA 6120 CLASSIC | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 36 | ATB | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43XN3 | F03FS06373 |
| CUT 110 | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 250 | 4,3-5,5 | 3,2 | 30 | 48 | CON | 8° | 15° | 2/10/60 | LI25M430C3 | F03FS02668 |
| | Postf. scorer | 250 | 4,60 | 3,0 | 30 | 48 | ATB | 15° | 15° | - | LI27M BA3 | F03FS02734 |
| ZENTREX 6220 (POWER, LIFT, DYNAMIC) | Main blade | 430 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB43007X | F03FS09177 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 36 | ATB | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43XN3 | F03FS06373 |
| HOLZMA | | | | | | | | | | | | |
| HPP130 | Main blade | 300 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB30012X | F03FS09207 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH4 | F03FS09621 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH6 | F03FS09622 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 45 | 36 | CON | 8° | 15° | - | LI25M43NE3 | F03FS02664 |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.

Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|---------------------------------|---------------|-----|---------|-----|----|-----|------------|-----|-----|---------------------|--------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| HPP230, 250 (before 06/2014) | Main blade | 300 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB30012X | F03FS09207 |
| | Main blade | 350 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB35004X | F03FS07636 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43PE3 | F03FS02676 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43NE3 | F03FS02664 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH4 | F03FS09621 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH6 | F03FS09622 |
| SAWTEQ B-200 | Main blade | 310 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB31001X | F03FS09949 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43PE3 | F03FS02676 |
| HPP350 | Main blade | 350 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | - | LSB35008X | F03FS07634 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43NE3 | F03FS02664 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH4 | F03FS09621 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH6 | F03FS09622 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH6 | F03FS09622 |
| HPP180 | Main blade | 380 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB38002X | F03FS07631 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43NE3 | F03FS02664 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH4 | F03FS09621 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH6 | F03FS09622 |
| HPP380, 82 | Main blade | 380 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB38002X | F03FS07631 |
| | Main blade | 380 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB38004X | F03FS07632 |
| | Main blade | 380 | 4,8 | 3,5 | 60 | 84 | TCG | 15° | 15° | 2/14/100 | LSB38005X | F03FS07807 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43NE3 | F03FS02664 |
| | HW Scorer | 180 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47NE3 | F03FS02715 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH4 | F03FS09621 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH6 | F03FS09622 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH4 | F03FS09623 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH6 | F03FS09624 |
| | Postf. scorer | 280 | 5,0 | 3,5 | 45 | 84 | ATB | 15° | 15° | - | LI27M CA3 | F03FS02736 |
| HPL410 | Main blade | 420 | 4,8 | 3,5 | 60 | 60 | TCG | 15° | 15° | 2/14/125 | LSB42001X | F03FS10234 |
| | Main blade | 420 | 4,8 | 3,5 | 60 | 84 | TCG | 15° | 15° | 2/14/100 + 2/14/125 | LSB42002X | F03FS09176 |
| | HW Scorer | 180 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47NE3 | F03FS02715 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH4 | F03FS09623 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH6 | F03FS09624 |
| | Postf. scorer | 340 | 5,0 | 3,5 | 45 | 108 | ATB | 15° | 15° | 3/14/65 | LI27M EB3 | F03FS02747 |
| HPP430, 510, 11 | Main blade | 450 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/14/125 + 2/17/100 | LSB45017X | F03FS07391 |
| | HW Scorer | 180 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47NE3 | F03FS02715 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH4 | F03FS09623 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH6 | F03FS09624 |
| | Postf. scorer | 340 | 5,0 | 3,5 | 45 | 108 | ATB | 15° | 15° | 3/14/65 | LI27M EB3 | F03FS02747 |
| 22 | Main blade | 500 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/11/115 | LSB50011X | F03FS09191 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47PE3 | F03FS02719 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 45 | 36 | FLAT | 6° | 14° | - | DLI25M47PEH4 | F03FS09629 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 45 | 36 | FLAT | 6° | 14° | - | DLI25M47PEH6 | F03FS09630 |
| | Postf. scorer | 340 | 5,0 | 3,5 | 45 | 108 | ATB | 15° | 15° | 3/14/65 | LI27M EB3 | F03FS02747 |
| HPL550 | Main blade | 520 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/11/115 + 2/19/120 | LSB52003X | F03FS09192 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47PE3 | F03FS02719 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 45 | 36 | FLAT | 6° | 14° | - | DLI25M47PEH4 | F03FS09629 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 45 | 36 | FLAT | 6° | 14° | - | DLI25M47PEH6 | F03FS09630 |
| | Postf. scorer | 340 | 5,0 | 3,5 | 45 | 108 | ATB | 15° | 15° | 3/14/65 | LI27M EB3 | F03FS02747 |
| HPL570 | Main blade | 570 | 4,8 | 3,5 | 60 | 60 | TCG | 15° | 15° | 2/11/115 + 2/19/120 | LSB57001X | F03FS09199 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47PE3 | F03FS02719 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 45 | 36 | FLAT | 6° | 14° | - | DLI25M47PEH4 | F03FS09629 |
| | DP Scorer | 200 | 4,7-5,5 | 3,5 | 45 | 36 | FLAT | 6° | 14° | - | DLI25M47PEH6 | F03FS09630 |
| | Postf. scorer | 340 | 5,0 | 3,5 | 45 | 108 | ATB | 15° | 15° | 3/14/65 | LI27M EB3 | F03FS02747 |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.

Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|--|---------------|-----|---------|-----|----|----|------------|----------|---------|-------------------------------|--------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| HPP42, 33 | Main blade | 600 | 5,8 | 4,0 | 60 | 60 | TCG | 15° | 15° | 2/11/115 + 2/19/120 | LSB60001X | F03FS09200 |
| | Main blade | 600 | 5,8 | 4,0 | 60 | 72 | TCG | 15° | 15° | 2/11/115 + 2/19/120 | LSB60002X | F03FS09201 |
| | HW Scorer | 200 | 5,7-6,9 | 4,0 | 45 | 36 | ATB | 8° | 15° | - | LI25M57PE3 | F03FS02728 |
| HOMAG | | | | | | | | | | | | |
| CH 3 | Main blade | 300 | 4,4 | 3,0 | 75 | 60 | TCG | 15° | 15° | - | LSB30003X | F03FS03916 |
| | HW Scorer | 125 | 4,3-5,5 | 3,2 | 45 | 24 | ATB | 0° | 15° | - | LI25M43FE3 | F03FS02645 |
| CH 3 | Main blade | 300 | 4,4 | 3,0 | 75 | 60 | TCG | 15° | 15° | - | LSB30003X | F03FS03916 |
| | HW Scorer | 125 | 4,3-5,5 | 3,2 | 45 | 24 | ATB | 0° | 15° | - | LI25M43FE3 | F03FS02645 |
| CT 04/40 | Main blade | 300 | 4,4 | 3,0 | 75 | 60 | TCG | 15° | 15° | - | LSB30003X | F03FS03916 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43KE3 | F03FS02651 |
| CV'S | Main blade | 300 | 4,4 | 3,0 | 75 | 60 | TCG | 15° | 15° | - | LSB30003X | F03FS10218 |
| | HW Scorer | 125 | 4,3-5,5 | 3,2 | 45 | 24 | ATB | 0° | 15° | - | LI25M43FE3 | F03FS02645 |
| CH 04 | Main blade | 355 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | 3/7/100 | LSB35507X | F03FS07710 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43NE3 | F03FS02664 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH4 | F03FS09621 |
| | DP Scorer | 180 | 4,3-5,1 | 3,2 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M43NEH6 | F03FS09622 |
| CH 08/12 | Main blade | 400 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | 4/15/105 + 2/7/110 + 2/14/100 | LSB40008X | F03FS07726 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43KE3 | F03FS02651 |
| NANXING | | | | | | | | | | | | |
| NPC330 | Main blade | 380 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB38002X | F03FS07631 |
| | Main blade | 350 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB35004X | F03FS07636 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 45 | 36 | ATB | 8° | 15° | - | LI25M43PE3 | F03FS02676 |
| MJB1327B | Main blade | 450 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/14/125 + 2/17/100 | LSB45017X | F03FS09272 |
| | Main blade | 400 | 4,4 | 3,2 | 60 | 84 | TCG | 15° | 15° | 2/14/100 | LSB40021X | F03FS09255 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 36 | ATB | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43XN3 | F03FS06373 |
| NP280FG NP280F | Main blade | 450 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/14/125 + 2/17/100 | LSB45017X | F03FS09272 |
| | Main blade | 400 | 4,4 | 3,2 | 60 | 84 | TCG | 15° | 15° | 2/14/100 | LSB40021X | F03FS09255 |
| | Main blade | 350 | 4,4 | 3,2 | 60 | 72 | TCG | 15° | 15° | 2/14/100 | LSB35004X | F03FS07636 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 36 | ATB | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43XN3 | F03FS06373 |
| | Main blade | 450 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/14/125 + 2/17/100 | LSB45017X | F03FS07391 |
| NPL330HG NP330H NP330HG | HW Scorer | 180 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47NE3 | F03FS02715 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH4 | F03FS09623 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH6 | F03FS09624 |
| | Main blade | 450 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/14/125 + 2/17/100 | LSB45017X | F03FS09272 |
| NP380FG NP330FG NP330F | Main blade | 400 | 4,4 | 3,2 | 60 | 84 | TCG | 15° | 15° | 2/14/100 | LSB40021X | F03FS09255 |
| | HW Scorer | 180 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47NE3 | F03FS02715 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH4 | F03FS09623 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH6 | F03FS09624 |
| | Main blade | 450 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/14/125 + 2/17/100 | LSB45017X | F03FS07391 |
| NZH3318 NPD380 | HW Scorer | 180 | 4,7-5,9 | 3,5 | 45 | 36 | ATB | 8° | 15° | - | LI25M47NE3 | F03FS02715 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH4 | F03FS09623 |
| | DP Scorer | 180 | 4,7-5,5 | 3,5 | 45 | 30 | FLAT | 6° | 14° | - | DLI25M47NEH6 | F03FS09624 |
| | Main blade | 450 | 4,8 | 3,5 | 60 | 72 | TCG | 15° | 15° | 2/14/125 + 2/17/100 | LSB45017X | F03FS07391 |
| NIMAC | | | | | | | | | | | | |
| HERMES 70 CNC | Main blade | 300 | 4,4 | 3,0 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB30006X | F03FS09158 |
| | Main blade | 320 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB32001X | F03FS07805 |
| ATLAS 80 | Main blade | 320 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB32001X | F03FS07805 |
| ATLAS 100/100TL | Main blade | 355 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB35508X | F03FS08740 |
| | Main blade | 360 | 4,4 | 3,2 | 65 | 72 | TCG | 15° | 15° | 2/9/95 + 2/9/110 | LSB36002X | F03FS07673 |
| PANHANS | | | | | | | | | | | | |
| EURO 10 SF | Main blade | 300 | 4,4 | 3,0 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB30001X | F03FS07802 |
| | HW Scorer | 250 | 4,3-5,5 | 3,2 | 30 | 48 | CON | 8° | 15° | 2/10/60 | LI25M430C3 | F03FS02668 |
| | Postf. scorer | 250 | 4,6 | 3,0 | 30 | 48 | ATB | 15° | 15° | - | LI27M BA3 | F03FS02734 |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.

Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|--|---------------|-----|---------|-----|----|----|------------|-----|-----|-----------------------------|------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| EURO 5 (SF, COMPACT, ECOPAN) | Main blade | 300 | 4,4 | 3,0 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB30001X | F03FS07802 |
| | HW Scorer | 125 | 4,3-5,5 | 3,2 | 20 | 24 | CON | 0° | 15° | - | LI25M43FA3 | F03FS02643 |
| EURO10, 693/SH 70 | Main blade | 300 | 4,4 | 3,0 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB30001X | F03FS07802 |
| | HW Scorer | 125 | 4,3-5,5 | 3,2 | 20 | 24 | CON | 0° | 15° | - | LI25M43FA3 | F03FS02643 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | CON | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| S 45 | Main blade | 300 | 4,4 | 3,0 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB30001X | F03FS07802 |
| | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | CON | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| EURO 12, 30 | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | CON | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| EURO 12 SF | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 280 | 4,3-5,5 | 3,2 | 30 | 48 | CON | 12° | 15° | 2/10/60 | LI25M43VC3 | F03FS07419 |
| POLYPAN 47 | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | CON | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| | Postf. scorer | 300 | 4,55 | 3,0 | 30 | 72 | ATB | 15° | 15° | - | LI27M DF3 | F03FS02745 |
| EUROSTAR 2 XL, POLYSTAR | Main blade | 370 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSC37001 | F03FS06312 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | CON | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| | HW Scorer | 280 | 4,3-5,5 | 3,2 | 30 | 48 | CON | 6° | 15° | 2/10/60 | LI25M43VC3 | F03FS07419 |
| EURO 32 | Main blade | 370 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB37001X | F03FS10228 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | CON | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| 693/SH 110 | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | CON | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| EUROSTAR 2 XXL | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 28 | CON | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43NC3 | F03FS02663 |
| | HW Scorer | 280 | 4,3-5,5 | 3,2 | 30 | 48 | CON | 6° | 15° | 2/10/60 | LI25M43VC3 | F03FS07419 |
| SCHEER KOCH | | | | | | | | | | | | |
| PA 6000, 5500 | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 30 | 36 | ATB | 8° | 15° | 2/9/60 + 2/10/60 | LI25M43PC3 | F03FS02674 |
| SCHELLING | | | | | | | | | | | | |
| FH3 | Main blade | 300 | 4,4 | 3,0 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB30005X | F03FS07803 |
| | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 36 | ATB | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43XN3 | F03FS06373 |
| FH4 (till 06/2015) | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | HW Scorer | 300 | 4,3-5,5 | 3,2 | 30 | 48 | ATB | 12° | 15° | 2/11/73 + 2/11/75 + 2/13/94 | LI25M43RC3 | F03FS07577 |
| S45 | Main blade | 350 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB35003X | F03FS07630 |
| | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 180 | 4,3-5,5 | 3,2 | 30 | 36 | ATB | 8° | 15° | 2/7/42 + 2/10/60 | LI25M43XN3 | F03FS06373 |
| SCHELLING FH4 (from 07/2015 till 07/2017) | HW Scorer | 300 | 4,3-5,5 | 3,2 | 30 | 48 | ATB | 12° | 15° | 2/11/73 + 2/11/75 + 2/13/94 | LI25M43RC3 | F03FS07577 |
| | Main blade | 360 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB36003X | F03FS09341 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| FH4 (from 07/2017) | Main blade | 360 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB36003X | F03FS09341 |
| | HW Scorer | 300 | 4,3-5,5 | 3,2 | 30 | 48 | ATB | 12° | 15° | 2/11/73 + 2/11/75 + 2/13/94 | LI25M43RC3 | F03FS07577 |
| FH5 (from 07/2015) | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 300 | 4,3-5,5 | 3,2 | 30 | 48 | ATB | 12° | 15° | 2/11/73 + 2/11/75 + 2/13/94 | LI25M43RC3 | F03FS07577 |
| FH5 (from 07/2015) | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 300 | 4,3-5,5 | 3,2 | 30 | 48 | ATB | 12° | 15° | 2/11/73 + 2/11/75 + 2/13/94 | LI25M43RC3 | F03FS07577 |
| FH5 | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| FK4 (from 07/2015) | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| FK4 (from 07/2017) | Main blade | 400 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB40007X | F03FS07725 |
| | HW Scorer | 300 | 4,3-5,5 | 3,2 | 30 | 48 | ATB | 12° | 15° | 2/11/73 + 2/11/75 + 2/13/94 | LI25M43RC3 | F03FS07577 |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.

Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|---|---------------|-----|---------|-----|----|----|------------|-----|-----|---|--------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| FH6, AH6, CH6 (till 06/2015) | Main blade | 460 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB46001X | F03FS08922 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| FK6, FP6, FM6 | Main blade | 460 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB46001X | F03FS08922 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| FH6, AH6, CH6 (starting from 07/2015) | Main blade | 480 | 4,8 | 3,5 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB48004X | F03FS09187 |
| | HW Scorer | 220 | 4,7-5,9 | 3,5 | 20 | 36 | ATB | 8° | 15° | 2/9/62 | LI25M47UA3 | F03FS09266 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 20 | 36 | ATB | 8° | 15° | 2/11/66 | LI25M47PA3 | F03FS02716 |
| FL | Main blade | 480 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/10/60 + 2/13/94 | LSB48007X | F03FS09914 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| FH8, AH8, CH8 | Main blade | 520 | 4,8 | 3,5 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB52007X | F03FS09319 |
| | Main blade | 520 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB52008X | F03FS09319 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| | HW Scorer | 220 | 4,7-5,9 | 3,5 | 20 | 36 | ATB | 8° | 15° | 2/9/62 | LI25M47UA3 | F03FS09266 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 20 | 36 | ATB | 8° | 15° | 2/11/66 | LI25M47PA3 | F03FS02716 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 20 | 36 | ATB | 8° | 15° | 2/13/94 | LSB52007X | F03FS09319 |
| FK8, FM8 | HW Scorer | 200 | 4,7-5,9 | 3,5 | 20 | 36 | ATB | 8° | 15° | 2/11/66 | LI25M47PA3 | F03FS02716 |
| | Main blade | 520 | 4,4 | 3,2 | 30 | 72 | TCG | 15° | 15° | 2/13/94 | LSB52008X | F03FS09319 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/11/66 + 2/10/60 + 2/9/62 | LI25M43PA3 | F03FS02670 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 20 | 36 | ATB | 8° | 15° | 2/13/140 + 2/17/140 + 2/13/114 | LSB68001X | F03FS09203 |
| FK10, FM10 | Main blade | 680 | 6,2 | 4,2 | 40 | 60 | TCG | 18° | 13° | 2/13/140 + 2/17/140 + 2/13/114 | LSB68001X | F03FS09203 |
| | HW Scorer | 200 | 6,1-7,3 | 4,0 | 20 | 36 | ATB | 8° | 15° | 2/11/66 | LI25M61PA3 | F03FS02730 |
| ASH (FSM) | Main blade | 720 | 6,4 | 4,4 | 40 | 60 | TCG | 18° | 13° | 2/14/114 + 2/14/140 | LSB72001X | F03FS09204 |
| | HW Scorer | 220 | 6,3-7,5 | 4,4 | 20 | 36 | ATB | 8° | 15° | 2/11/66 | LI25M63UA3 | F03FS02732 |
| SCM | | | | | | | | | | | | |
| PRIMA 50 | Main blade | 300 | 4,4 | 3,0 | 80 | 60 | TCG | 15° | 15° | 4/9/100 + 2/14/110 | LSB30004X | F03FS09157 |
| | Main blade | 300 | 4,4 | 3,0 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/14/110 | LSB30008X | F03FS07804 |
| | HW Scorer | 160 | 4,3-5,5 | 3,2 | 55 | 36 | ATB | 8° | 15° | 3/6/84 + 3/7/66 | LI25M43LG3 | F03FS02657 |
| PRIMA 67 | Main blade | 320 | 4,4 | 3,2 | 80 | 60 | TCG | 10° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | LSB32006X | F03FS10101 |
| | HW Scorer | 160 | 4,3-5,5 | 3,2 | 55 | 36 | ATB | 8° | 15° | 3/6/84 + 3/7/66 | LI25M43LG3 | F03FS02657 |
| | Postf. scorer | 280 | 4,65 | 3,2 | 80 | 72 | ATB | 15° | 15° | 2/14/110 | LI27M47VL3 | F03FS08014 |
| IMPACT 85 K | Main blade | 350 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | LSB35005X | F03FS07635 |
| | HW Scorer | 160 | 4,3-5,5 | 3,2 | 55 | 36 | ATB | 8° | 15° | 3/6/84 + 3/7/66 | LI25M43LG3 | F03FS02657 |
| IMPACT 105 C/D, PLUS 105 C/D/P | Main blade | 380 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | LSB38010X | F03FS07808 |
| | HW Scorer | 160 | 4,3-5,5 | 3,2 | 55 | 36 | ATB | 8° | 15° | 3/6/84 + 3/7/66 | LI25M43LG3 | F03FS02657 |
| IMPACT 90 | Main blade | 380 | 4,4 | 3,2 | 80 | 48 | TCG | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | LSB38009X | F03FS09164 |
| | HW Scorer | 160 | 4,3-5,5 | 3,2 | 55 | 36 | ATB | 8° | 15° | 3/6/84 + 3/7/66 | LI25M43LG3 | F03FS02657 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| | Postf. scorer | 300 | 4,70 | 3,2 | 80 | 72 | ATB | 15° | 15° | 2/14/110 | LI27M DC3 | F03FS02741 |
| IMPACT 110 | Main blade | 400 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 + 2/14/125 | LSB40012X | F03FS09173 |
| | HW Scorer | 160 | 4,3-5,5 | 3,2 | 55 | 36 | ATB | 8° | 15° | 3/6/84 + 3/7/66 | LI25M43LG3 | F03FS02657 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| | Postf. scorer | 300 | 4,7 | 3,2 | 80 | 72 | ATB | 15° | 15° | 2/14/110 | LI27M DC3 | F03FS02741 |
| SCM-GABBIANI | | | | | | | | | | | | |
| GALAXY 90 | Main blade | 300 | 4,4 | 3,0 | 80 | 60 | TCG | 15° | 15° | 4/9/100 + 2/14/110 | LSB30004X | F03FS09157 |
| | Main blade | 300 | 4,4 | 3,0 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/14/110 | LSB30008X | F03FS07804 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| | Postf. scorer | 300 | 4,70 | 3,2 | 80 | 72 | ATB | 15° | 15° | 2/14/110 | LI27M DC3 | F03FS02741 |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.

Reference table of saw blades for panel sizing machines

| Machine type | Tool type * | D | B-B1 | b | d | Z | Tooth type | α | β | NL | Freud Code | Art. No. |
|---------------------------|---------------|-----|---------|-----|----|----|------------|----------|---------|---|--------------|------------|
| | | mm | mm | mm | mm | | | | | | | |
| GALAXY 85 | Main blade | 350 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | LSB35005X | F03FS07635 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| GALAXY3 110, 110A | Main blade | 400 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 + 2/14/125 | LSB40012X | F03FS09173 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| | Postf. scorer | 300 | 4,70 | 3,2 | 80 | 72 | ATB | 15° | 15° | 2/14/110 | LI27M DC3 | F03FS02741 |
| GALAXY 115 | Main blade | 400 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 + 2/14/125 | LSB40012X | F03FS09173 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| GALAXY3 130, 130A | Main blade | 430 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | LSB43009X | F03FS07909 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| | Postf. scorer | 300 | 4,70 | 3,2 | 80 | 72 | ATB | 15° | 15° | 2/14/110 | LI27M DC3 | F03FS02741 |
| GALAXY3 145 | Main blade | 450 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | LSB45009X | F03FS07811 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| GALAXY 140, ELITE | Main blade | 450 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | LSB45009X | F03FS07811 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| GALAXY3 | Main blade | 460 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 2/14/110 + 4/9/100 | LSB46003X | F03FS09950 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 80 | 36 | ATB | 8° | 15° | 2/14/110 | LI25M43PL3 | F03FS02683 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH4 | F03FS09627 |
| | DP Scorer | 200 | 4,3-5,1 | 3,2 | 80 | 36 | FLAT | 6° | 14° | 2/14/110 | DLI25M43PLH6 | F03FS09628 |
| TÖRK MAKINE | | | | | | | | | | | | |
| MP70R | Main blade | 320 | 4,4 | 3,2 | 75 | 72 | TCG | 15° | 15° | 3/7/100 + 3/13/95 | LSB32002X | F03FS09162 |
| | HW Scorer | 160 | 4,3-5,5 | 3,2 | 55 | 36 | ATB | 8° | 15° | 3/6/84 + 3/7/66 | LI25M43LG3 | F03FS02657 |
| TURANLAR | | | | | | | | | | | | |
| T-PE 433 | Main blade | 300 | 4,4 | 3,0 | 30 | 60 | TCG | 15° | 15° | 2/10/60 | LSB30001X | F03FS07802 |
| | Main blade | 300 | 4,4 | 3,0 | 30 | 72 | TCG | 15° | 15° | 2/10/60 | LSB30005X | F03FS07803 |
| | HW Scorer | 150 | 4,3-5,6 | 3,2 | 30 | 36 | ATB | 8° | 15° | - | LI25M43KC3 | F03FS02649 |
| T-PE 434 (before 2020) | Main blade | 400 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 + 2/14/125 | LSB40012X | F03FS07810 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| T-PE 434 | Main blade | 430 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | LSB43009X | F03FS07909 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| T-PE 435 | Main blade | 430 | 4,4 | 3,2 | 80 | 72 | TCG | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | LSB43009X | F03FS07909 |
| | HW Scorer | 200 | 4,3-5,5 | 3,2 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M43PI3 | F03FS02681 |
| T-PE 436 (before 2020) | Main blade | 450 | 4,8 | 3,5 | 80 | 72 | TCG | 15° | 15° | 2/14/125 + 2/9/130 + 4/19/120 | LSB45018X | F03FS07812 |
| | HW Scorer | 200 | 4,7-5,9 | 3,5 | 65 | 36 | ATB | 8° | 15° | 2/9/100 + 2/9/110 | LI25M47PI3 | F03FS02720 |

* Tool type: Main saw blade, Scoring saw blade, Polycrystalline Diamond scorer and Postforming scorer.



LSB X

Industrial panel sizing saw blades



Horizontal Panel Sizing Machines



Laminated Chipboard



Laminated MDF



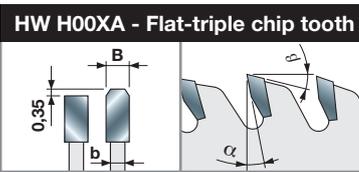
HPL



Thermoplastic Composites



Plexiglas

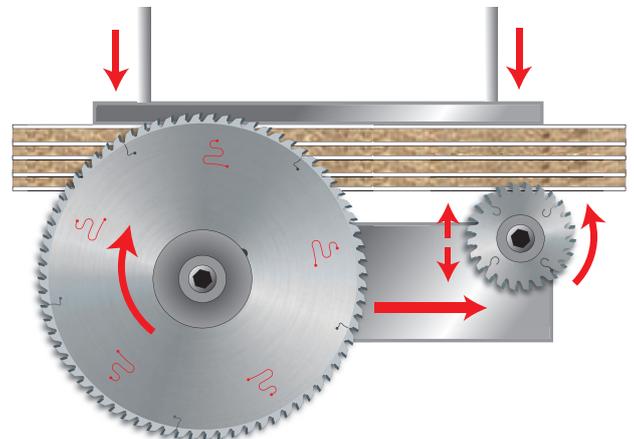


Machines:
Horizontal panel sizing machines.

Materials:
Laminated chipboard, laminated MDF, HPL, thermoplastic composites and plexiglas.

Applications:
Industrial panel sizing.

Technical information:
The LSB X range represents the ideal choice for industrial panel sizing. Saw blades suitable for chipboard and MDF bilaminated panels. Good finishing also in HPL and acrylic panel cutting.



| D | B | b | d | Z | α | β | NL | Machines | Freud Code | Art. No. |
|-----|-----|-----|----|----|----------|---------|------------------------------|-------------------------|------------|------------|
| mm | mm | mm | mm | | ° | ° | | | | |
| 250 | 4,2 | 3,0 | 30 | 60 | 15° | 15° | 2/10/60 | SCM - Techmatic, Verry | LSB25003X | F03FS10212 |
| 250 | 4,2 | 3,0 | 50 | 60 | 15° | 15° | - | Usikraft | LSB25005X | F03FS10214 |
| 250 | 4,2 | 3,0 | 55 | 60 | 15° | 15° | 4/10/70 | Baldan, SCM - Techmatic | LSB25002X | F03FS10211 |
| 250 | 4,4 | 3,0 | 30 | 80 | 15° | 15° | 2/9/46,4 + 2/10/60 | | LSB25004X | F03FS10213 |
| 270 | 4,2 | 3,0 | 55 | 60 | 15° | 15° | - | SCM - Techmatic | LSB27001X | F03FS10215 |
| 280 | 4,4 | 3,2 | 55 | 60 | 15° | 15° | 2/10/70 | Baldan | LSB28001X | F03FS10216 |
| 290 | 4,2 | 3,0 | 55 | 60 | 15° | 15° | - | SCM - Techmatic | LSB29001X | F03FS10217 |
| 300 | 4,4 | 3,0 | 30 | 60 | 15° | 15° | 2/10/60 | Panhans | LSB30001X | F03FS07802 |
| 300 | 4,4 | 3,0 | 65 | 60 | 15° | 15° | 2/9/110 | Selco | LSB30002X | F03FS09159 |
| 300 | 4,4 | 3,0 | 75 | 60 | 15° | 15° | - | Homag | LSB30003X | F03FS10218 |
| 300 | 4,4 | 3,0 | 80 | 60 | 15° | 15° | 4/9/100 + 2/14/110 | SCM | LSB30004X | F03FS09157 |
| 300 | 4,4 | 3,0 | 30 | 72 | 15° | 15° | 2/10/60 | Panhans, Verry | LSB30005X | F03FS07803 |
| 300 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/100 | Holzma | LSB30012X | F03FS09207 |
| 300 | 4,4 | 3,0 | 65 | 72 | 15° | 15° | 2/9/95 + 2/9/110 | Selco | LSB30006X | F03FS09158 |
| 300 | 4,4 | 3,0 | 75 | 72 | 15° | 15° | - | Holzma | LSB30007X | F03FS10219 |
| 300 | 4,4 | 3,0 | 80 | 72 | 15° | 15° | 4/9/100 + 2/14/110 | SCM | LSB30008X | F03FS07804 |
| 300 | 4,4 | 3,0 | 75 | 96 | 15° | 15° | - | | LSB30010X | F03FS10220 |
| 305 | 4,4 | 3,0 | 30 | 60 | 15° | 15° | 2/10/60 | Mayer, Panhans, SCM | LSB30501X | F03FS10221 |
| 310 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/100 | Holzma | LSB31001X | F03FS09949 |
| 320 | 4,4 | 3,2 | 30 | 60 | 15° | 15° | 2/10/60 | | LSB32005X | F03FS09160 |
| 320 | 4,4 | 3,2 | 50 | 60 | 15° | 15° | 3/13/95 + 3/15/80 | Giben | LSB32004X | F03FS10222 |
| 320 | 4,4 | 3,2 | 65 | 60 | 15° | 15° | 2/9/110 | Selco | LSB32003X | F03FS09161 |
| 320 | 4,4 | 3,2 | 80 | 60 | 10° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | | LSB32006X | F03FS10101 |
| 320 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/100 | | LSB32008X | F03FS10268 |
| 320 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/95 + 2/9/110 | Selco | LSB32001X | F03FS07805 |
| 320 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 3/13/95 + 3/7/100 | Giben | LSB32002X | F03FS09162 |
| 320 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | | LSB32007X | F03FS10267 |
| 350 | 4,2 | 3,2 | 80 | 96 | 15° | 15° | | | LSB35011X | F03FS10225 |

| D | B | b | d | Z | α | β | NL | Machines | Freud Code | Art. No. | |
|-----|-----|-----|------|----|----------|---------|---|---|------------|-----------|------------|
| mm | mm | mm | mm | | ° | ° | | | | | |
| 350 | 4,4 | 3,2 | 30 | 54 | 15° | 15° | 2/10/60 | Panhans, Scheer | | LSB35001X | F03FS10223 |
| 350 | 4,4 | 3,2 | 60 | 54 | 15° | 15° | 2/14/100 | Holzma | | LSB35002X | F03FS10224 |
| 350 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 | Panhans, Scheer | | LSB35003X | F03FS07630 |
| 350 | 4,4 | 3,2 | 50 | 72 | 15° | 15° | 4/13/80 | Giben | | LSB35006X | F03FS07709 |
| 350 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/100 | Holzma | | LSB35004X | F03FS07636 |
| 350 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/110 | Selco | | LSB35013X | F03FS09659 |
| 350 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | - | Giben, Hansol Machine | | LSB35008X | F03FS07634 |
| 350 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB35005X | F03FS07635 |
| 355 | 4,4 | 3,2 | 75 | 54 | 15° | 15° | - | Giben | | LSB35502X | F03FS10226 |
| 355 | 4,4 | 3,2 | 80 | 54 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB35503X | F03FS09205 |
| 355 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 | Panhans, SCM | | LSB35504X | F03FS07674 |
| 355 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/95 + 2/9/110 | Selco | | LSB35508X | F03FS08740 |
| 355 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 4/15/105 + 2/7/110 | Giben, KDT, Hold | | LSB35505X | F03FS07633 |
| 355 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 3/7/100 | Gabbiani | | LSB35507X | F03FS07710 |
| 355 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB35506X | F03FS09163 |
| 360 | 4,4 | 3,2 | 65 | 60 | 15° | 15° | 2/9/110 | Selco | | LSB36001X | F03FS10227 |
| 360 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/13/94 | Schelling | | LSB36003X | F03FS09341 |
| 360 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/95 + 2/9/110 | Selco | | LSB36002X | F03FS07673 |
| 370 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 | Schelling | | LSB37001X | F03FS10228 |
| 380 | 4,4 | 3,2 | 80 | 48 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB38009X | F03FS09164 |
| 380 | 4,4 | 3,2 | 50 | 60 | 15° | 15° | 4/13/80 | Giben | | LSB38007X | F03FS10230 |
| 380 | 4,4 | 3,2 | 60 | 60 | 15° | 15° | 2/14/100 | Holzma | | LSB38001X | F03FS07806 |
| 380 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 + 2/8/83 | | | LSB38011X | F03FS10231 |
| 380 | 4,4 | 3,2 | 50 | 72 | 15° | 15° | 4/13/80 | Giben | | LSB38008X | F03FS09165 |
| 380 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/100 | Holzma | | LSB38002X | F03FS07631 |
| 380 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/110 | Selco | | LSB38014X | F03FS09166 |
| 380 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 2/14/100 | Holzma wp, Wonpoong | | LSB38012X | F03FS07672 |
| 380 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB38010X | F03FS07808 |
| 380 | 4,4 | 3,2 | 60 | 84 | 15° | 15° | 2/14/100 | Holzma | | LSB38015X | F03FS08989 |
| 380 | 4,4 | 3,2 | 80 | 96 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB38013X | F03FS07809 |
| 380 | 4,8 | 3,5 | 60 | 60 | 15° | 15° | 2/14/100 | Holzma | | LSB38003X | F03FS10229 |
| 380 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/14/100 | Holzma | | LSB38004X | F03FS07632 |
| 380 | 4,8 | 3,5 | 60 | 84 | 15° | 15° | 2/14/100 | Holzma | | LSB38005X | F03FS07807 |
| 390 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 2/14/110 | Sigma | | LSB39001X | F03FS09167 |
| 400 | 4,4 | 3,2 | 30 | 48 | 15° | 15° | 2/10/60 | | | LSB40001X | F03FS09168 |
| 400 | 4,4 | 3,2 | 80 | 48 | 15° | 15° | 2/9/110 + 4/9/100 + 2/14/110 | Gabbiani | | LSB40010X | F03FS10233 |
| 400 | 4,4 | 3,2 | 30 | 60 | 15° | 15° | 2/10/60 | | | LSB40004X | F03FS09169 |
| 400 | 4,4 | 3,2 | 75 | 60 | 15° | 15° | 4/15/105 | Giben | | LSB40005X | F03FS09170 |
| 400 | 4,4 | 3,2 | 80 | 60 | 15° | 15° | 2/9/130 + 4/19/120 | Selco | | LSB40006X | F03FS10232 |
| 400 | 4,4 | 3,2 | 80 | 60 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB40011X | F03FS09171 |
| 400 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 + 2/13/94 | Scheer | | LSB40007X | F03FS07725 |
| 400 | 4,4 | 3,2 | 50,8 | 72 | 10° | 15° | 2/16/127 + 4/13/80 | | | LSB40018X | F03FS08957 |
| 400 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/11/85 + 2/14/100 | Anthon | | LSB40017X | F03FS09272 |
| 400 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/110 | Selco | | LSB40016X | F03FS09172 |
| 400 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 4/15/105 + 2/7/110 + 2/14/100 | Giben, Haisung Woodworking Machinery, Hansol Machine, HOMAG, Hyundai Sangi, KDT | | LSB40008X | F03FS07726 |
| 400 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 2/15/105 + 2/9/130 + 4/19/120 | Selco, MAS | | LSB40009X | F03FS07810 |
| 400 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 + 2/14/125 | Gabbiani | | LSB40012X | F03FS09173 |
| 400 | 4,4 | 3,2 | 60 | 84 | 15° | 15° | 2/14/100 | Nanxing | | LSB40021X | F03FS09255 |
| 400 | 4,4 | 3,2 | 75 | 84 | 15° | 15° | 4/15/105 + 2/7/110 | KDT | | LSB40019X | F03FS08990 |
| 400 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/14/125 | Holzma | | LSB40013X | F03FS07711 |
| 420 | 4,4 | 3,2 | 80 | 60 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB42004X | F03FS10235 |
| 420 | 4,4 | 3,2 | 50 | 72 | 15° | 15° | 4/13/80 | Selco | | LSB42006X | F03FS09174 |
| 420 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | | LSB42005X | F03FS09175 |
| 420 | 4,8 | 3,5 | 60 | 60 | 15° | 15° | 2/14/125 | Holzma | | LSB42001X | F03FS10234 |
| 420 | 4,8 | 3,5 | 60 | 84 | 15° | 15° | 2/14/100 + 2/14/125 | Holzma | | LSB42002X | F03FS09176 |
| 430 | 4,4 | 3,2 | 30 | 48 | 15° | 15° | - | | | LSB43001X | F03FS10236 |
| 430 | 4,4 | 3,2 | 75 | 48 | 15° | 15° | 4/15/105 | Giben | | LSB43002X | F03FS10237 |
| 430 | 4,4 | 3,2 | 30 | 60 | 15° | 15° | 2/10/60 | | | LSB43004X | F03FS10238 |
| 430 | 4,4 | 3,2 | 75 | 60 | 15° | 15° | 4/15/105 | Giben | | LSB43005X | F03FS10239 |
| 430 | 4,4 | 3,2 | 80 | 60 | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | Selco - Gabbiani | | LSB43006X | F03FS10240 |
| 430 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/13/94 | | | LSB43007X | F03FS09177 |
| 430 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/110 | Selco | | LSB43012X | F03FS09178 |
| 430 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 4/15/105 + 2/7/110 | Giben | | LSB43008X | F03FS07908 |
| 430 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | Selco, Gabbiani | | LSB43009X | F03FS07909 |

| D mm | B mm | b mm | d mm | Z | α | β | NL | Machines | Freud Code | Art. No. | |
|---------|---------|---------|---------|----|----------|---------|--------------------------------|----------------------|------------|-----------|------------|
| 430 | 4,4 | 3,2 | 75 | 96 | 15° | 15° | 4/15/105 + 2/7/110 | Giben Prismatic | | LSB43010X | F03FS09179 |
| 430 | 4,8 | 3,5 | 70 | 72 | 15° | 15° | 4/11/130 | Selco | | LSB43013X | F03FS09180 |
| 450 | 4,4 | 3,2 | 30 | 48 | 15° | 15° | 2/9/60 | Mayer, Panhans, SCM | | LSB45001X | F03FS10241 |
| 450 | 4,4 | 3,2 | 60 | 48 | 15° | 15° | 2/14/125 | Holzma | | LSB45002X | F03FS10242 |
| 450 | 4,4 | 3,2 | 30 | 60 | 15° | 15° | 2/10/60 | Mayer, Panhans, SCM | | LSB45004X | F03FS10243 |
| 450 | 4,4 | 3,2 | 60 | 60 | 15° | 15° | 2/14/125 | Holzma | | LSB45005X | F03FS10244 |
| 450 | 4,4 | 3,2 | 80 | 60 | 15° | 15° | 2/9/130 + 4/19/120 + 2/14/110 | Selco - Gabbiani | | LSB45006X | F03FS10245 |
| 450 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 + 2/14/95 | Mayer, Panhans, SCM | | LSB45007X | F03FS09181 |
| 450 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/125 | Holzma | | LSB45008X | F03FS09182 |
| 450 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | Selco, Gabbiani | | LSB45009X | F03FS07811 |
| 450 | 4,8 | 3,5 | 30 | 72 | 15° | 15° | 2/9/60 | Scheer | | LSB45016X | F03FS10246 |
| 450 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/14/125 + 2/17/100 | Holzma, Nanxing | | LSB45017X | F03FS07391 |
| 450 | 4,8 | 3,5 | 80 | 72 | 15° | 15° | 2/14/125 + 2/9/130 + 4/19/120 | Selco | | LSB45018X | F03FS07812 |
| 450 | 4,8 | 3,5 | 60 | 84 | 15° | 15° | 2/14/125 | Holzma | | LSB45019X | F03FS10247 |
| 460 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/13/94 | Schelling | | LSB46001X | F03FS08922 |
| 460 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 2/7/110 | Giben | | LSB46002X | F03FS07914 |
| 460 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 2/14/110 + 4/9/100 | Gabbiani | | LSB46003X | F03FS09950 |
| 470 | 4,4 | 3,2 | 75 | 48 | 15° | 15° | 4/15/105 | Giben | | LSB47001X | F03FS10248 |
| 470 | 4,4 | 3,2 | 75 | 60 | 15° | 15° | 4/15/105 | Giben | | LSB47002X | F03FS10249 |
| 470 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 4/15/105 | Giben, Hyundai Sangi | | LSB47003X | F03FS09183 |
| 470 | 4,4 | 3,2 | 75 | 96 | 15° | 15° | 4/15/105 | Giben | | LSB47004X | F03FS09184 |
| 470 | 4,8 | 3,5 | 70 | 72 | 15° | 15° | 4/11/130 | Selco | | LSB47005X | F03FS09185 |
| 480 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 + 2/13/94 | Schelling | | LSB48007X | F03FS09914 |
| 480 | 4,8 | 3,5 | 80 | 60 | 15° | 15° | 2/9/130 + 4/19/120 | Selco | | LSB48003X | F03FS09186 |
| 480 | 4,8 | 3,5 | 30 | 72 | 15° | 15° | 2/10/60 + 2/13/94 | Schelling | | LSB48004X | F03FS09187 |
| 480 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/19/120 | | | LSB48006X | F03FS10269 |
| 480 | 4,8 | 3,5 | 80 | 72 | 15° | 15° | 2/9/130 + 4/19/120 | Selco | | LSB48001X | F03FS09188 |
| 500 | 4,4 | 3,2 | 30 | 60 | 15° | 15° | 2/13/94 | Schelling | | LSB50003X | F03FS10250 |
| 500 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/13/94 | Schelling | | LSB50005X | F03FS10251 |
| 500 | 4,8 | 3,5 | 60 | 60 | 15° | 15° | 2/11/115 | Holzma | | LSB50009X | F03FS09189 |
| 500 | 4,8 | 3,5 | 75 | 60 | 15° | 15° | 4/15/105 | Giben | | LSB50010X | F03FS09190 |
| 500 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/11/115 | Holzma | | LSB50011X | F03FS09191 |
| 510 | 4,8 | 3,5 | 80 | 72 | 15° | 15° | 2/9/130 + 4/19/120 | Selco | | LSB51001X | F03FS09984 |
| 520 | 4,4 | 3,2 | 30 | 54 | 15° | 15° | 2/13/94 | Schelling | | LSB52005X | F03FS10253 |
| 520 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/13/94 | Schelling | | LSB52008X | F03FS09602 |
| 520 | 4,8 | 3,5 | 60 | 60 | 15° | 15° | 2/11/115 + 2/19/120 | Holzma | | LSB52002X | F03FS10252 |
| 520 | 4,8 | 3,5 | 70 | 60 | 15° | 15° | 4/11/130 | | | LSB52009X | F03FS09958 |
| 520 | 4,8 | 3,5 | 30 | 72 | 15° | 15° | 2/13/94 | Schelling | | LSB52007X | F03FS09319 |
| 520 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/11/115 + 2/19/120 | Holzma | | LSB52003X | F03FS09192 |
| 520 | 4,8 | 3,5 | 70 | 72 | 15° | 15° | 4/11/130 | Selco | | LSB52006X | F03FS09193 |
| 530 | 4,8 | 3,5 | 75 | 72 | 15° | 15° | 2/7/110 | Giben | | LSB53004X | F03FS09651 |
| 530 | 5,2 | 3,5 | 30 | 60 | 15° | 15° | - | Schelling | | LSB53001X | F03FS09194 |
| 530 | 5,2 | 3,5 | 100 | 60 | 15° | 15° | 2/7/140 | | | LSB53003X | F03FS09195 |
| 530 | 5,8 | 4,0 | 60 | 60 | 15° | 15° | 1/11/85 | Anthon | | LSB53002X | F03FS10254 |
| 540 | 4,8 | 3,5 | 60 | 60 | 15° | 15° | 2/11/115 + 2/19/120 | Holzma Typ 33 | | LSB54002X | F03FS10255 |
| 540 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/11/115 + 2/19/120 | Holzma Typ 33 | | LSB54003X | F03FS10256 |
| 550 | 5 | 3,5 | 40 | 72 | 15° | 15° | 2/13/122 | Schelling | | LSB55007X | F03FS09216 |
| 550 | 5,2 | 3,5 | 80 | 48 | 15° | 15° | 2/14/110 | Gabbiani | | LSB55005X | F03FS10257 |
| 550 | 5,2 | 3,5 | 40 | 72 | 15° | 15° | 2/13/122 | | | LSB55009X | F03FS09915 |
| 550 | 5,2 | 3,5 | 60 | 60 | 15° | 15° | - | | | LSB55002X | F03FS09196 |
| 550 | 5,2 | 3,5 | 75 | 60 | 15° | 15° | 4/10,5/140 | | | LSB55010X | F03FS10030 |
| 550 | 5,2 | 3,5 | 80 | 60 | 15° | 15° | 2/14/110 | Gabbiani | | LSB55006X | F03FS09197 |
| 550 | 5,2 | 3,5 | 90 | 60 | 15° | 15° | - | Giben | | LSB55008X | F03FS09970 |
| 565 | 5 | 3,5 | 100 | 72 | 15° | 15° | - | Giben | | LSB56504X | F03FS09215 |
| 565 | 5,2 | 3,5 | 100 | 60 | 15° | 15° | - | Giben | | LSB56502X | F03FS09198 |
| 570 | 4,8 | 3,5 | 60 | 60 | 15° | 15° | 2/11/115 + 2/19/120 | Holzma | | LSB57001X | F03FS09199 |
| 600 | 5,8 | 4,0 | 60 | 60 | 15° | 15° | 2/11/115 + 2/19/120 | Holzma Typ 33 | | LSB60001X | F03FS09200 |
| 600 | 5,8 | 4,0 | 70 | 60 | 15° | 15° | 4/11/130 | | | LSB60004X | F03FS10258 |
| 600 | 5,8 | 4,0 | 75 | 60 | 15° | 15° | 4/6,5/130 + 4/11/130 | Selco | | LSB60006X | F03FS10259 |
| 600 | 5,8 | 4,0 | 60 | 72 | 15° | 15° | 2/11/115 + 2/19/120 | Holzma Typ 33 | | LSB60002X | F03FS09201 |
| 670 | 6,2 | 4,2 | 40 | 60 | 18° | 13° | 2/17/140 + 2/13/140 | Schelling | | LSB67003X | F03FS09202 |
| 670 | 6,2 | 4,2 | 40 | 72 | 18° | 13° | 2/17/140 + 2/13/140 | Schelling | | LSB67004X | F03FS10260 |
| 680 | 6,2 | 4,2 | 40 | 60 | 18° | 13° | 2/13/140 + 2/17/140 + 2/13/114 | Schelling | | LSB68001X | F03FS09203 |
| 720 | 6,4 | 4,4 | 40 | 60 | 18° | 13° | 2/14/114 + 2/14/140 | Schelling | | LSB72001X | F03FS09204 |



LSC

“Supercut” panel sizing saw blades with variable pitch



Horizontal Panel Sizing Machines



Chipboard



Laminated Chipboard



MDF



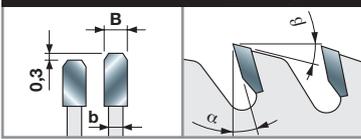
Laminated MDF



●●●● Ultimate ●● High ● Good



HW H00XA - Double triple chip tooth



Machines:

Horizontal panel sizing machines.

Materials:

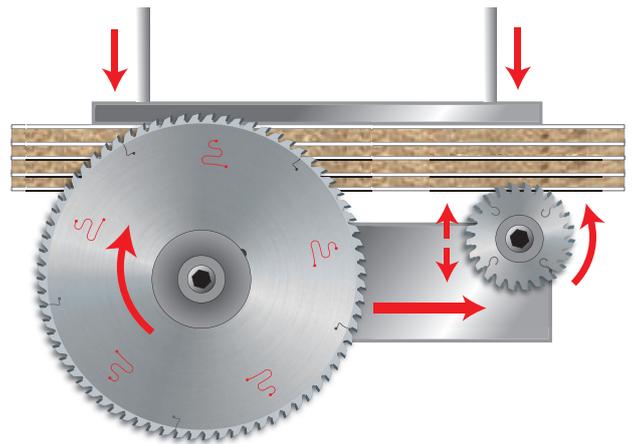
Wood based panels, laminated chipboard, MDF and laminated MDF.

Applications:

Panel sizing.

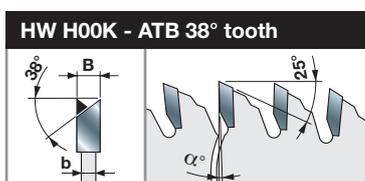
Technical information:

Saw blades suitable for sizing of single panels or small stacks with very good finishing, thanks to the double triple chip tooth grinding.



*Dedicated laser marking.

| D mm | B mm | b mm | d mm | Z | α | β | NL | Machines | Freud Code | Art. No. |
|---------|---------|---------|---------|----|-----|-----|-------------------------------|------------------|-------------|------------|
| 300 | 4,4 | 3,0 | 30 | 60 | 10° | 15° | 2/10/60 | Panhans | LSC30001 | F03FS06322 |
| 300 | 4,4 | 3,0 | 65 | 60 | 10° | 15° | 2/9/110 | Selco | LSC30002 | F03FS06325 |
| 300 | 4,4 | 3,0 | 75 | 60 | 10° | 15° | - | Holzma | LSC30003 | F03FS06326 |
| 300 | 4,4 | 3,0 | 80 | 60 | 10° | 15° | 2/14/110 + 4/9/100 | SCM | LSC30004 | F03FS06327 |
| 320 | 4,4 | 3,2 | 50 | 60 | 10° | 15° | 3/15/80 + 3/13/95 | Giben | LSC32004 | F03FS06328 |
| 320 | 4,4 | 3,2 | 65 | 60 | 10° | 15° | 2/9/110 | Selco | LSC32003 | F03FS06329 |
| 350 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 | Panhans - Scheer | LSC35003 | F03FS06305 |
| 350 | 4,4 | 3,2 | 50 | 72 | 15° | 15° | 4/13/80 | Giben | LSC35006 | F03FS06309 |
| 350 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/100 | Holzma | LSC35004 | F03FS06310 |
| 350 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | LSC35005 | F03FS06311 |
| 355 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 | Panhans - SCM | LSC35504 | F03FS06306 |
| 355 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/110 | Selco | LSC35508BS* | F03FS07869 |
| 355 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | - | Giben | LSC35505 | F03FS06307 |
| 360 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/110 | Selco | LSC36002 | F03FS06308 |
| 370 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 | Schelling | LSC37001 | F03FS06312 |
| 380 | 4,4 | 3,2 | 50 | 72 | 15° | 15° | 4/13/80 | Giben | LSC38008 | F03FS06343 |
| 380 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/100 | Holzma | LSC38002 | F03FS06313 |
| 380 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | LSC38010 | F03FS06314 |
| 380 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/14/100 | Holzma | LSC38004 | F03FS06332 |
| 400 | 4,4 | 3,2 | 30 | 72 | 15° | 15° | 2/10/60 | Scheer | LSC40007 | F03FS06315 |
| 400 | 4,4 | 3,2 | 65 | 72 | 15° | 15° | 2/9/110 | Selco | LSC40016BS* | F03FS07870 |
| 400 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 4/15/105 | Giben | LSC40008 | F03FS06317 |
| 400 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/19/120 + 2/9/130 | Selco | LSC40009 | F03FS06319 |
| 400 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 4/9/100 + 2/9/110 + 2/14/110 | Gabbiani | LSC40012 | F03FS06320 |
| 430 | 4,4 | 3,2 | 75 | 72 | 15° | 15° | 4/15/105 | Giben | LSC43008 | F03FS06316 |
| 430 | 4,4 | 3,2 | 80 | 72 | 15° | 15° | 2/9/130 + 2/14/110 + 4/19/120 | Selco - Gabbiani | LSC43009 | F03FS06321 |
| 450 | 4,4 | 3,2 | 60 | 72 | 15° | 15° | 2/14/125 | Holzma | LSC45008 | F03FS06318 |
| 450 | 4,8 | 3,5 | 60 | 72 | 15° | 15° | 2/14/125 | Holzma | LSC45017 | F03FS06323 |
| 450 | 4,8 | 3,5 | 80 | 72 | 15° | 15° | 2/9/130 + 4/19/120 | Selco | LSC45018 | F03FS06324 |
| 520 | 4,8 | 3,5 | 30 | 72 | 18° | 13° | 2/13/94 | Schelling | LSC52007 | F03FS07879 |



Machines:

Squaring saws and vertical panel sizing machines, hand-held circular saws.

Materials:

Laminated chipboard, laminated MDF and plywood.

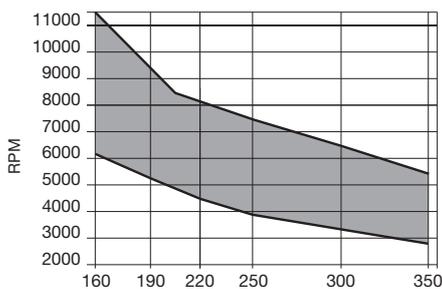
Applications:

Panel sizing.

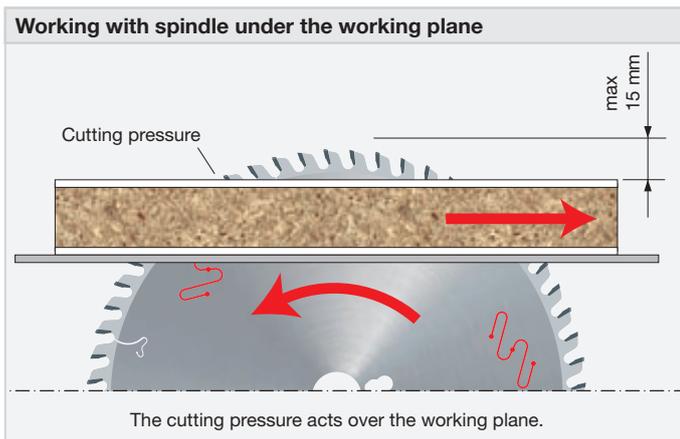
Technical information:

To size chipboard and MDF bilaminated panels. The ATB 38° tooth geometry grants perfect finishing on both sides.

No scoring saw blades needed.



Minimum and maximum RPM based on the blade diameter.

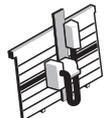


LU3A

Saw blades to cut bilaminated panels



Squaring Saws



Vertical Panel Sizing Machines



Hand-held Circular Saws



Laminated Chipboard



Laminated MDF



Plywood

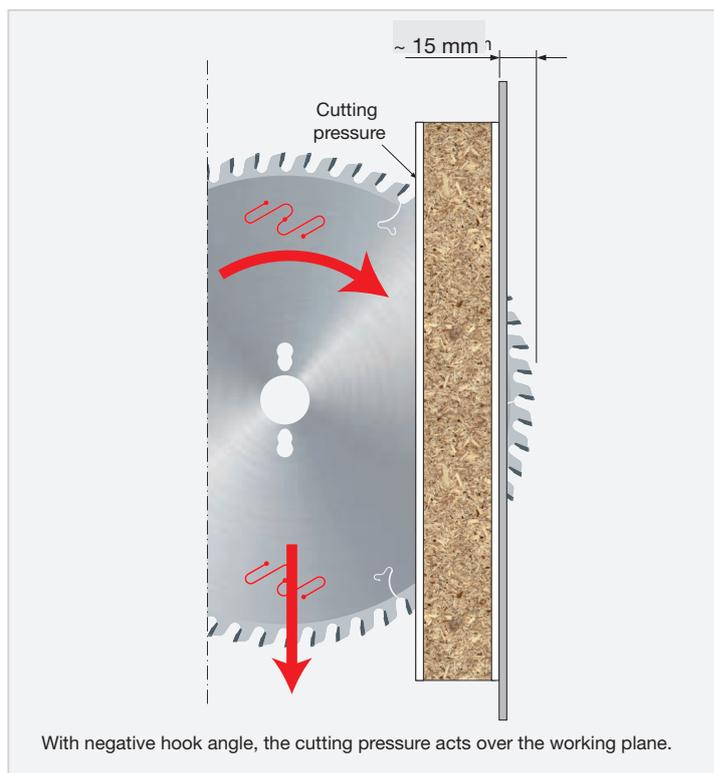
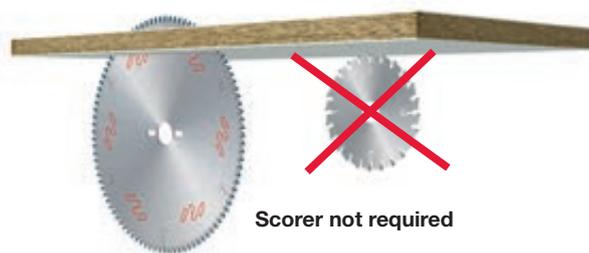


●●● Ultimate ●● High ● Good

| D | B | b | d | Z | α | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|-----|----|------------|----------------------|
| mm | mm | mm | mm | | ° | | | |
| 160 | 2,2 | 1,6 | 20 | 48 | -2° | - | | LU3A 0001 F03FS07411 |
| 190 | 2,5 | 1,8 | 30 | 48 | -2° | - | | LU3A 0002 F03FS07412 |
| 210 | 2,5 | 1,8 | 30 | 54 | -2° | - | | LU3A 0003 F03FS07413 |

| D | B | b | d | Z | α | NL | Freud Code | Art. No. |
|-----|-----|-----|------|-----|-----|--------|------------|----------------------|
| mm | mm | mm | mm | | ° | | | |
| 220 | 3,2 | 2,2 | 30 | 64 | -5° | 2/7/42 | | LU3A 0100 F03FS05059 |
| 250 | 3,2 | 2,2 | 30 | 80 | -2° | FT01 | | LU3A 0200 F03FS05061 |
| 300 | 3,2 | 2,2 | 25,4 | 96 | 2° | - | | LU3A 0600 F03FS05807 |
| 300 | 3,2 | 2,2 | 30 | 96 | 2° | FT01 | | LU3A 0300 F03FS05064 |
| 350 | 3,5 | 2,5 | 30 | 108 | 5° | FT02 | | LU3A 0400 F03FS05066 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



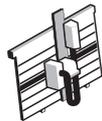


LU3B

Saw blades to cut bilaminated panels



Squaring Saws



Vertical Panel Sizing Machines



Plywood



Laminated Chipboard



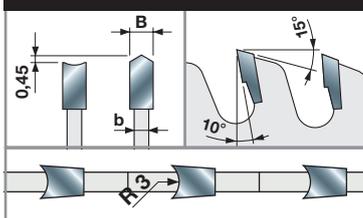
Laminated MDF



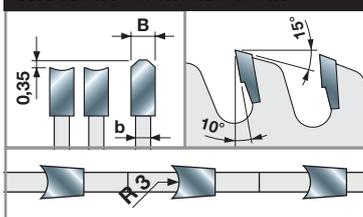
●●● Ultimate ●● High ● Good



HW H00K - Concave tooth



HW H00K - Concave tooth *



Machines:

Squaring saws and vertical panel sizing machines.

Materials:

Plywood, laminated chipboard and laminated MDF.

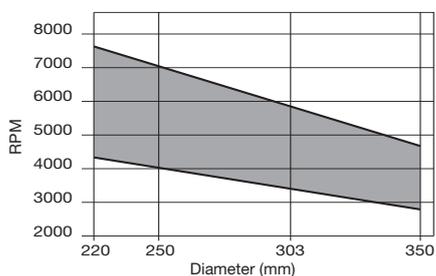
Applications:

Panel sizing.

Technical information:

To size chipboard and MDF bilaminated panels with good finishing and long cutting life.

No scoring saw blades needed.



Minimum and maximum RPM based on the blade diameter.

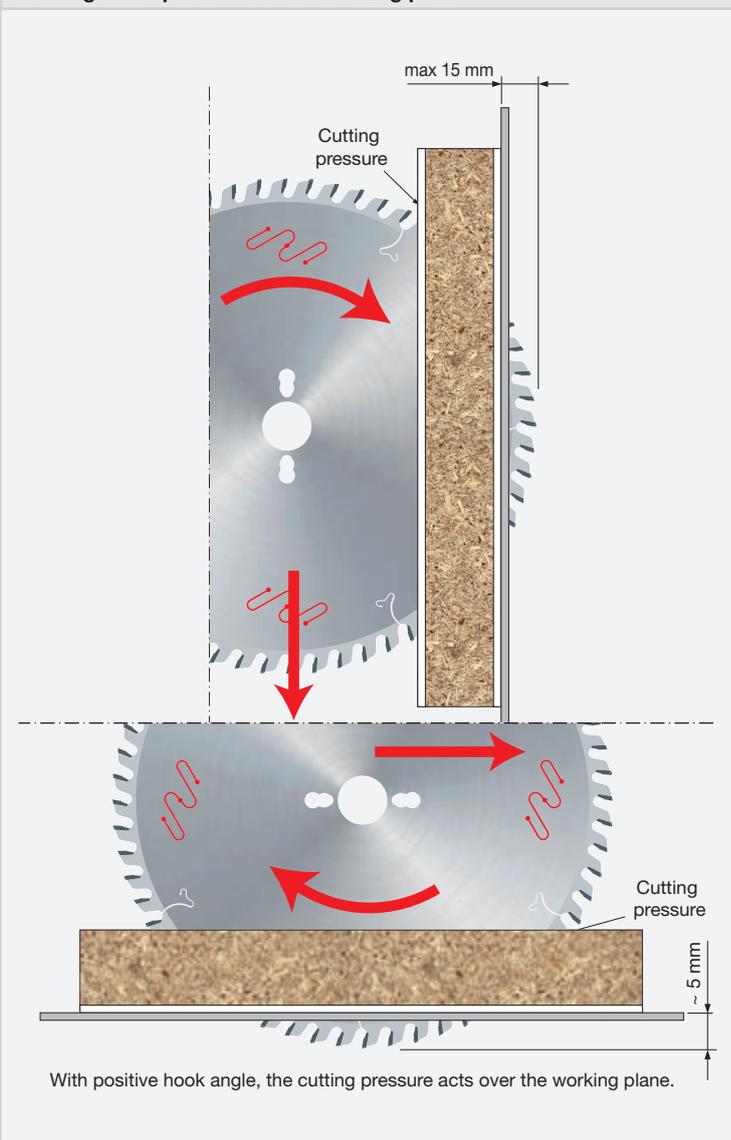
| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|--------|------------|------------|
| mm | mm | mm | mm | | | | |
| 220 | 3,2 | 2,2 | 30 | 42 | 2/7/42 | LU3B 0100 | F03FS05069 |
| 250 | 3,2 | 2,2 | 30 | 48 | FT01 | LU3B 0200 | F03FS05071 |
| 303 | 3,2 | 2,2 | 30 | 60 | FT01 | LU3B 0300 | F03FS05073 |
| 350 | 3,2 | 2,2 | 30 | 72 | FT01 | LU3B 0400 | F03FS05075 |

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|-------------|------------|
| mm | mm | mm | mm | | | | |
| 303 | 3,2 | 2,2 | 30 | 60 | FT01 | LU3B 1300 * | F03FS06478 |

Features: Flat - triple chip tooth with concave face and positive cutting angle.

FT01: 2/7/42 + 2/9/46,4 + 2/10/60

Working with spindle over the working plane



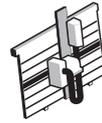


LU3C

Saw blades to cut bilaminated panels



Squaring Saws



Vertical Panel Sizing Machines



Plywood



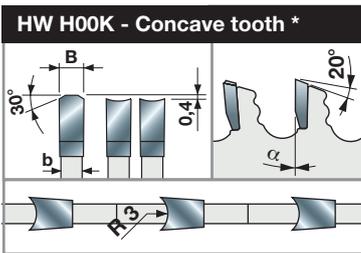
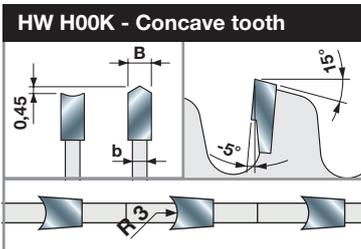
Laminated Chipboard



Laminated MDF



●●● Ultimate ●● High ● Good



Scorer not required

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|--------|------------|------------|
| 220 | 3,2 | 2,2 | 30 | 42 | 2/7/42 | LU3C 0100 | F03FS05076 |
| 250 | 3,2 | 2,2 | 30 | 48 | FT01 | LU3C 0200 | F03FS05077 |
| 303 | 3,2 | 2,2 | 30 | 60 | FT01 | LU3C 0300 | F03FS05078 |
| 350 | 3,2 | 2,2 | 30 | 72 | FT01 | LU3C 0400 | F03FS05080 |

| D | B | b | d | Z | α | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|----------|------|-------------|------------|
| 250 | 3,4 | 2,4 | 30 | 54 | -2° | FT01 | LU3C 0204 * | F03FS09537 |
| 303 | 3,4 | 2,4 | 30 | 66 | 0° | FT01 | LU3C 0302 * | F03FS09038 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60

Machines:

Squaring saws and vertical panel sizing machines.

Materials:

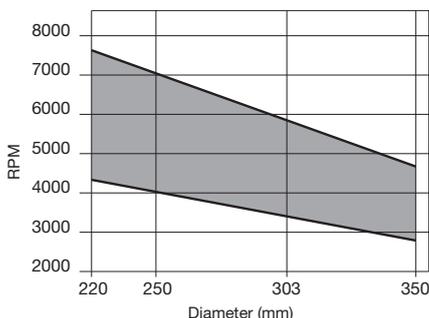
Plywood, laminated chipboard and laminated MDF.

Applications:

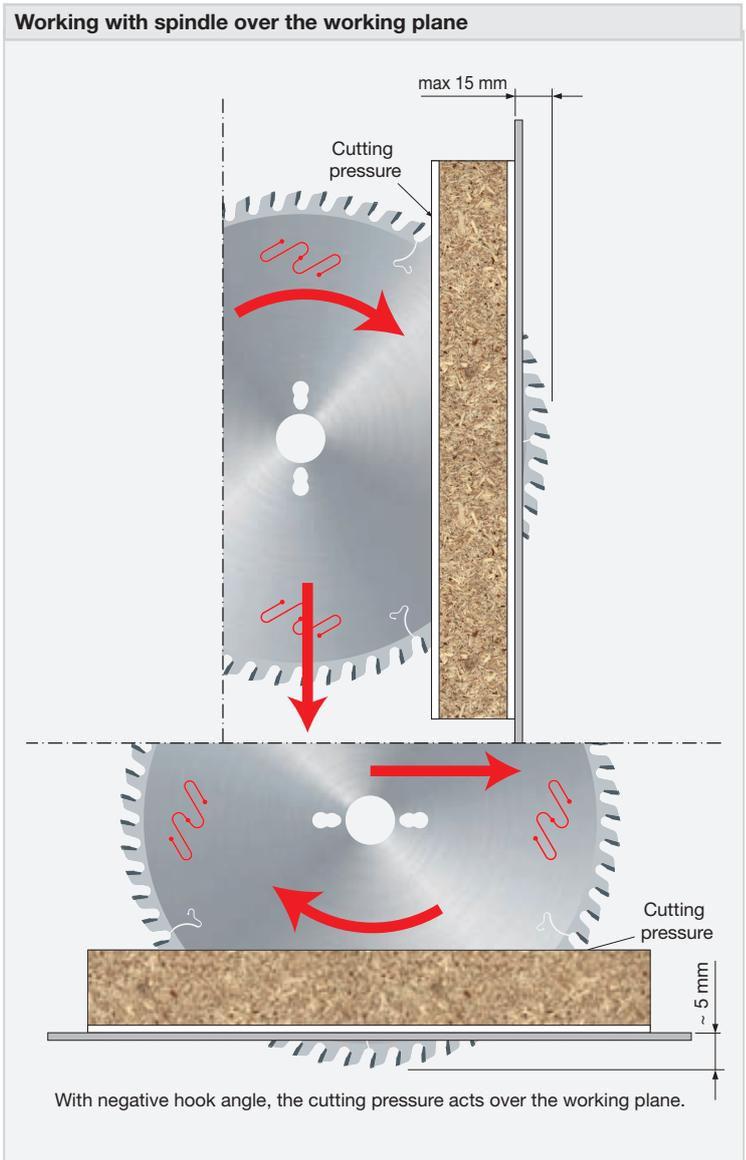
Panel sizing.

Technical information:

Recommended for vertical panel sizing machines. To size chipboard and MDF bilaminated panels with good finishing and long cutting life. No scoring saw blades needed.



Minimum and maximum RPM based on the blade diameter.





LU3D

Saw blades to cut bilaminated panels



Squaring Saws



Chipboard



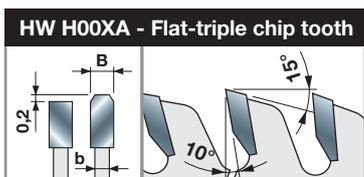
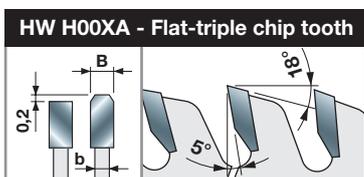
Laminated Chipboard



MDF



Laminated MDF



Machines:

Squaring saws.

Materials:

Wood based panels, laminated chipboard, MDF and laminated MDF.

Applications:

Panel sizing.

Technical information:

To size chipboard and MDF bilaminated panels with the use of the scoring saw blade, in detail melamine-coated panels, with good finishing and long cutting life.

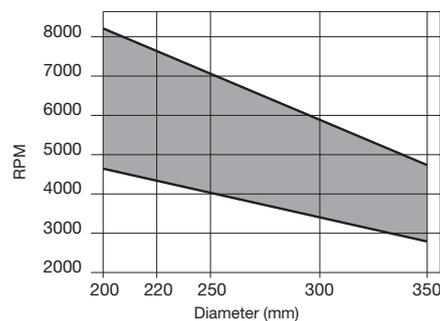
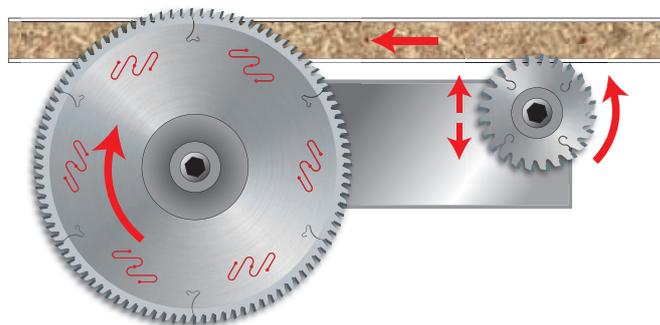
Hook angle 5° for cutting heights up to 30 mm

| D | B | b | d | Z | α | NL | Freud Code | Art. No. |
|-----|-----|-----|----|-----|----|--------|------------|------------|
| mm | mm | mm | mm | | | | | |
| 200 | 3,2 | 2,2 | 30 | 64 | 5° | 2/7/42 | LU3D 0100 | F03FS05081 |
| 220 | 3,2 | 2,2 | 30 | 64 | 5° | - | LU3D 0200 | F03FS05083 |
| 250 | 3,2 | 2,2 | 30 | 80 | 5° | FT01 | LU3D 0400 | F03FS05088 |
| 250 | 3,2 | 2,2 | 55 | 80 | 5° | - | LU3D 0455 | F03FS09973 |
| 300 | 3,2 | 2,2 | 30 | 96 | 5° | FT01 | LU3D 0600 | F03FS05093 |
| 300 | 3,2 | 2,2 | 35 | 96 | 5° | - | LU3D 0700 | F03FS05096 |
| 350 | 3,5 | 2,5 | 30 | 108 | 5° | FT02 | LU3D 0900 | F03FS05098 |

Hook angle 10° for cutting heights up to 40 mm

| D | B | b | d | Z | α | NL | Freud Code | Art. No. |
|-----|-----|-----|----|-----|-----|---------|------------|------------|
| mm | mm | mm | mm | | | | | |
| 250 | 3,2 | 2,2 | 30 | 60 | 10° | FT01 | LU3D 1100 | F03FS05100 |
| 250 | 3,2 | 2,2 | 60 | 60 | 10° | 2/11/85 | LU3D 1160 | F03FS09974 |
| 300 | 3,2 | 2,2 | 30 | 72 | 10° | FT01 | LU3D 2100 | F03FS05810 |
| 300 | 3,2 | 2,2 | 30 | 84 | 10° | FT01 | LU3D 1300 | F03FS05101 |
| 300 | 3,2 | 2,2 | 30 | 96 | 10° | FT01 | LU3D 1500 | F03FS05104 |
| 350 | 3,5 | 2,5 | 30 | 72 | 10° | FT02 | LU3D 2000 | F03FS05108 |
| 350 | 3,5 | 2,5 | 30 | 108 | 10° | FT02 | LU3D 1700 | F03FS05105 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



LU3E

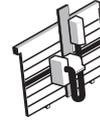
Saw blades to cut bilaminated panels



Squaring Saws



Horizontal Panel Sizing Machines



Vertical Panel Sizing Machines



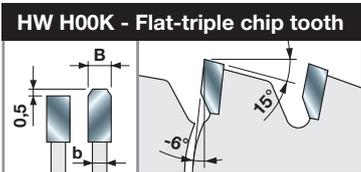
Laminated Chipboard



Laminated MDF



●●● Ultimate ●● High ● Good



Machines:

Squaring saws, horizontal and vertical panel sizing machines.

Materials:

Laminated chipboard and laminated MDF.

Applications:

Panel sizing.

Technical information:

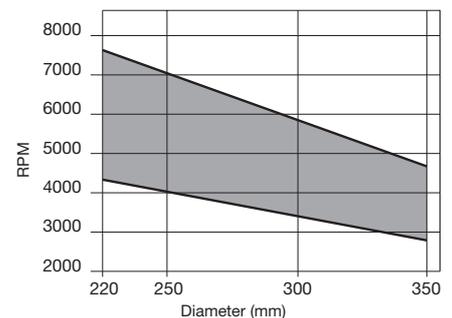
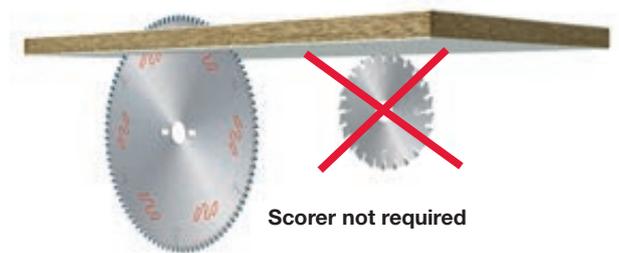
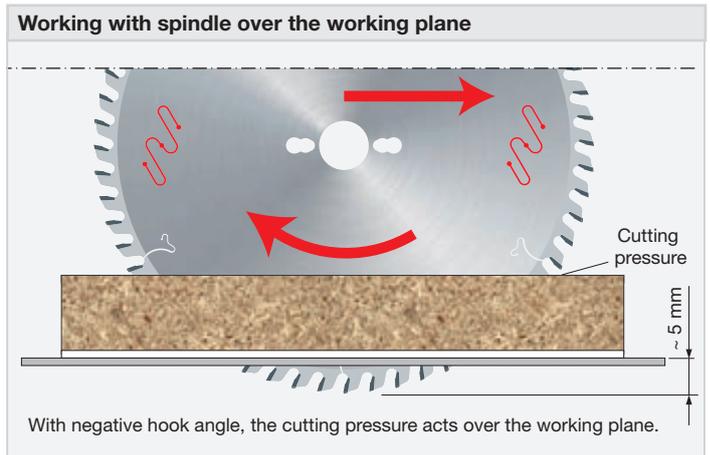
To size chipboard and MDF bilaminated panels with thickness up to 40 mm.

In detail, it is suitable to work melamine-coated panels.

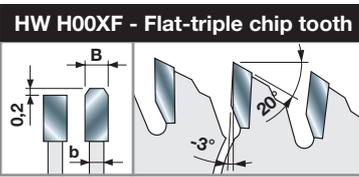
No scoring saw blades needed.

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|--------|------------|------------|
| mm | mm | mm | mm | | | | |
| 220 | 3,2 | 2,2 | 30 | 56 | 2/7/42 | LU3E 0100 | F03FS05109 |
| 250 | 3,2 | 2,2 | 30 | 60 | FT01 | LU3E 0200 | F03FS05111 |
| 300 | 3,2 | 2,2 | 30 | 72 | FT01 | LU3E 0300 | F03FS05113 |
| 350 | 3,5 | 2,5 | 30 | 84 | FT02 | LU3E 0400 | F03FS05115 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



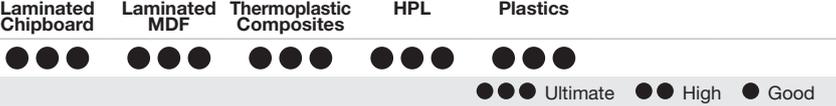
Machines:
Squaring saws, horizontal and vertical panel sizing machines.

Materials:
Laminated chipboard, laminated MDF, thermoplastic composites, HPL and plastics.

Applications:
Panel sizing.

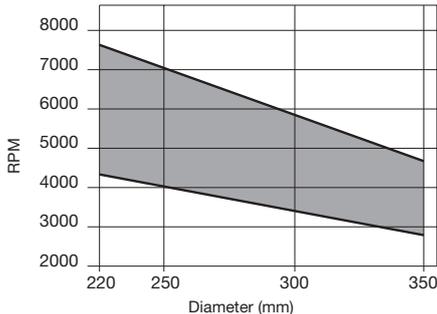
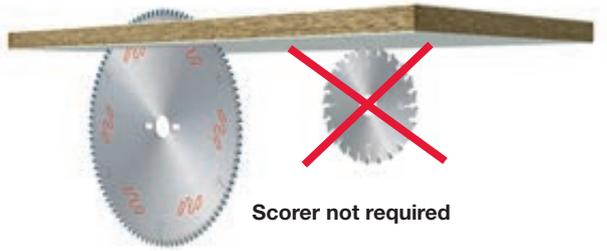
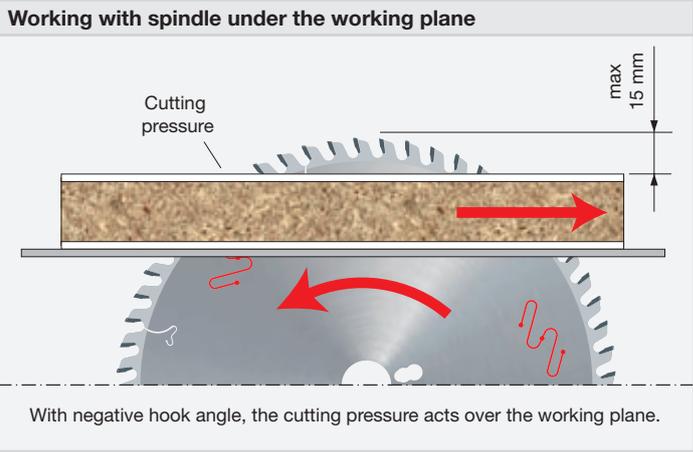
Technical information:
Suitable to work melamine-coated chipboard and MDF panels and plastic materials.
No scoring saw blades needed.
The H00XF Carbide grants extremely long blade lifetime.

LU3F Saw blades to cut bilaminated panels and plastic materials



| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|------|------|------|------|-----|--------|------------|------------|
| 220 | 3,2 | 2,2 | 30 | 64 | 2/7/42 | LU3F 0100 | F03FS05117 |
| 250 | 3,2 | 2,2 | 30 | 80 | FT01 | LU3F 0200 | F03FS05119 |
| 300 | 3,2 | 2,2 | 30 | 96 | FT01 | LU3F 0300 | F03FS05121 |
| 350 | 3,5 | 2,5 | 30 | 108 | FT02 | LU3F 0400 | F03FS05124 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



LG3D

Saw blades to cut bilaminated panels



Squaring Saws



Chipboard



Laminated Chipboard



MDF



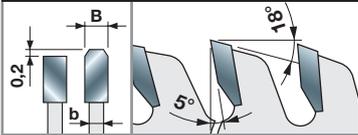
Laminated MDF



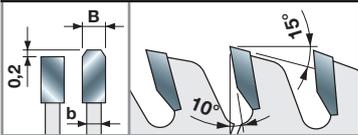
●●●● Ultimate ●● High ● Good



HW H00XA - Flat-triple chip tooth



HW H00XA - Flat-triple chip tooth



Machines:
Squaring saws.

Materials:
Wood based panels, laminated chipboard, MDF and laminated MDF.

Applications:
Panel sizing.

Technical information:
To size chipboard and MDF bilaminated panels with the employment of the scoring saw blade, in detail melamine-coated panels, with good finishing and long cutting life.

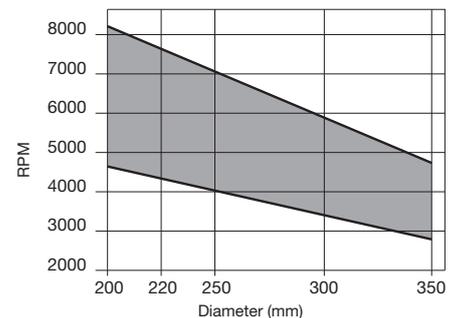
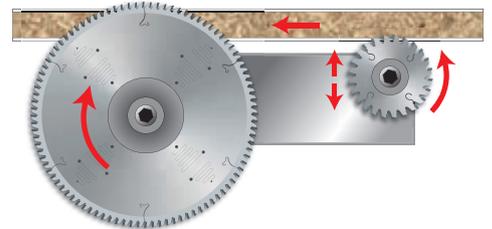
Hook angle 5°

| D mm | B mm | b mm | d mm | Z | α | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|----------|------|------------|------------|
| 250 | 3,2 | 2,2 | 30 | 80 | 5° | FT01 | LG3D 0400 | F03FS07438 |
| 300 | 3,2 | 2,2 | 30 | 96 | 5° | FT01 | LG3D 0600 | F03FS07436 |
| 350 | 3,5 | 2,5 | 30 | 108 | 5° | FT02 | LG3D 0900 | F03FS07437 |

Hook angle 10°

| D mm | B mm | b mm | d mm | Z | α | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|----------|------|------------|------------|
| 300 | 3,2 | 2,2 | 30 | 72 | 10° | FT01 | LG3D 2100 | F03FS07574 |
| 350 | 3,5 | 2,5 | 30 | 72 | 10° | FT02 | LG3D 2000 | F03FS07573 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60

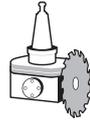


Minimum and maximum RPM based on the blade diameter.



LU34M

Saw blades for grooving and sizing on CNC units



CNC Cutting Units



Softwood



Hardwood



Laminated Chipboard



Laminated MDF



Plywood



Ripping



Crosscutting



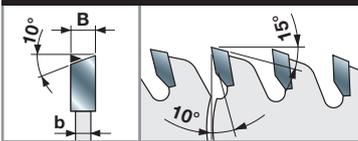
Grooving



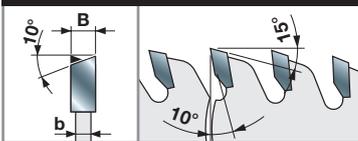
●●● Ultimate ●● High ● Good



HW H00K - ATB 10° tooth



HW H00XA - ATB 10° tooth **



Machines:

CNC cutting units.

Materials:

Softwood, hardwood, laminated chipboard, laminated MDF and plywood.

Applications:

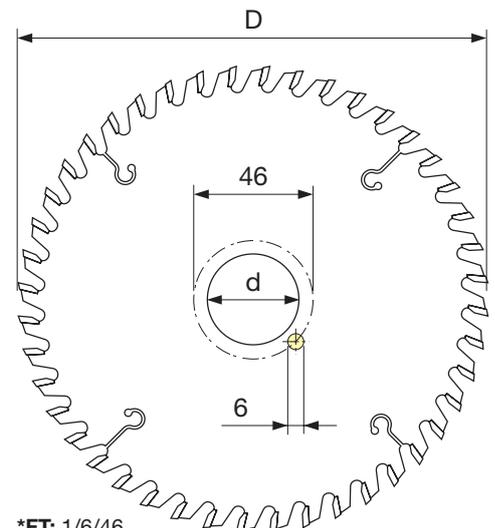
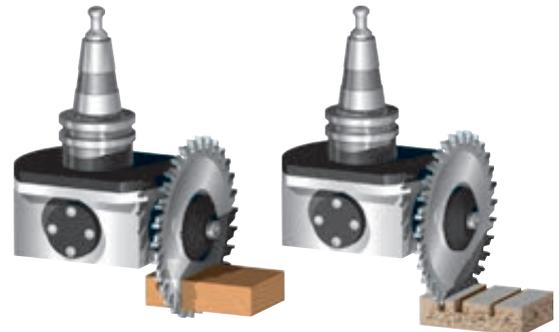
Sizing on CNC, ripping, crosscutting, grooving on CNC.

Technical information:

Saw blades dedicated to CNC machines. For grooving along and across grain on softwood, hardwood and laminates.

| D | B | b | d | Z | Max RPM | Freud Code | Art. No. |
|-----|-----|-----|----|------|---------|-------------|------------|
| mm | mm | mm | mm | | 1/min. | | |
| 120 | 4,0 | 3,0 | 30 | 18 | 12.000 | LU34M40AC3 | F03FS06095 |
| 120 | 4,0 | 3,0 | 20 | 30 | 12.000 | LU34M40EA3 | F03FS06367 |
| 120 | 4,0 | 3,0 | 35 | 30 | 12.000 | LU34M40EC3* | F03FS05141 |
| 120 | 5,0 | 3,0 | 30 | 18 | 12.000 | LU34M50AC3 | F03FS06096 |
| 120 | 5,0 | 3,0 | 35 | 30 | 12.000 | LU34M50EC3* | F03FS05143 |
| 120 | 6,0 | 3,0 | 30 | 18** | 12.000 | LU34M60AC3 | F03FS06097 |
| 120 | 6,0 | 3,0 | 35 | 30** | 12.000 | LU34M60EC3* | F03FS05145 |
| 180 | 4,0 | 3,0 | 35 | 44 | 10.000 | LU34M40NC3* | F03FS05142 |
| 180 | 5,0 | 3,0 | 35 | 44 | 10.000 | LU34M50NC3* | F03FS05144 |
| 180 | 6,0 | 3,0 | 35 | 44** | 10.000 | LU34M60NC3* | F03FS05146 |

Working examples



*FT: 1/6/46



LI25M

Conical scoring saw blades



Horizontal Panel Sizing Machines



Squaring Saws



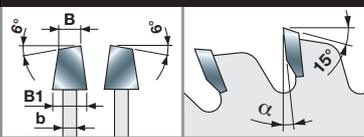
Laminated Chipboard



Laminated MDF



HW H00XA - ATB 6° conical tooth



Machines:

Horizontal panel sizing machines and squaring saws.

Materials:

Laminated chipboard and laminated MDF.

Applications:

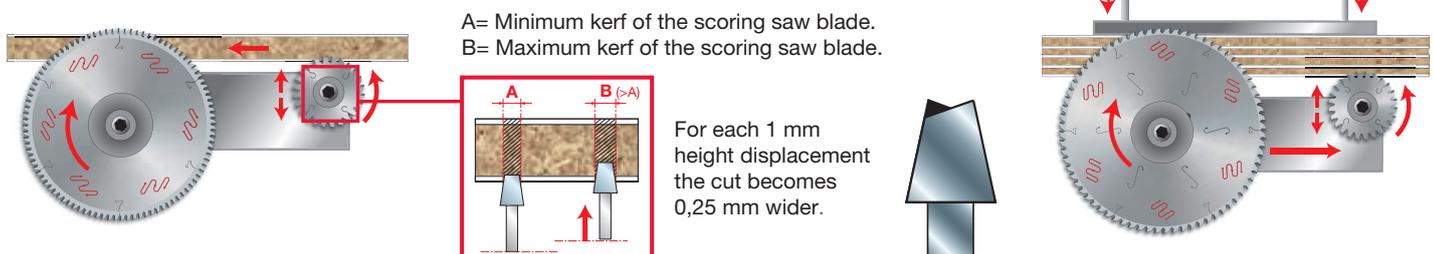
Panel scoring.

Technical information:

To score the coating on bilaminated panels.

| D | B-B1 | b | d | Z | α | NL | Machines | Freud Code | Art. No. |
|-----|-----------|-----|------|----|----------|--------|---|------------|------------|
| mm | mm | mm | mm | | | | | | |
| 80 | 3,1 - 4,3 | 2,2 | 20 | 12 | 0° | - | Casadei | LI25M31AA3 | F03FS02606 |
| 80 | 3,1 - 4,3 | 2,2 | 22 | 12 | 0° | - | | LI25M31AB3 | F03FS02608 |
| 100 | 3,1 - 4,3 | 2,5 | 20 | 20 | 0° | - | | LI25M31BC3 | F03FS06099 |
| 100 | 3,1 - 4,3 | 2,2 | 20 | 24 | 0° | - | Schelling | LI25M31BA3 | F03FS02610 |
| 100 | 3,1 - 4,3 | 2,2 | 22 | 24 | 0° | - | | LI25M31BB3 | F03FS02612 |
| 110 | 3,1 - 4,3 | 2,2 | 20 | 24 | 0° | - | | LI25M31CA3 | F03FS02614 |
| 110 | 3,1 - 4,3 | 2,2 | 22 | 24 | 0° | - | | LI25M31CB3 | F03FS02615 |
| 115 | 3,1 - 4,3 | 2,2 | 20 | 24 | 0° | - | | LI25M31DA3 | F03FS02616 |
| 115 | 3,1 - 4,3 | 2,2 | 22 | 24 | 0° | - | | LI25M31DB3 | F03FS02618 |
| 115 | 4,1 - 5,3 | 3,0 | 45 | 24 | 0° | - | SCM | LI25M41DE3 | F03FS08039 |
| 120 | 2,8 - 4,0 | 2,2 | 20 | 24 | 0° | - | Schelling | LI25M28EA3 | F03FS02604 |
| 120 | 2,8 - 4,0 | 2,2 | 22 | 24 | 0° | - | | LI25M28EB3 | F03FS02605 |
| 120 | 3,1 - 4,3 | 2,2 | 20 | 24 | 0° | - | | LI25M31EA3 | F03FS02620 |
| 120 | 3,1 - 4,3 | 2,2 | 22 | 24 | 0° | - | | LI25M31EB3 | F03FS02622 |
| 120 | 3,1 - 4,3 | 2,5 | 20 | 24 | 0° | - | | LI25M31EC3 | F03FS05978 |
| 120 | 3,4 - 4,6 | 2,2 | 20 | 24 | 0° | - | SCM | LI25M34EA3 | F03FS02632 |
| 125 | 3,1 - 4,3 | 2,2 | 20 | 24 | 0° | - | Panhans - Schelling | LI25M31FA3 | F03FS02623 |
| 125 | 3,1 - 4,3 | 2,2 | 22 | 24 | 0° | - | Martin | LI25M31FB3 | F03FS02625 |
| 125 | 3,1 - 4,3 | 2,5 | 20 | 24 | 0° | - | Panhans - Schelling | LI25M31FC3 | F03FS05932 |
| 125 | 3,4 - 4,6 | 2,2 | 20 | 24 | 0° | - | | LI25M34FA3 | F03FS02634 |
| 125 | 3,4 - 4,6 | 2,2 | 45 | 24 | 0° | - | | LI25M34FE3 | F03FS02636 |
| 125 | 4,3 - 5,5 | 3,2 | 20 | 24 | 0° | - | Panhans - Gabbiani | LI25M43FA3 | F03FS02643 |
| 125 | 4,3 - 5,5 | 3,2 | 45 | 24 | 0° | - | Giben - Homag | LI25M43FE3 | F03FS02645 |
| 125 | 4,5 - 5,7 | 3,0 | 20 | 24 | 0° | - | | LI25M45FA3 | F03FS02697 |
| 125 | 4,5 - 5,7 | 3,0 | 45 | 24 | 0° | - | Giben - Homag | LI25M45FE3 | F03FS02699 |
| 140 | 3,1 - 4,3 | 2,2 | 16 | 28 | 8° | 1/6/33 | Scheer | LI25M31HM3 | F03FS02627 |
| 140 | 3,4 - 4,6 | 3,0 | 45 | 24 | 8° | - | | LI25M34HE3 | F03FS02638 |
| 140 | 4,3 - 5,5 | 3,2 | 45 | 28 | 8° | - | Euromac | LI25M43HE3 | F03FS02647 |
| 140 | 4,5 - 5,7 | 3,0 | 45 | 24 | 8° | - | | LI25M45HE3 | F03FS02701 |
| 145 | 4,3 - 5,5 | 3,2 | 45 | 30 | 8° | - | Hansol Machine | LI25M43WE3 | F03FS08015 |
| 150 | 3,1 - 4,3 | 2,2 | 30 | 36 | 8° | - | SCM | LI25M31KC3 | F03FS02628 |
| 150 | 3,4 - 4,6 | 2,2 | 30 | 36 | 8° | - | SCM | LI25M34KC3 | F03FS02639 |
| 150 | 4,3 - 5,6 | 3,2 | 30 | 36 | 8° | - | SCM, Verry | LI25M43KC3 | F03FS02649 |
| 150 | 4,3 - 5,6 | 3,2 | 45 | 36 | 8° | - | SCM, Holzma, Homag, Haisung Woodworking Machinery | LI25M43KE3 | F03FS02651 |
| 150 | 4,5 - 5,8 | 3,0 | 30 | 36 | 8° | - | SCM | LI25M45KC3 | F03FS02702 |
| 150 | 4,5 - 5,8 | 3,0 | 45 | 36 | 8° | - | SCM | LI25M45KE3 | F03FS02704 |
| 160 | 3,1 - 4,3 | 2,2 | 20 | 36 | 8° | - | Langzauner | LI25M31LA3 | F03FS02630 |
| 160 | 3,4 - 4,6 | 2,2 | 25,4 | 36 | 8° | - | | LI25M34LR3 | F03FS02641 |
| 160 | 4,3 - 5,5 | 3,2 | 25,4 | 36 | 8° | - | | LI25M43LR3 | F03FS02660 |
| 160 | 4,3 - 5,5 | 3,2 | 30 | 36 | 8° | - | Langzauner | LI25M43LC3 | F03FS02653 |

| D mm | B-B1 mm | b mm | d mm | Z | α | NL | Machines | Freud Code | Art. No. |
|---------|------------|---------|---------|----|----------|-----------------------------|-----------------------|--------------|------------|
| 160 | 4,3 - 5,5 | 3,2 | 45 | 36 | 8° | 3/11/70 | Giben | LI25M43LE3 | F03FS02655 |
| 160 | 4,3 - 5,5 | 3,2 | 55 | 36 | 8° | 3/6/84 + 3/7/66 | Gabbiani - SCM | LI25M43LG3 | F03FS02657 |
| 160 | 4,3 - 5,5 | 3,2 | 60 | 36 | 8° | 3/7/80 | | LI25M43LH3 | F03FS02659 |
| 160 | 4,5 - 5,7 | 3,0 | 45 | 36 | 8° | 3/11/70 | Giben | LI25M45LE3 | F03FS02706 |
| 160 | 4,5 - 5,7 | 3,0 | 55 | 36 | 8° | 3/7/66 + 3/9/72 | Gabbiani | LI25M45LG3 | F03FS02708 |
| 175 | 4,3 - 5,5 | 3,2 | 75 | 36 | 8° | - | Wonpoong | LI25M43WT3 | F03FS07816 |
| 180 | 3,1 - 4,3 | 2,2 | 16 | 42 | 8° | 1/6/33 | Scheer | LI25M31NM3 | F03FS02631 |
| 180 | 3,4 - 4,6 | 2,2 | 25,4 | 36 | 8° | - | | LI25M34NR3 | F03FS02642 |
| 180 | 4,3 - 5,5 | 3,2 | 20 | 28 | 8° | - | Schelling - Anthon | LI25M43NA3 | F03FS02661 |
| 180 | 4,3 - 5,5 | 3,2 | 30 | 28 | 8° | 2/7/42 + 2/10/60 | Panhans - Holzer | LI25M43NC3 | F03FS02663 |
| 180 | 4,3 - 5,5 | 3,2 | 20 | 36 | 8° | - | Schelling - Anthon | LI25M43XA3 | F03FS06372 |
| 180 | 4,3 - 5,5 | 3,2 | 30 | 36 | 8° | 2/7/42 + 2/10/60 | Holzher, Nanxing, KDT | LI25M43XN3 | F03FS06373 |
| 180 | 4,3 - 5,5 | 3,2 | 45 | 36 | 8° | - | Holzma | LI25M43NE3 | F03FS02664 |
| 180 | 4,3 - 5,5 | 3,2 | 50 | 36 | 8° | 8/13/80 | Giben | LI25M43NF3 | F03FS02666 |
| 180 | 4,5 - 5,7 | 3,0 | 20 | 36 | 8° | - | Schelling - Anthon | LI25M45NA3 | F03FS02710 |
| 180 | 4,7 - 5,9 | 3,5 | 45 | 36 | 8° | - | Holzma | LI25M47NE3 | F03FS02715 |
| 180 | 5,1 - 6,3 | 3,5 | 55 | 36 | 8° | 3/7/66 | Gabbiani | LI25M51NG3 | F03FS02724 |
| 180 | 5,7 - 6,9 | 4,0 | 20 | 36 | 8° | - | Anthon - Holzma | LI25M57NA3 | F03FS02727 |
| 200 | 4,3 - 5,5 | 3,2 | 20 | 36 | 8° | 2/10/60 + 2/9/62 + 2/11/66 | Schelling | LI25M43PA3 | F03FS02670 |
| 200 | 4,3 - 5,5 | 3,2 | 22 | 36 | 8° | - | | LI25M43PB3 | F03FS02673 |
| 200 | 4,3 - 5,5 | 3,2 | 30 | 36 | 8° | 2/9/60 + 2/10/60 | Scheer | LI25M43PC3 | F03FS02674 |
| 200 | 4,3 - 5,5 | 3,2 | 45 | 36 | 8° | - | Holzma, Hyundai Sangi | LI25M43PE3 | F03FS02676 |
| 200 | 4,3 - 5,5 | 3,2 | 50 | 36 | 8° | 2/7/80 + 3/13/80 | Giben, KDT | LI25M43PF3 | F03FS02679 |
| 200 | 4,3 - 5,5 | 3,2 | 65 | 36 | 8° | 2/9/100 + 2/9/110 | Selco | LI25M43PI3 | F03FS02681 |
| 200 | 4,3 - 5,5 | 3,2 | 75 | 36 | 8° | - | Hyundai Sangi | LI25M43PT3 | F03FS07755 |
| 200 | 4,3 - 5,5 | 3,2 | 80 | 36 | 8° | 2/14/110 | Gabbiani | LI25M43PL3 | F03FS02683 |
| 200 | 4,5 - 5,7 | 3,0 | 22 | 36 | 8° | - | | LI25M45PB3 | F03FS02712 |
| 200 | 4,5 - 5,7 | 3,0 | 65 | 36 | 8° | 2/9/110 | Selco | LI25M45PI3 | F03FS02714 |
| 200 | 4,7 - 5,9 | 3,5 | 20 | 36 | 8° | 2/11/66 | | LI25M47PA3 | F03FS02716 |
| 200 | 4,7 - 5,9 | 3,5 | 22 | 36 | 8° | - | | LI25M47PB3 | F03FS02717 |
| 200 | 4,7 - 5,9 | 3,5 | 30 | 36 | 8° | 2/9/60 | Scheer | LI25M47PC3 | F03FS02718 |
| 200 | 4,7 - 5,9 | 3,5 | 45 | 36 | 8° | - | Holzma | LI25M47PE3 | F03FS02719 |
| 200 | 4,7 - 5,9 | 3,5 | 65 | 36 | 8° | 2/9/100 + 2/9/110 | Selco | LI25M47PI3 | F03FS02720 |
| 200 | 5,4 - 6,6 | 4,0 | 20 | 36 | 8° | - | | LI25M54PA3 | F03FS02726 |
| 200 | 5,7 - 6,9 | 4,0 | 45 | 36 | 8° | - | Holzma | LI25M57PE3 | F03FS02728 |
| 200 | 5,7 - 6,9 | 3,5 | 65 | 36 | 8° | 2/9/110 | | LI25M57PI3BS | F03FS08165 |
| 200 | 6,1 - 7,3 | 4,0 | 20 | 36 | 8° | 2/11/66 | Schelling, Scheer | LI25M61PA3 | F03FS02730 |
| 215 | 4,3 - 5,5 | 3,2 | 50 | 42 | 8° | 2/7/80 + 3/15/80 | Giben | LI25M43QF3 | F03FS02685 |
| 215 | 4,5 - 5,7 | 3,2 | 50 | 42 | 8° | 3/15/80 | Giben | LI25M45PF3 | F03FS02713 |
| 220 | 6,3 - 7,5 | 4,4 | 20 | 36 | 8° | 2/11/66 | Schelling | LI25M63UA3 | F03FS02732 |
| 250 | 3,1 - 4,3 | 2,2 | 30 | 54 | 8° | - | | LI25M310C3 | F03FS07595 |
| 250 | 4,3 - 5,5 | 3,2 | 50 | 48 | 8° | 3/13/80 | Giben | LI25M430F3 | F03FS02669 |
| 250 | 4,3 - 5,5 | 3,2 | 30 | 48 | 8° | 2/10/60 | | LI25M430C3 | F03FS02668 |
| 280 | 4,3 - 5,5 | 3,2 | 30 | 48 | 12° | 2/10/60 | Panhans | LI25M43VC3 | F03FS07419 |
| 300 | 4,3 - 5,5 | 3,0 | 65 | 48 | 12° | 2/9/100 + 2/9/110 | Selco | LI25M43RX3 | F03FS07616 |
| 300 | 4,3 - 5,5 | 3,2 | 30 | 48 | 12° | 2/11/73 + 2/11/75 + 2/13/94 | Schelling | LI25M43RC3 | F03FS07577 |
| 300 | 4,3 - 5,5 | 3,5 | 50 | 48 | 12° | 3/15/80 | Giben | LI25M43RM3 | F03FS02693 |
| 300 | 4,3 - 5,5 | 3,2 | 65 | 72 | 12° | 2/9/100 + 2/9/110 | Selco | LI25M43RI3 | F03FS02689 |
| 300 | 4,3 - 5,5 | 3,2 | 80 | 72 | 12° | 2/14/110 | | LI25M43RL3 | F03FS02691 |
| 300 | 4,7 - 5,9 | 3,5 | 65 | 48 | 6° | 2/9/110 | Selco | LI25M47RX3 | F03FS07744 |
| 320 | 4,3 - 5,5 | 3,0 | 45 | 48 | 12° | - | | LI25M43SE3 | F03FS02696 |
| 320 | 4,3 - 5,5 | 3,2 | 45 | 48 | 12° | - | | LI25M43SA3 | F03FS02695 |
| 340 | 4,7 - 5,9 | 3,5 | 45 | 72 | 12° | 3/14/65 | Holzma | LI25M47TE3 | F03FS02722 |





DLI25M Polycrystalline Diamond conical scoring saw blades (H4 - H6)



Horizontal Panel Sizing Machines



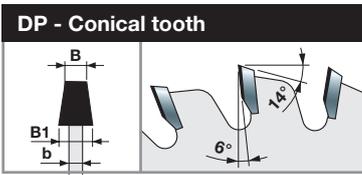
Squaring Saws



Laminated Chipboard



Laminated MDF



Machines:
Horizontal panel sizing machines and squaring saws.

Materials:
Laminated chipboard and laminated MDF.

Applications:
Panel scoring.

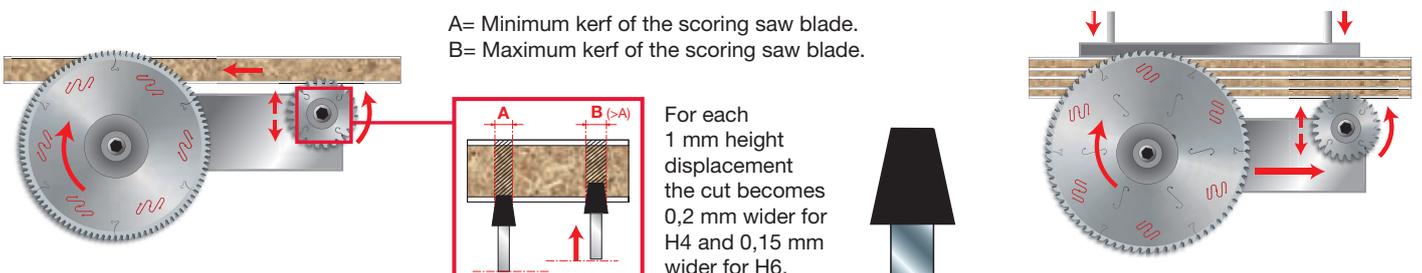
Technical information:
Extremely longer lifetime thanks to the Polycrystalline Diamond teeth material.
Delivered in dedicated wooden boxes.

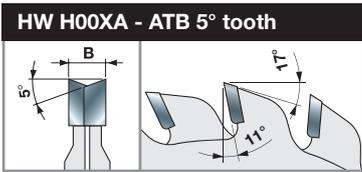
Polycrystalline Diamond conical scoring saw blades H4

| D mm | B-B1 mm | b mm | d mm | Z | NL | Machines | Freud Code | Art. No. |
|---------|------------|---------|---------|----|-------------------|---------------------|--------------|------------|
| 120 | 2,8 - 3,6 | 2,2 | 20 | 24 | - | Schelling | DLI25M28EAH4 | F03FS09613 |
| 120 | 2,8 - 3,6 | 2,2 | 22 | 24 | - | | DLI25M28EBH4 | F03FS09615 |
| 120 | 3,1 - 3,9 | 2,2 | 20 | 24 | - | | DLI25M31EAH4 | F03FS09617 |
| 125 | 3,1 - 3,9 | 2,2 | 20 | 24 | - | Panhans - Schelling | DLI25M31FAH4 | F03FS09619 |
| 180 | 4,3 - 5,1 | 3,2 | 45 | 30 | - | Holzma | DLI25M43NEH4 | F03FS09621 |
| 180 | 4,7 - 5,5 | 3,5 | 45 | 30 | - | Holzma | DLI25M47NEH4 | F03FS09623 |
| 200 | 4,3 - 5,1 | 3,2 | 65 | 36 | 2/9/100 + 2/9/110 | Selco | DLI25M43PIH4 | F03FS09625 |
| 200 | 4,3 - 5,1 | 3,2 | 80 | 36 | 2/14/110 | Gabbiani | DLI25M43PLH4 | F03FS09627 |
| 200 | 4,7 - 5,5 | 3,5 | 45 | 36 | - | Holzma | DLI25M47PEH4 | F03FS09629 |
| 200 | 4,7 - 5,5 | 3,5 | 65 | 36 | 2/9/100 + 2/9/110 | Selco | DLI25M47PIH4 | F03FS09631 |
| 215 | 4,3 - 5,1 | 3,2 | 50 | 42 | 2/7/80 + 3/15/80 | Giben | DLI25M43QFH4 | F03FS09633 |

Polycrystalline Diamond conical scoring saw blades H6

| D mm | B-B1 mm | b mm | d mm | Z | NL | Machines | Freud Code | Art. No. |
|---------|------------|---------|---------|----|-------------------|---------------------|--------------|------------|
| 120 | 2,8 - 3,6 | 2,2 | 20 | 24 | - | Schelling | DLI25M28EAH6 | F03FS09614 |
| 120 | 2,8 - 3,6 | 2,2 | 22 | 24 | - | | DLI25M28EBH6 | F03FS09616 |
| 120 | 3,1 - 3,9 | 2,2 | 20 | 24 | - | | DLI25M31EAH6 | F03FS09618 |
| 125 | 3,1 - 3,9 | 2,2 | 20 | 24 | - | Panhans - Schelling | DLI25M31FAH6 | F03FS09620 |
| 180 | 4,3 - 5,1 | 3,2 | 45 | 30 | - | Holzma | DLI25M43NEH6 | F03FS09622 |
| 180 | 4,7 - 5,5 | 3,5 | 45 | 30 | - | Holzma | DLI25M47NEH6 | F03FS09624 |
| 200 | 4,3 - 5,1 | 3,2 | 65 | 36 | 2/9/100 + 2/9/110 | Selco | DLI25M43PIH6 | F03FS09626 |
| 200 | 4,3 - 5,1 | 3,2 | 80 | 36 | 2/14/110 | Gabbiani | DLI25M43PLH6 | F03FS09628 |
| 200 | 4,7 - 5,5 | 3,5 | 45 | 36 | - | Holzma | DLI25M47PEH6 | F03FS09630 |
| 200 | 4,7 - 5,5 | 3,5 | 65 | 36 | 2/9/100 + 2/9/110 | Selco | DLI25M47PIH6 | F03FS09632 |
| 215 | 4,3 - 5,1 | 3,2 | 50 | 42 | 2/7/80 + 3/15/80 | Giben | DLI25M43QFH6 | F03FS09634 |





Machines:
Squaring saws.

Materials:
Laminated chipboard and laminated MDF.

Applications:
Panel scoring.

Technical information:
To score the coating on bilaminated panels.

LI16M

Adjustable scoring saw blades



Squaring Saws



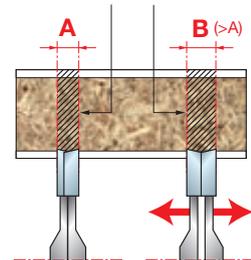
Laminated
Chipboard

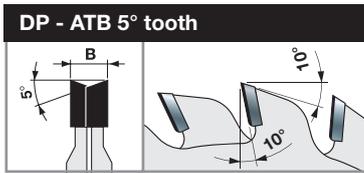
Laminated
MDF

| D | B | d | Z | Machines | Freud Code | Art. No. |
|-----|-----------|------|---------|--------------------------------|------------|------------|
| mm | mm | mm | | | | |
| 80 | 2,8 - 3,6 | 20 | 10 + 10 | Robland | LI16M HA3 | F03FS02502 |
| 80 | 2,8 - 3,6 | 20 | 12 + 12 | Felder | LI16M GA3 | F03FS02501 |
| 100 | 2,8 - 3,6 | 20 | 12 + 12 | Schelling - Panhans - Martin | LI16M BA3 | F03FS02491 |
| 100 | 2,8 - 3,6 | 22 | 12 + 12 | Altendorf - Striebig - Panhans | LI16M BB3 | F03FS02493 |
| 100 | 2,8 - 3,6 | 25,4 | 12 + 12 | Baldan | LI16M BR3 | F03FS07433 |
| 105 | 2,8 - 3,6 | 20 | 10 + 10 | | LI16M CA3 | F03FS02495 |
| 120 | 2,8 - 3,6 | 20 | 12 + 12 | Holzher - SCM | LI16M AA3 | F03FS02485 |
| 120 | 2,8 - 3,6 | 22 | 12 + 12 | Altendorf - Martin - Mrozek | LI16M AB3 | F03FS02488 |
| 120 | 2,8 - 3,6 | 50 | 12 + 12 | Altendorf - Griggio | LI16M PF3* | F03FS02512 |
| 120 | 2,8 - 3,6 | 50 | 12 + 12 | Felder | LI16M RF3* | F03FS06512 |
| 120 | 4,0 - 5,0 | 50 | 12 + 12 | | LI16M IF3* | F03FS02504 |
| 125 | 2,8 - 3,6 | 20 | 12 + 12 | Paoloni | LI16M FA3 | F03FS02500 |
| 125 | 2,8 - 3,6 | 20 | 14 + 14 | | LI16M EA3 | F03FS02498 |
| 125 | 2,8 - 3,6 | 22 | 14 + 14 | | LI16M EB3 | F03FS02499 |
| 125 | 4,0 - 4,7 | 20 | 20 + 20 | SCM | LI16M DA3 | F03FS02496 |
| 125 | 4,0 - 5,0 | 45 | 12 + 12 | Giben - Mayer | LI16M KE3 | F03FS02506 |
| 200 | 4,0 - 5,2 | 50 | 28 + 28 | Giben | LI16M OF3 | F03FS02511 |

* Thickness adjustment controlled by the machines, no spacers required.

A= Minimum kerf of the scoring saw blade.
B= Maximum kerf of the scoring saw blade.





Machines:
Squaring saws.

Materials:
Laminated chipboard and laminated MDF.

Applications:
Panel scoring.

Technical information:
To score the coating on bilaminated panels.
Extremely longer lifetime thanks to the Polycrystalline Diamond teeth material.
Delivered in dedicated wooden boxes.

DLI16M

Polycrystalline Diamond adjustable scoring saw blades (H6)



Squaring Saws



Laminated Chipboard

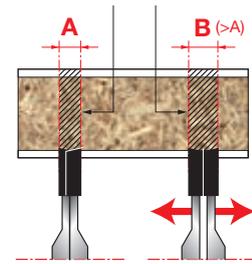


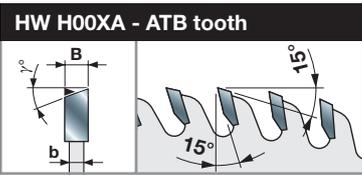
Laminated MDF

DP - Polycrystalline Diamond adjustable scoring saw blades H6

| D | B | d | Z | NL | Freud Code | Art. No. |
|-----|-----------|----|---------|------------------------------|-------------------|------------|
| mm | mm | mm | mm | | | |
| 100 | 2,8 - 3,6 | 20 | 12 + 12 | Schelling - Panhans - Martin | DLI16MBAH6 | F03FS09635 |
| 120 | 2,8 - 3,6 | 20 | 12 + 12 | Holzer - SCM | DLI16MAAH6 | F03FS09636 |
| 120 | 2,8 - 3,6 | 22 | 12 + 12 | Altendorf - Martin - Mrozek | DLI16MABH6 | F03FS09637 |

A= Minimum kerf of the scoring saw blade.
B= Maximum kerf of the scoring saw blade.



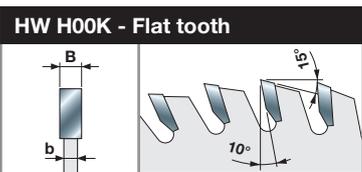


Machines:
Horizontal panel sizing machines.

Materials:
Laminated chipboard and laminated MDF.

Applications:
Panel scoring.

Technical information:
To score the coating on bilaminated panels.



Machines:
Horizontal panel sizing machines.

Materials:
Laminated chipboard and laminated MDF.

Applications:
Panel scoring.

Technical information:
To score bilaminated panels with plastic coating.

LI27M

Postforming scoring saw blades



Horizontal Panel Sizing Machines



Laminated Chipboard Laminated MDF

| D mm | B mm | b mm | d mm | Z | γ | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|----------|-----------------|------------|------------|
| 200 | 4,7 | 3,5 | 80 | 42 | 10° | 2/14/110 | LI27M FA3 | F03FS02749 |
| 220 | 3,4 | 2,2 | 30 | 48 | 10° | - | LI27M AA3 | F03FS02733 |
| 250 | 4,6 | 3,0 | 30 | 48 | 10° | - | LI27M BA3 | F03FS02734 |
| 280 | 4,65 | 3,2 | 80 | 72 | 15° | 2/14/110 | LI27M47VL3 | F03FS08014 |
| 280 | 5,0 | 3,5 | 45 | 84 | 30° | - | LI27M CA3 | F03FS02736 |
| 300 | 4,55 | 3,0 | 30 | 72 | 10° | - | LI27M DF3 | F03FS02745 |
| 300 | 4,55 | 3,2 | 65 | 72 | 10° | 2/9/100+2/9/110 | LI27M DA3 | F03FS02737 |
| 300 | 4,55 | 3,2 | 50 | 72 | 10° | 3/15/80 | LI27M DD3 | F03FS02743 |
| 300 | 4,7 | 3,2 | 80 | 72 | 10° | 2/14/110 | LI27M DC3 | F03FS02741 |
| 300 | 4,95 | 3,0 | 65 | 72 | 10° | 2/9/100+2/9/110 | LI27M DB3 | F03FS02739 |
| 340 | 5,0 | 3,5 | 45 | 48 | 30° | 3/14/65 | LI27M EA3 | F03FS02746 |
| 340 | 5,0 | 3,5 | 45 | 108 | 30° | 3/14/65 | LI27M EB3 | F03FS02747 |

LI20M

Flat tooth scoring saw blades

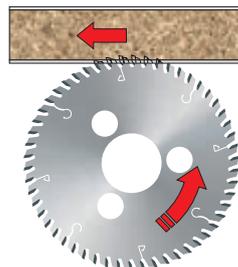


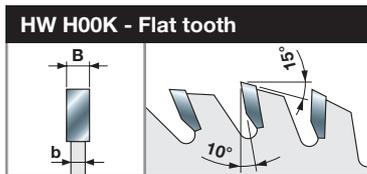
Horizontal Panel Sizing Machines



Laminated Chipboard Laminated MDF

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|---------|------------|------------|
| 180 | 3,2 | 2,2 | 50 | 54 | 3/22/80 | LI20M BB3 | F03FS02579 |



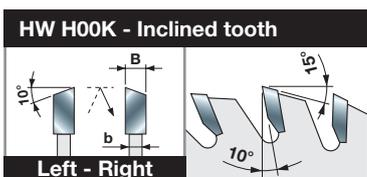


Machines:
SCM horizontal panel sizing machines.

Materials:
Laminated chipboard and laminated MDF.

Applications:
Panel scoring.

Technical information:
To score the coating on bilaminated panels.



Machines:
Horizontal panel sizing machines.

Materials:
Laminated chipboard and laminated MDF.

Applications:
Panel scoring.

Technical information:
To score the coating on bilaminated panels.

LI17M

Flat tooth scoring saw blades



Horizontal Panel Sizing Machines

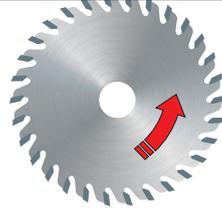


Laminated Chipboard



Laminated MDF

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|----|------------|------------|
| mm | mm | mm | mm | | | | |
| 115 | 3,2 | 2,2 | 20 | 30 | - | LI17M FA3 | F03FS02572 |
| 120 | 3,2 | 2,2 | 20 | 30 | - | LI17M GA3 | F03FS02574 |



LI22MD LI22MS

Inclined tooth scoring saw blades



Horizontal Panel Sizing Machines

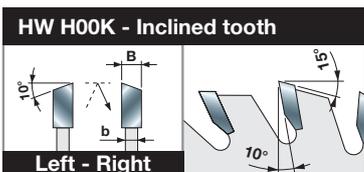


Laminated Chipboard



Laminated MDF

| D | B | b | d | Z | NL | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|-----|-----|----|----|----|------------|------------|------------|------------|
| mm | mm | mm | mm | | | Right (D) | | Left (S) | |
| 150 | 3,2 | 2,2 | 30 | 36 | | LI22MD KC3 | F03FS02581 | LI22MS KC3 | F03FS02592 |
| 150 | 3,2 | 2,2 | 55 | 36 | | LI22MD KG3 | F03FS02583 | LI22MS KG3 | F03FS02594 |
| 150 | 3,2 | 2,2 | 60 | 36 | | LI22MD KH3 | F03FS02584 | LI22MS KH3 | F03FS02595 |
| 180 | 3,2 | 2,2 | 30 | 42 | | LI22MD NC3 | F03FS02585 | LI22MS NC3 | F03FS02596 |
| 180 | 3,2 | 2,2 | 55 | 42 | | LI22MD NG3 | F03FS02586 | LI22MS NG3 | F03FS02598 |
| 200 | 3,2 | 2,2 | 30 | 48 | | LI22MD PC3 | F03FS02589 | LI22MS PC3 | F03FS02601 |
| 200 | 3,2 | 2,2 | 60 | 48 | | LI22MD PH3 | F03FS02590 | LI22MS PH3 | F03FS02602 |



Machines:

Horizontal panel sizing machines and edge banders.

Materials:

Wood based panels, laminated chipboard and laminated MDF.

Applications:

Panel scoring.

Technical information:

To score the coating on bilaminated panels. Especially dedicated to very fragile coating.

LI13MD LI13MS Inclined tooth scoring saw blades



Horizontal Panel Sizing Machines

Edge Banders



Chipboard



Laminated Chipboard

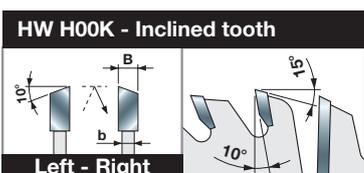


MDF



Laminated MDF

| D | B | b | d | Z | NL | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|-----|-----|----|----|----|------------|------------|------------|------------|
| mm | mm | mm | mm | | | Right (D) | | Left (S) | |
| 100 | 3,2 | 2,2 | 20 | 24 | | LI13MD AA3 | F03FS02452 | LI13MS AA3 | F03FS02466 |
| 100 | 3,2 | 2,2 | 22 | 24 | | LI13MD AB3 | F03FS02454 | LI13MS AB3 | F03FS02468 |
| 125 | 3,2 | 2,2 | 20 | 30 | | LI13MD BA3 | F03FS02455 | LI13MS BA3 | F03FS02470 |
| 150 | 3,2 | 2,2 | 30 | 48 | | LI13MD DA3 | F03FS02459 | LI13MS DA3 | F03FS02474 |
| 150 | 3,2 | 2,2 | 55 | 48 | | LI13MD DB3 | F03FS02461 | LI13MS DB3 | F03FS02476 |



LI14MD LI14MS End trim unit for panels with banded edges



Edge Banders



Chipboard



Laminated Chipboard



MDF



Laminated MDF

| D | B | b | d | Z | NL | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|-----|-----|----|--------|----|------------|------------|------------|------------|
| mm | mm | mm | mm | | | Right (D) | | Left (S) | |
| 140 | 3,2 | 2,2 | 30 | 28 + 4 | | LI14MD CA3 | F03FS02481 | LI14MS CA3 | F03FS02483 |

Machines:

Edge banders.

Materials:

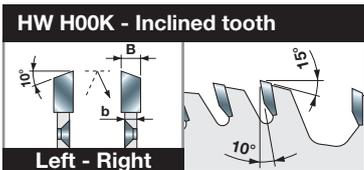
Wood based panels, laminated chipboard and laminated MDF.

Applications:

Panel scoring.

Technical information:

To score the coating on bilaminated panels. Particularly dedicated to very fragile coatings.



Machines:

Double end tenoners.

Materials:

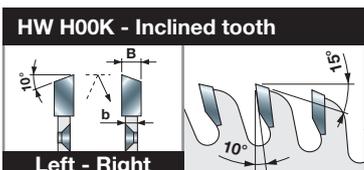
Softwood, hardwood, MDF and plywood.

Applications:

Hogging.

Technical information:

Saw blades suitable for squaring and trimming panels.



Machines:

Squaring edge banding machines and double end tenoners.

Materials:

Chipboard and MDF, laminated chipboard and laminated MDF.

Applications:

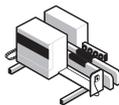
Hogging.

Technical information:

Saw blades suitable for squaring and trimming panels.

**LT16MD
LT16MS**

**Saw blades for
Freud hogging units**



Double End Tenoners



Softwood



Hardwood

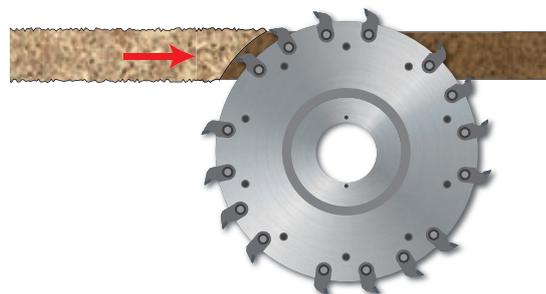


MDF



Plywood

| D | B | b | d | Z | NL | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|-----|-----|-----|----|------------|-------------------|------------|-------------------|------------|
| mm | mm | mm | mm | | | Right (D) | | Left (S) | |
| 250 | 4,2 | 3,0 | 130 | 56 | 10/8,5/170 | LT16MD BD3 | F03FS04401 | LT16MS BD3 | F03FS04409 |
| 300 | 4,2 | 3,0 | 130 | 68 | 10/8,5/215 | LT16MD CD3 | F03FS04404 | LT16MS CD3 | F03FS04412 |

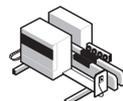


**LT12MD
LT12MS**

Saw blades for hogging units



Edge Banders



Double End Tenoners



Chipboard



MDF

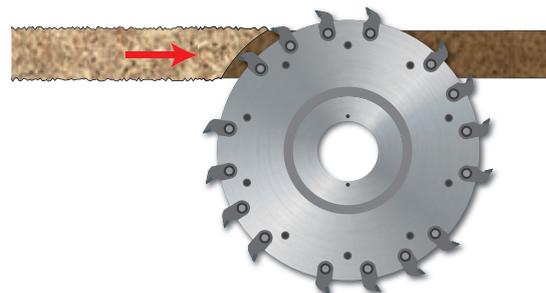


Laminated Chipboard



Laminated MDF

| D | B | b | d | Z | NL | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|-----|-----|-----|----|-----------|-------------------|------------|-------------------|------------|
| mm | mm | mm | mm | | | Right (D) | | Left (S) | |
| 250 | 4,2 | 3,0 | 130 | 60 | 4/8,5/185 | LT12MD BB3 | F03FS04372 | LT12MS BB3 | F03FS07063 |



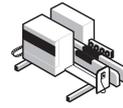


LT14MD LT14MS

Saw blades for hogging units - customised



Edge Banders



Double End
Tenoners



Chipboard



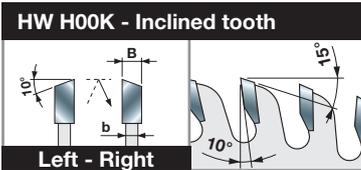
MDF



Laminated
Chipboard



Laminated
MDF



Machines:

Squaring edge banding machines and double end tenoners.

Materials:

Chipboard, MDF, laminated chipboard and laminated MDF.

Applications:

Hogging.

Technical information:

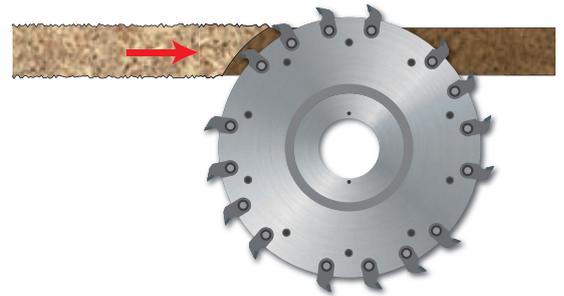
Saw blades suitable for squaring and trimming panels.

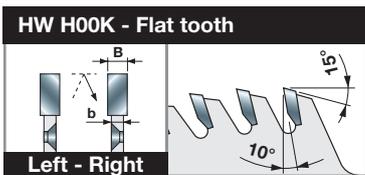
| D | B | b | d | Z | NL | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|-----|-----|-----|----|----|------------|------------|------------|------------|
| mm | mm | mm | mm | | | Right (D) | | Left (S) | |
| 200 | 4,2 | 3,0 | 30 | 48 | * | LT14MD AA3 | F03FS04378 | LT14MS AA3 | F03FS04389 |
| 250 | 4,2 | 3,0 | 30 | 60 | * | LT14MD BA3 | F03FS04380 | LT14MS BA3 | F03FS04391 |
| 250 | 4,2 | 3,0 | 130 | 60 | * | LT14MD BB3 | F03FS04382 | LT14MS BB3 | F03FS04393 |
| 255 | 4,2 | 3,0 | 80 | 60 | * | LT14MD FA3 | F03FS04387 | LT14MS FA3 | F03FS04398 |
| 350 | 4,2 | 3,0 | 30 | 84 | * | LT14MD DA3 | F03FS04386 | LT14MS DA3 | F03FS04397 |

* WHEN ORDERING, ALWAYS SPECIFY:

- OPT08 AA9 - to increase bore Ø;
- OPTFO... - for pin holes (NL* - see page 92).

Send sample saw blade or drawing with bore size. Specify no. of pin holes, diameter of holes (D1) and the diameter of the circumference passing through the centre of the holes (D2).





Machines:

Double end tenoners.

Materials:

Softwood, hardwood, MDF and plywood.

Applications:

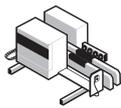
Hogging.

Technical information:

Saw blades suitable for squaring and trimming panels.

**LT18MD
LT18MS**

**Saw blades for
Freud hogging units**



Double End Tenoners



Softwood



Hardwood

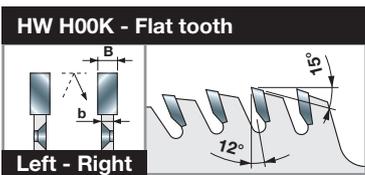


MDF



Plywood

| D | B | b | d | Z | NL | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|-----|-----|-----|----|------------|------------|------------|------------|------------|
| mm | mm | mm | mm | | | Right (D) | | Left (S) | |
| 250 | 4,2 | 3,0 | 130 | 72 | 10/8,5/170 | LT18MD BB3 | F03FS04415 | LT18MS BB3 | F03FS04417 |



Machines:

Double end tenoners.

Materials:

Softwood, hardwood, MDF and plywood.

Applications:

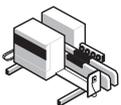
Hogging.

Technical information:

Saw blades suitable for squaring and trimming panels.

**LT20MD
LT20MS**

**Saw blades for Leuco
hogging units**



Double End Tenoners



Softwood



Hardwood

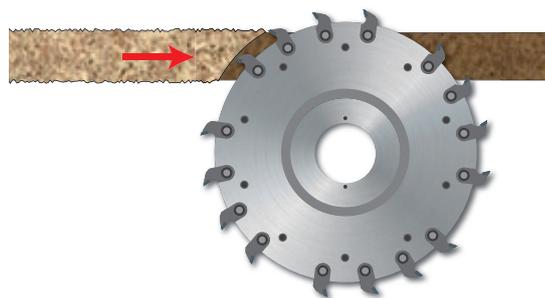


MDF



Plywood

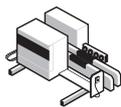
| D | B | b | d | Z | NL | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|-----|-----|-----|----|---------|------------|------------|------------|------------|
| mm | mm | mm | mm | | | Right (D) | | Left (S) | |
| 250 | 4,0 | 3,0 | 100 | 72 | 6/7/200 | LT20MD BB3 | F03FS04421 | LT20MS BB3 | F03FS04422 |





TR16MD TR16MS

Hogging units with SR06M interchangeable inserts



Double End
Tenoners



Softwood



Hardwood



MDF



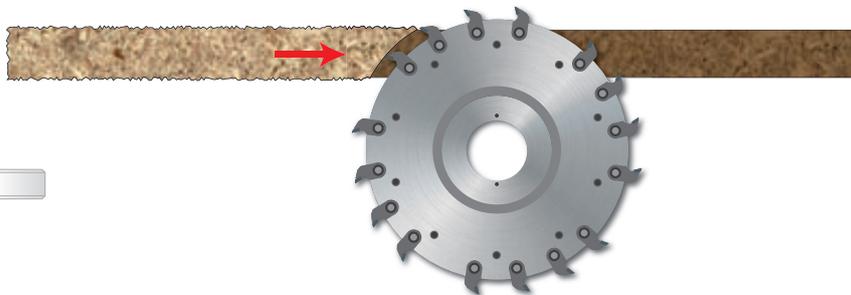
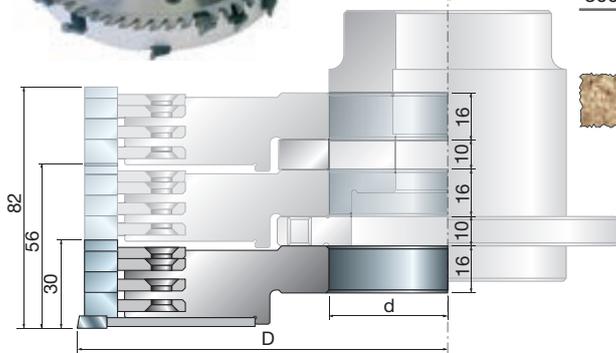
Plywood

* Nominal saw blade diameter.

| D* | B | d | Z | Freud Code | Art. No. | Freud Code | Art. No. |
|-----|----|----|----|------------|------------|------------|------------|
| mm | mm | mm | mm | Right (D) | | Left (S) | |
| 200 | 30 | 80 | 16 | TR16MD AA3 | F03FC20547 | TR16MS AA3 | F03FC20550 |
| 250 | 30 | 60 | 16 | TR16MD BA3 | F03FC20548 | TR16MS BA3 | F03FC20551 |
| 250 | 30 | 80 | 16 | TR16MD BB3 | F03FC22094 | TR16MS BB3 | F03FC22096 |
| 300 | 30 | 60 | 16 | TR16MD CA3 | F03FC20549 | TR16MS CA3 | F03FC20552 |
| 300 | 30 | 80 | 16 | TR16MD CB3 | F03FC22095 | TR16MS CB3 | F03FC22097 |



TR16MS
TR16MD



These tools can be stacked and used in multiples thus enabling the machining of a wider area.

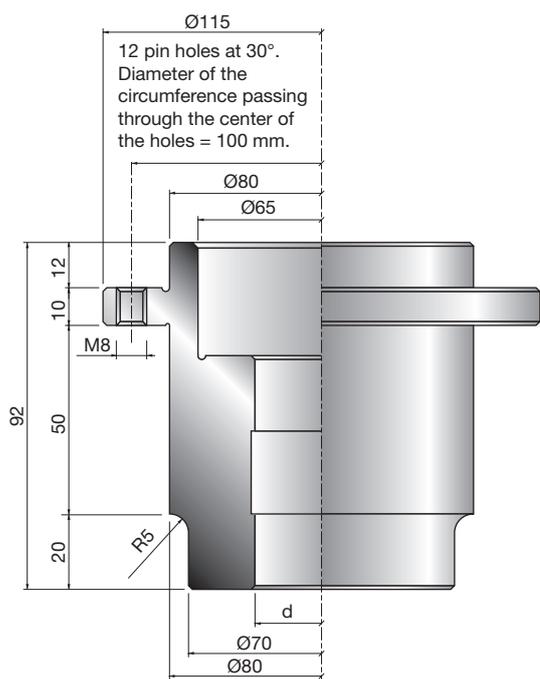
Particularly indicated for squaring solid wood panels.

| Spare parts | Dimensions | Freud Code | Art. No. |
|------------------|-------------|-------------|------------|
| Grooving inserts | 34 x 9 x 16 | SR06MDBB301 | F03FC24198 |
| Grooving inserts | 34 x 9 x 16 | SR06MSBB301 | F03FC24201 |
| Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| Screw | M6 x 10 | VT01M AA9 | F03FA04429 |
| Allen key | 4 | CB03M BA9 | F03FA00163 |

MT01M

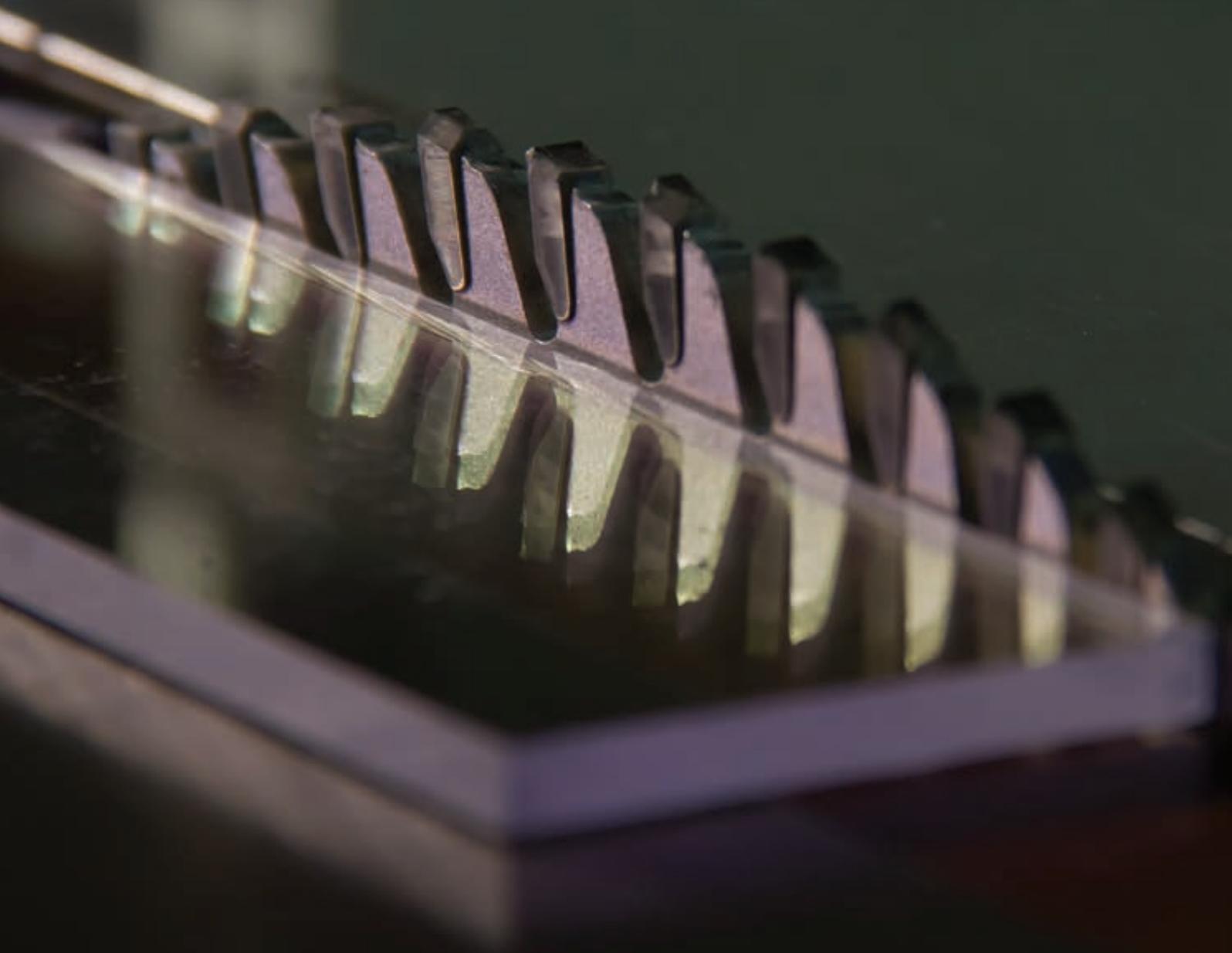
Mounting sleeves for hogging units

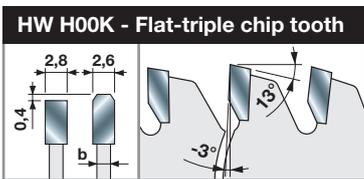
| d | KN | Freud Code | Art. No. |
|----|--------|------------|------------|
| mm | | | |
| 35 | 10 x 4 | MT01M DA9 | F03FC15424 |



Item **MT01M** includes the fixing operation of the mounting sleeve to the hogging unit.

Polymeric Materials





Machines:

Squaring saws and table saws, hand-held circular saws.

Materials:

Plexiglas and plastics.

Applications:

Plexiglas and plastic cutting.

Technical information:

Saw blades with negative cutting angle suitable to cut plastic materials. For a proper use, a blade projection of approximately 30 mm over the workpiece is recommended.

LU4A

Saw blades to cut plastic materials



Squaring Saws



Table Saws



Hand-held Circular Saws



Plexiglas



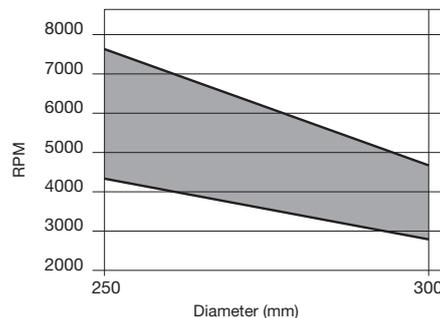
Plastics



●●● Ultimate ●● High ● Good

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|------------|------------|
| mm | mm | mm | mm | | | | |
| 250 | 2,8 | 2,2 | 30 | 80 | FT01 | LU4A 0100 | F03FS05163 |
| 300 | 2,8 | 2,2 | 30 | 96 | FT01 | LU4A 0200 | F03FS05165 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



LU4B Thin kerf saw blades to cut plastic materials and plexiglas - axial angle



Squaring Saws



Table Saws



Hand-held Circular Saws



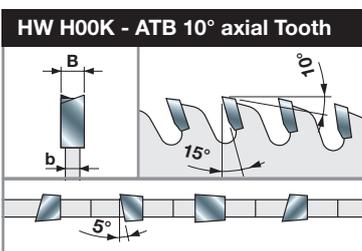
Plexiglas



Plastics



●●● Ultimate ●● High ● Good



| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|------|-----|------|------------|------------|
| mm | mm | mm | mm | | | | |
| 178 | 1,5 | 1,0 | 25,4 | 80 | - | LU4B 0500 | F03FS05173 |
| 203 | 2,0 | 1,4 | 25,4 | 90 | - | LU4B 0100 | F03FS05167 |
| 230 | 2,2 | 1,6 | 25,4 | 100 | - | LU4B 0200 | F03FS05169 |
| 250 | 2,2 | 1,6 | 30 | 100 | FT01 | LU4B 0300 | F03FS05170 |
| 255 | 2,2 | 1,6 | 25,4 | 100 | - | LU4B 0400 | F03FS05172 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60

Machines:

Squaring saws and table saws, hand-held circular saws.

Materials:

Plexiglas and plastics.

Applications:

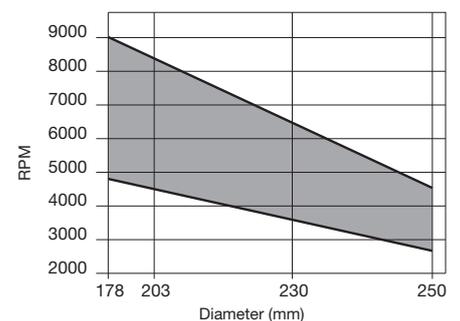
Plexiglas and plastic cutting.

Technical information:

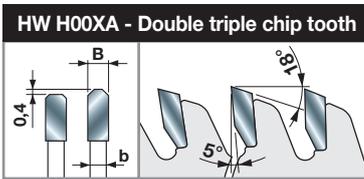
To size plexiglas and plastic panels.

The thin kerf design makes the workpiece feed easy especially when using low-power machines.

A perfect cutting finishing is granted by the 5° axial angle.



Minimum and maximum RPM based on the blade diameter.



Machines:
Squaring saws and table saws, mitre saws.

Materials:
Solid surfaces.

Applications:
Solid surfaces cutting.

Technical information:
The double triple chip grinding ensures flawless finishing, moreover the H00XA Carbide grants a long blade lifetime, thanks to its extraordinary resistance to abrasive materials.

LU4D Saw blades to cut solid surfaces



Squaring Saws



Table Saws



Mitre Saws



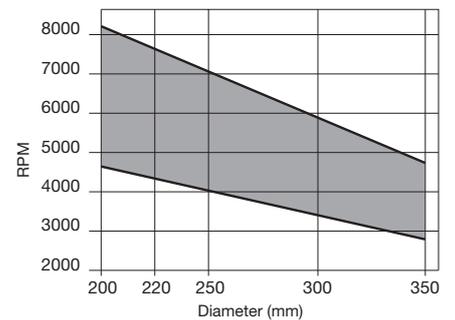
Solid Surfaces



●●● Ultimate ●● High ● Good

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|----|-----|------|------------|------------|
| mm | mm | mm | mm | | | | |
| 250 | 3,2 | 2,5 | 30 | 80 | FT02 | LU4D 0100 | F03FS07294 |
| 300 | 3,2 | 2,5 | 30 | 96 | FT02 | LU4D 0200 | F03FS07295 |
| 350 | 3,5 | 2,8 | 30 | 108 | FT02 | LU4D 0300 | F03FS07296 |

FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.

Non-ferrous Metals





LU5A

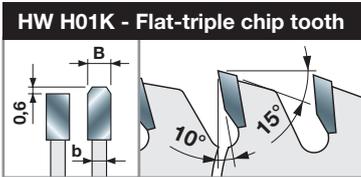
Saw blades to cut non-ferrous metals



Aluminium Copper and Brass



●●● Ultimate ●● High ● Good



Machines:
Double head cutting machines and CNC cutting units.

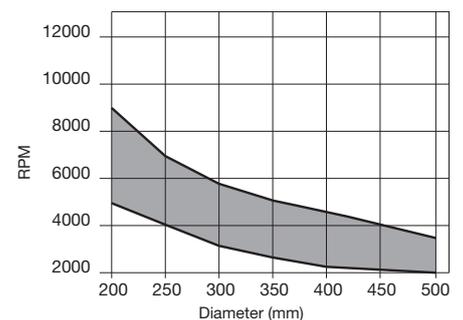
Materials:
Aluminium, copper and brass.

Applications:
Aluminium and non-ferrous metals cutting.

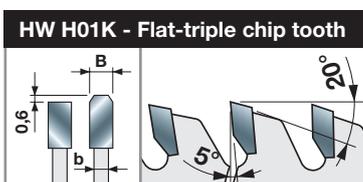
Technical information:
To cut solid drawn products with a thickness between 2 and 10 mm.

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 200 | 2,8 | 2,2 | 30 | 54 | - | LU5A 0100 | F03FS05181 |
| 250 | 3,5 | 3,0 | 30 | 60 | FT02 | LU5A 0200 | F03FS05182 |
| 250 | 3,5 | 3,0 | 32 | 60 | 2/11/63 | LU5A 0300 | F03FS05183 |
| 275 | 3,5 | 3,0 | 40 | 68 | 2/9/55 + 4/12/64 | LU5A 0400 | F03FS05185 |
| 300 | 3,5 | 3,0 | 30 | 72 | FT02 | LU5A 0500 | F03FS05186 |
| 300 | 3,5 | 3,0 | 32 | 72 | 2/11/63 | LU5A 0600 | F03FS05187 |
| 330 | 3,5 | 3,0 | 30 | 84 | FT02 | LU5A 0800 | F03FS05190 |
| 330 | 3,5 | 3,0 | 32 | 84 | 2/11/63 | LU5A 0900 | F03FS05192 |
| 350 | 3,5 | 3,0 | 30 | 84 | FT02 | LU5A 1000 | F03FS05193 |
| 350 | 3,5 | 3,0 | 32 | 84 | 2/11/63 | LU5A 1100 | F03FS05194 |
| 350 | 3,5 | 3,0 | 40 | 84 | 2/9/55 + 4/12/64 | LU5A 1200 | F03FS05196 |
| 370 | 3,5 | 3,0 | 30 | 90 | - | LU5A 1300 | F03FS05197 |
| 370 | 3,5 | 3,0 | 50 | 90 | 4/15/80 | LU5A 1400 | F03FS05198 |
| 380 | 3,5 | 3,0 | 32 | 96 | 2/11/63 | LU5A 1500 | F03FS05199 |
| 400 | 3,5 | 3,0 | 30 | 96 | 2/11/63 | LU5A 1600 | F03FS05200 |
| 400 | 3,5 | 3,0 | 32 | 96 | 2/11/63 | LU5A 1700 | F03FS05202 |
| 400 | 3,5 | 3,0 | 40 | 96 | 2/12/64 + 2/15/80 | LU5A 1800 | F03FS05205 |
| 400 | 3,5 | 3,0 | 50 | 96 | 4/15/80 | LU5A 1900 | F03FS05206 |
| 420 | 3,5 | 3,0 | 30 | 96 | 2/11/70 | LU5A 2000 | F03FS05207 |
| 450 | 4,0 | 3,2 | 30 | 108 | 2/11/63 | LU5A 2100 | F03FS05208 |
| 450 | 4,0 | 3,2 | 32 | 108 | 2/11/63 | LU5A 2200 | F03FS05210 |
| 450 | 4,0 | 3,2 | 40 | 108 | 2/12/64 + 2/15/80 | LU5A 2300 | F03FS08047 |
| 450 | 4,0 | 3,2 | 50 | 108 | 4/15/80 | LU5A 2400 | F03FS07420 |
| 500 | 4,0 | 3,2 | 30 | 120 | 2/10,5/70 | LU5A 2500 | F03FS05212 |
| 500 | 4,0 | 3,2 | 32 | 120 | 2/11/63 | LU5A 2600 | F03FS05214 |
| 500 | 4,0 | 3,2 | 50 | 120 | 4/15/80 | LU5A 2700 | F03FS08244 |
| 500 | 4,4 | 3,5 | 30 | 120 | - | LU5A 3000 | F03FS07543 |
| 530 | 4,2 | 3,5 | 30 | 126 | 2/10,5/70 | LU5A 2800 | F03FS06607 |
| 550 | 4,2 | 3,5 | 30 | 132 | 2/10,5/70 | LU5A 2900 | F03FS06608 |

FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Machines:

Double head cutting machines and CNC cutting units.

Materials:

Aluminium, copper, brass, plastics and PVC.

Applications:

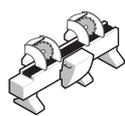
Aluminium, non-ferrous metals and plastic cutting.

Technical information:

To cut drawn products and tubes with a thickness between 2 and 5 mm, as well as polymeric panels up to 20 mm. Suitable for PVC profiles cutting.

LU5B

Saw blades to cut non-ferrous metals and plastics



Double Head Cutting Machines



CNC Cutting Units



Aluminium



Copper and Brass



Plastics



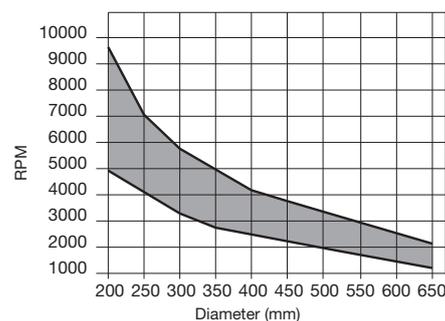
PVC



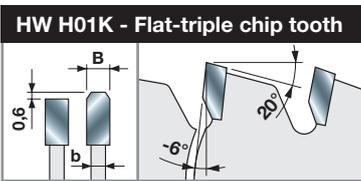
●●● Ultimate ●● High ● Good

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------------------|------------|------------|
| 200 | 2,8 | 2,2 | 30 | 64 | - | LU5B 0100 | F03FS05217 |
| 250 | 3,5 | 3,0 | 30 | 80 | FT02 | LU5B 0200 | F03FS05218 |
| 250 | 3,5 | 3,0 | 32 | 80 | 2/11/63 | LU5B 0300 | F03FS05221 |
| 275 | 3,5 | 3,0 | 40 | 84 | 2/9/55 + 4/12/64 | LU5B 0400 | F03FS05223 |
| 300 | 3,5 | 3,0 | 30 | 88 | FT02 | LU5B 0500 | F03FS05224 |
| 300 | 3,5 | 3,0 | 32 | 88 | 2/11/63 | LU5B 0600 | F03FS05225 |
| 300 | 3,5 | 3,0 | 40 | 88 | 2/9/55 + 4/12/64 | LU5B 0700 | F03FS05227 |
| 300 | 3,5 | 3,0 | 30 | 96 | FT02 | LU5B 0800 | F03FS05228 |
| 300 | 3,5 | 3,0 | 32 | 96 | 2/11/63 | LU5B 0900 | F03FS05230 |
| 300 | 3,5 | 3,0 | 40 | 96 | 2/9/55 + 4/12/64 | LU5B 1000 | F03FS05232 |
| 330 | 3,5 | 3,0 | 30 | 104 | FT02 | LU5B 1100 | F03FS05233 |
| 330 | 3,5 | 3,0 | 32 | 104 | 2/11/63 | LU5B 1200 | F03FS05234 |
| 350 | 3,5 | 3,0 | 30 | 96 | FT02 | LU5B 1300 | F03FS05235 |
| 350 | 3,5 | 3,0 | 32 | 96 | 2/11/63 | LU5B 1400 | F03FS05236 |
| 350 | 3,5 | 3,0 | 40 | 96 | 2/9/55 + 4/12/64 | LU5B 1500 | F03FS05238 |
| 350 | 3,5 | 3,0 | 30 | 108 | FT02 | LU5B 1600 | F03FS05239 |
| 350 | 3,5 | 3,0 | 32 | 108 | 2/11/63 | LU5B 1700 | F03FS05240 |
| 350 | 3,5 | 3,0 | 40 | 108 | 2/9/55 + 4/12/64 | LU5B 1800 | F03FS05242 |
| 370 | 3,5 | 3,0 | 30 | 112 | - | LU5B 1900 | F03FS07745 |
| 370 | 3,5 | 3,0 | 50 | 112 | 4/15/80 | LU5B 2000 | F03FS05243 |
| 380 | 3,5 | 3,0 | 32 | 112 | 2/11/63 | LU5B 2100 | F03FS05244 |
| 400 | 3,5 | 3,0 | 30 | 120 | 2/11/63 | LU5B 2200 | F03FS05245 |
| 400 | 3,5 | 3,0 | 32 | 120 | 2/11/63 | LU5B 2300 | F03FS05246 |
| 400 | 3,5 | 3,0 | 40 | 120 | 2/12/64 + 2/15/80 | LU5B 2400 | F03FS05248 |
| 400 | 3,5 | 3,0 | 50 | 120 | 4/15/80 | LU5B 2500 | F03FS05249 |
| 400 | 3,5 | 3,0 | 75 | 120 | 2/15/96 + 2/15/114 + 4/18/105 | LU5B 2275 | F03FS09967 |
| 420 | 3,5 | 3,0 | 30 | 120 | 2/11/70 | LU5B 2600 | F03FS05250 |
| 450 | 4,0 | 3,0 | 30 | 128 | - | LU5B 2700 | F03FS05251 |
| 450 | 4,0 | 3,0 | 32 | 128 | 2/11/63 | LU5B 2800 | F03FS05252 |
| 500 | 4,0 | 3,2 | 30 | 140 | 2/10,5/70 | LU5B 3100 | F03FS05254 |
| 500 | 4,0 | 3,2 | 32 | 140 | 2/11/63 | LU5B 3200 | F03FS05255 |
| 550 | 4,2 | 3,5 | 30 | 148 | 2/11/63 | LU5B 3500 | F03FS05257 |
| 550 | 4,2 | 3,5 | 32 | 148 | 2/11/63 | LU5B 3800 | F03FS05260 |
| 600 | 4,8 | 3,8 | 30 | 156 | - | LU5B 3600 | F03FS05258 |

FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Machines:

Double head cutting machines, mitre saws.

Materials:

Aluminium, copper and brass.

Applications:

Aluminium and non-ferrous metals cutting.

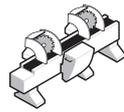
Technical information:

To cut solid drawn products whose thickness exceeds 3 mm.

It is recommended to use it on cutting machines where the saw blade is over the workpiece to be cut.

LU5C

Saw blades to cut non-ferrous metals



Double Head Cutting Machines



Mitre Saws



Aluminium



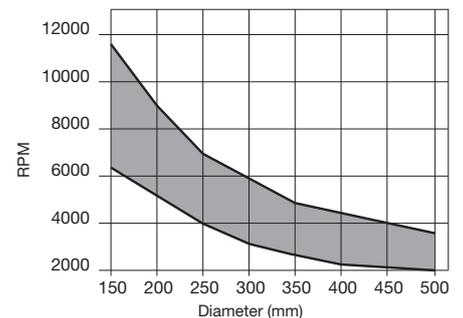
Copper and Brass



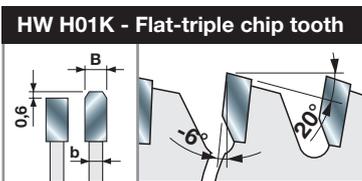
●●● Ultimate ●● High ● Good

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 180 | 2,8 | 2,2 | 20 | 42 | - | LU5C 0100 | F03FS07195 |
| 180 | 2,8 | 2,2 | 30 | 42 | - | LU5C 0200 | F03FS05261 |
| 200 | 2,8 | 2,2 | 30 | 48 | - | LU5C 0300 | F03FS05262 |
| 250 | 3,5 | 3,0 | 30 | 54 | - | LU5C 0400 | F03FS05263 |
| 275 | 3,5 | 3,0 | 40 | 60 | - | LU5C 0600 | F03FS05264 |
| 300 | 3,5 | 3,0 | 30 | 72 | FT02 | LU5C 0700 | F03FS05265 |
| 300 | 3,5 | 3,0 | 32 | 72 | 2/11/63 | LU5C 0800 | F03FS05266 |
| 300 | 3,5 | 3,0 | 40 | 72 | 2/9/55 + 4/12/64 | LU5C 0900 | F03FS05267 |
| 330 | 3,5 | 3,0 | 30 | 80 | - | LU5C 1000 | F03FS05268 |
| 330 | 3,5 | 3,0 | 32 | 80 | 2/11/63 | LU5C 1100 | F03FS05269 |
| 350 | 3,5 | 3,0 | 30 | 84 | FT01 | LU5C 1200 | F03FS05270 |
| 350 | 3,5 | 3,0 | 32 | 84 | 2/11/63 | LU5C 1300 | F03FS05271 |
| 350 | 3,5 | 3,0 | 40 | 84 | 2/9/55 + 4/12/64 | LU5C 1400 | F03FS05272 |
| 370 | 3,5 | 3,0 | 30 | 90 | - | LU5C 1500 | F03FS05273 |
| 370 | 3,5 | 3,0 | 50 | 90 | 4/15/80 | LU5C 1600 | F03FS05274 |
| 380 | 3,5 | 3,0 | 32 | 96 | 2/11/63 | LU5C 1700 | F03FS05275 |
| 400 | 3,5 | 3,0 | 30 | 96 | 2/11/70 | LU5C 1800 | F03FS05276 |
| 400 | 3,5 | 3,0 | 32 | 96 | 2/11/63 | LU5C 1900 | F03FS05277 |
| 400 | 3,5 | 3,0 | 40 | 96 | 2/12/64 + 2/15/80 | LU5C 2000 | F03FS05278 |
| 400 | 3,5 | 3,0 | 50 | 96 | 4/15/80 | LU5C 2100 | F03FS05279 |
| 420 | 4,0 | 3,2 | 30 | 96 | 2/11/70 | LU5C 2200 | F03FS05280 |
| 420 | 4,0 | 3,2 | 40 | 96 | - | LU5C 2300 | F03FS05281 |
| 450 | 4,0 | 3,2 | 30 | 108 | - | LU5C 2400 | F03FS05282 |
| 450 | 4,0 | 3,2 | 32 | 108 | 2/11/63 | LU5C 2500 | F03FS05283 |
| 450 | 4,0 | 3,2 | 40 | 108 | 2/12/64 + 2/15/80 | LU5C 2600 | F03FS05284 |
| 450 | 4,0 | 3,2 | 50 | 108 | 4/15/80 | LU5C 2700 | F03FS05285 |
| 500 | 4,0 | 3,2 | 30 | 120 | - | LU5C 2800 | F03FS06110 |
| 500 | 4,0 | 3,2 | 32 | 120 | 2/11/63 | LU5C 2900 | F03FS05286 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60 - FT02: 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.



Machines:

Double head cutting machines, mitre saws.

Materials:

Aluminium, copper, brass, plastics and PVC.

Applications:

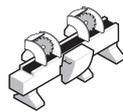
Aluminium, non-ferrous metals and plastics cutting.

Technical information:

To cut drawn products and tubes whose thickness does not exceed 3 mm. It is recommended to use it on cutting machines where the saw blade is over the workpiece to be cut. Suitable for PVC profiles cutting.

LU5D

Saw blades to cut non-ferrous metals and plastics



Double Head Cutting Machines



Mitre Saws



Aluminium



Copper and Brass



Plastics



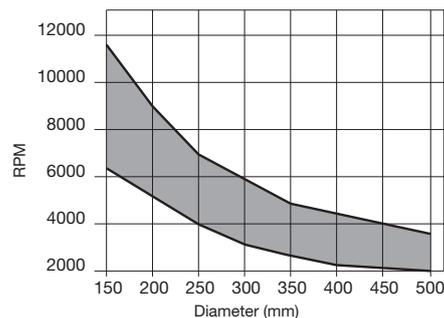
PVC



●●● Ultimate ●● High ● Good

| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 160 | 2,8 | 2,2 | 20 | 42 | - | LU5D 0100 | F03FS05288 |
| 190 | 2,8 | 2,2 | 30 | 54 | - | LU5D 0200 | F03FS05289 |
| 200 | 2,8 | 2,2 | 30 | 60 | - | LU5D 0300 | F03FS05290 |
| 210 | 2,8 | 2,2 | 30 | 60 | - | LU5D 0400 | F03FS05291 |
| 216 | 2,8 | 2,2 | 30 | 60 | - | LU5D 0500 | F03FS05292 |
| 220 | 3,0 | 2,5 | 30 | 64 | FT02 | LU5D 0600 | F03FS05293 |
| 230 | 3,0 | 2,5 | 30 | 64 | - | LU5D 0700 | F03FS05294 |
| 250 | 3,5 | 3,0 | 30 | 80 | FT02 | LU5D 0800 | F03FS05295 |
| 250 | 3,5 | 3,0 | 32 | 80 | 2/11/63 | LU5D 0900 | F03FS05297 |
| 250 | 3,5 | 3,0 | 40 | 80 | 2/9/55 + 4/12/64 | LU5D 1000 | F03FS05299 |
| 275 | 3,5 | 3,0 | 40 | 84 | 2/9/55 + 4/12/64 | LU5D 1100 | F03FS05300 |
| 300 | 3,5 | 3,0 | 96 | 96 | FT02 | LU5D 1200 | F03FS05301 |
| 300 | 3,5 | 3,0 | 32 | 96 | 2/11/63 | LU5D 1300 | F03FS05303 |
| 300 | 3,5 | 3,0 | 40 | 96 | 2/9/55 + 4/12/64 | LU5D 1400 | F03FS05305 |
| 330 | 3,5 | 3,0 | 30 | 104 | FT02 | LU5D 1500 | F03FS05306 |
| 330 | 3,5 | 3,0 | 32 | 104 | 2/11/63 | LU5D 1600 | F03FS05308 |
| 350 | 3,5 | 3,0 | 30 | 108 | FT02 | LU5D 1700 | F03FS05309 |
| 350 | 3,5 | 3,0 | 32 | 108 | 2/11/63 | LU5D 1800 | F03FS05311 |
| 350 | 3,5 | 3,0 | 40 | 108 | 2/9/55 + 4/12/64 | LU5D 1900 | F03FS05313 |
| 370 | 3,5 | 3,0 | 30 | 108 | - | LU5D 2000 | F03FS05314 |
| 380 | 3,5 | 3,0 | 32 | 108 | 2/11/63 | LU5D 2200 | F03FS05315 |
| 400 | 3,5 | 3,0 | 30 | 120 | - | LU5D 2300 | F03FS05316 |
| 400 | 3,5 | 3,0 | 32 | 120 | 2/11/63 | LU5D 2400 | F03FS05317 |
| 400 | 3,5 | 3,0 | 40 | 120 | 2/15/80 + 2/12/64 | LU5D 2500 | F03FS05318 |
| 400 | 3,5 | 3,0 | 50 | 120 | 4/15/80 | LU5D 2600 | F03FS05319 |
| 420 | 4,0 | 3,2 | 30 | 120 | 2/11/70 | LU5D 2700 | F03FS05320 |
| 420 | 4,0 | 3,2 | 40 | 120 | - | LU5D 2800 | F03FS05321 |
| 450 | 4,0 | 3,2 | 30 | 128 | - | LU5D 2900 | F03FS05322 |
| 500 | 4,0 | 3,2 | 32 | 140 | 2/11/63 | LU5D 3400 | F03FS05323 |

FT02: 2/9/46,4 + 2/10/60

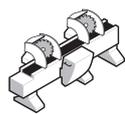


Minimum and maximum RPM based on the blade diameter.



LU5F

Saw blades to cut non-ferrous metals and plastics



Double Head Cutting Machines



CNC Cutting Units



Aluminium



Copper and Brass



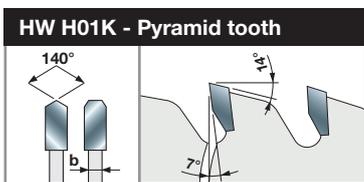
Plastics



PVC



●●● Ultimate ●● High ● Good



Machines:

Double head cutting machines and CNC cutting units.

Materials:

Aluminium, copper, brass, plastics and PVC.

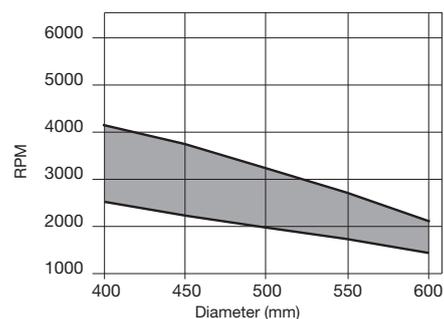
Applications:

Aluminium, non-ferrous metals and plastics cutting.

Technical information:

Saw blades to cut thin wall aluminium profiles up to 4,5 mm for doors and windows, also including built-in plastic profiles.

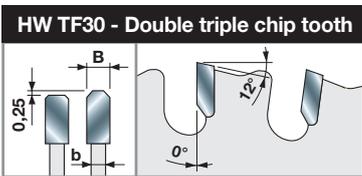
| D mm | B mm | b mm | d mm | Z | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 400 | 3,5 | 3,0 | 30 | 96 | 2/11/63 + 2/11/70 | LU5F40001 | F03FS07683 |
| 400 | 3,5 | 3,0 | 32 | 96 | 2/11/63 + 2/11/70 | LU5F40002 | F03FS07684 |
| 400 | 3,5 | 3,0 | 30 | 120 | 2/11/63 + 2/11/70 | LU5F40003 | F03FS07685 |
| 400 | 3,5 | 3,0 | 32 | 120 | 2/11/63 + 2/11/70 | LU5F40004 | F03FS07686 |
| 420 | 3,5 | 3,0 | 30 | 100 | 2/11/63 + 2/11/70 | LU5F42001 | F03FS07687 |
| 420 | 3,5 | 3,0 | 32 | 100 | 2/11/63 + 2/11/70 | LU5F42002 | F03FS07688 |
| 450 | 3,5 | 3,0 | 30 | 108 | 2/11/63 + 2/11/70 | LU5F45001 | F03FS07689 |
| 450 | 3,5 | 3,0 | 32 | 108 | 2/11/63 + 2/11/70 | LU5F45002 | F03FS07690 |
| 500 | 4,0 | 3,5 | 30 | 120 | 2/11/63 + 2/11/70 | LU5F50001 | F03FS07691 |
| 500 | 4,0 | 3,5 | 32 | 120 | 2/11/63 + 2/11/70 | LU5F50002 | F03FS07692 |
| 530 | 4,0 | 3,5 | 30 | 126 | 2/11/63 + 2/11/70 | LU5F53001 | F03FS07693 |
| 530 | 4,0 | 3,5 | 32 | 126 | 2/11/63 + 2/11/70 | LU5F53002 | F03FS07694 |
| 550 | 4,0 | 3,5 | 30 | 132 | 2/11/63 + 2/11/70 | LU5F55001 | F03FS07695 |
| 550 | 4,0 | 3,5 | 32 | 132 | 2/11/63 + 2/11/70 | LU5F55002 | F03FS07696 |
| 600 | 4,7 | 4,0 | 30 | 144 | 2/11/63 + 2/11/70 | LU5F60001 | F03FS07697 |
| 600 | 4,7 | 4,0 | 32 | 144 | 2/11/63 + 2/11/70 | LU5F60002 | F03FS07698 |
| 600 | 4,7 | 4,0 | 30 | 156 | 2/11/63 + 2/11/70 | LU5F60003 | F03FS07699 |
| 600 | 4,7 | 4,0 | 32 | 156 | 2/11/63 + 2/11/70 | LU5F60004 | F03FS07700 |



Minimum and maximum RPM based on the blade diameter.

Ferrous Metals





Machines:
Dry cut mitre saws.

Materials:
Steel.

Applications:
Steel dry cutting.

Technical information:
Dry-cut saw blades for steel tubes and profiles.
Suitable also for small-size steel bars.
Ensure the workpiece is properly clamped when cutting.

| Saw blade diameter | Maximum RPM |
|--------------------|-------------|
| 160 mm | 3.200 |
| 184 mm | 3.000 |
| 190 mm | 2.600 |
| 210 mm | 2.300 |
| 216 mm | 2.200 |
| 230 mm | 2.100 |
| 250 mm | 1.900 |
| 255 mm | 1.900 |
| 300 mm | 1.800 |
| 305 mm | 1.800 |
| 315 mm | 1.700 |
| 350 mm | 1.600 |
| 355 mm | 1.600 |
| 400 mm | 1.400 |

Table of maximum RPM based on the blade diameter, for saw blades to cut ferrous metals.

LU6A

Saw blades to cut ferrous metal



Dry cut
Mitre Saws



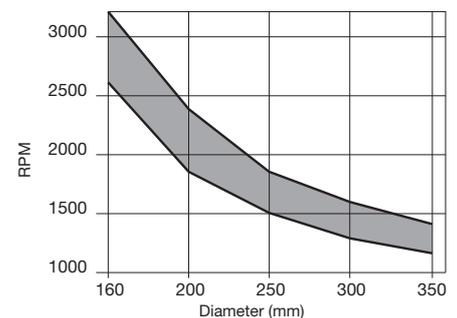
Steel



●●● Ultimate ●● High ● Good

| D | B | b | d | Z | NL | Freud Code | Art. No. |
|-----|-----|-----|-------|----|------|------------|------------|
| mm | mm | mm | mm | | | | |
| 160 | 2,0 | 1,6 | 20 | 30 | - | LU6A 0100 | F03FS05343 |
| 184 | 2,0 | 1,6 | 15,88 | 38 | - | LU6A 0200 | F03FS05344 |
| 184 | 2,0 | 1,6 | 15,88 | 48 | - | LU6A 1900 | F03FS06586 |
| 190 | 2,0 | 1,6 | 30 | 38 | - | LU6A 0300 | F03FS05345 |
| 210 | 2,0 | 1,6 | 30 | 40 | - | LU6A 0400 | F03FS05346 |
| 216 | 2,0 | 1,6 | 30 | 40 | - | LU6A 0500 | F03FS05347 |
| 230 | 2,0 | 1,6 | 30 | 48 | FT01 | LU6A 0600 | F03FS05348 |
| 230 | 2,4 | 2,0 | 25,4 | 44 | - | LU6A 0700 | F03FS05349 |
| 250 | 2,4 | 2,0 | 30 | 48 | FT01 | LU6A 0800 | F03FS05350 |
| 254 | 2,4 | 2,0 | 25,4 | 50 | - | LU6A 0900 | F03FS05351 |
| 254 | 2,4 | 2,0 | 25,4 | 60 | - | LU6A 1000 | F03FS05352 |
| 300 | 2,6 | 2,2 | 30 | 60 | FT01 | LU6A 1700 | F03FS05359 |
| 300 | 2,6 | 2,2 | 30 | 80 | FT01 | LU6A 1800 | F03FS05360 |
| 305 | 2,6 | 2,2 | 25,4 | 60 | - | LU6A 1100 | F03FS05353 |
| 305 | 2,6 | 2,2 | 25,4 | 80 | - | LU6A 1200 | F03FS05354 |
| 350 | 2,6 | 2,2 | 30 | 72 | FT01 | LU6A 1300 | F03FS05355 |
| 350 | 2,6 | 2,2 | 30 | 90 | FT01 | LU6A 1400 | F03FS05356 |
| 355 | 2,6 | 2,2 | 25,4 | 72 | - | LU6A 1500 | F03FS05357 |
| 355 | 2,6 | 2,2 | 25,4 | 90 | - | LU6A 1600 | F03FS05358 |

FT01: 2/7/42 + 2/9/46,4 + 2/10/60



Minimum and maximum RPM based on the blade diameter.

BLA

Standard reduction rings for saw blades

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|----------------|------------|
| 15,88 | 0,8 | 10 | BLA08158100 | F03FA23018 |
| 20 | 1,2 | 12,7 | BL15M20127 | F03FC00694 |
| 20 | 1,5 | 16 | BLA15200160V01 | F03FS11956 |
| 20 | 1,8 | 16 | BLA18200160V01 | F03FS11960 |
| 25,4 | 1,0 | 19,05 | BLA10254190V01 | F03FS11954 |
| 25,4 | 1,2 | 20 | BLA12254200V01 | F03FS11955 |
| 30 | 1,5 | 15,88 | BLA15300158 | F03FA23019 |
| 30 | 1,8 | 15,88 | BLA18300158 | F03FA23020 |
| 30 | 1,5 | 20 | BLA15300200V01 | F03FS11957 |
| 30 | 1,8 | 20 | BLA18300200 | F03FA23021 |
| 30 | 1,5 | 25 | BLA15300250V01 | F03FS11958 |
| 30 | 1,8 | 25 | BLA18300250 | F03FA23022 |
| 30 | 1,5 | 25,4 | BLA15300254V01 | F03FS11959 |
| 30 | 1,8 | 25,4 | BLA18300254V01 | F03FS11961 |
| 35 | 1,8 | 25,4 | BLA18350254 | F03FA22201 |
| 35 | 1,8 | 30 | BLA18350300 | F03FA23023 |

OPT06

Optional workings Standard keyways

| D mm | B mm | Freud Code | Art. No. |
|---------|---------|------------|------------|
| 10 | 5 | OPT06 AA9 | F03FC16213 |
| 12 | 5 | OPT06 BA9 | F03FC16214 |
| 12,5 | 4 | OPT06 CA9 | F03FC16215 |
| 13 | 5 | OPT06 DA9 | F03FC16216 |
| 15 | 5 | OPT06 EA9 | F03FC16217 |
| 17 | 5 | OPT06 FA9 | F03FC16218 |
| 18 | 5 | OPT06 GA9 | F03FC16219 |
| 21 | 5 | OPT06 HA9 | F03FC16220 |

OPT07

Optional workings Special keyways

| Freud Code | Art. No. |
|------------|------------|
| OPT07 AA9 | F03FC16221 |

OPT08

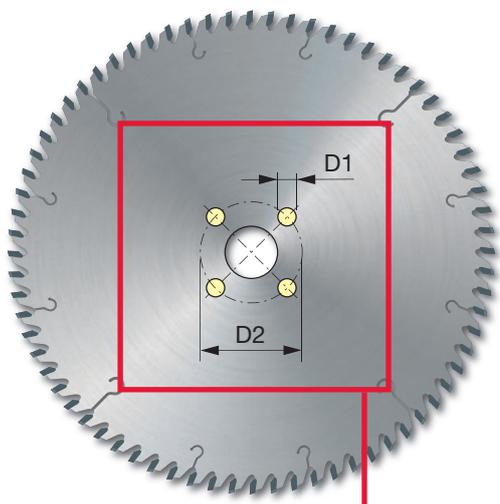
Optional workings Special reboring

| Freud Code | Art. No. |
|------------|------------|
| OPT08 AA9 | F03FC16222 |

OPTF0

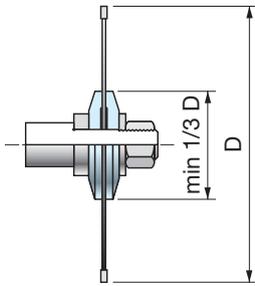
Optional workings Safety pin holes for saw blades

| | Freud Code | Art. No. |
|----|------------|------------|
| 1 | OPTF0 AA9 | F03FC16103 |
| 2 | OPTF0 AB9 | F03FC16104 |
| 3 | OPTF0 AC9 | F03FC16105 |
| 4 | OPTF0 AD9 | F03FC16106 |
| 5 | OPTF0 AE9 | F03FC16107 |
| 6 | OPTF0 AF9 | F03FC16108 |
| 7 | OPTF0 AG9 | F03FC16109 |
| 8 | OPTF0 AM9 | F03FC16111 |
| 10 | OPTF0 AH9 | F03FC16110 |

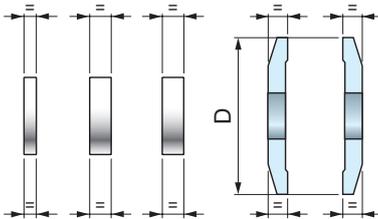


Specify no. of pin holes, diameter of holes (D1) and the diameter of the circumference passing through the centre of the holes (D2).

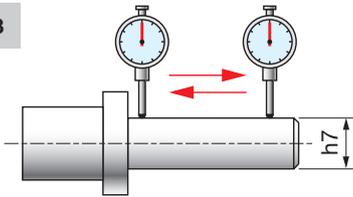
1



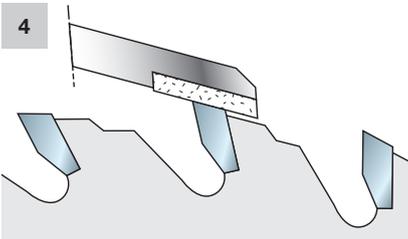
2



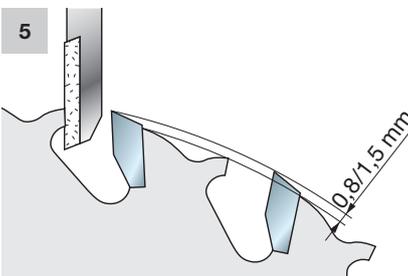
3



4



5



TIPS FOR THE CORRECT USE OF A CIRCULAR SAW BLADE

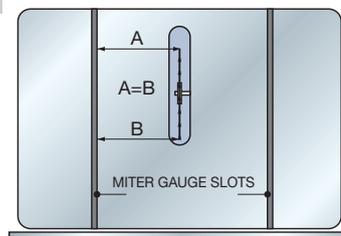
To obtain the best performance from a saw blade we suggest following these simple instructions:

- The machine must be in good condition, free from vibrations.
- The flanges used to secure the blade must be of the same diameter, at least 1/3 of the blade's diameter (Fig. 1).
- The flanges must be parallel to each other. Also check tolerances on diameters, sides and concentricity, by using a clock gauge (Fig. 2).
- The spacers must be perfectly parallel (Fig. 2).
- The spindle must be perfectly straight and with an h7 tolerance (Fig. 3).
- After continuous use, remove the blade and clean it with the appropriate solvents making sure to get rid of built up resin. For the synthetic coated (Perma-SHIELD Coating) blades, it is sufficient to use warm water. In any case, avoid using solvents containing caustic soda.
- The blades must be sharpened as soon as they become dull, maintaining the original tooth angles.
- For sharpening, always use the correct grinding wheels and plenty of cooling liquid.
- Always keep spacers and flanges clean.
- When sharpening, the shoulder of the teeth must not be lowered more than needed. This operation must be done with appropriate precision machinery and never by hand. There is the risk of breaking the tip or upsetting the blade balance (Fig. 4 - 5).
- On ripping machines, the feeding track must be levelled with the fixed table.
- Before starting the cut of the material, make sure the blade is correctly locked according to the machine specifications.

Saw blade alignment on a table saw:

- If the saw blade and the saw are not correctly aligned to the table and the fence, then there is the possibility that a serious accident may occur (for example, violent kickbacks) or that the workpiece may scorch or splinter. The first thing you must do is read the instruction sheet carefully. This is necessary to acquire the understanding and comprehension of the corrections suggested in this section.
- Before carrying out the following instructions, make sure that the starter switch is off and that the machine is not connected to the socket.
- Mounting the saw blade onto the table:
We advise you to use precise measuring instruments when mounting your saw blade. Clean the saw blade well, before mounting it onto the machine. Mount the saw blade onto the arbor. Adjust the arbor to its maximum height. With the aid of the most precise measuring instrument available, verify that the saw blade is parallel to the mitre gauge slots (Fig. 6). Adjust as needed. This step is necessary to obtain crosscuts with the maximum quality finish and for setting up the fence for ripping.
- Positioning the fence for ripping:
After having positioned the saw blade so as it is parallel to the mitre gauge slots, you may proceed with setting the fence. The fence should ideally be parallel to the saw blade. However since it is impossible to position the guide "exactly" it is necessary to leave a slight margin of clearance on the exit side of the cut so as to avoid the wood becoming wedged in between the fence and the saw blade. Adjust the fence so as when it is aligned to the mitre gauge slots, there is a space of 0,1 mm (Fig. 7; for the correct adjustment, consult the machine's instruction manual).

6



7

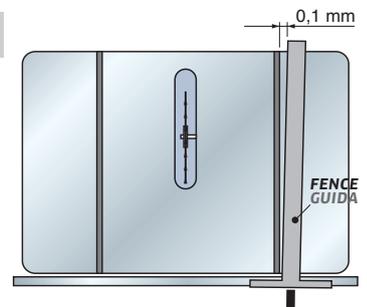


Table 1

| Saw blade diameter | Maximum RPM |
|--------------------|-------------|
| 100 mm | 23.000 |
| 125 mm | 18.000 |
| 150 mm | 14.500 |
| 180 mm | 11.500 |
| 185 mm | 11.000 |
| 200 mm | 10.000 |
| 225 mm | 8.500 |
| 250 mm | 8.000 |
| 255 mm | 7.800 |
| 280 mm | 7.100 |
| 300 mm | 6.500 |
| 320 mm | 6.000 |
| 350 mm | 5.500 |
| 380 mm | 5.000 |
| 400 mm | 4.700 |
| 430 mm | 4.400 |
| 450 mm | 4.200 |
| 500 mm | 3.750 |
| 550 mm | 3.400 |
| 600 mm | 3.100 |
| 630 mm | 2.950 |
| 650 mm | 2.800 |
| 700 mm | 2.600 |
| 730 mm | 2.500 |
| 760 mm | 2.400 |
| 800 mm | 2.250 |

Not valid for saw blades to cut ferrous metals.

TIPS FOR THE CORRECT USE OF A CIRCULAR SAW BLADE

- The maximum RPM of a circular saw blade varies according to the diameter of the blade itself (table 1). If you exceed this limit, the saw blade will lose its characteristics, therefore influencing the cutting quality and the work life of the blade itself, not to mention the dangers implied to the user who may incur serious injury.
- The saw blade's projection (T) with respect to the workpiece must be at least equal to the height of the blade's tooth (Fig. 8). Increase or decrease the projection of the saw blade to improve the quality of the cutting finish.
- The number of teeth cutting the wood simultaneously (Fig. 9) must be between 3 or 4. With less than three teeth cutting, the saw blade begins to vibrate leading to an uneven cut. If you want to cut workpieces with increased thicknesses (S - Fig. 11), but wish to maintain the same diameter saw blade, then use a blade with less teeth. If instead you want to cut workpieces with a reduced thickness, but also maintain the same diameter saw blade, then use a blade with more teeth.
- To obtain the pitch (P) of a blade (the distance between teeth; Fig. 10 - see formula "A") multiply the thickness of the workpiece by 1,4142 and divide by 3 (if you want 3 teeth cutting) or by 4 (if you want 4 teeth cutting).
- Formula "B": to obtain the number of teeth (Z) of the saw blade, multiply the diameter (D) of the saw blade by 3,14 (π) and divide by the pitch of the saw blade - obtained from the previous formula. The shorter formula "C" allows you to obtain the number of the saw blade's teeth, knowing its diameter and the thickness of the workpiece.

| Formula A | Formula B | Formula C |
|---------------------------------|-------------------------------|----------------------------|
| $P = \frac{S \times 1,4142}{3}$ | $Z = \frac{D \times 3,14}{P}$ | $Z = \frac{D \times 8}{S}$ |

KEY:

P= Pitch

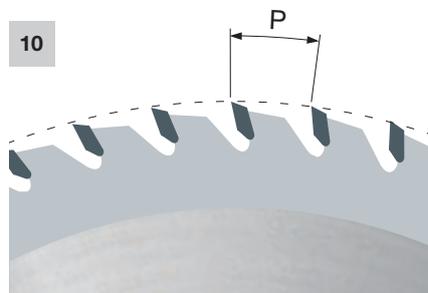
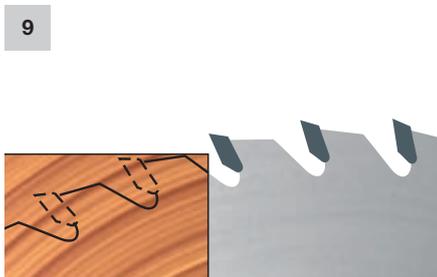
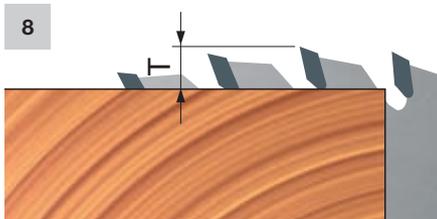
S= Thickness of the workpiece

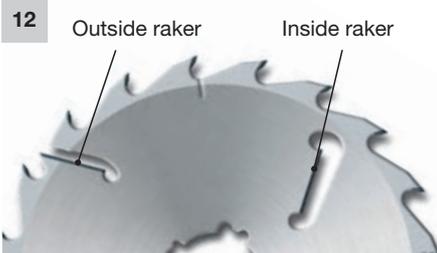
Z= Number of teeth of the saw blade

D= Diameter of the saw blade

Attention:

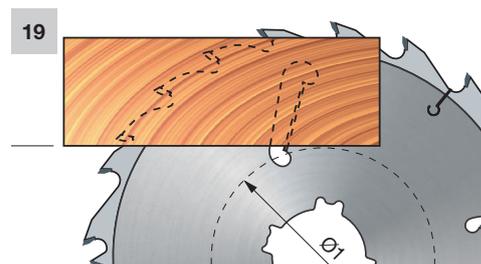
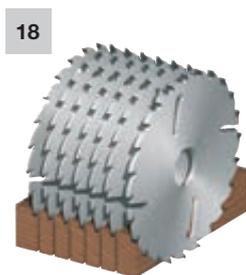
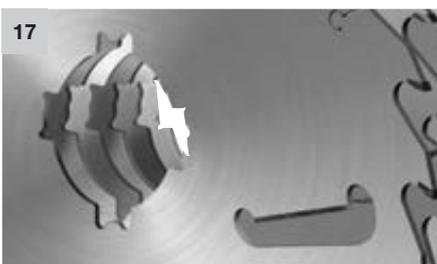
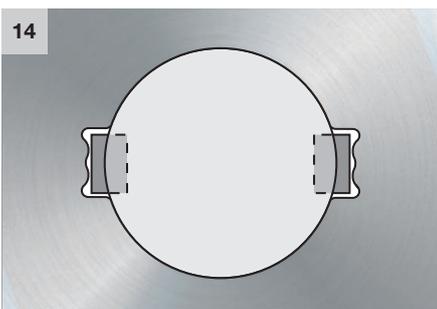
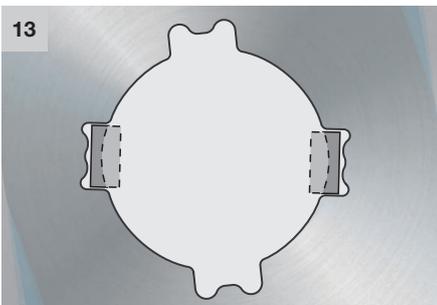
These formulas are valid for crosscutting and cutting other wood composites (MDF, plywood, chipboard and laminated panels) and cannot be applied for ripping.





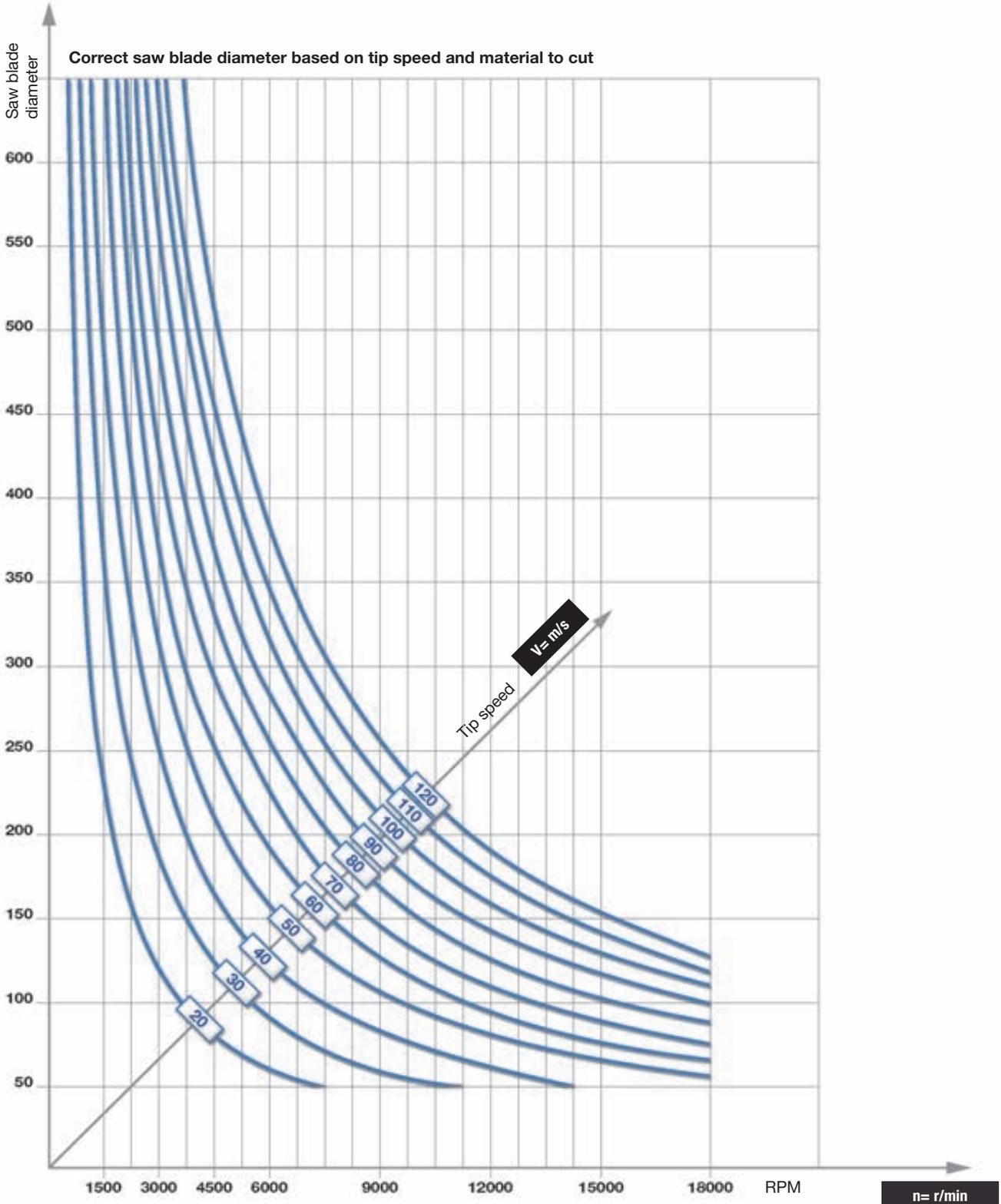
TIPS FOR THE CORRECT USE OF A CIRCULAR SAW BLADE

- Rakers (Fig. 12) are inserts in HW that are brazed onto saw blades exclusively for cutting wood. They help keep a distance between the saw blade body and the workpiece, in order to avoid friction and overheating which cause the blade to deform.
- On saw blades for multiripping machines, the anti-kickback device is advised in cases where wood has loose knots and discards cases insert themselves underneath the saw blade.
- The pairing of blade and arbor with keyways is excellent in all cases where the keyways are the same (Fig. 13) or smaller than the blade slots (Fig. 14).
- On machines with an arbor with 1 keyway, you can only mount blades with 1 keyway slot (Fig. 15); on machines with an arbor with 2 keyways, you can only mount blades with 2 or 4 keyway slots (Fig. 16).
- You cannot mount a saw blade with 2 keyways on an arbor with 1 keyway slot, because the pairing will not be balanced.
- In case multiripping saw blades are used, it is recommendable to assembly them with alternate keyways (Fig. 17).
- Shoulder blade ensures correct distribution of lateral forces created by crooked planks in heavy duty use. The shoulder blade must be the first blade on the guide side of the multiripping machine.
- Always use shoulder blade with the set of multiripping blades (Fig. 18).
- On multiripping saw blades, the thickness of the workpiece (S) varies according to the diameter of the blade (\varnothing) and the minimum diameter (\varnothing_1) of the rakers (the rakers position may vary from blade to blade - Fig. 19).



TIPS FOR THE CORRECT USE OF A CIRCULAR SAW BLADE

| Tip speed (m/s) | Recommended for |
|-----------------|---------------------------|
| 50 - 90 | Softwood |
| 50 - 80 | Hardwood |
| 50 - 85 | Exotic wood |
| 60 - 80 | Chipboard |
| 60 - 80 | Joinery wood |
| 30 - 60 | MDF |
| 40 - 60 | Laminated and bilaminated |

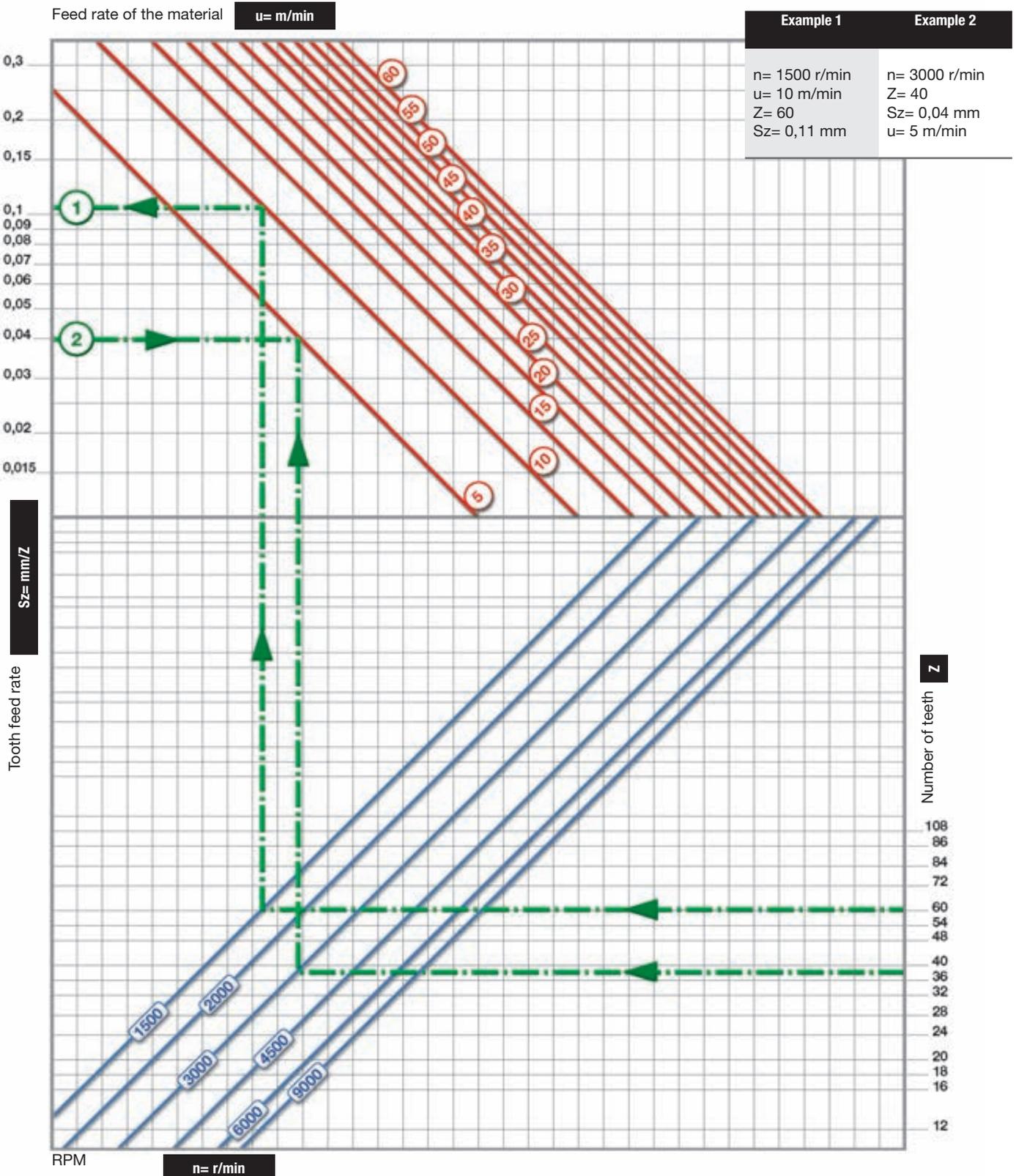


TIPS FOR THE CORRECT USE OF A CIRCULAR SAW BLADE

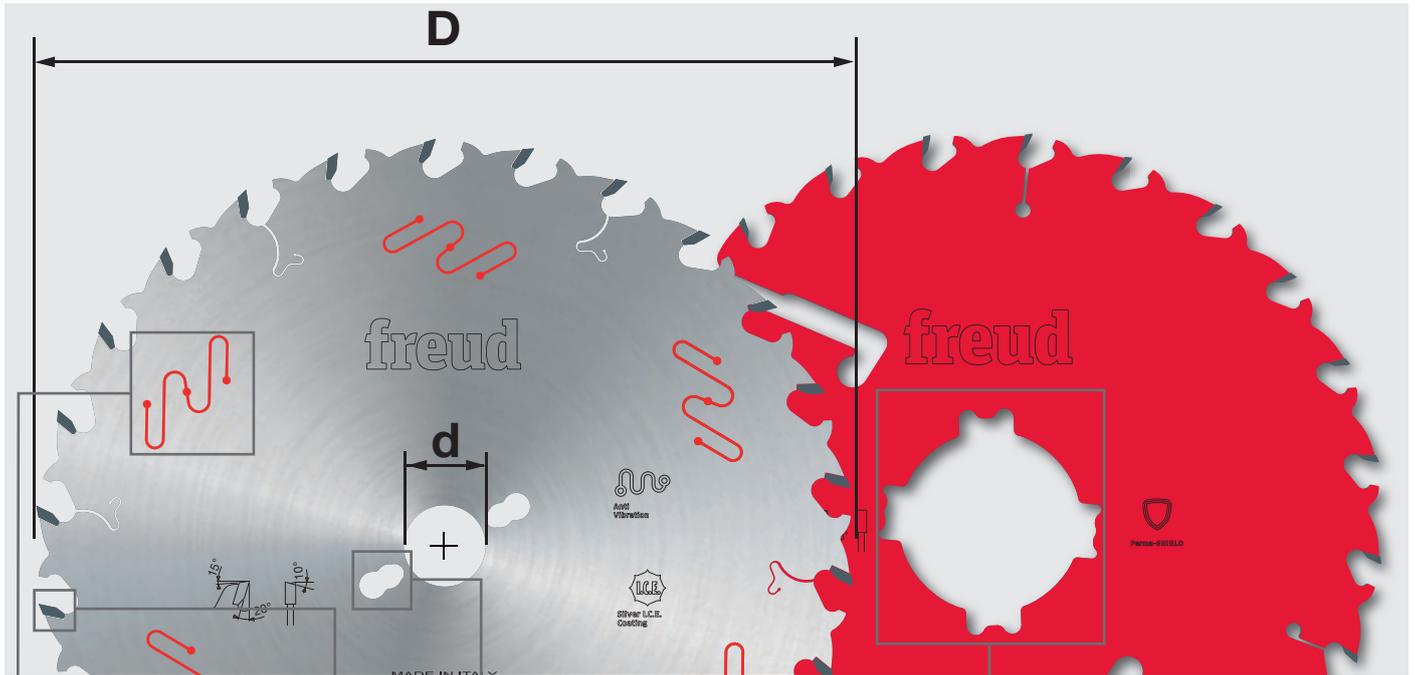
Correct tooth feed rate, material feedrate, number of teeth and RPM

| Recommended tooth feed rate (Sz= mm/tooth) | Recommended for |
|--|----------------------|
| 0,20 - 0,30 | Softwood with grain |
| 0,10 - 0,20 | Softwood cross grain |
| 0,06 - 0,15 | Hardwood |
| 0,10 - 0,25 | Chipboard |

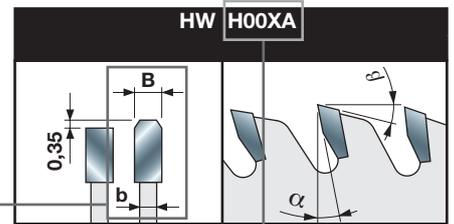
| Recommended tooth feed rate (Sz= mm/tooth) | Recommended for |
|--|---|
| 0,05 - 0,12 | Plywood |
| 0,05 - 0,10 | Laminated board |
| 0,02 - 0,05 | Aluminium and plastic laminated chipboard |



EXPLANATION OF SYMBOLS AND ABBREVIATIONS

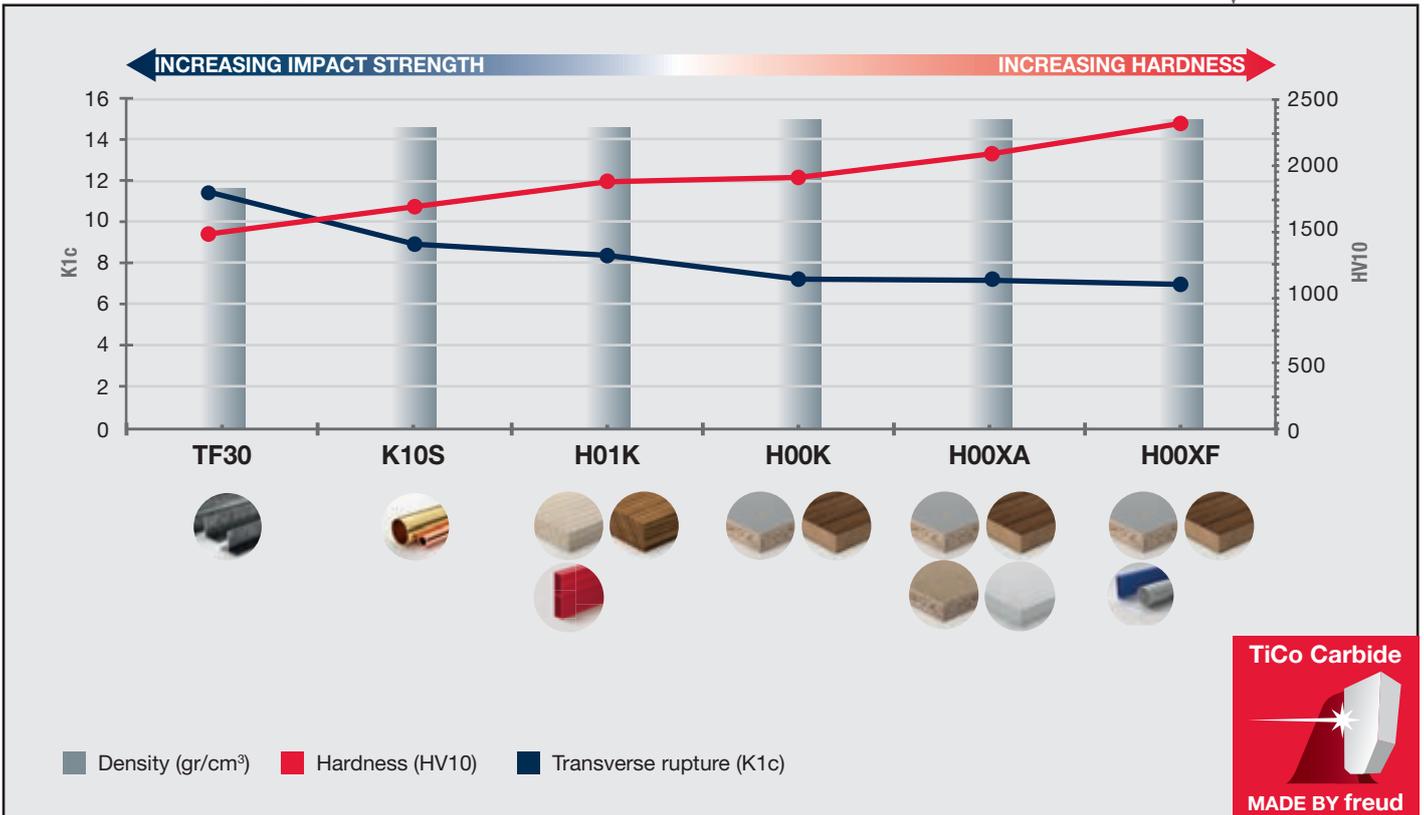


| D | B | b | d | Z | NL | KN | Freud Code | Art. No. |
|-----|-----|-----|----|----|----|----------|------------|------------|
| mm | mm | mm | mm | | | | | |
| 250 | 3,2 | 2,2 | 30 | 22 | | FT01 | ABCD 1234 | A00BC01234 |
| 250 | 3,2 | 2,2 | 70 | 22 | | 4CH 21x5 | ABCD 1234 | A00BC01234 |
| 300 | 3,2 | 2,2 | 30 | 26 | | FT01 | ABCD 1234 | A00BC01234 |



Tooth features

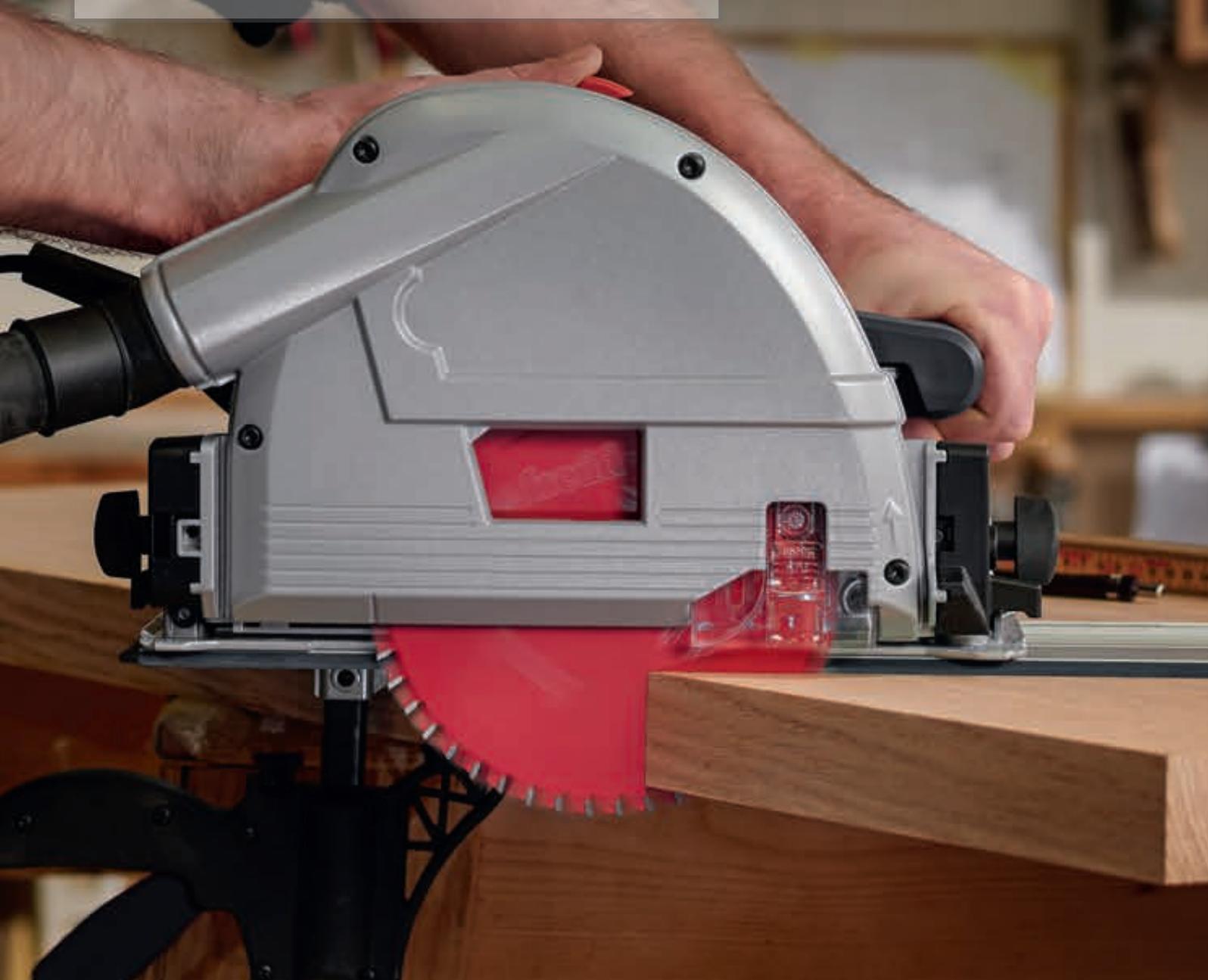
MICRO-GRAIN CARBIDE (HW) HARDNESS USED FOR MANUFACTURING TIPS



Circular Saw Blades for Portable Machines

Freud's wide range of circular saw blades for portable machines offers dedicated solutions for all main power tool brands. Each blade is specifically engineered per application material and machine type. The portfolio includes dedicated blades designed for cordless power tools and featuring extra thin kerf teeth with optimised geometries that enable maximised cuts per battery charge, optimum ease of cut and excellent lifetime.

The range offers a wide variety of solutions dedicated to wood, laminated panel, construct wood, high pressure laminate, aluminium, fibre cement, sandwich panel and multi material. All circular saw blades feature Freud's unique and industry-first attributes.



CIRCULAR SAW BLADES FOR PORTABLE MACHINES

| | |
|---|----------|
| Leading technology for circular saw blades..... | Page 112 |
| The widest professional range for any application need..... | Page 114 |

WOOD

| | |
|--|----------|
| For hand held and plunge circular saws | Page 116 |
| For cordless hand held and plunge circular saws..... | Page 117 |
| For mitre saws | Page 118 |
| For cordless mitre saws | Page 118 |
| For small table saws..... | Page 119 |
| For cordless small table saws | Page 120 |

CONSTRUCT WOOD

| | |
|-----------------------------------|----------|
| For hand held circular saws | Page 122 |
|-----------------------------------|----------|

LAMINATED PANEL

| | |
|--|----------|
| For hand held and plunge circular saws | Page 124 |
| For cordless hand held and plunge circular saws..... | Page 124 |
| For small table saws..... | Page 125 |
| For cordless small table saws | Page 125 |

HIGH PRESSURE LAMINATE

| | |
|--|----------|
| For hand held and plunge circular saws | Page 127 |
| For mitre saws | Page 127 |
| For small table saws..... | Page 127 |

ALUMINIUM

| | |
|--|----------|
| For hand held and plunge circular saws | Page 129 |
| For cordless hand held and plunge circular saws..... | Page 129 |
| For mitre saws | Page 130 |
| For cordless mitre saws | Page 130 |
| For small table saws..... | Page 130 |
| For cordless small table saws | Page 131 |
| LP88M - Saw blades to cut non-ferrous metals | Page 131 |

FIBRE CEMENT

| | |
|--|----------|
| For hand held and plunge circular saws | Page 133 |
| For cordless hand held and plunge circular saws..... | Page 133 |
| For mitre saws | Page 134 |
| For cordless mitre saws | Page 134 |

SANDWICH PANEL

| | |
|--|----------|
| For hand held and plunge circular saws | Page 136 |
|--|----------|

MULTI MATERIAL

| | |
|--|----------|
| For hand held and plunge circular saws | Page 138 |
| For mitre saws | Page 138 |

| | |
|--|----------|
| Tips for the correct use of a circular saw blade | Page 139 |
| Explanation of symbols and abbreviations | Page 142 |

LEADING TECHNOLOGY

TiCo CARBIDE TECHNOLOGY

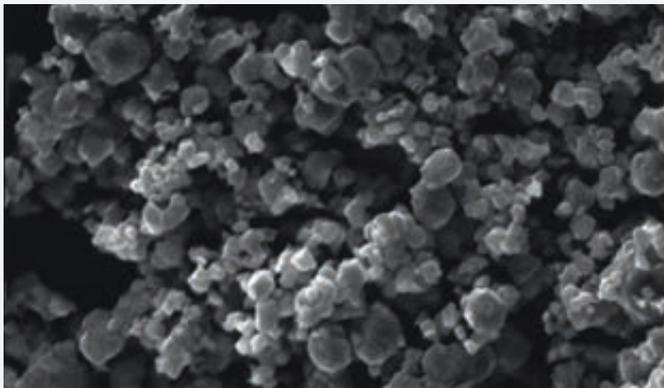
Freud's ownership and control of the entire Carbide production cycle ensures that the correct formula is used for the specific application needs, to constantly maximise the saw blade performance.



TiCo Carbide

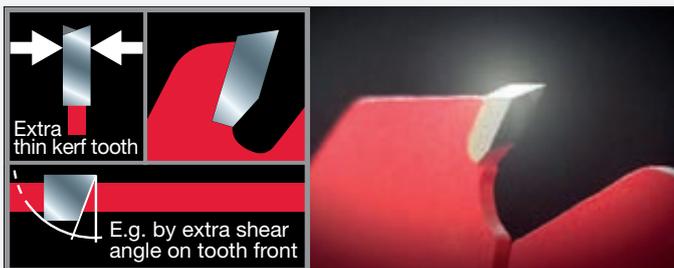
A specially formulated, highly compact Titanium Cobalt Carbide, engineered and manufactured by Freud.

It provides a sharper edge and flawless finish with a dramatically longer cutting life.



DESIGN INNOVATION

Freud's special tooth designs and geometries are engineered to perform perfect cuts and deliver extraordinary durability. Freud's tooth designs are optimised for specific material applications and portable machine types, both corded and cordless.

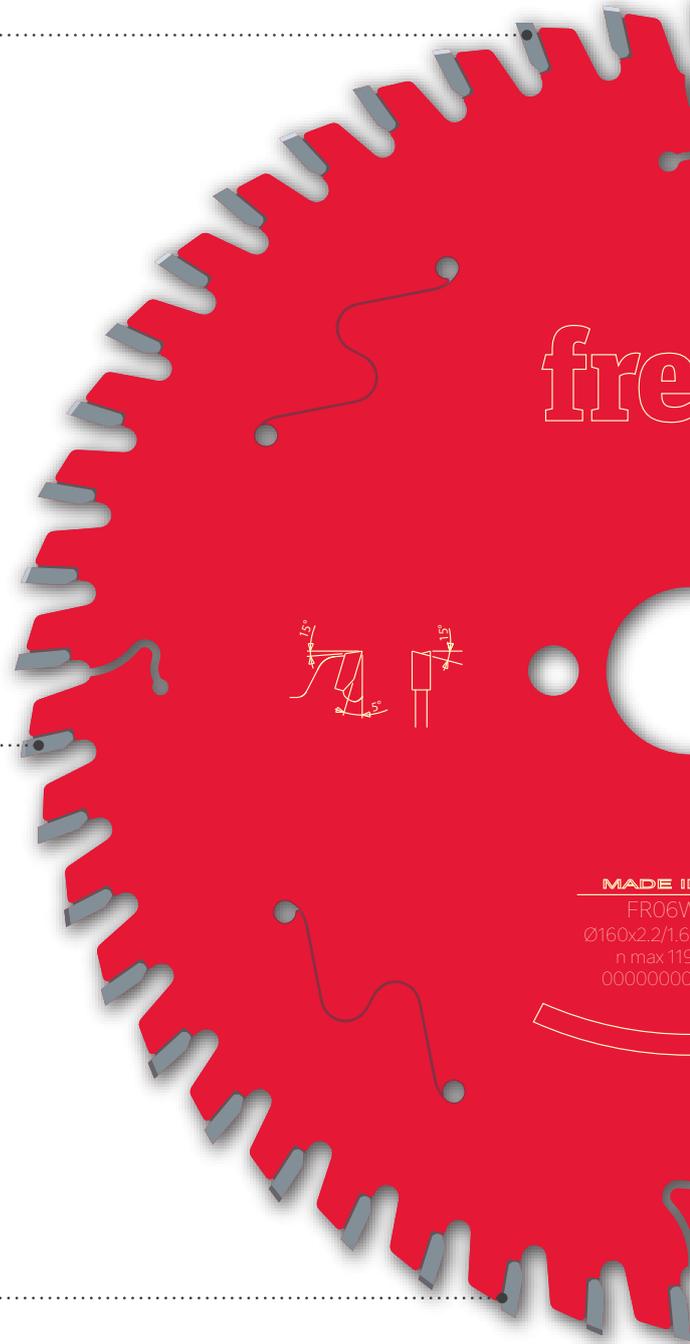
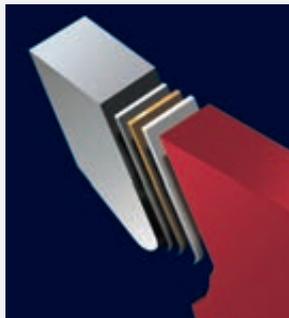


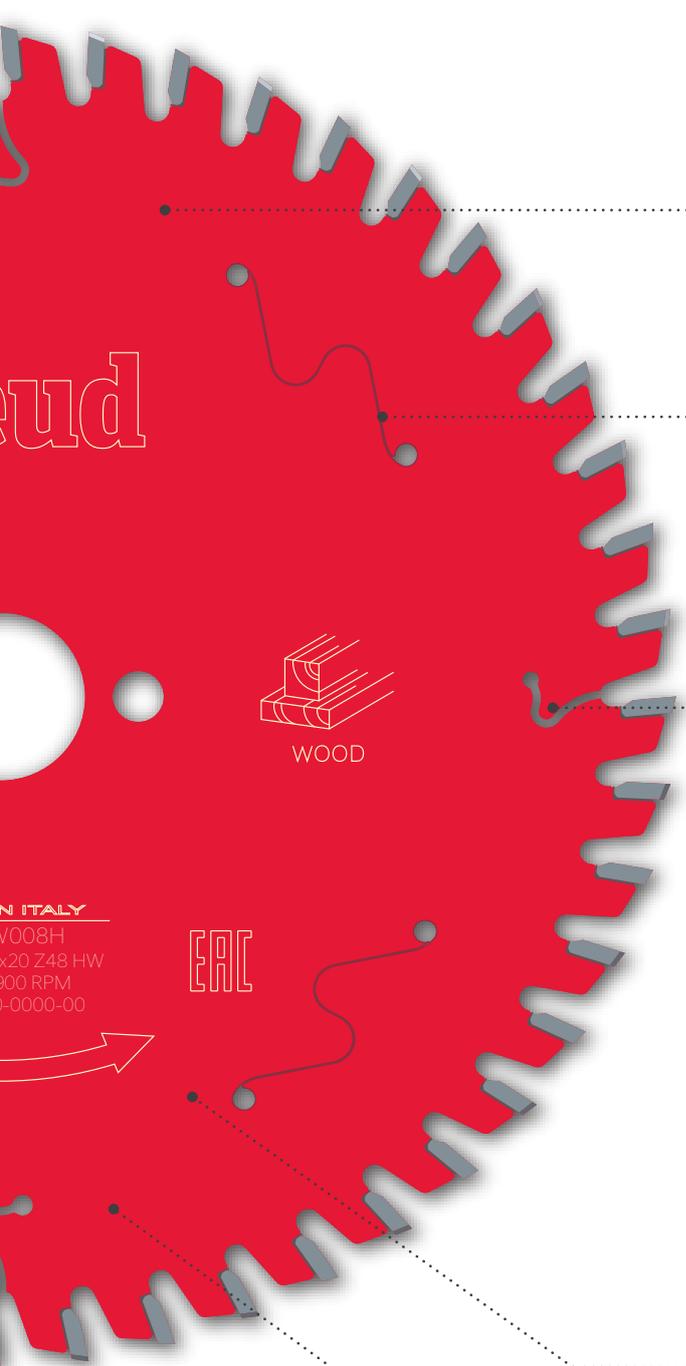
EXTREME SHOCK RESISTANCE



All Freud's circular saw blades undergo an innovative **Tri-Metal Brazing**

process that bonds the Carbide tips to the steel blade body. This special method consists of copper alloy sandwiched between layers of silver alloy, for extra flexibility and maximum impact resistance.





COATING TECHNOLOGY

All Freud's circular saw blades feature an industry-first premium coating for superior protection from heat, pitch build-up and corrosion.

Freud's circular saws for portable machines display Perma-SHIELD Coating for the highest performance on dedicated applications.



Perma-SHIELD Coating

A non-stick coating formulation that withstands the toughest applications.

It provides thermal insulation, protects from corrosion and eliminates resin build-up, reducing downtime for cleaning.

ANTI-VIBRATION SOLUTIONS

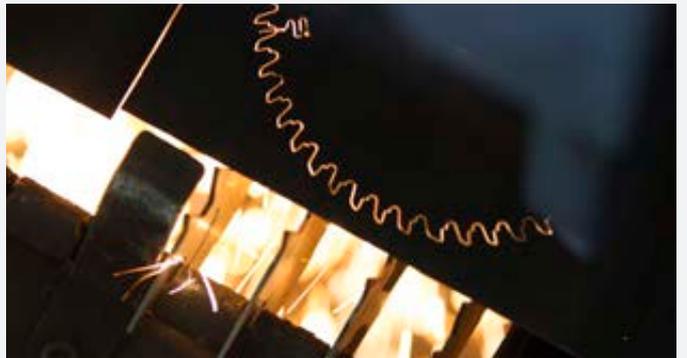


Anti-vibration Slots

Freud's circular saw blades for portable machines display specially designed anti-vibration slots, laser cut on the blade body that enable a smooth running and minimise noise.

LASER-CUT EXPANSION SLOTS

Special laser-cut expansion slots enable heat dispersion and prevent the blade deformation caused by overheating, granting the greatest blade stability.



BALANCING



Tensioning

Freud's circular saw blades ($\geq 200\text{mm}$) include a tensioning ring to maintain the blade flat, maximising cutting precision and performance.

PREMIUM MATERIALS

Premium Steel

Freud's circular blades for portable machines are made from pre-hardened and pre-flattened superior quality steel (up to HRC 46) that delivers the highest precision, performance and durability.

THE WIDEST PROFESSIONAL RANGE FOR ANY APPLICATION NEED

| | |  |  |  |
|-------------------------------|--|---|---|---|
| WOOD |  |  |  |  |
| CONSTRUCT WOOD |  |  |  |  |
| LAMINATED PANEL |  |  |  |  |
| HIGH PRESSURE LAMINATE |  |  |  |  |
| SANDWICH PANEL |  |  |  |  |
| FIBRE CEMENT |  |  |  |  |
| ALUMINIUM |  |  |  |  |
| MULTI MATERIAL |  |  |  |  |

OPTIMISED FOR CORDLESS POWER TOOLS



| | | | |
|------------------------|---|---|---|
| WOOD |  |  |  |
| LAMINATED PANEL |  |  |  |
| ALUMINIUM |  |  |  |
| FIBRE CEMENT |  |  |  |



SPECIAL RANGE FOR CORDLESS POWER TOOLS

- Maximised battery runtime
- Optimised ease of cut

BATTERY RUNTIME

Optimised range (cordless)

Regular range (corded)

EASE OF CUT

Optimised range (cordless)

Regular range (corded)

BLADE LIFETIME

Optimised range (cordless)

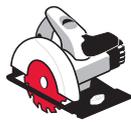
Regular range (corded)

Wood



CIRCULAR SAW BLADES FOR WOOD

For hand-held and plunge circular saws



Hand-held
Circular Saws



Plunge Saws



Corded



Softwood



Hardwood



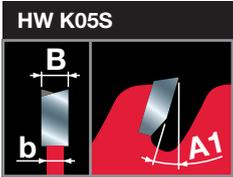
Chipboard



Plywood



MDF



Machines:

Hand-held circular saws and plunge circular saws.

Materials:

Soft and hard solid wood, chipboard, plywood, MDF and other wood based materials.

Technical information:

ATB tooth with positive cutting angle.



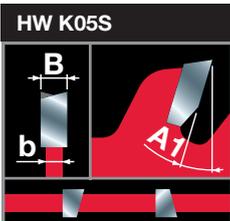
| | D | B | b | d | Z | Hook A1 | Rip cut quality | Cross cut quality | NL | Freud Code | Art. No. |
|--|-----|-----|-----|-------|----|------------|--------------------|----------------------|----------|------------|------------|
| | mm | mm | mm | mm | | | | | | | |
| | 120 | 1,8 | 1,3 | 20 | 12 | 15° | ••• | • | - | FR02W001H | F03FS09663 |
| | 120 | 1,8 | 1,3 | 20 | 40 | 5° | • | ••• | - | FR02W002H | F03FS09664 |
| | 130 | 2,4 | 1,6 | 20 | 24 | 15° | •• | •• | 2/6/32,5 | FR03W001H | F03FS09665 |
| | 130 | 2,4 | 1,6 | 20 | 36 | 5° | • | ••• | 2/6/32,5 | FR03W002H | F03FS09666 |
| | 140 | 1,8 | 1,3 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR04W001H | F03FS09667 |
| | 140 | 1,8 | 1,3 | 20 | 36 | 10° | •• | •• | 2/6/32,5 | FR04W002H | F03FS09668 |
| | 140 | 1,8 | 1,3 | 20 | 42 | 5° | • | ••• | 2/6/32,5 | FR04W003H | F03FS09669 |
| | 150 | 2,4 | 1,6 | 16 | 24 | 15° | ••• | • | 2/6/32,5 | FR05W001H | F03FS09670 |
| | 150 | 2,4 | 1,6 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR05W002H | F03FS09671 |
| | 150 | 2,4 | 1,6 | 20 | 42 | 5° | • | ••• | 2/6/32,5 | FR05W003H | F03FS09672 |
| | 160 | 2,4 | 1,6 | 16 | 24 | 15° | ••• | • | 2/6/32,5 | FR06W001H | F03FS09673 |
| | 160 | 2,4 | 1,6 | 16 | 48 | 5° | • | ••• | 2/6/32,5 | FR06W002H | F03FS09674 |
| | 160 | 1,8 | 1,3 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR06W003H | F03FS09675 |
| | 160 | 1,8 | 1,3 | 20 | 36 | 10° | •• | •• | 2/6/32,5 | FR06W004H | F03FS09676 |
| | 160 | 1,8 | 1,3 | 20 | 48 | 5° | • | ••• | 2/6/32,5 | FR06W005H | F03FS09677 |
| | 160 | 2,2 | 1,6 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR06W006H | F03FS09678 |
| | 160 | 2,2 | 1,6 | 20 | 36 | 10° | •• | •• | 2/6/32,5 | FR06W007H | F03FS09679 |
| | 160 | 2,2 | 1,6 | 20 | 48 | 5° | • | ••• | 2/6/32,5 | FR06W008H | F03FS09680 |
| | 160 | 2,4 | 1,6 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR06W009H | F03FS09681 |
| | 160 | 2,4 | 1,6 | 20 | 36 | 10° | •• | •• | 2/6/32,5 | FR06W010H | F03FS09682 |
| | 160 | 2,4 | 1,6 | 20 | 48 | 5° | • | ••• | 2/6/32,5 | FR06W011H | F03FS09683 |
| | 160 | 2,4 | 1,6 | 30 | 24 | 15° | ••• | • | 2/6/42 | FR06W012H | F03FS09684 |
| | 160 | 2,4 | 1,6 | 30 | 48 | 5° | • | ••• | 2/6/42 | FR06W013H | F03FS09685 |
| | 165 | 1,7 | 1,3 | 20 | 12 | 20° | ••• | • | - | FR07W009H | F03FS10040 |
| | 165 | 1,7 | 1,3 | 20 | 24 | 15° | ••• | • | - | FR07W001H | F03FS09686 |
| | 165 | 1,7 | 1,3 | 20 | 40 | 18° | • | ••• | - | FR07W002H | F03FS09687 |
| | 165 | 2,4 | 1,6 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR07W003H | F03FS09688 |
| | 165 | 2,4 | 1,6 | 20 | 36 | 10° | •• | •• | 2/6/32,5 | FR07W004H | F03FS09689 |
| | 165 | 2,4 | 1,6 | 20 | 48 | 5° | • | ••• | 2/6/32,5 | FR07W005H | F03FS09690 |
| | 165 | 2,4 | 1,6 | 20 | 56 | 5° | • | ••• | 2/6/32,5 | FR07W013H | F03FS11505 |
| | 165 | 2,4 | 1,6 | 30 | 24 | 15° | ••• | • | 2/7/42 | FR07W006H | F03FS09691 |
| | 165 | 2,4 | 1,6 | 30 | 36 | 10° | •• | •• | 2/7/42 | FR07W007H | F03FS09692 |
| | 165 | 2,4 | 1,6 | 30 | 48 | 5° | • | ••• | 2/7/42 | FR07W008H | F03FS09693 |
| | 170 | 2,4 | 1,6 | 30 | 40 | 10° | •• | •• | 2/7/42 | FR08W002H | F03FS09695 |
| | 180 | 2,4 | 1,6 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR09W001H | F03FS09696 |
| | 180 | 2,4 | 1,6 | 20 | 48 | 5° | • | ••• | 2/6/32,5 | FR09W002H | F03FS09697 |
| | 180 | 2,4 | 1,6 | 30 | 24 | 15° | ••• | • | 2/7/42 | FR09W003H | F03FS09698 |
| | 180 | 2,4 | 1,6 | 30 | 48 | 5° | • | ••• | 2/7/42 | FR09W004H | F03FS09699 |
| | 182 | 1,7 | 1,3 | 19,05 | 30 | 15° | ••• | • | - | FR10W001H | F03FS09700 |
| | 182 | 1,7 | 1,3 | 19,05 | 40 | 15° | •• | •• | - | FR10W002H | F03FS09701 |
| | 182 | 1,7 | 1,3 | 19,05 | 60 | 15° | • | ••• | - | FR10W003H | F03FS09702 |
| | 182 | 1,7 | 1,3 | 25,4 | 30 | 15° | ••• | • | - | FR10W004H | F03FS11507 |
| | 182 | 1,7 | 1,3 | 25,4 | 40 | 15° | •• | •• | - | FR10W005H | F03FS11508 |
| | 182 | 1,7 | 1,3 | 25,4 | 60 | 15° | • | ••• | - | FR10W006H | F03FS11509 |
| | 184 | 2,4 | 1,6 | 16 | 24 | 15° | ••• | • | 2/6/32,5 | FR11W001H | F03FS09703 |
| | 184 | 2,4 | 1,6 | 16 | 40 | 10° | •• | •• | 2/6/32,5 | FR11W002H | F03FS09704 |
| | 184 | 2,4 | 1,6 | 16 | 24 | 15° | ••• | • | - | FR11W012H | F03FS11511 |
| | 184 | 2,4 | 1,6 | 30 | 24 | 15° | ••• | • | 2/7/42 | FR11W007H | F03FS09709 |
| | 185 | 2,4 | 1,6 | 20 | 24 | 15 | ••• | • | - | FR12W001H | F03FS11513 |
| | 185 | 2,4 | 1,6 | 20 | 48 | 10 | • | ••• | - | FR12W002H | F03FS11514 |
| | 190 | 2,4 | 1,6 | 16 | 24 | 15° | ••• | • | 2/6/32,5 | FR13W001H | F03FS09712 |
| | 190 | 2,4 | 1,6 | 16 | 48 | 10° | • | ••• | 2/6/32,5 | FR13W002H | F03FS09713 |

CIRCULAR SAW BLADES FOR WOOD

| D | B | b | d | Z | Hook | Rip cut | Cross cut | NL | Freud Code | Art. No. |
|-----|-----|-----|------|----|------|---------|-----------|----------|------------|------------|
| mm | mm | mm | mm | | A1 | quality | quality | | | |
| 190 | 2,4 | 1,6 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR13W003H | F03FS09714 |
| 190 | 2,4 | 1,6 | 20 | 48 | 10° | • | ••• | 2/6/32,5 | FR13W004H | F03FS09715 |
| 190 | 2,4 | 1,6 | 20 | 56 | 5° | • | ••• | 2/6/32,5 | FR13W005H | F03FS09716 |
| 190 | 2,4 | 1,6 | 30 | 24 | 15° | ••• | • | 2/7/42 | FR13W006H | F03FS09717 |
| 190 | 2,4 | 1,6 | 30 | 40 | 10° | •• | •• | 2/7/42 | FR13W007H | F03FS09718 |
| 190 | 2,4 | 1,6 | 30 | 48 | 10° | • | ••• | 2/7/42 | FR13W008H | F03FS09719 |
| 190 | 2,4 | 1,6 | 30 | 56 | 5° | • | ••• | 2/7/42 | FR13W009H | F03FS09720 |
| 200 | 1,7 | 1,2 | 25,4 | 40 | 10° | •• | •• | - | FR14W003H | F03FS11515 |
| 200 | 2,4 | 1,6 | 30 | 24 | 15° | ••• | • | 2/7/42 | FR14W001H | F03FS09721 |
| 200 | 2,4 | 1,6 | 30 | 48 | 10° | • | ••• | 2/7/42 | FR14W002H | F03FS09722 |
| 210 | 2,4 | 1,8 | 30 | 24 | 15° | ••• | • | 2/7/42 | FR15W003H | F03FS09725 |
| 210 | 2,4 | 1,8 | 30 | 40 | 15° | •• | •• | 2/7/42 | FR15W001H | F03FS09723 |
| 210 | 2,4 | 1,8 | 30 | 48 | 10° | • | ••• | 2/7/42 | FR15W004H | F03FS09726 |
| 210 | 2,4 | 1,8 | 30 | 56 | 5° | • | ••• | 2/7/42 | FR15W002H | F03FS09724 |
| 230 | 2,8 | 1,8 | 30 | 24 | 15° | ••• | • | 2/6/42 | FR19W001H | F03FS09728 |
| 230 | 2,8 | 1,8 | 30 | 36 | 15° | •• | •• | 2/7/42 | FR19W002H | F03FS09729 |
| 230 | 2,8 | 1,8 | 30 | 48 | 15° | •• | •• | 2/7/42 | FR19W003H | F03FS09730 |
| 230 | 2,2 | 1,6 | 25,4 | 60 | 10° | • | ••• | - | FR20W007H | F03FS11521 |
| 235 | 2,8 | 1,8 | 30 | 24 | 15° | ••• | • | 2/6/42 | FR20W003H | F03FS09733 |
| 235 | 2,8 | 1,8 | 30 | 36 | 15° | •• | •• | 2/7/42 | FR20W004H | F03FS09734 |
| 235 | 2,8 | 1,8 | 30 | 48 | 15° | •• | •• | 2/7/42 | FR20W005H | F03FS09735 |
| 235 | 2,8 | 1,8 | 30 | 56 | 10° | • | ••• | 2/7/42 | FR20W006H | F03FS09736 |
| 237 | 2,5 | 1,8 | 30 | 24 | 15° | ••• | • | 2/7/42 | FR21W001H | F03FS09737 |
| 237 | 2,5 | 1,8 | 30 | 56 | 10° | • | ••• | 2/7/42 | FR21W002H | F03FS09738 |
| 240 | 2,8 | 1,8 | 30 | 48 | 15° | •• | •• | 2/7/42 | FR22W001H | F03FS09739 |
| 270 | 2,8 | 1,8 | 30 | 60 | 10° | •• | •• | FT121 | FR27W001H | F03FS09740 |
| 350 | 3,5 | 2,2 | 30 | 24 | 20° | ••• | • | 2/7/42 | FR32W001H* | F03FS09742 |
| 355 | 3,0 | 2,2 | 30 | 60 | 15° | ••• | • | FT121 | FR33W001H* | F03FS09743 |

*HW K10S

FT121: 2/7/42 + 2/9/46 + 2/9,5/46,5 + 2/10/60



Machines:

Cordless hand-held and plunge circular saws.

Materials:

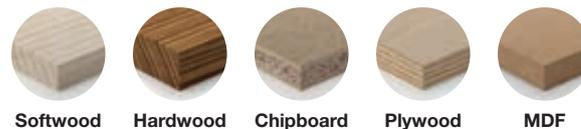
Soft and hard solid wood, chipboard, plywood, MDF and other wood based materials.

Technical information:

Specifically designed to maximise battery runtime and optimise ease of cut on cordless saws. Thin kerf teeth and axial shear angle on tooth front. ATB tooth with positive cutting angle.



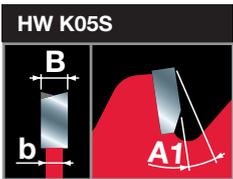
For cordless hand-held and plunge circular saws



| D | B | b | d | Z | Hook | Rip cut | Cross cut | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|---------|-----------|----------|------------|------------|
| mm | mm | mm | mm | | A1 | quality | quality | | | |
| 120 | 1,7 | 1,2 | 20 | 24 | 20° | •• | •• | - | FR02W003HC | F03FS10043 |
| 136 | 1,5 | 1,0 | 20 | 24 | 20° | •• | •• | - | FR03W003HC | F03FS10044 |
| 140 | 1,8 | 1,3 | 20 | 24 | 15° | ••• | • | - | FR04W004HC | F03FS10045 |
| 140 | 1,8 | 1,3 | 20 | 42 | 5° | • | ••• | - | FR04W005HC | F03FS10046 |
| 160 | 1,5 | 1,0 | 20 | 24 | 25° | ••• | • | - | FR05W015HC | F03FS10048 |
| 160 | 1,5 | 1,0 | 20 | 36 | 15° | •• | •• | - | FR05W016HC | F03FS10049 |
| 160 | 1,5 | 1,0 | 20 | 48 | 10° | • | ••• | - | FR05W017HC | F03FS10050 |
| 160 | 1,8 | 1,3 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR06W003H | F03FS09675 |
| 160 | 1,8 | 1,3 | 20 | 36 | 10° | •• | •• | 2/6/32,5 | FR06W004H | F03FS09676 |
| 160 | 1,8 | 1,3 | 20 | 48 | 5° | • | ••• | 2/6/32,5 | FR06W005H | F03FS09677 |
| 160 | 2,2 | 1,6 | 20 | 24 | 15° | ••• | • | 2/6/32,5 | FR06W006H | F03FS09678 |
| 160 | 2,2 | 1,6 | 20 | 36 | 10° | •• | •• | 2/6/32,5 | FR06W007H | F03FS09679 |
| 160 | 2,2 | 1,6 | 20 | 48 | 5° | • | ••• | 2/6/32,5 | FR06W008H | F03FS09680 |
| 165 | 1,5 | 1,0 | 20 | 12 | 25° | ••• | • | - | FR07W009HC | F03FS10051 |
| 165 | 1,5 | 1,0 | 20 | 24 | 25° | ••• | • | - | FR07W010HC | F03FS10052 |
| 165 | 1,5 | 1,0 | 20 | 36 | 15° | •• | •• | - | FR07W011HC | F03FS10053 |
| 165 | 1,5 | 1,0 | 20 | 48 | 10° | • | ••• | - | FR07W012HC | F03FS10054 |
| 165 | 1,7 | 1,3 | 20 | 12 | 20° | ••• | • | - | FR07W009H | F03FS10040 |
| 165 | 1,7 | 1,3 | 20 | 24 | 15° | ••• | • | - | FR07W001H | F03FS09686 |
| 165 | 1,7 | 1,3 | 20 | 40 | 18° | • | ••• | - | FR07W002H | F03FS09687 |

CIRCULAR SAW BLADES FOR WOOD

| D mm | B mm | b mm | d mm | Z | Hook A1 | Rip cut quality | Cross cut quality | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|--------------------|----------------------|----|------------|------------|
| 182 | 1,7 | 1,3 | 19,05 | 30 | 15° | ••• | • | - | FR10W001H | F03FS09700 |
| 182 | 1,7 | 1,3 | 19,05 | 40 | 15° | •• | •• | - | FR10W002H | F03FS09701 |
| 182 | 1,7 | 1,3 | 19,05 | 60 | 15° | • | ••• | - | FR10W003H | F03FS09702 |
| 184 | 1,6 | 1,0 | 20 | 24 | 25° | ••• | • | - | FR11W010HC | F03FS10055 |
| 184 | 1,6 | 1,0 | 20 | 48 | 10° | • | ••• | - | FR11W011HC | F03FS10056 |
| 190 | 1,5 | 1,0 | 30 | 18 | 25° | ••• | • | - | FR13W010HC | F03FS10057 |
| 190 | 1,5 | 1,0 | 30 | 24 | 25° | ••• | • | - | FR13W011HC | F03FS10058 |
| 190 | 1,5 | 1,0 | 30 | 48 | 15° | •• | •• | - | FR13W012HC | F03FS10059 |
| 190 | 1,5 | 1,0 | 30 | 60 | 10° | • | ••• | - | FR13W013HC | F03FS10060 |

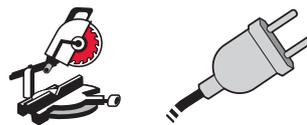


Machines:
Mitre saws.

Materials:
Soft and hard solid wood, chipboard, plywood, MDF and other wood based materials.

Technical information:
ATB tooth with negative cutting angle.

For mitre saws



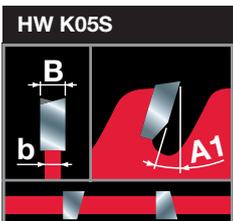
Mitre Saws Corded



Softwood Hardwood Chipboard Plywood MDF

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|--------|------------|------------|
| 210 | 2,4 | 1,8 | 25,4 | 24 | -5° | - | FR15W002M | F03FS11566 |
| 210 | 2,4 | 1,8 | 25,4 | 48 | -5° | - | FR15W003M | F03FS11517 |
| 210 | 2,4 | 1,8 | 30 | 48 | -5° | 2/7/42 | FR15W001M | F03FS09747 |
| 216 | 2,4 | 1,8 | 25,4 | 48 | -5° | 2/6/42 | FR16W004M | F03FS09751 |
| 216 | 2,4 | 1,8 | 25,4 | 64 | -5° | 2/6/42 | FR16W005M | F03FS09752 |
| 216 | 2,4 | 1,8 | 30 | 24 | -5° | 2/6/42 | FR16W001M | F03FS09748 |
| 216 | 2,4 | 1,8 | 30 | 40 | -5° | 2/7/42 | FR16W002M | F03FS09749 |
| 216 | 2,4 | 1,8 | 30 | 48 | -5° | 2/7/42 | FR16W003M | F03FS09750 |
| 250 | 2,4 | 1,8 | 30 | 40 | -5° | FT121 | FR23W001M | F03FS09753 |
| 250 | 2,4 | 1,8 | 30 | 60 | -5° | FT121 | FR23W002M | F03FS09754 |
| 254 | 2,4 | 1,8 | 30 | 60 | -5° | FT121 | FR24W001M | F03FS09755 |
| 260 | 2,4 | 1,8 | 30 | 60 | -5° | FT121 | FR26W001M | F03FS09760 |
| 300 | 2,4 | 1,8 | 30 | 72 | -5° | FT121 | FR28W001M | F03FS09761 |
| 305 | 2,4 | 1,8 | 30 | 48 | -5° | - | FR29W001M | F03FS09762 |
| 305 | 2,4 | 1,8 | 30 | 72 | -5° | FT121 | FR29W002M | F03FS09763 |
| 315 | 2,4 | 1,8 | 30 | 72 | -5° | FT121 | FR30W001M | F03FS09766 |

FT121: 2/7/42 + 2/9/46 + 2/9,5/46,5 + 2/10/60

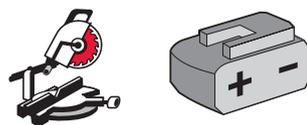


Machines:
Cordless mitre saws.

Materials:
Soft and hard solid wood, chipboard, plywood, MDF and other wood based materials.

Technical information:
Specifically designed to maximise battery runtime and optimise ease of cut on cordless mitre saws. Thin kerf teeth and axial shear angle on tooth front. ATB tooth with positive cutting angle.

For cordless mitre saws



Mitre Saws Cordless

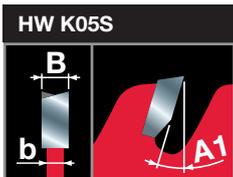


Softwood Hardwood Chipboard Plywood MDF

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|----|------------|------------|
| 216 | 1,7 | 1,2 | 30 | 24 | 5° | - | FR16W006MC | F03FS10061 |
| 216 | 1,7 | 1,2 | 30 | 48 | 5° | - | FR16W007MC | F03FS10062 |
| 250 | 2,1 | 1,6 | 30 | 24 | 5° | - | FR23W003MC | F03FS10063 |
| 250 | 2,1 | 1,6 | 30 | 48 | 5° | - | FR23W004MC | F03FS10064 |

CIRCULAR SAW BLADES FOR WOOD

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|----|------------|------------|
| 254 | 2,1 | 1,6 | 30 | 24 | 5° | - | FR24W002MC | F03FS11527 |
| 254 | 2,1 | 1,6 | 30 | 48 | 5° | - | FR24W003MC | F03FS11528 |
| 305 | 2,2 | 1,6 | 30 | 42 | 5° | - | FR29W004MC | F03FS10065 |
| 305 | 2,2 | 1,6 | 30 | 60 | 5° | - | FR29W005MC | F03FS10066 |
| 305 | 2,2 | 1,6 | 30 | 96 | 5° | - | FR29W006MC | F03FS10067 |



Machines:
Small table saws.

Materials:
Soft and hard solid wood, chipboard, plywood, MDF and other wood based materials.

Technical information:
ATB tooth with positive cutting angle.



For small table saws

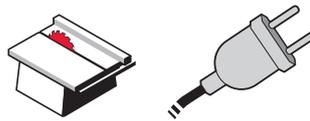


Table saws Corded

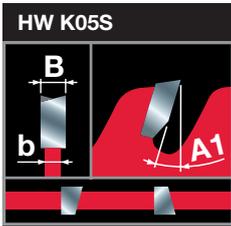


Softwood Hardwood Chipboard Plywood MDF

| D mm | B mm | b mm | d mm | Z | Hook A1 | Rip cut quality | Cross cut quality | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|------------|--------------------|----------------------|---------|------------|------------|
| 190 | 2,0 | 1,3 | 30 | 24 | 15° | ••• | • | 2/7/42 | FR13W001T | F03FS09767 |
| 190 | 2,0 | 1,3 | 30 | 48 | 5° | • | ••• | 2/7/42 | FR13W002T | F03FS09768 |
| 190 | 2,4 | 1,6 | Star | 24 | 15° | ••• | • | - | FR13W003T | F03FS09769 |
| 190 | 2,4 | 1,6 | Star | 48 | 5° | • | ••• | - | FR13W004T | F03FS09770 |
| 216 | 2,4 | 1,8 | 30 | 24 | 15° | ••• | • | 2/6/42 | FR16W003T | F03FS11519 |
| 216 | 2,4 | 1,8 | 30 | 48 | 10° | • | ••• | 2/6/42 | FR16W004T | F03FS11520 |
| 220 | 2,6 | 1,6 | 30 | 48 | 10° | •• | •• | 2/7/42 | FR17W001T | F03FS09771 |
| 225 | 2,6 | 1,6 | 30 | 32 | 15° | ••• | • | 2/7/42 | FR18W001T | F03FS09772 |
| 225 | 2,6 | 1,6 | 30 | 48 | 10° | •• | •• | 2/7/42 | FR18W002T | F03FS09773 |
| 250 | 2,4 | 1,8 | 25,4 | 48 | 15 | ••• | • | - | FR23W005T | F03FS11641 |
| 250 | 2,4 | 1,8 | 25,4 | 60 | 15 | •• | •• | - | FR23W006T | F03FS11642 |
| 250 | 2,4 | 1,8 | 25,4 | 80 | 15 | • | ••• | - | FR23W007T | F03FS11643 |
| 250 | 2,4 | 1,8 | 25,4 | 100 | 15 | • | ••• | - | FR23W008T | F03FS11644 |
| 250 | 2,8 | 1,8 | 30 | 24 | 20° | ••• | • | 2/6/42 | FR23W001T | F03FS09774 |
| 250 | 2,8 | 1,8 | 30 | 40 | 15° | ••• | • | 2/6/42 | FR23W002T | F03FS09775 |
| 250 | 2,8 | 1,8 | 30 | 60 | 10° | •• | •• | 2/6/42 | FR23W003T | F03FS09776 |
| 250 | 2,8 | 1,8 | 30 | 80 | 5° | • | ••• | FT121 | FR23W004T | F03FS09777 |
| 254 | 2,6 | 1,8 | 30 | 24 | 20° | ••• | • | 2/6/42 | FR24W001T | F03FS09778 |
| 254 | 2,6 | 1,8 | 30 | 40 | 15° | ••• | • | 2/6/42 | FR24W002T | F03FS09779 |
| 254 | 2,6 | 1,8 | 30 | 60 | 10° | •• | •• | FT121 | FR24W003T | F03FS09780 |
| 254 | 2,6 | 1,8 | 30 | 80 | 5° | • | ••• | FT121 | FR24W004T | F03FS09781 |
| 255 | 2,8 | 1,8 | 25,4 | 40 | 15° | ••• | • | - | FR25W002T | F03FS10134 |
| 255 | 2,8 | 1,8 | 25,4 | 60 | 15° | •• | •• | - | FR25W003T | F03FS10135 |
| 255 | 2,8 | 1,8 | 25,4 | 80 | 15° | • | ••• | - | FR25W004T | F03FS10136 |
| 260 | 2,6 | 1,8 | 30 | 60 | 10° | •• | •• | - | FR26W001T | F03FS09782 |
| 260 | 2,6 | 1,8 | 30 | 80 | 5° | • | ••• | FT121 | FR26W002T | F03FS09783 |
| 280 | 2,5 | 1,8 | 30 | 64 | 10° | •• | •• | 2/10/60 | FR27W001T | F03FS11530 |
| 300 | 2,5 | 1,8 | 30 | 48 | 15° | ••• | • | 2/10/60 | FR28W001T | F03FS09784 |
| 300 | 2,5 | 1,8 | 30 | 72 | 10° | •• | •• | 2/10/60 | FR28W002T | F03FS09785 |
| 300 | 2,5 | 1,8 | 30 | 100 | 5° | • | ••• | FT121 | FR28W003T | F03FS09786 |
| 305 | 2,8 | 1,8 | 25,4 | 96 | 15° | • | ••• | - | FR29W002T | F03FS10138 |
| 305 | 2,8 | 1,8 | 30 | 100 | 5° | • | ••• | 2/10/60 | FR29W001T | F03FS09787 |
| 355 | 3,0 | 2,2 | 25,4 | 108 | 15° | • | ••• | - | FR33W001T | F03FS10137 |

FT121: 2/7/42 + 2/9/46 + 2/9,5/46,5 + 2/10/60

CIRCULAR SAW BLADES FOR WOOD



Machines:
Cordless small table saws.

Materials:
Soft and hard solid wood, chipboard, plywood, MDF and other wood based materials.

Technical information:
Specifically designed to maximise battery runtime and optimise ease of cut on cordless table saws. Thin kerf teeth and axial shear angle on tooth front. ATB tooth with positive cutting angle.



For cordless small table saws

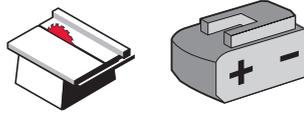


Table saws

Cordless



Softwood

Hardwood

Chipboard

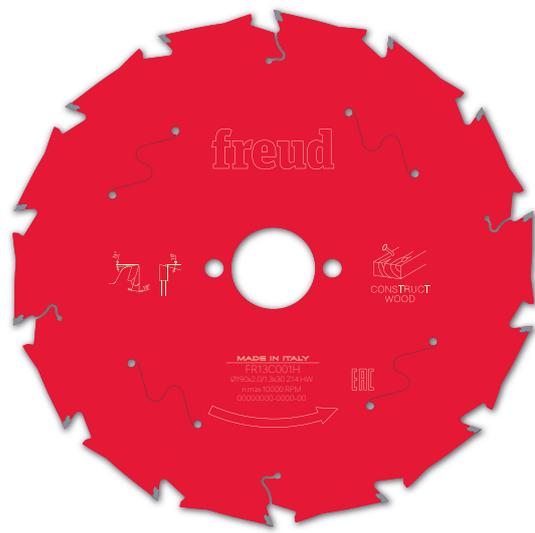
Plywood

MDF

| D mm | B mm | b mm | d mm | Z | Hook A1 | Rip cut quality | Cross cut quality | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|--------------------|----------------------|----|------------|------------|
| 210 | 2,0 | 1,4 | 30 | 24 | 25° | ••• | • | - | FR15W001TC | F03FS10068 |
| 210 | 2,0 | 1,4 | 30 | 48 | 15° | • | ••• | - | FR15W002TC | F03FS10069 |
| 216 | 2,0 | 1,4 | 30 | 24 | 25° | ••• | • | - | FR16W001TC | F03FS10070 |
| 216 | 2,0 | 1,4 | 30 | 48 | 15° | • | ••• | - | FR16W002TC | F03FS10071 |
| 254 | 2,1 | 1,6 | 30 | 24 | 25° | ••• | • | - | FR24W005TC | F03FS10072 |
| 254 | 2,1 | 1,6 | 30 | 40 | 20° | •• | •• | - | FR24W006TC | F03FS10073 |
| 254 | 2,1 | 1,6 | 30 | 60 | 15° | • | ••• | - | FR24W007TC | F03FS10074 |

Construct Wood



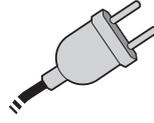


CIRCULAR SAW BLADES FOR CONSTRUCT WOOD

For hand-held circular saws



Hand-held Circular Saws



Corded



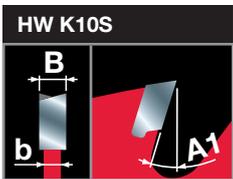
Construction Timber



Shuttering Board



Chipboard



Machines:

Hand-held circular saws.

Materials:

Construction timber with nails and concrete residues, chipboard and formwork boards.

Technical information:

Special Carbide recipe and innovative tooth design ensure high cutting resistance, also when hitting nails.

ATB tooth with positive cutting angle.

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|----------|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 160 | 2,0 | 1,3 | 20 | 14 | 18° | 2/6/32,5 | FR06C001H | F03FS09788 |
| 165 | 2,0 | 1,3 | 20 | 14 | 18° | 2/6/32,5 | FR07C001H | F03FS09789 |
| 180 | 2,0 | 1,3 | 30 | 14 | 18° | 2/6/42 | FR09C001H | F03FS09790 |
| 184 | 2,0 | 1,3 | 16 | 14 | 18° | 2/6/32,5 | FR11C001H | F03FS09791 |
| 190 | 2,0 | 1,3 | 30 | 14 | 18° | 2/7/42 | FR13C001H | F03FS09792 |
| 200 | 2,0 | 1,3 | 30 | 16 | 18° | 2/7/42 | FR14C001H | F03FS09793 |
| 210 | 2,0 | 1,3 | 30 | 16 | 18° | 2/7/42 | FR15C001H | F03FS09794 |
| 230 | 2,2 | 1,6 | 30 | 20 | 18° | 2/7/42 | FR19C001H | F03FS09795 |
| 235 | 2,2 | 1,6 | 30 | 20 | 18° | 2/7/42 | FR20C001H | F03FS09796 |

Laminated Panel



CIRCULAR SAW BLADES FOR LAMINATED PANEL

For hand-held and plunge circular saws

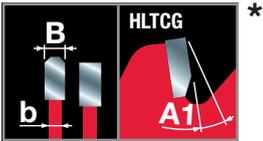
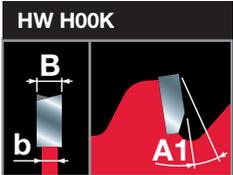


Hand-held Circular Saws Plunge Saws Corded



Laminated Chipboard Laminated MDF Chipboard MDF

| | D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|--|---------|---------|---------|---------|----|------------|----------|------------|------------|
| | 140 | 1,8 | 1,3 | 20 | 42 | -5° | 2/6/32,5 | FR04L001H | F03FS09797 |
| | 160 | 1,8 | 1,2 | 20 | 48 | -5° | - | FR06L003HC | F03FS10075 |
| | 160 | 2,2 | 1,6 | 20 | 48 | -5° | 2/6/32,5 | FR06L001H | F03FS09798 |
| | 160 | 2,2 | 1,6 | 20 | 48 | -5° | - | FR06L002H* | F03FS09799 |
| | 165 | 2,6 | 1,6 | 20 | 48 | -5° | 2/6/32,5 | FR07L001H | F03FS09800 |
| | 185 | 2,4 | 1,6 | 20 | 60 | -5° | - | FR12L001H | F03FS09801 |
| | 190 | 2,6 | 1,6 | 30 | 60 | -5° | 2/7/42 | FR13L001H | F03FS09802 |



Machines:
Hand-held and plunge circular saws.

Materials:
Laminated and bilaminated panels, chipboard, MDF and fine-coated or veneered panels.

Technical information:
ATB tooth with negative cutting angle.
*HLTCG with negative cutting angle.

For cordless hand-held and plunge circular saws

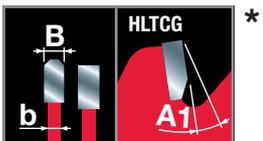
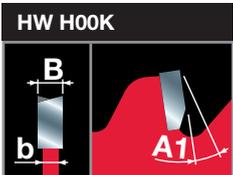


Hand-held Cordless Saws Plunge Saws Cordless



Laminated Chipboard Laminated MDF Chipboard MDF

| | D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|--|---------|---------|---------|---------|----|------------|----------|------------|------------|
| | 140 | 1,8 | 1,3 | 20 | 42 | -5° | 2/6/32,5 | FR04L001H | F03FS09797 |
| | 160 | 1,8 | 1,2 | 20 | 48 | -5° | - | FR06L003HC | F03FS10075 |
| | 160 | 2,2 | 1,6 | 20 | 48 | -5° | 2/6/32,5 | FR06L001H | F03FS09798 |
| | 160 | 2,2 | 1,6 | 20 | 48 | -5° | - | FR06L002H* | F03FS09799 |
| | 165 | 1,8 | 1,2 | 20 | 48 | -5° | - | FR07L002HC | F03FS10076 |
| | 190 | 2,1 | 1,4 | 30 | 60 | -5° | - | FR13L002HC | F03FS10077 |



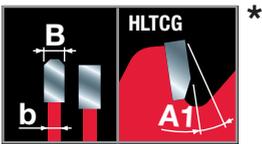
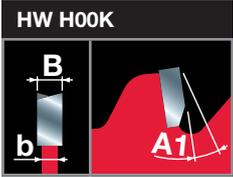
Machines:
Cordless hand-held and plunge circular saws.

Materials:
Laminated and bilaminated panels, chipboard, MDF and fine-coated or veneered panels.

Technical information:
Specifically designed to maximise battery runtime and optimise ease of cut on cordless saws.
Thin kerf and ATB tooth with negative cutting angle.
*HLTCG with negative cutting angle.

CIRCULAR SAW BLADES FOR LAMINATED PANEL

For small table saws



Machines:
Small table saws.

Materials:
Laminated and bilaminated panels, chipboard, MDF and fine-coated or veneered panels.

Technical information:
ATB tooth with negative cutting angle.

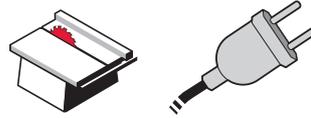
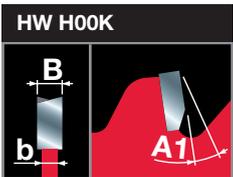


Table saws Corded



Laminated Chipboard Laminated MDF Chipboard MDF

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|---------|------------|------------|
| 200 | 2,5 | 1,8 | 30 | 64 | -2° | - | FR14L001T | F03FS09803 |
| 216 | 2,5 | 1,8 | 30 | 60 | 5° | 2/6/42 | FR16L002T* | F03FS11518 |
| 250 | 2,8 | 1,8 | 30 | 80 | -2° | - | FR23L001T | F03FS09804 |
| 300 | 2,8 | 1,8 | 30 | 96 | -2° | - | FR28L001T | F03FS09805 |
| 305 | 2,8 | 1,8 | 30 | 96 | 5° | 2/10/60 | FR29L001T* | F03FS11533 |



Machines:
Cordless small table saws.

Materials:
Laminated and bilaminated panels, chipboard, MDF and fine-coated or veneered panels.

Technical information:
Specifically designed to maximise battery runtime and optimise ease of cut on cordless table saws. Thin kerf and ATB tooth with negative cutting angle.

For cordless small table saws

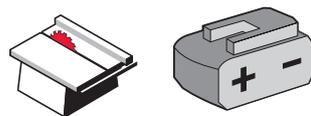


Table saws Cordless



Laminated Chipboard Laminated MDF Chipboard MDF

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|----|------------|------------|
| 210 | 2,1 | 1,4 | 30 | 66 | -5° | - | FR15L001TC | F03FS10078 |
| 216 | 2,1 | 1,4 | 30 | 66 | -5° | - | FR16L001TC | F03FS10079 |

High Pressure Laminate





CIRCULAR SAW BLADES FOR HIGH PRESSURE LAMINATE

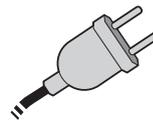
For hand-held and plunge circular saws



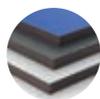
Hand-held Circular Saws



Plunge Saws



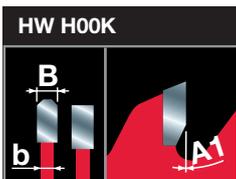
Corded



HPL



Solid surface



Machines:

Hand-held and plunge circular saws.

Materials:

High pressure laminate panels, suitable for Trespa® panels.

Technical information:

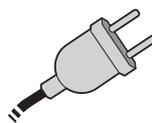
HLTCG with 0° cutting angle.

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|----------|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 140 | 1,8 | 1,3 | 20 | 42 | 0° | 2/6/32,5 | FR04H001H | F03FS09864 |
| 160 | 2,2 | 1,6 | 20 | 48 | 0° | 2/6/32,5 | FR06H001H | F03FS09865 |
| 165 | 2,6 | 1,6 | 20 | 48 | 0° | 2/6/32,5 | FR07H001H | F03FS09866 |
| 190 | 2,6 | 1,6 | 20 | 56 | 0° | 2/6/32,5 | FR13H001H | F03FS09867 |
| 190 | 2,6 | 1,6 | 30 | 56 | 0° | 2/7/42 | FR13H002H | F03FS09868 |
| 210 | 2,8 | 1,8 | 30 | 60 | 0° | 2/7/42 | FR15H001H | F03FS09869 |
| 235 | 2,8 | 1,8 | 30 | 64 | 0° | 2/7/42 | FR20H001H | F03FS09871 |

For mitre saws



Mitre saws



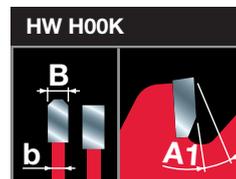
Corded



HPL



Solid surface



Machines:

Mitre saws.

Materials:

High pressure laminate panels, suitable for Trespa® panels.

Technical information:

HLTCG with negative cutting angle.

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|--------|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 216 | 2,8 | 1,8 | 30 | 64 | -3° | 2/7/42 | FR16H001M | F03FS09872 |
| 250 | 2,8 | 1,8 | 30 | 80 | -3° | FT121 | FR23H001M | F03FS09873 |
| 254 | 2,8 | 1,8 | 30 | 80 | -3° | FT121 | FR24H001M | F03FS09874 |
| 305 | 3,2 | 2,2 | 30 | 96 | -3° | FT121 | FR29H001M | F03FS09876 |

FT121: 2/7/42 + 2/9/46 + 2/9,5/46,5 + 2/10/60

For small table saws



Table saws



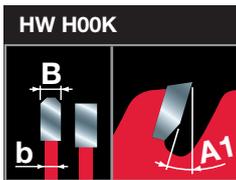
Corded



HPL



Solid surface



Machines:

Small table saws.

Materials:

High pressure laminate panels, suitable for Trespa® panels.

Technical information:

HLTCG with positive cutting angle.

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|-------|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 250 | 2,8 | 1,8 | 30 | 80 | 10° | FT121 | FR23H001T | F03FS09877 |
| 300 | 3,2 | 2,2 | 30 | 96 | 10° | FT121 | FR28H001T | F03FS09878 |

FT121: 2/7/42 + 2/9/46 + 2/9,5/46,5 + 2/10/60

Aluminium





CIRCULAR SAW BLADES FOR ALUMINIUM

For hand-held and plunge circular saws



Hand-held Circular Saws

Plunge Saws

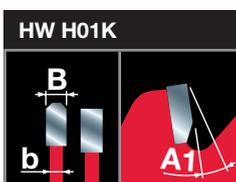
Corded



Aluminium

Copper and Brass

Plastics



Machines:

Hand-held and plunge circular saws.

Materials:

Aluminium, other non-ferrous metals and plastics. Also suitable for chipboard and MDF.

Technical information:

HLTCG tooth with negative cutting angle.

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|----------|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 140 | 1,8 | 1,3 | 20 | 42 | -5° | 2/6/32,5 | FR04A001H | F03FS09806 |
| 150 | 2,5 | 1,6 | 20 | 42 | -5° | 2/6/32,5 | FR05A001H | F03FS09807 |
| 160 | 2,2 | 1,6 | 20 | 52 | -5° | 2/6/32,5 | FR06A001H | F03FS09808 |
| 165 | 2,5 | 1,6 | 20 | 52 | -5° | 2/6/32,5 | FR07A001H | F03FS09809 |
| 165 | 2,5 | 1,6 | 30 | 52 | -5° | 2/7/42 | FR07A002H | F03FS09810 |
| 180 | 2,5 | 1,6 | 30 | 56 | -5° | 2/7/42 | FR09A001H | F03FS09811 |
| 190 | 2,5 | 1,6 | 20 | 56 | -5° | 2/6/32,5 | FR13A001H | F03FS09814 |
| 190 | 2,5 | 1,6 | 30 | 56 | -5° | 2/7/42 | FR13A002H | F03FS09815 |
| 200 | 2,8 | 1,8 | 30 | 60 | -5° | 2/7/42 | FR14A001H | F03FS09816 |
| 210 | 2,3 | 1,8 | 30 | 72 | -5° | 2/7/42 | FR15A001H | F03FS09817 |
| 230 | 2,8 | 1,8 | 30 | 64 | -5° | 2/7/42 | FR19A001H | F03FS09818 |
| 235 | 2,5 | 1,8 | 30 | 80 | -5° | 2/7/42 | FR20A001H | F03FS09819 |

For cordless hand-held and plunge circular saws



Hand-held Circular Saws

Plunge Saws

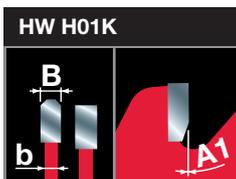
Cordless



Aluminium

Copper and Brass

Plastics



Machines:

Cordless hand-held and plunge circular saws.

Materials:

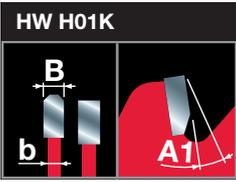
Aluminium, other non-ferrous metals and plastics. Also suitable for chipboard and MDF.

Technical information:

Specifically designed to maximise battery runtime and optimise ease of cut on cordless saws. Thin kerf and HLTCG tooth with 0° or negative cutting angle.

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|----------|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 136 | 1,6 | 1,0 | 20 | 48 | 0° | - | FR03A001HC | F03FS10082 |
| 140 | 1,8 | 1,3 | 20 | 48 | -5° | - | FR04A002HC | F03FS10083 |
| 150 | 1,8 | 1,3 | 20 | 48 | 0° | - | FR05A002HC | F03FS10084 |
| 160 | 1,8 | 1,3 | 20 | 54 | 0° | - | FR06A002HC | F03FS10085 |
| 160 | 2,2 | 1,6 | 20 | 52 | -5° | 2/6/32,5 | FR06A001H | F03FS09808 |
| 165 | 1,8 | 1,3 | 20 | 54 | 0° | - | FR07A002HC | F03FS10086 |
| 190 | 1,8 | 1,3 | 30 | 54 | 0° | - | FR13A003HC | F03FS10088 |

CIRCULAR SAW BLADES FOR ALUMINIUM



Machines:
Mitre saws.

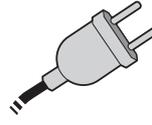
Materials:
Aluminium, other non-ferrous metals and plastics.
Also suitable for chipboard and MDF.

Technical information:
HLTCG tooth with negative cutting angle.

For mitre saws



Mitre saws



Corded



Aluminium



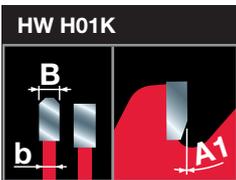
Copper and Brass



Plastics

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|------|------|------|------|-----|---------|---------|------------|------------|
| 210 | 2,5 | 1,8 | 30 | 54 | -5° | FT121 | FR15A001M | F03FS09820 |
| 216 | 2,5 | 1,8 | 30 | 64 | -5° | FT121 | FR16A001M | F03FS09821 |
| 250 | 2,8 | 2,0 | 30 | 80 | -5° | FT121 | FR23A001M | F03FS09822 |
| 254 | 2,8 | 2,0 | 30 | 80 | -5° | FT121 | FR24A001M | F03FS09823 |
| 260 | 2,3 | 1,8 | 30 | 80 | -5° | FT121 | FR26A001M | F03FS09827 |
| 300 | 2,8 | 2,0 | 30 | 96 | -5° | FT121 | FR28A001M | F03FS09828 |
| 305 | 2,8 | 2,0 | 30 | 96 | -5° | FT121 | FR29A001M | F03FS09829 |
| 315 | 2,8 | 2,2 | 30 | 96 | -5° | FT121 | FR30A001M | F03FS09832 |
| 350 | 3,0 | 2,2 | 30 | 108 | 5° | 2/10/60 | FR32A001M | F03FS11534 |

FT121: 2/7/42 + 2/9/46 + 2/9,5/46,5 + 2/10/60



Machines:
Cordless mitre saws.

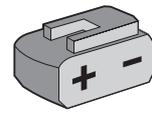
Materials:
Aluminium, other non-ferrous metals and plastics.
Also suitable for chipboard and MDF.

Technical information:
Specifically designed to maximise battery runtime and optimise ease of cut on cordless mitre saws.
Thin kerf and HLTCG tooth with 0° cutting angle.

For cordless mitre saws



Mitre saws



Cordless



Aluminium

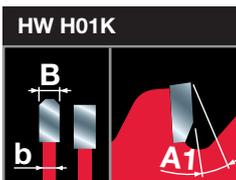


Copper and Brass



Plastics

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|------|------|------|------|----|---------|----|------------|------------|
| 216 | 2,0 | 1,4 | 30 | 66 | 0° | - | FR16A002MC | F03FS10089 |
| 250 | 2,4 | 1,8 | 30 | 78 | 0° | - | FR23A002MC | F03FS10090 |
| 254 | 2,4 | 1,8 | 30 | 78 | 0° | - | FR24A002MC | F03FS11526 |
| 305 | 2,4 | 1,8 | 30 | 96 | 0° | - | FR29A004MC | F03FS10091 |



Machines:
Small table saws.

Materials:
Aluminium, other non-ferrous metals and plastics.
Also suitable for chipboard and MDF.

Technical information:
HLTCG tooth with negative cutting angle.

For small table saws



Table saws



Corded



Aluminium



Copper and Brass



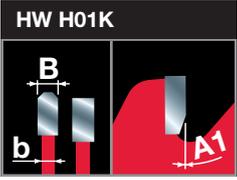
Plastics

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|------|------|------|------|----|---------|---------|------------|------------|
| 190 | 2,6 | 1,8 | Star | 58 | -5° | - | FR13A001T | F03FS09833 |
| 225 | 2,6 | 1,8 | 30 | 68 | -5° | FT121 | FR18A001T | F03FS09834 |
| 250 | 2,8 | 2,0 | 30 | 68 | -5° | FT121 | FR23A001T | F03FS09835 |
| 280 | 2,8 | 2,0 | 30 | 84 | -5° | 2/10/60 | FR27A001T | F03FS11529 |

FT121: 2/7/42 + 2/9/46 + 2/9,5/46,5 + 2/10/60

CIRCULAR SAW BLADES FOR ALUMINIUM

For cordless small table saws



Machines:
Cordless small table saws.

Materials:
Aluminium, other non-ferrous metals and plastics.
Also suitable for chipboard and MDF.

Technical information:
Specifically designed to maximise battery runtime and optimise ease of cut on cordless table saws.
Thin kerf and HLTG tooth with 0° cutting angle.

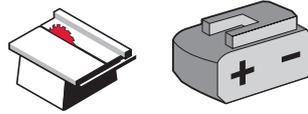


Table saws

Cordless



Aluminium

Copper and Brass

Plastics

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|----|------|----|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 210 | 2,0 | 1,4 | 30 | 66 | 0° | - | FR15A001TC | F03FS10092 |
| 216 | 2,0 | 1,4 | 30 | 66 | 0° | - | FR16A001TC | F03FS10093 |



LP88M

Saw blades to cut non-ferrous metals



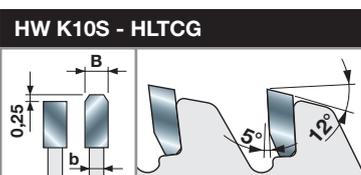
Mitre saws



Aluminium

Copper and Brass

| D | B | b | d | Z | Hook | Freud Code | Art. No. |
|-----|-----|-----|-------|-----|------|------------|------------|
| mm | mm | mm | mm | | A1 | | |
| 255 | 2,6 | 2,0 | 15,88 | 100 | 5° | LP88M 003P | F03FS09410 |
| 255 | 2,6 | 2,0 | 25,4 | 100 | 5° | LP88M 007P | F03FS09590 |
| 255 | 2,6 | 2,0 | 15,88 | 120 | 5° | LP88M 004P | F03FS09411 |
| 255 | 2,6 | 2,0 | 25,4 | 120 | 5° | LP88M 002P | F03FS09289 |
| 305 | 2,8 | 2,2 | 25,4 | 100 | 5° | LP88M 005P | F03FS09412 |
| 305 | 2,8 | 2,2 | 25,4 | 120 | 5° | LP88M 006P | F03FS09413 |



Machines:
Mitre saws.

Materials:
Aluminium and non-ferrous metals.

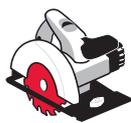
Technical information:
HLTG with positive cutting angle.

Fibre Cement



CIRCULAR SAW BLADES FOR FIBRE CEMENT

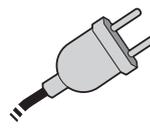
For hand-held and plunge circular saws



Hand-held Circular Saws



Plunge Saws



Corded

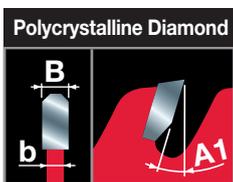


Fibre Cement



Plasterboard

| | D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|--|---------|---------|---------|---------|---|------------|----------|------------|------------|
| | 140 | 1,8 | 1,3 | 20 | 4 | 10° | 2/6/32,5 | FR04F001H | F03FS09836 |
| | 160 | 1,8 | 1,2 | 20 | 4 | 10° | - | FR06F002HC | F03FS10095 |
| | 160 | 2,2 | 1,6 | 20 | 4 | 10° | 2/6/32,5 | FR06F001H | F03FS09837 |
| | 165 | 2,2 | 1,6 | 20 | 4 | 10° | 2/6/32,5 | FR07F001H | F03FS09838 |
| | 182 | 2,2 | 1,6 | 19,05 | 4 | 10° | - | FR10F001H | F03FS11506 |
| | 184 | 2,2 | 1,6 | 30 | 4 | 10° | 2/7/42 | FR11F001H | F03FS09840 |
| | 190 | 2,2 | 1,6 | 20 | 4 | 10° | 2/6/32,5 | FR13F001H | F03FS09841 |
| | 190 | 2,2 | 1,6 | 30 | 4 | 10° | 2/7/42 | FR13F002H | F03FS09842 |
| | 210 | 2,2 | 1,6 | 30 | 6 | 10° | 2/7/42 | FR15F001H | F03FS09843 |
| | 230 | 2,2 | 1,6 | 30 | 6 | 10° | 2/7/42 | FR19F001H | F03FS09844 |
| | 235 | 2,2 | 1,6 | 30 | 6 | 10° | 2/7/42 | FR20F001H | F03FS09845 |



Machines:
Hand-held and plunge circular saws.

Materials:
Fibre cement and plasterboard.

Technical information:
Polycrystalline Diamond teeth for long lifetime in abrasive materials.
TCG tooth with positive cutting angle.

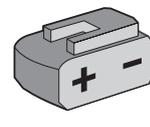
For cordless hand-held and plunge circular saws



Hand-held Cordless Circular Saws



Plunge Saws



Cordless

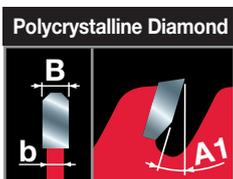


Fibre Cement



Plasterboard

| | D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|--|---------|---------|---------|---------|---|------------|----------|------------|------------|
| | 140 | 1,8 | 1,3 | 20 | 4 | 10° | 2/6/32,5 | FR04F001H | F03FS09836 |
| | 160 | 1,8 | 1,2 | 20 | 4 | 10° | - | FR06F002HC | F03FS10095 |
| | 160 | 2,2 | 1,6 | 20 | 4 | 10° | 2/6/32,5 | FR06F001H | F03FS09837 |
| | 165 | 1,8 | 1,2 | 20 | 4 | 10° | - | FR07F002HC | F03FS10096 |
| | 190 | 1,8 | 1,2 | 30 | 4 | 10° | - | FR13F003HC | F03FS10097 |



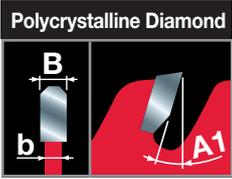
Machines:
Cordless hand-held and plunge circular saws.

Materials:
Fibre cement and plasterboard.

Technical information:
Specifically designed to maximise battery runtime and optimise ease of cut on cordless saws.
Thin kerf and TCG tooth with positive cutting angle.
Polycrystalline Diamond teeth for long lifetime in abrasive materials.

CIRCULAR SAW BLADES FOR FIBRE CEMENT

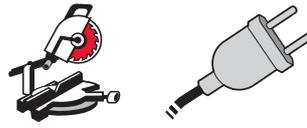
For mitre saws



Machines:
Mitre saws.

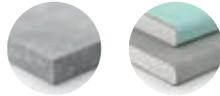
Materials:
Fibre cement and plasterboard.

Technical information:
Polycrystalline Diamond teeth for long lifetime in abrasive materials.
TCG tooth with positive cutting angle.



Mitre saws

Corded

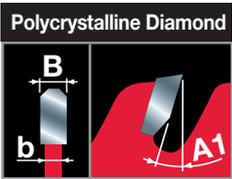


Fibre Cement

Plasterboard

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|---|------|--------|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 216 | 2,2 | 1,6 | 30 | 6 | 10° | 2/7/42 | FR16F001M | F03FS09846 |
| 250 | 2,4 | 1,8 | 30 | 6 | 10° | FT121 | FR23F001M | F03FS09847 |
| 254 | 2,4 | 1,8 | 30 | 6 | 10° | FT121 | FR24F001M | F03FS09848 |
| 260 | 2,4 | 1,8 | 30 | 6 | 10° | FT121 | FR26F001M | F03FS09849 |
| 300 | 2,4 | 1,8 | 30 | 8 | 10° | FT121 | FR28F001M | F03FS09850 |
| 305 | 2,4 | 1,8 | 30 | 8 | 10° | FT121 | FR29F001M | F03FS09851 |

FT121: 2/7/42 + 2/9/46 + 2/9,5/46,5 + 2/10/60

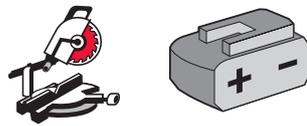


Machines:
Cordless mitre saws.

Materials:
Fibre cement and plasterboard.

Technical information:
Specifically designed to maximise battery runtime and optimise ease of cut on cordless mitre saws.
Thin kerf and TCG tooth with positive cutting angle.
Polycrystalline Diamond teeth for long lifetime in abrasive materials.

For cordless mitre saws



Mitre saws

Cordless



Fibre Cement

Plasterboard

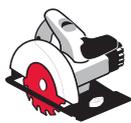
| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|----|---|------|----|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 216 | 2,0 | 1,4 | 30 | 6 | 10° | - | FR16F002MC | F03FS10098 |
| 250 | 2,2 | 1,6 | 30 | 6 | 10° | - | FR23F002MC | F03FS10099 |
| 305 | 2,2 | 1,6 | 30 | 8 | 10° | - | FR29F002MC | F03FS10100 |

Sandwich Panel

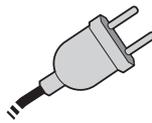


CIRCULAR SAW BLADES FOR SANDWICH PANEL

For hand-held circular saws



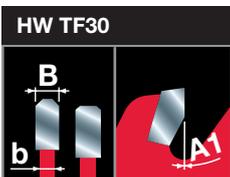
Hand-held Circular Saws



Corded



Sandwich Panel



Machines:

Hand-held circular saws.

Materials:

Sandwich panels with sheet steel layers.

Technical information:

HLTCG with chamfer also on second tooth.
0° cutting angle.

| D | B | b | d | Z | Hook | NL | Freud Code | Art. No. |
|-----|-----|-----|-------|----|------|----------|------------|------------|
| mm | mm | mm | mm | | A1 | | | |
| 160 | 2,0 | 1,6 | 20 | 30 | 0° | 2/6/32,5 | FR06X001H | F03FS09852 |
| 165 | 2,0 | 1,6 | 20 | 30 | 0° | 2/6/32,5 | FR07X001H | F03FS09853 |
| 182 | 2,0 | 1,6 | 19,05 | 36 | 0° | - | FR10X001H | F03FS11510 |
| 190 | 2,0 | 1,6 | 30 | 36 | 0° | 2/7/42 | FR13X001H | F03FS09854 |
| 210 | 2,4 | 2,0 | 30 | 36 | 0° | 2/7/42 | FR15X001H | F03FS09855 |
| 230 | 2,2 | 1,8 | 30 | 48 | 0° | 2/7/42 | FR19X001H | F03FS09856 |
| 235 | 2,2 | 1,8 | 30 | 50 | 0° | 2/7/42 | FR20X001H | F03FS09857 |
| 240 | 2,6 | 1,6 | 30 | 48 | 0° | 2/7/42 | FR22X001H | F03FS09858 |
| 270 | 2,4 | 2,0 | 30 | 60 | 0° | 2/7/42 | FR27X001H | F03FS09859 |
| 350 | 2,9 | 2,5 | 30 | 60 | 0° | 2/7/42 | FR32X001H | F03FS09861 |
| 355 | 2,6 | 2,2 | 30 | 80 | 0° | 2/7/42 | FR33X001H | F03FS09862 |

Multi Material





CIRCULAR SAW BLADES FOR MULTI MATERIAL

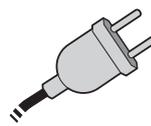
For hand-held and plunge circular saws



Hand-held Circular Saws



Plunge Saws



Corded



Plywood



Chipboard



MDF



Aluminium



Copper and Brass

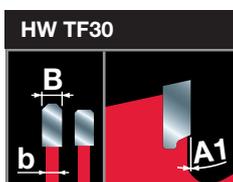


Plastics

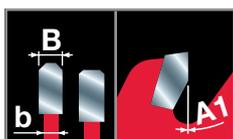


Thin-walled Steel

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|----|-------------|------------|
| 160 | 2,0 | 1,6 | 20 | 30 | 0° | - | FR06M001H * | F03FS10114 |
| 184 | 2,0 | 1,6 | 30 | 36 | 0° | - | FR11M001H * | F03FS10113 |
| 185 | 2,0 | 1,6 | 20 | 36 | 0° | - | FR12M001H | F03FS11512 |
| 190 | 2,0 | 1,6 | 30 | 38 | 0° | - | FR13M001H * | F03FS10041 |
| 230 | 2,4 | 2,0 | 30 | 44 | 0° | - | FR19M001H | F03FS10042 |



*



Machines:

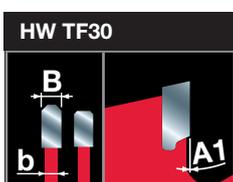
Hand-held and plunge circular saws.

Materials:

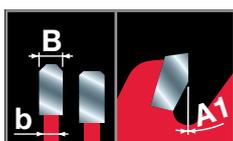
Wood based materials, aluminium and other non-ferrous materials, plastics and thin-walled steel profiles.

Technical information:

Suitable to cut a variety of different materials.
HLTCG with chamfer also on second tooth.
0° cutting angle.



*



Machines:

Mitre saws.

Materials:

Wood based materials, aluminium and other non-ferrous materials, plastics and thin-walled steel profiles.

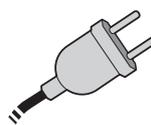
Technical information:

Suitable to cut a variety of different materials.
HLTCG with chamfer also on second tooth.
0° cutting angle.

For mitre saws



Mitre Saws



Corded



Plywood



Chipboard



MDF



Aluminium



Copper and Brass



Plastics



Thin-walled Steel

| D mm | B mm | b mm | d mm | Z | Hook A1 | NL | Freud Code | Art. No. |
|---------|---------|---------|---------|----|------------|----|-------------|------------|
| 210 | 25,4 | 2,0 | 1,6 | 40 | 0° | - | FR15M002M | F03FS11516 |
| 210 | 2,0 | 1,6 | 30 | 40 | 0° | - | FR15M001M * | F03FS09886 |
| 216 | 2,0 | 1,6 | 30 | 40 | 0° | - | FR16M001M * | F03FS09887 |
| 250 | 2,4 | 2,0 | 30 | 48 | 0° | - | FR23M001M | F03FS09888 |
| 254 | 2,4 | 2,0 | 30 | 48 | 0° | - | FR24M001M | F03FS09889 |
| 300 | 2,6 | 2,0 | 30 | 80 | 0° | - | FR28M001M | F03FS09890 |
| 305 | 2,6 | 2,0 | 30 | 80 | 0° | - | FR29M001M | F03FS09891 |

TIPS FOR THE CORRECT USE OF A CIRCULAR SAW BLADE

To obtain the best performance from a saw blade we suggest following these simple instructions:

- The machine must be in good condition, free from vibrations.
- The flanges used to secure the blade must be of the same diameter, at least 1/3 of the blade diameter (Fig. 1).
- The flanges must be parallel to each other. Also check tolerances on diameters, sides and concentricity, by using a clock gauge (Fig. 2).
- After continuous use, remove the blade and clean it with the appropriate solvents making sure to get rid of built up resin. For the synthetic coated (Perma-SHIELD Coating) blades, it is sufficient to use warm water. In any case, avoid using solvents containing caustic soda.
- The blades must be sharpened as soon as they become dull, maintaining the original tooth angles.
- For sharpening, always use the correct grinding wheels and plenty of cooling liquid.
- Always keep flanges clean.
- When sharpening, the shoulder of the teeth must not be lowered more than needed. This operation must be done with appropriate precision machinery and never by hand. There is the risk of breaking the tip or upsetting the blade balance (Fig. 3 - 4).
- Before starting the cut of the material, make sure the blade is correctly locked according to the machines specifications.

Saw blade alignment on a table saw

- If the saw blade and the saw are not correctly aligned to the table and the fence, then there is the possibility that a serious accident may occur (for example, violent kickbacks) or that the workpiece may scorch or splinter. The first thing you must do is read the instruction sheet carefully. This is necessary to acquire the understanding and comprehension of the corrections suggested in this section.
- Before carrying out the following instructions, make sure that the starter switch is off and that the machine is not connected to the socket.
- Mounting the saw blade onto the table:

We advise using precise measuring instruments when mounting a saw blade. Clean the saw blade well, before mounting it onto the machine. Mount the saw blade onto the arbor. Adjust the arbor to its maximum height. With the aid of the most precise measuring instrument available, verify that the saw blade is parallel to the mitre gauge slots (Fig. 5). Adjust as needed. This step is necessary to obtain crosscuts with the maximum in quality finish and for setting up the fence for ripping.

- Positioning the fence for ripping:

After having positioned the saw blade so as it is parallel to the mitre gauge slots, you may proceed with setting the fence. The fence should ideally be parallel to the saw blade. However since it is impossible to position the guide "exactly" it is necessary to leave a slight margin of clearance on the exit side of the cut so as to avoid the wood becoming wedged in between the fence and the saw blade.

Adjust the fence so as when it is aligned to the mitre gauge slots, there is a space of 0,1 mm (Fig. 6; for the correct adjustment, consult the machine's instruction manual).

- The maximum RPM of a circular saw blade varies according to the diameter of the blade itself (table 1). If you exceed this limit, the saw blade will lose its characteristics, therefore influencing the cutting quality and the work life of the blade itself, not to mention the dangers implied to the user who may incur serious injury.
- The saw blade's projection (T) with respect to the workpiece must be at least equal to the height of the blade's tooth (Fig. 7). Increase or decrease the projection of the saw blade to improve the quality of the cutting finish.
- The number of teeth cutting the wood simultaneously (Fig. 8) must be between 3 or 4. With less than three teeth cutting, the saw blade begins to vibrate leading to an uneven cut. If you want to cut workpieces with increased thicknesses (S - Fig. 10), but wish to maintain the same diameter saw blade, then use a blade with less teeth. If instead you want to cut workpieces with a reduced thickness, but also maintain the same diameter saw blade, then use a blade with more teeth.
- To obtain the pitch (P) of a blade (the distance between teeth: Fig. 9 - see formula "A") multiply the thickness of the workpiece by 1,4142 and divide by 3 (if you want 3 teeth cutting) or by 4 (if you want 4 teeth cutting).
- Formula "B": to obtain the number of teeth (Z) of the saw blade, multiply the diameter (D) of the saw blade by 3,14 (π) and divide by the pitch of the saw blade - obtained from the previous formula. The shorter formula "C" allows you to obtain the number of the saw blade's teeth, knowing its diameter and the thickness of the workpiece.

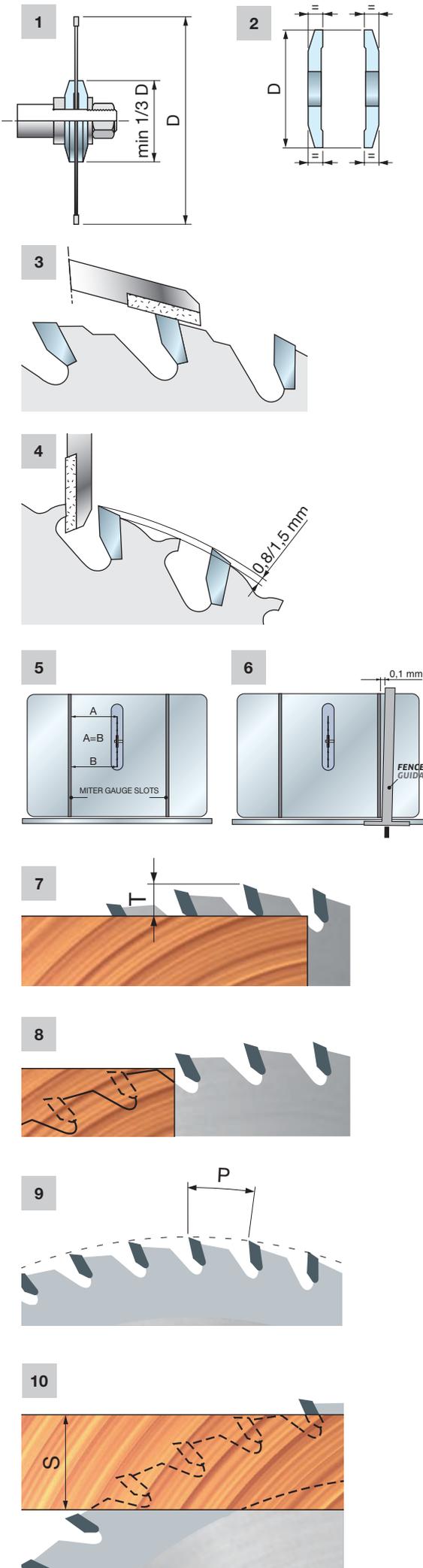
| Formula A | Formula B | Formula C |
|---------------------------------|-------------------------------|----------------------------|
| $P = \frac{S \times 1,4142}{3}$ | $Z = \frac{D \times 3,14}{P}$ | $Z = \frac{D \times 8}{S}$ |

KEY:

- P= Pitch
- S= Thickness of the workpiece
- Z= Number of teeth of the saw blade
- D= Diameter of the saw blade

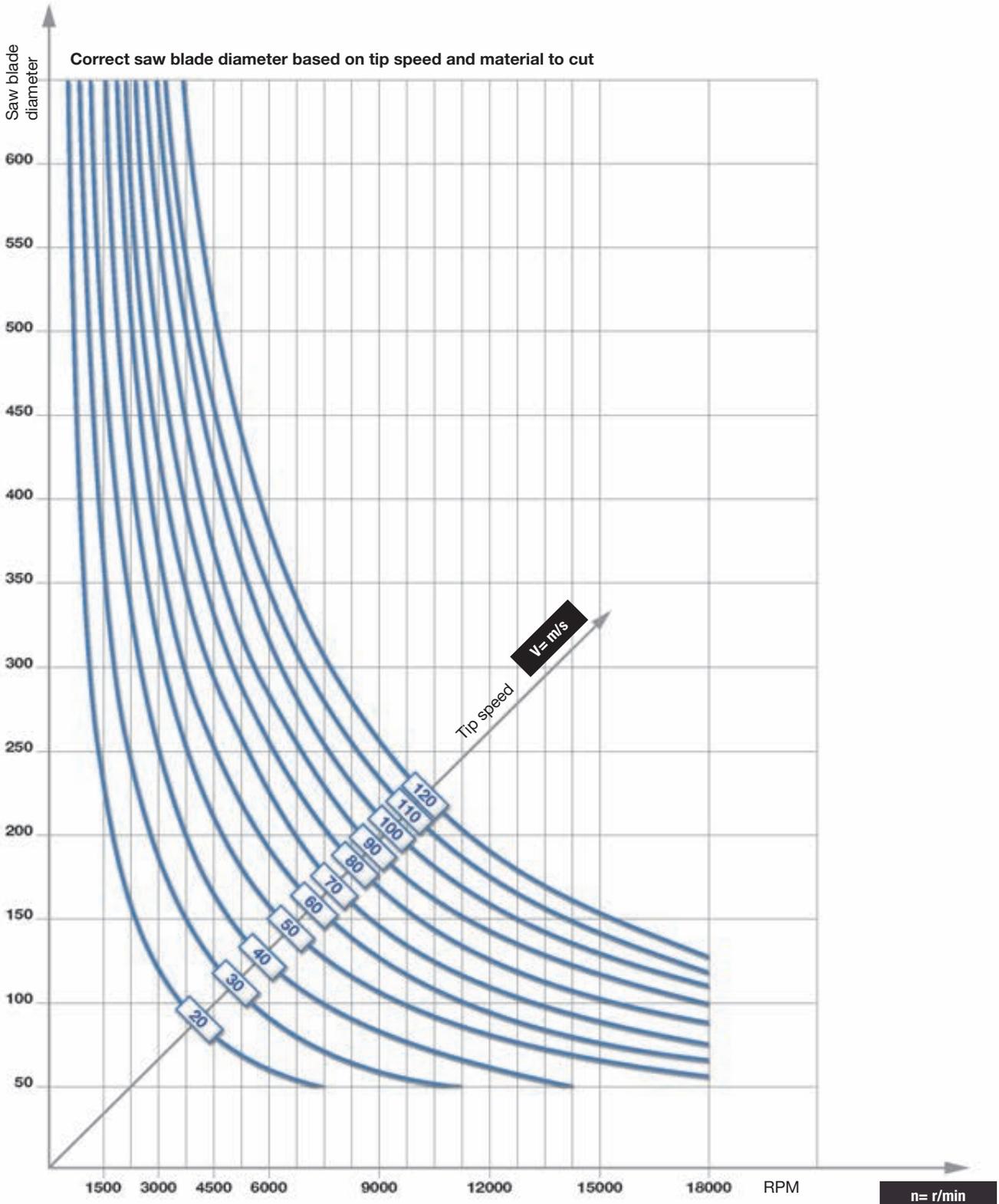
Attention:

These formulas are valid for crosscutting and cutting other wood composites (MDF, plywood, chipboard and laminated panels) and cannot be applied for ripping.



TIPS FOR THE CORRECT USE OF A CIRCULAR SAW BLADE

| Tip speed (m/s) | Recommended for |
|-----------------|---------------------------|
| 50 - 90 | Softwood |
| 50 - 80 | Hardwood |
| 50 - 85 | Exotic wood |
| 60 - 80 | Chipboard |
| 60 - 80 | Joinery wood |
| 30 - 60 | MDF |
| 40 - 60 | Laminated and bilaminated |

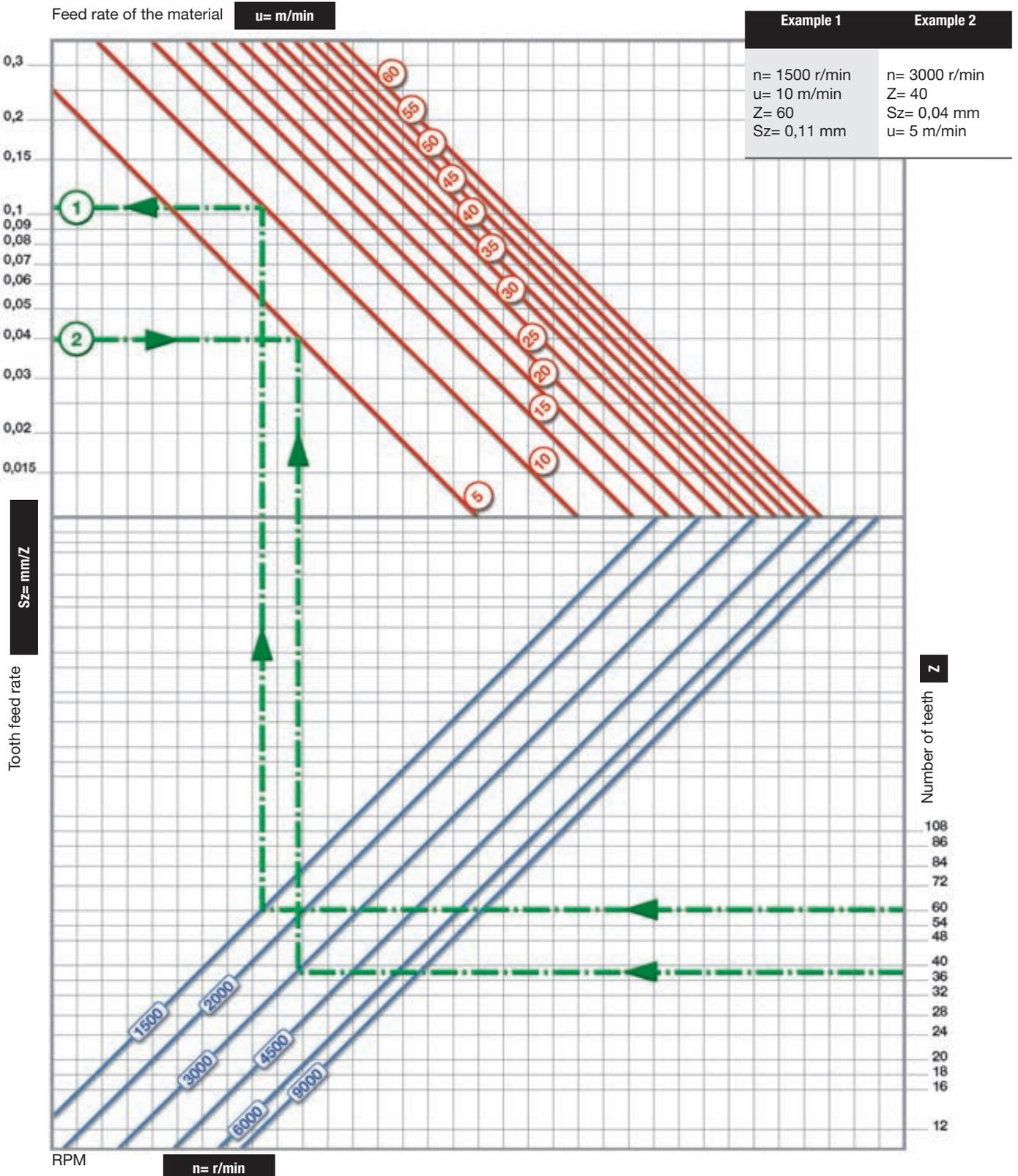


TIPS FOR THE CORRECT USE OF A CIRCULAR SAW BLADE

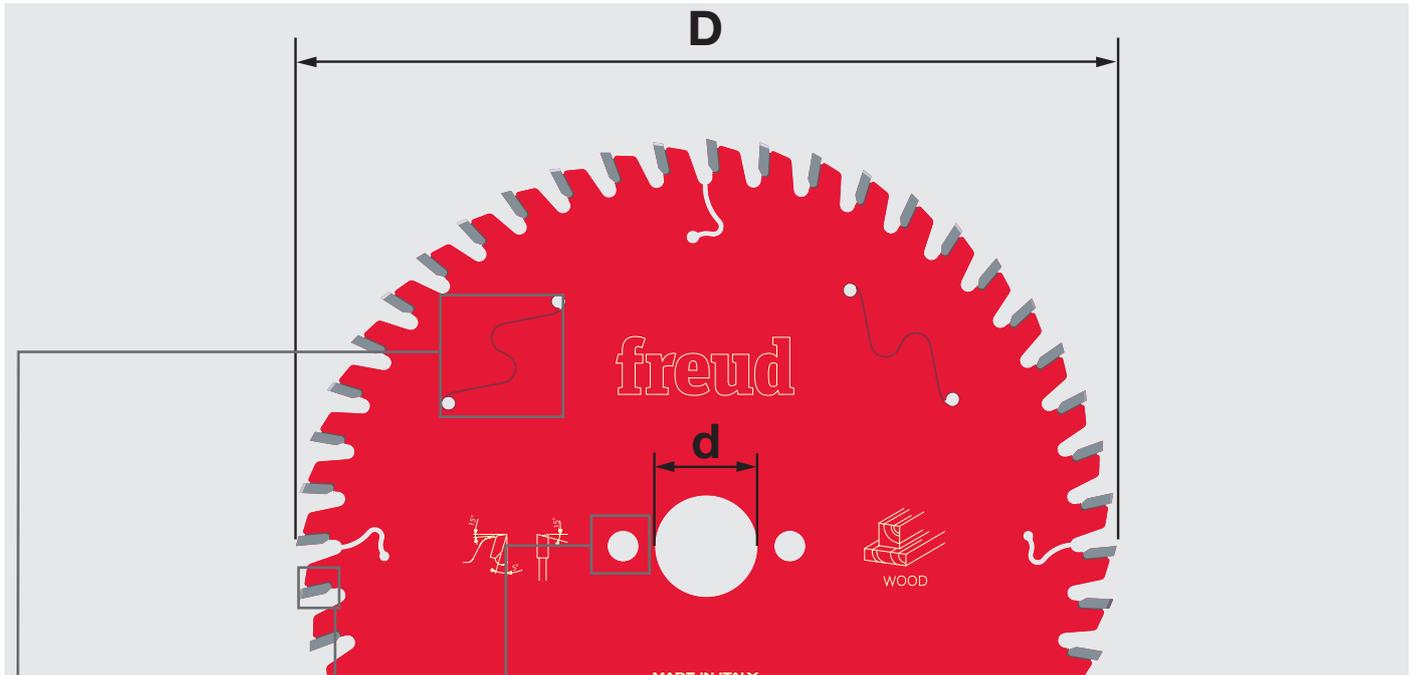
Correct tooth feed rate, material feedrate, number of teeth and RPM

| Recommended tooth feed rate (Sz= mm/tooth) | Recommended for |
|--|----------------------|
| 0,20 - 0,30 | Softwood with grain |
| 0,10 - 0,20 | Softwood cross grain |
| 0,06 - 0,15 | Hardwood |
| 0,10 - 0,25 | Chipboard |

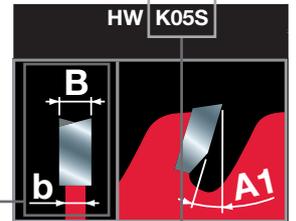
| Recommended tooth feed rate (Sz= mm/tooth) | Recommended for |
|--|---|
| 0,05 - 0,12 | Plywood |
| 0,05 - 0,10 | Laminated board |
| 0,02 - 0,05 | Aluminium and plastic laminated chipboard |



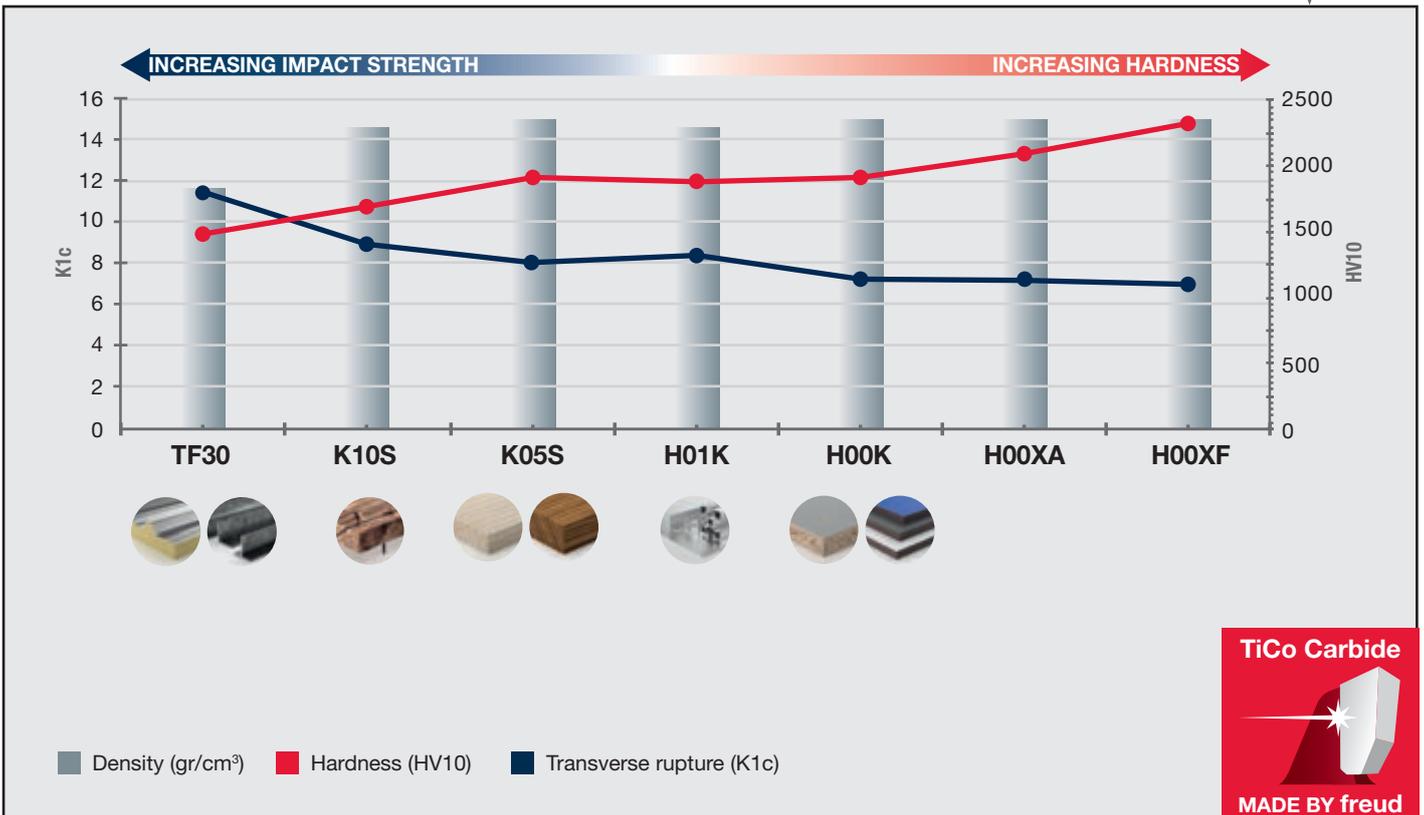
EXPLANATION OF SYMBOLS AND ABBREVIATIONS



| D mm | B mm | b mm | d mm | Z | NL | Code | SAP |
|---------|---------|---------|---------|----|----------|-----------|------------|
| 250 | 3,2 | 2,2 | 30 | 22 | FT01 | ABCD 1234 | A00BC01234 |
| 250 | 3,2 | 2,2 | 70 | 22 | 4CH 21x5 | ABCD 1234 | A00BC01234 |
| 300 | 3,2 | 2,2 | 30 | 26 | FT01 | ABCD 1234 | A00BC01234 |



MICRO-GRAIN CARBIDE (HW) HARDNESS USED FOR MANUFACTURING TIPS



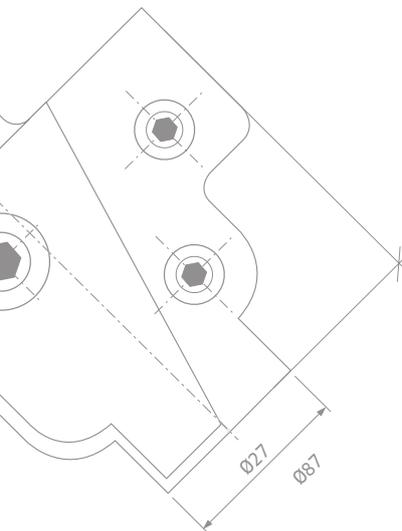
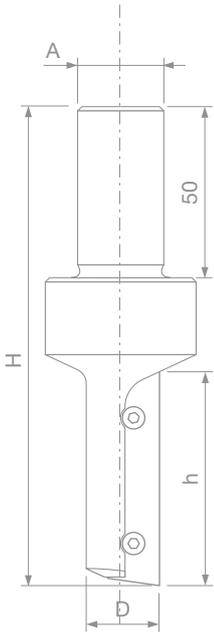
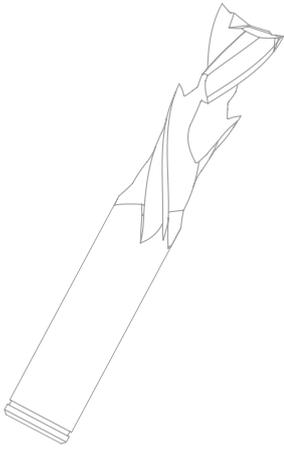
Routing Tools for CNC Machines

Freud's wide range of superior quality routing, drilling and CNC tools for high-speed and fully automated routing machines leverages outstanding technical know-how, advanced manufacturing processes and finest quality materials.

Designed to perform precise and burn free cuts, these tools deliver superior performance, perfect finishing and maximum lifetime.

All routing tools feature Freud's unique and industry-first attributes.





Leading technology for router cutters Page 147

SIZING

Solid Carbide router cutters for sizing

SCH1UF Finishing router cutter - upcut with right-hand Z1 Page 149
 SCH2UF Finishing router cutter - upcut with right-hand Z2 Page 150
 SCH3UF Finishing router cutter - upcut with right-hand Z3 Page 151
 SCH1DF Finishing router cutter - downcut with right-hand Z1 Page 152
 SCH2DF Finishing router cutter - downcut with right-hand Z2 Page 153
 SCH3DF Finishing router cutter - downcut with right-hand Z3 Page 154
 SCH2XF Finishing router cutter - compression with right-hand Z2+2 Page 155
 SCH3XF Finishing router cutter - compression with right-hand Z3+3 Page 156
 SCH3UR Roughing router cutter - upcut with right-hand Z3 Page 157
 SCH3DR Roughing router cutter - downcut with right-hand Z3 Page 158

Disposable knives router cutters for sizing

TG62MD Disposable knives straight router cutters Page 159
 TG63MD Disposable knives straight router cutters Page 159
 TG71MD Disposable knives straight router cutters Page 160
 TG74MD Bearing disposable knives straight router cutters Page 161
 TG76MD Bearing disposable knives straight router cutters Page 161

Circular saw blades for grooving and sizing

LU34M Circular saw blades for grooving and sizing Page 162

GROOVING

Solid Carbide router cutters for grooving and sizing

SCH3 Finishing hardware slot router cutter - right-hand Z2 and Z3 Page 164

Disposable knives router cutters for grooving

TG72MD Disposable knife straight router cutters Page 166

PLANING

Disposable knives router cutters for planing

TM10MD Disposable knives straight router cutter Page 168
 NC12M Spoilboard surfacing cutters Page 169
 NC96MGC13 CNC multicut planer cutterhead Page 170

PROFILING

CNC router cutters for profiling

NC01M Multiprofile router cutter - Z1 Page 172
 NC02M CNC router cutter with profiled knives Page 173
 PCN110 Customised CNC router cutter with profiled knives Page 174
 NC21MCA CNC router cutter with multiradius knives Page 175
 NC23MCA CNC router cutter with multiradius knives Page 176
 PCN121 Customised CNC router cutter with profiled knives Page 177
 NC30MCA CNC router cutter with multiradius knives Page 178
 NC30MCB CNC router cutter with multiradius knives Page 179
 PCN130 Customised CNC router cutter with profiled knives Page 180
 NC33MCA CNC router cutter with multiradius knives Page 181
 PCN133 Customised CNC router cutter with profiled knives Page 182
 NC40MCA CNC router cutter with multiradius knives Page 183
 PCN140 Customised CNC router cutter with profiled knives Page 184
 NC50MCA CNC router cutter with multiradius knives Page 185
 PCN150 Customised CNC router cutter with profiled knives Page 186
 NC60MCA CNC router cutter with multiradius knives Page 187
 NC62MCA CNC raised panel router cutter Page 188
 NC64MCA CNC raised panel router cutter Page 189
 PCN160 Customised CNC raised panel router cutter Page 190
 PCN160R Customised CNC raised panel router cutter Page 191
 NC90MCA CNC cabinet door router cutter - profile Page 192
 PCN300 Customised CNC cabinet door router cutter - profile Page 194
 NC91MCA CNC cabinet door router cutter - scribe Page 196
 PCN310 Customised CNC cabinet door router cutter - scribe Page 198
 NCSEM22 A01-A03 CNC tool for cabinet door frame profile - 22 mm Page 200
 NCSEM22 A02-A04 CNC tool for cabinet door frame scribe - 22 mm Page 202
 NCSEM30 A01-A03 CNC tool for cabinet door frame profile - 30 mm Page 204
 NCSEM30 A02-A04 CNC tool for cabinet door frame scribe - 30 mm Page 206
 TD54MD CNC multiprofile raised panel router cutter Page 208
 NC92M CNC tool with profiled knives Page 210
 NC93M CNC finger joint tool Page 212
 NC94MGC13 CNC finger joint tool Page 214

DRILLING

Drill bits for blind holes

| | | |
|-------------------|--|----------|
| PF03MD - PF03MS | Solid Carbide multipurpose drilling - screw holes..... | Page 217 |
| PF26MD - PF26MS | Dowel drills for blind holes | Page 218 |
| PF04MD - PF04MS | Dowel drills with round spurs | Page 219 |
| PF06MD - PF06MS | Dowel drills for blind holes | Page 220 |
| PF07MD - PF07MS | Dowel drills for blind holes | Page 221 |
| PF08MDC - PF08MSC | Dowel drills with countersink - blind holes..... | Page 222 |
| PF08MDB - PF08MSB | Dowel drills with countersink - blind holes..... | Page 223 |
| PF08MDA - PF08MSA | Dowel drills with countersink - blind holes..... | Page 224 |
| PF09MDB - PF09MSB | Dowel drills without countersink - blind holes..... | Page 225 |
| PF09MDA - PF09MSA | Dowel drills without countersink - blind holes..... | Page 226 |

Drill bits for through holes

| | | |
|-----------------|--|----------|
| PF33MD - PF33MS | Solid Carbide through holes drills | Page 227 |
| PF31MD - PF31MS | Solid Carbide multipurpose drills | Page 228 |
| PF05MD - PF05MS | Through holes drills | Page 229 |
| PF10MD - PF10MS | Through holes drills | Page 230 |
| PF11MD - PF11MS | Through holes drills | Page 231 |

Countersinks for drill bits

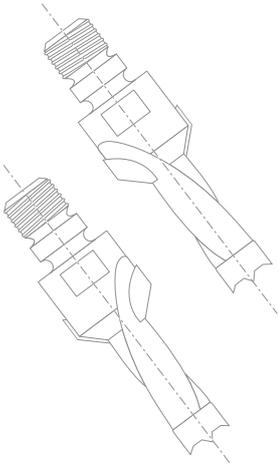
| | | |
|-----------------|---|----------|
| SV05MD - SV05MS | Carbide loose countersink cutters | Page 232 |
|-----------------|---|----------|

Boring bits for hinges

| | | |
|-----------------|-------------------------------------|----------|
| PC04MD - PC04MS | Carbide boring bits for hinges..... | Page 233 |
| PC05MD - PC05MS | Carbide boring bits for hinges..... | Page 234 |

| | |
|----------------------------|----------|
| Safe working practice..... | Page 235 |
|----------------------------|----------|

| | |
|------------------------------|----------|
| Advice for correct use | Page 236 |
|------------------------------|----------|



LEADING TECHNOLOGY

TiCo CARBIDE TECHNOLOGY

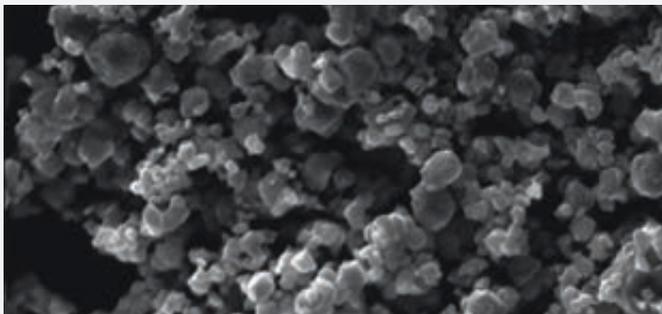
Freud's ownership and control of the entire Carbide production cycle ensures that the correct formula is used for the specific application needs, to constantly maximise the routing tool performance.



TiCo Carbide

A specially formulated, highly compact Titanium Cobalt Carbide, engineered and manufactured by Freud.

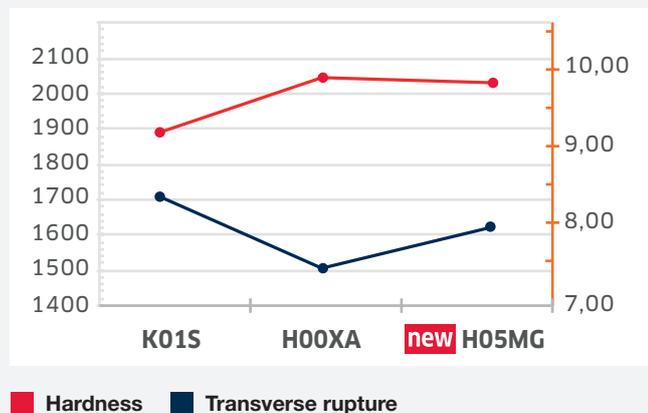
It provides a sharper edge and flawless finish with a dramatically longer cutting life.



CARBIDE INNOVATION

The continuous investment in new Carbide recipe development maintains the router performance at unmatched quality levels.

For example, the SCH range features the new micro-grain Carbide **H05MG**, specifically formulated for a high level of hardness and tenacity, to achieve the greatest resistance to wear and impact.

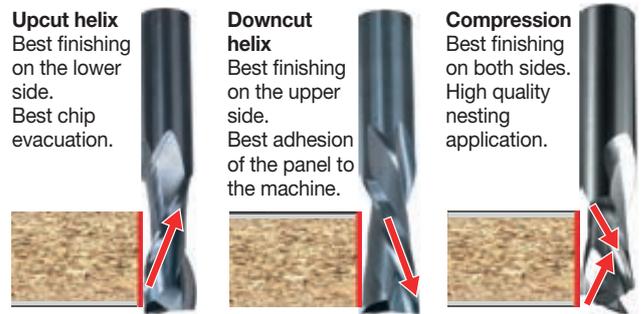




DESIGN INNOVATION

Freud leverages its market knowledge and technical know-how to constantly develop new geometries for its routing tools and guarantee superior cutting performance in demanding applications.

The new helix designs and geometries, designed for the SCH range, deliver flawless results and impeccable finishing across a number of applications:



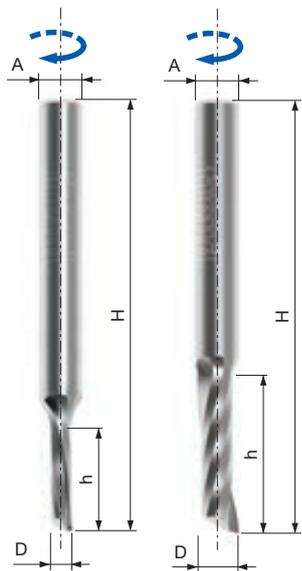
EXTENSIVE RANGE

Freud offers different solutions for specific application needs. The wide range includes a selection of router cutters that combines the efficiency of the cutterheads with the versatility given by the shank.



Sizing





SCH1UF

Finishing router cutter upcut with right-hand Z1



CNC Routers



Up spiral



For table mounted only



Softwood



Hardwood



Chipboard



Laminated Chipboard



MDF



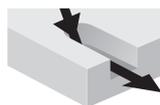
Laminated MDF



Plywood



Sizing



Plunging



Grooving



Better Finishing on Bottom

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with positive helix designed for CNC routing with large gullet space for high chips removal.

- Suitable for sizing, plunging and grooving with a perfect finishing.
- Upcut helix, good chip flow, upward chip removal for best finishing on the lower side of the panel.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Hardwood: 0,9

MDF, Chipboard: 1,1

Depth of cut:

From 1 x D to 2 x D : 0,75

From 2 x D to 3 x D : 0,5

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

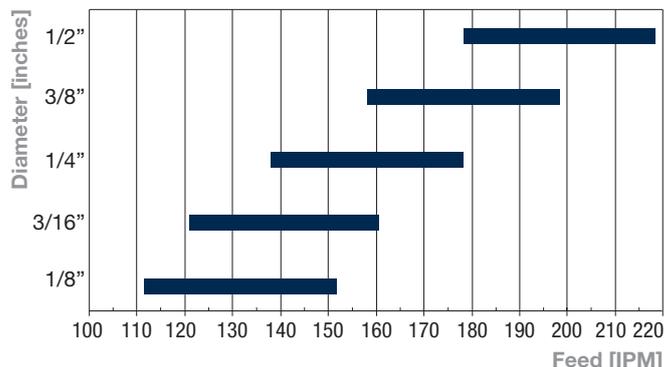
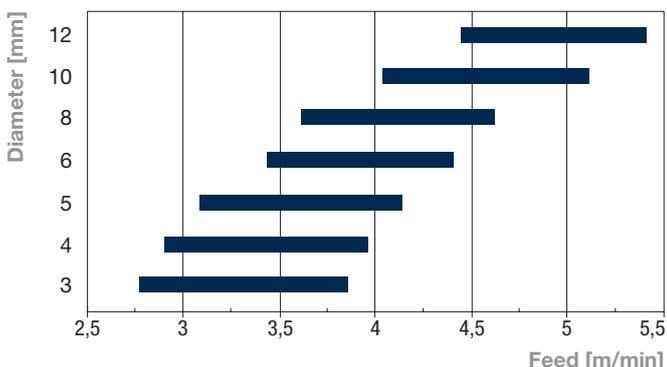
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

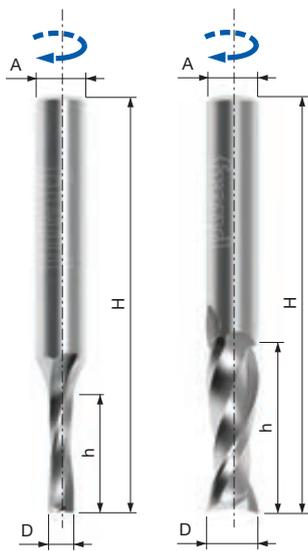
Suggested speeds for softwood: 18.000 RPM.

Depth of cut equal to cutting diameter.

| D mm | h mm | H mm | A mm | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|---------|---------|---------|---------|---------------|---|---------|-------------|------------|
| 3 | 13 | 60 | 6 | MG10 | 1 | 30.000 | SCH1UFN110R | F03FR03639 |
| 4 | 15 | 50 | 4 | MG10 | 1 | 30.000 | SCH1UFN210R | F03FR03645 |
| 4 | 16 | 60 | 6 | MG10 | 1 | 30.000 | SCH1UFN120R | F03FR03640 |
| 5 | 17 | 50 | 5 | MG10 | 1 | 30.000 | SCH1UFN215R | F03FR03646 |
| 5 | 17 | 60 | 6 | MG10 | 1 | 30.000 | SCH1UFN130R | F03FR03641 |
| 5 | 17 | 60 | 8 | MG10 | 1 | 30.000 | SCH1UFN160R | F03FR03644 |
| 6 | 17 | 50 | 6 | MG10 | 1 | 30.000 | SCH1UFN220R | F03FR03647 |
| 6 | 22 | 60 | 6 | MG10 | 1 | 30.000 | SCH1UFN225R | F03FR03648 |
| 8 | 22 | 70 | 8 | MG10 | 1 | 30.000 | SCH1UFN235R | F03FR03650 |
| 8 | 32 | 80 | 8 | MG10 | 1 | 30.000 | SCH1UFN240R | F03FR03651 |
| 8 | 42 | 90 | 8 | MG10 | 1 | 30.000 | SCH1UFN245R | F03FR03652 |
| 10 | 32 | 80 | 10 | H05MG | 1 | 30.000 | SCH1UFN255R | F03FR03654 |
| 10 | 42 | 100 | 10 | H05MG | 1 | 30.000 | SCH1UFN260R | F03FR03655 |
| 10 | 52 | 100 | 10 | H05MG | 1 | 30.000 | SCH1UFN265R | F03FR03656 |
| 12 | 32 | 80 | 12 | H05MG | 1 | 30.000 | SCH1UFN270R | F03FR03657 |
| 12 | 52 | 100 | 12 | H05MG | 1 | 30.000 | SCH1UFN275R | F03FR03658 |

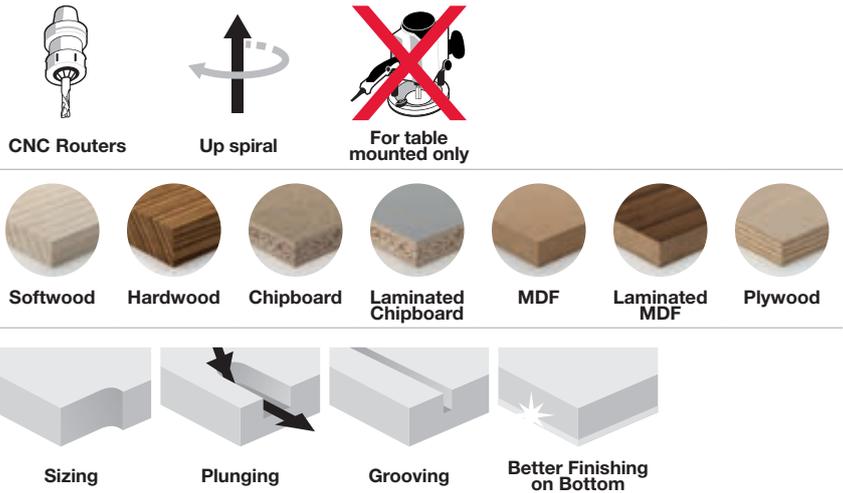
| D inch | h inch | H inch | A inch | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|-----------|-----------|-----------|-----------|---------------|---|---------|-------------|------------|
| 1/8 | 1/2 | 2-1/2 | 1/4 | MG10 | 1 | 30.000 | SCH1UFN140R | F03FR03642 |
| 3/16 | 3/4 | 2-1/2 | 1/4 | MG10 | 1 | 30.000 | SCH1UFN150R | F03FR03643 |
| 1/4 | 1 | 2-1/2 | 1/4 | MG10 | 1 | 30.000 | SCH1UFN230R | F03FR03649 |
| 3/8 | 1-1/8 | 3 | 3/8 | H05MG | 1 | 30.000 | SCH1UFN250R | F03FR03653 |
| 1/2 | 1-5/16 | 3 | 1/2 | H05MG | 1 | 30.000 | SCH1UFN280R | F03FR03659 |





SCH2UF

Finishing router cutter upcut with right-hand Z2



Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide with positive helix bit designed for CNC routing for general purpose with perfect finishing.

- Suitable for sizing, plunging and grooving with a perfect finishing.
- Upcut helix, good chip flow, upward chip removal for best finishing on the lower side of the panel.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Hardwood: 0,9

MDF, Chipboard: 1,1

Depth of cut:

From 1 x D to 2 x D : 0,75

From 2 x D to 3 x D : 0,5

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

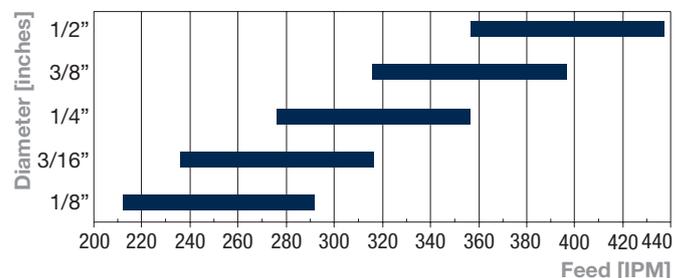
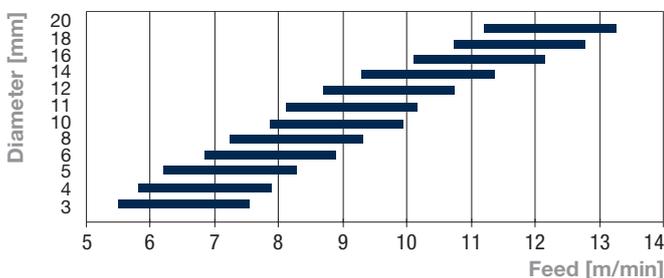
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

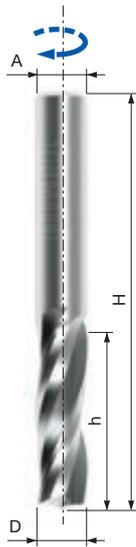
Suggested speeds for softwood: 18.000 RPM.

Depth of cut equal to cutting diameter.

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|----|----|-----|----|---------------|---|---------|-------------|------------|
| mm | mm | mm | mm | | | | | |
| 3 | 13 | 50 | 6 | MG10 | 2 | 30.000 | SCH2UFN110R | F03FR03696 |
| 3 | 13 | 50 | 8 | MG10 | 2 | 30.000 | SCH2UFN135R | F03FR03701 |
| 4 | 15 | 50 | 4 | MG10 | 2 | 30.000 | SCH2UFN204R | F03FR03709 |
| 4 | 16 | 50 | 6 | MG10 | 2 | 30.000 | SCH2UFN115R | F03FR03697 |
| 4 | 16 | 50 | 8 | MG10 | 2 | 30.000 | SCH2UFN140R | F03FR03702 |
| 5 | 17 | 50 | 5 | MG10 | 2 | 30.000 | SCH2UFN208R | F03FR03710 |
| 5 | 17 | 60 | 6 | MG10 | 2 | 30.000 | SCH2UFN120R | F03FR03698 |
| 5 | 17 | 50 | 8 | MG10 | 2 | 30.000 | SCH2UFN145R | F03FR03703 |
| 6 | 17 | 60 | 6 | MG10 | 2 | 30.000 | SCH2UFN212R | F03FR03711 |
| 6 | 22 | 60 | 6 | MG10 | 2 | 30.000 | SCH2UFN216R | F03FR03712 |
| 6 | 25 | 60 | 8 | MG10 | 2 | 30.000 | SCH2UFN150R | F03FR03704 |
| 7 | 32 | 80 | 8 | MG10 | 2 | 30.000 | SCH2UFN155R | F03FR03705 |
| 8 | 22 | 70 | 8 | MG10 | 2 | 30.000 | SCH2UFN224R | F03FR03714 |
| 8 | 32 | 80 | 8 | MG10 | 2 | 30.000 | SCH2UFN228R | F03FR03715 |
| 8 | 42 | 90 | 8 | MG10 | 2 | 30.000 | SCH2UFN232R | F03FR03716 |
| 8 | 25 | 70 | 12 | H05MG | 2 | 30.000 | SCH2UFN160R | F03FR03706 |
| 10 | 32 | 80 | 10 | H05MG | 2 | 30.000 | SCH2UFN240R | F03FR03718 |
| 10 | 42 | 100 | 10 | H05MG | 2 | 30.000 | SCH2UFN244R | F03FR03719 |
| 10 | 52 | 100 | 10 | H05MG | 2 | 30.000 | SCH2UFN248R | F03FR03720 |
| 10 | 32 | 80 | 12 | H05MG | 2 | 30.000 | SCH2UFN170R | F03FR03708 |
| 11 | 37 | 80 | 11 | H05MG | 2 | 30.000 | SCH2UFN252R | F03FR03721 |
| 12 | 32 | 80 | 12 | H05MG | 2 | 30.000 | SCH2UFN256R | F03FR03722 |
| 12 | 42 | 90 | 12 | H05MG | 2 | 30.000 | SCH2UFN260R | F03FR03723 |
| 12 | 52 | 100 | 12 | H05MG | 2 | 30.000 | SCH2UFN264R | F03FR03724 |
| 14 | 52 | 100 | 14 | H05MG | 2 | 25.000 | SCH2UFN276R | F03FR03727 |
| 16 | 52 | 100 | 16 | H05MG | 2 | 25.000 | SCH2UFN280R | F03FR03728 |
| 18 | 52 | 110 | 18 | H05MG | 2 | 25.000 | SCH2UFN284R | F03FR03729 |
| 20 | 52 | 120 | 20 | H05MG | 2 | 25.000 | SCH2UFN288R | F03FR03730 |
| 20 | 72 | 140 | 20 | H05MG | 2 | 25.000 | SCH2UFN292R | F03FR03731 |

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|------|-------|-------|------|---------------|---|---------|-------------|------------|
| inch | inch | inch | inch | | | | | |
| 1/8 | 1/2 | 2 | 1/4 | MG10 | 2 | 30.000 | SCH2UFN125R | F03FR03699 |
| 3/16 | 3/4 | 2 | 1/4 | MG10 | 2 | 30.000 | SCH2UFN130R | F03FR03700 |
| 1/4 | 1 | 2-1/2 | 1/4 | MG10 | 2 | 30.000 | SCH2UFN220R | F03FR03713 |
| 3/8 | 1-1/8 | 3 | 3/8 | H05MG | 2 | 30.000 | SCH2UFN236R | F03FR03717 |
| 3/8 | 1-1/4 | 3 | 1/2 | H05MG | 2 | 30.000 | SCH2UFN165R | F03FR03707 |
| 1/2 | 1-1/4 | 3 | 1/2 | H05MG | 2 | 30.000 | SCH2UFN268R | F03FR03725 |
| 1/2 | 2 | 4 | 1/2 | H05MG | 2 | 30.000 | SCH2UFN272R | F03FR03726 |



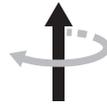


SCH3UF

Finishing router cutter upcut with right-hand Z3



CNC Routers



Up spiral



For table mounted only



Softwood



Hardwood



Chipboard



Laminated Chipboard



MDF



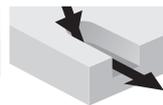
Laminated MDF



Plywood



Sizing



Plunging



Grooving



Better Finishing on Bottom

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with positive helix designed for CNC routing for high feed rate applications.

- Suitable for: sizing, plunging and grooving with a perfect finishing.
- Upcut helix, good chip flow, upward chip removal for best finishing on the lower side of the panel.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Hardwood: 0,9

MDF, Chipboard: 1,1

Depth of cut:

From 1 x D to 2 x D : 0,75

From 2 x D to 3 x D : 0,5

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

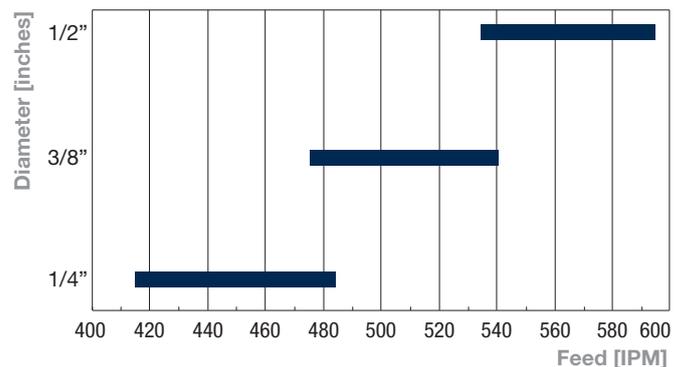
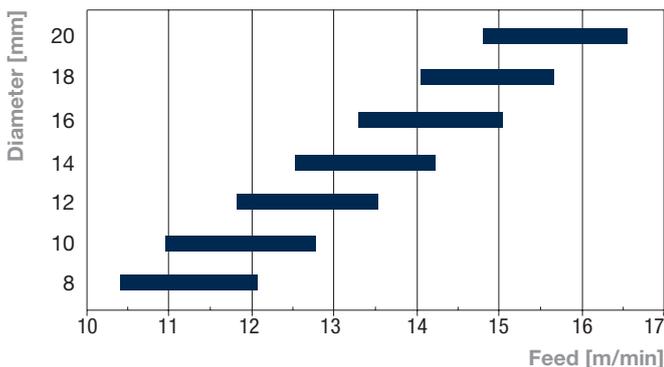
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

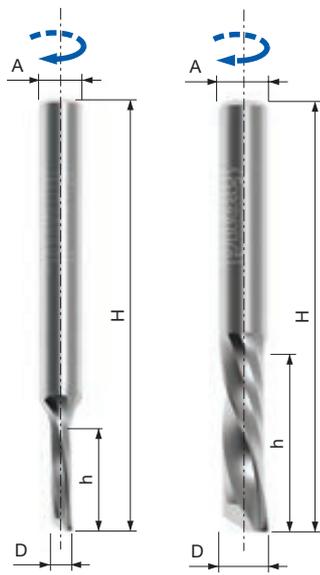
Suggested speeds for softwood: 18.000 RPM.

Depth of cut equal to cutting diameter.

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|----|----|-----|----|---------------|---|---------|-------------|------------|
| mm | mm | mm | mm | | | | | |
| 8 | 22 | 70 | 8 | MG10 | 3 | 30.000 | SCH3UFN208R | F03FR03807 |
| 8 | 32 | 80 | 8 | MG10 | 3 | 30.000 | SCH3UFN212R | F03FR03808 |
| 10 | 32 | 80 | 10 | H05MG | 3 | 30.000 | SCH3UFN220R | F03FR03810 |
| 10 | 42 | 90 | 10 | H05MG | 3 | 30.000 | SCH3UFN224R | F03FR03811 |
| 10 | 52 | 100 | 10 | H05MG | 3 | 30.000 | SCH3UFN228R | F03FR03812 |
| 12 | 32 | 80 | 12 | H05MG | 3 | 30.000 | SCH3UFN232R | F03FR03813 |
| 12 | 42 | 90 | 12 | H05MG | 3 | 30.000 | SCH3UFN236R | F03FR03814 |
| 12 | 52 | 100 | 12 | H05MG | 3 | 30.000 | SCH3UFN240R | F03FR03815 |
| 14 | 42 | 90 | 14 | H05MG | 3 | 25.000 | SCH3UFN248R | F03FR03817 |
| 14 | 52 | 100 | 14 | H05MG | 3 | 25.000 | SCH3UFN252R | F03FR03818 |
| 16 | 42 | 100 | 16 | H05MG | 3 | 25.000 | SCH3UFN256R | F03FR03819 |
| 16 | 52 | 100 | 16 | H05MG | 3 | 25.000 | SCH3UFN260R | F03FR03820 |
| 16 | 62 | 120 | 16 | H05MG | 3 | 25.000 | SCH3UFN264R | F03FR03821 |
| 18 | 52 | 110 | 18 | H05MG | 3 | 25.000 | SCH3UFN268R | F03FR03822 |
| 18 | 72 | 130 | 18 | H05MG | 3 | 25.000 | SCH3UFN272R | F03FR03823 |
| 20 | 52 | 110 | 20 | H05MG | 3 | 25.000 | SCH3UFN276R | F03FR03824 |
| 20 | 72 | 140 | 20 | H05MG | 3 | 25.000 | SCH3UFN280R | F03FR03825 |
| 20 | 92 | 170 | 20 | H05MG | 3 | 25.000 | SCH3UFN284R | F03FR03826 |

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|------|-------|-------|------|---------------|---|---------|-------------|------------|
| inch | inch | inch | inch | | | | | |
| 1/4 | 3/4 | 2-1/2 | 1/4 | MG10 | 3 | 30.000 | SCH3UFN204R | F03FR03806 |
| 3/8 | 1-1/8 | 3 | 3/8 | H05MG | 3 | 30.000 | SCH3UFN216R | F03FR03809 |
| 1/2 | 2 | 4 | 1/2 | H05MG | 3 | 30.000 | SCH3UFN244R | F03FR03816 |



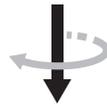


SCH1DF

Finishing router cutter downcut with right-hand Z1



CNC Routers



Down spiral



For table mounted only



Softwood



Hardwood



Chipboard



Laminated Chipboard



MDF



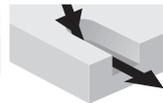
Laminated MDF



Plywood



Sizing



Plunging



Grooving



Better Finishing on Top

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with negative helix designed for CNC routing with large gullet space for high chips removal.

- Suitable for: sizing, ramp plunging and grooving with a perfect finishing.
- Downcut helix, helps the clamping of the workpiece, downward chip removal for best finishing on the upper side of the panel.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Hardwood: 0,9

MDF, Chipboard: 1,1

Depth of cut:

From 1 x D to 2 x D : 0,75

From 2 x D to 3 x D : 0,5

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

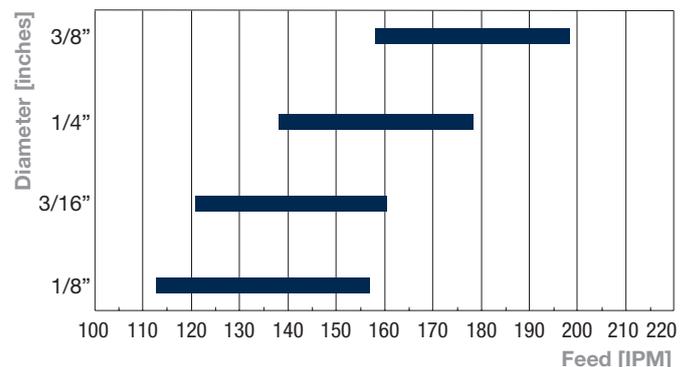
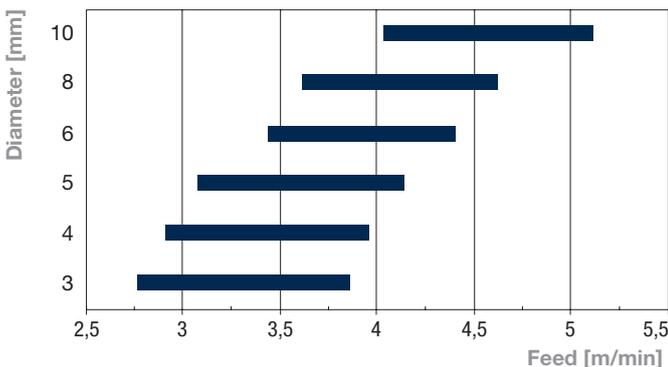
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

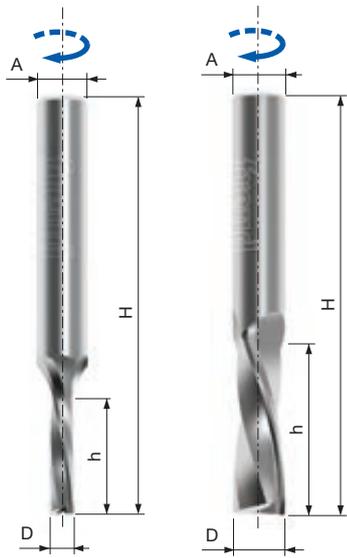
Suggested speeds for softwood: 18.000 RPM.

Depth of cut equal to cutting diameter.

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|----|----|-----|----|---------------|---|---------|-------------|------------|
| mm | mm | mm | mm | | | | | |
| 3 | 13 | 60 | 6 | MG10 | 1 | 30.000 | SCH1DFN110R | F03FR03623 |
| 4 | 15 | 50 | 4 | MG10 | 1 | 30.000 | SCH1DFN210R | F03FR03629 |
| 4 | 16 | 60 | 6 | MG10 | 1 | 30.000 | SCH1DFN120R | F03FR03624 |
| 5 | 17 | 50 | 5 | MG10 | 1 | 30.000 | SCH1DFN215R | F03FR03630 |
| 5 | 17 | 60 | 6 | MG10 | 1 | 30.000 | SCH1DFN130R | F03FR03625 |
| 5 | 17 | 60 | 8 | MG10 | 1 | 30.000 | SCH1DFN160R | F03FR03628 |
| 6 | 17 | 50 | 6 | MG10 | 1 | 30.000 | SCH1DFN220R | F03FR03631 |
| 6 | 22 | 60 | 6 | MG10 | 1 | 30.000 | SCH1DFN225R | F03FR03632 |
| 8 | 22 | 70 | 8 | MG10 | 1 | 30.000 | SCH1DFN235R | F03FR03634 |
| 8 | 32 | 80 | 8 | MG10 | 1 | 30.000 | SCH1DFN240R | F03FR03635 |
| 10 | 32 | 80 | 10 | H05MG | 1 | 30.000 | SCH1DFN255R | F03FR03637 |
| 10 | 42 | 100 | 10 | H05MG | 1 | 30.000 | SCH1DFN260R | F03FR03638 |

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|------|-------|-------|------|---------------|---|---------|-------------|------------|
| inch | inch | inch | inch | | | | | |
| 1/8 | 1/2 | 2-1/2 | 1/4 | MG10 | 1 | 30.000 | SCH1DFN140R | F03FR03626 |
| 3/16 | 3/4 | 2-1/2 | 1/4 | MG10 | 1 | 30.000 | SCH1DFN150R | F03FR03627 |
| 1/4 | 1 | 2-1/2 | 1/4 | MG10 | 1 | 30.000 | SCH1DFN230R | F03FR03633 |
| 3/8 | 1-1/8 | 3 | 3/8 | H05MG | 1 | 30.000 | SCH1DFN250R | F03FR03636 |



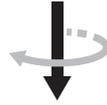


SCH2DF

Finishing router cutter downcut with right-hand Z2



CNC Routers



Down spiral



For table
mounted only



Softwood



Hardwood



Chipboard



Laminated
Chipboard



MDF



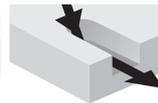
Laminated
MDF



Plywood



Sizing



Plunging



Grooving



Better Finishing
on Top

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with negative helix, designed for CNC routing for general purpose with perfect finishing.

- Suitable for: sizing, ramp plunging and grooving with a perfect finishing.
- Downcut helix, helps the clamping of the workpiece, downward chip removal for best finishing on the upper side of the panel.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Hardwood: 0,9

MDF, Chipboard: 1,1

Depth of cut:

From 1 x D to 2 x D : 0,75

From 2 x D to 3 x D : 0,5

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

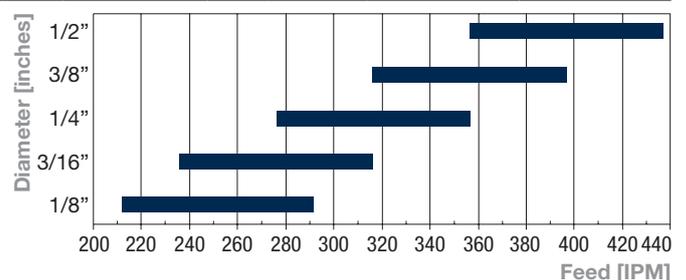
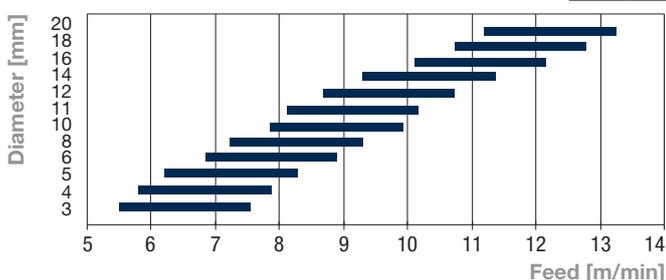
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

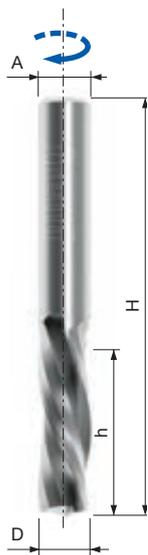
Suggested speeds for softwood: 18.000 RPM.

Depth of cut equal to cutting diameter.

| D mm | h mm | H mm | A mm | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|---------|---------|---------|---------|---------------|---|---------|-------------|------------|
| 3 | 13 | 50 | 6 | MG10 | 2 | 30.000 | SCH2DFN110R | F03FR03660 |
| 3 | 13 | 50 | 8 | MG10 | 2 | 30.000 | SCH2DFN135R | F03FR03665 |
| 4 | 15 | 50 | 4 | MG10 | 2 | 30.000 | SCH2DFN204R | F03FR03673 |
| 4 | 16 | 50 | 6 | MG10 | 2 | 30.000 | SCH2DFN115R | F03FR03661 |
| 4 | 16 | 50 | 8 | MG10 | 2 | 30.000 | SCH2DFN140R | F03FR03666 |
| 5 | 17 | 50 | 5 | MG10 | 2 | 30.000 | SCH2DFN208R | F03FR03674 |
| 5 | 17 | 60 | 6 | MG10 | 2 | 30.000 | SCH2DFN120R | F03FR03662 |
| 5 | 17 | 50 | 8 | MG10 | 2 | 30.000 | SCH2DFN145R | F03FR03667 |
| 6 | 17 | 60 | 6 | MG10 | 2 | 30.000 | SCH2DFN212R | F03FR03675 |
| 6 | 22 | 60 | 6 | MG10 | 2 | 30.000 | SCH2DFN216R | F03FR03676 |
| 6 | 25 | 60 | 8 | MG10 | 2 | 30.000 | SCH2DFN150R | F03FR03668 |
| 7 | 32 | 80 | 8 | MG10 | 2 | 30.000 | SCH2DFN155R | F03FR03669 |
| 8 | 22 | 70 | 8 | MG10 | 2 | 30.000 | SCH2DFN224R | F03FR03678 |
| 8 | 32 | 80 | 8 | MG10 | 2 | 30.000 | SCH2DFN228R | F03FR03679 |
| 8 | 42 | 90 | 8 | MG10 | 2 | 30.000 | SCH2DFN232R | F03FR03680 |
| 8 | 25 | 70 | 12 | H05MG | 2 | 30.000 | SCH2DFN160R | F03FR03670 |
| 10 | 32 | 80 | 10 | H05MG | 2 | 30.000 | SCH2DFN240R | F03FR03682 |
| 10 | 42 | 100 | 10 | H05MG | 2 | 30.000 | SCH2DFN244R | F03FR03683 |
| 10 | 52 | 100 | 10 | H05MG | 2 | 30.000 | SCH2DFN248R | F03FR03684 |
| 10 | 32 | 80 | 12 | H05MG | 2 | 30.000 | SCH2DFN170R | F03FR03672 |
| 11 | 37 | 80 | 11 | H05MG | 2 | 30.000 | SCH2DFN252R | F03FR03685 |
| 12 | 32 | 80 | 12 | H05MG | 2 | 30.000 | SCH2DFN256R | F03FR03686 |
| 12 | 42 | 90 | 12 | H05MG | 2 | 30.000 | SCH2DFN260R | F03FR03687 |
| 12 | 52 | 100 | 12 | H05MG | 2 | 30.000 | SCH2DFN264R | F03FR03688 |
| 14 | 52 | 100 | 14 | H05MG | 2 | 25.000 | SCH2DFN276R | F03FR03691 |
| 16 | 52 | 100 | 16 | H05MG | 2 | 25.000 | SCH2DFN280R | F03FR03692 |
| 18 | 52 | 110 | 18 | H05MG | 2 | 25.000 | SCH2DFN284R | F03FR03693 |
| 20 | 52 | 120 | 20 | H05MG | 2 | 25.000 | SCH2DFN288R | F03FR03694 |
| 20 | 72 | 140 | 20 | H05MG | 2 | 25.000 | SCH2DFN292R | F03FR03695 |

| D inch | h inch | H inch | A inch | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|-----------|-----------|-----------|-----------|---------------|---|---------|-------------|------------|
| 1/8 | 1/2 | 2 | 1/4 | MG10 | 2 | 30.000 | SCH2DFN125R | F03FR03663 |
| 3/16 | 3/4 | 2 | 1/4 | MG10 | 2 | 30.000 | SCH2DFN130R | F03FR03664 |
| 1/4 | 1 | 2-1/2 | 1/4 | MG10 | 2 | 30.000 | SCH2DFN220R | F03FR03677 |
| 3/8 | 1-1/8 | 3 | 3/8 | H05MG | 2 | 30.000 | SCH2DFN236R | F03FR03681 |
| 3/8 | 1-1/4 | 3 | 1/2 | H05MG | 2 | 30.000 | SCH2DFN165R | F03FR03671 |
| 1/2 | 1-1/4 | 3 | 1/2 | H05MG | 2 | 30.000 | SCH2DFN268R | F03FR03689 |
| 1/2 | 2 | 4 | 1/2 | H05MG | 2 | 30.000 | SCH2DFN272R | F03FR03690 |



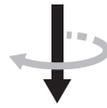


SCH3DF

Finishing router cutter downcut with right-hand Z3



CNC Routers



Down spiral



For table mounted only



Softwood



Hardwood



Chipboard



Laminated Chipboard



MDF



Laminated MDF



Plywood



Sizing



Plunging



Grooving



Better Finishing on Top

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with negative helix designed for CNC routing for high feed rate applications.

- Suitable for: sizing, ramp plunging and grooving with a perfect finishing.
- Downcut helix, helps the clamping of the workpiece, downward chip removal for best finishing on the upper side of the panel.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Hardwood: 0,9

MDF, Chipboard: 1,1

Depth of cut:

From 1 x D to 2 x D : 0,75

From 2 x D to 3 x D : 0,5

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

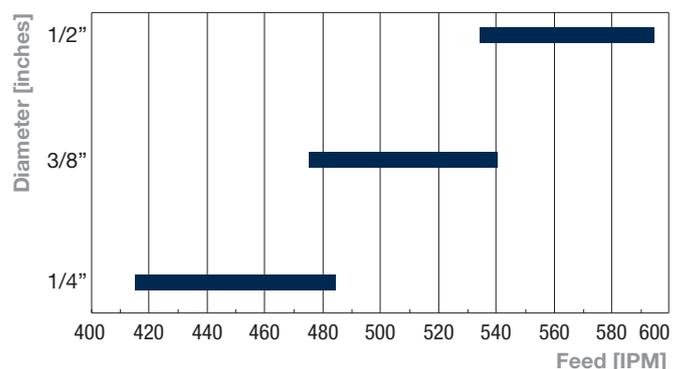
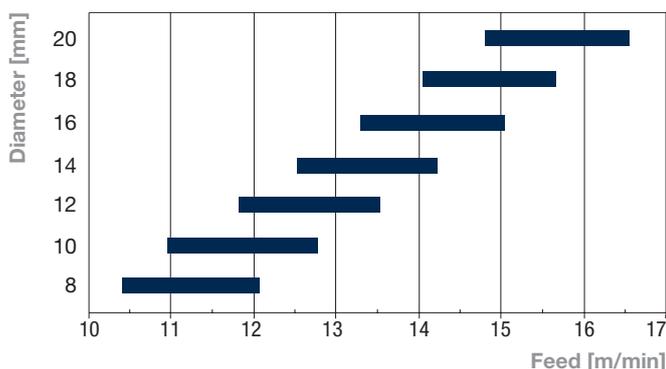
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

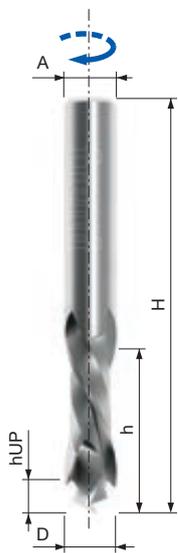
Suggested speeds for softwood: 18.000 RPM.

Depth of cut equal to cutting diameter.

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|----|----|-----|----|---------------|---|---------|-------------|------------|
| mm | mm | mm | mm | | | | | |
| 8 | 22 | 70 | 8 | MG10 | 3 | 30.000 | SCH3DFN208R | F03FR03755 |
| 8 | 32 | 80 | 8 | MG10 | 3 | 30.000 | SCH3DFN212R | F03FR03756 |
| 10 | 32 | 80 | 10 | H05MG | 3 | 30.000 | SCH3DFN220R | F03FR03758 |
| 10 | 42 | 90 | 10 | H05MG | 3 | 30.000 | SCH3DFN224R | F03FR03759 |
| 10 | 52 | 100 | 10 | H05MG | 3 | 30.000 | SCH3DFN228R | F03FR03760 |
| 12 | 32 | 80 | 12 | H05MG | 3 | 30.000 | SCH3DFN232R | F03FR03761 |
| 12 | 42 | 90 | 12 | H05MG | 3 | 30.000 | SCH3DFN236R | F03FR03762 |
| 12 | 52 | 100 | 12 | H05MG | 3 | 30.000 | SCH3DFN240R | F03FR03763 |
| 14 | 42 | 90 | 14 | H05MG | 3 | 25.000 | SCH3DFN248R | F03FR03765 |
| 14 | 52 | 100 | 14 | H05MG | 3 | 25.000 | SCH3DFN252R | F03FR03766 |
| 16 | 42 | 100 | 16 | H05MG | 3 | 25.000 | SCH3DFN256R | F03FR03767 |
| 16 | 52 | 100 | 16 | H05MG | 3 | 25.000 | SCH3DFN260R | F03FR03768 |
| 16 | 62 | 120 | 16 | H05MG | 3 | 25.000 | SCH3DFN264R | F03FR03769 |
| 18 | 52 | 110 | 18 | H05MG | 3 | 25.000 | SCH3DFN268R | F03FR03770 |
| 18 | 72 | 130 | 18 | H05MG | 3 | 25.000 | SCH3DFN272R | F03FR03771 |
| 20 | 52 | 110 | 20 | H05MG | 3 | 25.000 | SCH3DFN276R | F03FR03772 |
| 20 | 72 | 140 | 20 | H05MG | 3 | 25.000 | SCH3DFN280R | F03FR03773 |
| 20 | 92 | 170 | 20 | H05MG | 3 | 25.000 | SCH3DFN284R | F03FR03774 |

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|------|-------|-------|------|---------------|---|---------|-------------|------------|
| inch | inch | inch | inch | | | | | |
| 1/4 | 3/4 | 2-1/2 | 1/4 | MG10 | 3 | 30.000 | SCH3DFN204R | F03FR03754 |
| 3/8 | 1-1/8 | 3 | 3/8 | H05MG | 3 | 30.000 | SCH3DFN216R | F03FR03757 |
| 1/2 | 2 | 4 | 1/2 | H05MG | 3 | 30.000 | SCH3DFN244R | F03FR03764 |





SCH2XF

Finishing router cutter compression with right-hand Z2+2



CNC Routers



Up and down spiral



For table mounted only



Softwood



Hardwood



Chipboard



Laminated
Chipboard



MDF



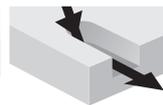
Laminated
MDF



Plywood



Sizing



Plunging



Grooving



Better Finishing on
Top and Bottom

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with negative and positive helix designed for CNC routing for general purpose with perfect finishing on both sides of the panel.

- Suitable for: nesting, sizing, ramp plunging and grooving with a perfect finishing.
- Up helix and down helix for a best finishing on both sides of the panel.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Softwood: 0,9

Hardwood: 0,8

Depth of cut:

2x19 mm or 2x3/4" : 0,75

2x19 mm or 3x3/4" : 0,75

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

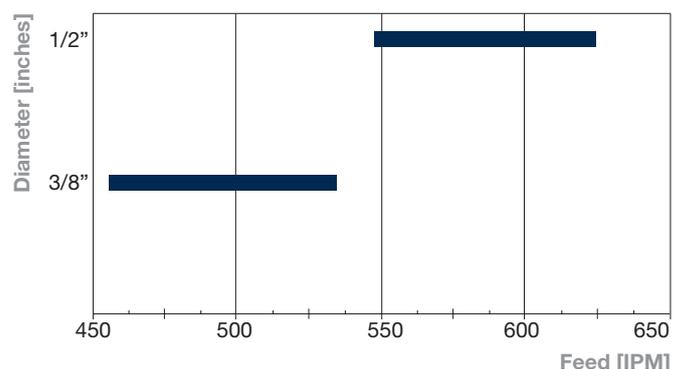
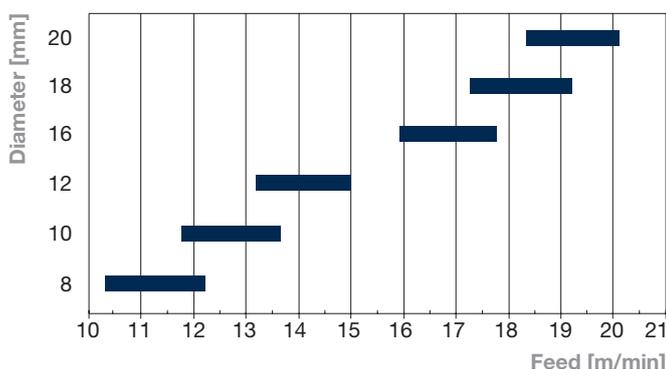
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

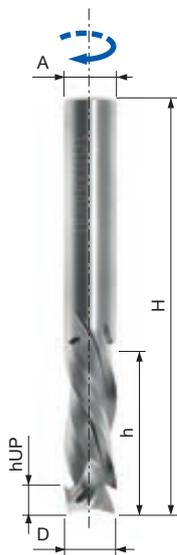
Suggested speeds for softwood: 18.000 RPM.

Depth of cut: 3/4".

| D | h | hUP | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|----|----|-----|-----|----|---------------|-----|---------|-------------|------------|
| mm | mm | mm | mm | mm | | | 1/min. | | |
| 8 | 22 | 5 | 70 | 8 | MG10 | 2+2 | 30.000 | SCH2XFN310R | F03FR03732 |
| 8 | 32 | 10 | 70 | 8 | MG10 | 2+2 | 30.000 | SCH2XFN410R | F03FR03741 |
| 10 | 26 | 5 | 70 | 10 | H05MG | 2+2 | 30.000 | SCH2XFN340R | F03FR03735 |
| 10 | 32 | 5 | 80 | 10 | H05MG | 2+2 | 30.000 | SCH2XFN350R | F03FR03736 |
| 10 | 29 | 10 | 80 | 10 | H05MG | 2+2 | 30.000 | SCH2XFN420R | F03FR03743 |
| 12 | 32 | 5 | 90 | 12 | H05MG | 2+2 | 30.000 | SCH2XFN360R | F03FR03737 |
| 12 | 42 | 5 | 100 | 12 | H05MG | 2+2 | 30.000 | SCH2XFN370R | F03FR03738 |
| 12 | 32 | 12 | 80 | 12 | H05MG | 2+2 | 30.000 | SCH2XFN425R | F03FR03744 |
| 12 | 42 | 12 | 100 | 12 | H05MG | 2+2 | 30.000 | SCH2XFN430R | F03FR03745 |
| 16 | 35 | 14 | 90 | 16 | H05MG | 2+2 | 25.000 | SCH2XFN444R | F03FR04012 |
| 18 | 55 | 24 | 110 | 18 | H05MG | 2+2 | 25.000 | SCH2XFN450R | F03FR03749 |
| 20 | 55 | 30 | 120 | 20 | H05MG | 2+2 | 25.000 | SCH2XFN455R | F03FR03750 |

| D | h | hUP | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|------|-------|------|-------|------|---------------|-----|---------|-------------|------------|
| inch | inch | inch | inch | inch | | | 1/min. | | |
| 3/8 | 1 | 3/16 | 3 | 3/8 | H05MG | 2+2 | 30.000 | SCH2XFN320R | F03FR03733 |
| 3/8 | 1-1/8 | 3/8 | 3 | 3/8 | H05MG | 2+2 | 30.000 | SCH2XFN415R | F03FR03742 |
| 3/8 | 1-1/4 | 3/16 | 3 | 3/8 | H05MG | 2+2 | 30.000 | SCH2XFN330R | F03FR03734 |
| 1/2 | 1 | 3/16 | 3 | 1/2 | H05MG | 2+2 | 30.000 | SCH2XFN380R | F03FR03739 |
| 1/2 | 1-1/2 | 3/16 | 3-1/2 | 1/2 | H05MG | 2+2 | 30.000 | SCH2XFN390R | F03FR03740 |
| 1/2 | 1 | 9/16 | 3 | 1/2 | H05MG | 2+2 | 30.000 | SCH2XFN435R | F03FR03746 |
| 1/2 | 1-1/2 | 9/16 | 3-1/2 | 1/2 | H05MG | 2+2 | 30.000 | SCH2XFN440R | F03FR03747 |





SCH3XF

Finishing router cutter compression with right-hand Z3+3



CNC Routers



Up and down
spiral



For table
mounted only



Softwood



Hardwood



Chipboard



Laminated
Chipboard



MDF



Laminated
MDF



Plywood



Sizing



Plunging



Grooving



Better Finishing on
Top and Bottom

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with negative and positive helix designed for CNC routing for high speed demanding applications with perfect finishing on both sides of the panel.

- Suitable for: nesting, sizing, ramp plunging and grooving with a perfect finishing.
- Up helix and down helix for a best finishing on both sides of the panel.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Softwood: 0,9

Hardwood: 0,8

Depth of cut:

2x19 mm or 2x3/4" : 0,75

2x19 mm or 3x3/4" : 0,75

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

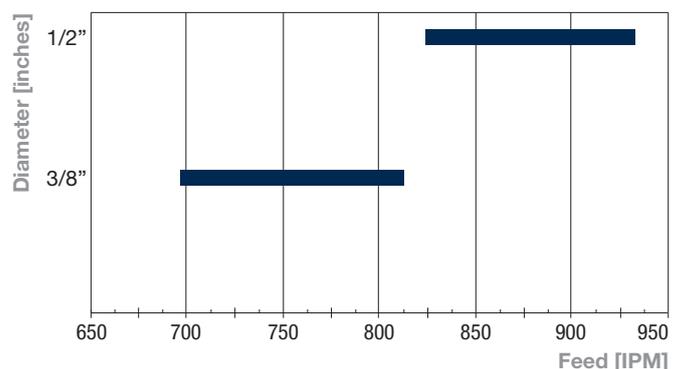
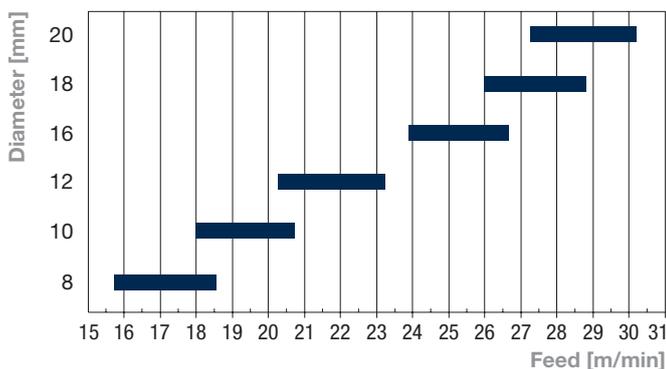
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

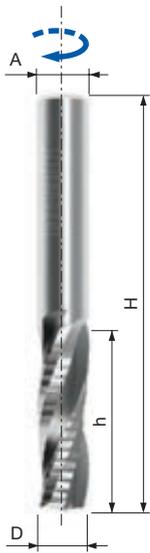
Suggested speeds for softwood: 18.000 RPM.

Depth of cut: 3/4".

| D | h | hUP | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|----|----|-----|-----|----|---------------|-----|---------|-------------|------------|
| mm | mm | mm | mm | mm | | | 1/min. | | |
| 8 | 22 | 5 | 70 | 8 | MG10 | 3+3 | 30.000 | SCH3XFN310R | F03FR03856 |
| 8 | 32 | 10 | 70 | 8 | MG10 | 3+3 | 30.000 | SCH3XFN410R | F03FR03866 |
| 10 | 26 | 5 | 70 | 10 | H05MG | 3+3 | 30.000 | SCH3XFN340R | F03FR04013 |
| 10 | 29 | 10 | 80 | 10 | H05MG | 3+3 | 30.000 | SCH3XFN420R | F03FR04014 |
| 10 | 32 | 5 | 80 | 10 | H05MG | 3+3 | 30.000 | SCH3XFN350R | F03FR03860 |
| 10 | 42 | 13 | 90 | 10 | H05MG | 3+3 | 30.000 | SCH3XFN422R | F03FR03869 |
| 12 | 22 | 5 | 80 | 12 | H05MG | 3+3 | 30.000 | SCH3XFN355R | F03FR03861 |
| 12 | 32 | 5 | 90 | 12 | H05MG | 3+3 | 30.000 | SCH3XFN360R | F03FR03862 |
| 12 | 42 | 5 | 100 | 12 | H05MG | 3+3 | 30.000 | SCH3XFN370R | F03FR03863 |
| 12 | 32 | 12 | 80 | 12 | H05MG | 3+3 | 30.000 | SCH3XFN425R | F03FR03870 |
| 12 | 42 | 14 | 100 | 12 | H05MG | 3+3 | 30.000 | SCH3XFN430R | F03FR03871 |
| 12 | 52 | 16 | 100 | 12 | H05MG | 3+3 | 30.000 | SCH3XFN432R | F03FR03872 |

| D | h | hUP | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|------|-------|------|-------|------|---------------|-----|---------|-------------|------------|
| inch | inch | inch | inch | inch | | | 1/min. | | |
| 3/8 | 1 | 3/16 | 3 | 3/8 | H05MG | 3+3 | 30.000 | SCH3XFN320R | F03FR03857 |
| 3/8 | 1-1/8 | 3/8 | 3 | 3/8 | H05MG | 3+3 | 30.000 | SCH3XFN415R | F03FR03867 |
| 3/8 | 1-1/4 | 3/16 | 3 | 3/8 | H05MG | 3+3 | 30.000 | SCH3XFN330R | F03FR03858 |
| 1/2 | 1 | 3/16 | 3 | 1/2 | H05MG | 3+3 | 30.000 | SCH3XFN380R | F03FR03864 |
| 1/2 | 1-1/8 | 1/2 | 3 | 1/2 | H05MG | 3+3 | 30.000 | SCH3XFN436R | F03FR03873 |
| 1/2 | 1-1/2 | 3/16 | 3-1/2 | 1/2 | H05MG | 3+3 | 30.000 | SCH3XFN390R | F03FR03865 |
| 1/2 | 1-5/8 | 3/4 | 3-1/2 | 1/2 | H05MG | 3+3 | 30.000 | SCH3XFN438R | F03FR03874 |
| 1/2 | 2-1/4 | 3/4 | 4 | 1/2 | H05MG | 3+3 | 30.000 | SCH3XFN442R | F03FR03875 |





SCH3UR

Roughing router cutter upcut with right-hand Z3



CNC Routers



Up spiral



For table mounted only



Softwood



Hardwood



Chipboard



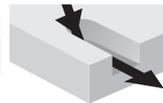
MDF



Plywood



Sizing



Plunging



Grooving

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with positive helix designed for CNC routing with chip breaker for very high feed rate applications.

- Suitable for: sizing, plunging and grooving with a rough finishing.
- Upcut helix, good chip flow, upward chip removal.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Hardwood: 0,9

MDF, Chipboard: 1,1

Depth of cut:

From 1 x D to 2 x D : 0,75

From 2 x D to 3 x D : 0,5

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

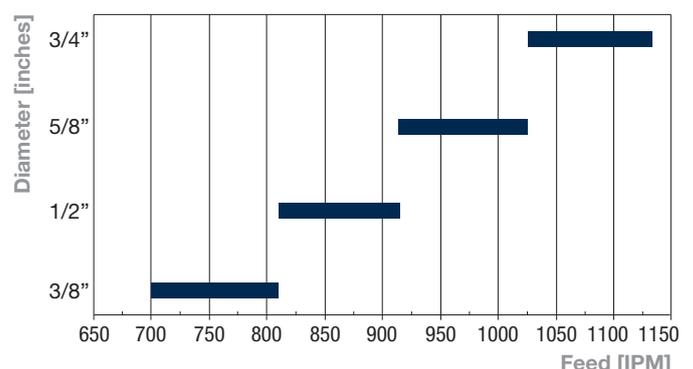
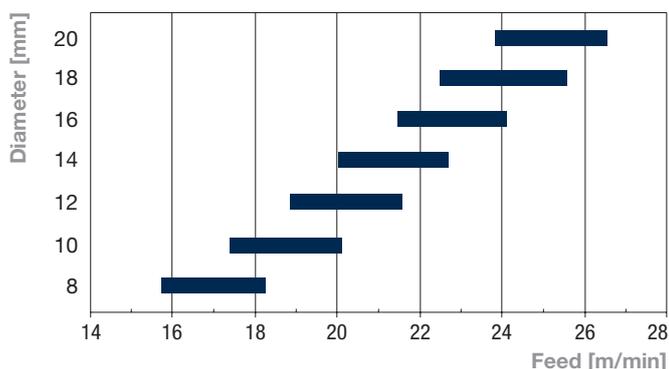
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

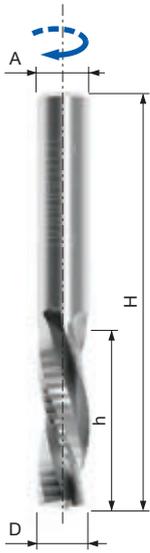
Suggested speeds for softwood: 18.000 RPM.

Depth of cut equal to cutting diameter.

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|----|-----|-----|----|---------------|---|---------|-------------|------------|
| mm | mm | mm | mm | | | | | |
| 8 | 22 | 70 | 8 | MG10 | 3 | 30.000 | SCH3URN504R | F03FR03830 |
| 8 | 32 | 80 | 8 | MG10 | 3 | 30.000 | SCH3URN506R | F03FR03831 |
| 8 | 42 | 90 | 8 | MG10 | 3 | 30.000 | SCH3URN508R | F03FR03832 |
| 10 | 32 | 80 | 10 | H05MG | 3 | 30.000 | SCH3URN512R | F03FR03834 |
| 10 | 42 | 90 | 10 | H05MG | 3 | 30.000 | SCH3URN514R | F03FR03835 |
| 10 | 52 | 100 | 10 | H05MG | 3 | 30.000 | SCH3URN516R | F03FR03836 |
| 12 | 32 | 80 | 12 | H05MG | 3 | 30.000 | SCH3URN518R | F03FR03837 |
| 12 | 42 | 90 | 12 | H05MG | 3 | 30.000 | SCH3URN520R | F03FR03838 |
| 12 | 52 | 100 | 12 | H05MG | 3 | 30.000 | SCH3URN522R | F03FR03839 |
| 14 | 42 | 90 | 14 | H05MG | 3 | 25.000 | SCH3URN528R | F03FR03842 |
| 14 | 52 | 100 | 14 | H05MG | 3 | 25.000 | SCH3URN530R | F03FR03843 |
| 14 | 60 | 130 | 14 | H05MG | 3 | 25.000 | SCH3URN531R | F03FR03844 |
| 16 | 42 | 100 | 16 | H05MG | 3 | 25.000 | SCH3URN534R | F03FR03846 |
| 16 | 52 | 110 | 16 | H05MG | 3 | 25.000 | SCH3URN536R | F03FR03847 |
| 16 | 62 | 120 | 16 | H05MG | 3 | 25.000 | SCH3URN538R | F03FR03848 |
| 18 | 52 | 110 | 18 | H05MG | 3 | 25.000 | SCH3URN540R | F03FR03849 |
| 18 | 72 | 130 | 18 | H05MG | 3 | 25.000 | SCH3URN542R | F03FR03850 |
| 20 | 52 | 120 | 20 | H05MG | 3 | 25.000 | SCH3URN546R | F03FR03852 |
| 20 | 72 | 140 | 20 | H05MG | 3 | 25.000 | SCH3URN548R | F03FR03853 |
| 20 | 85 | 150 | 20 | H05MG | 3 | 25.000 | SCH3URN550R | F03FR03854 |
| 20 | 102 | 170 | 20 | H05MG | 3 | 25.000 | SCH3URN552R | F03FR03855 |

| D | h | H | A | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|------|-------|-------|------|---------------|---|---------|-------------|------------|
| inch | inch | inch | inch | | | | | |
| 3/8 | 1-1/8 | 3-1/2 | 3/8 | H05MG | 3 | 30.000 | SCH3URN510R | F03FR03833 |
| 1/2 | 1-1/8 | 3-1/2 | 1/2 | H05MG | 3 | 30.000 | SCH3URN524R | F03FR03840 |
| 1/2 | 1-5/8 | 4 | 1/2 | H05MG | 3 | 30.000 | SCH3URN526R | F03FR03841 |
| 5/8 | 2-1/8 | 5 | 5/8 | H05MG | 3 | 25.000 | SCH3URN532R | F03FR03845 |
| 3/4 | 2-1/8 | 5 | 3/4 | H05MG | 3 | 25.000 | SCH3URN544R | F03FR03851 |



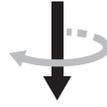


SCH3DR

Roughing router cutter downcut with right-hand Z3



CNC Routers



Down spiral



For table mounted only



Softwood



Hardwood



Chipboard



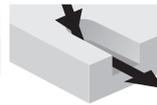
MDF



Plywood



Sizing



Plunging



Grooving

Machines:

Nesting and CNC overhead routing machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Sizing, plunging and grooving.

Technical information:

Solid Carbide bit with negative helix designed for CNC routing with chip breaker for very high feed rate applications.

- Suitable for: sizing, ramp plunging and grooving with a rough finishing.
- Downcut helix, helps the clamping of the workpiece, downward chip removal.

Working parameters

To find suggested feeding speeds see the tables below and apply the following correction factors.

Materials:

Hardwood: 0,9

MDF, Chipboard: 1,1

Depth of cut:

From 1 x D to 2 x D : 0,75

From 2 x D to 3 x D : 0,5

Over 3 x D : 0,4

Rotation speed:

Suggested speeds are proportional to RPM.

Examples:

Factor for 12.000 RPM: $12.000/18.000 = 0,66$

Factor for 24.000 RPM: $24.000/18.000 = 1,33$

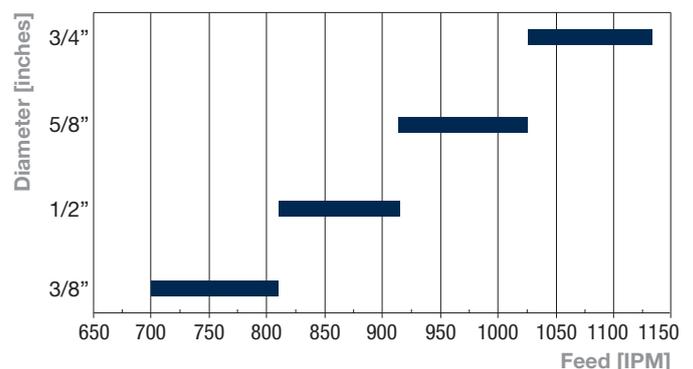
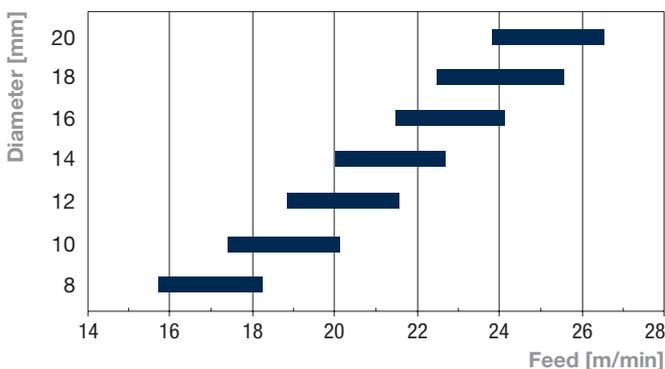
To maximise the tool lifetime, always set the maximum speed that delivers the needed quality of cut.

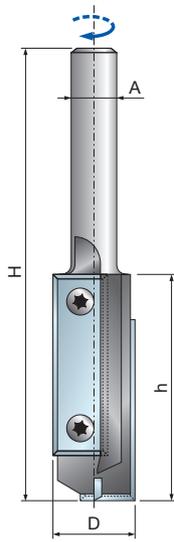
Suggested speeds for softwood: 18.000 RPM.

Depth of cut equal to cutting diameter.

| D mm | h mm | H mm | A mm | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|---------|---------|---------|---------|---------------|---|---------|-------------|------------|
| 8 | 22 | 70 | 8 | MG10 | 3 | 30.000 | SCH3DRN504R | F03FR03778 |
| 8 | 32 | 80 | 8 | MG10 | 3 | 30.000 | SCH3DRN506R | F03FR03779 |
| 8 | 42 | 90 | 8 | MG10 | 3 | 30.000 | SCH3DRN508R | F03FR03780 |
| 10 | 32 | 80 | 10 | H05MG | 3 | 30.000 | SCH3DRN512R | F03FR03782 |
| 10 | 42 | 90 | 10 | H05MG | 3 | 30.000 | SCH3DRN514R | F03FR03783 |
| 10 | 52 | 100 | 10 | H05MG | 3 | 30.000 | SCH3DRN516R | F03FR03784 |
| 12 | 32 | 80 | 12 | H05MG | 3 | 30.000 | SCH3DRN518R | F03FR03785 |
| 12 | 42 | 90 | 12 | H05MG | 3 | 30.000 | SCH3DRN520R | F03FR03786 |
| 12 | 52 | 100 | 12 | H05MG | 3 | 30.000 | SCH3DRN522R | F03FR03787 |
| 14 | 42 | 90 | 14 | H05MG | 3 | 25.000 | SCH3DRN528R | F03FR03790 |
| 14 | 52 | 100 | 14 | H05MG | 3 | 25.000 | SCH3DRN530R | F03FR03791 |
| 16 | 42 | 100 | 16 | H05MG | 3 | 25.000 | SCH3DRN534R | F03FR03793 |
| 16 | 52 | 110 | 16 | H05MG | 3 | 25.000 | SCH3DRN536R | F03FR03794 |
| 16 | 62 | 120 | 16 | H05MG | 3 | 25.000 | SCH3DRN538R | F03FR03795 |
| 18 | 52 | 110 | 18 | H05MG | 3 | 25.000 | SCH3DRN540R | F03FR03796 |
| 18 | 72 | 130 | 18 | H05MG | 3 | 25.000 | SCH3DRN542R | F03FR03797 |
| 20 | 52 | 120 | 20 | H05MG | 3 | 25.000 | SCH3DRN546R | F03FR03799 |
| 20 | 72 | 140 | 20 | H05MG | 3 | 25.000 | SCH3DRN548R | F03FR03800 |
| 20 | 85 | 150 | 20 | H05MG | 3 | 25.000 | SCH3DRN550R | F03FR03801 |
| 20 | 102 | 170 | 20 | H05MG | 3 | 25.000 | SCH3DRN552R | F03FR03802 |

| D inch | h inch | H inch | A inch | Quality of HW | Z | Max RPM | Freud Code | Art. No. |
|-----------|-----------|-----------|-----------|---------------|---|---------|-------------|------------|
| 3/8 | 1-1/8 | 3-1/2 | 3/8 | H05MG | 3 | 30.000 | SCH3DRN510R | F03FR03781 |
| 1/2 | 1-1/8 | 3-1/2 | 1/2 | H05MG | 3 | 30.000 | SCH3DRN524R | F03FR03788 |
| 1/2 | 1-5/8 | 4 | 1/2 | H05MG | 3 | 30.000 | SCH3DRN526R | F03FR03789 |
| 5/8 | 2-1/8 | 5 | 5/8 | H05MG | 3 | 25.000 | SCH3DRN532R | F03FR03792 |
| 3/4 | 2-1/8 | 5 | 3/4 | H05MG | 3 | 25.000 | SCH3DRN544R | F03FR03798 |





Machines:
CNC overhead routing machines.

Materials:
Softwood and hardwood.

Applications:
Sizing and plunging.

Technical information:
For CNC machining centres or overhead routing machines.

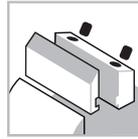
- Suitable for plunging and sizing.
- The disposable knife guarantees a constant finish and cutting diameter.
- It is suggested a gradual feed rate when entering into the workpiece.
- Steel body.

TG62MD

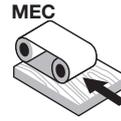
Disposable knives straight router cutters



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



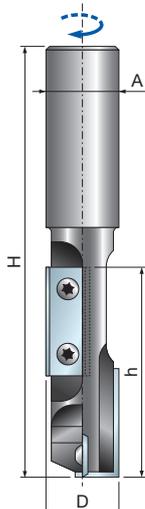
Sizing



Plunging

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 16 | 50 | 105 | 12 | 2+1 | - | TG62MD AD3 | F03FA13927 |
| 18 | 50 | 105 | 20 | 2+1 | - | TG62MD BD3 | F03FA13928 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|----------|------------------|------------|------------|
| | Knife | 40 x 12 x 1,5 | CG44MLA310 | F03FA21938 |
| | Screw | M4 x 10 x 9 | VT71M AA9 | F03FA04505 |
| | Torx key | T15 | CB03M DA9 | F03FA00168 |



Machines:
CNC overhead routing machines.

Materials:
Softwood and hardwood.

Applications:
Sizing and plunging.

Technical information:
For CNC machining centres or overhead routing machines.

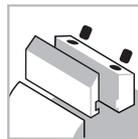
- Suitable for plunging and sizing.
- The disposable knife guarantees a constant finish and cutting diameter.
- It is suggested a gradual feed rate when entering into the workpiece.
- Steel body.

TG63MD

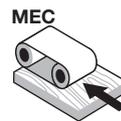
Disposable knives straight router cutters



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



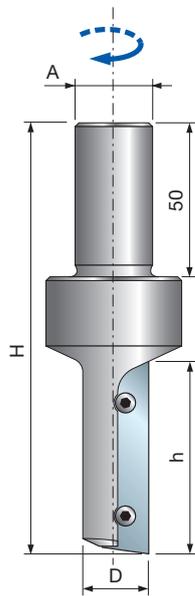
Sizing



Plunging

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 20 | 58 | 120 | 20 | 2+1 | - | TG63MD CD3 | F03FA13937 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|----------|------------------|------------|------------|
| | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
| | Knife | 9,6 x 12 x 1,5 | CG08MMA310 | F03FH02910 |
| | Screw | M4 x 10 x 9 | VT71M AA9 | F03FA04505 |
| | Torx key | T15 | CB03M DA9 | F03FA00168 |

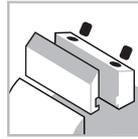


TG71MD

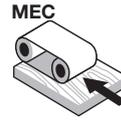
Disposable knives straight router cutters



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Sizing



Plunging

Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Sizing and plunging.

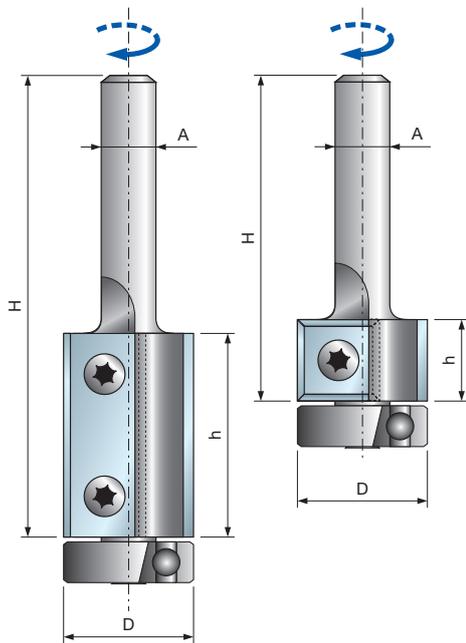
Technical information:

For CNC machining centres or overhead routing machines.

- The disposable knife guarantees a constant finishing and cutting diameter.
- It is suggested a gradual feed rate when entering into the workpiece.
- Steel body.

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|-------------------|------------|
| 16 | 50 | 120 | 20 | 1 | - | TG71MD AD3 | F03FA04272 |
| 18 | 50 | 120 | 20 | 1 | - | TG71MD BD3 | F03FA04273 |
| 20 | 50 | 120 | 20 | 1 | - | TG71MD CD3 | F03FA04274 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|--|----------|------------------|-------------------|------------|
|  | Knife | 50 x 12 x 1,5 | CG71MAA310 | F03FC23923 |
|  | Screw | M4 x 10 x 9 | VT71M AA9 | F03FA04505 |
|  | Torx key | T15 | CB03M DA9 | F03FA00168 |

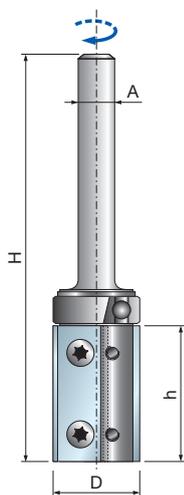


Machines:
CNC routers.

Materials:
Softwood and hardwood.

Applications:
Sizing.

Technical information:
For routers. Ideal for roughing and sizing.
• Steel body.



Machines:
CNC routers.

Materials:
Softwood and hardwood.

Applications:
Sizing.

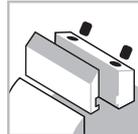
Technical information:
For routers. Ideal for roughing and sizing.
• Steel body.

TG74MD

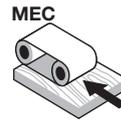
Bearing disposable knives straight router cutters



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Sizing

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|------------|------------|
| 19 | 12 | 55 | 6 | 2 | - | TG74MD CA3 | F03FA14728 |
| 19 | 12 | 70 | 8 | 2 | - | TG74MD CB3 | F03FA14729 |
| 19 | 12 | 70 | 12 | 2 | - | TG74MD CC3 | F03FA14730 |
| 19 | 30 | 75 | 6 | 2 | - | TG74MD CD3 | F03FA14731 |
| 19 | 30 | 90 | 8 | 2 | - | TG74MD CE3 | F03FA13925 |
| 19 | 30 | 90 | 12 | 2 | - | TG74MD CF3 | F03FA13926 |

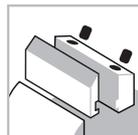
| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|--------------|------------------|------------|------------|
|  | Knife | 12 x 12 x 1,5 | CG08MBA310 | F03FH02903 |
|  | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
|  | Screw | M4 x 10 x 9 | VT71M AA9 | F03FA04505 |
|  | Ball bearing | 19 x 6 x 6 | 3102M CA9 | F03FA14097 |
|  | Torx key | T15 | CB03M DA9 | F03FA00168 |

TG76MD

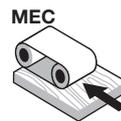
Bearing disposable knives straight router cutters



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Sizing

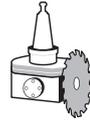
| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|------------|------------|
| 19 | 30 | 90 | 8 | 2 | - | TG76MD CD3 | F03FA13919 |
| 19 | 30 | 90 | 12 | 2 | - | TG76MD CE3 | F03FA13920 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|----------------|------------------|------------|------------|
|  | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
|  | Screw | M4 x 10 x 9 | VT71M AA9 | F03FA04505 |
|  | Torx key | T15 | CB03M DA9 | F03FA00168 |
|  | Retaining ring | 11 x 13,9 | 2621M AC9 | F03FA14741 |
|  | Ball bearing | 19,05 x 4 | 3102M CB9 | F03FA14098 |



LU34M

Saw blades for grooving and sizing on CNC units



CNC Cutting Units



Softwood



Hardwood



Laminated Chipboard



Laminated MDF



Plywood



Ripping



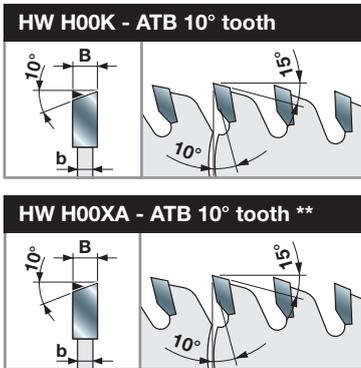
Crosscutting



Grooving



●●●● Ultimate ●● High ● Good



Machines:
CNC cutting units.

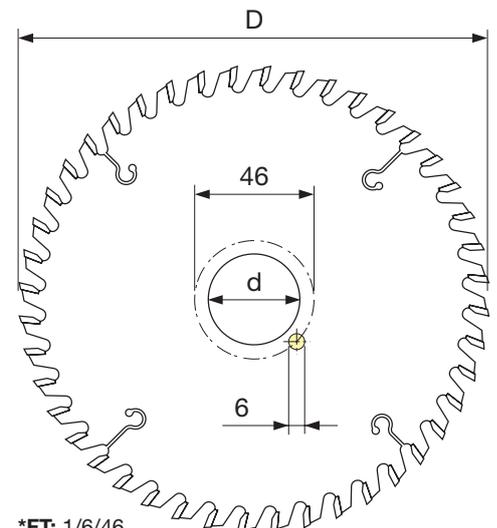
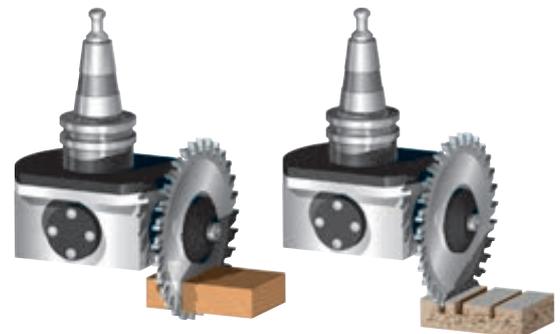
Materials:
Softwood, hardwood, laminated chipboard, laminated MDF and plywood.

Applications:
Sizing on CNC, ripping, crosscutting, grooving on CNC.

Technical information:
Saw blades dedicated to CNC machines. For grooving along and across grain on softwood, hardwood and laminates.

| D mm | B mm | b mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|------|-------------------|-------------|------------|
| 120 | 4,0 | 3,0 | 30 | 18 | 12.000 | LU34M40AC3 | F03FS06095 |
| 120 | 4,0 | 3,0 | 20 | 30 | 12.000 | LU34M40EA3 | F03FS06367 |
| 120 | 4,0 | 3,0 | 35 | 30 | 12.000 | LU34M40EC3* | F03FS05141 |
| 120 | 5,0 | 3,0 | 30 | 18 | 12.000 | LU34M50AC3 | F03FS06096 |
| 120 | 5,0 | 3,0 | 35 | 30 | 12.000 | LU34M50EC3* | F03FS05143 |
| 120 | 6,0 | 3,0 | 30 | 18** | 12.000 | LU34M60AC3 | F03FS06097 |
| 120 | 6,0 | 3,0 | 35 | 30** | 12.000 | LU34M60EC3* | F03FS05145 |
| 180 | 4,0 | 3,0 | 35 | 44 | 10.000 | LU34M40NC3* | F03FS05142 |
| 180 | 5,0 | 3,0 | 35 | 44 | 10.000 | LU34M50NC3* | F03FS05144 |
| 180 | 6,0 | 3,0 | 35 | 44** | 10.000 | LU34M60NC3* | F03FS05146 |

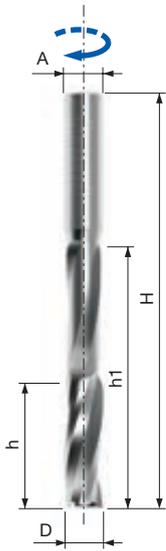
Working examples



*FT: 1/6/46

Grooving





SCH3

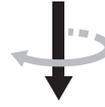
Finishing hardware slot router cutter - right-hand Z3



CNC Routers



Up spiral



Down spiral



For table mounted only



Softwood



Hardwood



Chipboard



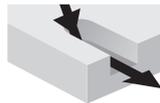
MDF



Plywood



Grooving



Plunging

Machines:

CNC routers.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Grooving and plunging.

Technical information:

Solid Carbide bit with positive helix designed for CNC machines centres.

- Suitable for: windows, shutters and all hardware on laminates and solid wood.
- Upcut helix, good chip flow, upward chip removal for best finishing on the lower side.

Upcut

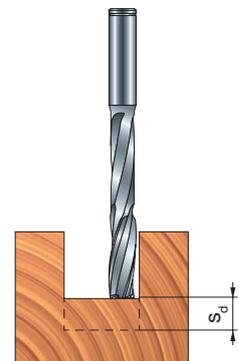
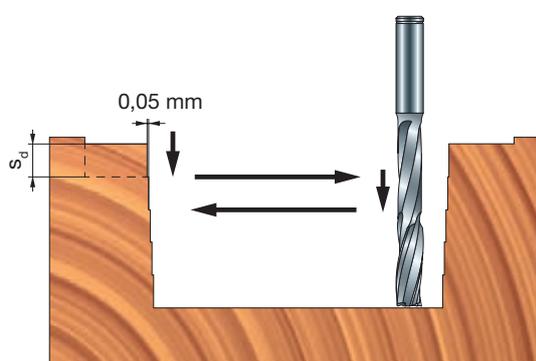


| D mm | h mm | h1 mm | H mm | A mm | Quality of HW | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|----------|---------|---------|---------------|---|-------------------|--------------------|------------|
| 14 | 45 | 95 | 150 | 14 | H05MG | 3 | 25.000 | SCH3UFN102R | F03FR03803 |
| 16 | 45 | 95 | 150 | 16 | H05MG | 3 | 25.000 | SCH3UFN104R | F03FR03804 |
| 18 | 45 | 95 | 150 | 18 | H05MG | 3 | 25.000 | SCH3UFN106R | F03FR03805 |

Downcut



| D mm | h mm | h1 mm | H mm | A mm | Quality of HW | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|----------|---------|---------|---------------|---|-------------------|--------------------|------------|
| 14 | 45 | 95 | 150 | 14 | H05MG | 3 | 25.000 | SCH3DFN102R | F03FR03751 |
| 16 | 45 | 95 | 150 | 16 | H05MG | 3 | 25.000 | SCH3DFN104R | F03FR03752 |
| 18 | 45 | 95 | 150 | 18 | H05MG | 3 | 25.000 | SCH3DFN106R | F03FR03753 |



Working parameters

Solid wood feed and speeds:

Maximum depth per stroke s_v : 8 mm

Suggested infeed at 18.000 RPM: 15 m/min

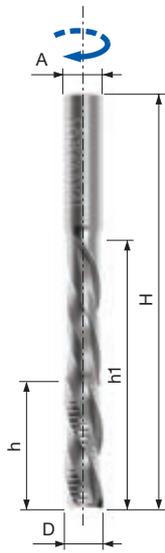
Chipboard feed and speeds:

Maximum depth per stroke s_v : 15 mm

Suggested infeed at 18.000 RPM: 12 m/min



Solid wood - Best Downcut



SCH3

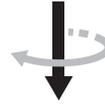
Roughing hardware slot router cutter - right-hand Z3



CNC Routers



Up spiral



Down spiral



For table mounted only



Softwood



Hardwood



Chipboard



MDF



Plywood



Grooving



Plunging

Machines:

CNC routers.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Grooving and plunging.

Technical information:

Available until stock sells out.

- Solid Carbide bit with positive helix designed for CNC machining centres.
- Suitable for: windows, shutters and all hardware on solid wood.
- Downcut helix, good chip flow, upward chip removal.

Working parameters

Solid wood feed and speeds:

Maximum depth per stroke s_p : 8 mm

Suggested infeed at 18.000 RPM: 15 m/min

Chipboard feed and speed:

Maximum depth per stroke s_p : 15 mm

Suggested infeed at 18.000 RPM: 12 m/min

Upcut

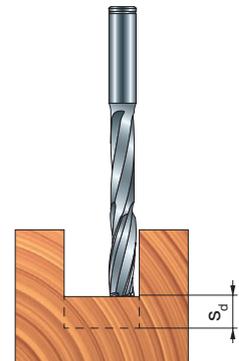
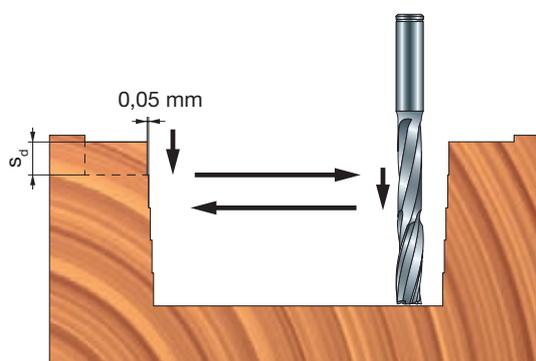


| D mm | h mm | h1 mm | H mm | A mm | Quality of HW | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|----------|---------|---------|---------------|---|-------------------|-------------|------------|
| 14 | 45 | 95 | 150 | 14 | H05MG | 3 | 25.000 | SCH3UMN102R | F03FR03827 |
| 16 | 45 | 95 | 150 | 16 | H05MG | 3 | 25.000 | SCH3UMN104R | F03FR03828 |
| 18 | 45 | 95 | 150 | 18 | H05MG | 3 | 25.000 | SCH3UMN106R | F03FR03829 |

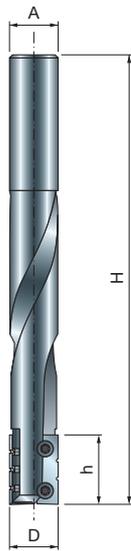
Downcut



| D mm | h mm | h1 mm | H mm | A mm | Quality of HW | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|----------|---------|---------|---------------|---|-------------------|-------------|------------|
| 14 | 45 | 95 | 150 | 14 | H05MG | 3 | 25.000 | SCH3DMN102R | F03FR03775 |
| 16 | 45 | 95 | 150 | 16 | H05MG | 3 | 25.000 | SCH3DMN104R | F03FR03776 |
| 18 | 45 | 95 | 150 | 18 | H05MG | 3 | 25.000 | SCH3DMN106R | F03FR03777 |



Solid wood - Best Downcut

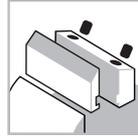


TG72MD

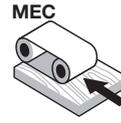
Disposable knife straight router cutter



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Grooving



Plunging

Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Grooving and plunging.

Technical information:

For CNC machining centres or overhead routing machines.

- Suitable for plunging and sizing softwood and hardwood.
- The disposable knife guarantees a constant finishing and cutting diameter.
- It is suggested a gradual feed rate when entering into the workpiece.
- Steel body.

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|------------|------------|
| 16 | 23 | 150 | 16 | 2 | - | TG72MD AA3 | F03FA04278 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------------------|------------------|------------|------------|
| | Knife with 2 carvings | 23 x 7 x 1,5 | CG72MAB310 | F03FA18190 |
| | Knife with 3 carvings | 23 x 7 x 1,5 | CG72MAA310 | F03FA18189 |
| | Screw | M3 x 6 x 5 | VT72M AA9 | F03FA04506 |

Planing



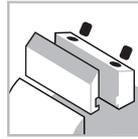


TM10MD

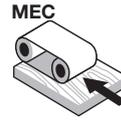
Disposable knives straight router cutter



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Planing



Rebating



Sizing

Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Planing, rebating and sizing.

Technical information:

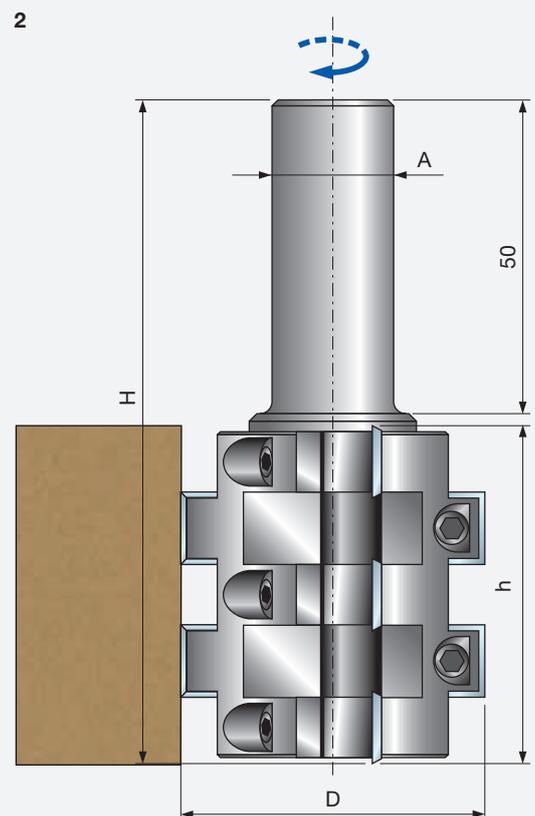
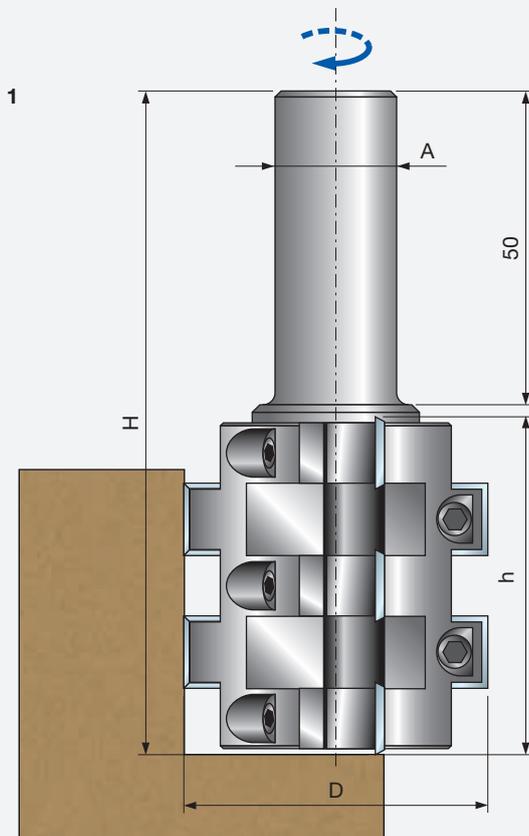
Disposable knives tool for roughing and sizing and suitable for cutting rebates.

- The multiple edge guarantees low noise running and optimum chip discharge.
- Steel body.

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|----|-------------------|------------|------------|
| 50 | 56 | 108 | 20 | 10 | 12.000 | TM10MD AA3 | F03FC20422 |
| 50 | 78 | 130 | 20 | 14 | 12.000 | TM10MD AC3 | F03FC20423 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|---|-----------|------------------|------------|------------|
|  | Knife | 12 x 12 x 1,5 | CG08MBA310 | F03FH02903 |
|  | Wedge | 15 x 10 x 8 | CN01M BA9 | F03FC01249 |
|  | Screw | M6 x 12 | VT03M DL9 | F03FA04441 |
|  | Allen key | 3 | CB03M AA9 | F03FA00162 |

Working examples



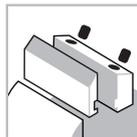


NC12M

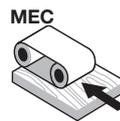
Spoilboard surfacing cutters



CNC Routers



Clamping system



Automatic feed



Steel Body



MDF



Planing



Rebating

Machines:

Nesting and CNC overhead routing machines.

Materials:

MDF.

Applications:

Planing and rebating.

Technical information:

Spurs cutterhead for recover a spoil board.

- The cutters have 4 sides, so they can be used 4 times.
- **NC12M...** Positive shear angle - for solid wood and other board materials.
- **NC12M...N** Negative shear angle - for LDF, MDF or composite particle spoilboard for nesting.
- Steel body.

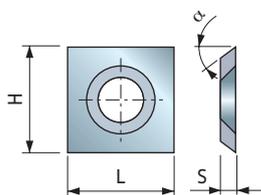
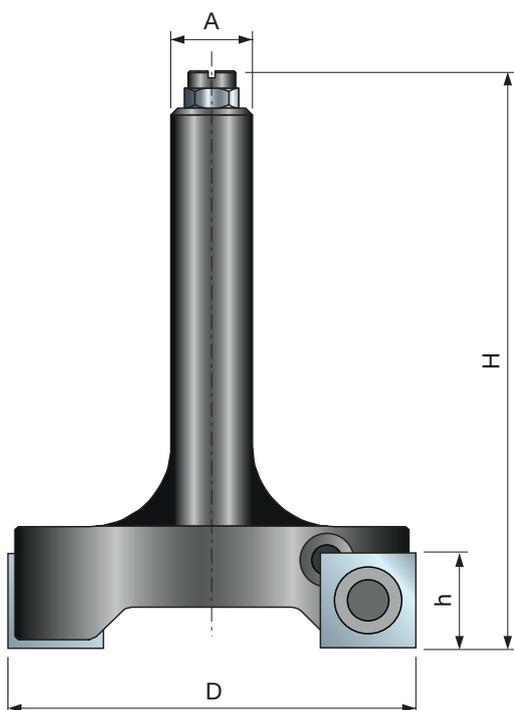
| D | h | H | A | Z | Max RPM | Freud Code | Art. No. |
|-----|----|----|----|---|---------|------------------|------------|
| mm | mm | mm | mm | | 1/min. | | |
| 60 | 13 | 80 | 12 | 2 | - | NC12M60 | F03FR03949 |
| 80 | 13 | 80 | 20 | 3 | - | NC12M80 | F03FR03884 |
| 100 | 13 | 80 | 20 | 3 | - | NC12M100 | F03FR03886 |
| 60 | 13 | 80 | 12 | 2 | - | NC12M60N | F03FR03950 |
| 80 | 13 | 80 | 20 | 3 | - | NC12M80N | F03FR03885 |
| 100 | 13 | 80 | 20 | 3 | - | NC12M100N | F03FR03887 |

| D | h | H | A | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|------|---|---------|------------------|------------|
| inch | inch | inch | inch | | 1/min. | | |
| 2-1/2 | 1/2 | 3 | 1/2 | 2 | - | NC12M61 | F03FR03951 |
| 4 | 1/2 | 3 | 3/4 | 3 | - | NC12M101 | F03FR03888 |
| 2-1/2 | 1/2 | 3 | 1/2 | 2 | - | NC12M61N | F03FR03952 |
| 4 | 1/2 | 3 | 3/4 | 3 | - | NC12M101N | F03FR03889 |

| Spare parts | Dimensions | Freud Code | Art. No. |
|---------------------------|-------------|-------------------|------------|
| | mm | | |
| Spur | 14 x 14 x 2 | RG01MAI310 | F03FH03791 |
| Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| Hex nut | M4 | 2606M CE9 | F03FA07360 |
| Slotted cheese head screw | M4 x 10 | 2611M DB9 | F03FA07386 |
| Torx key | T20 | CB03M CC9 | F03FA00167 |

Optional square disposable spur

| L | H | S | Type | Quality of HW | α | Freud Code | Art. No. |
|----|----|----|------|---------------|----------|-------------------|------------|
| mm | mm | mm | | | | | |
| 14 | 14 | 2 | 1 | H00XA | 31° | RG01MAH310 | F03FH03037 |



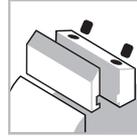


NC96MGC13

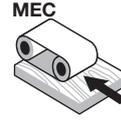
CNC multicut planer cutterhead



CNC Machines



Clamping system



Automatic feed



Aluminium body



Softwood



Hardwood



Planing



Rebating

Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Planing.

Technical information:

Multicut CNC tool suitable for planing, rebating and roughing.

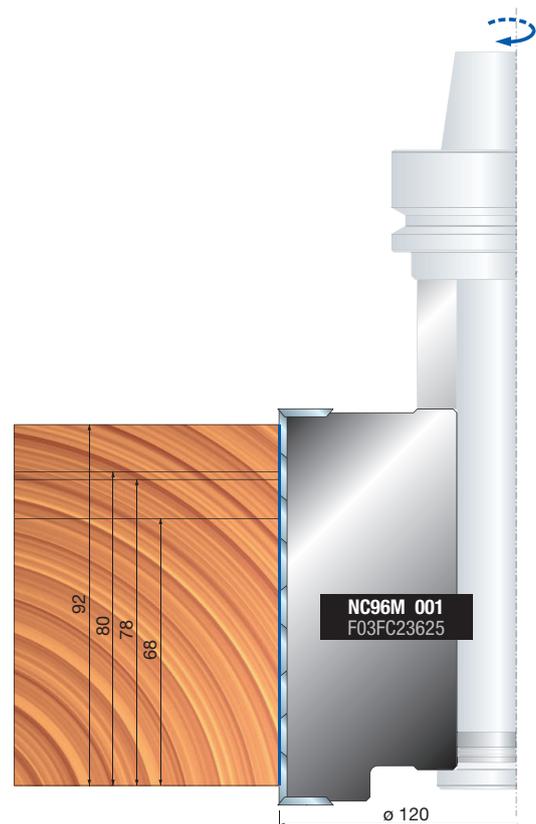
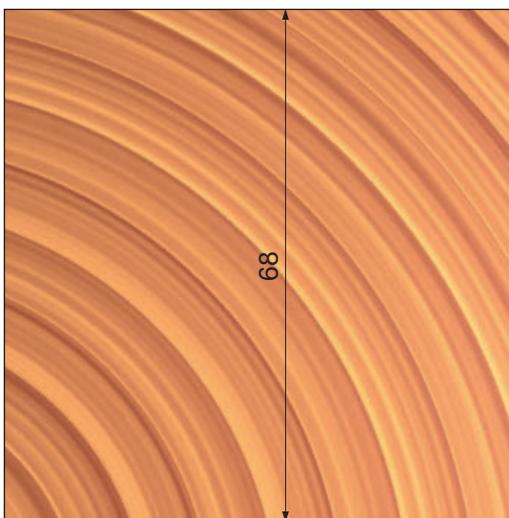
- Timber up to 92 mm thickness, tool available in left and right hand rotation.
- Chuck and knives to be ordered separately.
- Aluminium light alloy body.

| D mm | B mm | d mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------------|------------|
| 120 | 104 | 30 | 11.000 | NC96MGC13 | F03FC23630 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------|------------------|-------------------|------------|
|  | Spacer | 50 x 33 x 30 | AN01MA3309 | F03FC00067 |
|  | Steel pin | 4 x 10 | 2601M AB9 | F03FA07326 |
|  | Spur | 14 x 14 x 2 | RG01MAG310 | F03FC24180 |
|  | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |

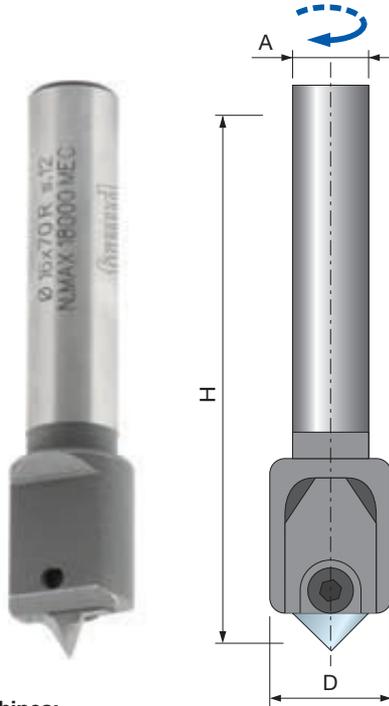
Tools for set NC93M 100

| D mm | B mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------------|------------|
| 120 | 101 | 30 | NC96MGC13 | F03FC23625 |



Profiling



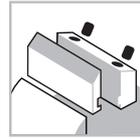


NC01M

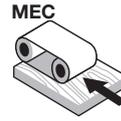
Multiprofile router cutter - Z1



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving

Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

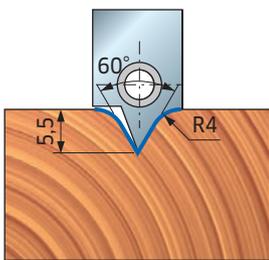
Technical information:

Multiprofile router cutter available with 11 different shape solutions.

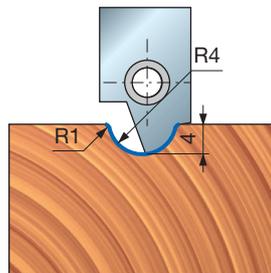
- Item **NC01MCA** includes the router cutter body and 10 knives (1 for each profile).
- For making one profile only, please order the router cutter body **NC01M-A** and 1 knife with the desired profile.
- Steel body.

| D mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 16 | 70 | 12 x 50 | 1 | 18.000 | NC01MCA | F03FA01710 |
| 16 | 70 | 12 x 50 | 1 | 18.000 | NC01M-A | F03FA01709 |

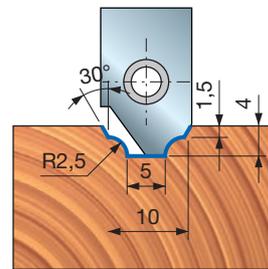
| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|-------------------------|------------|------------|
| 1 | Knife | 12x19 R=4 | CC01MT0101 | F03FA18124 |
| 2 | Knife | 12x19 R=4 | CC01MT0201 | F03FA18125 |
| 3 | Knife | 12x19 R=2,5 | CC01MT0301 | F03FA18126 |
| 4 | Knife | 12x19 $\alpha=90^\circ$ | CC01MT0401 | F03FA18127 |
| 5 | Knife | 12x19 R=5 | CC01MT0501 | F03FA18128 |
| 6 | Knife | 12x19 R=4 | CC01MT0601 | F03FA18129 |
| 7 | Knife | 12x19 R=2,5 | CC01MT0701 | F03FA18130 |
| 8 | Knife | 12x19 R=2,25 | CC01MT0801 | F03FA18131 |
| 9 | Knife | 12x19 R=5 | CC01MT0901 | F03FA18132 |
| 10 | Knife | 12x19 R=3 | CC01MT1001 | F03FA18133 |
| 11 | Knife | 12x19 R=3 | CC01MT1101 | F03FC25455 |



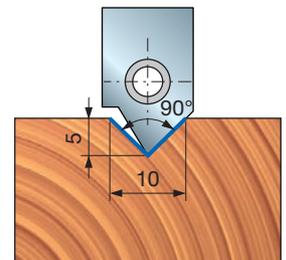
PROFILE 1



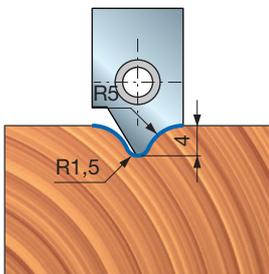
PROFILE 2



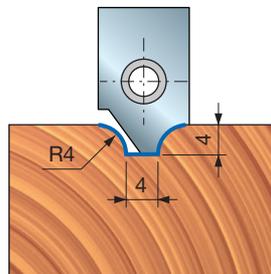
PROFILE 3



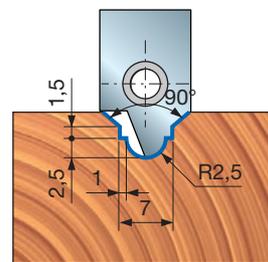
PROFILE 4



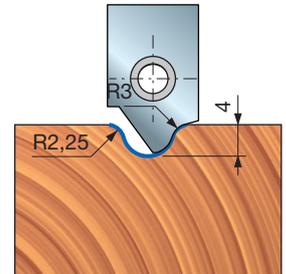
PROFILE 5



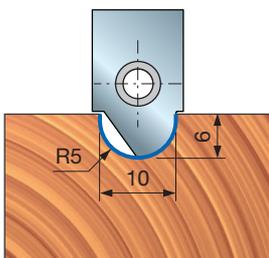
PROFILE 6



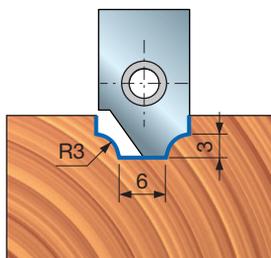
PROFILE 7



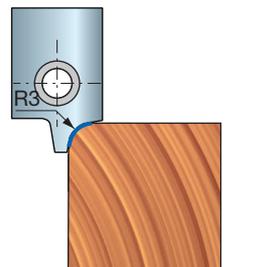
PROFILE 8



PROFILE 9



PROFILE 10



PROFILE 11

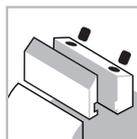


NC02M

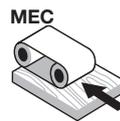
CNC router cutter with profiled knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

Technical information:

Performance knives router cutter with 6 available profiles (knives included in the box).

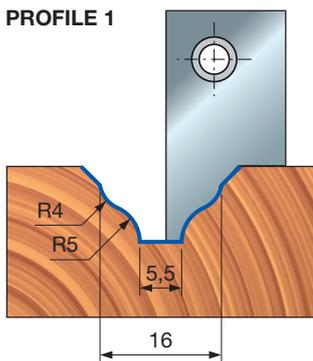
- 12x50 mm and 20x50 mm shank available.
- Steel body.

| D mm | h mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|------------|
| 50 | 35 | 12 | 12.000 | NC02M11012 | F03FC15441 |
| 50 | 35 | 20 | 12.000 | NC02M11020 | F03FC15443 |

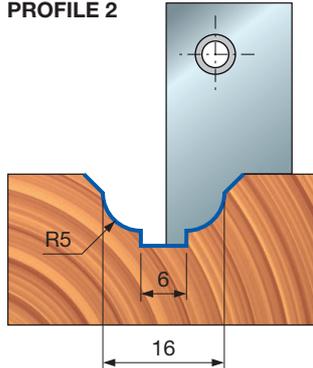
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------|------------------|------------|------------|
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M5 x 5 | 2615M CC9 | F03FA07420 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |
| | Allen key | 2,5 | 2619M CA9 | F03FA07432 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|-------------|------------|
| 1 | Knife | 17,5 x 35 x 3 | CC02M110A01 | F03FC23740 |
| 2 | Knife | 17,5 x 35 x 3 | CC02M110B01 | F03FC23741 |
| 3 | Knife | 17,5 x 35 x 3 | CC02M110C01 | F03FC23742 |
| 4 | Knife | 17,5 x 35 x 3 | CC02M110D01 | F03FC23743 |
| 5 | Knife | 17,5 x 35 x 3 | CC02M110E01 | F03FC23744 |
| 6 | Knife | 17,5 x 35 x 3 | CC02M110F01 | F03FC23745 |

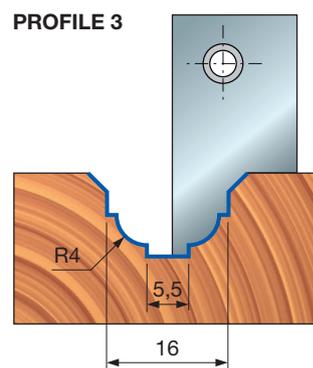
PROFILE 1



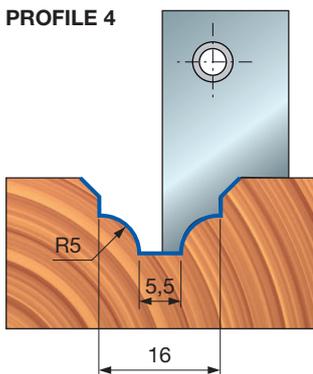
PROFILE 2



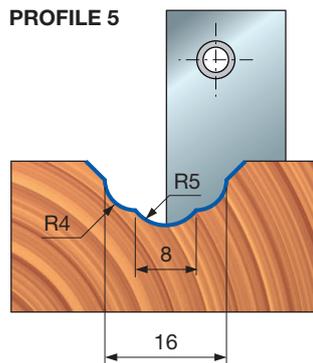
PROFILE 3



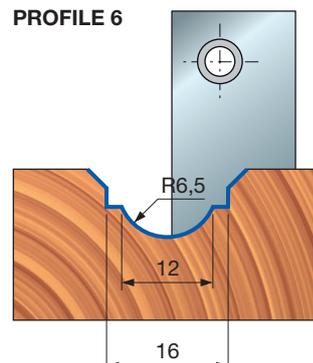
PROFILE 4

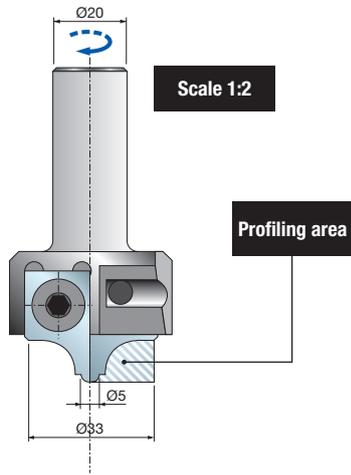


PROFILE 5



PROFILE 6

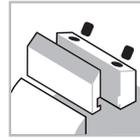




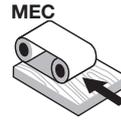
PCN110 Customised CNC router cutter with profiled knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

Technical information:

Performance CNC router cutter suitable for customised profiles.

- Steel body.
- **PCN110** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys for orders please specify: shank dimensions, profile drawing (please refer to knife profiling area).

| D | B | A | Max RPM | Freud Code | Art. No. |
|----|----|---------|---------|------------|----------|
| mm | mm | mm | 1/min. | | |
| 50 | 33 | 20 x 50 | 25.000 | PCN110 | - |

| | Spare parts | Dimensions | Freud Code | Art. No. |
|---|-------------|---------------|------------------|------------|
| | | mm | | |
|  | Knife | 17,5 x 35 x 3 | CCN110 | |
|  | Screw | M5 x 5 | 2615M CC9 | F03FA07420 |
|  | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
|  | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
|  | Allen key | 4 | CB03M BA9 | F03FA00163 |
|  | Allen key | 2,5 | 2619M CA9 | F03FA07432 |

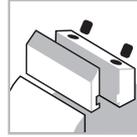


NC21MCA

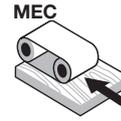
CNC router cutter with multiradius knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

Technical information:

Performance knives router cutter suitable for profiling with 3 available profiles.

- Steel body.
- 20x50 mm shank.

***NC21MCA**: complete with all available knives.

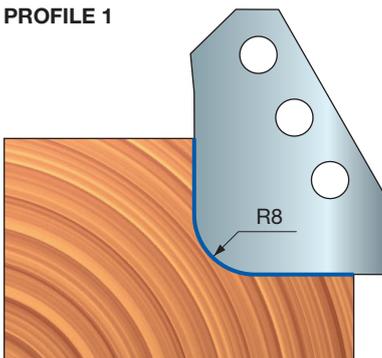
****NC21M-A**: knives to be ordered separately.

| D mm | h mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------------|------------|
| 48 | 34 | 20 x 50 | 18.000 | NC21MCA* | F03FC15446 |
| 48 | 34 | 20 x 50 | 18.000 | NC21M-A** | F03FC15445 |

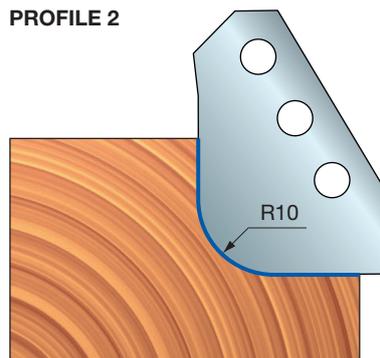
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------|------------------|------------------|------------|
| | Screw | M4 x 10 | 2622M AB9 | F03FA07453 |
| | Screw | M8 x 18 | 2622M DF9 | F03FA07457 |
| | Washer | 9 x 1,5 x 4 | VT18M AH9 | F03FA04481 |
| | Allen key | 2,5 | 2619M CA9 | F03FA07432 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|----------|--------------|--------------------|-------------------|------------|
| 1 | Knife | 24 x 34 x 2,5 R=8 | CC21MT0101 | F03FC23746 |
| 2 | Knife | 24 x 34 x 2,5 R=10 | CC21MT0201 | F03FC23747 |
| 3 | Knife | 24 x 34 x 2,5 R=12 | CC21MT0301 | F03FC23748 |

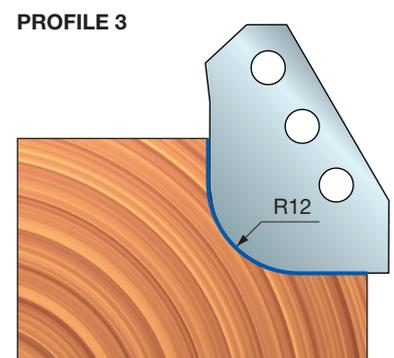
PROFILE 1



PROFILE 2



PROFILE 3



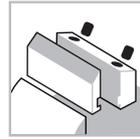


NC23MCA

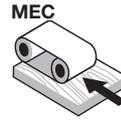
CNC router cutter with multiradius knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

Technical information:

Performance knives router cutter suitable for profiling with 3 available profiles.

- Steel body.
- 20x50 mm shank.

***NC23MCA**: complete with all available knives.

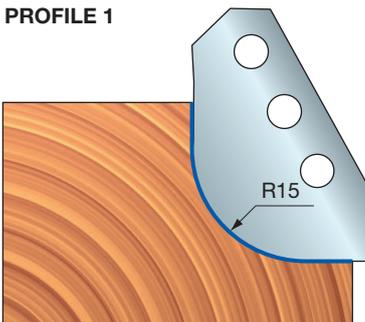
****NC23M-A**: knives to be ordered separately.

| D mm | h mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------------|------------|
| 48 | 34 | 20 x 50 | 18.000 | NC23MCA* | F03FC15448 |
| 48 | 34 | 20 x 50 | 18.000 | NC23M-A** | F03FC15447 |

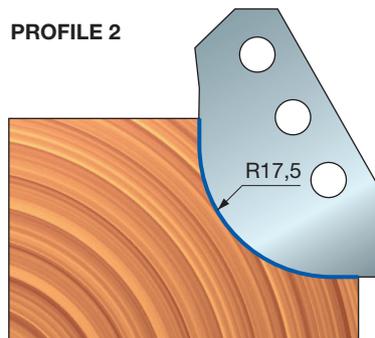
| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|-------------|------------------|------------------|------------|
| | Screw | M4 x 10 | 2622M AB9 | F03FA07453 |
| | Screw | M8 x 18 | 2622M DF9 | F03FA07457 |
| | Washer | 9 x 1,5 x 4 | VT18M AH9 | F03FA04481 |
| | Allen key | 2,5 | 2619M CA9 | F03FA07432 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|----------|--------------|----------------------|-------------------|------------|
| 1 | Knife | 24 x 34 x 2,5 R=15 | CC23MT0101 | F03FC23749 |
| 2 | Knife | 24 x 34 x 2,5 R=17,5 | CC23MT0201 | F03FC23750 |
| 3 | Knife | 24 x 34 x 2,5 R=20 | CC23MT0301 | F03FC23751 |

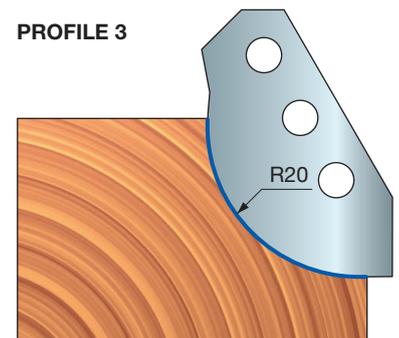
PROFILE 1

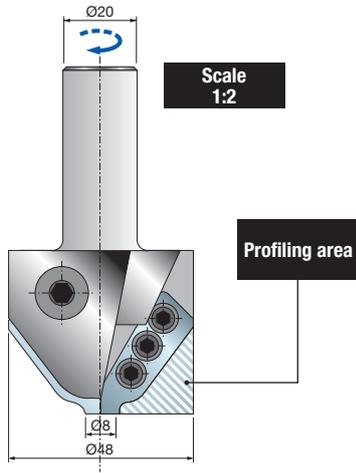


PROFILE 2



PROFILE 3



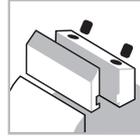


PCN121

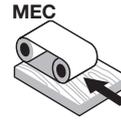
Customised CNC router cutter with profiled knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

Technical information:

Performance CNC router cutter suitable for customised profiles.

- Steel body.
- **PCN121** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

| D | B | A | Max RPM | Freud Code | Art. No. |
|----|----|---------|---------|---------------|----------|
| mm | mm | mm | 1/min. | | |
| 65 | 45 | 20 x 50 | 18.000 | PCN121 | - |

| | Spare parts | Dimensions | Freud Code | Art. No. |
|--|-------------|-----------------|------------------|------------|
| | | mm | | |
|  | Knife | 24,5 x 34 x 2,5 | CCN120 | - |
|  | Screw | M8 x 18 | 2622M DF9 | F03FA07457 |
|  | Screw | M4 x 10 | 2622M AB9 | F03FA07453 |
|  | Washer | 9 x 1,5 x 4 | VT18M AH9 | F03FA04481 |
|  | Allen key | 2,5 | 2619M CA9 | F03FA07432 |

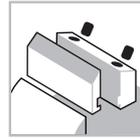


NC30MCA

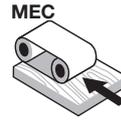
CNC router cutter with multiradius knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|------------|
| 96 | 55 | 20 | 11.000 | NC30MCA* | F03FC15451 |
| 96 | 55 | 20 | 11.000 | NC30M-A** | F03FC15449 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|------------------|------------|----------------------|
|  | Allen key | 4 | CB03M BA9 F03FA00163 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|---|------------------|------------|------------|
| 1 |  Knife | 55 x 35 x 3 R=2 | CC30MT0201 | F03FC23752 |
| 2 |  Knife | 55 x 35 x 3 R=3 | CC30MT0301 | F03FC23753 |
| 3 |  Knife | 55 x 35 x 3 R=4 | CC30MT0401 | F03FC23754 |
| 4 |  Knife | 55 x 35 x 3 R=5 | CC30MT0501 | F03FC23755 |
| 5 |  Knife | 55 x 35 x 3 R=6 | CC30MT0601 | F03FC23756 |
| 6 |  Knife | 55 x 35 x 3 R=7 | CC30MT0701 | F03FC23757 |



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

Technical information:

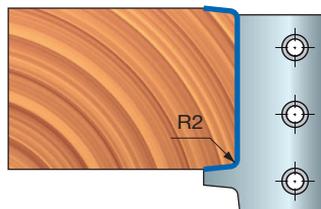
Performance knives router cutter suitable for profiling with 6 available radius profiles.

- Steel body.
- 20x50 mm shank.

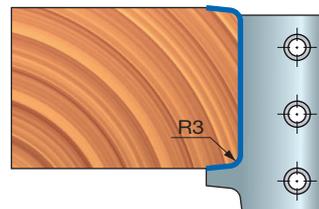
*NC30MCA: complete with all available knives.

**NC30M-A: knives to be ordered separately.

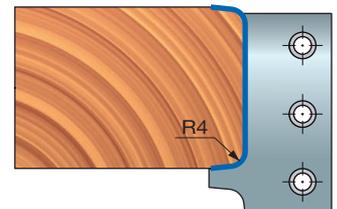
PROFILE 1



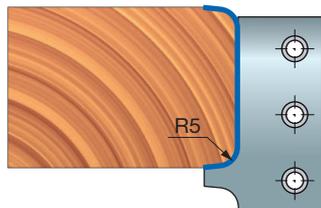
PROFILE 2



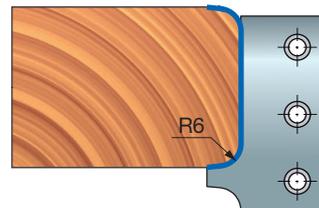
PROFILE 3



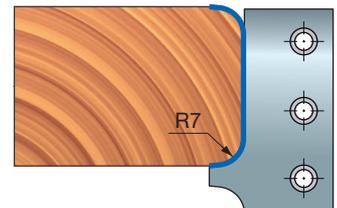
PROFILE 4



PROFILE 5



PROFILE 6



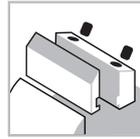


NC30MCB

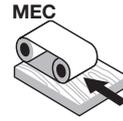
CNC router cutter with multiradius knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

Technical information:

Performance knives router cutter suitable for profiling with 6 available radius profiles.

- Steel body.
- 20x50 mm shank.

***NC30MCB**: complete with all available knives.

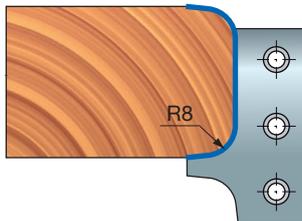
****NC30M-B**: knives to be ordered separately.

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------------|------------|
| 96 | 55 | 20 | 11.000 | NC30MCB* | F03FC15452 |
| 96 | 55 | 20 | 11.000 | NC30M-B** | F03FC15450 |

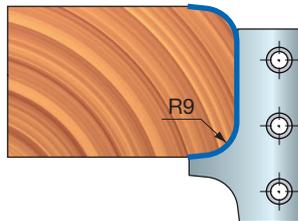
| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|------------------|------------------|------------|
|  Allen key | 4 | CB03M BA9 | F03FA00163 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|--|--------------|------------------|-------------------|------------|
| 1  | Knife | 55 x 35 x 3 R=8 | CC30MT0801 | F03FC23758 |
| 2  | Knife | 55 x 35 x 3 R=9 | CC30MT0901 | F03FC23759 |
| 3  | Knife | 55 x 35 x 3 R=10 | CC30MT1001 | F03FC23760 |
| 4  | Knife | 55 x 35 x 3 R=11 | CC30MT1101 | F03FC23761 |
| 5  | Knife | 55 x 35 x 3 R=12 | CC30MT1201 | F03FC23762 |
| 6  | Knife | 55 x 35 x 3 R=13 | CC30MT1301 | F03FC23763 |

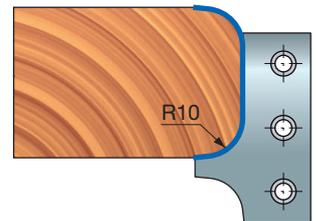
PROFILE 1



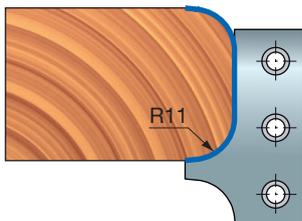
PROFILE 2



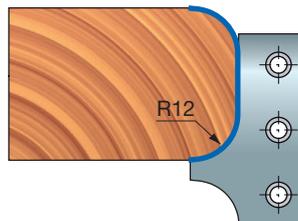
PROFILE 3



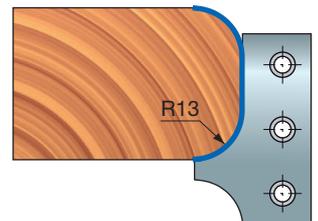
PROFILE 4

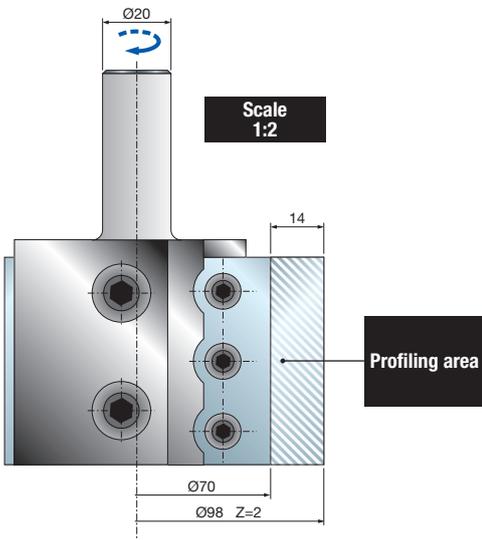


PROFILE 5



PROFILE 6



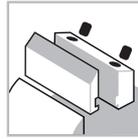


PCN130

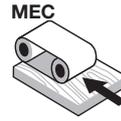
Customised CNC router cutter with profiled knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Jointing



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

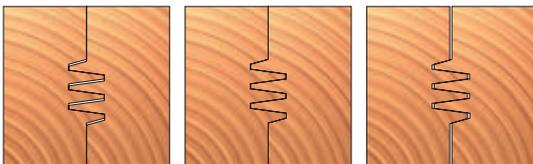
Jointing and profiling.

Technical information:

Performance CNC router cutter suitable for customised profiles.

- Steel body.
- **PCN130** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

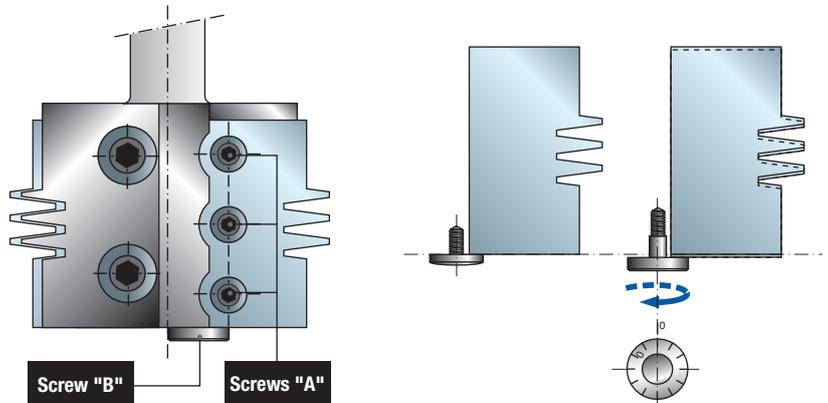
Adjustment examples



Regular joint

Tight joint

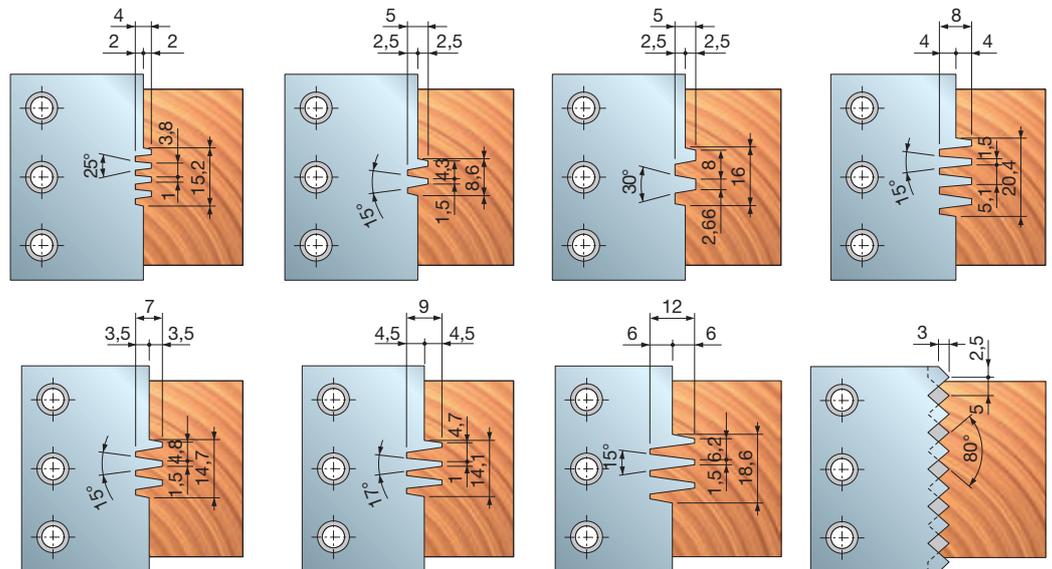
Loose joint



*Spare parts needed in case of jointing profiles.

How to achieve different types of joint:

- Loosen screws "A" with the key supplied.
- Loosen or tighten screw "B" to obtain the desired type of joint.
- Tighten screws "A" while pushing the knife towards screw "B" and the knife seat.



PCN130 is suitable for jointing too, with 8 different joint proposals with adjusting system to manage regular, tight and loose joint.

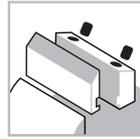


NC33MCA

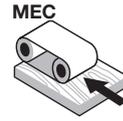
CNC router cutter with multiradius knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

Technical information:

Performance knives router cutter suitable for profiling with 5 available radius profiles.

- Steel body.
- 20x88 mm shank.

***NC33MCA**: complete with all available knives.

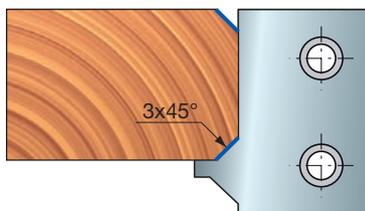
****NC33M-A**: knives to be ordered separately.

| D mm | h mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------------|------------|
| 87 | 35 | 20 x 88 | 11.000 | NC33MCA* | F03FC15454 |
| 87 | 35 | 20 x 88 | 11.000 | NC33M-A** | F03FC15453 |

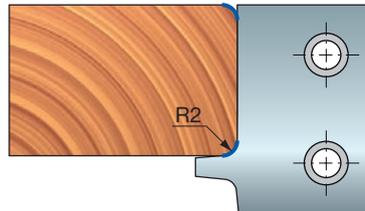
| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|-------------|------------------|------------------|------------|
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|----------|--------------|-------------------|-------------------|------------|
| 1 | Knife | 35 x 34 x 3 3x45° | CC33MT0101 | F03FC23764 |
| 2 | Knife | 35 x 34 x 3 R=2 | CC33MT0201 | F03FC23765 |
| 3 | Knife | 35 x 34 x 3 R=3 | CC33MT0301 | F03FC23766 |
| 4 | Knife | 35 x 34 x 3 R=4 | CC33MT0401 | F03FC23767 |
| 5 | Knife | 35 x 34 x 3 R=5 | CC33MT0501 | F03FC23768 |

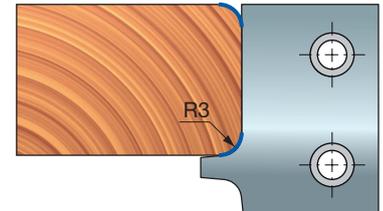
PROFILE 1



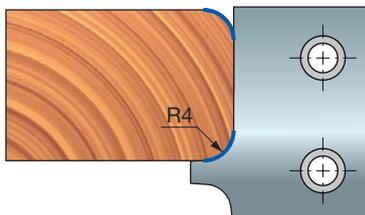
PROFILE 2



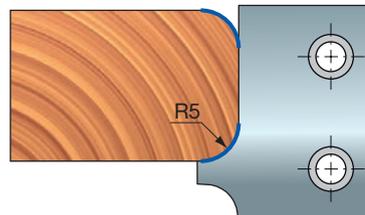
PROFILE 3

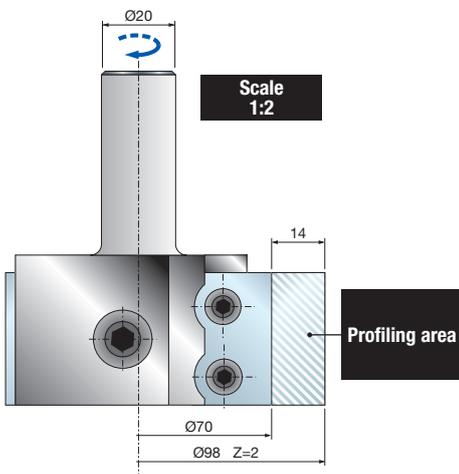


PROFILE 4



PROFILE 5



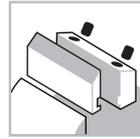


PCN133

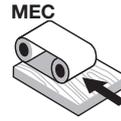
Customised CNC router cutter with profiled knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Jointing



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and jointing.

Technical information:

Performance CNC router cutter suitable for customised profiles.

- Steel body.
- **PCN133** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|----------|
| 98 | 35 | 20 x 50 | 11.000 | PCN133 | - |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------|------------------|------------|------------|
| | Knife | 35 x 35 x 3 | CCN133 | |
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |

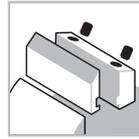


NC40MCA

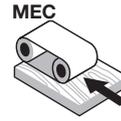
CNC router cutter with multiradius knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

Technical information:

Performance knives router cutter suitable for profiling with 4 available radius profiles.

- Steel body.
- 20x50 mm shank.

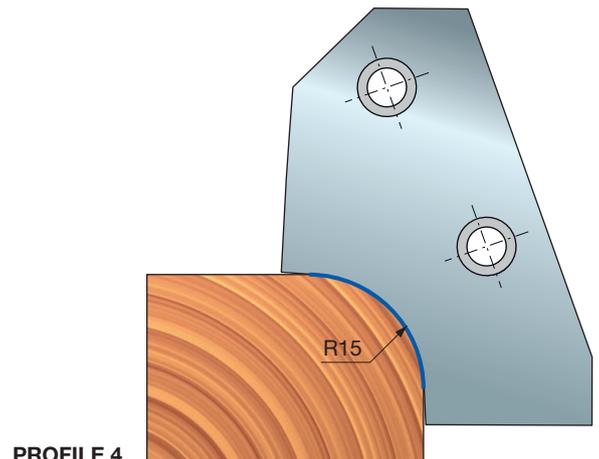
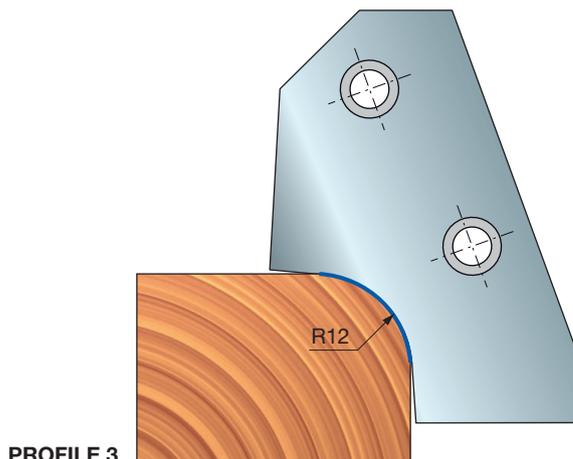
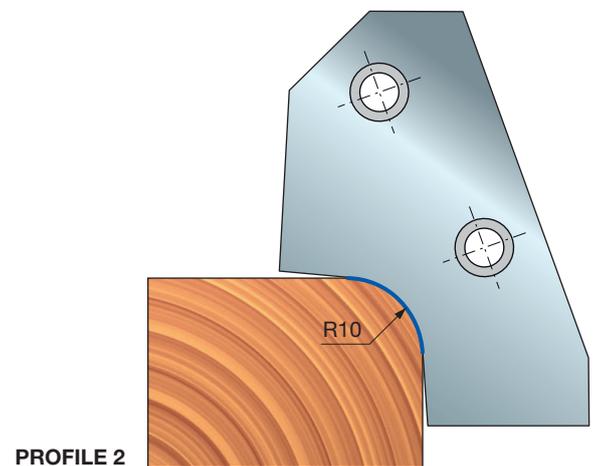
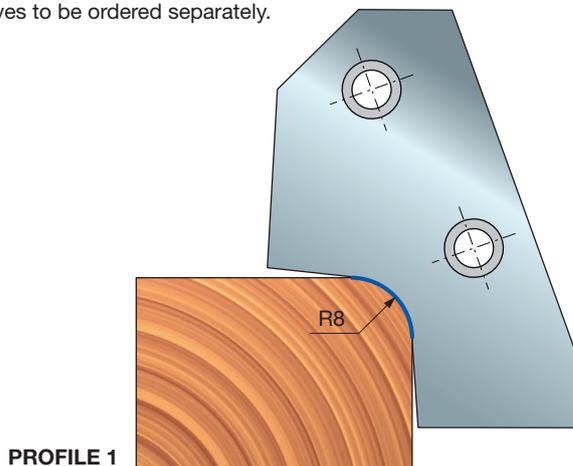
***NC40MCA**: complete with all available knives.

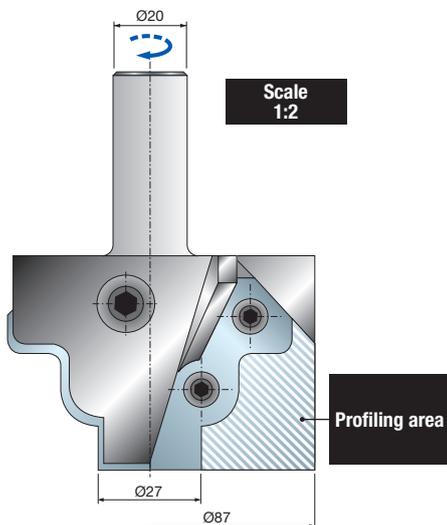
****NC40M-A**: knives to be ordered separately.

| D mm | h mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------------|------------|
| 76 | 58 | 20 x 50 | 12.000 | NC40MCA* | F03FC15456 |
| 76 | 58 | 20 x 50 | 12.000 | NC40M-A** | F03FC15455 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------|------------------|------------------|------------|
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|----------|--------------|------------------|-------------------|------------|
| 1 | Knife | 48 x 53 x 3 R=8 | CC40MT0101 | F03FC23769 |
| 2 | Knife | 48 x 53 x 3 R=10 | CC40MT0201 | F03FC23770 |
| 3 | Knife | 48 x 53 x 3 R=12 | CC40MT0301 | F03FC23771 |
| 4 | Knife | 48 x 53 x 3 R=15 | CC40MT0401 | F03FC23772 |



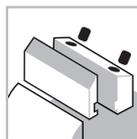


PCN140

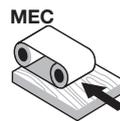
Customised CNC router cutter with profiled knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|----------|
| 90 | 58 | 20 x 50 | 12.000 | PCN140 | - |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|-------------|------------------|------------|------------|
| | Knife | 48 x 53 x 3 | CCN140 | |
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

Technical information:

Performance CNC router cutter suitable for customised profiles.

- Steel body.
- **PCN140** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

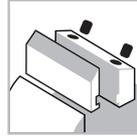


NC50MCA

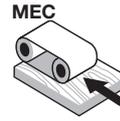
CNC router cutter with multiradius knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and grooving.

Technical information:

Performance knives router cutter suitable for profiling with 3 available radius profiles.

- Steel body.
- 20x50 mm shank.

***NC50MCA**: complete with all available knives.

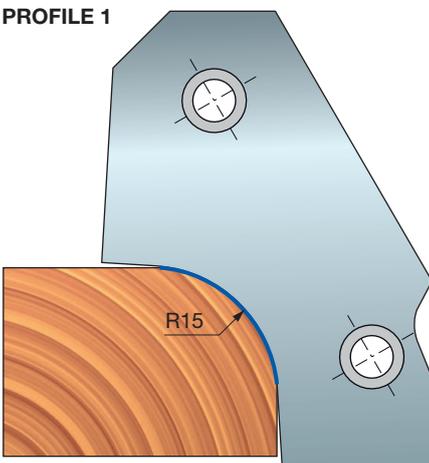
****NC50M-A**: knives to be ordered separately.

| D mm | h mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------------|------------|
| 72 | 59 | 20 x 50 | 12.000 | NC50MCA* | F03FC15458 |
| 72 | 59 | 20 x 50 | 12.000 | NC50M-A** | F03FC15457 |

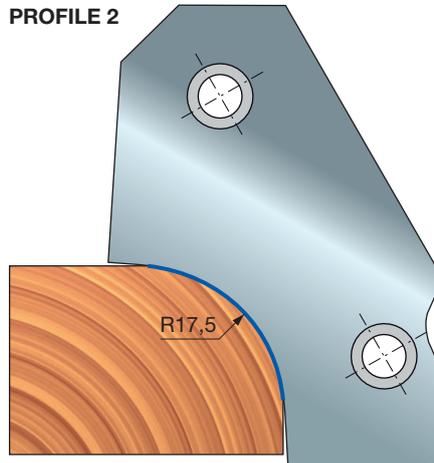
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------|------------------|------------------|------------|
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|----------|--------------|--------------------|-------------------|------------|
| 1 | Knife | 47 x 53 x 3 R=15 | CC50MT0101 | F03FC23773 |
| 2 | Knife | 47 x 53 x 3 R=17,5 | CC50MT0201 | F03FC23774 |
| 3 | Knife | 47 x 53 x 3 R=20 | CC50MT0301 | F03FC23775 |

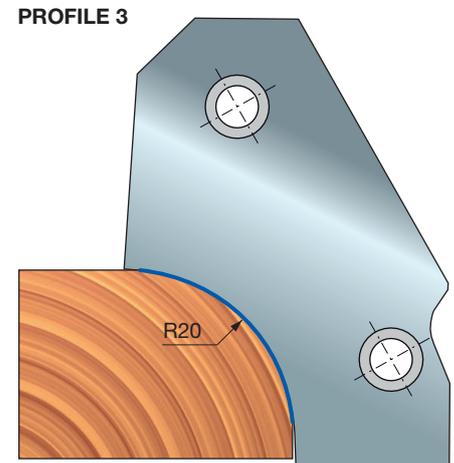
PROFILE 1

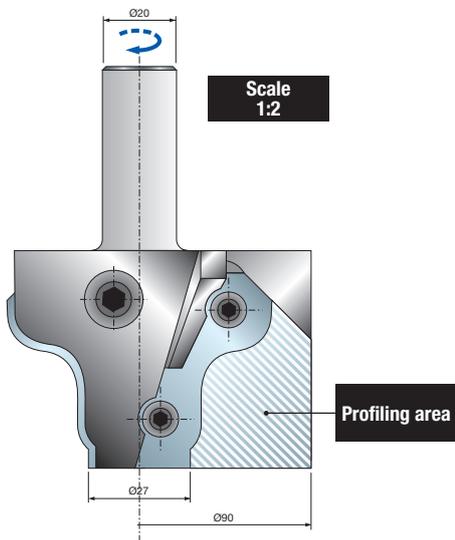


PROFILE 2



PROFILE 3





Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

Technical information:

Performance CNC router cutter suitable for customised profiles.

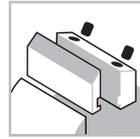
- Steel body.
- **PCN150** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

PCN150

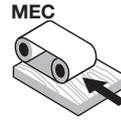
Customised CNC router cutter with profiled knives



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Grooving

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|---------------|----------|
| 90 | 59 | 20 x 50 | 12.000 | PCN150 | - |

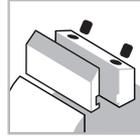
| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|-------------|------------------|------------------|------------|
| | Knife | 47 x 53 x 3 | CCN150 | |
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |

NC60MCA

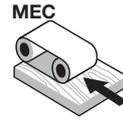
CNC raised panel router cutter



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood

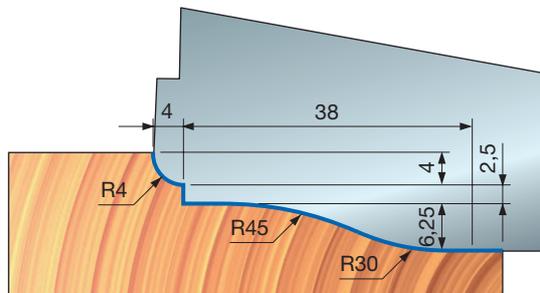


Profiling

| D mm | h mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|------------|
| 114 | 54 | 20 x 50 | 9.000 | NC60MCA | F03FC15459 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|------------|------------|
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| | Positioning plate | 20 x 11,6 x 2,2 | VT18M AS9 | F03FC20665 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|------------|------------|
| | Knife | 60 x 36 x 3 | CC60MT0101 | F03FC23776 |



Machines:
CNC overhead routing machines.

Materials:
Softwood and hardwood.

Applications:
Profiling.

Technical information:
Performance knives raised panel cutter.

- Knives included in the tool set.
- Steel body.
- 20x50 mm shank.

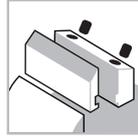


NC62MCA

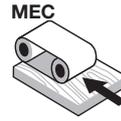
CNC raised panel router cutter



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

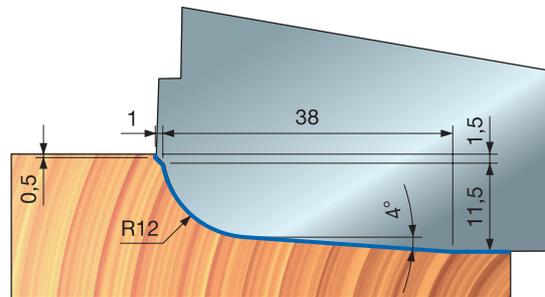
Performance knives raised panel cutter.

- Knives included in the tool set.
- Steel body.
- 20x50 mm shank.

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|------------|
| 114 | 54 | 20 x 50 | 9.000 | NC62MCA | F03FC15460 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|------------|------------|
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| | Positioning plate | 20 x 11,6 x 2,2 | VT18M AS9 | F03FC20665 |
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|------------|------------|
| | Knife | 60 x 36 x 3 | CC62MT0101 | F03FC23777 |

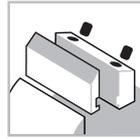


NC64MCA

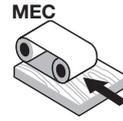
CNC raised panel router cutter



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling

| D mm | h mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|---------|----------------|------------|------------|
| 114 | 54 | 20 x 50 | 9.000 | NC64MCA* | F03FC15462 |
| 114 | 54 | 20 x 50 | 9.000 | NC64M-A** | F03FC15461 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------|---------------|------------|------------|
| Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
| Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| Allen key | 4 | CB03M BA9 | F03FA00163 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|---------------|------------|------------|
| 1 | Knife | 60 x 36 x 3 | CC64MD0101 | F03FC23778 |
| 2 | Knife | 60 x 36 x 3 | CC64MD0201 | F03FC23779 |
| 3 | Knife | 60 x 36 x 3 | CC64MD0301 | F03FC23780 |
| 4 | Knife | 60 x 36 x 3 | CC64MD0401 | F03FC23781 |
| 5 | Knife | 60 x 36 x 3 | CC64MD0501 | F03FC23782 |



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

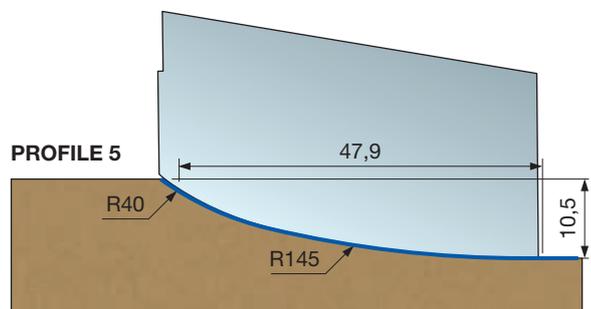
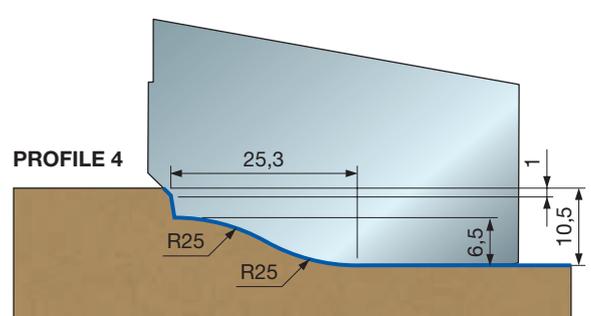
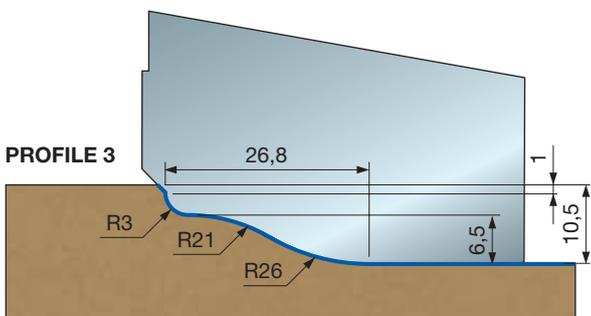
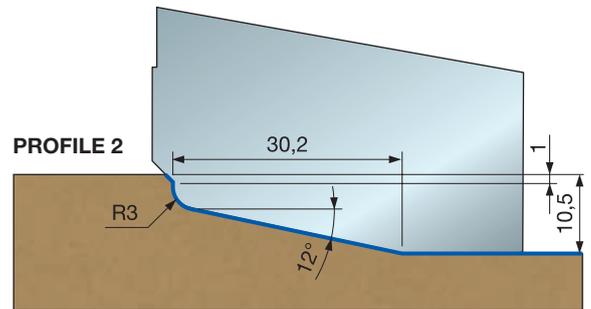
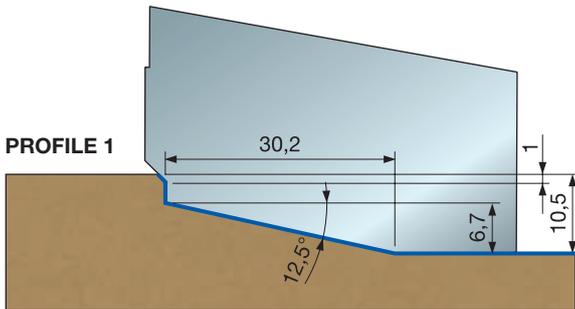
Technical information:

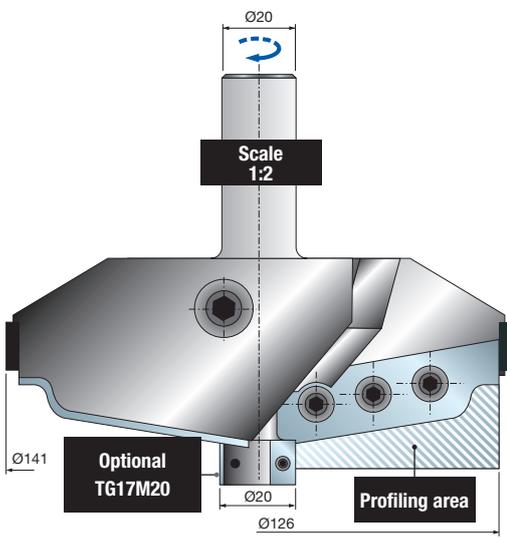
Performance knives raised panel cutter with 5 available profiles.

- Steel body.
- 20x50 mm shank.

*NC64MCA: complete with all available knives.

**NC64M-A: knives to be ordered separately.



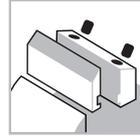


PCN160

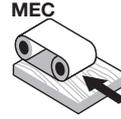
Customised CNC raised panel router cutter



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

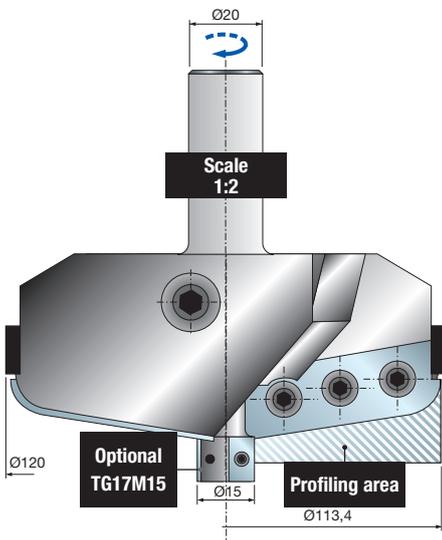
Technical information:

Performance CNC router cutter suitable for customised raised panels.

- Steel body.
- **PCN160** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|---------------|----------|
| 141 | 54 | 20 x 50 | 9.000 | PCN160 | - |

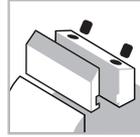
| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------------|------------------|------------------|------------|
|  | Knife | 60 x 35 x 3 | CCN160 | |
|  | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
|  | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
|  | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
|  | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
|  | Positioning plate | 20 x 11,6 x 2,2 | VT18M AS9 | F03FC20665 |
|  | Allen key | 4 | CB03M BA9 | F03FA00163 |



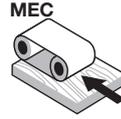
PCN160R Customised CNC raised panel router cutter



CNC Routers



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

Technical information:

Performance CNC router cutter suitable for customised raised panels.

- Steel body.
- **PCN160R** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

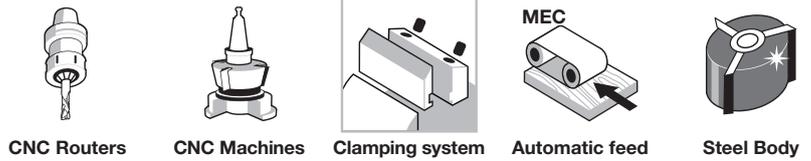
| D | h | A | Max RPM | Freud Code | Art. No. |
|-----|----|---------|---------|------------|----------|
| mm | mm | mm | 1/min. | | |
| 120 | 54 | 20 x 50 | 9.000 | PCN160R | - |

| | Spare parts | Dimensions | Freud Code | Art. No. |
|---|-------------------|-----------------|------------------|------------|
| | | mm | | |
|  | Knife | 60 x 35 x 3 | CCN160 | |
|  | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
|  | Screw | M10 x 25 | 2622M EH9 | F03FA07459 |
|  | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
|  | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
|  | Positioning plate | 20 x 11,6 x 2,2 | VT18M AS9 | F03FC20665 |
|  | Allen key | 4 | CB03M BA9 | F03FA00163 |



NC90MCA

CNC cabinet door router cutter - profile



Profiling



Machines:
CNC overhead routing machines.

Materials:
Softwood, hardwood, wood based panels and MDF.

Applications:
Profiling.

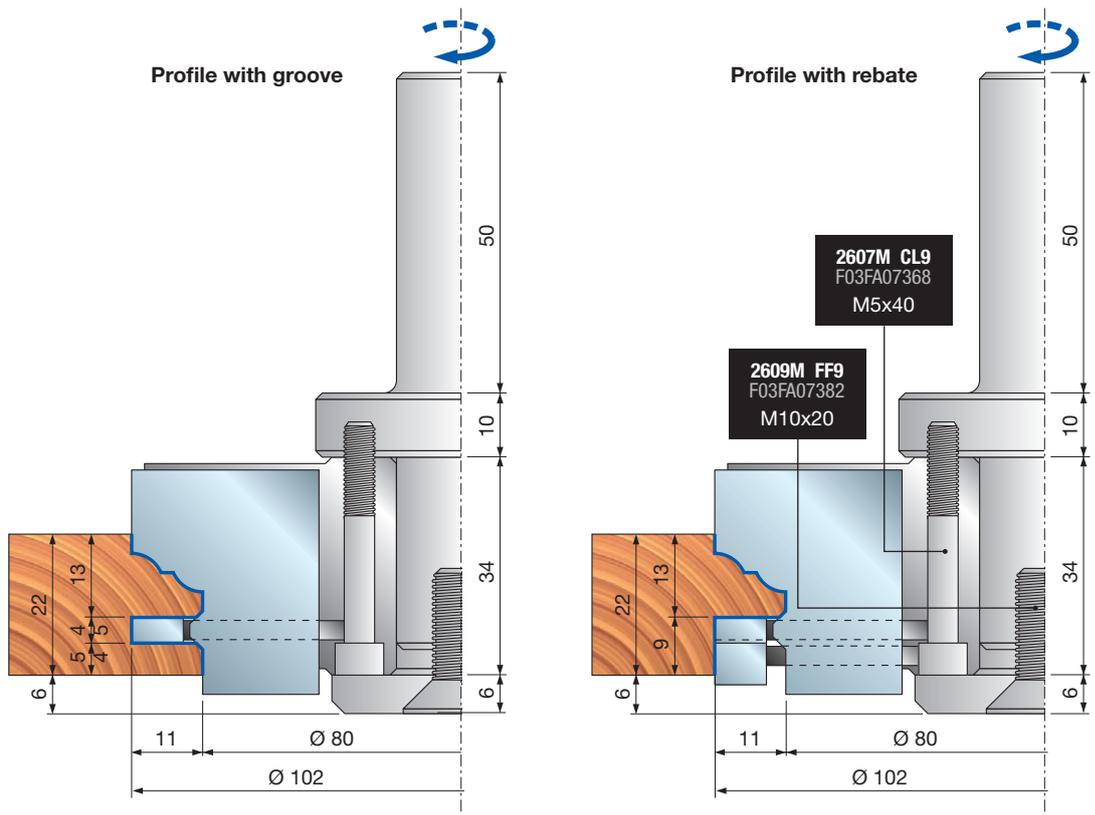
Technical information:
Performance knives raised panel cutter.
• Knives included in the tool set.
• Steel body.
• 20x50 mm shank.

***NC90MCA:** complete with all available knives.
****NC90M-A:** knives to be ordered separately.

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|---------|----------------|------------|------------|
| 102 | 35 | 20 x 50 | 10.500 | NC90MCA* | F03FC15465 |
| 102 | 35 | 20 x 50 | 10.500 | NC90M-A** | F03FC15463 |

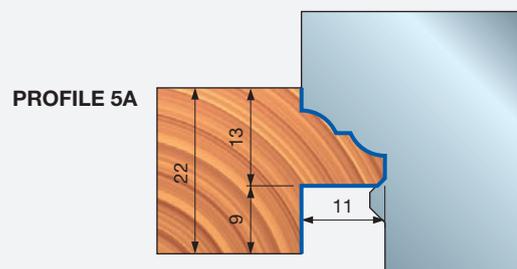
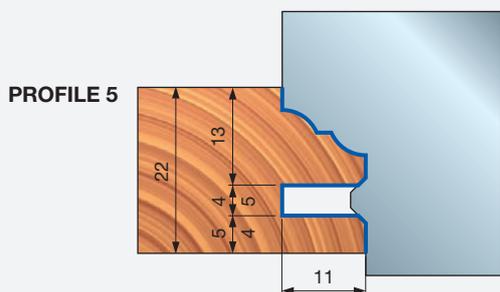
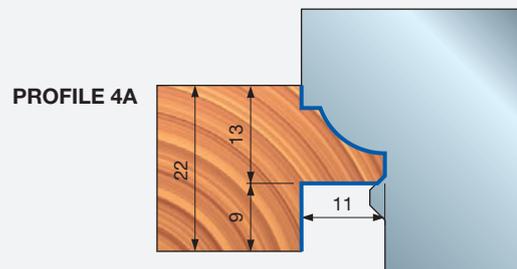
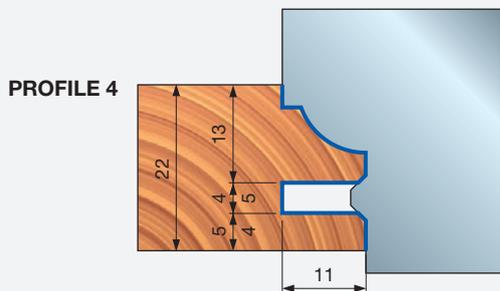
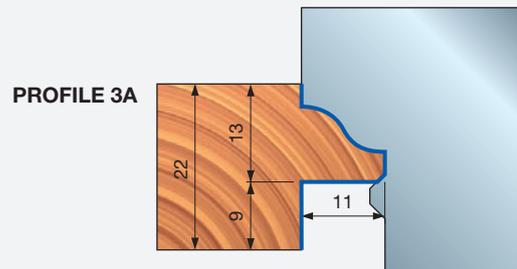
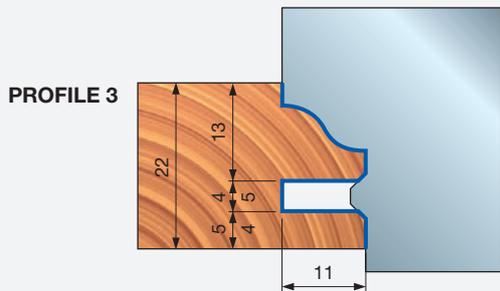
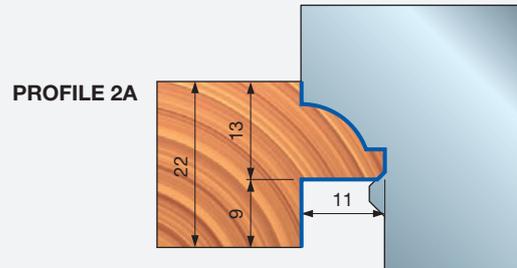
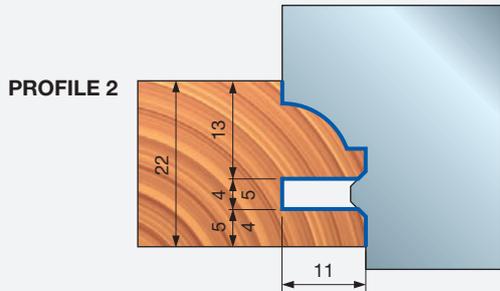
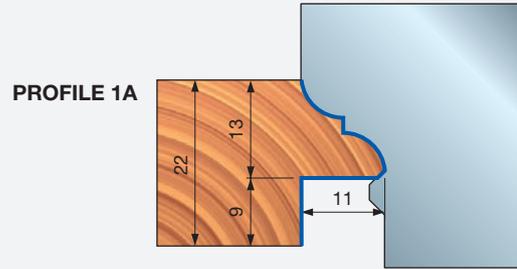
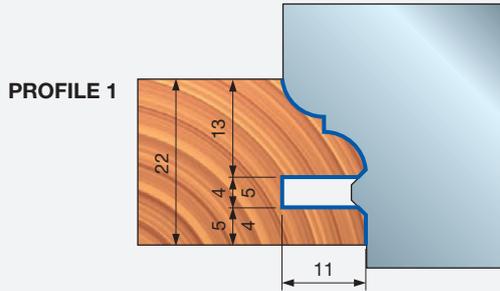
| Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------------|--------------|------------------------|
| | Screw | M10 x 18 | VT03M CC9 F03FA04438 |
| | Screw | M6 x 14,5 | VT16M AA9 F03FA04476 |
| | Screw | M5 x 7 x 18 | VT08M AE9 F03FA04457 |
| | Grooving insert | 34 x 4 | SR06MDAG302 F03FC24193 |
| | Grooving insert | 34 x 7 | SR06MDAH302 F03FC24194 |
| | Allen key | 5 | CB03M EA9 F03FA00169 |
| | Chuck | 20 x 33 x 93 | AP08M DA9 F03FC00579 |

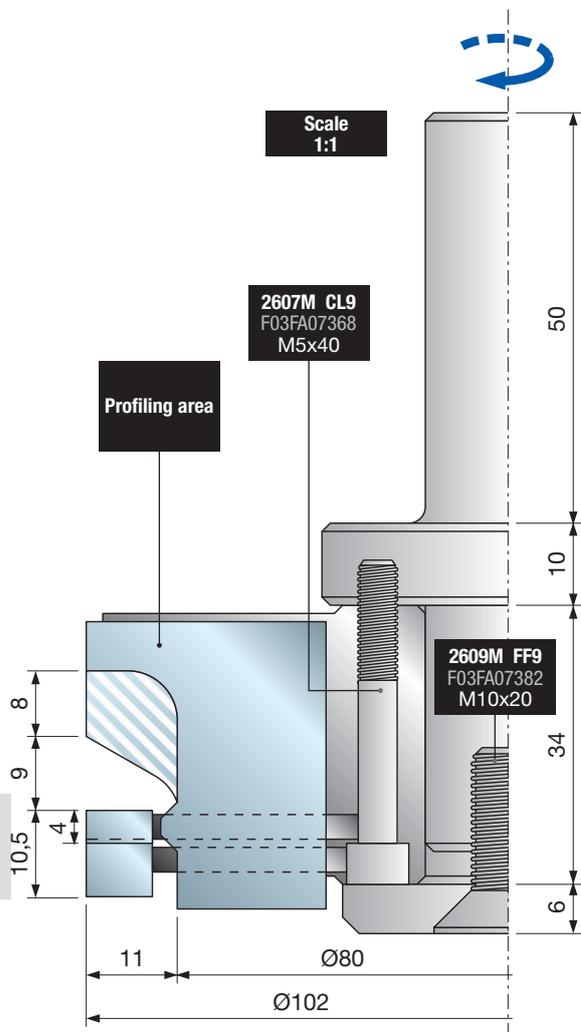
To obtain a 5 mm groove, it is necessary to replace the **SR06MDAG302** (4 mm thick) inserts with the **SR06MDAH302** (5 mm thick) inserts which must be ordered separately.



| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|--|--------------|---------------|------------|------------|
| 1/1A  | Knife | 35 x 30 x 3 | CC90MT0101 | F03FC23783 |
| 2/2A  | Knife | 35 x 30 x 3 | CC90MT0201 | F03FC23784 |
| 3/3A  | Knife | 35 x 30 x 3 | CC90MT0301 | F03FC23785 |
| 4/4A  | Knife | 35 x 30 x 3 | CC90MT0401 | F03FC23786 |
| 5/5A  | Knife | 35 x 30 x 3 | CC90MT0501 | F03FC23787 |

Example of profiles





PCN300

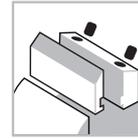
Customised CNC cabinet door router cutter - profile



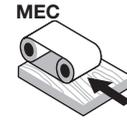
CNC Routers



CNC Machines



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|----------|
| 102 | 35 | 20 x 50 | 10.500 | PCN300 | - |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------------|------------------|-------------|------------|
| | Knife | 35 x 30 x 3 | CK02 DC3 | |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M5 x 7 x 18 | VT08M AE9 | F03FA04457 |
| | Grooving insert | 34 x 4 | SR06MDAG302 | F03FC24193 |
| | Grooving insert | 34 x 7 | SR06MDAH302 | F03FC24194 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

Technical information:

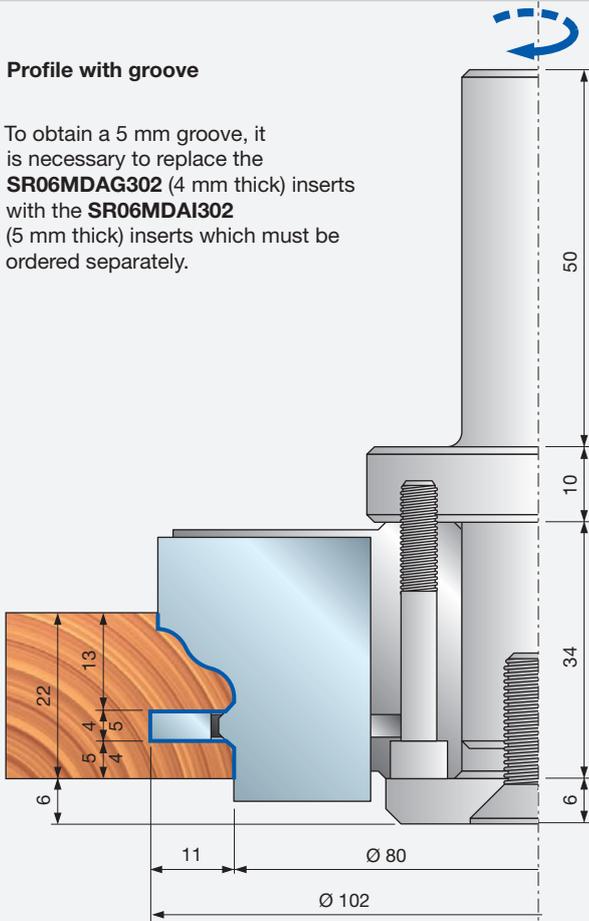
Performance CNC router cutter suitable for customised cabinet doors profiles.

- Profile available both with and without groove.
- 22 mm timber.
- Steel body.
- **PCN300** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

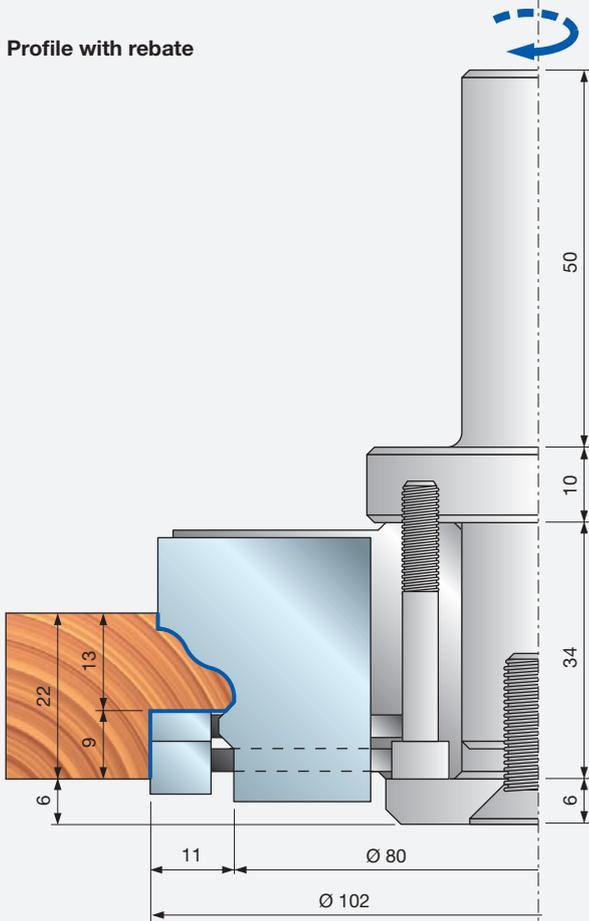
Example of profiles

Profile with groove

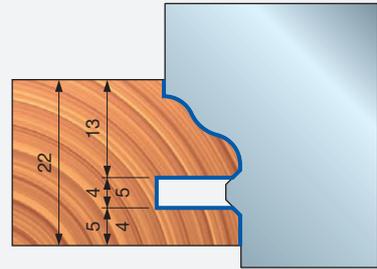
To obtain a 5 mm groove, it is necessary to replace the **SR06MDAG302** (4 mm thick) inserts with the **SR06MDAI302** (5 mm thick) inserts which must be ordered separately.



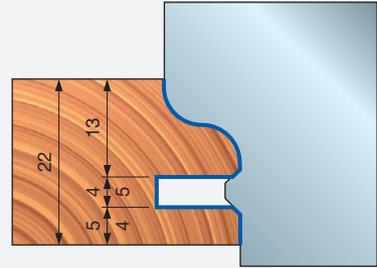
Profile with rebate



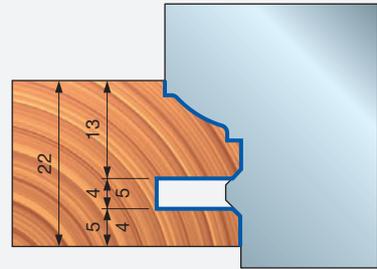
PROFILE 1



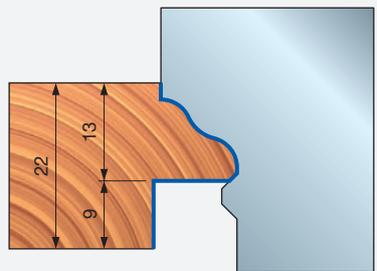
PROFILE 2



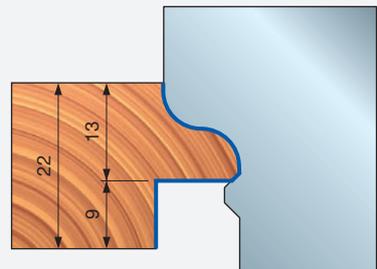
PROFILE 3



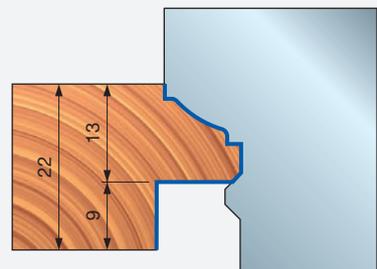
PROFILE 1



PROFILE 2



PROFILE 3





NC91MCA

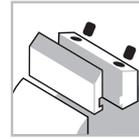
CNC cabinet door router cutter - scribe



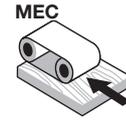
CNC Routers



CNC Machines



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

Technical information:

Performance knives cutter suitable for cabinet doors scribes with 5 available profiles (please refer to NC90M profiles).

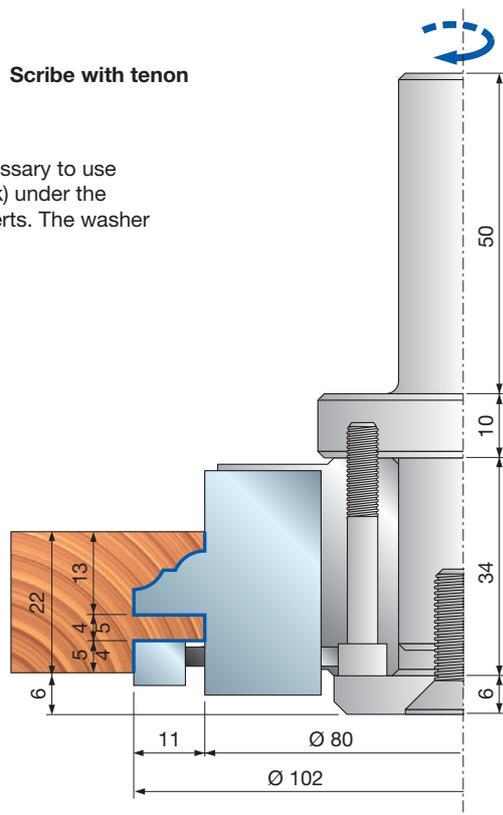
- Profile available both with and without groove.
- Steel body.
- 20x50 mm shank.
- Chuck not included.

***NC91MCA**: complete with all available knives.

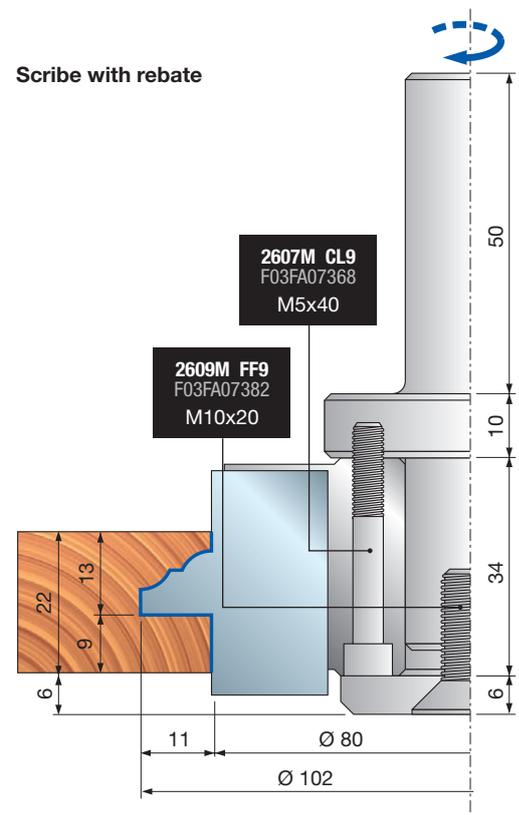
****NC91M-A**: knives to be ordered separately.

| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|---------|----------------|------------------|------------|
| 102 | 35 | 20 x 50 | 10.500 | NC91MCA* | F03FC15468 |
| 102 | 35 | 20 x 50 | 10.500 | NC91M-A** | F03FC15466 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-----------------|--------------|-------------------------------|
|  | Screw | M10 x 18 | VT03M CC9 F03FA04438 |
|  | Screw | M6 x 14,5 | VT16M AA9 F03FA04476 |
|  | Screw | M5 x 7 x 18 | VT08M AE9 F03FA04457 |
|  | Grooving insert | 34 x 7 | SR06MDAH302 F03FC24194 |
|  | Allen key | 5 | CB03M EA9 F03FA00169 |
|  | Chuck | 20 x 33 x 93 | AP08M DA9 F03FC00579 |

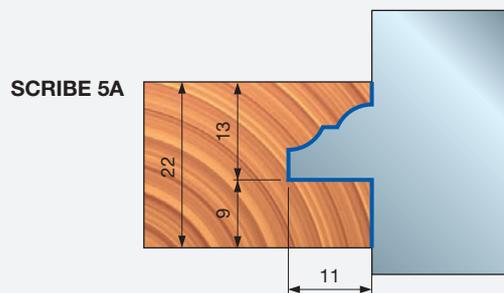
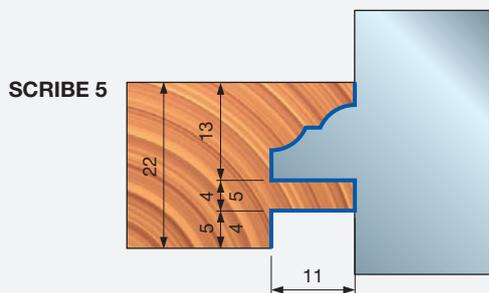
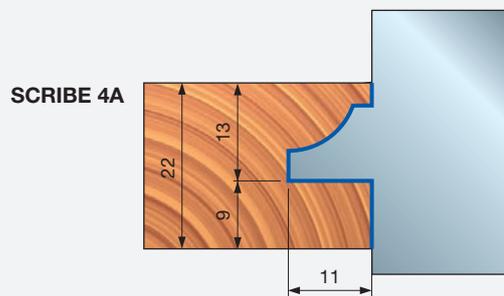
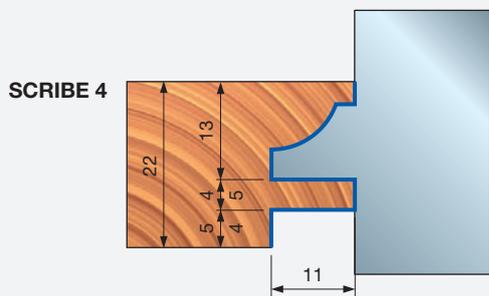
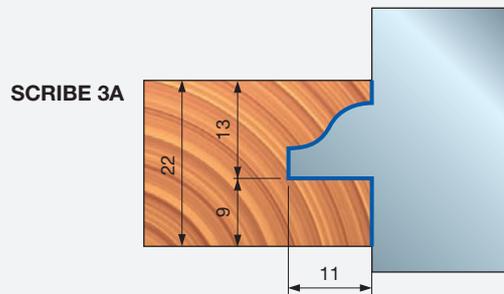
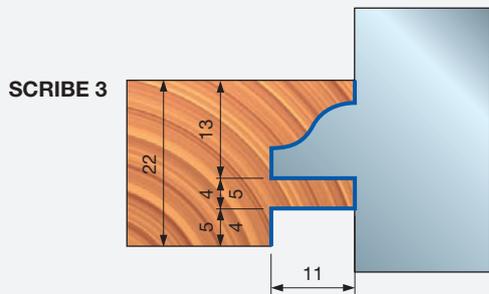
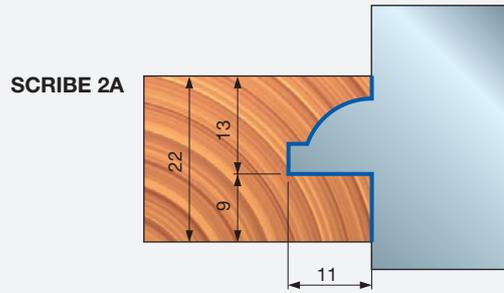
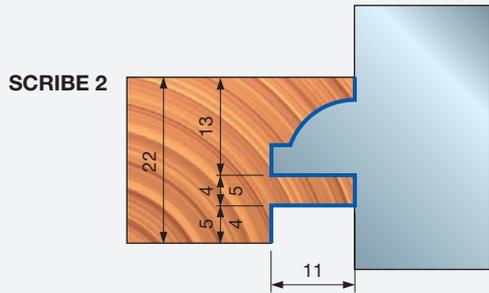
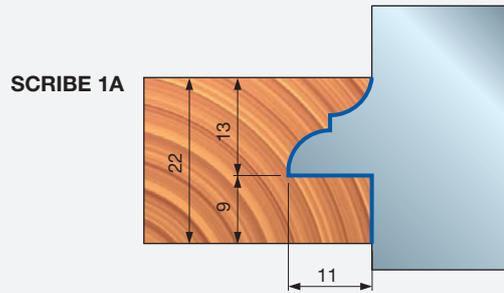
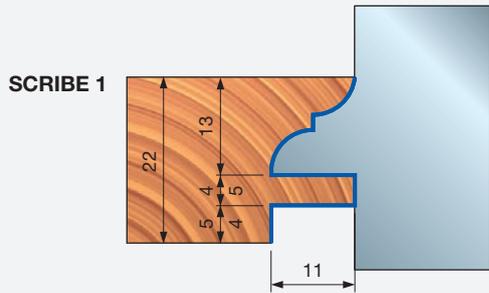


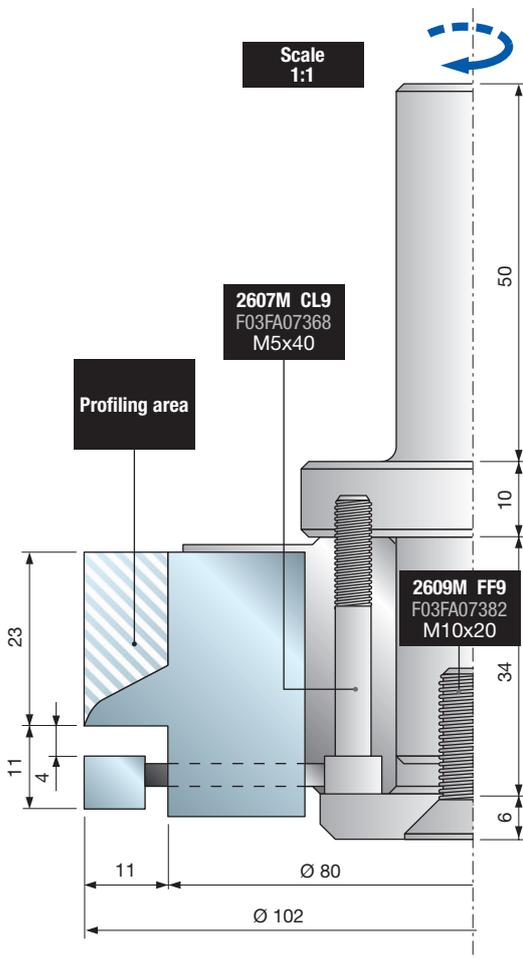
To obtain a 5 mm tenon, it is necessary to use a washer **ST07M-109** (1 mm thick) under the **SR06MDAH302** (7 mm thick) inserts. The washer must be ordered separately.



| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|--|--------------|------------------|------------|------------|
| 1/1A  | Knife | 35 x 30 x 3 | CC91MT0101 | F03FC23788 |
| 2/2A  | Knife | 35 x 30 x 3 | CC91MT0201 | F03FC23789 |
| 3/3A  | Knife | 35 x 30 x 3 | CC91MT0301 | F03FC23790 |
| 4/4A  | Knife | 35 x 30 x 3 | CC91MT0401 | F03FC23791 |
| 5/5A  | Knife | 35 x 30 x 3 | CC91MT0501 | F03FC23792 |

Example of profiles





PCN310

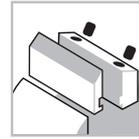
Customised CNC cabinet door router cutter - scribe



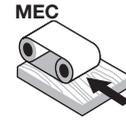
CNC Routers



CNC Machines



Clamping system



Automatic feed



Steel Body



Softwood



Hardwood



Chipboard



MDF



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling.

Technical information:

Performance CNC router cutter suitable for customised cabinet doors counter-profiles.

- Profile available both with and without groove.
- 22 mm timber.
- Steel body.
- **PCN310** item includes router cutter complete of components, knives (minimum order quantity 6 pieces) and maintenance keys. For orders please specify: shank dimensions and profile drawing (please refer to knife profiling area).

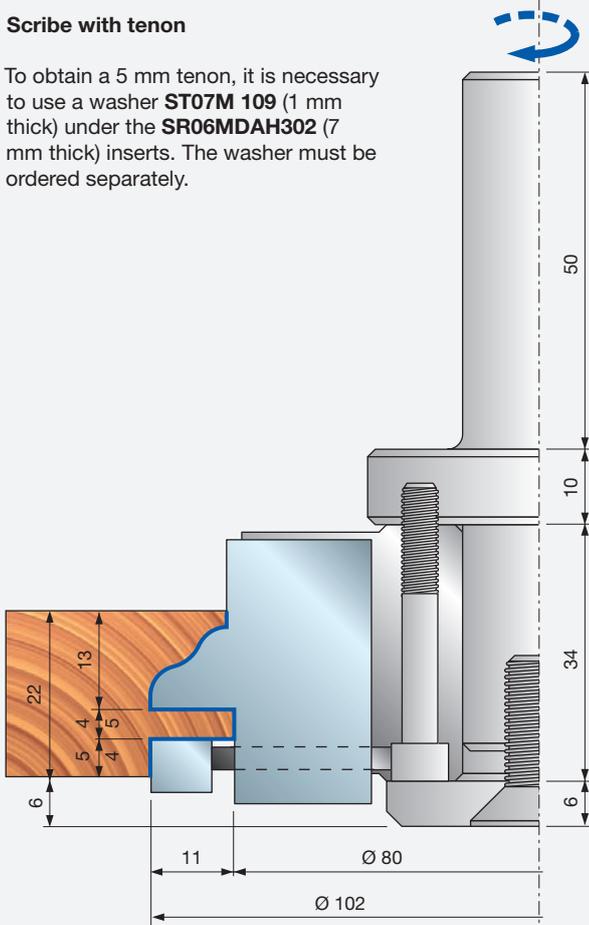
| D mm | B mm | A mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|----------|
| 102 | 35 | 20 x 50 | 10.500 | PCN310 | - |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|------------------|-------------|------------|
|  Knife | 35 x 30 x 3 | CK02 DC3 | - |
|  Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
|  Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
|  Screw | M5 x 7 x 18 | VT08M AE9 | F03FA04457 |
|  Grooving insert | 34 x 7 | SR06MDAH302 | F03FC24194 |
|  Allen key | 5 | CB03M EA9 | F03FA00169 |

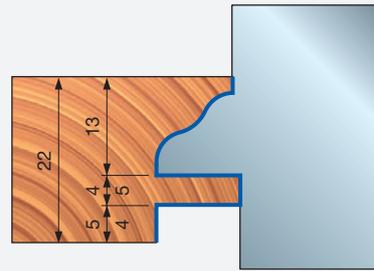
Example of scribes

Scribe with tenon

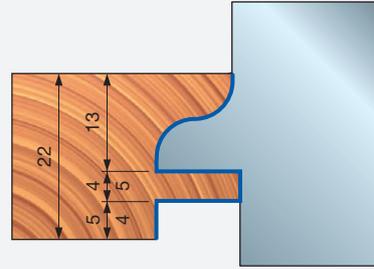
To obtain a 5 mm tenon, it is necessary to use a washer **ST07M 109** (1 mm thick) under the **SR06MDAH302** (7 mm thick) inserts. The washer must be ordered separately.



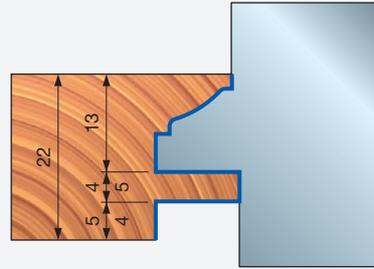
SCRIBE 1



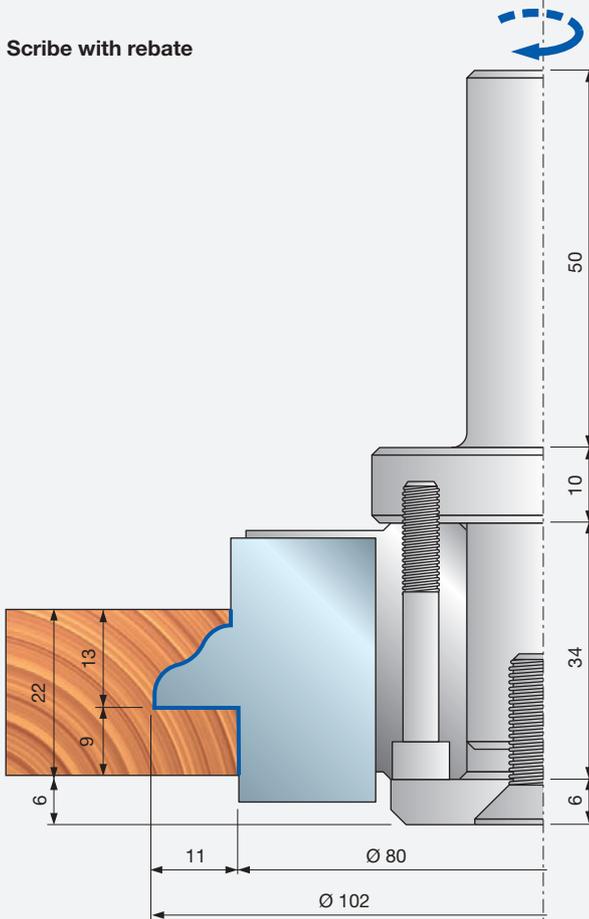
SCRIBE 2



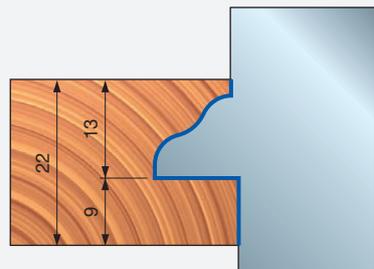
SCRIBE 3



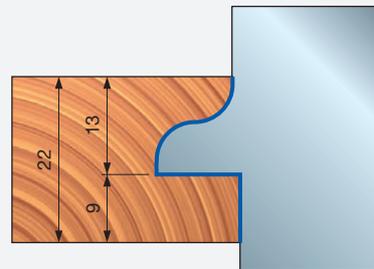
Scribe with rebate



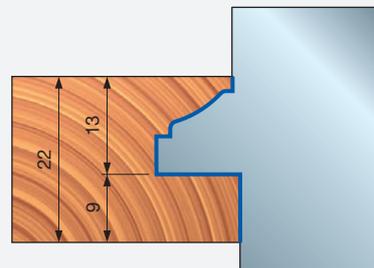
SCRIBE 1



SCRIBE 2



SCRIBE 3



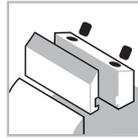


NCSEM22

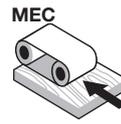
CNC tool for cabinet door frame profile - 22 mm



CNC Machines



Clamping system



Automatic feed



Aluminium body



Softwood



Hardwood



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

CNC tool set suitable for cabinet doors with 6 available profiles.

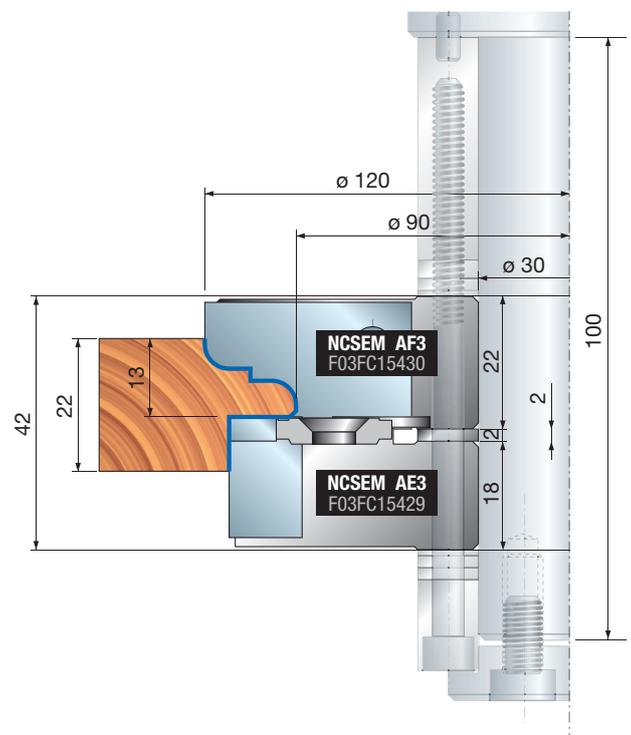
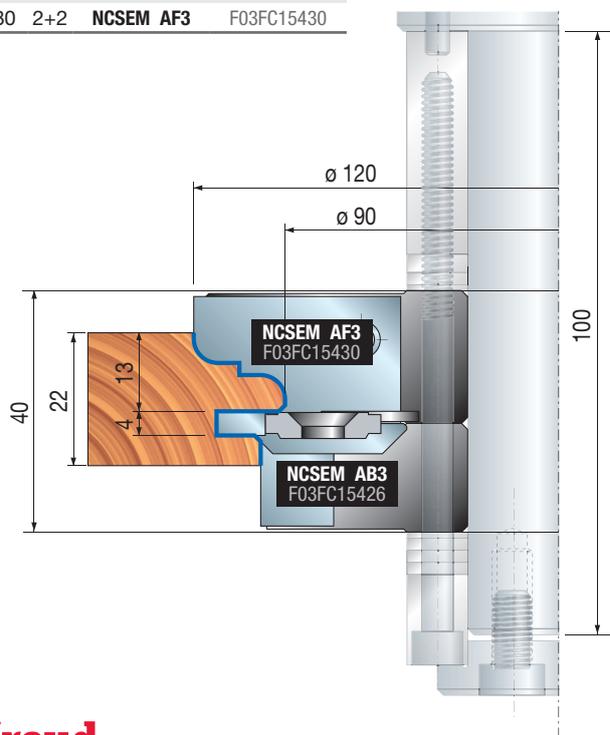
- Profile available both with and without groove.
- 22 mm timber.
- Aluminium light alloy body.
- Chuck and knives to be ordered separately.

Tools for NCSEM22A01 and NCSEM22A03 sets

| D mm | B mm | d mm | Z | Freud Code | Art. No. |
|---------|---------|---------|-----|------------|------------|
| 112 | 20 | 30 | 2+2 | NCSEM AE3 | F03FC15429 |
| 112,5 | 19 | 30 | 2+4 | NCSEM AB3 | F03FC15426 |
| 120 | 22 | 30 | 2+2 | NCSEM AF3 | F03FC15430 |

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 120 | 38 | 30 | 2 | 11.000 | NCSEM22A01 | F03FC15432 |
| 120 | 39 | 30 | 2 | 11.000 | NCSEM22A03 | F03FC15434 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----------|-------------------|------------------|--------------|------------|
| NCSEM AB3 | Knife | 14,6 x 12 x 1,5 | CG06MBA310 | F03FH02890 |
| | Wedge | 13 | CN01M CA9 | F03FC01250 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Beveling insert | 22 x 16 x 5 | IG51MBA305 | F03FH03022 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| NCSEM AE3 | Grooving insert | 27 x 4 x 16 | IG04MSAA3T05 | F03FC24155 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Knife | 20 x 12 x 1,5 | CG06MCA310 | F03FH02891 |
| | Wedge | 15 x 16 x 8 | CN09MS AC9 | F03FC01325 |
| | Nut | 10 x 11,5 x M6 | VT20M AA9 | F03FA04497 |
| NCSEM AF3 | Screw | M6 x 22 | VT19M AB9 | F03FA04491 |
| | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| | Grooving insert | 27 x 4 x 16 | IG04MDAA3T05 | F03FC24151 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| Screw | M5 x 8 | VT05M AA9 | F03FA04444 | |

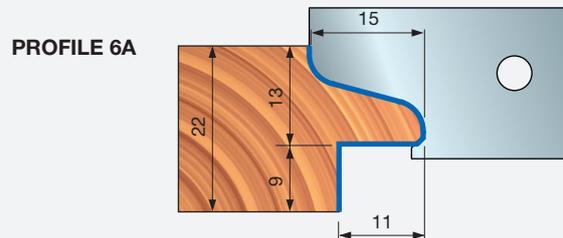
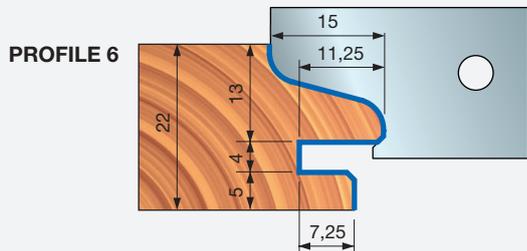
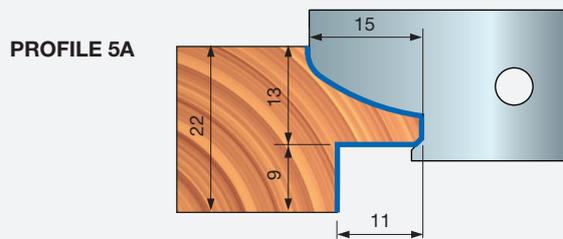
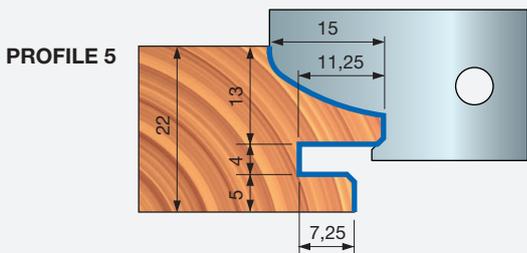
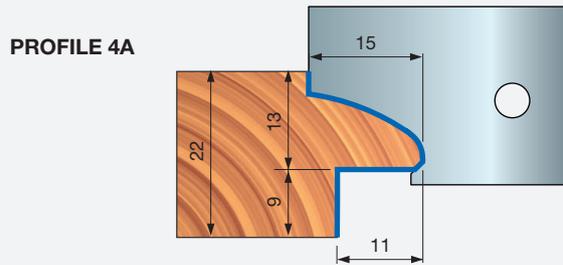
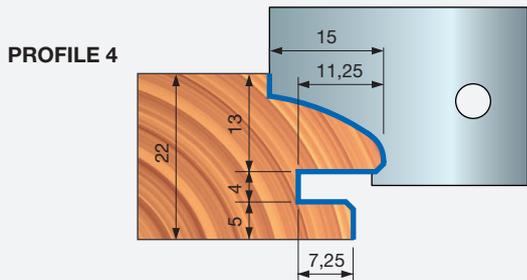
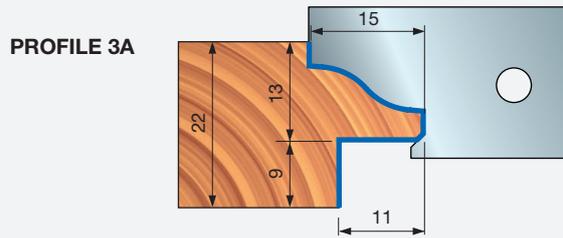
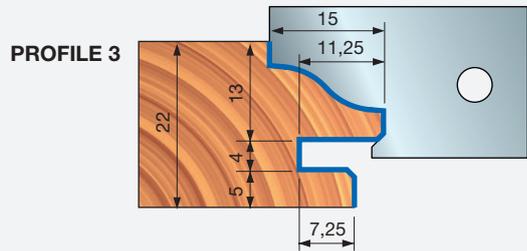
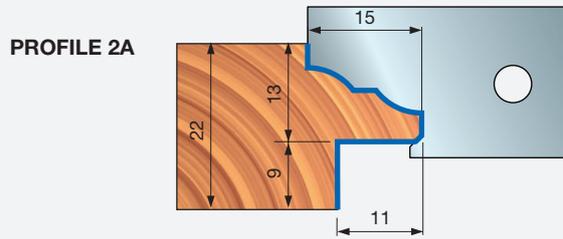
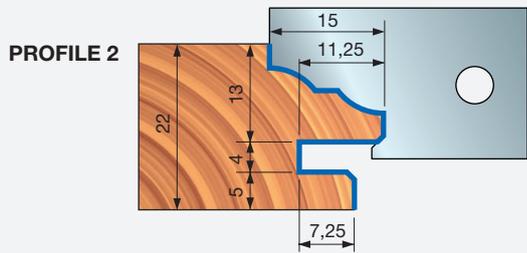
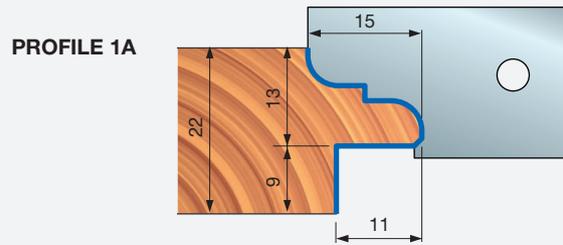
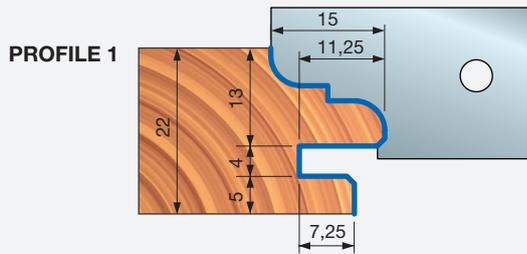


NCSEM22

CNC tool for cabinet door frame profile - 22 mm

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|---------------|------------|------------|
| 1/1A | Knife | 20 x 34 x 3 | CCSEMCA301 | F03FC23728 |
| 2/2A | Knife | 20 x 34 x 3 | CCSEMCA301 | F03FC23729 |
| 3/3A | Knife | 20 x 34 x 3 | CCSEMCA301 | F03FC23730 |
| 4/4A | Knife | 20 x 34 x 3 | CCSEMCA301 | F03FC23731 |
| 5/5A | Knife | 20 x 34 x 3 | CCSEMCA301 | F03FC23732 |
| 6/6A | Knife | 20 x 34 x 3 | CCSEMCA301 | F03FC23733 |

Example of profiles



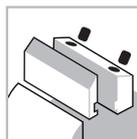


NCSEM22

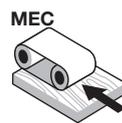
CNC tool for cabinet door frame scribe - 22 mm



CNC Machines



Clamping system



Automatic feed



Aluminium body



Softwood



Hardwood



Profiling



| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 120 | 41 | 30 | 2 | 11.000 | NCSEM22A02 | F03FC15433 |
| 120 | 29 | 30 | 2 | 11.000 | NCSEM22A04 | F03FC15435 |

Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

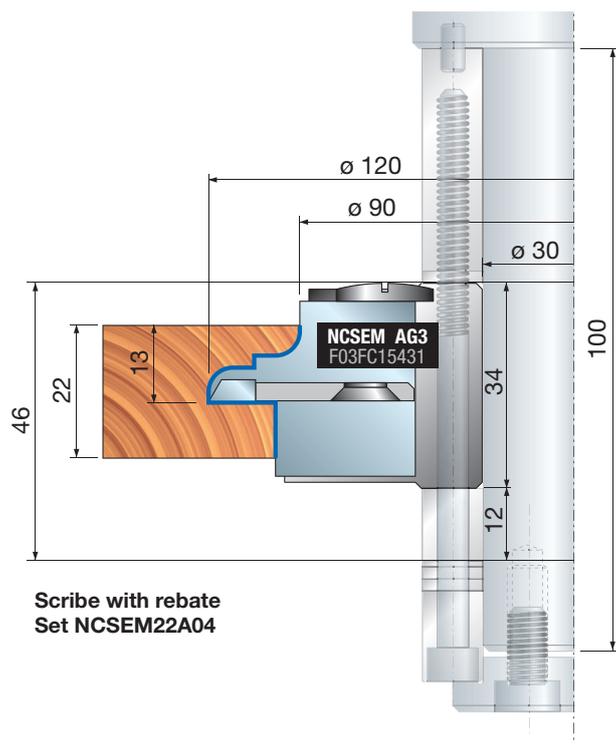
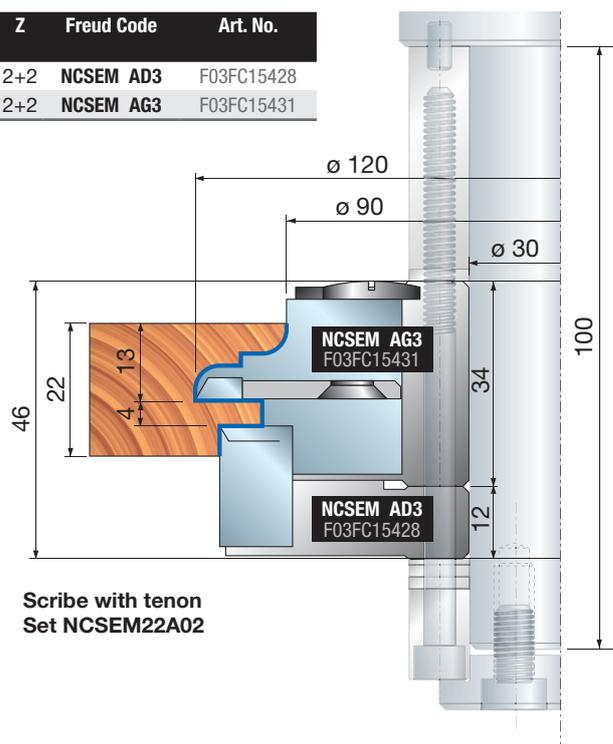
CNC tool set suitable for cabinet doors with 6 available counte-profiles (please refer to NCSEM22 profiles).

- Profile available both with and without groove.
- 22 mm timber.
- Aluminium light alloy body.
- Chuck and knives to be ordered separately.

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----------|-------------------|------------------|-------------|------------|
| NCSEM AD3 | Knife | 20 x 12 x 1,5 | CG06MCA310 | F03FH02891 |
| | Wedge | 16 | CN01MS DA9 | F03FC01264 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| NCSEM AG3 | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| | Spur insert | 34 x 3,5 x 16 | SR06MDBA302 | F03FC24197 |
| | Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |

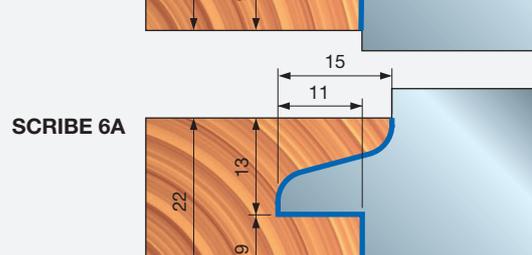
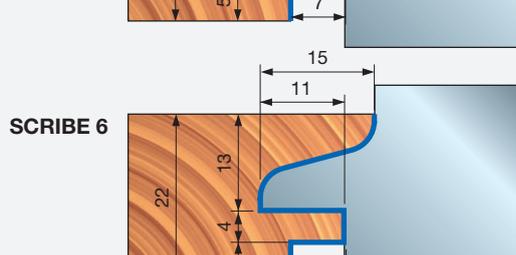
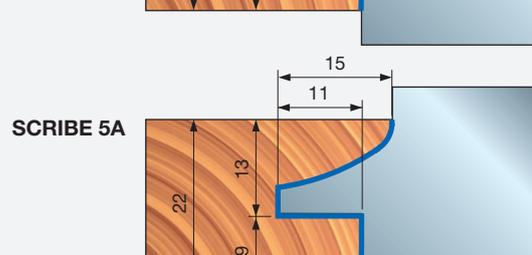
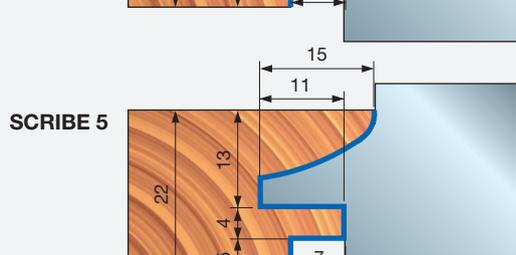
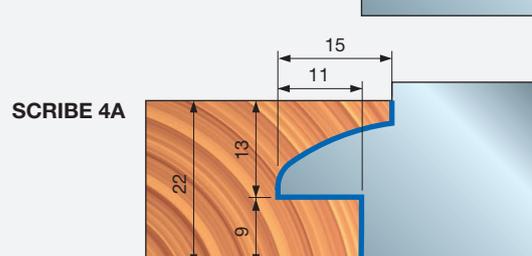
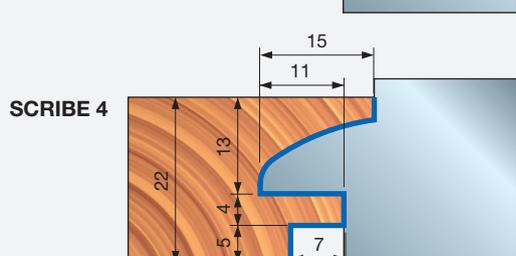
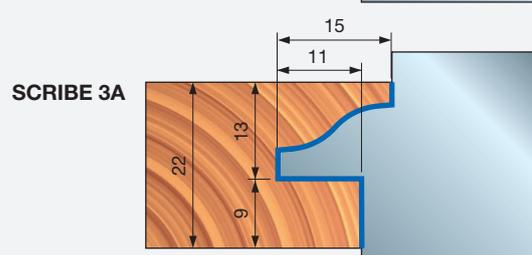
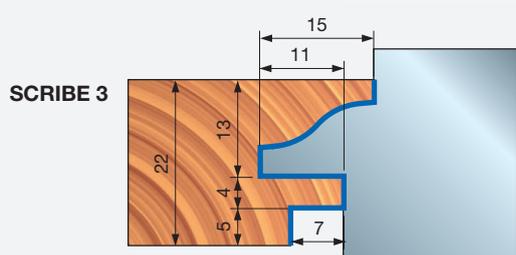
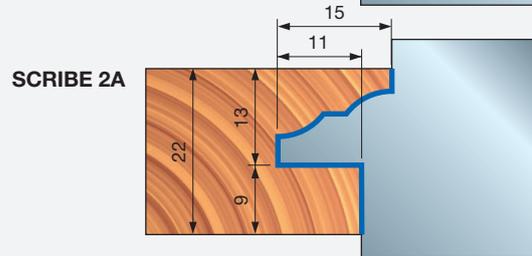
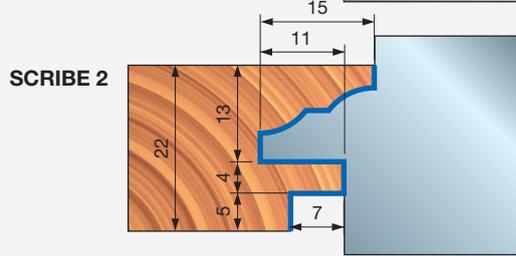
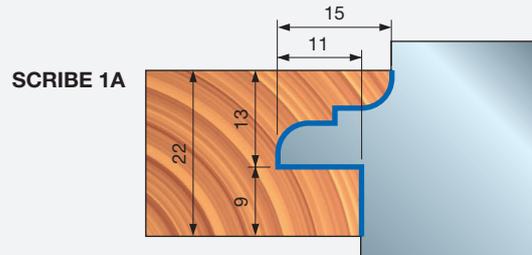
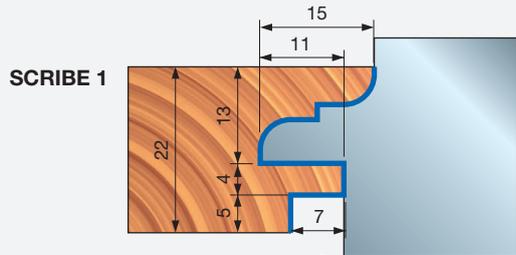
Tools for NCSEM22A02 and NCSEM22A04 sets

| D mm | B mm | d mm | Z | Freud Code | Art. No. |
|---------|---------|---------|-----|------------|------------|
| 112 | 20 | 30 | 2+2 | NCSEM AD3 | F03FC15428 |
| 120 | 29 | 30 | 2+2 | NCSEM AG3 | F03FC15431 |



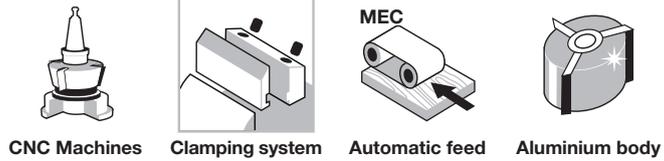
| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|--|--------------|---------------|------------|------------|
| 1/1A  | Knife | 30 x 34 x 3 | CCSEMDA301 | F03FC23734 |
| 2/2A  | Knife | 30 x 34 x 3 | CCSEMDB301 | F03FC23735 |
| 3/3A  | Knife | 30 x 34 x 3 | CCSEMDC301 | F03FC23736 |
| 4/4A  | Knife | 30 x 34 x 3 | CCSEMDD301 | F03FC23737 |
| 5/5A  | Knife | 30 x 34 x 3 | CCSEMDE301 | F03FC23738 |
| 6/6A  | Knife | 30 x 34 x 3 | CCSEMDF301 | F03FC23739 |

Example of scribes



NCSEM30

CNC tool for cabinet door frame profile - 30 mm



Profiling



| D | B | d | Z | Max RPM | Freud Code | Art. No. |
|-----|----|----|---|---------|------------|------------|
| mm | mm | mm | | 1/min. | | |
| 120 | 43 | 30 | 2 | 11.000 | NCSEM30A01 | F03FC15436 |
| 120 | 42 | 30 | 2 | 11.000 | NCSEM30A03 | F03FC15438 |

Machines:
CNC overhead routing machines.

Materials:
Softwood and hardwood.

Applications:
Profiling.

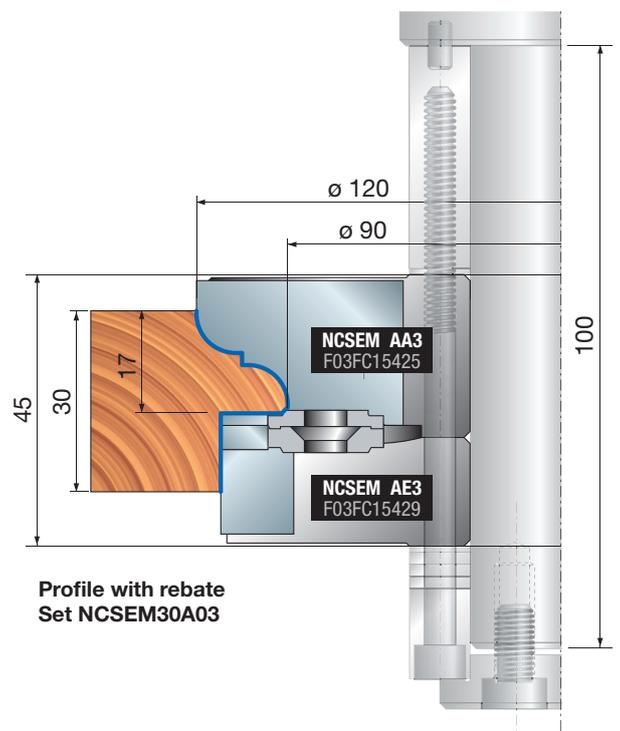
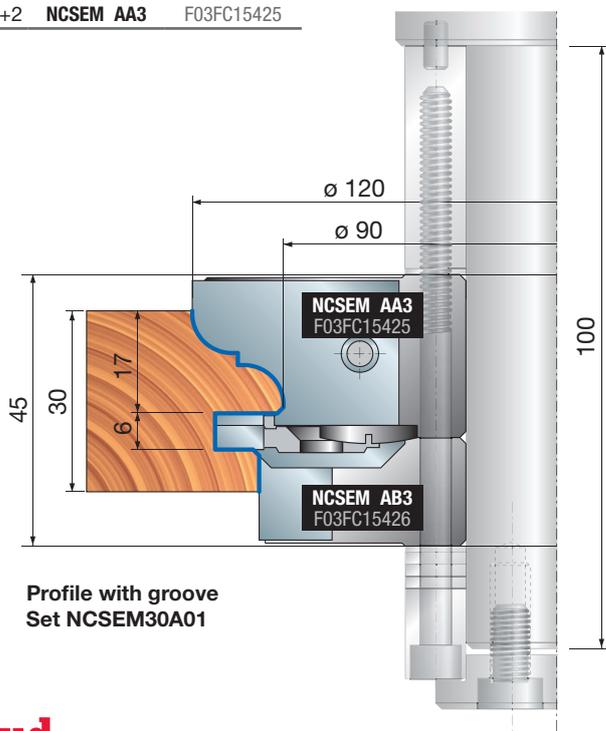
Technical information:
CNC tool set suitable for cabinet doors with 3 available profiles.

- Profile available both with and without groove.
- 30 mm timber.
- Aluminium light alloy body.
- Chuck and knives to be ordered separately.

Tools for NCSEM30A01 and NCSEM30A03 sets

| D | B | d | Z | Freud Code | Art. No. |
|-------|----|----|-----|------------|------------|
| mm | mm | mm | | | |
| 112 | 20 | 30 | 2+2 | NCSEM AE3 | F03FC15429 |
| 112,5 | 19 | 30 | 2+4 | NCSEM AB3 | F03FC15426 |
| 120 | 28 | 30 | 2+2 | NCSEM AA3 | F03FC15425 |

| | Spare parts | Dimensions | Freud Code | Art. No. |
|-----------|-------------------|-----------------|--------------|------------|
| NCSEM AA3 | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| | Grooving insert | 27 x 4 x 16 | IG04MDAA3T05 | F03FC24151 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| NCSEM AB3 | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Knife | 14,6 x 12 x 1,5 | CG06MBA310 | F03FH02890 |
| | Wedge | 13 | CN01M CA9 | F03FC01250 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Beveling insert | 22 x 16 x 5 | IG51MBA305 | F03FH03022 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| NCSEM AE3 | Grooving insert | 27 x 4 x 16 | IG04MSAA3T05 | F03FC24155 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Knife | 20 x 12 x 1,5 | CG06MCA310 | F03FH02891 |
| | Wedge | 15 x 16 x 8 | CN09MS AC9 | F03FC01325 |
| | Nut | 10 x 11,5 x M6 | VT20M AA9 | F03FA04497 |
| | Screw | M6 x 22 | VT19M AB9 | F03FA04491 |
| | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |

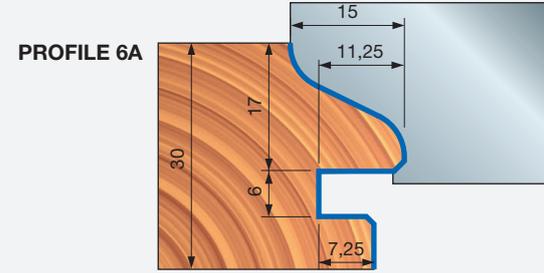
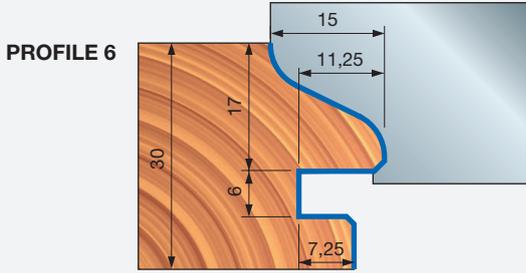
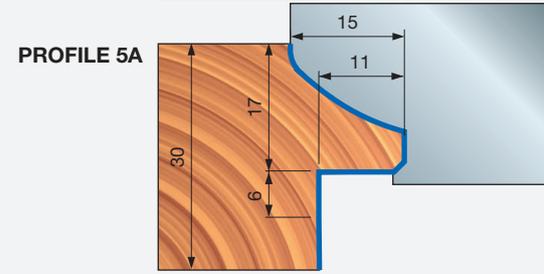
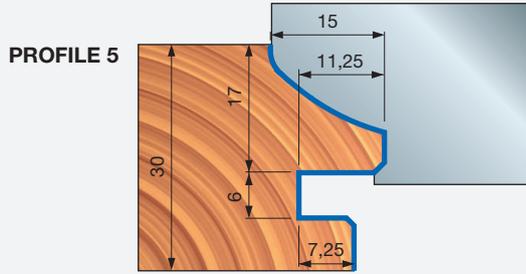
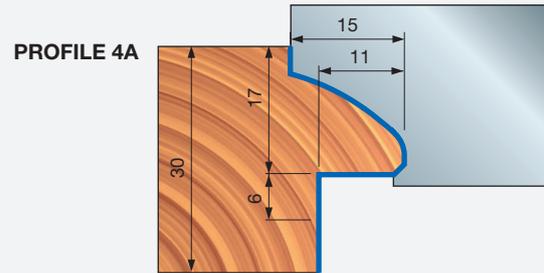
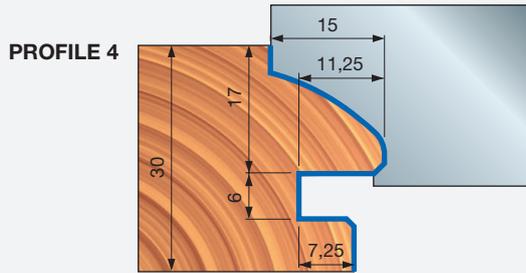
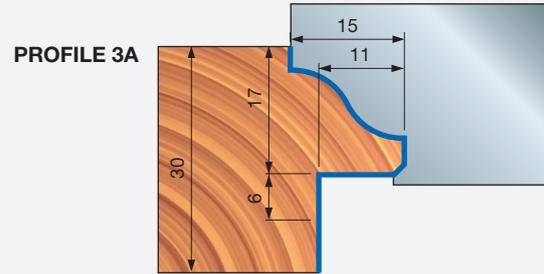
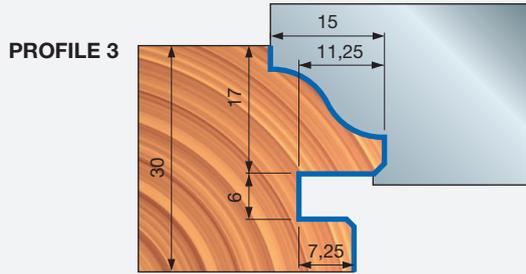
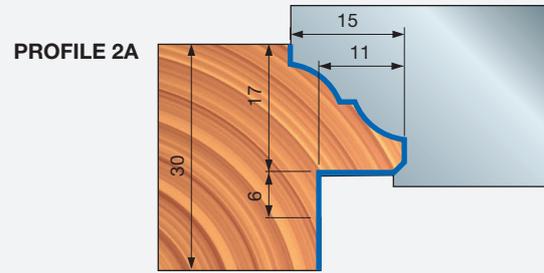
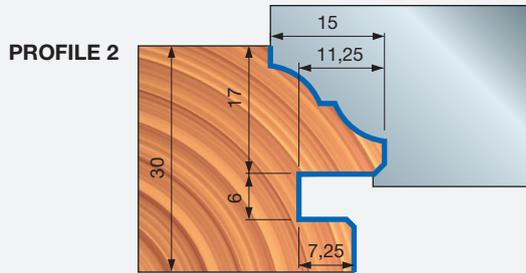
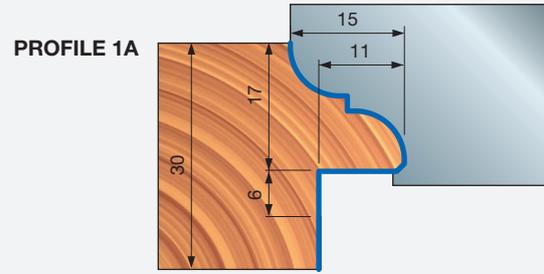
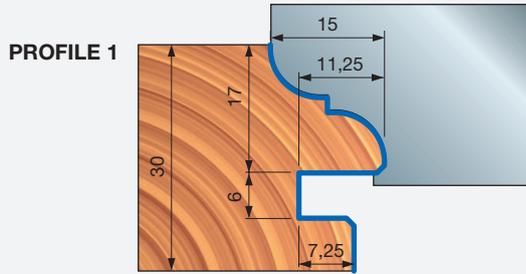


NCSEM30

CNC tool for cabinet door frame profile - 30 mm

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|---------------|------------|------------|
| 1/1A | Knife | 24 x 34 x 3 | CCSEMAA301 | F03FC01398 |
| 2/2A | Knife | 24 x 34 x 3 | CCSEMAB301 | F03FC23169 |
| 3/3A | Knife | 24 x 34 x 3 | CCSEMAC301 | F03FC23657 |
| 4/4A | Knife | 24 x 34 x 3 | CCSEMAA301 | F03FC23715 |
| 5/5A | Knife | 24 x 34 x 3 | CCSEMAE301 | F03FC23717 |
| 6/6A | Knife | 24 x 34 x 3 | CCSEMAF301 | F03FC23718 |

Example of profiles



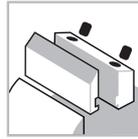


NCSEM30

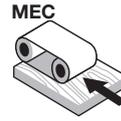
CNC tool for cabinet door frame scribe - 30 mm



CNC Machines



Clamping system



Automatic feed



Aluminium body



Softwood



Hardwood



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

CNC tool set suitable for cabinet doors with 6 available counter profiles (please refer to NCSEM22 profiles).

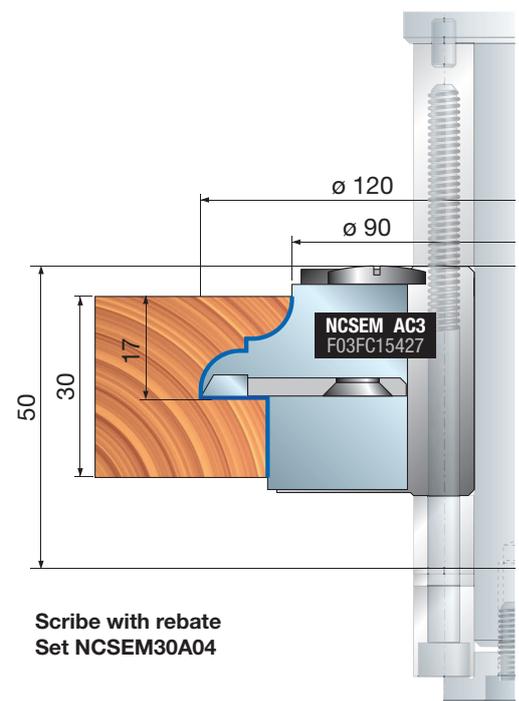
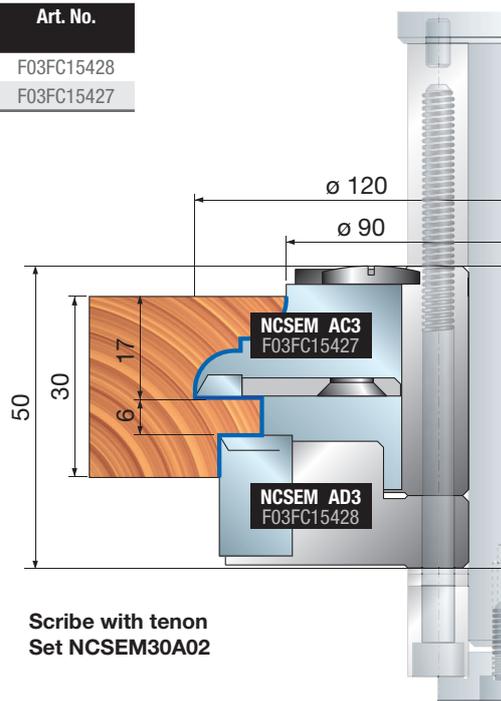
- Profile available both with and without groove.
- 30 mm timber.
- Aluminium light alloy body.
- Chuck and knives to be ordered separately.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 120 | 41 | 30 | 2 | 11.000 | NCSEM30A02 | F03FC15437 |
| 120 | 29 | 30 | 2 | 11.000 | NCSEM30A04 | F03FC15439 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----------|-------------------|-----------------------|--------------|------------|
| NCSEM AC3 | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| | Spur insert | 34 x 3,5 x 16 x 3 x 3 | SR06MDBA302 | F03FC24197 |
| | Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| NCSEM AD3 | Knife | 14,6 x 12 x 1,5 | CG06MBA310 | F03FH02890 |
| | Wedge | 13 | CN01M CA9 | F03FC01250 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Beveling insert | 22 x 16 x 5 | IG51MBA305 | F03FH03022 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Grooving insert | 27 x 4 x 16 | IG04MSAA3T05 | F03FC24155 |

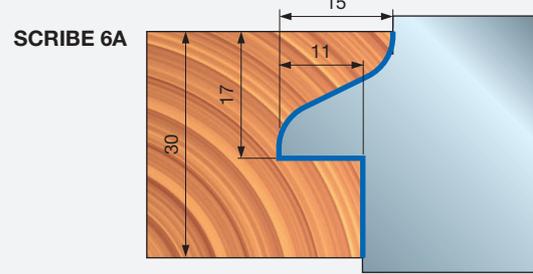
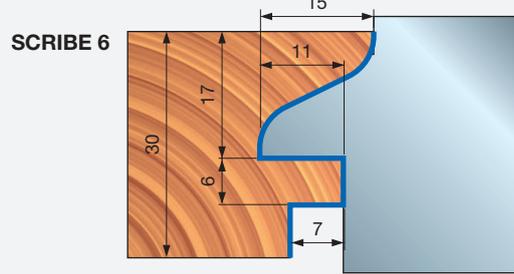
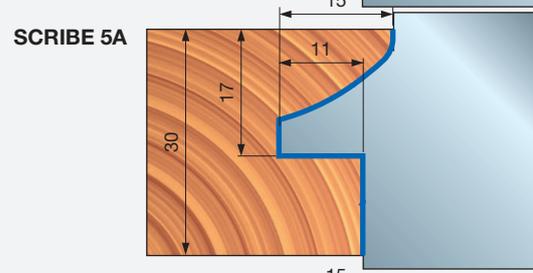
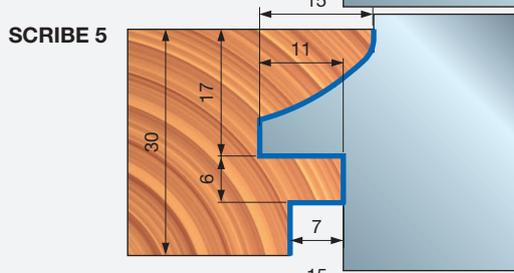
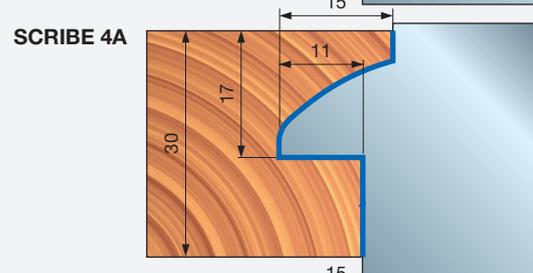
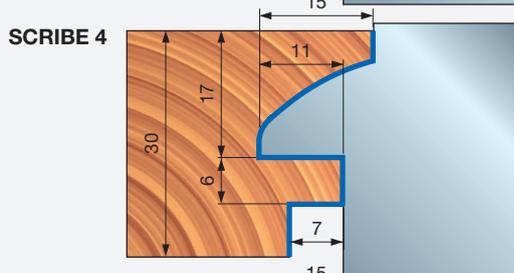
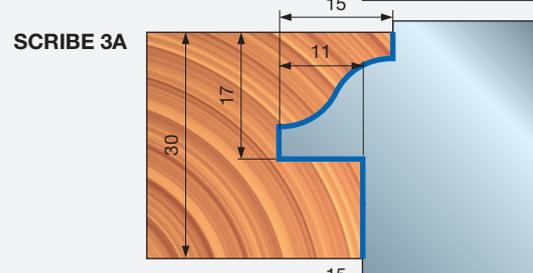
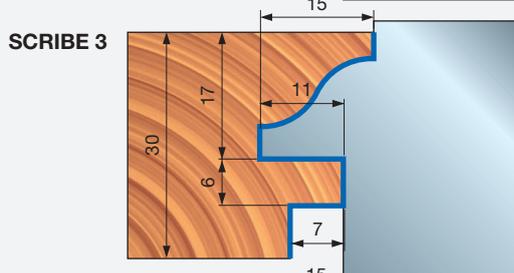
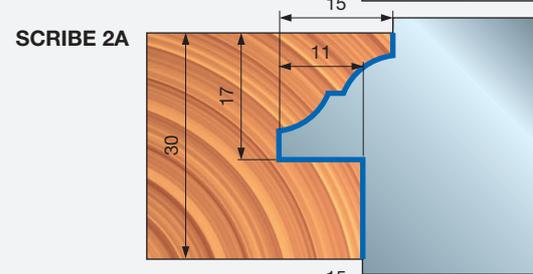
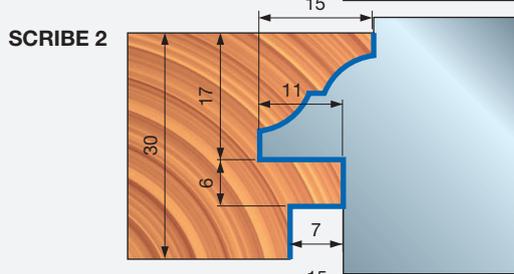
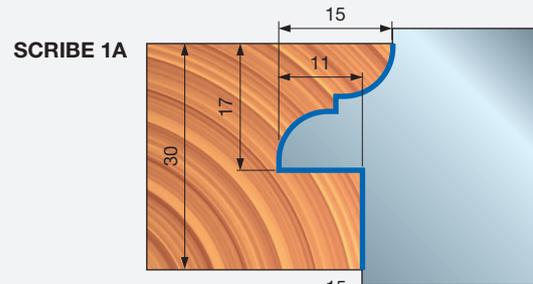
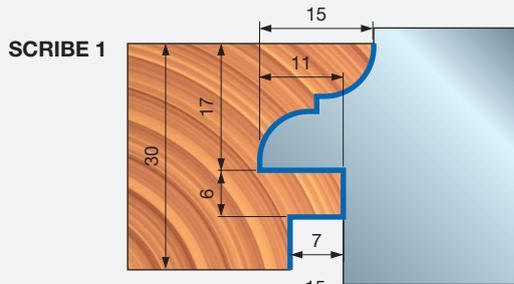
Tools for NCSEM30A02 and NCSEM30A04 sets

| D mm | B mm | d mm | Z | Freud Code | Art. No. |
|---------|---------|---------|-----|------------|------------|
| 112 | 20 | 30 | 2+2 | NCSEM AD3 | F03FC15428 |
| 120 | 34 | 30 | 2+2 | NCSEM AC3 | F03FC15427 |



| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|---------------|------------|------------|
| 1/1A | Knife | 24 x 34 x 3 | CCSEMAA301 | F03FC01398 |
| 2/2A | Knife | 24 x 34 x 3 | CCSEMAB301 | F03FC23169 |
| 3/3A | Knife | 24 x 34 x 3 | CCSEMAC301 | F03FC23657 |
| 4/4A | Knife | 24 x 34 x 3 | CCSEMAD301 | F03FC23715 |
| 5/5A | Knife | 24 x 34 x 3 | CCSEMAE301 | F03FC23717 |
| 6/6A | Knife | 24 x 34 x 3 | CCSEMAF301 | F03FC23718 |

Example of scribes



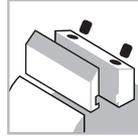


TD54MD

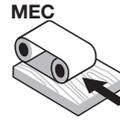
CNC multiprofile raised panel router cutter



CNC Machines



Clamping system



Automatic feed



Aluminium body



Softwood



Hardwood



Chipboard



Profiling



Machines:
CNC overhead routing machines.

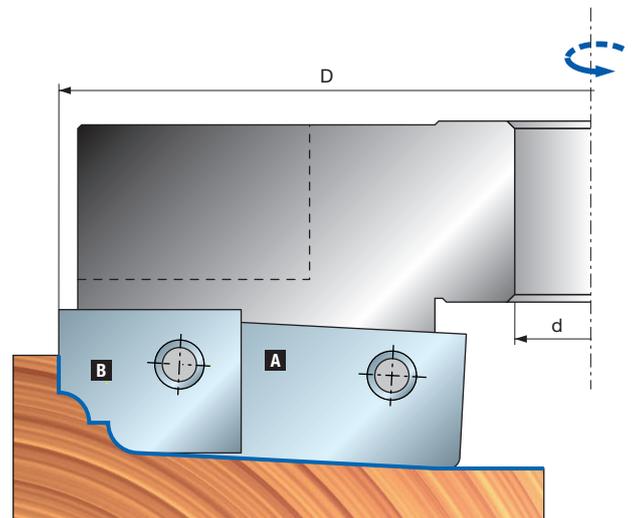
Materials:
Softwood, hardwood and chipboard.

Applications:
Profiling.

- Technical information:**
Performance knives raised panel cutter with 9 available profiles.
- 2+2 cutting design to reach maximum finishing.
 - Aluminium light alloy body.
 - 20x50 mm shank.
 - Knives to be ordered separately.

| D mm | A mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-----|-------------------|------------|------------|
| 140 | 20 x 50 | 20 | 2+2 | 9.600 | TD54MD AA3 | F03FC22230 |
| 140 | 20 x 50 | 20 | 2+2 | 9.600 | TD54MD BA3 | F03FC22204 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----|-------------|-------------------|------------|------------|
| AA3 | Wedge | 42,9 x 18 x 7,8 | CN54M AA9 | F03FC22200 |
| | Wedge | 16,6 x 21,3 x 8,5 | CN54M AB9 | F03FC22201 |
| BA3 | Wedge | 42,8 x 16,7 x 7,8 | CN54M BA9 | F03FC22202 |
| | Wedge | 16,5 x 21,8 x 8,5 | CN54M BB9 | F03FC22203 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M8 x 10 x 22 | VT08M AD9 | F03FA04456 |
| | Screw | M5 x 7 x 18 | VT08M AE9 | F03FA04457 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Chuck | 20 x 33 x 93 | AP08M DA9 | F03FC00579 |



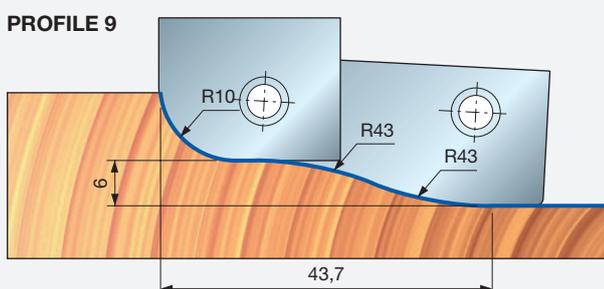
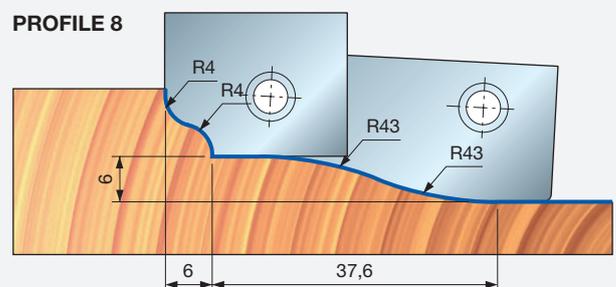
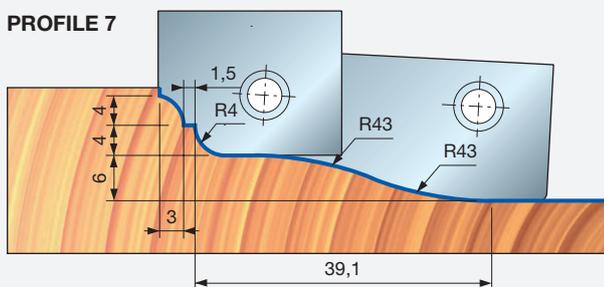
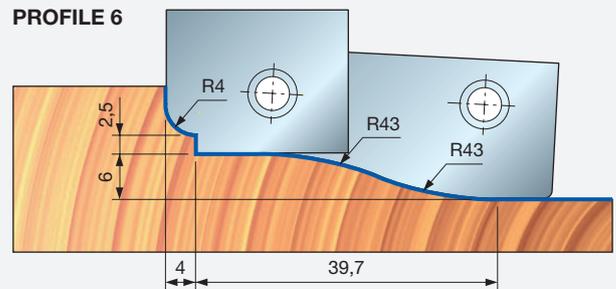
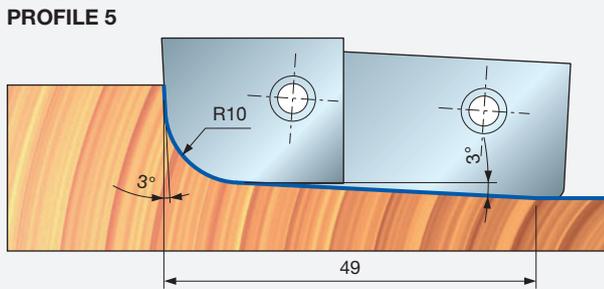
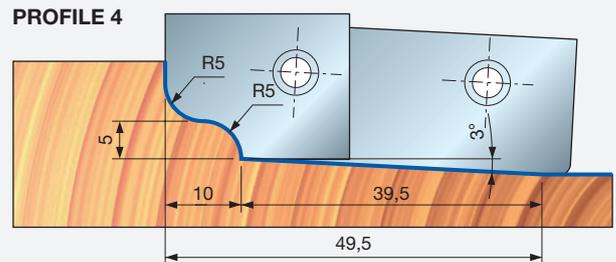
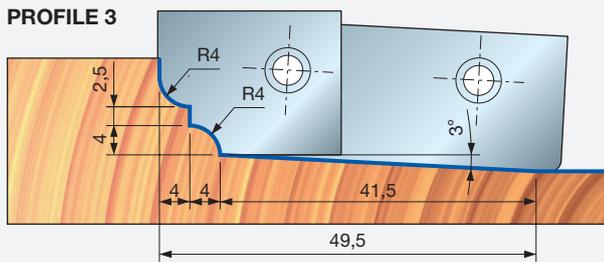
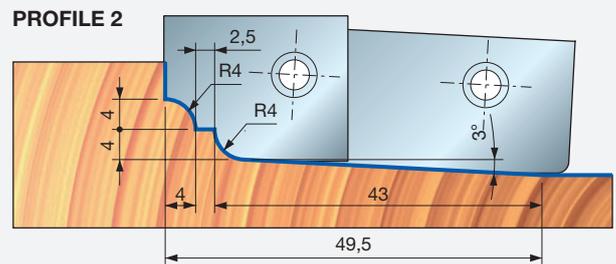
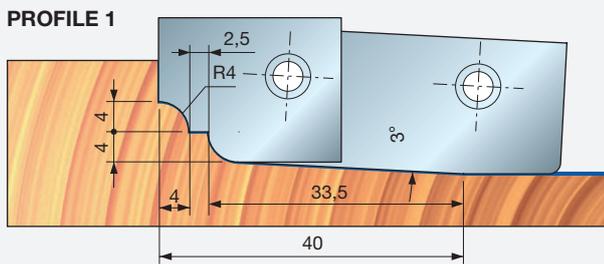
Knives for TD54MD AA3

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|---------------|-------------|------------|
| 1 | Knife A | 64 x 20 x 3 | CT54MDBA301 | F03FC24069 |
| | Knife B | 19 x 24 x 3 | CT54MDAA301 | F03FC24061 |
| 2 | Knife A | 64 x 20 x 3 | CT54MDBB301 | F03FC24070 |
| | Knife B | 19 x 24 x 3 | CT54MDAA301 | F03FC24061 |
| 3 | Knife A | 64 x 20 x 3 | CT54MDBC301 | F03FC24071 |
| | Knife B | 19 x 24 x 3 | CT54MDAC301 | F03FC24062 |
| 4 | Knife A | 64 x 20 x 3 | CT54MDBD301 | F03FC24072 |
| | Knife B | 19 x 24 x 3 | CT54MDAD301 | F03FC24063 |
| 5 | Knife A | 64 x 20 x 3 | CT54MDBE301 | F03FC24073 |
| | Knife B | 19 x 24 x 3 | CT54MDAE301 | F03FC24064 |

Knives for TD54MD BA3

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|---------------|-------------|------------|
| 6 | Knife A | 64 x 20 x 3 | CT54MDBF301 | F03FC24074 |
| | Knife B | 19 x 24 x 3 | CT54MDAF301 | F03FC24065 |
| 7 | Knife A | 64 x 20 x 3 | CT54MDBG301 | F03FC24075 |
| | Knife B | 19 x 24 x 3 | CT54MDAG301 | F03FC24066 |
| 8 | Knife A | 64 x 20 x 3 | CT54MDBH301 | F03FC24076 |
| | Knife B | 19 x 24 x 3 | CT54MDAH301 | F03FC24067 |
| 9 | Knife A | 64 x 20 x 3 | CT54MDBL301 | F03FC24077 |
| | Knife B | 19 x 24 x 3 | CT54MDAL301 | F03FC24068 |

Example of scribes



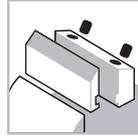


NC92M

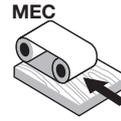
CNC tool with profiled knives



CNC Machines



Clamping system



Automatic feed



Aluminium body



Softwood



Hardwood



Chipboard



MDF



Profiling



Planing



Machines:

CNC overhead routing machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Profiling and planing.

Technical information:

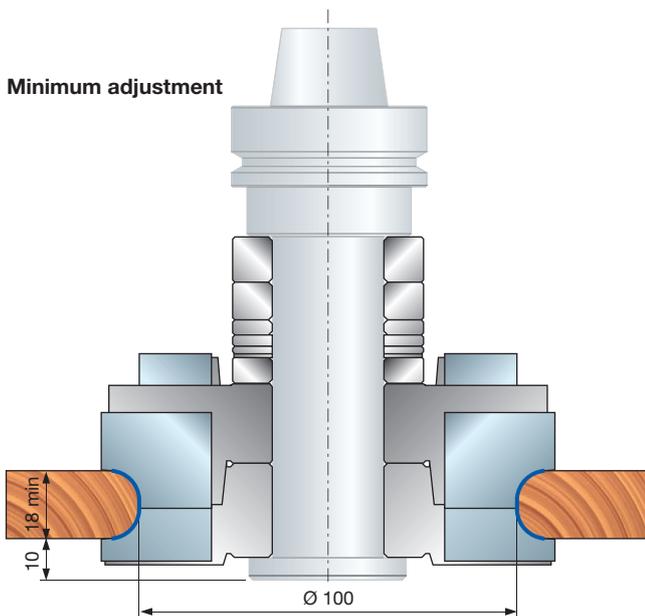
Performance CNC tool set suitable for profiling with 8 available radius and bevel profiles.

- Aluminium light alloy body.
- Chuck and knives to be ordered separately.

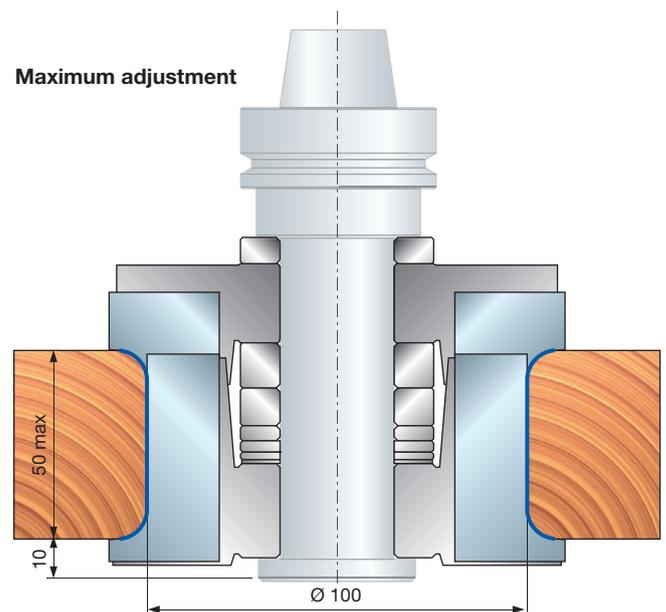
| D mm | B mm | d mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|------------|
| 120 | 30 | 30 | 10.000 | NC92M 100* | F03FC15469 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|-------------|------------------|------------|------------|
|  | Wedge | 30,7 x 28 x 8 | CN13M CC9 | F03FC01391 |
|  | Wedge | 50 x 28 x 8 | CN13M CD9 | F03FC01392 |
|  | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
|  | Screw | M5 x 7 x 18 | VT08M AE9 | F03FA04457 |
|  | Allen key | 5 | CB03M EA9 | F03FA00169 |

Minimum adjustment



Maximum adjustment



Tools for NC92M set

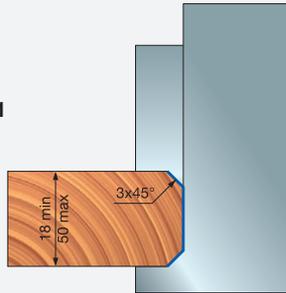
| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|-------------------|-------------|------------|
| 1 | Knife | 35 x 30 x 3 3x45° | CC92M1T0101 | F03FC23793 |
| 2 | Knife | 35 x 30 x 3 5x45° | CC92M1T0201 | F03FC23794 |
| 3 | Knife | 35 x 30 x 3 R=3 | CC92M1T0301 | F03FC23795 |
| 4 | Knife | 35 x 30 x 3 R=4 | CC92M1T0401 | F03FC23796 |
| 5 | Knife | 35 x 30 x 3 R=5 | CC92M1T0501 | F03FC23797 |
| 6 | Knife | 35 x 30 x 3 R=6 | CC92M1T0601 | F03FC23798 |
| 7 | Knife | 35 x 30 x 3 R=7 | CC92M1T0701 | F03FC23799 |
| 8 | Knife | 35 x 30 x 3 R=8 | CC92M1T0801 | F03FC23800 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|-------------------|-------------|------------|
| 1 | Knife | 55 x 30 x 3 3x45° | CC92M2T0101 | F03FC23801 |
| 2 | Knife | 55 x 30 x 3 5x45° | CC92M2T0201 | F03FC23802 |
| 3 | Knife | 55 x 30 x 3 R=3 | CC92M2T0301 | F03FC23803 |
| 4 | Knife | 55 x 30 x 3 R=4 | CC92M2T0401 | F03FC23804 |
| 5 | Knife | 55 x 30 x 3 R=5 | CC92M2T0501 | F03FC23805 |
| 6 | Knife | 55 x 30 x 3 R=6 | CC92M2T0601 | F03FC23806 |
| 7 | Knife | 55 x 30 x 3 R=7 | CC92M2T0701 | F03FC23807 |
| 8 | Knife | 55 x 30 x 3 R=8 | CC92M2T0801 | F03FC23808 |

Example of scribes

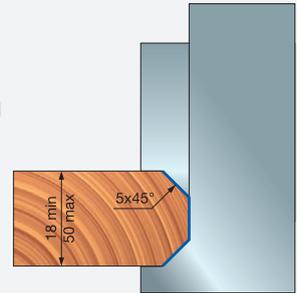
PROFILE 1

Obtainable with knives:
CC92M1T0101 + CC92M2T0101



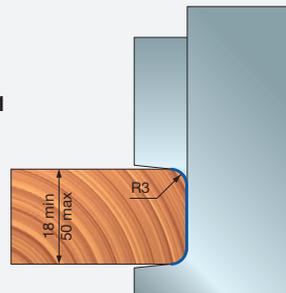
PROFILE 2

Obtainable with knives:
CC92M1T0201 + CC92M2T0201



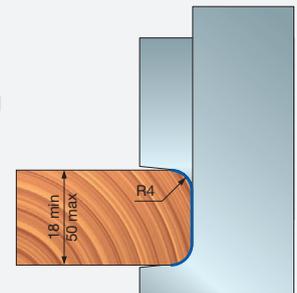
PROFILE 3

Obtainable with knives:
CC92M1T0301 + CC92M2T0301



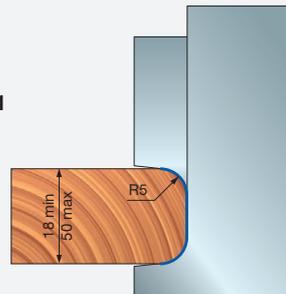
PROFILE 4

Obtainable with knives:
CC92M1T0401 + CC92M2T0401



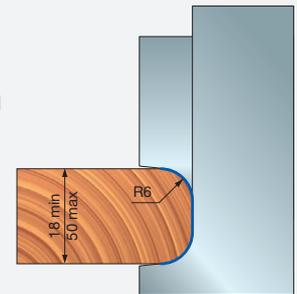
PROFILE 5

Obtainable with knives:
CC92M1T0501 + CC92M2T0501



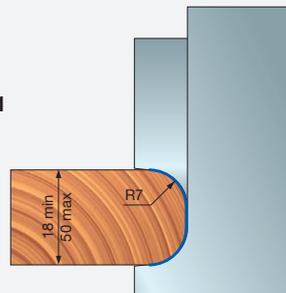
PROFILE 6

Obtainable with knives:
CC92M1T0601 + CC92M2T0601



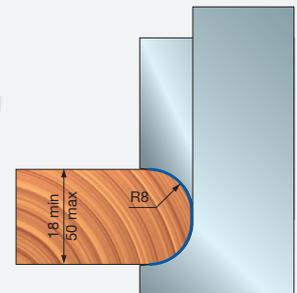
PROFILE 7

Obtainable with knives:
CC92M1T0701 + CC92M2T0701



PROFILE 8

Obtainable with knives:
CC92M1T0801 + CC92M2T0801



Item **NC92M 100** is supplied without chuck (for chuck ref. see the catalogue accessories).

| | | | |
|-----------------------|--------------------|--------|----------|
| Order example: | NC92M 100 | Group | 1 piece |
| | CC92M1T0101 | Knives | 2 pieces |
| | CC92M2T0101 | Knives | 2 pieces |
| | MP05M AE9 | Chuck | 1 piece |

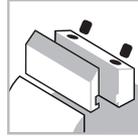


NC93M

CNC finger joint tool



CNC Machines



Clamping system



Automatic feed



Aluminium body



Softwood



Hardwood



Jointing



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Jointing.

Technical information:

Adjustable CNC tool set suitable for jointing.

- Timber from 40 to 80 mm.
- Adjusting system to manage regular, tight and loose joint.
- Tool available in left and right hand rotation.
- Aluminium light alloy body.
- Chuck and knives to be ordered separately.

| D mm | B mm | d mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|------------|
| 120 | 30 | 30 | 10.000 | NC93M 100* | F03FC15472 |

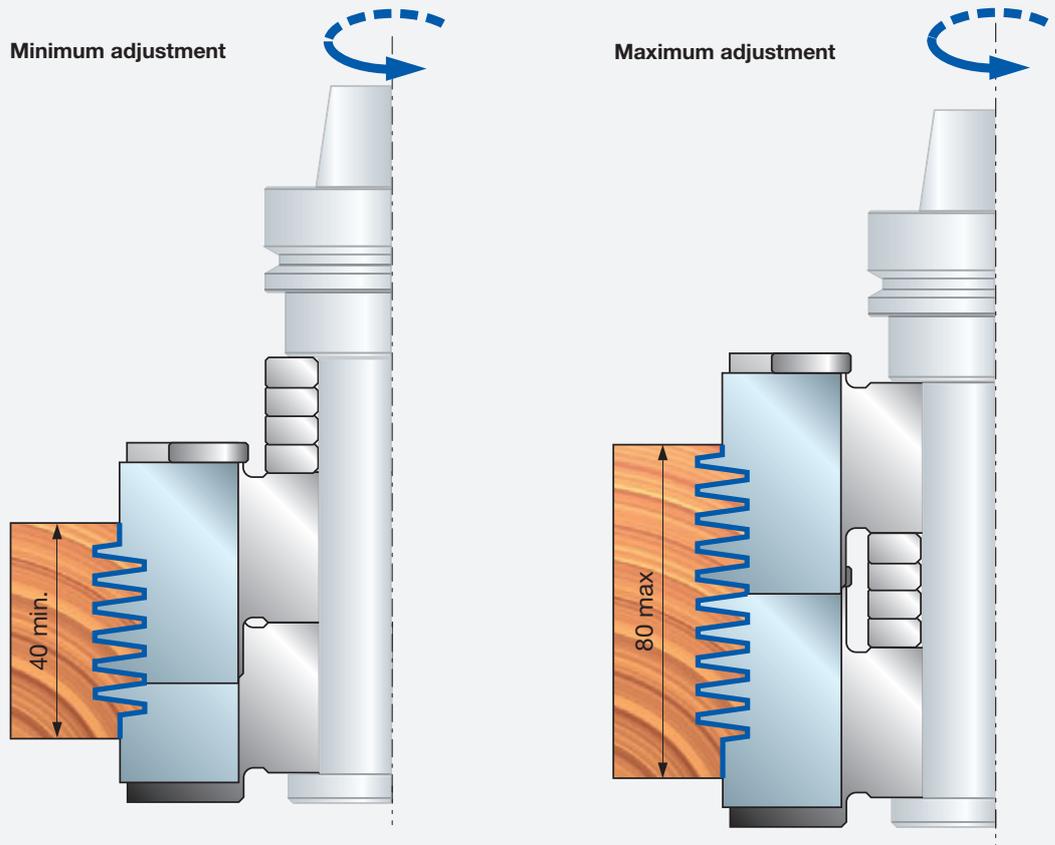
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------|------------------|------------|------------|
| | Wedge | 41 x 17 x 8 | CN11M B410 | F03FC01351 |
| | Screw | M4 x 6 | 2602M CE9 | F03FA07349 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M5 x 7 x 18 | VT08M AE9 | F03FA04457 |
| | Screw | 18 x 7 x M6 | VT08M AG9 | F03FC20653 |
| | Spacer | 50 x 5,8 x 30 | AN04M AC9 | F03FC00500 |
| | Allen key | 2 | 2619M BA9 | F03FA07431 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|-------------|------------|
| | Knife | 45 x 30 x 3 | CW24MAAA301 | F03FC24128 |
| | Knife | 45 x 30 x 3 | CW24MBAA301 | F03FC24129 |

Tools for set NC93M 100

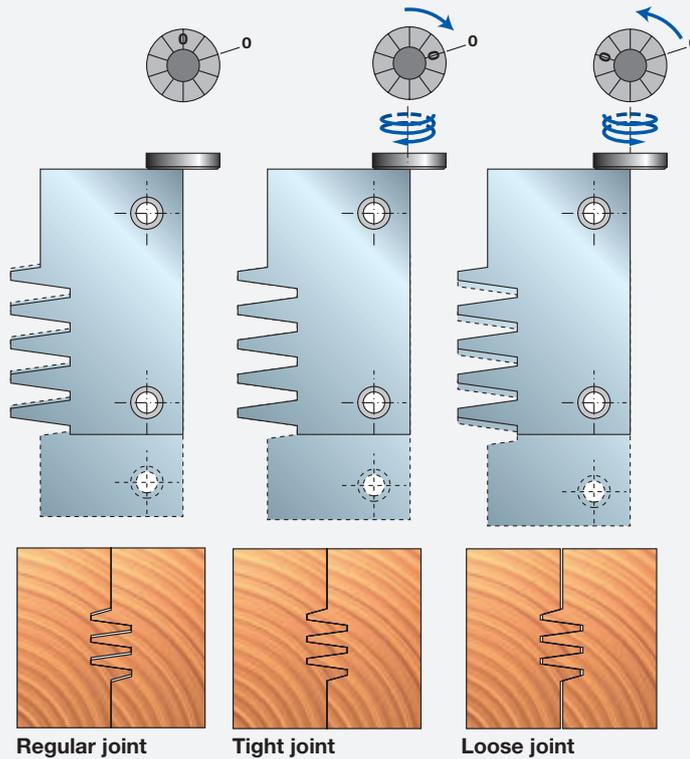
| D mm | B mm | D mm | Z mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 120 | 52 | 30 | 2 | NC93M100-1 | F03FC15473 |
| 120 | 55 | 30 | 2 | NC93M100-2 | F03FC15474 |

Adjustment examples:



Follow below instructions:

- Before rotating the adjusting screw, the clamping screw must be loosened.
- Rotating the adjusting screw clockwise, the tightness of the screw increases progressively (every notch on the adjusting screw corresponds to a movement of 1/10 mm). The perfect alignment of the knives is 0:0 (the "0" on the adjusting screw with the "0" on the tool body). This alignment results in a tight joint.
- Rotate the adjusting screw anti-clockwise in order to loosen the joint.



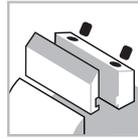


NC94MGC13

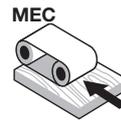
CNC finger joint tool



CNC Machines



Clamping system



Automatic feed



Aluminium body



Softwood



Hardwood



Jointing



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Jointing.

Technical information:

Adjustable CNC tool set suitable for jointing.

- Timber from 44 to 92 mm.
- Adjusting system to manage regular, tight and loose joint.
- Tool available in left and right hand rotation.
- Aluminium light alloy body.
- Chuck and knives to be ordered separately.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|-------------|------------|
| 120 | 107 | 30 | 2 | 11.000 | NC94MGC13-D | F03FC23626 |
| 120 | 107 | 30 | 2 | 11.000 | NC94MGC13-S | F03FC23627 |

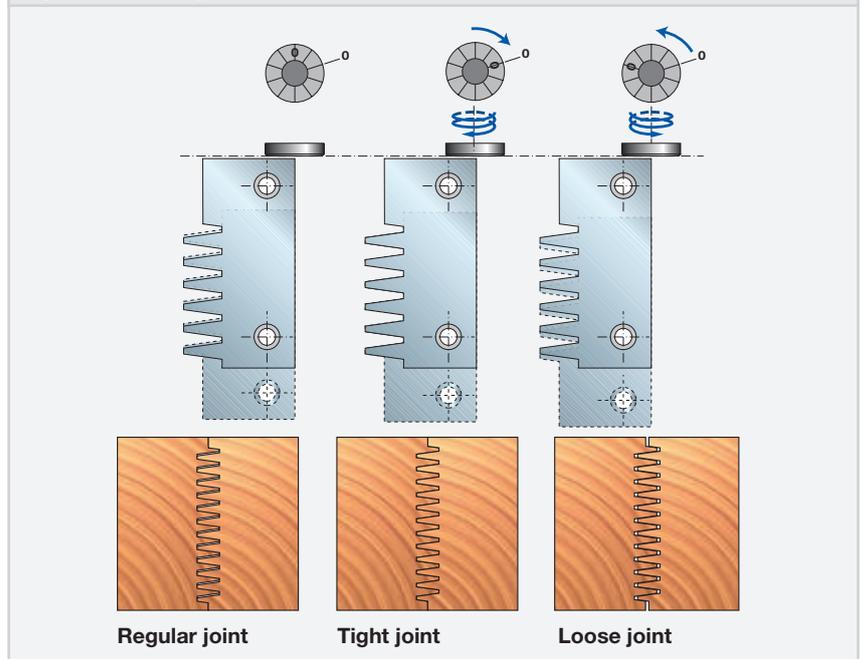
| Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------|------------------|------------|------------|
| Spacer | 50 x 5,8 x 30 | AN01MA0589 | F03FC00039 |
| Spacer | 50 x 23 x 30 | AN01MA2309 | F03FC00057 |
| Steel pin | 4 x 10 | 2601M AB9 | F03FA07326 |
| Steel pin | 2,5 x 6 | 2601M AV9 | F03FA07342 |
| Screw | M5 x 90 | 2607M CS9 | F03FA18898 |
| Wedge | 53,5 x 32,5 x 8 | CN94M 001 | F03FC23364 |
| Wedge | 53,5 x 32,5 x 8 | CN94M 002 | F03FC23365 |
| Screw | 18 x 7 x M6 | VT08M AG9 | F03FC20653 |
| Screw | M4 x 6 | 2602M CE9 | F03FA07349 |
| Screw | M10 x 16 | 2616M EE9 | F03FA07426 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|------------|----------|
| 001 | Knife | 55 x 29 x 3 | CW94M00101 | - |
| 002 | Knife | 55 x 29 x 3 | CW94M00201 | - |

Tools for set NC94M 100

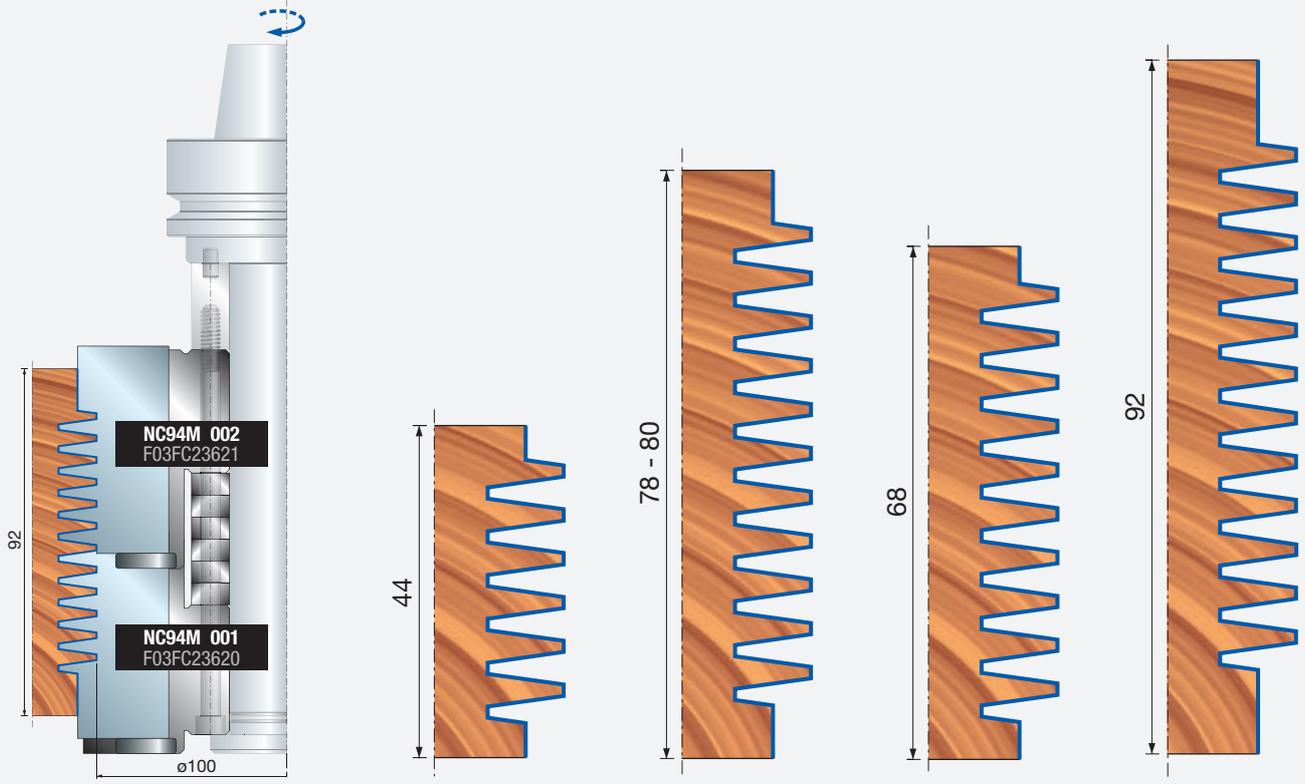
| D mm | B mm | d mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---|------------|------------|
| 120 | 59 | 30 | 2 | NC94M 001 | F03FC23620 |
| 120 | 59 | 30 | 2 | NC94M 002 | F03FC23621 |

Adjustment examples:



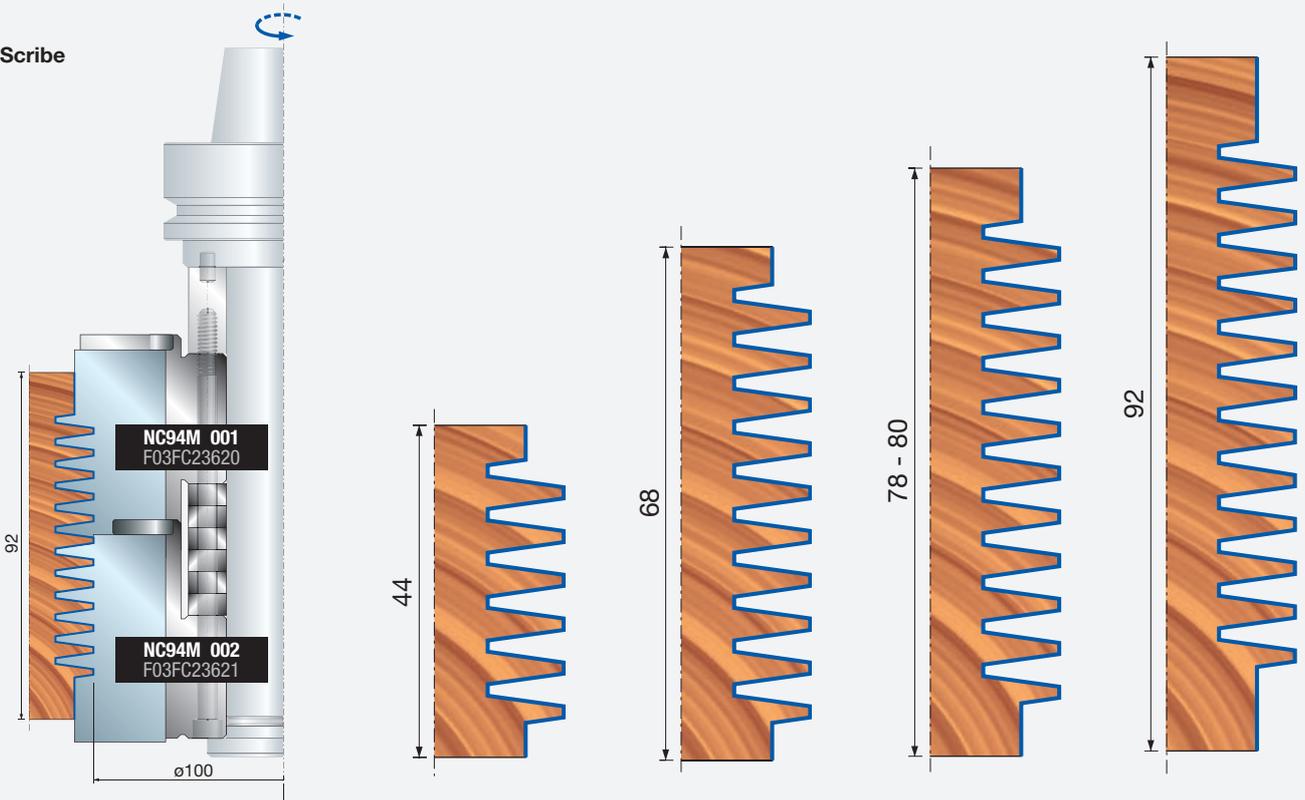
Profiles NC94MGC13-D

Profile



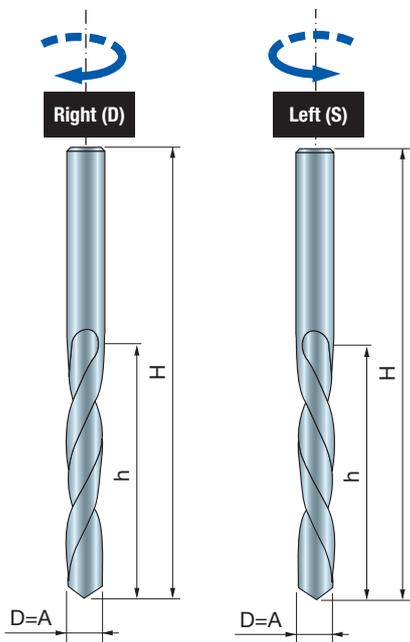
Scribes NC94MGC13-S

Scribe



Drilling



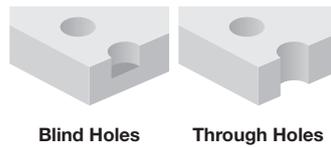


PF03MD PF03MS

Solid Carbide multipurpose drilling - screw holes



Boring Machines



Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

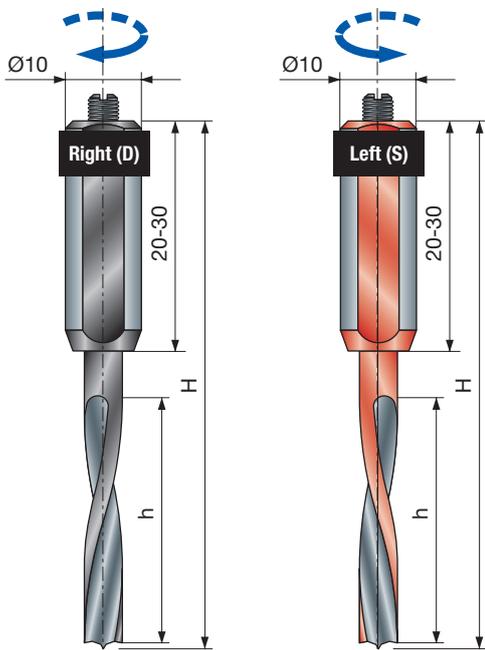
Boring and drilling.

Technical information:

Solid Carbide drills in HW suitable for screw holes.

- Constructed with two spirals with back clearance angle.

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 2 | 24 | 49 | 2 | 2 | PF03MD PA3 | F03FA02055 |
| 2,5 | 24 | 49 | 2,5 | 2 | PF03MD QA3 | F03FA02056 |
| 3 | 30 | 55 | 3 | 2 | PF03MD RA3 | F03FA02057 |
| 3,2 | 30 | 55 | 3,2 | 2 | PF03MD SA3 | F03FA02058 |
| 3,5 | 30 | 55 | 3,5 | 2 | PF03MD TA3 | F03FA02059 |
| 4 | 30 | 55 | 4 | 2 | PF03MD ZA3 | F03FA02062 |
| 4,5 | 35 | 60 | 4,5 | 2 | PF03MD UA3 | F03FA02060 |
| 5 | 35 | 60 | 5 | 2 | PF03MD VA3 | F03FA02061 |
| 2 | 24 | 49 | 2 | 2 | PF03MS PA3 | F03FA02063 |
| 2,5 | 24 | 49 | 2,5 | 2 | PF03MS QA3 | F03FA02064 |
| 3 | 30 | 55 | 3 | 2 | PF03MS RA3 | F03FA02065 |
| 3,2 | 30 | 55 | 3,2 | 2 | PF03MS SA3 | F03FA02066 |
| 3,5 | 30 | 55 | 3,5 | 2 | PF03MS TA3 | F03FA02067 |
| 4 | 30 | 55 | 4 | 2 | PF03MS ZA3 | F03FA02070 |
| 4,5 | 35 | 60 | 4,5 | 2 | PF03MS UA3 | F03FA02068 |
| 5 | 35 | 60 | 5 | 2 | PF03MS VA3 | F03FA02069 |



PF26MD PF26MS

Dowel drills for blind holes



Boring Machines



Blind Holes

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

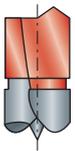
Boring.

Technical information:

Solid Carbide dowel drills suitable for blind holes.

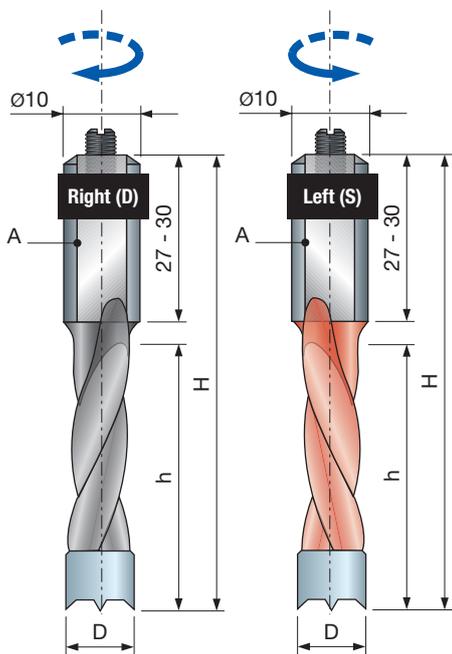
- Bit in HW with central point and cylindrical steel shank with M5 x 10 mm adjusting screw.

Geometry of the tip



| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 3 | 22 | 70 | 10 x 33 | 2 | PF26MD VC3 | F03FA13217 |
| 4 | 27 | 70 | 10 x 30 | 2 | PF26MD ZC3 | F03FA03016 |
| 5 | 33 | 70 | 10 x 30 | 2 | PF26MD AC3 | F03FA03013 |
| 6 | 33 | 70 | 10 x 30 | 2 | PF26MD BC3 | F03FA03014 |
| 8 | 33 | 70 | 10 x 20 | 2 | PF26MD DC3 | F03FA03015 |
| 3 | 22 | 70 | 10 x 33 | 2 | PF26MS VC3 | F03FA13218 |
| 4 | 27 | 70 | 10 x 30 | 2 | PF26MS ZC3 | F03FA03020 |
| 5 | 33 | 70 | 10 x 30 | 2 | PF26MS AC3 | F03FA03017 |
| 6 | 33 | 70 | 10 x 30 | 2 | PF26MS BC3 | F03FA03018 |
| 8 | 33 | 70 | 10 x 20 | 2 | PF26MS DC3 | F03FA03019 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|------------------|------------|------------|
|  Screw | M5x10 | 2602M DC9 | F03FA07350 |



Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

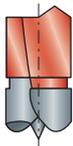
Boring.

Technical information:

Dowel drills HW tipped with centre point for blind holes.

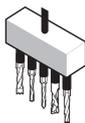
- Round edge spurs to avoid splintering.
- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

Geometry of the tip



**PF04MD
PF04MS**

Dowel drills with round spurs



Boring Machines



Softwood



Hardwood



Chipboard



Laminated
Chipboard



MDF



Laminated
MDF



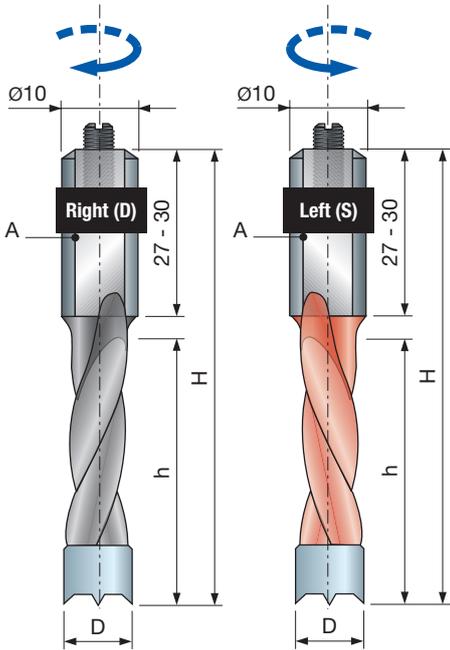
Plywood



Blind Holes

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 27 | 57,5 | 10 x 27 | 2 | PF04MD AA3 | F03FA02071 |
| 6 | 27 | 57,5 | 10 x 27 | 2 | PF04MD BA3 | F03FA02073 |
| 8 | 27 | 57,5 | 10 x 27 | 2 | PF04MD DA3 | F03FA02075 |
| 10 | 27 | 57,5 | 10 x 27 | 2 | PF04MD FA3 | F03FA02077 |
| 5 | 35 | 70 | 10 x 30 | 2 | PF04MD AC3 | F03FA02072 |
| 6 | 35 | 70 | 10 x 30 | 2 | PF04MD BC3 | F03FA02074 |
| 8 | 35 | 70 | 10 x 30 | 2 | PF04MD DC3 | F03FA02076 |
| 10 | 35 | 70 | 10 x 30 | 2 | PF04MD FC3 | F03FA02078 |
| 5 | 27 | 57,5 | 10 x 27 | 2 | PF04MS AA3 | F03FA02079 |
| 6 | 27 | 57,5 | 10 x 27 | 2 | PF04MS BA3 | F03FA02081 |
| 8 | 27 | 57,5 | 10 x 27 | 2 | PF04MS DA3 | F03FA02083 |
| 10 | 27 | 57,5 | 10 x 27 | 2 | PF04MS FA3 | F03FA02085 |
| 5 | 35 | 70 | 10 x 30 | 2 | PF04MS AC3 | F03FA02080 |
| 6 | 35 | 70 | 10 x 30 | 2 | PF04MS BC3 | F03FA02082 |
| 8 | 35 | 70 | 10 x 30 | 2 | PF04MS DC3 | F03FA02084 |
| 10 | 35 | 70 | 10 x 30 | 2 | PF04MS FC3 | F03FA02086 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|------------------|------------|------------|
|  Screw | M5 x 10 | 2602M DC9 | F03FA07350 |



PF06MD PF06MS

Dowel drills for blind holes



Boring Machines



Blind Holes

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

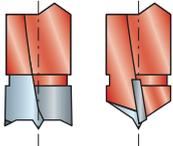
Technical information:

Dowel drills HW tipped with centre point for blind holes.

- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

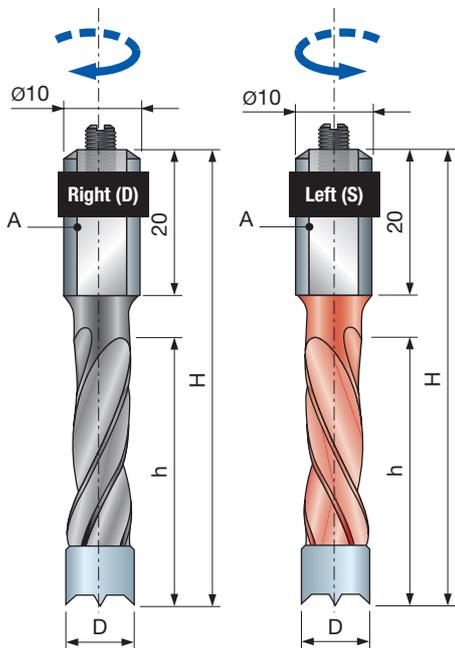
Geometry of the tip

Router bit with negative spur



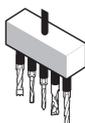
| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 27 | 57,5 | 10 x 27 | 2 | PF06MD AA3 | F03FA02103 |
| 6 | 27 | 57,5 | 10 x 27 | 2 | PF06MD BA3 | F03FA02106 |
| 7 | 27 | 57,5 | 10 x 27 | 2 | PF06MD CA3 | F03FA02109 |
| 8 | 27 | 57,5 | 10 x 27 | 2 | PF06MD DA3 | F03FA02112 |
| 9 | 27 | 57,5 | 10 x 27 | 2 | PF06MD EA3 | F03FA02115 |
| 10 | 27 | 57,5 | 10 x 27 | 2 | PF06MD FA3 | F03FA02117 |
| 12 | 27 | 57,5 | 10 x 27 | 2 | PF06MD GA3 | F03FA02120 |
| 14 | 27 | 57,5 | 10 x 27 | 2 | PF06MD HA3 | F03FA02123 |
| 15 | 27 | 57,5 | 10 x 27 | 2 | PF06MD IA3 | F03FA02125 |
| 16 | 27 | 57,5 | 10 x 27 | 2 | PF06MD KA3 | F03FA02127 |
| 4 | 27 | 57,5 | 10 x 27 | 2 | PF06MD ZA3 | F03FA02132 |
| 5 | 35 | 70 | 10 x 30 | 2 | PF06MD AC3 | F03FA02104 |
| 5 | 44 | 77 | 10 x 30 | 2 | PF06MD AD3 | F03FA02105 |
| 6 | 35 | 70 | 10 x 30 | 2 | PF06MD BC3 | F03FA02107 |
| 6 | 44 | 77 | 10 x 30 | 2 | PF06MD BD3 | F03FA02108 |
| 7 | 35 | 70 | 10 x 30 | 2 | PF06MD CC3 | F03FA02110 |
| 7 | 44 | 77 | 10 x 30 | 2 | PF06MD CD3 | F03FA02111 |
| 8 | 35 | 70 | 10 x 30 | 2 | PF06MD DC3 | F03FA02113 |
| 8 | 44 | 77 | 10 x 30 | 2 | PF06MD DD3 | F03FA02114 |
| 9 | 35 | 70 | 10 x 30 | 2 | PF06MD EC3 | F03FA02116 |
| 10 | 35 | 70 | 10 x 30 | 2 | PF06MD FC3 | F03FA02118 |
| 10 | 44 | 77 | 10 x 30 | 2 | PF06MD FD3 | F03FA02119 |
| 12 | 35 | 70 | 10 x 30 | 2 | PF06MD GC3 | F03FA02121 |
| 12 | 44 | 77 | 10 x 30 | 2 | PF06MD GD3 | F03FA02122 |
| 14 | 35 | 70 | 10 x 30 | 2 | PF06MD HC3 | F03FA02124 |
| 15 | 35 | 70 | 10 x 30 | 2 | PF06MD IC3 | F03FA02126 |
| 16 | 35 | 70 | 10 x 30 | 2 | PF06MD KC3 | F03FA02128 |
| 5 | 27 | 57,5 | 10 x 27 | 2 | PF06MS AA3 | F03FA02135 |
| 6 | 27 | 57,5 | 10 x 27 | 2 | PF06MS BA3 | F03FA02138 |
| 7 | 27 | 57,5 | 10 x 27 | 2 | PF06MS CA3 | F03FA02141 |
| 8 | 27 | 57,5 | 10 x 27 | 2 | PF06MS DA3 | F03FA02144 |
| 9 | 27 | 57,5 | 10 x 27 | 2 | PF06MS EA3 | F03FA02147 |
| 10 | 27 | 57,5 | 10 x 27 | 2 | PF06MS FA3 | F03FA02149 |
| 12 | 27 | 57,5 | 10 x 27 | 2 | PF06MS GA3 | F03FA02152 |
| 14 | 27 | 57,5 | 10 x 27 | 2 | PF06MS HA3 | F03FA02155 |
| 15 | 27 | 57,5 | 10 x 27 | 2 | PF06MS IA3 | F03FA02157 |
| 16 | 27 | 57,5 | 10 x 27 | 2 | PF06MS KA3 | F03FA02159 |
| 4 | 27 | 57,5 | 10 x 27 | 2 | PF06MS ZA3 | F03FA02164 |
| 5 | 35 | 70 | 10 x 30 | 2 | PF06MS AC3 | F03FA02136 |
| 5 | 44 | 77 | 10 x 30 | 2 | PF06MS AD3 | F03FA02137 |
| 6 | 35 | 70 | 10 x 30 | 2 | PF06MS BC3 | F03FA02139 |
| 6 | 44 | 77 | 10 x 30 | 2 | PF06MS BD3 | F03FA02140 |
| 7 | 35 | 70 | 10 x 30 | 2 | PF06MS CC3 | F03FA02142 |
| 7 | 44 | 77 | 10 x 30 | 2 | PF06MS CD3 | F03FA02143 |
| 8 | 35 | 70 | 10 x 30 | 2 | PF06MS DC3 | F03FA02145 |
| 8 | 44 | 77 | 10 x 30 | 2 | PF06MS DD3 | F03FA02146 |
| 9 | 35 | 70 | 10 x 30 | 2 | PF06MS EC3 | F03FA02148 |
| 10 | 35 | 70 | 10 x 30 | 2 | PF06MS FC3 | F03FA02150 |
| 10 | 44 | 77 | 10 x 30 | 2 | PF06MS FD3 | F03FA02151 |
| 12 | 35 | 70 | 10 x 30 | 2 | PF06MS GC3 | F03FA02153 |
| 12 | 44 | 77 | 10 x 30 | 2 | PF06MS GD3 | F03FA02154 |
| 14 | 35 | 70 | 10 x 30 | 2 | PF06MS HC3 | F03FA02156 |
| 15 | 35 | 70 | 10 x 30 | 2 | PF06MS IC3 | F03FA02158 |
| 16 | 35 | 70 | 10 x 30 | 2 | PF06MS KC3 | F03FA02160 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|-------------|------------------|------------|------------|
| | Screw | M5 x 10 | 2602M DC9 | F03FA07350 |



PF07MD PF07MS

Dowel drills for blind holes



Boring Machines



Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF Plywood



Blind Holes

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

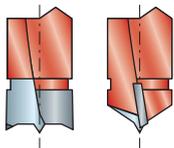
Technical information:

Dowel drills HW tipped with centre point for blind holes.

- Edge geometry to avoid splintering.
- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

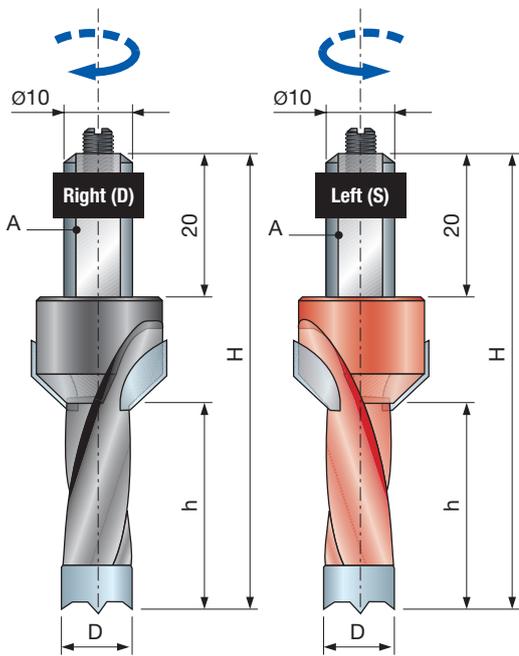
Geometry of the tip

Router bit with negative spur



| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 4 | 27 | 57,5 | 10 x 20 | 2 | PF07MD ZA3 | F03FA02202 |
| 5 | 30 | 57,5 | 10 x 20 | 2 | PF07MD AA3 | F03FA02172 |
| 5 | 43 | 70 | 10 x 20 | 2 | PF07MD AC3 | F03FA02174 |
| 6 | 30 | 57,5 | 10 x 20 | 2 | PF07MD BA3 | F03FA02175 |
| 6 | 43 | 70 | 10 x 20 | 2 | PF07MD BC3 | F03FA02177 |
| 7 | 30 | 57,5 | 10 x 20 | 2 | PF07MD CA3 | F03FA02178 |
| 7 | 43 | 70 | 10 x 20 | 2 | PF07MD CC3 | F03FA02180 |
| 8 | 30 | 57,5 | 10 x 20 | 2 | PF07MD DA3 | F03FA02181 |
| 8 | 43 | 70 | 10 x 20 | 2 | PF07MD DC3 | F03FA02183 |
| 9 | 30 | 57,5 | 10 x 20 | 2 | PF07MD EA3 | F03FA02184 |
| 9 | 43 | 70 | 10 x 20 | 2 | PF07MD EC3 | F03FA02186 |
| 10 | 30 | 57,5 | 10 x 20 | 2 | PF07MD FA3 | F03FA02187 |
| 10 | 43 | 70 | 10 x 20 | 2 | PF07MD FC3 | F03FA02189 |
| 12 | 30 | 57,5 | 10 x 20 | 2 | PF07MD GA3 | F03FA02190 |
| 12 | 43 | 70 | 10 x 20 | 2 | PF07MD GC3 | F03FA02192 |
| 14 | 30 | 57,5 | 10 x 20 | 2 | PF07MD HA3 | F03FA02193 |
| 14 | 43 | 70 | 10 x 20 | 2 | PF07MD HC3 | F03FA02195 |
| 15 | 30 | 57,5 | 10 x 20 | 2 | PF07MD IA3 | F03FA02196 |
| 15 | 43 | 70 | 10 x 20 | 2 | PF07MD IC3 | F03FA02198 |
| 16 | 30 | 57,5 | 10 x 20 | 2 | PF07MD KA3 | F03FA02199 |
| 16 | 43 | 70 | 10 x 20 | 2 | PF07MD KC3 | F03FA02201 |
| 4 | 27 | 57,5 | 10 x 20 | 2 | PF07MS ZA3 | F03FA02235 |
| 5 | 30 | 57,5 | 10 x 20 | 2 | PF07MS AA3 | F03FA02205 |
| 5 | 43 | 70 | 10 x 20 | 2 | PF07MS AC3 | F03FA02207 |
| 6 | 30 | 57,5 | 10 x 20 | 2 | PF07MS BA3 | F03FA02208 |
| 6 | 43 | 70 | 10 x 20 | 2 | PF07MS BC3 | F03FA02210 |
| 7 | 30 | 57,5 | 10 x 20 | 2 | PF07MS CA3 | F03FA02211 |
| 7 | 43 | 70 | 10 x 20 | 2 | PF07MS CC3 | F03FA02213 |
| 8 | 30 | 57,5 | 10 x 20 | 2 | PF07MS DA3 | F03FA02214 |
| 8 | 43 | 70 | 10 x 20 | 2 | PF07MS DC3 | F03FA02216 |
| 9 | 30 | 57,5 | 10 x 20 | 2 | PF07MS EA3 | F03FA02217 |
| 9 | 43 | 70 | 10 x 20 | 2 | PF07MS EC3 | F03FA02219 |
| 10 | 30 | 57,5 | 10 x 20 | 2 | PF07MS FA3 | F03FA02220 |
| 10 | 43 | 70 | 10 x 20 | 2 | PF07MS FC3 | F03FA02222 |
| 12 | 30 | 57,5 | 10 x 20 | 2 | PF07MS GA3 | F03FA02223 |
| 12 | 43 | 70 | 10 x 20 | 2 | PF07MS GC3 | F03FA02225 |
| 14 | 30 | 57,5 | 10 x 20 | 2 | PF07MS HA3 | F03FA02226 |
| 14 | 43 | 70 | 10 x 20 | 2 | PF07MS HC3 | F03FA02228 |
| 15 | 30 | 57,5 | 10 x 20 | 2 | PF07MS IA3 | F03FA02229 |
| 15 | 43 | 70 | 10 x 20 | 2 | PF07MS IC3 | F03FA02231 |
| 16 | 30 | 57,5 | 10 x 20 | 2 | PF07MS KA3 | F03FA02232 |
| 16 | 43 | 70 | 10 x 20 | 2 | PF07MS KC3 | F03FA02234 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------|------------------|------------|------------|
|  | Screw | M5x10 | 2602M DC9 | F03FA07350 |

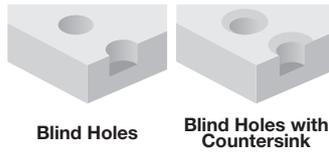


PF08MDC PF08MSC

Dowel drills with countersink - blind holes



Boring Machines



Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

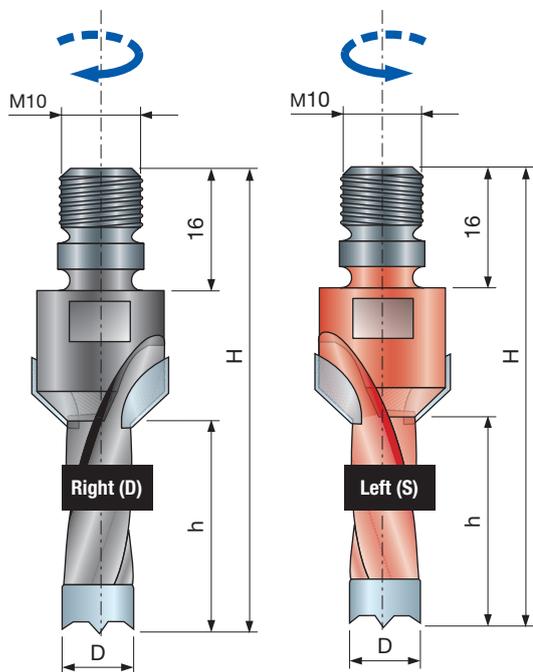
Technical information:

Dowel drills HW tipped with centre point for blind holes with 45° countersink.

- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

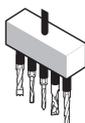
| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 15 | 57,5 | 10 x 20 | 2 | PF08MDCAB3 | F03FA02410 |
| 5 | 20 | 57,5 | 10 x 20 | 2 | PF08MDCAC3 | F03FA02411 |
| 6 | 15 | 57,5 | 10 x 20 | 2 | PF08MDCBB3 | F03FA02412 |
| 6 | 20 | 57,5 | 10 x 20 | 2 | PF08MDCBC3 | F03FA02413 |
| 8 | 15 | 57,5 | 10 x 20 | 2 | PF08MDCCB3 | F03FA02414 |
| 8 | 20 | 57,5 | 10 x 20 | 2 | PF08MDCCC3 | F03FA02415 |
| 10 | 15 | 57,5 | 10 x 20 | 2 | PF08MDCDB3 | F03FA02416 |
| 10 | 20 | 57,5 | 10 x 20 | 2 | PF08MDCDC3 | F03FA02417 |
| 5 | 15 | 57,5 | 10 x 20 | 2 | PF08MSCAB3 | F03FA02503 |
| 5 | 20 | 57,5 | 10 x 20 | 2 | PF08MSCAC3 | F03FA02504 |
| 6 | 15 | 57,5 | 10 x 20 | 2 | PF08MSCBB3 | F03FA02505 |
| 6 | 20 | 57,5 | 10 x 20 | 2 | PF08MSCBC3 | F03FA02506 |
| 8 | 15 | 57,5 | 10 x 20 | 2 | PF08MSCCB3 | F03FA02507 |
| 8 | 20 | 57,5 | 10 x 20 | 2 | PF08MSCCC3 | F03FA02508 |
| 10 | 15 | 57,5 | 10 x 20 | 2 | PF08MSCDB3 | F03FA02509 |
| 10 | 20 | 57,5 | 10 x 20 | 2 | PF08MSCDC3 | F03FA02510 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|---|-------|------------------|------------|------------|
|  | Screw | M5x10 | 2602M DC9 | F03FA07350 |



PF08MDB PF08MSB

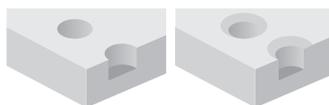
Dowel drills with countersink - blind holes



Boring Machines



Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF Plywood



Blind Holes Blind Holes with Countersink

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

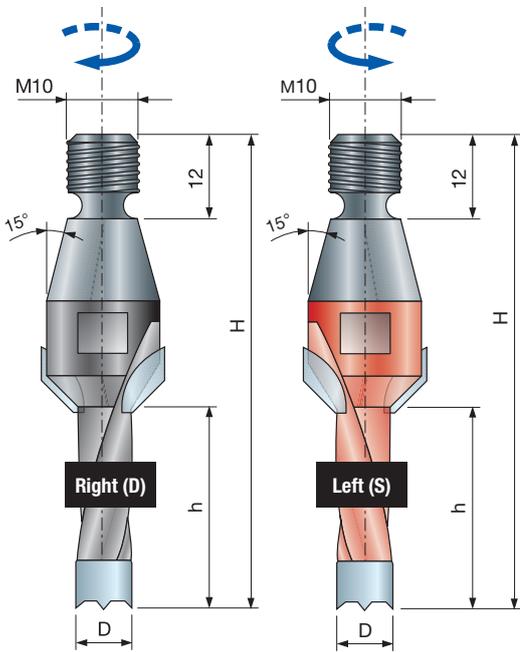
Boring.

Technical information:

Dowel drills HW tipped with centre point for blind holes with 45° countersink.

- M10 threaded shank.

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 30 | 61 | - | 2 | PF08MDBAB3 | F03FA02368 |
| 5 | 40 | 71 | - | 2 | PF08MDBAC3 | F03FA02370 |
| 5 | 50 | 81 | - | 2 | PF08MDBAD3 | F03FA02372 |
| 6 | 30 | 61 | - | 2 | PF08MDBBB3 | F03FA02375 |
| 6 | 40 | 71 | - | 2 | PF08MDBBC3 | F03FA02377 |
| 6 | 50 | 81 | - | 2 | PF08MDBBD3 | F03FA02379 |
| 8 | 30 | 61 | - | 2 | PF08MDBCB3 | F03FA02383 |
| 8 | 40 | 71 | - | 2 | PF08MDBCC3 | F03FA02385 |
| 8 | 50 | 81 | - | 2 | PF08MDBCD3 | F03FA02387 |
| 10 | 30 | 61 | - | 2 | PF08MDBDB3 | F03FA02391 |
| 10 | 40 | 71 | - | 2 | PF08MDBDC3 | F03FA02393 |
| 10 | 50 | 81 | - | 2 | PF08MDBDD3 | F03FA02395 |
| 12 | 30 | 61 | - | 2 | PF08MDBEB3 | F03FA02398 |
| 12 | 40 | 71 | - | 2 | PF08MDBEC3 | F03FA02400 |
| 12 | 50 | 81 | - | 2 | PF08MDBED3 | F03FA02402 |
| 14 | 30 | 61 | - | 2 | PF08MDBFB3 | F03FA02405 |
| 14 | 40 | 71 | - | 2 | PF08MDBFC3 | F03FA02407 |
| 14 | 50 | 81 | - | 2 | PF08MDBFD3 | F03FA02409 |
| 5 | 30 | 61 | - | 2 | PF08MSBAB3 | F03FA02462 |
| 5 | 40 | 71 | - | 2 | PF08MSBAC3 | F03FA02464 |
| 5 | 50 | 81 | - | 2 | PF08MSBAD3 | F03FA02466 |
| 6 | 30 | 61 | - | 2 | PF08MSBBB3 | F03FA02469 |
| 6 | 40 | 71 | - | 2 | PF08MSBBC3 | F03FA02471 |
| 6 | 50 | 81 | - | 2 | PF08MSBBD3 | F03FA02473 |
| 8 | 30 | 61 | - | 2 | PF08MSBCB3 | F03FA02476 |
| 8 | 40 | 71 | - | 2 | PF08MSBCC3 | F03FA02478 |
| 8 | 50 | 81 | - | 2 | PF08MSBCD3 | F03FA02480 |
| 10 | 30 | 61 | - | 2 | PF08MSBDB3 | F03FA02484 |
| 10 | 40 | 71 | - | 2 | PF08MSBDC3 | F03FA02486 |
| 10 | 50 | 81 | - | 2 | PF08MSBDD3 | F03FA02488 |
| 12 | 30 | 61 | - | 2 | PF08MSBEB3 | F03FA02491 |
| 12 | 40 | 71 | - | 2 | PF08MSBEC3 | F03FA02493 |
| 12 | 50 | 81 | - | 2 | PF08MSBED3 | F03FA02495 |
| 14 | 30 | 61 | - | 2 | PF08MSBFB3 | F03FA02498 |
| 14 | 40 | 71 | - | 2 | PF08MSBFC3 | F03FA02500 |
| 14 | 50 | 81 | - | 2 | PF08MSBFD3 | F03FA02502 |

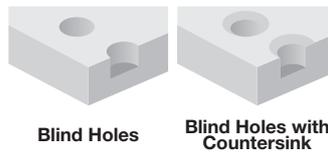


PF08MDA PF08MSA

Dowel drills with countersink - blind holes



Boring Machines



Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

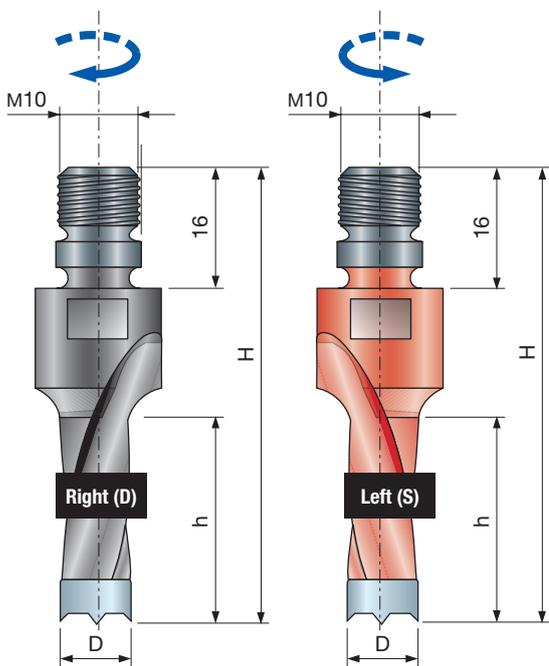
Boring.

Technical information:

Dowel drills HW tipped with centre point for blind holes with 45° countersink.

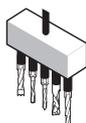
- M10 threaded shank.

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 30 | 67 | - | 2 | PF08MDAAB3 | F03FA02325 |
| 5 | 40 | 77 | - | 2 | PF08MDAAC3 | F03FA02327 |
| 5 | 50 | 87 | - | 2 | PF08MDAAD3 | F03FA02329 |
| 6 | 30 | 67 | - | 2 | PF08MDABB3 | F03FA02332 |
| 6 | 40 | 77 | - | 2 | PF08MDABC3 | F03FA02334 |
| 6 | 50 | 87 | - | 2 | PF08MDABD3 | F03FA02336 |
| 8 | 30 | 67 | - | 2 | PF08MDACB3 | F03FA02340 |
| 8 | 40 | 77 | - | 2 | PF08MDACC3 | F03FA02342 |
| 8 | 50 | 87 | - | 2 | PF08MDACD3 | F03FA02344 |
| 10 | 30 | 67 | - | 2 | PF08MDADB3 | F03FA02347 |
| 10 | 40 | 77 | - | 2 | PF08MDADC3 | F03FA02349 |
| 10 | 50 | 87 | - | 2 | PF08MDADD3 | F03FA02351 |
| 12 | 30 | 67 | - | 2 | PF08MDAEB3 | F03FA02354 |
| 12 | 40 | 77 | - | 2 | PF08MDAEC3 | F03FA02356 |
| 12 | 50 | 87 | - | 2 | PF08MDAED3 | F03FA02358 |
| 14 | 30 | 67 | - | 2 | PF08MDAFB3 | F03FA02361 |
| 14 | 40 | 77 | - | 2 | PF08MDAFC3 | F03FA02363 |
| 14 | 50 | 87 | - | 2 | PF08MDAFD3 | F03FA02365 |
| 5 | 30 | 67 | - | 2 | PF08MSAAB3 | F03FA02420 |
| 5 | 40 | 77 | - | 2 | PF08MSAAC3 | F03FA02422 |
| 5 | 50 | 87 | - | 2 | PF08MSAAD3 | F03FA02424 |
| 6 | 30 | 67 | - | 2 | PF08MSABB3 | F03FA02427 |
| 6 | 40 | 77 | - | 2 | PF08MSABC3 | F03FA02429 |
| 6 | 50 | 87 | - | 2 | PF08MSABD3 | F03FA02431 |
| 8 | 30 | 67 | - | 2 | PF08MSACB3 | F03FA02434 |
| 8 | 40 | 77 | - | 2 | PF08MSACC3 | F03FA02436 |
| 8 | 50 | 87 | - | 2 | PF08MSACD3 | F03FA02438 |
| 10 | 30 | 67 | - | 2 | PF08MSADB3 | F03FA02441 |
| 10 | 40 | 77 | - | 2 | PF08MSADC3 | F03FA02443 |
| 10 | 50 | 87 | - | 2 | PF08MSADD3 | F03FA02445 |
| 12 | 30 | 67 | - | 2 | PF08MSAEB3 | F03FA02448 |
| 12 | 40 | 77 | - | 2 | PF08MSAEC3 | F03FA02450 |
| 12 | 50 | 87 | - | 2 | PF08MSAED3 | F03FA02452 |
| 14 | 30 | 67 | - | 2 | PF08MSAFB3 | F03FA02455 |
| 14 | 40 | 77 | - | 2 | PF08MSAFC3 | F03FA02457 |
| 14 | 50 | 87 | - | 2 | PF08MSAFD3 | F03FA02459 |



PF09MDB PF09MSB

Dowel drills without countersink - blind holes



Boring Machines



Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF Plywood



Blind Holes

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

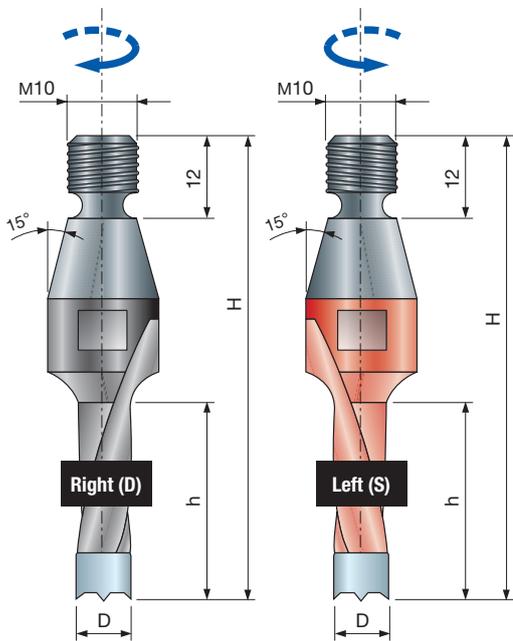
Boring.

Technical information:

Dowel drills HW tipped with centre point for blind holes with round countersink.

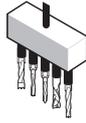
- M10 threaded shank.

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 30 | 61 | - | 2 | PF09MDBAB3 | F03FA02719 |
| 5 | 40 | 71 | - | 2 | PF09MDBAC3 | F03FA02720 |
| 5 | 50 | 81 | - | 2 | PF09MDBAD3 | F03FA02721 |
| 6 | 30 | 61 | - | 2 | PF09MDBBB3 | F03FA02722 |
| 6 | 40 | 71 | - | 2 | PF09MDBBC3 | F03FA02723 |
| 6 | 50 | 81 | - | 2 | PF09MDBBD3 | F03FA02724 |
| 8 | 30 | 61 | - | 2 | PF09MDBCB3 | F03FA02726 |
| 8 | 40 | 71 | - | 2 | PF09MDBCC3 | F03FA02727 |
| 8 | 50 | 81 | - | 2 | PF09MDBCD3 | F03FA02728 |
| 10 | 30 | 61 | - | 2 | PF09MDBDB3 | F03FA02730 |
| 10 | 40 | 71 | - | 2 | PF09MDBDC3 | F03FA02731 |
| 10 | 50 | 81 | - | 2 | PF09MDBDD3 | F03FA02732 |
| 12 | 30 | 61 | - | 2 | PF09MDBEB3 | F03FA02734 |
| 12 | 40 | 71 | - | 2 | PF09MDBEC3 | F03FA02735 |
| 12 | 50 | 81 | - | 2 | PF09MDBED3 | F03FA02736 |
| 14 | 30 | 61 | - | 2 | PF09MDBFB3 | F03FA02737 |
| 14 | 40 | 71 | - | 2 | PF09MDBFC3 | F03FA02738 |
| 14 | 50 | 81 | - | 2 | PF09MDBFD3 | F03FA02739 |
| 5 | 30 | 61 | - | 2 | PF09MSBAB3 | F03FA02758 |
| 5 | 40 | 71 | - | 2 | PF09MSBAC3 | F03FA02759 |
| 5 | 50 | 81 | - | 2 | PF09MSBAD3 | F03FA02760 |
| 6 | 30 | 61 | - | 2 | PF09MSBBB3 | F03FA02761 |
| 6 | 40 | 71 | - | 2 | PF09MSBBC3 | F03FA02762 |
| 6 | 50 | 81 | - | 2 | PF09MSBBD3 | F03FA02763 |
| 8 | 30 | 61 | - | 2 | PF09MSBCB3 | F03FA02765 |
| 8 | 40 | 71 | - | 2 | PF09MSBCC3 | F03FA02766 |
| 8 | 50 | 81 | - | 2 | PF09MSBCD3 | F03FA02767 |
| 10 | 30 | 61 | - | 2 | PF09MSBDB3 | F03FA02769 |
| 10 | 40 | 71 | - | 2 | PF09MSBDC3 | F03FA02770 |
| 10 | 50 | 81 | - | 2 | PF09MSBDD3 | F03FA02771 |
| 12 | 30 | 61 | - | 2 | PF09MSBEB3 | F03FA02773 |
| 12 | 40 | 71 | - | 2 | PF09MSBEC3 | F03FA02774 |
| 12 | 50 | 81 | - | 2 | PF09MSBED3 | F03FA02775 |
| 14 | 30 | 61 | - | 2 | PF09MSBFB3 | F03FA02776 |
| 14 | 40 | 71 | - | 2 | PF09MSBFC3 | F03FA02777 |
| 14 | 50 | 81 | - | 2 | PF09MSBFD3 | F03FA02778 |



PF09MDA PF09MSA

Dowel drills without countersink - blind holes



Boring Machines



Blind Holes

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

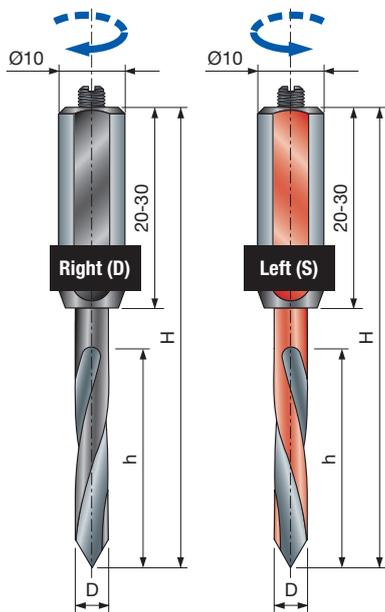
Boring.

Technical information:

Dowel drills HW tipped with centre point for blind holes with round countersink.

- M10 threaded shank.

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 30 | 67 | - | 2 | PF09MDAAB3 | F03FA02701 |
| 5 | 40 | 77 | - | 2 | PF09MDAAC3 | F03FA02702 |
| 5 | 50 | 87 | - | 2 | PF09MDAAD3 | F03FA02703 |
| 6 | 30 | 67 | - | 2 | PF09MDABB3 | F03FA02704 |
| 6 | 40 | 77 | - | 2 | PF09MDABC3 | F03FA02705 |
| 6 | 50 | 87 | - | 2 | PF09MDABD3 | F03FA02706 |
| 8 | 30 | 67 | - | 2 | PF09MDACB3 | F03FA02707 |
| 8 | 40 | 77 | - | 2 | PF09MDACC3 | F03FA02708 |
| 8 | 50 | 87 | - | 2 | PF09MDACD3 | F03FA02709 |
| 10 | 30 | 67 | - | 2 | PF09MDADB3 | F03FA02710 |
| 10 | 40 | 77 | - | 2 | PF09MDADC3 | F03FA02711 |
| 10 | 50 | 87 | - | 2 | PF09MDADD3 | F03FA02712 |
| 12 | 30 | 67 | - | 2 | PF09MDAEB3 | F03FA02713 |
| 12 | 40 | 77 | - | 2 | PF09MDAEC3 | F03FA02714 |
| 12 | 50 | 87 | - | 2 | PF09MDAED3 | F03FA02715 |
| 14 | 30 | 67 | - | 2 | PF09MDAFB3 | F03FA02716 |
| 14 | 40 | 77 | - | 2 | PF09MDAFC3 | F03FA02717 |
| 14 | 50 | 87 | - | 2 | PF09MDAFD3 | F03FA02718 |
| 5 | 30 | 67 | - | 2 | PF09MSAAB3 | F03FA02740 |
| 5 | 40 | 77 | - | 2 | PF09MSAAC3 | F03FA02741 |
| 5 | 50 | 87 | - | 2 | PF09MSAAD3 | F03FA02742 |
| 6 | 30 | 67 | - | 2 | PF09MSABB3 | F03FA02743 |
| 6 | 40 | 77 | - | 2 | PF09MSABC3 | F03FA02744 |
| 6 | 50 | 87 | - | 2 | PF09MSABD3 | F03FA02745 |
| 8 | 30 | 67 | - | 2 | PF09MSACB3 | F03FA02746 |
| 8 | 40 | 77 | - | 2 | PF09MSACC3 | F03FA02747 |
| 8 | 50 | 87 | - | 2 | PF09MSACD3 | F03FA02748 |
| 10 | 30 | 67 | - | 2 | PF09MSADB3 | F03FA02749 |
| 10 | 40 | 77 | - | 2 | PF09MSADC3 | F03FA02750 |
| 10 | 50 | 87 | - | 2 | PF09MSADD3 | F03FA02751 |
| 12 | 30 | 67 | - | 2 | PF09MSAEB3 | F03FA02752 |
| 12 | 40 | 77 | - | 2 | PF09MSAEC3 | F03FA02753 |
| 12 | 50 | 87 | - | 2 | PF09MSAED3 | F03FA02754 |
| 14 | 30 | 67 | - | 2 | PF09MSAFB3 | F03FA02755 |
| 14 | 40 | 77 | - | 2 | PF09MSAFC3 | F03FA02756 |
| 14 | 50 | 87 | - | 2 | PF09MSAFD3 | F03FA02757 |



PF33MD PF33MS

Solid Carbide through holes drills



Boring Machines



Through Holes

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

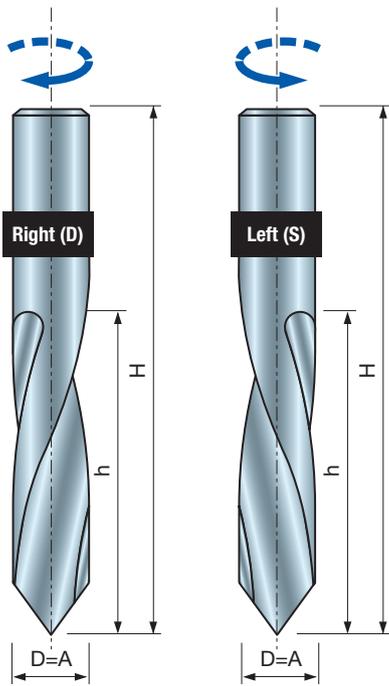
Technical information:

Solid Carbide drills suitable for through holes.

- Bit in HW and cylindrical steel shank with M5 x 10 mm adjusting screw.

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 3 | 20 | 70 | 10 x 40 | 2 | PF33MD VC3 | F03FA13215 |
| 4 | 27 | 70 | 10 x 30 | 2 | PF33MD ZC3 | F03FA03025 |
| 5 | 35 | 70 | 10 x 30 | 2 | PF33MD AC3 | F03FA03022 |
| 6 | 35 | 70 | 10 x 30 | 2 | PF33MD BC3 | F03FA03023 |
| 8 | 35 | 70 | 10 x 20 | 2 | PF33MD DC3 | F03FA03024 |
| 3 | 20 | 70 | 10 x 40 | 2 | PF33MS VC3 | F03FA13216 |
| 4 | 27 | 70 | 10 x 30 | 2 | PF33MS ZC3 | F03FA03030 |
| 5 | 35 | 70 | 10 x 30 | 2 | PF33MS AC3 | F03FA03027 |
| 6 | 35 | 70 | 10 x 30 | 2 | PF33MS BC3 | F03FA03028 |
| 8 | 35 | 70 | 10 x 20 | 2 | PF33MS DC3 | F03FA03029 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|---|-------|------------------|------------|------------|
|  | Screw | M5 x 10 | 2602M DC9 | F03FA07350 |



Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

Technical information:

Solid Carbide drills in HW suitable for through holes.

**PF31MD
PF31MS**

**Solid Carbide
multipurpose drills**



Boring Machines



Softwood

Hardwood

Chipboard

Laminated
Chipboard

MDF

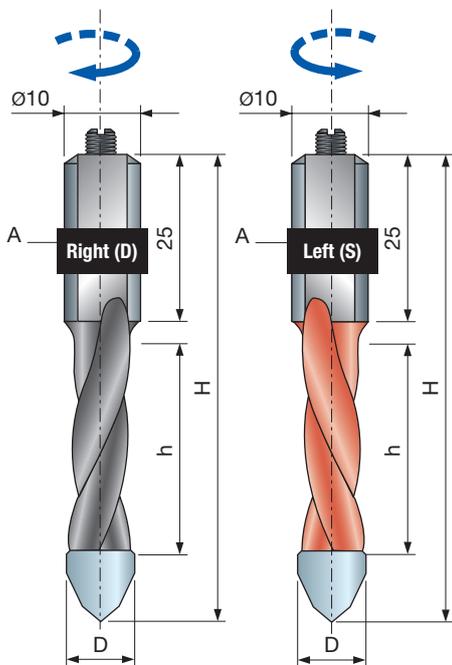
Laminated
MDF

Plywood



Through Holes

| D | h | H | A | Z | Freud Code | Art. No. |
|----|----|----|----|---|-------------------|------------|
| mm | mm | mm | mm | | | |
| 10 | 43 | 70 | 10 | 2 | PF31MD FC3 | F03FR00355 |
| 10 | 43 | 70 | 10 | 2 | PF31MS FC3 | F03FR00356 |



Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

Technical information:

Through holes drills HW tipped.

- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

**PF05MD
PF05MS**

Through holes drills



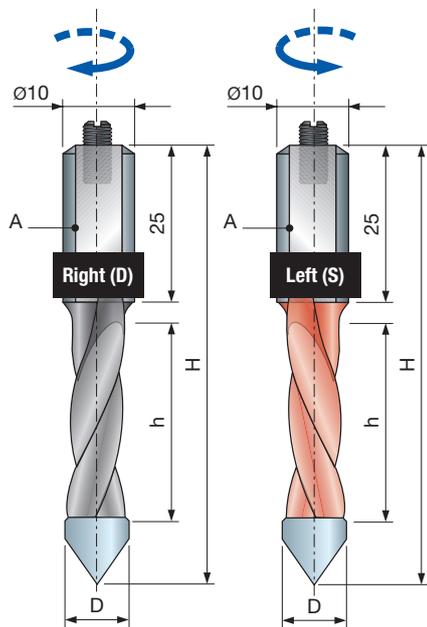
Boring Machines



Through Holes

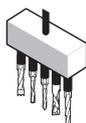
| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 22 | 57,5 | 10 x 25 | 2 | PF05MD AA3 | F03FA02087 |
| 5 | 35 | 70 | 10 x 25 | 2 | PF05MD AC3 | F03FA02088 |
| 6 | 22 | 57,5 | 10 x 25 | 2 | PF05MD BA3 | F03FA02089 |
| 6 | 35 | 70 | 10 x 25 | 2 | PF05MD BC3 | F03FA02090 |
| 8 | 22 | 57,5 | 10 x 25 | 2 | PF05MD DA3 | F03FA02091 |
| 8 | 35 | 70 | 10 x 25 | 2 | PF05MD DC3 | F03FA02092 |
| 10 | 22 | 57,5 | 10 x 25 | 2 | PF05MD FA3 | F03FA02093 |
| 10 | 35 | 70 | 10 x 25 | 2 | PF05MD FC3 | F03FA02094 |
| 5 | 22 | 57,5 | 10 x 25 | 2 | PF05MS AA3 | F03FA02095 |
| 5 | 35 | 70 | 10 x 25 | 2 | PF05MS AC3 | F03FA02096 |
| 6 | 22 | 57,5 | 10 x 25 | 2 | PF05MS BA3 | F03FA02097 |
| 6 | 35 | 70 | 10 x 25 | 2 | PF05MS BC3 | F03FA02098 |
| 8 | 22 | 57,5 | 10 x 25 | 2 | PF05MS DA3 | F03FA02099 |
| 8 | 35 | 70 | 10 x 25 | 2 | PF05MS DC3 | F03FA02100 |
| 10 | 22 | 57,5 | 10 x 25 | 2 | PF05MS FA3 | F03FA02101 |
| 10 | 35 | 70 | 10 x 25 | 2 | PF05MS FC3 | F03FA02102 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------|------------------|------------|------------|
| Screw | M5 x 10 | 2602M DC9 | F03FA07350 |



PF10MD PF10MS

Through holes drills



Boring Machines



Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF Plywood



Through Holes

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

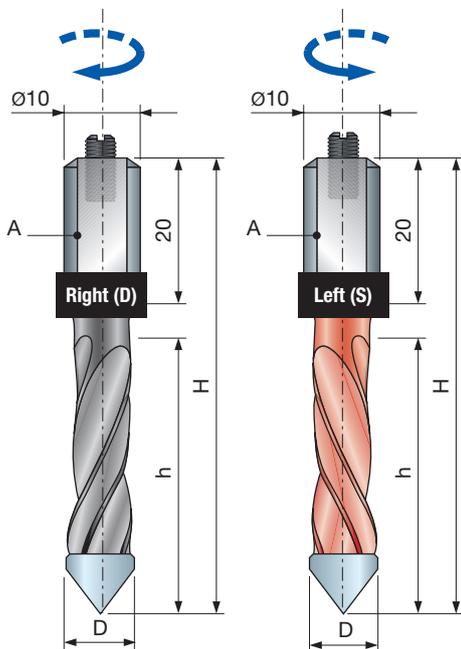
Technical information:

Through holes drills HW tipped.

- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 4 | 22 | 57,5 | 10 x 25 | 2 | PF10MD ZA3 | F03FA02928 |
| 5 | 22 | 57,5 | 10 x 25 | 2 | PF10MD AA3 | F03FA02911 |
| 5 | 35 | 70 | 10 x 25 | 2 | PF10MD AC3 | F03FA02913 |
| 6 | 22 | 57,5 | 10 x 25 | 2 | PF10MD BA3 | F03FA02914 |
| 6 | 35 | 70 | 10 x 25 | 2 | PF10MD BC3 | F03FA02916 |
| 7 | 22 | 57,5 | 10 x 25 | 2 | PF10MD CA3 | F03FA02917 |
| 7 | 35 | 70 | 10 x 25 | 2 | PF10MD CC3 | F03FA02919 |
| 8 | 22 | 57,5 | 10 x 25 | 2 | PF10MD DA3 | F03FA02920 |
| 8 | 35 | 70 | 10 x 25 | 2 | PF10MD DC3 | F03FA02922 |
| 10 | 22 | 57,5 | 10 x 25 | 2 | PF10MD EA3 | F03FA02923 |
| 10 | 35 | 70 | 10 x 25 | 2 | PF10MD EC3 | F03FA02925 |
| 12 | 22 | 57,5 | 10 x 25 | 2 | PF10MD GA3 | F03FA02926 |
| 12 | 35 | 70 | 10 x 25 | 2 | PF10MD GC3 | F03FA02927 |
| 4 | 22 | 57,5 | 10 x 25 | 2 | PF10MS ZA3 | F03FA02947 |
| 5 | 22 | 57,5 | 10 x 25 | 2 | PF10MS AA3 | F03FA02930 |
| 5 | 35 | 70 | 10 x 25 | 2 | PF10MS AC3 | F03FA02932 |
| 6 | 22 | 57,5 | 10 x 25 | 2 | PF10MS BA3 | F03FA02933 |
| 6 | 35 | 70 | 10 x 25 | 2 | PF10MS BC3 | F03FA02935 |
| 7 | 22 | 57,5 | 10 x 25 | 2 | PF10MS CA3 | F03FA02936 |
| 7 | 35 | 70 | 10 x 25 | 2 | PF10MS CC3 | F03FA02938 |
| 8 | 22 | 57,5 | 10 x 25 | 2 | PF10MS DA3 | F03FA02939 |
| 8 | 35 | 70 | 10 x 25 | 2 | PF10MS DC3 | F03FA02941 |
| 10 | 22 | 57,5 | 10 x 25 | 2 | PF10MS EA3 | F03FA02942 |
| 10 | 35 | 70 | 10 x 25 | 2 | PF10MS EC3 | F03FA02944 |
| 12 | 22 | 57,5 | 10 x 25 | 2 | PF10MS GA3 | F03FA02945 |
| 12 | 35 | 70 | 10 x 25 | 2 | PF10MS GC3 | F03FA02946 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------|------------------|------------|------------|
|  | Screw | M5 x 10 | 2602M DC9 | F03FA07350 |



Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

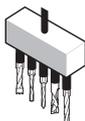
Technical information:

Through holes drills HW tipped.

- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

**PF11MD
PF11MS**

Through holes drills



Boring Machines



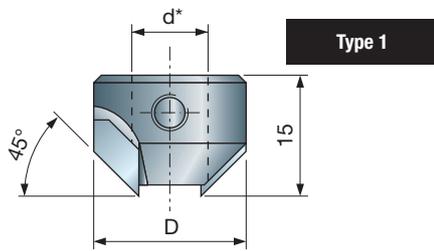
Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF Plywood



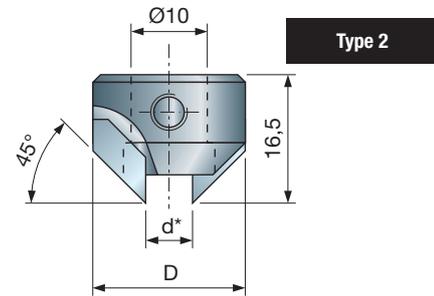
Through Holes

| D mm | h mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|---------|---|------------|------------|
| 5 | 27 | 57,5 | 10 x 20 | 2 | PF11MD AA3 | F03FA02977 |
| 5 | 40 | 70 | 10 x 20 | 2 | PF11MD AC3 | F03FA02979 |
| 6 | 27 | 57,5 | 10 x 20 | 2 | PF11MD BA3 | F03FA02980 |
| 6 | 40 | 70 | 10 x 20 | 2 | PF11MD BC3 | F03FA02982 |
| 8 | 27 | 57,5 | 10 x 20 | 2 | PF11MD DA3 | F03FA02984 |
| 8 | 40 | 70 | 10 x 20 | 2 | PF11MD DC3 | F03FA02986 |
| 10 | 27 | 57,5 | 10 x 20 | 2 | PF11MD FA3 | F03FA02987 |
| 10 | 40 | 70 | 10 x 20 | 2 | PF11MD FC3 | F03FA02989 |
| 12 | 27 | 57,5 | 10 x 20 | 2 | PF11MD GA3 | F03FA02990 |
| 12 | 40 | 70 | 10 x 20 | 2 | PF11MD GC3 | F03FA02992 |
| 5 | 27 | 57,5 | 10 x 20 | 2 | PF11MS AA3 | F03FA02993 |
| 5 | 40 | 70 | 10 x 20 | 2 | PF11MS AC3 | F03FA02995 |
| 6 | 27 | 57,5 | 10 x 20 | 2 | PF11MS BA3 | F03FA02996 |
| 6 | 40 | 70 | 10 x 20 | 2 | PF11MS BC3 | F03FA02998 |
| 8 | 27 | 57,5 | 10 x 20 | 2 | PF11MS DA3 | F03FA03000 |
| 8 | 40 | 70 | 10 x 20 | 2 | PF11MS DC3 | F03FA03002 |
| 10 | 27 | 57,5 | 10 x 20 | 2 | PF11MS FA3 | F03FA03003 |
| 10 | 40 | 70 | 10 x 20 | 2 | PF11MS FC3 | F03FA03005 |
| 12 | 27 | 57,5 | 10 x 20 | 2 | PF11MS GA3 | F03FA03006 |
| 12 | 40 | 70 | 10 x 20 | 2 | PF11MS GC3 | F03FA03008 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|------------------|------------|------------|
|  Screw | M5 x 10 | 2602M DC9 | F03FA07350 |



Type 1



Type 2

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

Technical information:

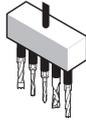
Countersink cutters HW tipped with side fixing screw.

*Type 1 suitable for **PF11M** and **PF07M** to fix on bits helix.

*Type 2 suitable for **PF10M** and **PF06M** to fix on bits shank.

**SV05MD
SV05MS**

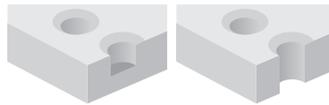
**Carbide loose
countersink cutters**



Boring Machines



Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF Plywood



Blind Holes with Countersink

Through Holes with Countersink

| D mm | d* mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|----------|---------|---------|---|-------------------|------------|
| 14 | 4 | 15 | type 1 | 2 | SV05MD ZA3 | F03FA03901 |
| 16 | 5 | 15 | type 1 | 2 | SV05MD AA3 | F03FA03890 |
| 16 | 6 | 15 | type 1 | 2 | SV05MD BA3 | F03FA03891 |
| 18 | 7 | 15 | type 1 | 2 | SV05MD CA3 | F03FA03892 |
| 18 | 8 | 15 | type 1 | 2 | SV05MD DA3 | F03FA03893 |
| 20 | 9 | 15 | type 1 | 2 | SV05MD EA3 | F03FA03894 |
| 20 | 10 | 15 | type 1 | 2 | SV05MD FA3 | F03FA03895 |
| 22 | 12 | 15 | type 1 | 2 | SV05MD GA3 | F03FA03896 |
| 24 | 14 | 15 | type 1 | 2 | SV05MD HA3 | F03FA03897 |
| 20 | 5÷10 | 16,5 | type 2 | 2 | SV05MD TA3 | F03FA03899 |
| 22 | 11÷12 | 16,5 | type 2 | 2 | SV05MD TB3 | F03FA03900 |
| 14 | 4 | 15 | type 1 | 2 | SV05MS ZA3 | F03FA03914 |
| 16 | 5 | 15 | type 1 | 2 | SV05MS AA3 | F03FA03902 |
| 16 | 6 | 15 | type 1 | 2 | SV05MS BA3 | F03FA03903 |
| 18 | 7 | 15 | type 1 | 2 | SV05MS CA3 | F03FA03904 |
| 18 | 8 | 15 | type 1 | 2 | SV05MS DA3 | F03FA03905 |
| 20 | 9 | 15 | type 1 | 2 | SV05MS EA3 | F03FA03906 |
| 20 | 10 | 15 | type 1 | 2 | SV05MS FA3 | F03FA03908 |
| 22 | 12 | 15 | type 1 | 2 | SV05MS GA3 | F03FA03909 |
| 24 | 14 | 15 | type 1 | 2 | SV05MS HA3 | F03FA03910 |
| 20 | 5÷10 | 16,5 | type 2 | 2 | SV05MS TA3 | F03FA03912 |
| 22 | 11÷12 | 16,5 | type 2 | 2 | SV05MS TB3 | F03FA03913 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------|------------------|------------------|------------|
|  | Screw | M5 x 5 | 2615M CC9 | F03FA07420 |
|  | Screw | M6 x 6 | 2615M DD9 | F03FA07423 |

PC04MD PC04MS

Carbide boring bits for hinges



Boring Machines



Softwood



Hardwood



Laminated Chipboard



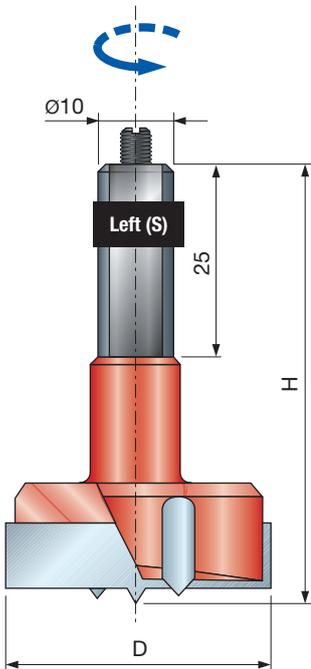
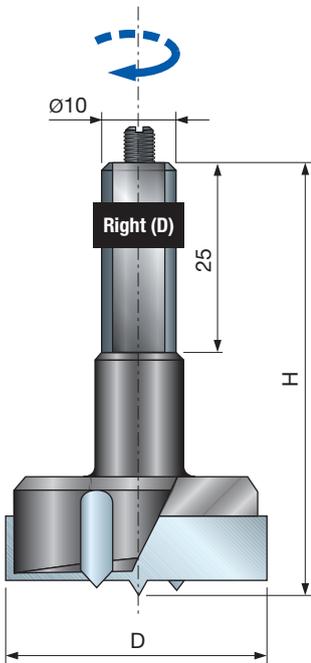
Laminated MDF



Blind Holes



Hinge Pockets



Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

Technical information:

Boring bits HW tipped suitable for hinges.

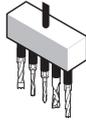
- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

| D mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|-----|------------|------------|
| 12 | 57,5 | 10 x 25 | 2+2 | PC04MD 123 | F03FA01782 |
| 14 | 57,5 | 10 x 25 | 2+2 | PC04MD 143 | F03FA01783 |
| 15 | 57,5 | 10 x 25 | 2+2 | PC04MD 153 | F03FA01784 |
| 16 | 57,5 | 10 x 25 | 2+2 | PC04MD 163 | F03FA01785 |
| 18 | 57,5 | 10 x 25 | 2+2 | PC04MD 183 | F03FA01786 |
| 20 | 57,5 | 10 x 25 | 2+2 | PC04MD 203 | F03FA01787 |
| 22 | 57,5 | 10 x 25 | 2+2 | PC04MD 223 | F03FA01788 |
| 25 | 57,5 | 10 x 25 | 2+2 | PC04MD 253 | F03FA01789 |
| 26 | 57,5 | 10 x 25 | 2+2 | PC04MD 263 | F03FA01790 |
| 30 | 57,5 | 10 x 25 | 2+2 | PC04MD 303 | F03FA01791 |
| 35 | 57,5 | 10 x 25 | 2+2 | PC04MD 353 | F03FA01792 |
| 38 | 57,5 | 10 x 25 | 2+2 | PC04MD 383 | F03FA01793 |
| 40 | 57,5 | 10 x 25 | 2+2 | PC04MD 403 | F03FA01794 |
| 50 | 57,5 | 10 x 25 | 2+2 | PC04MD 503 | F03FA01795 |
| 60 | 57,5 | 10 x 25 | 2+2 | PC04MD 603 | F03FA13297 |
| 12 | 57,5 | 10 x 25 | 2+2 | PC04MS 123 | F03FA01796 |
| 14 | 57,5 | 10 x 25 | 2+2 | PC04MS 143 | F03FA01797 |
| 15 | 57,5 | 10 x 25 | 2+2 | PC04MS 153 | F03FA01798 |
| 16 | 57,5 | 10 x 25 | 2+2 | PC04MS 163 | F03FA01799 |
| 18 | 57,5 | 10 x 25 | 2+2 | PC04MS 183 | F03FA01800 |
| 20 | 57,5 | 10 x 25 | 2+2 | PC04MS 203 | F03FA01801 |
| 22 | 57,5 | 10 x 25 | 2+2 | PC04MS 223 | F03FA01802 |
| 25 | 57,5 | 10 x 25 | 2+2 | PC04MS 253 | F03FA01803 |
| 26 | 57,5 | 10 x 25 | 2+2 | PC04MS 263 | F03FA01804 |
| 30 | 57,5 | 10 x 25 | 2+2 | PC04MS 303 | F03FA01805 |
| 35 | 57,5 | 10 x 25 | 2+2 | PC04MS 353 | F03FA01806 |
| 38 | 57,5 | 10 x 25 | 2+2 | PC04MS 383 | F03FA01807 |
| 40 | 57,5 | 10 x 25 | 2+2 | PC04MS 403 | F03FA01808 |
| 50 | 57,5 | 10 x 25 | 2+2 | PC04MS 503 | F03FA13296 |
| 60 | 57,5 | 10 x 25 | 2+2 | PC04MS 603 | F03FA13298 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------|------------------|------------|------------|
|  | Screw | M5 x 10 | 2602M DC9 | F03FA07350 |

PC05MD PC05MS

Carbide boring bits for hinges



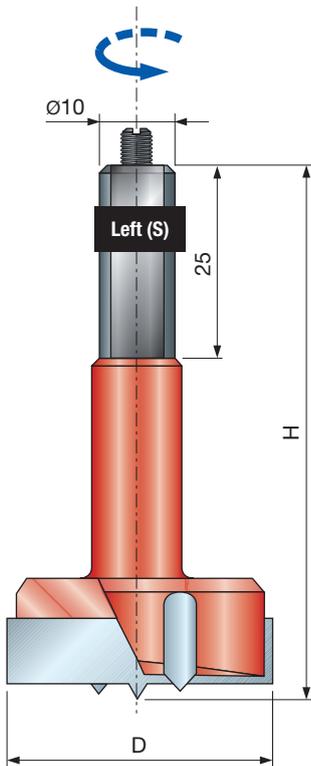
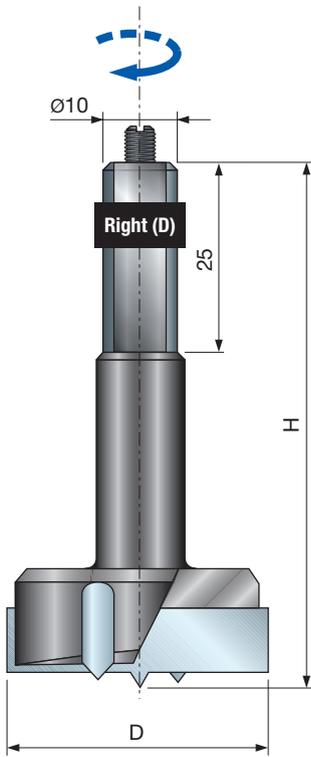
Boring Machines



Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF Plywood



Blind Holes Hinge Pockets



| D mm | H mm | A mm | Z | Freud Code | Art. No. |
|---------|---------|---------|-----|------------|------------|
| 12 | 70 | 10 x 25 | 2+2 | PC05MD 123 | F03FA01809 |
| 14 | 70 | 10 x 25 | 2+2 | PC05MD 143 | F03FA01810 |
| 15 | 70 | 10 x 25 | 2+2 | PC05MD 153 | F03FA01811 |
| 16 | 70 | 10 x 25 | 2+2 | PC05MD 163 | F03FA01812 |
| 18 | 70 | 10 x 25 | 2+2 | PC05MD 183 | F03FA01813 |
| 20 | 70 | 10 x 25 | 2+2 | PC05MD 203 | F03FA01814 |
| 22 | 70 | 10 x 25 | 2+2 | PC05MD 223 | F03FA01815 |
| 25 | 70 | 10 x 25 | 2+2 | PC05MD 253 | F03FA01816 |
| 26 | 70 | 10 x 25 | 2+2 | PC05MD 263 | F03FA01817 |
| 30 | 70 | 10 x 25 | 2+2 | PC05MD 303 | F03FA01818 |
| 35 | 70 | 10 x 25 | 2+2 | PC05MD 353 | F03FA01819 |
| 38 | 70 | 10 x 25 | 2+2 | PC05MD 383 | F03FA01820 |
| 40 | 70 | 10 x 25 | 2+2 | PC05MD 403 | F03FA01821 |
| 12 | 70 | 10 x 25 | 2+2 | PC05MS 123 | F03FA01822 |
| 14 | 70 | 10 x 25 | 2+2 | PC05MS 143 | F03FA01823 |
| 15 | 70 | 10 x 25 | 2+2 | PC05MS 153 | F03FA01824 |
| 16 | 70 | 10 x 25 | 2+2 | PC05MS 163 | F03FA01825 |
| 18 | 70 | 10 x 25 | 2+2 | PC05MS 183 | F03FA01826 |
| 20 | 70 | 10 x 25 | 2+2 | PC05MS 203 | F03FA01827 |
| 22 | 70 | 10 x 25 | 2+2 | PC05MS 223 | F03FA01828 |
| 25 | 70 | 10 x 25 | 2+2 | PC05MS 253 | F03FA01829 |
| 26 | 70 | 10 x 25 | 2+2 | PC05MS 263 | F03FA01830 |
| 30 | 70 | 10 x 25 | 2+2 | PC05MS 303 | F03FA01831 |
| 35 | 70 | 10 x 25 | 2+2 | PC05MS 353 | F03FA01832 |
| 38 | 70 | 10 x 25 | 2+2 | PC05MS 383 | F03FA01833 |
| 40 | 70 | 10 x 25 | 2+2 | PC05MS 403 | F03FA01834 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------|------------------|------------|------------|
| Screw | M5 x 10 | 2602M DC9 | F03FA07350 |

Machines:

CNC, boring and multi boring machines.

Materials:

Softwood, hardwood, wood based panels and MDF.

Applications:

Boring.

Technical information:

Boring bits HW tipped suitable for hinges.

- 10 mm cylindrical shank with M5 x 10 mm adjusting screw.

TOOLS

Tools shall be used only by persons of training and experience who have knowledge of how to use and handle tools.

The maximum rotational speed marked on the tool shall not be exceeded.

One piece tool with visible cracks shall not be used.

Clamping surfaces shall be cleaned to remove dirt, grease, oil and water.

Resin shall only be removed from light alloys with solvents that do not affect the mechanical characteristics of these materials.

Tools and tool bodies shall be clamped in such a way, that they shall not loosen during operation.

Tools with cylindrical shank must be clamped in a way that the mark of the maximum free shank length shall be covered, at least partially, by the clamping device or by the locking collet.

Care shall be taken of mounting tools to ensure that the clamping is by the hub respectively by the clamping surface of the tool and that the cutting edges are not in contact with each other or with the clamping elements.

Fastening screws and nuts shall be tightened using the appropriate spanners etc. and to the torque value provided by the manufacturer. Extension of the spanner or tightening using hammer blows shall not be permitted.

Clamping screws shall be tightened according to instructions provided, by the manufacturer. Where instructions are not provided clamping screws shall be tightened in sequence from the centre outwards.

Use of fixed rings, e. g. pressed or held by adhesive fixing, in flanged sleeves, shall be permitted if made to the manufacturers specifications.

Repair and regrinding of tools shall only be allowed according to the tool manufacturer's instructions.

After repair and regrinding of tools it shall be ensured that the tools observe balancing requirements.

The design of composite (tipped) tools, shall not be changed in the process of repair.

Composite tools shall be repaired by a competent person, i.e. a person of training and experience, who has knowledge of the design requirements and understands the level of safety to be achieved. Repair shall therefore include, e.g. use of spare parts which are in accordance with the specification of the original parts provided by the manufacturer.

Tolerances which ensure correct clamping shall be maintained.

For one piece tools care shall be taken that regrinding of the cutting edge will not cause weakening of the hub and the connection of the cutting edge to the hub.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer. Typically, safe handling involves the use of devices such as carrying hooks, proprietary handles, frames (e. g. for circular saw blades), boxes, trolleys etc.

The wearing of protective gloves improves the grip on the tool and further reduces the risk of injury.

Maintenance and modification of milling tools and related components and circular saw blades should always be in accordance with the design requirements/the manufacturer's instructions.

Maintenance and modification of milling tools and circular saw blades should only be carried out by a competent person, i. e. a person of training and experience, who has knowledge of the design requirements and understand levels of safety to be achieved.

When regrinding milling tools and circular saw blades, the minimum requirements of cutting blade thickness and cutting blade projection should be observed.

Composite tools should be repaired by persons experienced in and with understanding of design and use of milling tools for processing wood and similar materials, e.g. an expert with a relevant education and knowledge of the brazing process, including in particular the influence of the brazing process on tension in tool body and cutting material.

When brazing off worn tips and subsequently brazing on new tips it should be made sure that the tip is correctly mounted in the tool body and that the process does not result in critical tension in the tool body. After any type of maintenance, milling tools marked with MAN should

continue to observe the requirements of the standards related to tools for hand feed.

When modifying milling tools, e. g. modification of bore diameter, modification of shank, retipping of composite tools and similar, it should be ensured that the requirements of the standard relating to balancing are still observed.

After being modified and/or retipped, milling tools and circular saw blades should be marked according to the rules applying to new tools. However, the name/logo of the company making the modification/retipping should be added.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer.

Tools which weigh more than 15 kg may require the use of special handling devices or attachments, these will depend on the features that the manufacturer has designed into the tool to allow easy handling. The manufacturer can advise on the availability of necessary devices.

CLAMPING DEVICES

The speeds indicated on the clamping device and the tool to be clamped should be compared. For adjusting the speed on the machine the lower speed should be applied.

Screws and nuts should be tightened using the appropriate spanners; Clamping surfaces should be cleaned to remove dirt, grease, oil and water.

Clamping devices and tools should be mounted or clamped according to given torques, pressures and wrenches to be used; extension of spanners or tightening or loosening by means of hammer blows should not be permitted.

Maximum tool diameters and tool lengths should not be exceeded; Shank diameters must be in accordance with the clamping range of the clamping devices.

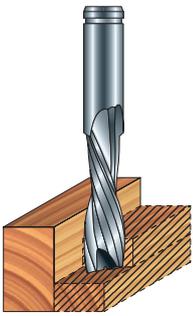
The minimum required clamping length must be kept.

Care should be taken that the data relevant to the safety of the clamped tool are always stored in the data medium.

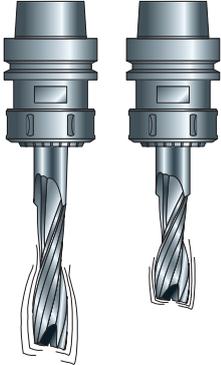
Repairs should only be carried out by a competent person, i.e. a person with professional training and experience, who has knowledge of the design, construction and safety requirements.

Repair should therefore include the use of spare parts which are in compliance with the specifications of the original parts.

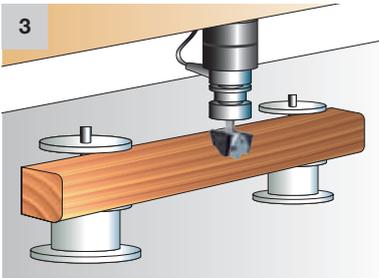
1



2



3

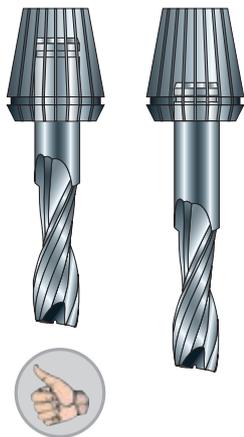


ADVICE FOR CORRECT USE

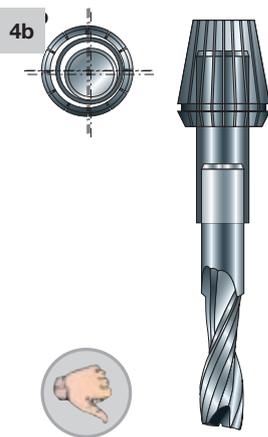
To reduce vibrations from the router bit, which can compromise the finish and cause damages to both the tool and the workpiece, it is necessary to respect the following conditions:

- For large removals, carry out more passes or proceed with a feedrate and RPM rate in proportion to the depth of cut (Fig. 1).
- A router bit with a shorter cutting height vibrates less than a router bit with the same diameter but with a longer cutting height (Fig. 2).
- Control your machine regularly (especially guides and ball bearings), making sure that there are no eccentricity problems, so as to avoid the arbor from vibrating hazardously.
- Accurately block the workpiece to the work table surface (Fig. 3).
- Respect the minimum fixing length of the shank with a preference to short chucks, with the aim of reducing eccentricity errors (Fig. 4a).
- For the same reason the use of extensions are generally avoided (Fig. 4b).
- Router bits with staggered cutters tend to leave marks caused by small eccentricity tolerances (Fig. 5).
- To identify eccentricity issues in a router bit or a chuck: make a milling on the workpiece, rotate the tool 90° on the chuck and repeat the operation. If the marks left on the wood are unvaried between the 2 processes then the tool is defective, if there's a difference the issue is probably on the chuck/collet.
- Do not exceed the maximum RPM limit marked on the tool. Higher RPM, extreme feedrate as well as an excessive cutting depth can cause the tool breakage.
- To avoid damaging router bits, we suggest controlling if the fixing surface of the chuck and the router bit are clean and that there are no imperfections (Fig. 6).
- Always choose router bits with the appropriate dimensions for the kind of work to carry out.
- Make sure that the workpiece is properly fixed to a support with appropriate dimensions. Place the locking devices (as suckers) sufficiently far from the tool path (Fig. 7).
- To avoid dangerous kick backs, we suggest fixing a spare piece of material and milling small parts of waste which have accumulated during the working process, by carrying out more passes (Fig. 8).

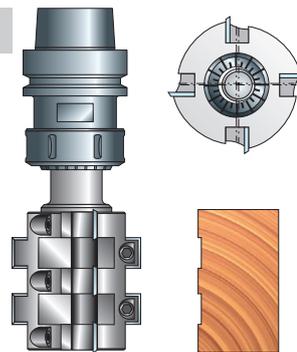
4a



4b



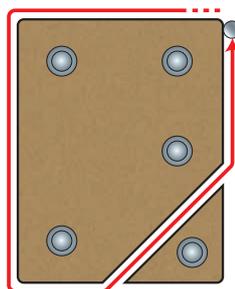
5



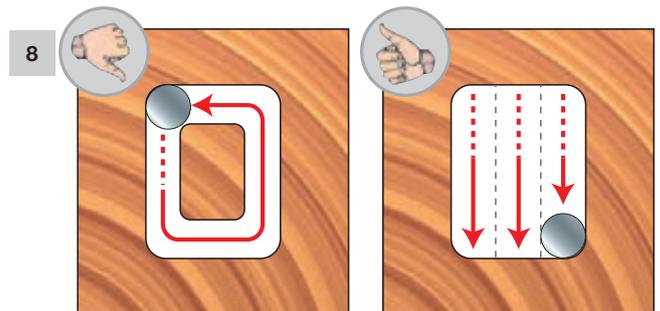
6



7



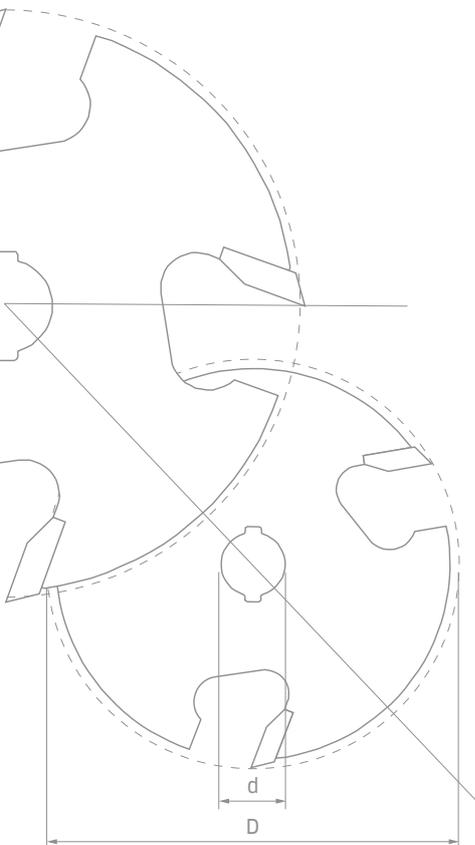
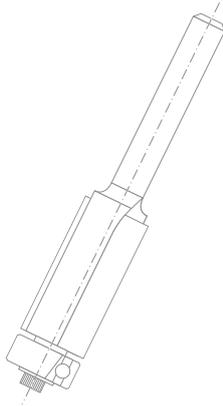
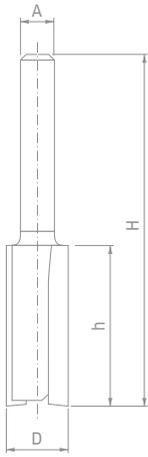
8



Routing tools for portable machines

Freud's wide range of superior quality router bits are the result of outstanding technical expertise and know-how, advanced manufacturing processes and finest quality materials. Designed to perform precise and burn free cuts, these tools deliver flawless finishing, unmatched precision and long-lasting performance. All router bits feature Freud's unique and industry-first attributes.





Leading technology for router bits Page 240
 Table of content Page 242

STRAIGHT BITS

Series 04- 12- MM- R006 Double flute straight bits Type A (Solid Carbide bit) Page 244
 Series 12- Double flute straight bits Type B (Solid Carbide cutting part) Page 244
 Series 04- 12- MM- Double flute straight bits Type C (HW tipped cutter) Page 245
 Series FR-TP 3 Piece double flute straight bit set Page 246
 Series 17- Double flute straight bits with bottom tip Page 247
 Series 14- Stagger bits Page 248
 Series 16- Mortising bits Page 249

TRIMMING BITS

Series 50- Top bearing flush trim bits Page 251
 Series 42- 44- Flush trim bits Page 252
 Series 48- Flush trim "V" groove bits Page 253
 Series 26- 28 - Panel pilot bits Page 254

EDGE FORMING BITS

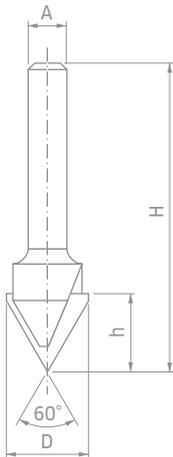
Series 34- 36- Rounding over bits Page 256
 Series 40- Chamfer bits Page 257
 Series 30- Cove bits Page 258
 Series 30- Classical cove bits Page 259
 Series 38- 99- Ogee fillet bits Page 260
 Series 38- Roman ogee bits Page 261
 Series 38- 99- Classical roman ogee bit Page 261
 Series 38- 99- Classical ogee bits Page 262
 Series 99- Table top classical bold bits Page 262
 Series 38- Double bead bits Page 263
 Series 38- Double cove bits Page 264
 Series 38- Cove and bead bits Page 265
 Series 38- Fillet cove and bead bits Page 265
 Series 38- Double fillet ogee bits Page 266
 Series 80- Traditional beading bits Page 266
 Series 80- Triple beading bits Page 267
 Series 84- Triple fluting bit Page 267
 Series 23- Top bearing ogee and cove moulding bits Page 268
 Series 99- Table edge and hand rail bits Page 269
 Series 82- Half round bits Page 270
 Series 99- Multi-profile bit Page 271
 Series 85- Round over bowl bits Page 272
 Series 85- Ogee bowl bits Page 273
 Series 85- Bevel bowl bit Page 274
 Series 85- Wavy joint bit Page 275

JOINERY BITS

Series 63- Wing slotting cutters Page 277
 Series 56- 58- Slotting cutters Page 278
 Series 60- Slotting cutter arbors Page 279
 Series 63- Biscuit joint slot cutter Page 280
 Series 99- Adjustable tongue & groove cutter set Page 281
 Series 32- Rabbeting bits Page 282
 Series 32- Rabbeting bits with bearing set Page 282
 Series 70- Keyhole bits Page 283
 Series 52- T-Slotting bits Page 284
 Series 22- Dovetail bits Page 285
 Series 99- Lock mitre bits 45° Page 286
 Series 99- 2 piece lock mitre bit set 22,5° Page 287
 Series 99- Reversible glue joint bits Page 288
 Series 99- Finger joint bits Page 289
 Series 99- Top bearing finger joint bits - Type A Page 290
 Series 99- Top bearing finger joint bits - Type B Page 291
 Series 99- Drawer lock bits Page 292
 Series 99- Door pull bit Page 293
 Series 99- Matched profile and scribe bits Page 294
 Series 99- Matched profile and scribe bits Page 296
 Series 99- Window router bits set Page 298
 Series 99- Raised panel bits Type A Page 299
 Series 99- Raised panel bits Type B Page 299
 Series 99- Raised panel bits Type C Page 300
 Series 99- Raised panel bits Type D Page 300
 Series 99- Raised panel bits Type E Page 300
 Series 99- Raised panel bits with back cutters Page 301
 Series 99- Vertical raised panel bits Page 302

SURFACE FORMING BITS

Series 20- PI01- V-Groove bits..... Page 304
 Series 21- V-Groove bits for ACM panel folding Page 305
 Series 21- Rectangular groove bit for ACM panels folding Page 305
 Series 20- Lettering bits Page 306
 Series 18- Round nose bits Page 307
 Series 19- 99- Wood bowl bits..... Page 308
 Series 39- Ovolo bits Page 309
 Series 39- Double cove and bead groove bits Page 310
 Series 39- Top bearing double cove groove bits Page 311
 Series 39- Cove and bead groove bits Page 311
 Series 39- Classical beading groove bits Page 312
 Series 39- Ogee groove bits Page 312
 Series 39- Top bearing cove and bead groove bits Page 313
 Series 39- Top bearing fillet ogee groove bits Page 313



MIXED SETS

88-10606P Basic set - 4 router bits Page 315
 91-10408P, 91-10412P Starter 6 piece router bit set Page 316
 88-10206P Intermediate 9 piece router bit set Page 317
 91-10008P, 91-10012P Super 13 piece router bit set Page 318
 90-10006P Advanced 15 piece router bit set Page 320
 92-10006P Professional 26 piece router bit set Page 322
 97-10212P Cabinet door set - 3 router bits Page 324
 97-10412P Cabinet door set - 3 router bits Page 325
 95-20012P Cabinet door set - 4 router bits Page 326

3105M Reducing bushes Page 327
 3102M Ball bearings Page 327
 RB62M Sleeved bearings Page 327
 3103MC Sleeved bearings with angle Page 327

Safe working practice Page 328
 Advice for correct use Page 329

LEADING TECHNOLOGY

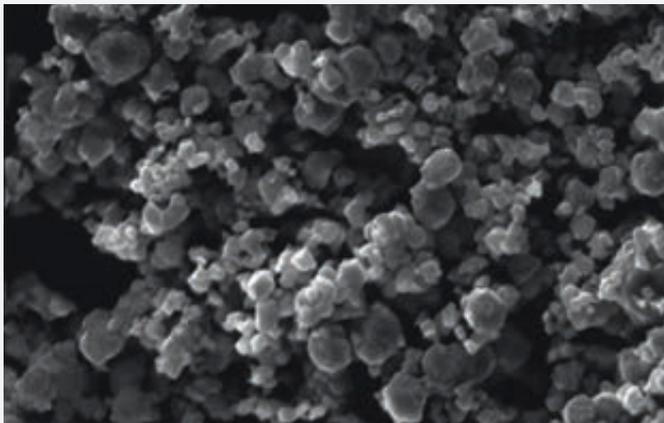
TiCo CARBIDE TECHNOLOGY



Freud's ownership and control of the entire Carbide production cycle ensures that the correct formula is used for the specific application needs, to constantly maximise the router bit performance.

TiCo Carbide

A specially formulated, highly compact Titanium Cobalt Carbide, engineered and manufactured by Freud. It provides a sharper edge and a flawless finish with a dramatically longer cutting life.



DESIGN INNOVATION

Freud's special tip designs and geometries are engineered to perform perfect cuts and deliver extraordinary durability.



Shear Angle Technology

Freud's Carbide tips are angled to slice through the wood fibers similar in principle to using a hand plane at an angle to the direction of the motion.

Freud's high shear angle bits leave a cross grain cut that requires virtually no sanding.

EXTREME SHOCK RESISTANCE



Freud's innovative **Tri-Metal Brazing** process bonds the Carbide tips to the cutter body.

This special method consists of copper alloy sandwiched between layers of silver alloy, for extra flexibility and maximum impact resistance.





COATING TECHNOLOGY

Freud's router bits feature an exclusive industry-first coating that secures a superior protection from heat, pitch build-up and corrosion.



Perma-SHIELD Coating

- A non-stick coating formulation that withstands the toughest applications.
- It provides thermal insulation, protects from corrosion and eliminates resin build-up, reducing downtime for cleaning.



EXTENSIVE RANGE

Freud offers different solutions for specific application needs. The wide variety of router bits includes premium straight bits, trimming bits, edge forming bits, joinery bits, surface forming bits as well as mixed sets and spare parts. Each delivers flawless results and extraordinary lifetime.

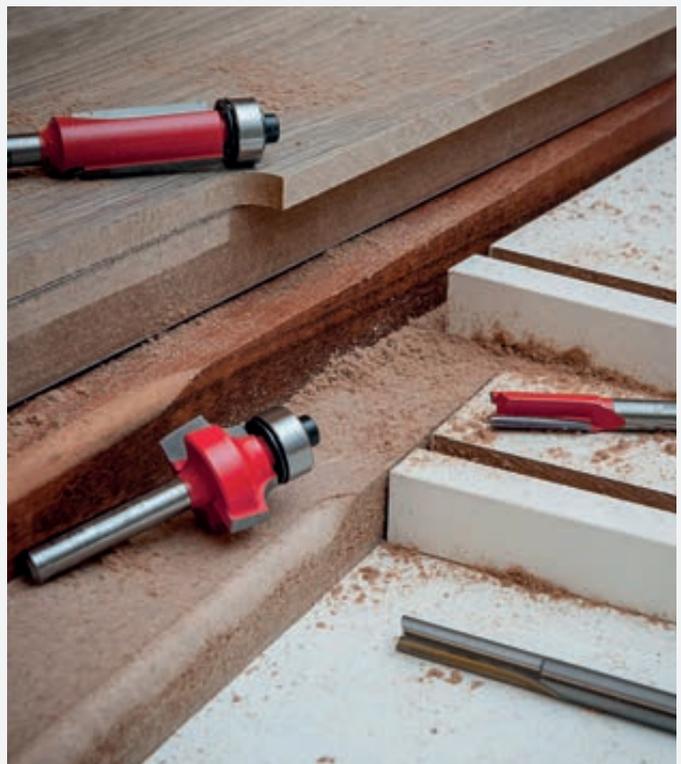


Table of content

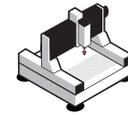
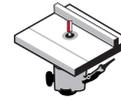
| | Application picture | Description | Page reference |
|-----------------------------|---|--|----------------|
| Straight bits |  | Freud's straight router bits in all relevant shank diameter 6 mm, 8 mm, 12 mm, 1/4", 1/2". Cutting diameters from 2 mm up to 25 mm. Freud Straight bits are designed to deliver clean, precise, splinter free results in hardwood and softwood and in almost any composite material they cover many applications such as grooving, rebating, slots, planning and hinge cut outs. | 243-249 |
| Trimming bits |  | Freud's trimming bits range includes bits for any trimming application. Use these bits for precise trim work on laminate or veneered counter tops, to follow patterns, to create or duplicate intricate shapes or for any task requiring a clean cut-off along a flush edge with a smooth, burn free cut. Hardwood, softwood, plywood, composites and laminates on hand-held or table-mounted routers. | 250-254 |
| Edge forming bits |  | Freud's edge forming bits are designed to cover every edge profiling application, such as rounding, chamfer, ogee, cove profiles and many more. | 255-275 |
| Joinery bits |  | Freud's joinery router bits are designed to create perfect wood joints. It is possible to choose a selection ranging from slotting cutters to dovetail router bits and many more. | 276-302 |
| Surface forming bits |  | All Freud's surface forming router bits are available without ball bearing for a perfect profile grooving on wooden surfaces. | 303-313 |
| Mixed sets |  | Freud offers several different router bit sets. Mixed router bit sets are available in the most common shank diameters, along with our classical cabinet door sets. | 314-326 |

Straight Bits



DOUBLE FLUTE STRAIGHT BITS

04- 12-
MM- R006M



Hand-held Routers

Table Routers

CNC Machines

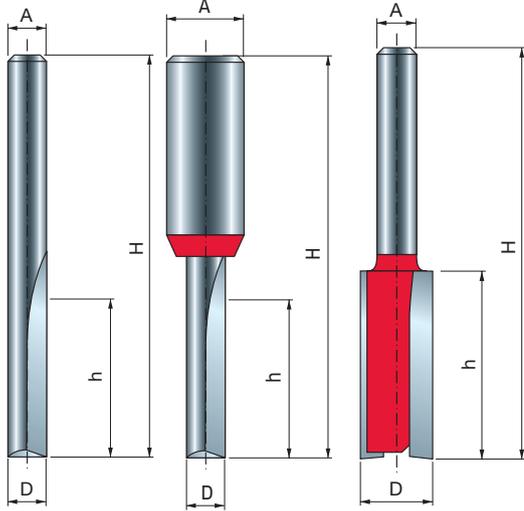


Softwood

Hardwood

Plywood

Wood Based Panels



Type A
Solid Carbide
bits

Type B
Solid Carbide
cutting parts

Type C
HW tipped bits



Machines:

Hand-held routers, table routers and CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

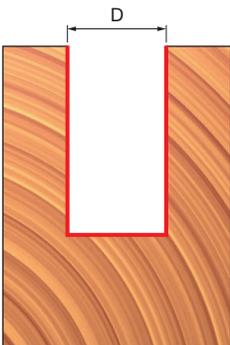
Applications:

Type A: Small cutting diameter solid Carbide double flute straight bits.

Ideal for grooving, edge-routing, plunge cuts and other general purpose routing tasks.

Type B: Small cutting diameter double flute straight bits, steel shank with integrated solid Carbide cutting part.

Type C: Ideal for grooving, edge-routing and other general purpose routing tasks.



Type A - Solid Carbide bits

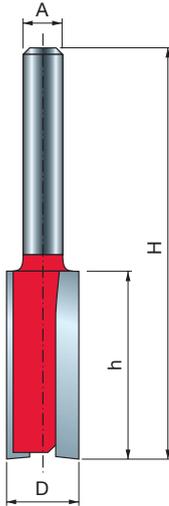
| D mm | h mm | H mm | A mm | A inch | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|-----------|---|-------------------|------------|------------|
| 2 | 6,3 | 44,5 | 6 | | 2 | 24.000 | 04-09706P | F03FR01413 |
| 3 | 9,5 | 44,5 | 6 | | 2 | 24.000 | 04-09906P | F03FR01415 |
| 3 | 11 | 50,8 | 6 | | 2 | 24.000 | 04-10006P | F03FR01418 |
| 3 | 12 | 50 | 6 | | 2 | 24.000 | R006M03006 | F03FR01355 |
| 4 | 12 | 50,3 | 6 | | 2 | 24.000 | R006M05006 | F03FR01356 |
| 4 | 12 | 50,8 | 6 | | 2 | 24.000 | 04-10206P | F03FR01423 |
| 4 | 15,8 | 50,7 | 6 | | 2 | 24.000 | 04-10106P | F03FR01420 |
| 5 | 12 | 50,3 | 6 | | 2 | 24.000 | R006M07006 | F03FR01357 |
| 5 | 12,7 | 50,8 | 6 | | 2 | 24.000 | 04-11306P | F03FR01437 |
| 5 | 16 | 51 | 6 | | 2 | 24.000 | R006M07406 | F03FR01358 |
| 6 | 16 | 50,8 | 6 | | 2 | 24.000 | 04-11406P | F03FR01440 |
| 6 | 16 | 57 | 6 | | 2 | 24.000 | R006M09406 | F03FR01359 |
| 6 | 25 | 63 | 6 | | 2 | 24.000 | R006M10206 | F03FR01360 |
| 6 | 25,4 | 76,2 | 6 | | 2 | 24.000 | 04-11006P | F03FR01431 |
| 3 | 9,5 | 44,5 | 8 | | 2 | 24.000 | 04-09908P | F03FR01416 |
| 4 | 15,8 | 50,7 | 8 | | 2 | 24.000 | 04-10108P | F03FR01421 |
| 5 | 12,7 | 50,8 | 8 | | 2 | 24.000 | 04-11308P | F03FR01438 |
| 6 | 16 | 50,8 | 8 | | 2 | 24.000 | 04-11408P | F03FR01441 |
| 6 | 25,4 | 76,2 | 8 | | 2 | 24.000 | 04-11008P | F03FR01432 |
| 1,58 | 6,4 | 44,5 | | 1/4 | 2 | 24.000 | 04-09625P | F03FR01412 |
| 2 | 4 | 38,1 | | 1/4 | 2 | 24.000 | 04-50225P | F03FR01502 |
| 2,38 | 9,5 | 38,1 | | 1/4 | 2 | 24.000 | 04-09825P | F03FR01414 |
| 3 | 8 | 44,5 | | 1/4 | 2 | 24.000 | 04-50825P | F03FR01503 |
| 3,18 | 9,5 | 44,5 | | 1/4 | 2 | 24.000 | 04-10025P | F03FR01419 |
| 4 | 15,77 | 50,8 | | 1/4 | 2 | 24.000 | 04-10125P | F03FR01422 |
| 4,76 | 12,7 | 49,2 | | 1/4 | 2 | 24.000 | 04-10225P | F03FR01424 |
| 5 | 11,9 | 50,8 | | 1/4 | 2 | 24.000 | 04-51225P | F03FR01504 |
| 6,35 | 12,7 | 50,5 | | 1/4 | 2 | 24.000 | 04-10425P | F03FR01426 |
| 6,35 | 15,9 | 50,8 | | 1/4 | 2 | 24.000 | 04-10525P | F03FR01427 |
| 6,35 | 19 | 57,1 | | 1/4 | 2 | 24.000 | 04-10625P | F03FR01428 |
| 6,35 | 22,2 | 57,1 | | 1/4 | 2 | 24.000 | 04-10725P | F03FR01429 |
| 6,35 | 25,4 | 63,5 | | 1/4 | 2 | 24.000 | 04-10825P | F03FR01430 |
| 6,35 | 25,4 | 76,2 | | 1/4 | 2 | 24.000 | 04-11025P | F03FR01433 |
| 6,35 | 19 | 61 | | 1/2 | 2 | 24.000 | 12-10050P | F03FR01521 |
| 6,35 | 23 | 73 | | 1/2 | 2 | 24.000 | 12-10250P | F03FR01522 |

Type B - Solid Carbide cutting parts

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|------------|------------|
| 3 | 8 | 58 | 12 | 2 | 24.000 | 12-09612P | F03FR01517 |
| 4 | 10 | 58 | 12 | 2 | 24.000 | 12-09712P | F03FR01518 |
| 5 | 12,7 | 57 | 12 | 2 | 24.000 | 12-09812P | F03FR01519 |
| 6 | 19 | 64 | 12 | 2 | 24.000 | 12-09912P | F03FR01520 |

DOUBLE FLUTE STRAIGHT BITS

04- 12-
MM- R006M



Type C
HW tipped bits

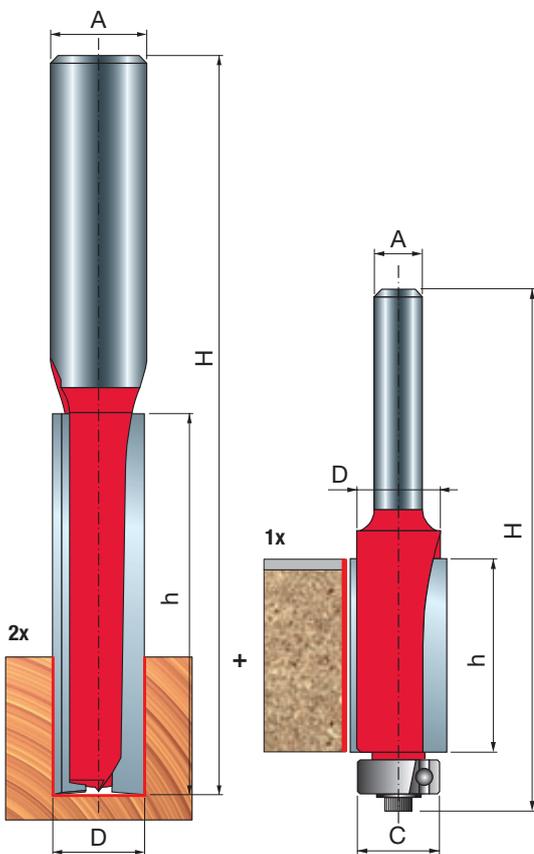
Type C - HW tipped bits

| D | h | H | A | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|------------|---|---------|------------|------------|
| mm | mm | mm | mm inch | | 1/min. | | |
| 7 | 25,4 | 63,5 | 6 | 2 | 24.000 | 04-11206P | F03FR01434 |
| 8 | 19,1 | 52 | 6 | 2 | 24.000 | 04-11506P | F03FR01443 |
| 8 | 31,8 | 70 | 6 | 2 | 24.000 | 04-11906P | F03FR01447 |
| 9 | 25 | 63 | 6 | 2 | 24.000 | 04-12406P | F03FR01450 |
| 10 | 25,4 | 62,4 | 6 | 2 | 24.000 | MM-01006P | F03FR00330 |
| 10 | 31,8 | 69 | 6 | 2 | 24.000 | MM-11006P | F03FR00333 |
| 11 | 25,4 | 62 | 6 | 2 | 24.000 | 04-13306P | F03FR01458 |
| 12 | 19 | 55,5 | 6 | 2 | 24.000 | 04-13506P | F03FR01460 |
| 12 | 31,8 | 68 | 6 | 2 | 24.000 | 04-13706P | F03FR01464 |
| 13 | 25,4 | 62,4 | 6 | 2 | 24.000 | 04-14206P | F03FR01470 |
| 14 | 19 | 56 | 6 | 2 | 24.000 | 04-14306P | F03FR01472 |
| 14 | 31,8 | 68,2 | 6 | 2 | 24.000 | 04-14506P | F03FR01475 |
| 15 | 20 | 57,2 | 6 | 2 | 24.000 | 04-14606P | F03FR01478 |
| 15 | 31,8 | 68,2 | 6 | 2 | 24.000 | 04-14706P | F03FR01480 |
| 16 | 19 | 51 | 6 | 2 | 24.000 | 04-14906P | F03FR01483 |
| 16 | 31,8 | 66 | 6 | 2 | 24.000 | 04-15006P | F03FR01486 |
| 18 | 20 | 52 | 6 | 2 | 24.000 | 04-15106P | F03FR01488 |
| 19 | 19 | 54 | 6 | 2 | 24.000 | 04-14006P | F03FR01468 |
| 20 | 19 | 56 | 6 | 2 | 24.000 | 04-15506P | F03FR01492 |
| 22 | 19 | 51 | 6 | 2 | 24.000 | 04-15706P | F03FR01495 |
| 24 | 20 | 52 | 6 | 2 | 24.000 | 04-15806P | F03FR01498 |
| 25 | 19 | 56 | 6 | 2 | 24.000 | 04-15906P | F03FR01500 |
| 7 | 25,4 | 63,5 | 8 | 2 | 24.000 | 04-11208P | F03FR01435 |
| 8 | 19 | 52 | 8 | 2 | 24.000 | 04-11508P | F03FR01444 |
| 8 | 31,8 | 70 | 8 | 2 | 24.000 | 04-11908P | F03FR01448 |
| 9 | 25 | 63 | 8 | 2 | 24.000 | 04-12408P | F03FR01451 |
| 10 | 25,4 | 62,4 | 8 | 2 | 24.000 | MM-01008P | F03FR00331 |
| 10 | 31,8 | 69 | 8 | 2 | 24.000 | MM-11008P | F03FR00334 |
| 12 | 19 | 55,5 | 8 | 2 | 24.000 | 04-13508P | F03FR01461 |
| 12 | 31,8 | 63,8 | 8 | 2 | 24.000 | 04-13708P | F03FR01465 |
| 14 | 19 | 56 | 8 | 2 | 24.000 | 04-14308P | F03FR01473 |
| 14 | 31,8 | 68,2 | 8 | 2 | 24.000 | 04-14508P | F03FR01476 |
| 15 | 20 | 57,2 | 8 | 2 | 24.000 | 04-14608P | F03FR01479 |
| 15 | 31,8 | 68,2 | 8 | 2 | 24.000 | 04-14708P | F03FR01481 |
| 16 | 19 | 51 | 8 | 2 | 24.000 | 04-14908P | F03FR01484 |
| 16 | 31,8 | 66 | 8 | 2 | 24.000 | 04-15008P | F03FR01487 |
| 18 | 20 | 52 | 8 | 2 | 24.000 | 04-15108P | F03FR01489 |
| 20 | 19 | 56 | 8 | 2 | 24.000 | 04-15508P | F03FR01493 |
| 22 | 19 | 51 | 8 | 2 | 24.000 | 04-15708P | F03FR01496 |
| 24 | 20 | 52 | 8 | 2 | 24.000 | 04-15808P | F03FR01499 |
| 25 | 19 | 56 | 8 | 2 | 24.000 | 04-15908P | F03FR01501 |
| 7 | 18 | 67 | 12 | 2 | 24.000 | 12-10312P | F03FR01523 |
| 8 | 31,8 | 76 | 12 | 2 | 24.000 | 12-10712P | F03FR01525 |
| 9 | 31,8 | 76 | 12 | 2 | 24.000 | 12-11012P | F03FR01528 |
| 10 | 31,8 | 76 | 12 | 2 | 24.000 | 12-11212P | F03FR01530 |
| 12 | 38,1 | 80 | 12 | 2 | 24.000 | 12-12212P | F03FR01534 |
| 12 | 50,5 | 98 | 12 | 2 | 24.000 | 12-12812P | F03FR01537 |
| 13 | 25,4 | 66,7 | 12 | 2 | 24.000 | 12-11612P | F03FR01531 |
| 14 | 31,8 | 73 | 12 | 2 | 24.000 | 12-13412P | F03FR01540 |
| 15 | 31,8 | 69,8 | 12 | 2 | 24.000 | 12-13512P | F03FR01541 |
| 16 | 38,1 | 76,1 | 12 | 2 | 24.000 | 12-14012P | F03FR01544 |
| 18 | 38,1 | 80 | 12 | 2 | 24.000 | 12-14312P | F03FR01547 |
| 19 | 25,4 | 63,4 | 12 | 2 | 24.000 | 12-15212P | F03FR01548 |
| 20 | 38,1 | 80 | 12 | 2 | 24.000 | 12-15912P | F03FR01553 |
| 22 | 38,1 | 80 | 12 | 2 | 24.000 | 12-16912P | F03FR01556 |
| 7,14 | 25,4 | 65,4 | 1/4 | 2 | 24.000 | 04-11225P | F03FR01436 |
| 7,94 | 25,4 | 71,4 | 1/4 | 2 | 24.000 | 04-11825P | F03FR01446 |
| 9,53 | 22,2 | 59,2 | 1/4 | 2 | 24.000 | 04-12025P | F03FR01449 |
| 9,53 | 25,4 | 62,4 | 1/4 | 2 | 24.000 | 04-12425P | F03FR01452 |
| 9,53 | 31,8 | 68,7 | 1/4 | 2 | 24.000 | 04-12625P | F03FR01453 |
| 10 | 25,4 | 62,4 | 1/4 | 2 | 24.000 | MM-01025P | F03FR00332 |
| 10 | 31,8 | 63,8 | 1/4 | 2 | 24.000 | 04-52025P | F03FR01505 |
| 11,11 | 25,4 | 62,4 | 1/4 | 2 | 24.000 | 04-12925P | F03FR01454 |
| 12 | 31,8 | 63,8 | 1/4 | 2 | 24.000 | 04-52825P | F03FR01506 |

DOUBLE FLUTE STRAIGHT BITS

04- 12-
MM- R006M

| D | h | H | A | Z | Obr./min (maks.) | Kod Freud | Nr art. |
|-------|------|-------|-----|------|------------------|-----------|------------|
| mm | mm | mm | mm | cale | 1/min | | |
| 12,7 | 19 | 55,5 | 1/4 | 2 | 24.000 | 04-13025P | F03FR01455 |
| 12,7 | 22,2 | 59,2 | 1/4 | 2 | 24.000 | 04-13125P | F03FR01456 |
| 12,7 | 25,4 | 62,4 | 1/4 | 2 | 24.000 | 04-13225P | F03FR01457 |
| 12,7 | 31,8 | 69,9 | 1/4 | 2 | 24.000 | 04-13325P | F03FR01459 |
| 15 | 31,8 | 66,7 | 1/4 | 2 | 24.000 | 04-53625P | F03FR01507 |
| 15,88 | 19 | 51 | 1/4 | 2 | 24.000 | 04-13625P | F03FR01463 |
| 15,88 | 31,8 | 69,9 | 1/4 | 2 | 24.000 | 04-13725P | F03FR01466 |
| 16 | 31,8 | 66,7 | 1/4 | 2 | 24.000 | 04-54425P | F03FR01508 |
| 17,46 | 19,1 | 56,1 | 1/4 | 2 | 24.000 | 04-13825P | F03FR01467 |
| 18 | 19,1 | 51,1 | 1/4 | 2 | 24.000 | 04-54825P | F03FR01509 |
| 19 | 19 | 57 | 1/4 | 2 | 24.000 | 04-14025P | F03FR01469 |
| 20 | 19,1 | 51,1 | 1/4 | 2 | 24.000 | 04-55225P | F03FR01510 |
| 22,23 | 19,1 | 56,1 | 1/4 | 2 | 24.000 | 04-14825P | F03FR01482 |
| 25,4 | 19,1 | 56,1 | 1/4 | 2 | 24.000 | 04-15225P | F03FR01491 |
| 7,94 | 25,4 | 78,9 | 1/2 | 2 | 24.000 | 12-10650P | F03FR01524 |
| 9,53 | 25,4 | 73,6 | 1/2 | 2 | 24.000 | 12-10850P | F03FR01526 |
| 9,53 | 31,8 | 82 | 1/2 | 2 | 24.000 | 12-11050P | F03FR01529 |
| 10 | 31,8 | 75 | 1/2 | 2 | 24.000 | 12-52050P | F03FR01558 |
| 12 | 31,8 | 75 | 1/2 | 2 | 24.000 | 12-53050P | F03FR01559 |
| 12,7 | 25,4 | 66,7 | 1/2 | 2 | 24.000 | 12-11650P | F03FR01532 |
| 12,7 | 31,8 | 77 | 1/2 | 2 | 24.000 | 12-11850P | F03FR01533 |
| 12,7 | 38,1 | 80,4 | 1/2 | 2 | 24.000 | 12-12250P | F03FR01535 |
| 12,7 | 38,1 | 108 | 1/2 | 2 | 24.000 | 12-12450P | F03FR01536 |
| 12,7 | 50,5 | 98 | 1/2 | 2 | 24.000 | 12-12850P | F03FR01538 |
| 12,7 | 63,2 | 110,7 | 1/2 | 2 | 24.000 | 12-13050P | F03FR01539 |
| 15,88 | 25,4 | 62,4 | 1/2 | 2 | 24.000 | 12-13650P | F03FR01542 |
| 15,88 | 31,8 | 71,8 | 1/2 | 2 | 24.000 | 12-13850P | F03FR01543 |
| 15,88 | 38,1 | 76,1 | 1/2 | 2 | 24.000 | 12-14050P | F03FR01545 |
| 15,88 | 50,8 | 103 | 1/2 | 2 | 24.000 | 12-14250P | F03FR01546 |
| 16 | 31,8 | 69,8 | 1/2 | 2 | 24.000 | 12-54450P | F03FR01560 |
| 19 | 25,4 | 63,4 | 1/2 | 2 | 24.000 | 12-15250P | F03FR01549 |
| 19 | 31,8 | 69,8 | 1/2 | 2 | 24.000 | 12-15450P | F03FR01550 |
| 19 | 38,1 | 76,1 | 1/2 | 2 | 24.000 | 12-15650P | F03FR01551 |
| 19,05 | 50,8 | 88,8 | 1/2 | 2 | 24.000 | 12-15850P | F03FR01552 |
| 20,63 | 31,8 | 76 | 1/2 | 2 | 24.000 | 12-16250P | F03FR01554 |
| 22,23 | 31,8 | 76 | 1/2 | 2 | 24.000 | 12-16850P | F03FR01555 |
| 25,4 | 31,8 | 69,8 | 1/2 | 2 | 24.000 | 12-17250P | F03FR01557 |



KITCHEN FITTER SET

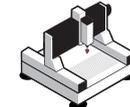
88-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



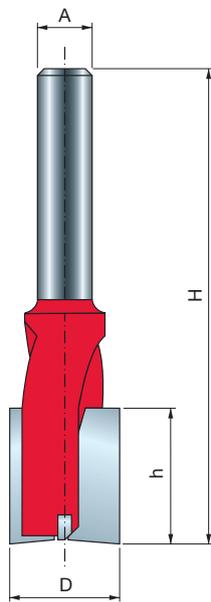
Wood Based Panels



| | A | Max RPM | Freud Code | Art. No. |
|---|------------|---------|------------|------------|
| | inch | 1/min. | | |
| 2x Straight bit and 1x flush trim bit set | 1/2 1/4 | 24.000 | 88-20075P | F03FR04370 |

DOUBLE FLUTE STRAIGHT BITS WITH BOTTOM TIP

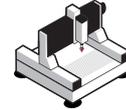
17-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|-----|-------------------|------------|------------|
| 16 | 45 | 85 | 8 | 2+1 | 24.000 | 17-10008P | F03FR01577 |
| 18 | 18 | 70 | 8 | 2+1 | 24.000 | 17-10208P | F03FR01578 |
| 20 | 18 | 70 | 8 | 2+1 | 24.000 | 17-10408P | F03FR01579 |
| 22 | 25 | 70 | 8 | 2+1 | 24.000 | 17-10608P | F03FR01580 |
| 16 | 60 | 110 | 12 | 2+1 | 24.000 | 17-10112P | F03FA13994 |



Machines:

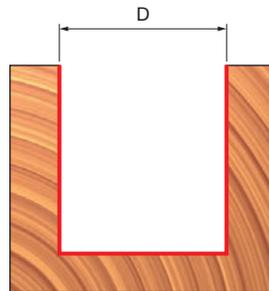
Hand-held routers, table routers and CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

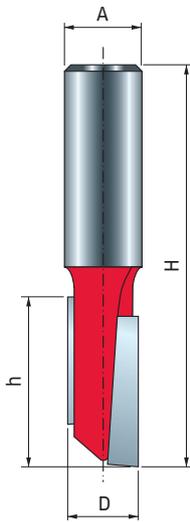
Applications:

Ideal for grooving, edge-routing, plunge cuts and other general purpose routing tasks. The additional centred tip provides a smoother plunge cut with a clean bottom finish.



STAGGER BITS

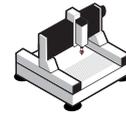
14-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



Wood Based Panels

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|------------|------------|
| 9,53 | 37,8 | 82 | 12 | 2 | 24.000 | 14-10212P | F03FR01561 |
| 12,7 | 38,1 | 82 | 12 | 2 | 24.000 | 14-10412P | F03FR01562 |
| 12,7 | 37,8 | 79 | 12 | 2 | 24.000 | 14-20412P | F03FR01564 |
| 12,7 | 54 | 98,3 | 12 | 2 | 24.000 | 14-10612P | F03FR01563 |



Machines:

Hand-held routers, table routers and CNC machines.

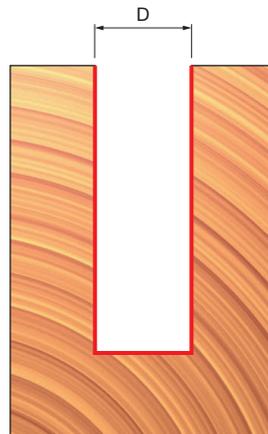
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

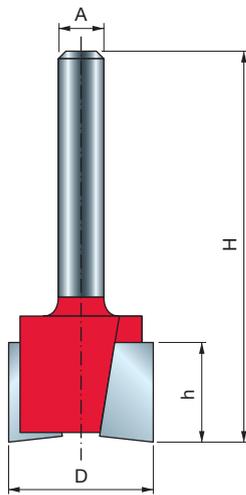
Stagger bits combine the balance of a double fluted bit with the speed and versatility of a single flute bit.

Ideal for grooving, edge-routing, plunge cuts and other general purpose routing tasks.



MORTISING BITS

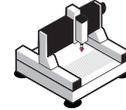
16-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



Wood Based Panels



Machines:

Hand-held routers, table routers and CNC machines.

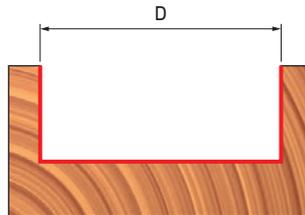
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Down shear design for clean top surfaces.

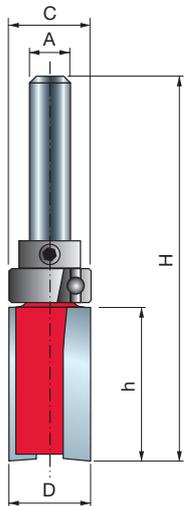
| D | h | H | A | Z | Max RPM | Freud Code | Art. No. |
|-------|------|-------|-----|------|---------|------------------|------------|
| mm | mm | mm | mm | inch | 1/min. | | |
| 12,7 | 12,5 | 51 | 6 | 2 | 24.000 | 16-10006P | F03FR01565 |
| 19 | 12,5 | 51 | 6 | 2 | 24.000 | 16-10406P | F03FR01568 |
| 19 | 19 | 62,15 | 6 | 2 | 24.000 | 16-50406P | F03FR01576 |
| 12,7 | 12,5 | 50,8 | 8 | 2 | 24.000 | 16-10008P | F03FR01566 |
| 19 | 12,5 | 50,8 | 8 | 2 | 24.000 | 16-10408P | F03FR01569 |
| 12,7 | 12,5 | 60,5 | 12 | 2 | 24.000 | 16-11012P | F03FR01573 |
| 31,75 | 12,1 | 56,2 | 12 | 2 | 24.000 | 16-11812P | F03FR01575 |
| 12,7 | 12,5 | 51 | 1/4 | 2 | 24.000 | 16-10025P | F03FR01567 |
| 19 | 12,5 | 51 | 1/4 | 2 | 24.000 | 16-10425P | F03FR01570 |
| 12,7 | 12,5 | 60,5 | 1/2 | 2 | 24.000 | 16-11050P | F03FR01574 |
| 31,75 | 12,7 | 56,2 | 1/2 | 2 | 18.000 | 16-10850P | F03FR01572 |



Trimming Bits



TOP BEARING FLUSH TRIM BITS 50-



Machines:

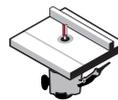
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Ideal for following templates and for other tasks where the pattern is placed on top of the workpiece.



Hand-held Routers

Table Routers



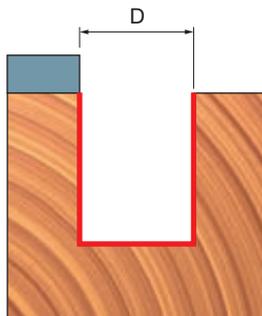
Softwood

Hardwood

Plywood

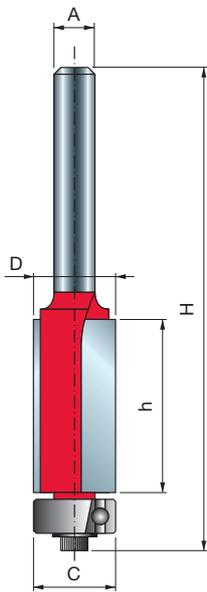
Wood Based Panels

| D | h | H | A | C | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|----|------|-------|---------|------------|------------|
| mm | mm | mm | mm | inch | mm | 1/min. | | |
| 13 | 20 | 60 | 6 | | 13 | 24.000 | 50-10206P | F03FR02003 |
| 15 | 20 | 60 | 6 | | 15 | 24.000 | 50-10406P | F03FR02006 |
| 19 | 25,4 | 67,5 | 6 | | 19 | 24.000 | 50-10606P | F03FR02008 |
| 16 | 20 | 60 | 8 | | 16 | 24.000 | 50-10308P | F03FR02005 |
| 22 | 20 | 60 | 8 | | 22 | 24.000 | 50-10808P | F03FR02010 |
| 12,7 | 25,4 | 65,4 | | 1/4 | 12,7 | 24.000 | 50-10225P | F03FR02004 |
| 15,88 | 25,4 | 65,4 | | 1/4 | 15,88 | 24.000 | 50-10425P | F03FR02007 |
| 19 | 25,4 | 68,5 | | 1/4 | 19 | 24.000 | 50-10625P | F03FR02009 |



FLUSH TRIM BITS

42- 44-



Hand-held Routers

Table Routers



Softwood

Hardwood

Plywood

Wood Based Panels



Machines:

Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

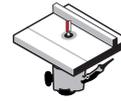
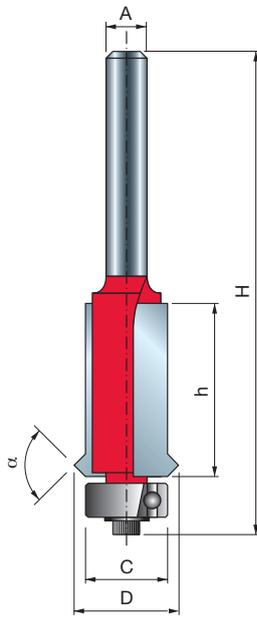
Use these bits for precise trim work on laminated counter tops, to follow patterns and to create or duplicate complex shapes.

| D mm | h mm | H mm | mm | A inch | C mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|----|-----------|---------|---|-------------------|------------|------------|
| 9,53 | 12,7 | 60,9 | 6 | | 9,53 | 2 | 24.000 | 42-10206P | F03FR01935 |
| 9,53 | 25,8 | 72,4 | 6 | | 9,53 | 2 | 24.000 | 42-10006P | F03FR01932 |
| 12,7 | 25,7 | 72,9 | 6 | | 12,7 | 2 | 24.000 | 42-10406P | F03FR01938 |
| 9,53 | 12,7 | 60,9 | 8 | | 9,53 | 2 | 24.000 | 42-10208P | F03FR01936 |
| 9,53 | 25,8 | 72,4 | 8 | | 9,53 | 2 | 24.000 | 42-10008P | F03FR01933 |
| 12,7 | 25,7 | 72,9 | 8 | | 12,7 | 2 | 24.000 | 42-10408P | F03FR01939 |
| 12,7 | 40 | 84 | 8 | | 12,7 | 2 | 24.000 | 42-11508P | F03FR02771 |
| 12,7 | 25,4 | 82,5 | 12 | | 12,7 | 2 | 24.000 | 42-11012P | F03FR01942 |
| 12,7 | 38,5 | 94,1 | 12 | | 12,7 | 2 | 24.000 | 42-11412P | F03FR01944 |
| 12,7 | 50,8 | 106,8 | 12 | | 12,7 | 2 | 24.000 | 42-11612P | F03FR01946 |
| 9,53 | 12,7 | 60,9 | | 1/4 | 9,53 | 2 | 24.000 | 42-10225P | F03FR01937 |
| 9,53 | 25,8 | 72,4 | | 1/4 | 9,53 | 2 | 24.000 | 42-10025P | F03FR01934 |
| 12,7 | 12,7 | 60,2 | | 1/4 | 12,7 | 2 | 24.000 | 42-10625P | F03FR01941 |
| 12,7 | 25,7 | 72,9 | | 1/4 | 12,7 | 2 | 24.000 | 42-10425P | F03FR01940 |
| 12,7 | 25,7 | 82,5 | | 1/2 | 12,7 | 2 | 24.000 | 42-11050P | F03FR01943 |
| 12,7 | 38,5 | 94,1 | | 1/2 | 12,7 | 2 | 24.000 | 42-11450P | F03FR01945 |
| 12,7 | 50,8 | 109,8 | | 1/2 | 12,7 | 2 | 24.000 | 42-11650P | F03FR01947 |
| 12,7 | 38,5 | 94,1 | | 1/2 | 12,7 | 3 | 24.000 | 44-10850P | F03FR01952 |



FLUSH TRIM "V" GROOVE BITS

48-



Hand-held Routers

Table Routers



Softwood

Hardwood

Plywood

Wood Based Panels

| D mm | h mm | H mm | A mm | C mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|----------|---|-------------------|------------|------------|
| 15,88 | 25,4 | 76,2 | 6 | 12,7 | 90° | 2 | 20.000 | 48-10206P | F03FR02000 |
| 15,88 | 25,4 | 76,2 | 8 | 12,7 | 90° | 2 | 24.000 | 48-10208P | F03FR02001 |
| 15,88 | 25,4 | 87,2 | 12 | 12,7 | 90° | 2 | 24.000 | 48-11212P | F03FR02002 |



Machines:
Hand-held routers and table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Flush trimming bits rout a small, decorative "V" groove on the workpiece.



PANEL PILOT BITS

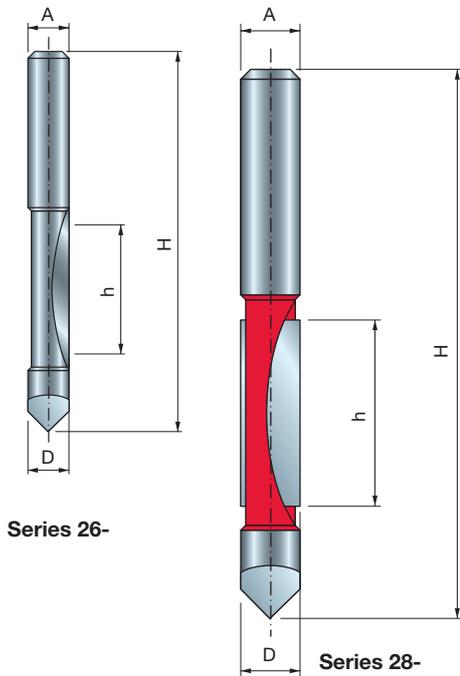
26- 28-



Hand-held Routers



Softwood Hardwood Plywood Wood Based Panels



Series 26-

Series 28-

| D mm | h mm | H mm | A mm | A inch | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|-----------|---|-------------------|------------------|------------|
| 6 | 19 | 57 | 6 | | 1 | 24.000 | 26-10006P | F03FR01664 |
| 8 | 19 | 75 | 8 | | 1 | 24.000 | 26-10008P | F03FR01665 |
| 12,7 | 31,75 | 96,2 | 12 | | 2 | 24.000 | 28-10412P | F03FR01692 |
| 6,35 | 19 | 57 | | 1/4 | 1 | 24.000 | 26-10025P | F03FR01666 |
| 12,7 | 31,75 | 96,2 | | 1/2 | 2 | 24.000 | 28-10450P | F03FR01693 |

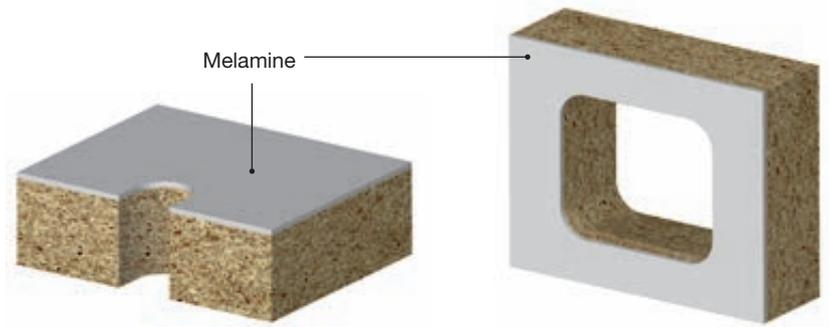
- Solid Carbide Bits



Machines:
Hand-held routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Panel pilot bits are a fast, efficient solution for cutting openings and trimming in panelling and other applications.



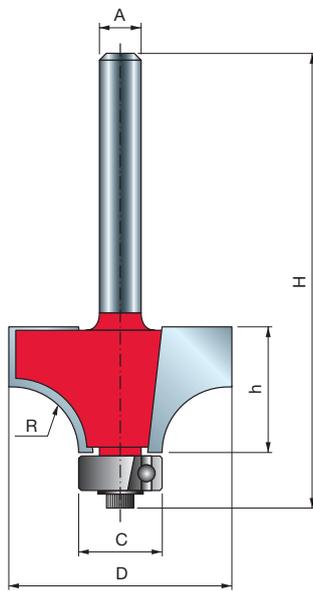
Edge Forming Bits



0.713.0°

ROUNDING OVER BITS

34- 36-



Machines:

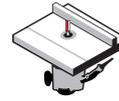
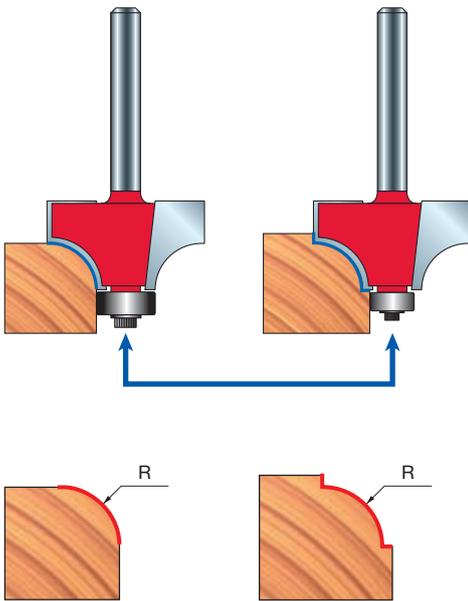
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Rounding over bits soften sharp edges of any workpiece.



Hand-held Routers

Table Routers



Softwood

Hardwood

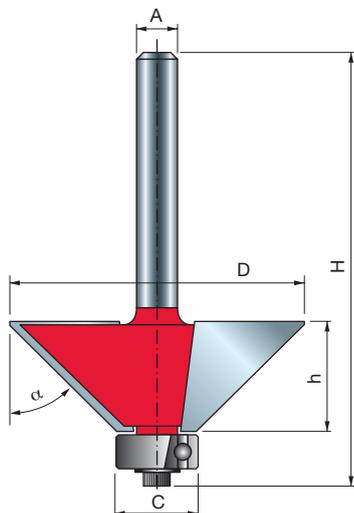
Plywood

Wood Based Panels

| D | h | H | A | C | R | Z | Max RPM | Freud Code | Art. No. | |
|-------|-------|-------|----|------|------|-------|---------|------------|-----------|------------|
| mm | mm | mm | mm | inch | mm | mm | 1/min. | | | |
| 15,88 | 12,7 | 54,9 | 6 | | 12,7 | 1,59 | 2 | 24.000 | 34-10006P | F03FR01763 |
| 16,7 | 12,7 | 54,9 | 6 | | 12,7 | 2 | 2 | 24.000 | 34-10106P | F03FR02766 |
| 19,05 | 12,7 | 55,2 | 6 | | 12,7 | 3,18 | 2 | 24.000 | 34-10406P | F03FR01768 |
| 22,22 | 12,7 | 54,9 | 6 | | 12,7 | 4,8 | 2 | 24.000 | 34-10806P | F03FR01771 |
| 25,4 | 12,7 | 54,7 | 6 | | 9,53 | 6,35 | 2 | 24.000 | 36-11006P | F03FR01803 |
| 25,4 | 12,7 | 55,2 | 6 | | 12,7 | 6,35 | 2 | 24.000 | 34-11006P | F03FR01774 |
| 28,58 | 12,7 | 55,2 | 6 | | 12,7 | 8 | 2 | 18.000 | 34-11206P | F03FR01777 |
| 31,75 | 18 | 59,7 | 6 | | 12,7 | 9,53 | 2 | 18.000 | 34-11406P | F03FR01780 |
| 31,75 | 18 | 59,2 | 6 | | 9,53 | 9,53 | 2 | 18.000 | 36-11406P | F03FR01804 |
| 38,1 | 19,1 | 61,25 | 6 | | 12,7 | 12,7 | 2 | 16.000 | 34-11606P | F03FR01783 |
| 15,88 | 12,7 | 54,9 | 8 | | 12,7 | 1,59 | 2 | 24.000 | 34-10008P | F03FR01764 |
| 16,7 | 12,7 | 54,9 | 8 | | 12,7 | 2 | 2 | 24.000 | 34-10108P | F03FR01766 |
| 18,7 | 12,7 | 54,9 | 8 | | 12,7 | 3 | 2 | 24.000 | 34-10308P | F03FR01767 |
| 19,05 | 12,7 | 55,2 | 8 | | 12,7 | 3,18 | 2 | 24.000 | 34-10408P | F03FR01769 |
| 22,22 | 13,2 | 54,9 | 8 | | 12,7 | 4,75 | 2 | 24.000 | 34-10808P | F03FR01772 |
| 25,4 | 12,7 | 55,2 | 8 | | 12,7 | 6,35 | 2 | 24.000 | 34-11008P | F03FR01775 |
| 28,58 | 12,7 | 55,2 | 8 | | 12,7 | 7,94 | 2 | 18.000 | 34-11208P | F03FR01778 |
| 31,75 | 18 | 59,7 | 8 | | 12,7 | 9,5 | 2 | 18.000 | 34-11408P | F03FR01781 |
| 38,1 | 19,1 | 61,25 | 8 | | 12,7 | 12,7 | 2 | 16.000 | 34-11608P | F03FR01784 |
| 44,44 | 22,2 | 64,72 | 8 | | 12,7 | 15,8 | 2 | 16.000 | 34-12708P | F03FR01793 |
| 25,4 | 12,7 | 61,2 | 12 | | 12,7 | 6,35 | 2 | 24.000 | 34-12012P | F03FR01786 |
| 31,75 | 18 | 65,7 | 12 | | 12,7 | 9,53 | 2 | 18.000 | 34-12412P | F03FR01788 |
| 38,1 | 19,05 | 67,25 | 12 | | 12,7 | 12,7 | 2 | 16.000 | 34-12612P | F03FR01791 |
| 44,44 | 22,22 | 70,72 | 12 | | 12,7 | 15,8 | 2 | 16.000 | 34-12712P | F03FR01794 |
| 50,8 | 25,4 | 73,9 | 12 | | 12,7 | 19 | 2 | 16.000 | 34-12812P | F03FR01796 |
| 57,15 | 31,4 | 79,85 | 12 | | 12,7 | 22,2 | 2 | 16.000 | 34-13012P | F03FR01798 |
| 63,5 | 31,3 | 79,75 | 12 | | 12,7 | 25,4 | 2 | 12.000 | 34-13212P | F03FR01799 |
| 69,85 | 34,9 | 83,3 | 12 | | 12,7 | 28,6 | 2 | 12.000 | 34-13412P | F03FR01801 |
| 76,2 | 38,1 | 86,6 | 12 | | 12,7 | 31,8 | 2 | 12.000 | 34-13612P | F03FR01802 |
| 15,88 | 12,7 | 54,9 | | 1/4 | 12,7 | 1,59 | 2 | 24.000 | 34-10025P | F03FR01765 |
| 19,05 | 12,7 | 55,2 | | 1/4 | 12,7 | 3,18 | 2 | 24.000 | 34-10425P | F03FR01770 |
| 22,22 | 13,2 | 54,9 | | 1/4 | 12,7 | 4,25 | 2 | 24.000 | 34-10825P | F03FR01773 |
| 25,4 | 12,7 | 55,2 | | 1/4 | 12,7 | 6,35 | 2 | 24.000 | 34-11025P | F03FR01776 |
| 28,58 | 12,7 | 55,2 | | 1/4 | 12,7 | 7,94 | 2 | 18.000 | 34-11225P | F03FR01779 |
| 31,75 | 18 | 59,7 | | 1/4 | 12,7 | 9,53 | 2 | 18.000 | 34-11425P | F03FR01782 |
| 38,1 | 19,1 | 61,25 | | 1/4 | 12,7 | 12,7 | 2 | 16.000 | 34-11625P | F03FR01785 |
| 25,4 | 12,7 | 61,2 | | 1/2 | 12,7 | 6,35 | 2 | 24.000 | 34-12050P | F03FR01787 |
| 31,75 | 18 | 65,7 | | 1/2 | 12,7 | 9,53 | 2 | 18.000 | 34-12450P | F03FR01790 |
| 38,1 | 19,1 | 67,25 | | 1/2 | 12,7 | 12,7 | 2 | 16.000 | 34-12650P | F03FR01792 |
| 44,44 | 22,2 | 70,7 | | 1/2 | 12,7 | 15,87 | 2 | 16.000 | 34-12750P | F03FR01795 |
| 50,8 | 25,4 | 73,9 | | 1/2 | 12,7 | 19,05 | 2 | 16.000 | 34-12850P | F03FR01797 |
| 63,5 | 31,25 | 79,8 | | 1/2 | 12,7 | 25,4 | 2 | 12.000 | 34-13250P | F03FR01800 |

By ordering a smaller ball bearing and step washer you will be able to obtain a different profile:

- The Ball bearing **3102M AA9** (Ø 9,53 mm) and the Step washer **FX07M AA9** for series 34-
- The Ball bearing **3102M AB9** (Ø 12,7 mm) and the Step washer **FX07M AB9** for series 36-



Machines:

Hand-held routers, table routers and CNC machines.

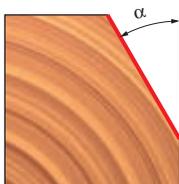
Bits with ball bearing are not recommended to be used on CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Easing edges, chamfer bits create a uniform chamfer on the edge of any workpiece.



CHAMFER BITS

40-



Hand-held Routers

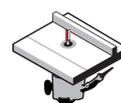
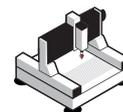


Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



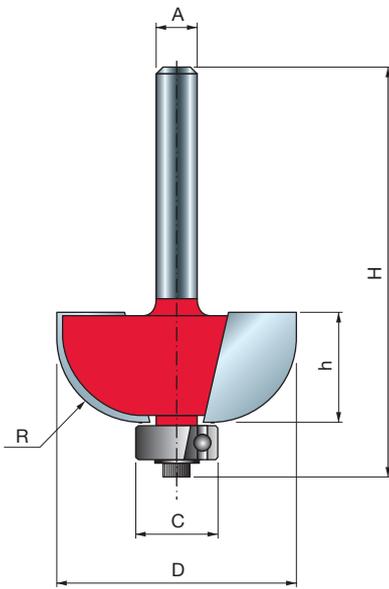
Wood Based Panels

| D | h | H | A | C | α | Z | Max RPM | Freud Code | Art. No. | |
|-------|------|-------|----|------|------|-------|---------|------------|-----------|------------|
| mm | mm | mm | mm | inch | mm | | 1/min. | | | |
| 18,15 | 12,7 | 54,9 | 6 | | 12,7 | 15° | 2 | 24.000 | 40-10006P | F03FR01906 |
| 21,77 | 25 | 67,3 | 6 | | 12,7 | 11.3° | 2 | 24.000 | 40-09406P | F03FR01900 |
| 23,6 | 12,7 | 54,9 | 6 | | 12,7 | 25° | 2 | 24.000 | 40-10206P | F03FR01912 |
| 24 | 12 | 44 | 6 | | • | 30° | 2 | 24.000 | 40-90206P | F03FR01929 |
| 24 | 14 | 46 | 6 | | • | 15° | 2 | 24.000 | 40-90006P | F03FR01927 |
| 25 | 8 | 40,3 | 6 | | • | 45° | 2 | 24.000 | 40-90406P | F03FR01931 |
| 25,4 | 25,1 | 67,25 | 6 | | 12,7 | 15° | 2 | 24.000 | 40-09806P | F03FR01903 |
| 30,1 | 22,5 | 64,7 | 6 | | 12,7 | 22.5° | 2 | 18.000 | 40-10106P | F03FR01909 |
| 31 | 9,5 | 52,3 | 6 | | 12,7 | 45° | 2 | 18.000 | 40-10506P | F03FR01917 |
| 33 | 11,5 | 54 | 6 | | 12,7 | 45° | 2 | 16.000 | 40-10406P | F03FR01914 |
| 33 | 19 | 61,6 | 6 | | 12,7 | 30° | 2 | 16.000 | 40-20206P | F03FR01925 |
| 44 | 18,5 | 61 | 6 | | 12,7 | 45° | 2 | 16.000 | 40-10606P | F03FR01919 |
| 18,15 | 12,7 | 54,9 | 8 | | 12,7 | 15° | 2 | 24.000 | 40-10008P | F03FR01907 |
| 21,77 | 25 | 67,3 | 8 | | 12,7 | 11.3° | 2 | 24.000 | 40-09408P | F03FR01901 |
| 23,6 | 12,7 | 54,9 | 8 | | 12,7 | 25° | 2 | 24.000 | 40-10208P | F03FR01913 |
| 24 | 12 | 44 | 8 | | • | 30° | 2 | 24.000 | 40-90208P | F03FR01930 |
| 24 | 14 | 46 | 8 | | • | 15° | 2 | 24.000 | 40-90008P | F03FR01928 |
| 25 | 8 | 40,3 | 8 | | • | 45° | 2 | 24.000 | 40-90408P | F03FR03255 |
| 25,4 | 25,1 | 67,25 | 8 | | 12,7 | 15° | 2 | 24.000 | 40-09808P | F03FR01904 |
| 30,1 | 22,5 | 64,7 | 8 | | 12,7 | 22.5° | 2 | 18.000 | 40-10108P | F03FR01910 |
| 31 | 9,5 | 52,3 | 8 | | 12,7 | 45° | 2 | 18.000 | 40-10508P | F03FR01918 |
| 33 | 11,5 | 54 | 8 | | 12,7 | 45° | 2 | 16.000 | 40-10408P | F03FR01915 |
| 33 | 19 | 61,6 | 8 | | 12,7 | 30° | 2 | 16.000 | 40-20208P | F03FR01926 |
| 44 | 18,5 | 61 | 8 | | 12,7 | 45° | 2 | 16.000 | 40-10608P | F03FR01920 |
| 21,77 | 25 | 73,3 | 12 | | 12,7 | 11.3° | 2 | 24.000 | 40-09412P | F03FR01902 |
| 25,4 | 25,1 | 73,25 | 12 | | 12,7 | 15° | 2 | 24.000 | 40-09812P | F03FR01905 |
| 30,1 | 22,5 | 70,7 | 12 | | 12,7 | 22.5° | 2 | 18.000 | 40-10112P | F03FR01911 |
| 44 | 18,5 | 67 | 12 | | 12,7 | 45° | 2 | 16.000 | 40-11412P | F03FR01922 |
| 62,1 | 25,5 | 74 | 12 | | 12,7 | 45° | 2 | 12.000 | 40-11812P | F03FR01924 |
| 18,15 | 12,7 | 54,9 | | 1/4 | 12,7 | 15° | 2 | 24.000 | 40-10025P | F03FR01908 |
| 33 | 11,5 | 53,9 | | 1/4 | 12,7 | 45° | 2 | 24.000 | 40-10425P | F03FR01916 |
| 41,5 | 15,9 | 58,4 | | 1/4 | 12,7 | 45° | 2 | 16.000 | 40-10625P | F03FR01921 |
| 43 | 18,5 | 67 | | 1/2 | 12,7 | 45° | 2 | 16.000 | 40-11450P | F03FR01923 |

- Without ball bearing.

COVE BITS

30-



Machines:

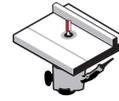
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Decorative concave edge for traditional furniture.



Hand-held Routers

Table Routers



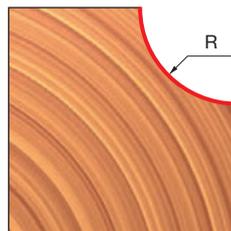
Softwood

Hardwood

Plywood

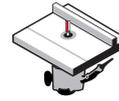
Wood Based Panels

| D mm | h mm | H mm | A mm | inch | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|------|---------|---------|---|-------------------|------------|------------|
| 19,05 | 14 | 56 | 6 | | 9,53 | 4,76 | 2 | 24.000 | 30-10006P | F03FR01694 |
| 22,23 | 13,2 | 54,7 | 6 | | 9,53 | 6,35 | 2 | 24.000 | 30-10206P | F03FR01697 |
| 25,4 | 12,7 | 54,7 | 6 | | 9,53 | 8 | 2 | 24.000 | 30-10306P | F03FR01700 |
| 31,75 | 12,7 | 55,2 | 6 | | 12,7 | 9,53 | 2 | 18.000 | 30-10406P | F03FR01703 |
| 38,1 | 16,4 | 58,9 | 6 | | 12,7 | 12,7 | 2 | 16.000 | 30-10606P | F03FR01706 |
| 19,05 | 14 | 56 | 8 | | 9,53 | 4,75 | 2 | 24.000 | 30-10008P | F03FR01695 |
| 22,23 | 13,2 | 54,7 | 8 | | 9,53 | 6,35 | 2 | 24.000 | 30-10208P | F03FR01698 |
| 25,4 | 12,7 | 54,7 | 8 | | 9,53 | 8 | 2 | 24.000 | 30-10308P | F03FR01701 |
| 31,75 | 12,7 | 55,2 | 8 | | 12,7 | 9,53 | 2 | 18.000 | 30-10408P | F03FR01704 |
| 38,1 | 16,4 | 58,9 | 8 | | 12,7 | 12,7 | 2 | 16.000 | 30-10608P | F03FR01707 |
| 19,05 | 14 | 62,4 | 12 | | 9,53 | 4,75 | 2 | 24.000 | 30-10012P | F03FR01696 |
| 22,23 | 12,7 | 60,7 | 12 | | 9,53 | 6,35 | 2 | 24.000 | 30-11012P | F03FR01709 |
| 25,4 | 12,7 | 60,7 | 12 | | 9,53 | 8 | 2 | 24.000 | 30-11112P | F03FR01710 |
| 31,75 | 12,7 | 61,2 | 12 | | 12,7 | 9,5 | 2 | 18.000 | 30-11212P | F03FR01711 |
| 38,1 | 16,4 | 64,9 | 12 | | 12,7 | 12,7 | 2 | 16.000 | 30-11412P | F03FR01713 |
| 22,23 | 13,2 | 54,7 | | 1/4 | 9,53 | 6,35 | 2 | 24.000 | 30-10225P | F03FR01699 |
| 25,4 | 12,7 | 54,7 | | 1/4 | 9,53 | 7,94 | 2 | 24.000 | 30-10325P | F03FR01702 |
| 31,75 | 12,7 | 55,2 | | 1/4 | 12,7 | 9,5 | 2 | 18.000 | 30-10425P | F03FR01705 |
| 38,1 | 16,4 | 58,9 | | 1/4 | 12,7 | 12,7 | 2 | 16.000 | 30-10625P | F03FR01708 |
| 31,75 | 12,7 | 61,2 | | 1/2 | 12,7 | 9,53 | 2 | 18.000 | 30-11250P | F03FR01712 |
| 38,1 | 16,4 | 64,9 | | 1/2 | 12,7 | 12,7 | 2 | 16.000 | 30-11450P | F03FR01714 |



CLASSICAL COVE BITS

30-



Hand-held Routers

Table Routers



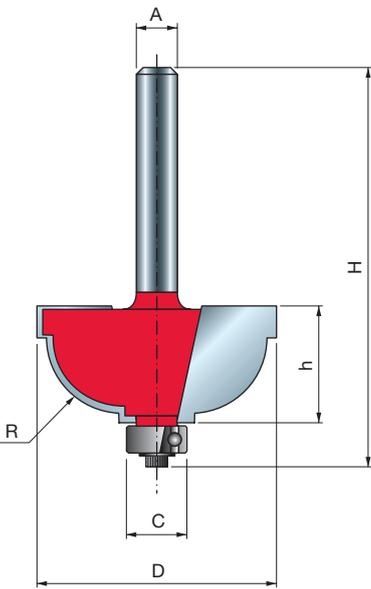
Softwood

Hardwood

Plywood

Wood Based Panels

| D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------|---|-------------------|------------------|------------|
| 28,58 | 13 | 54,2 | 6 | 9,53 | 4,8 | 2 | 18.000 | 30-30406P | F03FR01719 |
| 31,75 | 15,1 | 56,8 | 6 | 9,53 | 4,8 | 2 | 18.000 | 30-20206P | F03FR01715 |
| 28,58 | 13 | 54,2 | 8 | 9,53 | 4,8 | 2 | 18.000 | 30-30408P | F03FR01720 |
| 31,75 | 15,1 | 56,8 | 8 | 9,53 | 8 | 2 | 18.000 | 30-20208P | F03FR01716 |
| 28,58 | 13 | 60,2 | 12 | 9,53 | 4,8 | 2 | 18.000 | 30-32412P | F03FR01722 |
| 31,75 | 15,1 | 62,8 | 12 | 9,53 | 8 | 2 | 18.000 | 30-22212P | F03FR01718 |



Machines:

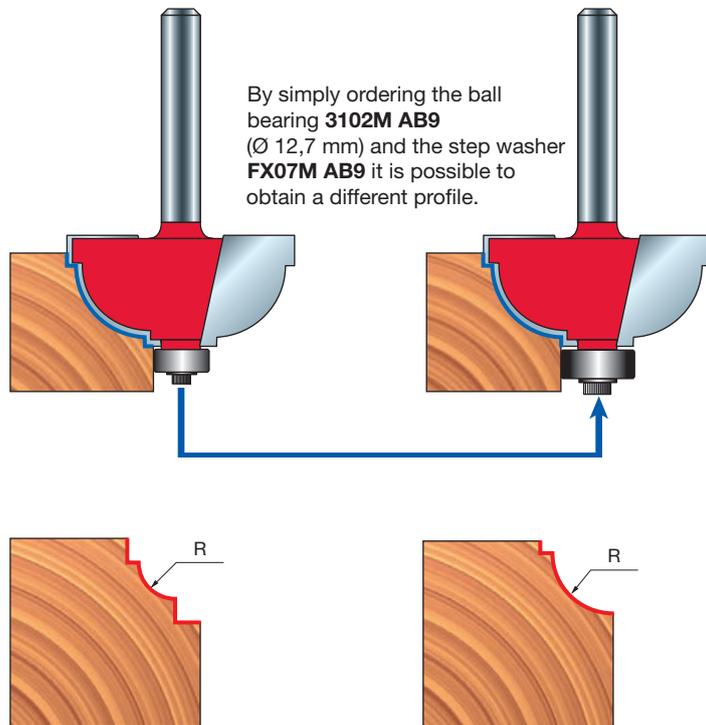
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

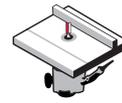
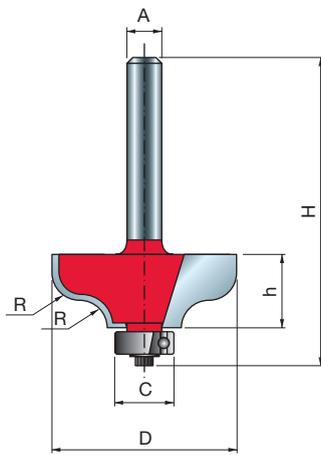
Applications:

Enhance edges and corners by adding an attractive cove profile, with a small fillet at the top and bottom.



OGEE FILLET BITS

38- 99-



Hand-held Routers

Table Routers



Softwood

Hardwood

Plywood

Wood Based Panels



Machines:

Hand-held routers and table routers.

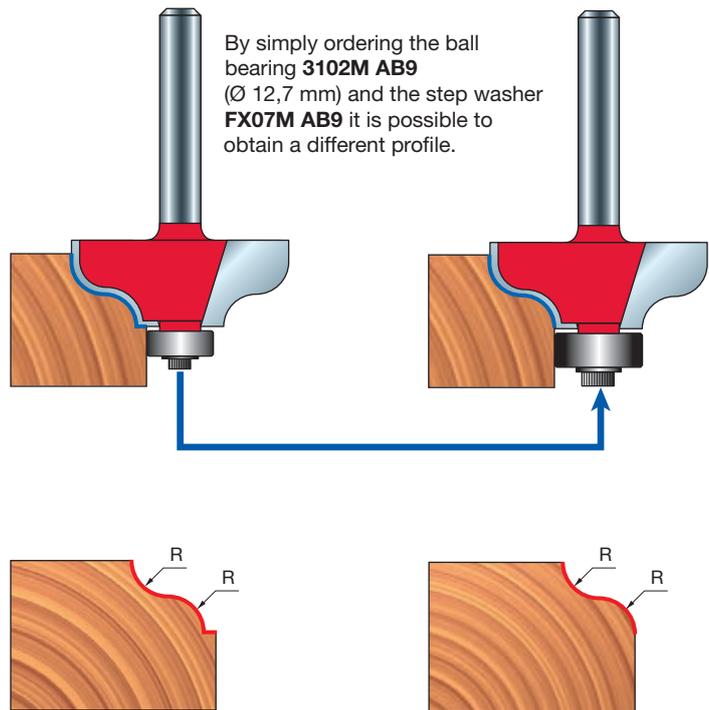
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Decorative edge detail on any workpiece.

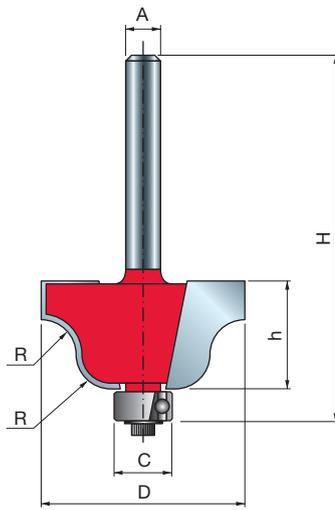
| D mm | h mm | H mm | A mm | inch | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|------|---------|---------|---|-------------------|------------------|------------|
| 31,75 | 12,2 | 53,9 | 6 | | 9,53 | 4,8 | 2 | 18.000 | 38-20206P | F03FR01815 |
| 38,1 | 16,2 | 57,4 | 6 | | 9,53 | 6,35 | 2 | 16.000 | 38-20406P | F03FR01818 |
| 31,75 | 12,2 | 53,9 | 8 | | 9,53 | 4,8 | 2 | 18.000 | 38-20208P | F03FR01816 |
| 38,1 | 16,2 | 57,4 | 8 | | 9,53 | 6,35 | 2 | 16.000 | 38-20408P | F03FR01819 |
| 31,75 | 12,2 | 59,9 | 12 | | 9,53 | 4,8 | 2 | 18.000 | 38-21212P | F03FR01821 |
| 38,1 | 16,2 | 63,4 | 12 | | 9,53 | 6,35 | 2 | 16.000 | 38-21412P | F03FR01822 |
| 31,75 | 12,2 | 53,9 | | 1/4 | 9,53 | 4,76 | 2 | 18.000 | 38-20225P | F03FR01817 |
| 31,75 | 12,2 | 54,4 | | 1/4 | 12,7 | 4,76 | 2 | 18.000 | 38-15225P | F03FR01814 |
| 38,1 | 16,2 | 57,4 | | 1/4 | 9,53 | 6,35 | 2 | 16.000 | 38-20425P | F03FR01820 |
| 38,1 | 16,5 | 64,7 | | 1/2 | 12,7 | 8,25 | 2 | 16.000 | 99-00650P | F03FR02412 |



By simply ordering the ball bearing **3102M AB9** (Ø 12,7 mm) and the step washer **FX07M AB9** it is possible to obtain a different profile.

ROMAN OGEE BITS

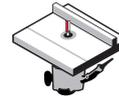
38-



Machines:
Hand-held routers and table routers.

Material:
Softwood, hardwood, plywood and wood based panels.

Applications:
Decorative edge detail on any workpiece.



Hand-held Routers

Table Routers



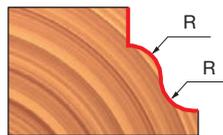
Softwood

Hardwood

Plywood

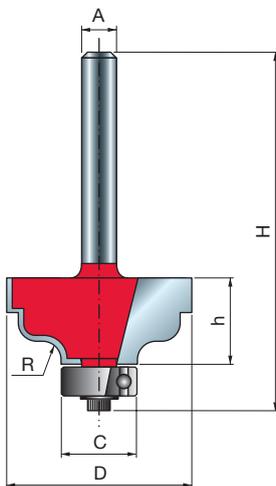
Wood Based Panels

| D | h | H | A | C | R | Z | Max RPM | Freud Code | Art. No. |
|----|------|-------|-----|------|------|---|---------|------------------|------------|
| mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 27 | 13,3 | 55,3 | 6 | 9,53 | 4 | 2 | 18.000 | 38-10006P | F03FR01805 |
| 35 | 18,5 | 60,5 | 6 | 9,53 | 6,35 | 2 | 16.000 | 38-10206P | F03FR01808 |
| 27 | 13,3 | 55,3 | 8 | 9,53 | 4 | 2 | 18.000 | 38-10008P | F03FR01806 |
| 35 | 18,5 | 60,5 | 8 | 9,53 | 6,35 | 2 | 16.000 | 38-10208P | F03FR01809 |
| 27 | 13,3 | 61,31 | 12 | 9,53 | 4 | 2 | 18.000 | 38-10412P | F03FR01811 |
| 35 | 18,5 | 66,5 | 12 | 9,53 | 6,35 | 2 | 16.000 | 38-10612P | F03FR01812 |
| 27 | 13,3 | 55,3 | 1/4 | 9,53 | 4 | 2 | 18.000 | 38-10025P | F03FR01807 |
| 35 | 18,5 | 66,5 | 1/4 | 9,53 | 6,35 | 2 | 16.000 | 38-10225P | F03FR01810 |
| 35 | 18,5 | 66,5 | 1/2 | 9,53 | 6,35 | 2 | 16.000 | 38-10650P | F03FR01813 |



CLASSICAL ROMAN OGEE BITS

38- 99-



Machines:
Hand-held routers and table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Decorative edge detail on any workpiece.



Hand-held Routers

Table Routers



Softwood

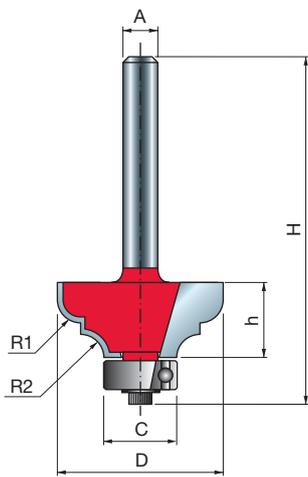
Hardwood

Plywood

Wood Based Panels

| D | h | H | A | C | R | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|-----|------|------|---|---------|------------------|------------|
| mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 31,75 | 15 | 56,7 | 6 | 12,7 | 3,18 | 2 | 18.000 | 38-40206P | F03FR01832 |
| 31,75 | 15 | 56,7 | 8 | 12,7 | 3,18 | 2 | 18.000 | 38-40208P | F03FR01833 |
| 34,92 | 14,3 | 62,8 | 12 | 12,7 | 4,8 | 2 | 16.000 | 99-00512P | F03FR02411 |
| 31,75 | 15 | 56,7 | 1/4 | 12,7 | 3,18 | 2 | 18.000 | 38-40225P | F03FR01834 |





Machines:
Hand-held routers and table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Decorative edge detail on any workpiece.

CLASSICAL OGEE BITS

38- 99-



Hand-held Routers

Table Routers



Softwood

Hardwood

Plywood

Wood Based Panels

| D | h | H | A | C | R1 | R2 | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|----|------|------|------|---|---------|------------|------------|
| mm | mm | mm | mm | inch | mm | mm | | 1/min. | | |
| 28,58 | 12,7 | 54,9 | 6 | 12,7 | 4 | 4 | 2 | 18.000 | 38-60206P | F03FR01838 |
| 34,92 | 18,3 | 60 | 6 | 12,7 | 6,35 | 4,76 | 2 | 16.000 | 38-60406P | F03FR01841 |
| 28,58 | 12,7 | 54,9 | 8 | 12,7 | 4 | 4 | 2 | 18.000 | 38-60208P | F03FR01839 |
| 34,92 | 18,3 | 60 | 8 | 12,7 | 6,35 | 4,76 | 2 | 16.000 | 38-60408P | F03FR01842 |
| 28,58 | 12,7 | 61,2 | 12 | 12,7 | 4 | 4 | 2 | 18.000 | 38-61212P | F03FR01843 |
| 34,92 | 17,5 | 65,7 | 12 | 12,7 | 6,35 | 4,76 | 2 | 16.000 | 38-61412P | F03FR01844 |
| 28,58 | 12,7 | 54,9 | | 1/4 | 12,7 | 3,97 | 2 | 18.000 | 38-60225P | F03FR01840 |
| 34,93 | 14,7 | 62,4 | | 1/2 | 9,53 | 5,35 | 2 | 16.000 | 99-00950P | F03FR02415 |
| 34,92 | 17,5 | 65,7 | | 1/2 | 12,7 | 6,35 | 2 | 16.000 | 38-61450P | F03FR01845 |

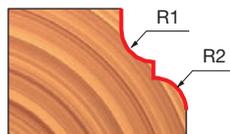
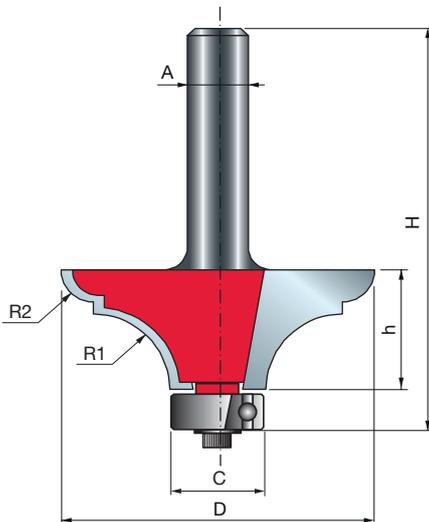


TABLE TOP CLASSICAL BOLD BITS

99-



Machines:
Hand-held routers and table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Create a bold effect on furniture of all types.



Hand-held Routers

Table Routers



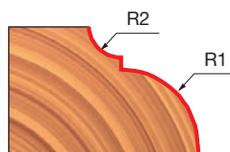
Softwood

Hardwood

Plywood

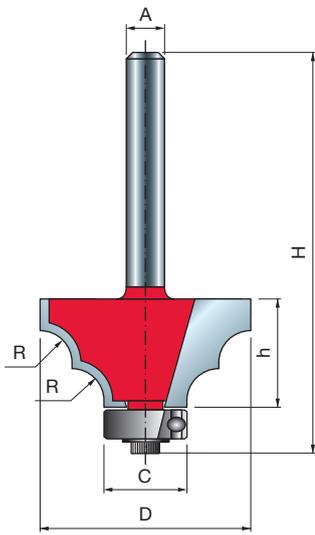
Wood Based Panels

| D | h | H | A | C | R1 | R2 | Z | Max RPM | Freud Code | Art. No. |
|------|------|------|----|------|----|-----|---|---------|------------|------------|
| mm | mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 41,3 | 15,9 | 58,4 | 8 | 12,7 | 10 | 4,3 | 2 | 16.000 | 99-01108P | F03FR02416 |
| 41,3 | 15,9 | 64,4 | 12 | 12,7 | 10 | 4,3 | 2 | 16.000 | 99-01112P | F03FR02417 |



DOUBLE BEAD BITS

38-



Hand-held Routers

Table Routers



Softwood

Hardwood

Plywood

Wood Based Panels

| D | h | H | A | C | R | Z | Max RPM | Freud Code | Art. No. |
|------|----|------|----|------|----|---|---------|------------|------------|
| mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 32,7 | 15 | 57,2 | 6 | 12,7 | 5 | 2 | 16.000 | 38-90006P | F03FR01852 |
| 32,7 | 15 | 57,2 | 8 | 12,7 | 5 | 2 | 16.000 | 38-90008P | F03FR01853 |

Machines:

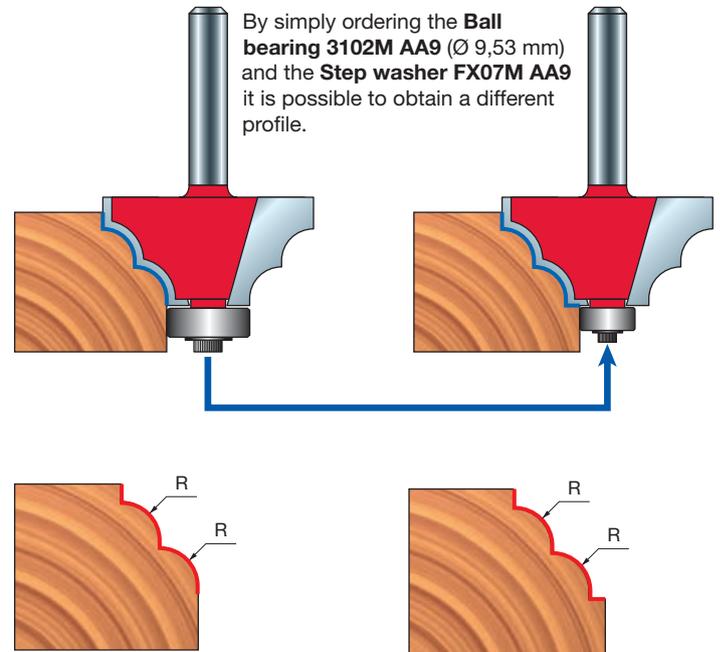
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

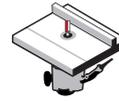
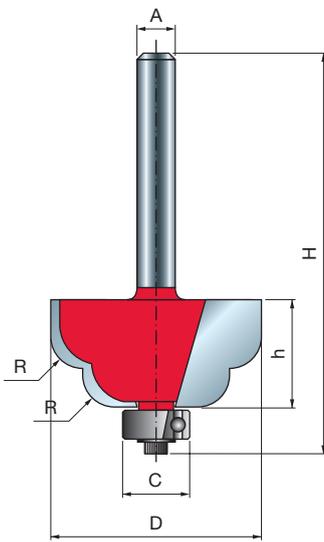
Applications:

Create two beads in one pass in the surface of the workpiece.



DOUBLE COVE BITS

38-



Hand-held Routers

Table Routers



Softwood

Hardwood

Plywood

Wood Based Panels



Machines:

Hand-held routers and table routers.

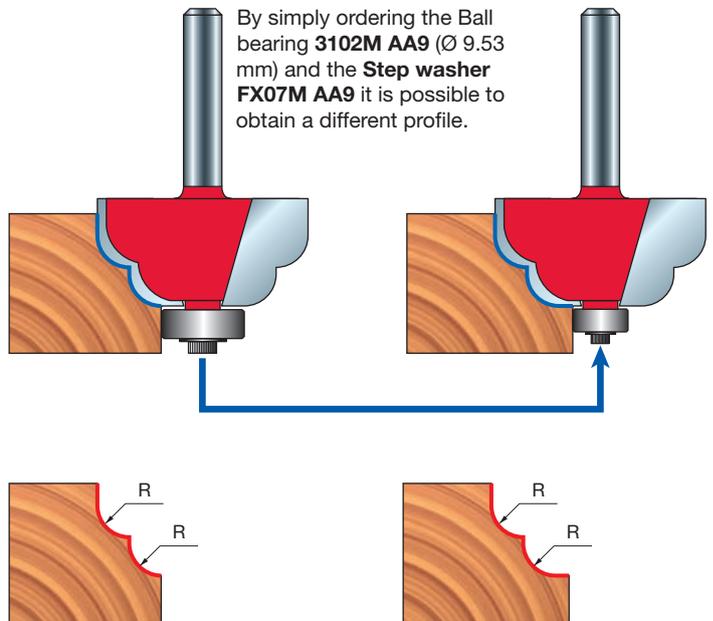
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Create two graceful curves to add character to the workpiece.

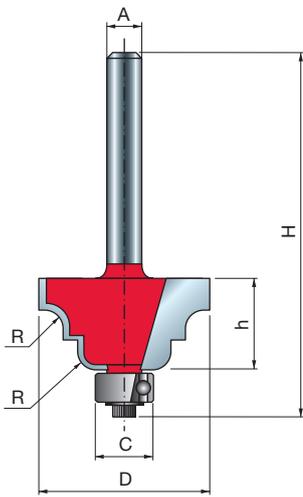
| D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------|---|-------------------|------------------|------------|
| 32,7 | 15 | 57,2 | 6 | 12,7 | 5 | 2 | 16.000 | 38-95006P | F03FR01854 |
| 32,7 | 15 | 57,2 | 8 | 12,7 | 5 | 2 | 16.000 | 38-95008P | F03FR01855 |



By simply ordering the Ball bearing **3102M AA9** (Ø 9.53 mm) and the Step washer **FX07M AA9** it is possible to obtain a different profile.

COVE AND BEAD BITS

38-



Machines:

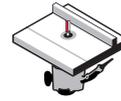
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Decorative edge detail on any workpiece.



Hand-held Routers

Table Routers



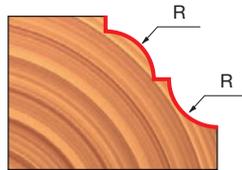
Softwood

Hardwood

Plywood

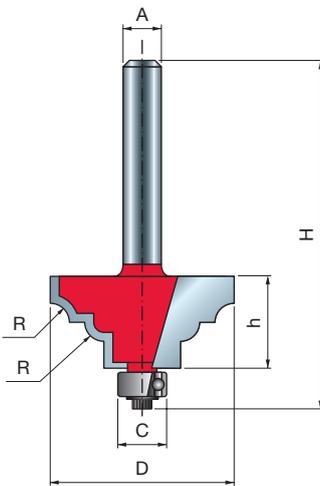
Wood Based Panels

| D mm | h mm | H mm | A mm inch | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-----------------|---------|---------|---|-------------------|------------------|------------|
| 29,38 | 13,5 | 55,5 | 6 | 9,53 | 3,97 | 2 | 18.000 | 38-30606P | F03FR01826 |
| 38,9 | 18,3 | 60 | 6 | 9,53 | 6,35 | 2 | 16.000 | 38-30406P | F03FR01823 |
| 29,38 | 13,5 | 55,5 | 8 | 9,53 | 3,97 | 2 | 18.000 | 38-30608P | F03FR01827 |
| 38,9 | 18,3 | 60 | 8 | 9,53 | 6,35 | 2 | 16.000 | 38-30408P | F03FR01824 |
| 29,38 | 13,5 | 61,2 | 12 | 9,53 | 3,97 | 2 | 18.000 | 38-31212P | F03FR01829 |
| 38,92 | 18,3 | 66 | 12 | 9,53 | 6,35 | 2 | 16.000 | 38-31412P | F03FR01831 |
| 38,9 | 18,3 | 60,8 | 1/4 | 9,53 | 6,35 | 2 | 16.000 | 38-30425P | F03FR01825 |



FILLET COVE AND BEAD BITS

38-



Machines:

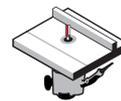
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Decorative edge detail on any workpiece.



Hand-held Routers

Table Routers



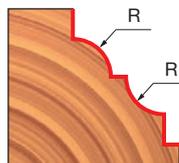
Softwood

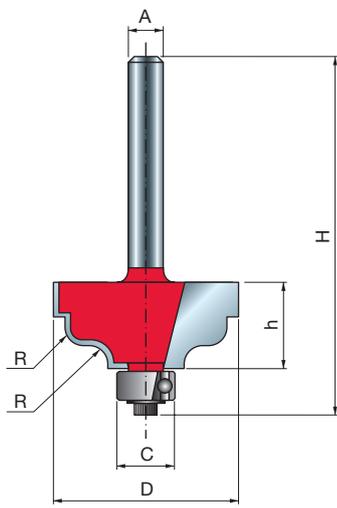
Hardwood

Plywood

Wood Based Panels

| D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------|---|-------------------|------------------|------------|
| 32,7 | 14,5 | 56,7 | 6 | 12,7 | 3 | 2 | 16.000 | 38-80006P | F03FR01846 |
| 36,7 | 16,5 | 58,7 | 6 | 12,7 | 4 | 2 | 16.000 | 38-80206P | F03FR01848 |
| 40,7 | 18 | 60,2 | 6 | 12,7 | 5 | 2 | 16.000 | 38-80406P | F03FR01850 |
| 32,7 | 14,5 | 56,7 | 8 | 12,7 | 3 | 2 | 16.000 | 38-80008P | F03FR01847 |
| 36,7 | 16,5 | 58,7 | 8 | 12,7 | 4 | 2 | 16.000 | 38-80208P | F03FR01849 |
| 40,7 | 18 | 60,2 | 8 | 12,7 | 5 | 2 | 16.000 | 38-80408P | F03FR01851 |





Machines:
Hand-held routers and table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Decorative edge detail on any workpiece.

DOUBLE FILLET OGEE BITS

38-



Hand-held Routers

Table Routers



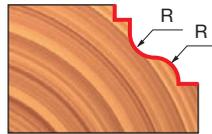
Softwood

Hardwood

Plywood

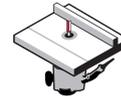
Wood Based Panels

| D mm | h mm | H mm | A mm | A inch | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|-----------|---------|---------|---|-------------------|------------|------------|
| 31,75 | 15 | 56,2 | 6 | | 9,53 | 3,18 | 2 | 18.000 | 38-45206P | F03FR01835 |
| 31,75 | 15 | 56,2 | 8 | | 9,53 | 3,18 | 2 | 18.000 | 38-45208P | F03FR01836 |
| 31,75 | 15 | 56,2 | | 1/4 | 9,53 | 3,18 | 2 | 18.000 | 38-45225P | F03FR01837 |



TRADITIONAL BEADING BITS

80-



Hand-held Routers

Table Routers

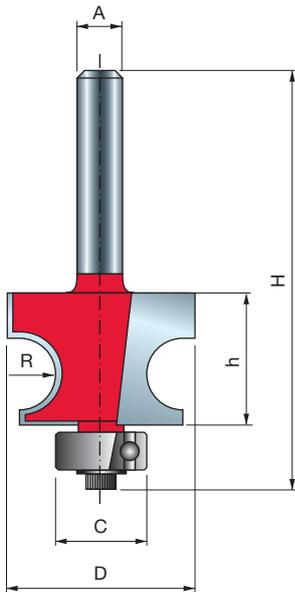


Softwood

Hardwood

Plywood

Wood Based Panels

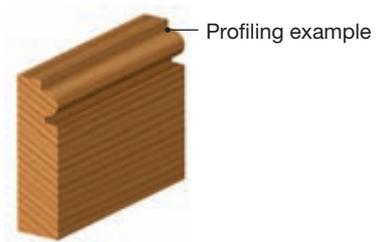
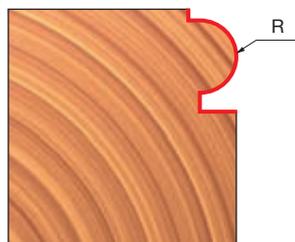


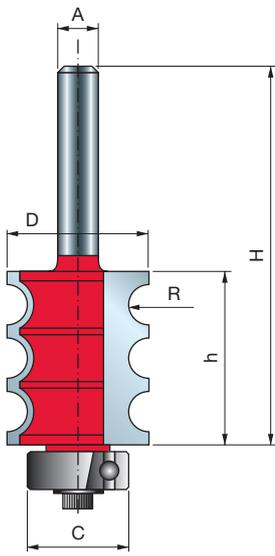
Machines:
Hand-held routers and table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Create single beads in one pass in the surface of the workpiece.

| D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------|---|-------------------|------------|------------|
| 22,23 | 14,3 | 56,9 | 6 | 12,7 | 3,18 | 2 | 24.000 | 80-10206P | F03FR02192 |
| 25,4 | 17,5 | 60 | 6 | 12,7 | 4,76 | 2 | 24.000 | 80-10406P | F03FR02195 |
| 30,17 | 22,2 | 64,2 | 6 | 12,7 | 7,14 | 2 | 18.000 | 80-10806P | F03FR02198 |
| 22,23 | 14,3 | 57,1 | 8 | 12,7 | 3,18 | 2 | 24.000 | 80-10208P | F03FR02193 |
| 25,4 | 17,5 | 60 | 8 | 12,7 | 4,76 | 2 | 24.000 | 80-10408P | F03FR02196 |
| 30,17 | 22,2 | 64,2 | 8 | 12,7 | 7,14 | 2 | 18.000 | 80-10808P | F03FR02199 |
| 22,23 | 14,3 | 62,9 | 12 | 12,7 | 3,18 | 2 | 24.000 | 80-12212P | F03FR02201 |
| 25,4 | 17,5 | 66,4 | 12 | 12,7 | 4,76 | 2 | 24.000 | 80-12412P | F03FR02203 |
| 30,17 | 22,2 | 70,6 | 12 | 12,7 | 7,14 | 2 | 18.000 | 80-12812P | F03FR02204 |





Machines:

Hand-held routers and table routers.

Materials:

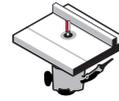
Softwood, hardwood, plywood and wood based panels.

Applications:

Create three beads in one pass in the surface of the workpiece.

TRIPLE BEADING BITS

80-



Hand-held Routers

Table Routers



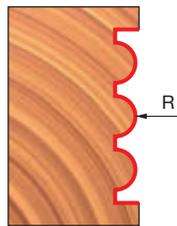
Softwood

Hardwood

Plywood

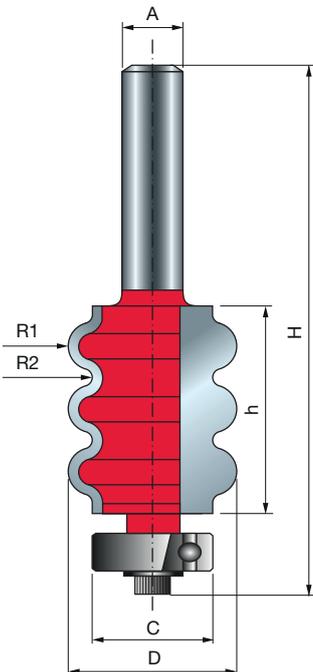
Wood Based Panels

| D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------|---|-------------------|------------|------------|
| 22,24 | 27,4 | 70,9 | 6 | 15,88 | 3,18 | 2 | 18.000 | 80-55206P | F03FR02205 |
| 22,24 | 27,4 | 70,9 | 8 | 15,88 | 3,18 | 2 | 24.000 | 80-55208P | F03FR02206 |
| 22,24 | 27,4 | 76,9 | 12 | 15,88 | 3,18 | 2 | 24.000 | 80-57212P | F03FR02207 |



TRIPLE FLUTING BITS

84-



Machines:

Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Produce multiple flutes on the workpiece.



Hand-held Routers

Table Routers



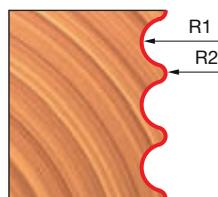
Softwood

Hardwood

Plywood

Wood Based Panels

| D mm | h mm | H mm | A mm | C mm | R1 mm | R2 mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|----------|----------|---|-------------------|------------|------------|
| 22,24 | 27,4 | 70,9 | 6 | 15,88 | 3,18 | 1,16 | 2 | 24.000 | 84-10606P | F03FR02220 |
| 22,24 | 27,4 | 70,9 | 8 | 15,88 | 3,18 | 1,16 | 2 | 24.000 | 84-10608P | F03FR02221 |
| 22,24 | 27,4 | 76,9 | 12 | 15,88 | 3,18 | 1,16 | 2 | 24.000 | 84-12612P | F03FR02222 |





TOP BEARING OGEE AND COVE MOULDING BITS

23-

Machines:
Table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

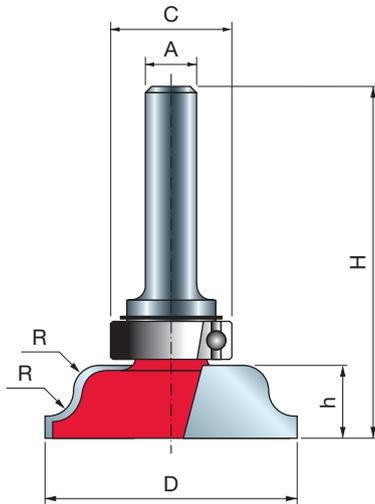
Applications:
Decorative edge detail on any workpiece.



Table Routers

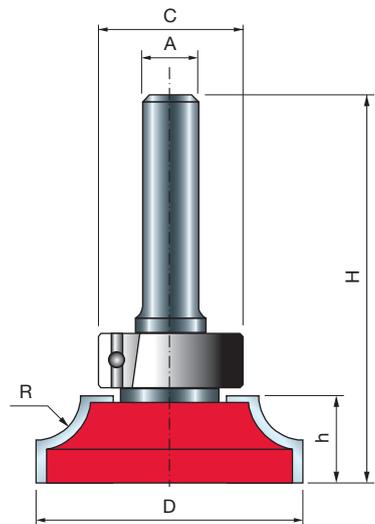
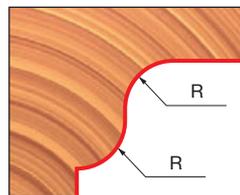


Softwood Hardwood Plywood Wood Based Panels



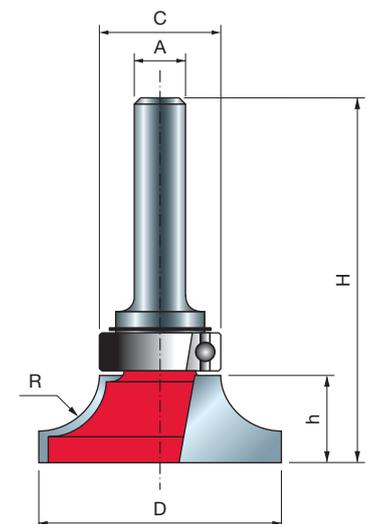
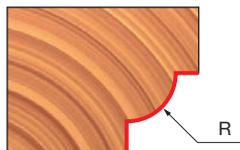
Type A

| D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|------|------|------|------|---|----------------|------------|------------|
| 39,5 | 11,5 | 54,6 | 8 | 19 | 4 | 2 | 16.000 | 23-10008P | F03FR01654 |
| 39,5 | 11,5 | 58 | 12 | 19 | 4 | 2 | 16.000 | 23-10012P | F03FR01655 |
| 54 | 11,5 | 58 | 12 | 19 | 4 | 2 | 16.000 | 23-10212P | F03FR01656 |
| 60,5 | 17,3 | 63,8 | 12 | 19 | 6,35 | 2 | 12.000 | 23-10412P | F03FR01657 |



Type B

| D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|------|------|------|------|---|----------------|------------|------------|
| 38 | 12,5 | 55,6 | 8 | 19 | 6,35 | 2 | 16.000 | 23-20008P | F03FR01658 |
| 38 | 12,5 | 59 | 12 | 19 | 6,35 | 2 | 16.000 | 23-20012P | F03FR01659 |



Type C

| D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|------|------|------|------|---|----------------|------------|------------|
| 35 | 13,2 | 56,3 | 8 | 19 | 8 | 2 | 16.000 | 23-20208P | F03FR01660 |
| 38 | 14,5 | 57,6 | 8 | 19 | 9,53 | 2 | 16.000 | 23-20408P | F03FR01662 |
| 35 | 13,2 | 59,7 | 12 | 19 | 8 | 2 | 16.000 | 23-20212P | F03FR01661 |
| 38 | 14,5 | 61 | 12 | 19 | 9,53 | 2 | 16.000 | 23-20412P | F03FR01663 |

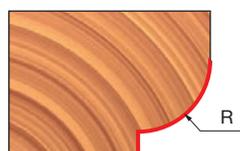




TABLE EDGE AND HAND RAIL BITS

99-

Machines:
Table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Rout elegant table and furniture detail, hand rail shapes and much more.



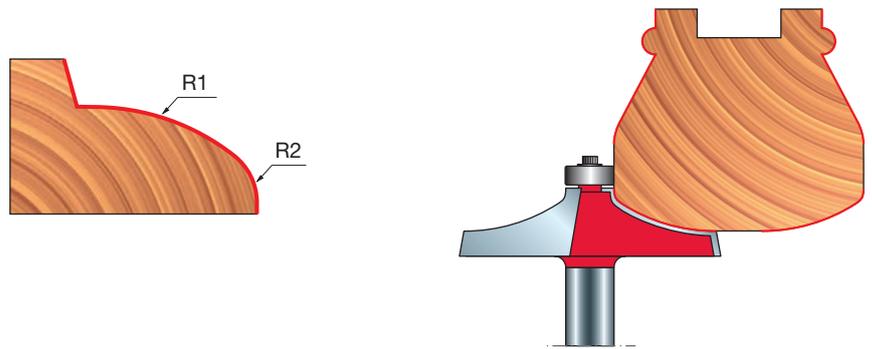
Table Routers



Softwood Hardwood Plywood Wood Based Panels

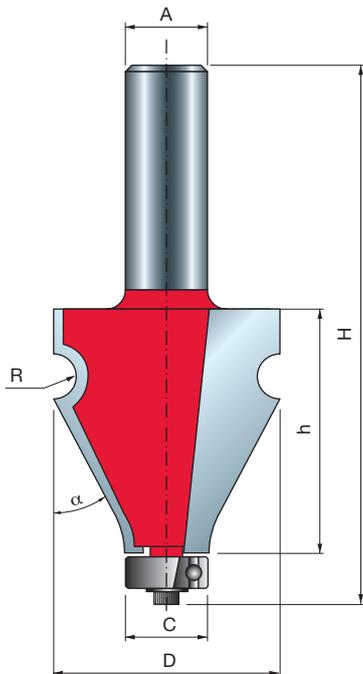
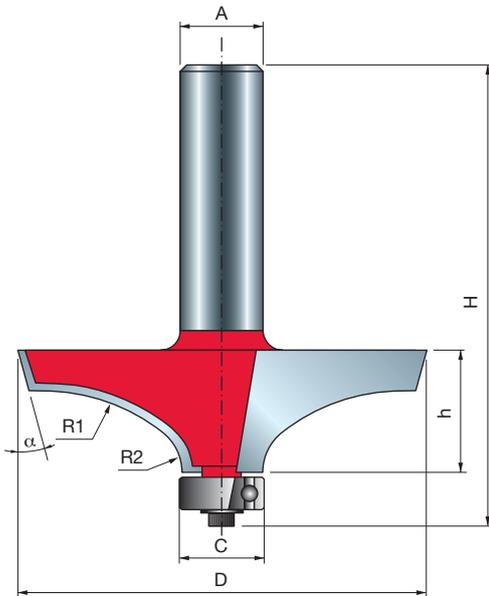
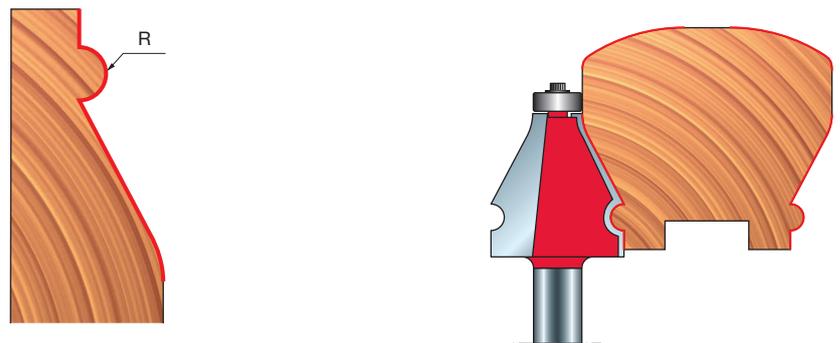
Type A

| D mm | h mm | H mm | A mm | C mm | R1 mm | R2 mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|----------|----------|----------|---|-------------------|------------|------------|
| 63,5 | 18 | 66,2 | 12 | 12,7 | 30 | 8 | 15° | 2 | 12.000 | 99-02712P | F03FR02421 |



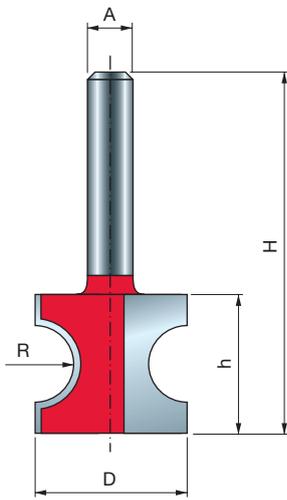
Type B

| D mm | h mm | H mm | A mm | C mm | R mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------|----------|---|-------------------|------------|------------|
| 35 | 38,5 | 86,6 | 12 | 12,7 | 3,18 | 25° | 2 | 16.000 | 99-07212P | F03FR02456 |



HALF ROUND BITS

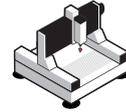
82-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Machines:

Hand-held routers, table routers and CNC machines.

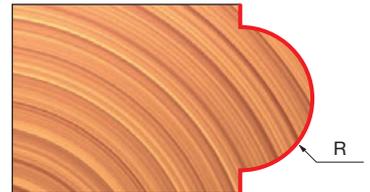
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Perform fully rounded semicircular edge on any workpiece.

| D | h | H | A | R | Z | Max RPM | Freud Code | Art. No. |
|-------|-------|-------|----|------|---|---------|------------------|------------|
| mm | mm | mm | mm | inch | | 1/min. | | |
| 19 | 12,4 | 44,4 | 6 | 3,18 | 2 | 24.000 | 82-10206P | F03FR02208 |
| 22,22 | 19,5 | 51,5 | 6 | 4,8 | 2 | 24.000 | 82-10406P | F03FR02210 |
| 25,4 | 22,9 | 54,9 | 6 | 6,35 | 2 | 24.000 | 82-10606P | F03FR02213 |
| 19 | 12,4 | 44,4 | 8 | 3,18 | 2 | 24.000 | 82-10208P | F03FR02209 |
| 22,22 | 19,5 | 51,5 | 8 | 4,76 | 2 | 24.000 | 82-10408P | F03FR02211 |
| 25,4 | 22,9 | 54,9 | 8 | 6,35 | 2 | 24.000 | 82-10608P | F03FR02214 |
| 19 | 12,4 | 53,4 | 12 | 3,2 | 2 | 24.000 | 82-11012P | F03FR02215 |
| 22,22 | 19,5 | 60,5 | 12 | 4,76 | 2 | 24.000 | 82-11212P | F03FR02216 |
| 25,4 | 22,9 | 64,9 | 12 | 6,35 | 2 | 24.000 | 82-11412P | F03FR02217 |
| 37 | 29,05 | 71,05 | 12 | 9,5 | 2 | 16.000 | 82-11612P | F03FR02218 |
| 45,9 | 35,4 | 73,4 | 12 | 12,7 | 2 | 16.000 | 82-11812P | F03FR02219 |
| 22 | 19,5 | 51,5 | | 1/4 | 2 | 24.000 | 82-10425P | F03FR02212 |





MULTI-PROFILE BITS

99-

Machines:
Table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Produce an endless number of profile designs by varying the height and fence settings and making multiple passes.

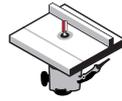
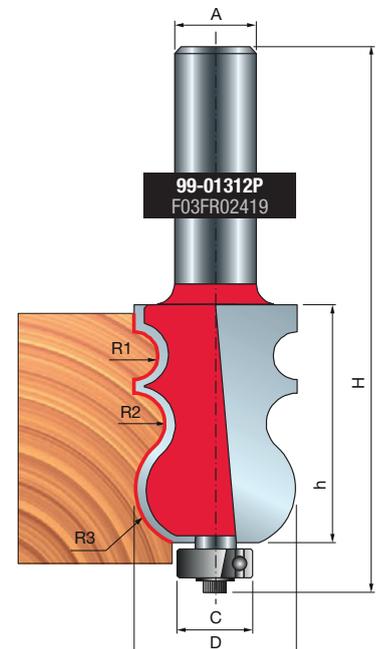
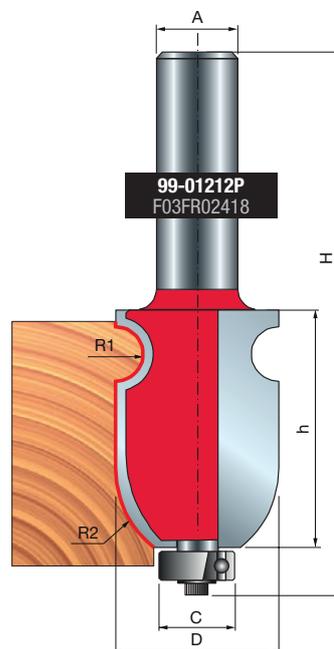
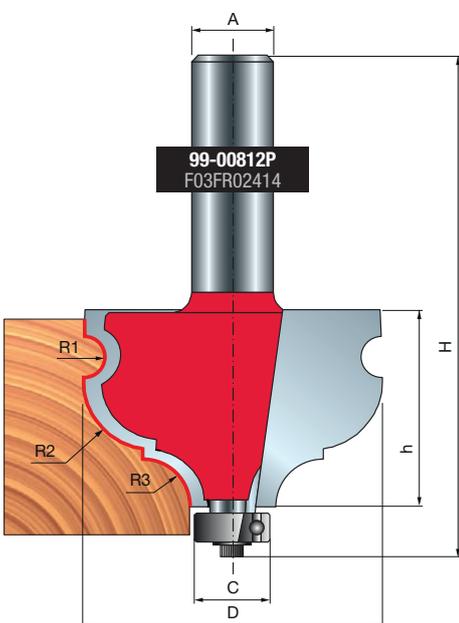
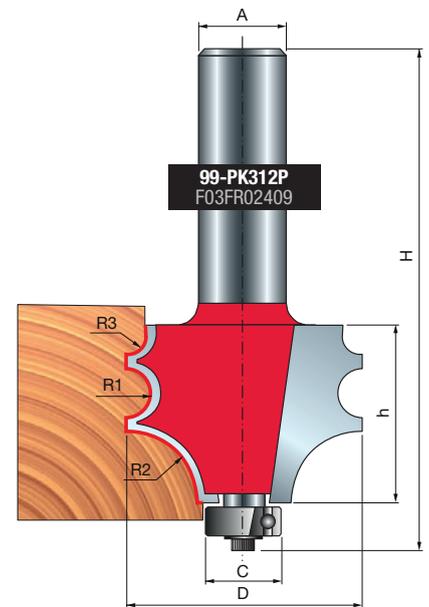
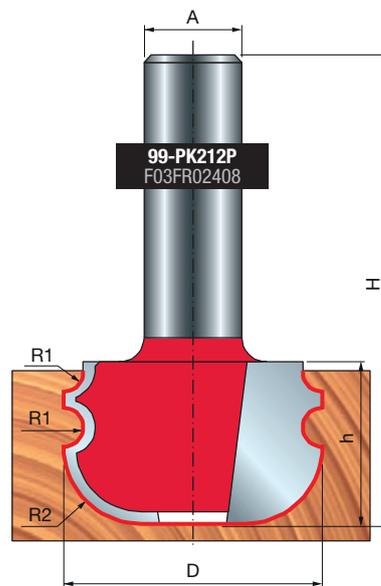
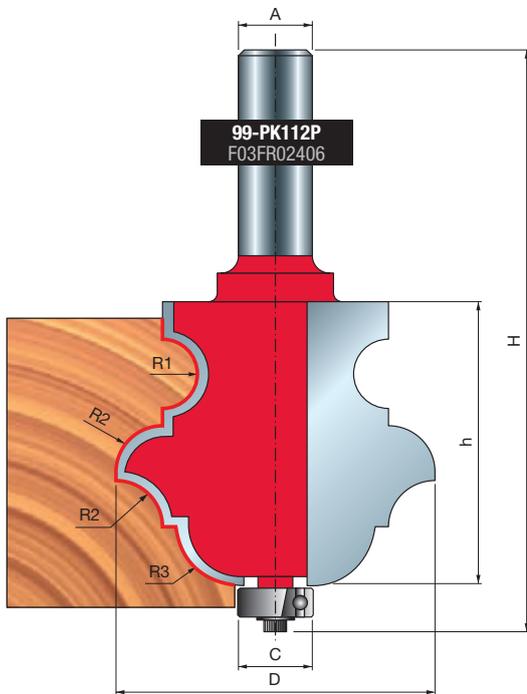


Table Routers



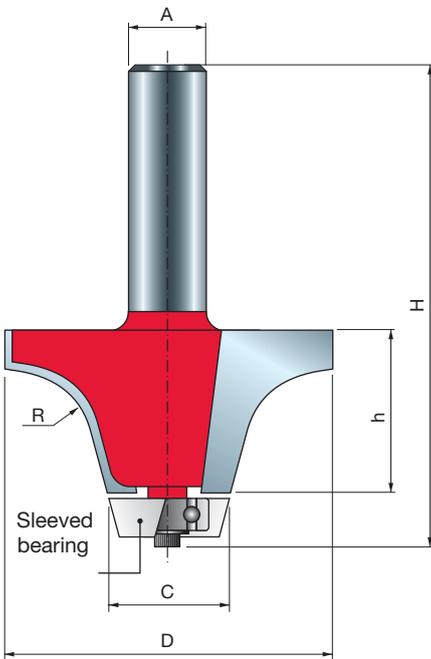
Softwood Hardwood Plywood Wood Based Panels

| D | h | H | A | C | R1 | R2 | R3 | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|----|------|-----|------|-----|---|---------|------------|------------|
| mm | mm | mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 54,7 | 49 | 102 | 12 | 12,7 | 6 | 8 | 10 | 2 | 10.000 | 99-PK112P | F03FR02406 |
| 31,75 | 20 | 58 | 12 | - | 2,4 | 9,53 | - | 2 | 18.000 | 99-PK212P | F03FR02408 |
| 31,75 | 23,8 | 72 | 12 | 12,7 | 3,2 | 9,53 | 2,4 | 2 | 18.000 | 99-PK312P | F03FR02409 |
| 44,44 | 29 | 77,1 | 12 | 12,7 | 3 | 10,5 | 7 | 2 | 16.000 | 99-00812P | F03FR02414 |
| 23,8 | 35 | 83,5 | 12 | 12,7 | 4 | 15 | - | 2 | 24.000 | 99-01212P | F03FR02418 |
| 23,8 | 35 | 83,5 | 12 | 12,7 | 3,5 | 4,5 | 8,5 | 2 | 24.000 | 99-01312P | F03FR02419 |



ROUND OVER BOWL BITS

85-



Hand-held Routers

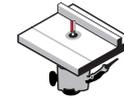


Table Routers



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



Solid Surfaces

| D | h | H | A | C | R | Z | Max RPM | Freud Code | Art. No. | |
|------|------|------|----|------|------|------|---------|------------|-----------|------------|
| mm | mm | mm | mm | inch | mm | | 1/min. | | | |
| 54 | 25,4 | 74,6 | 12 | | 22,2 | 12,7 | 2 | 16.000 | 85-00112P | F03FR02223 |
| 57,2 | 31,8 | 81 | 12 | | 22,2 | 12,7 | 2 | 12.000 | 85-00312P | F03FR02225 |
| 50,8 | 25,4 | 73,6 | | 1/2 | 19,1 | 12,7 | 2 | 16.000 | 85-00150P | F03FR02224 |



Machines:

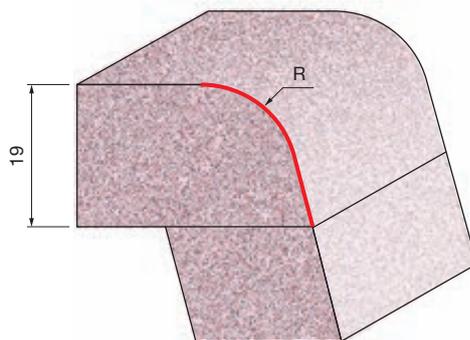
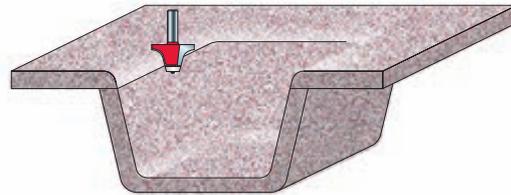
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood, wood composites and all solid surface materials.

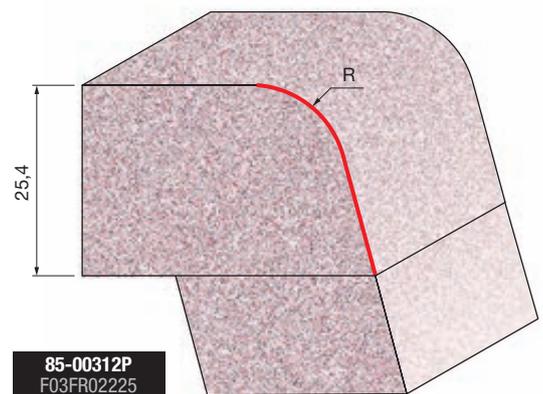
Applications:

Designed to trim the joint between solid surface countertops and solid surface sink bowls, in order to create a smooth, rounded edge.



85-00112P
F03FR02223

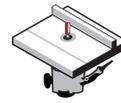
85-00150P
F03FR02224



85-00312P
F03FR02225

OGEE BOWL BITS

85-



Hand-held Routers

Table Routers



Softwood

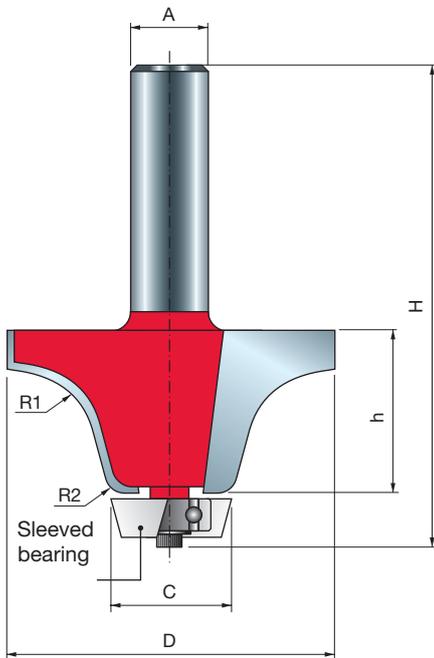
Hardwood

Plywood

Wood Based Panels

Solid Surfaces

| D mm | h mm | H mm | A mm | C mm | R1 mm | R2 mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|----------|----------|---|-------------------|------------|------------|
| 54 | 25,4 | 74,6 | 12 | 19,2 | 12,7 | 6,35 | 2 | 16.000 | 85-00512P | F03FR02226 |
| 57,2 | 31,8 | 80,9 | 12 | 19,2 | 12,7 | 6,35 | 2 | 12.000 | 85-00712P | F03FR02227 |



Machines:

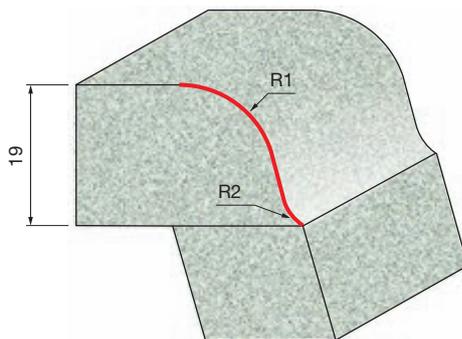
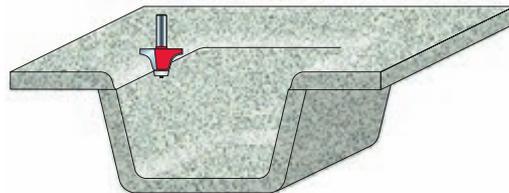
Hand-held routers and table routers.

Materials:

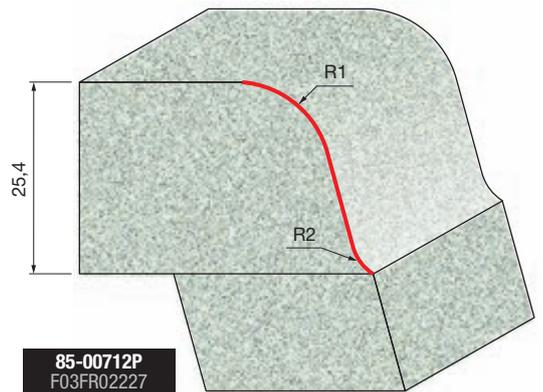
Softwood, hardwood, plywood, wood based panels and all solid surface materials.

Applications:

Trim the counter flush with the bowl while creating an ogee edge.



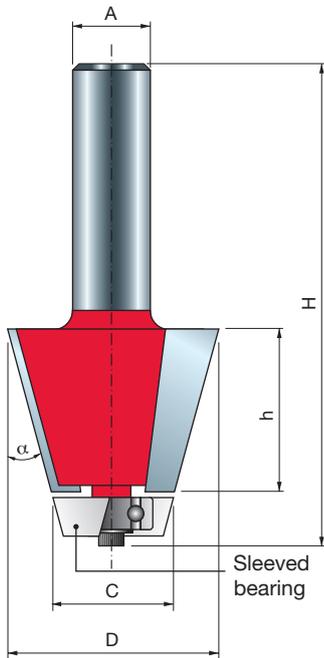
85-00512P
F03FR02226



85-00712P
F03FR02227

BEVEL BOWL BIT

85-



Hand-held Routers

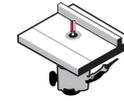


Table Routers



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



Solid Surfaces

| D | h | H | A | C | α | Z | Max RPM | Freud Code | Art. No. |
|------|------|------|----|------|-----|---|---------|------------|------------|
| mm | mm | mm | mm | mm | | | 1/min. | | |
| 35,6 | 25,4 | 78,1 | 12 | 22,2 | 15° | 2 | 16.000 | 85-00912P | F03FR02228 |



Machines:

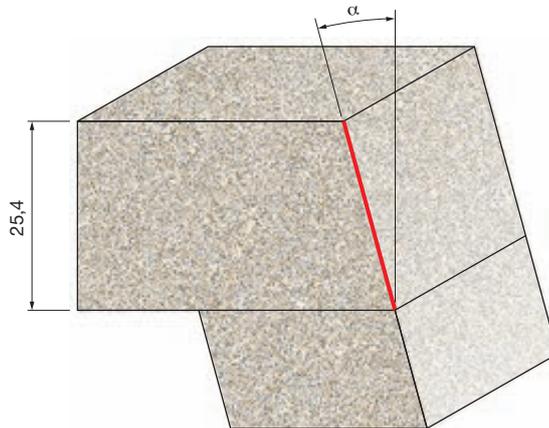
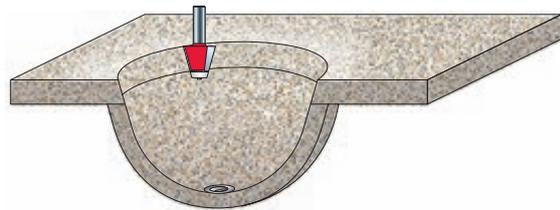
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood, wood based panels and all solid surface materials.

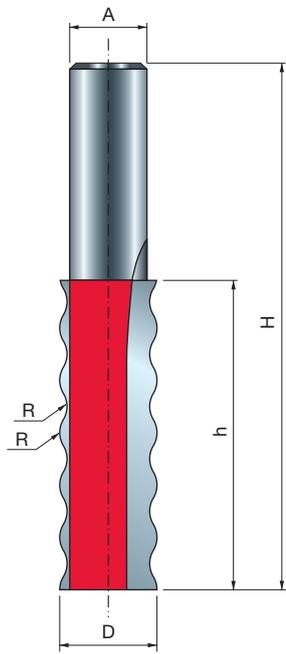
Applications:

Designed to trim the joint between solid surface countertops and solid surface sink bowls to create a smooth, chamfered edge.



WAVY JOINT BIT

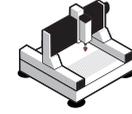
85-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



Solid Surfaces

| D | h | H | A | R | Z | Max RPM | Freud Code | Art. No. |
|----|------|----|----|----|---|---------|------------|------------|
| mm | mm | mm | mm | mm | | 1/min. | | |
| 16 | 51,3 | 88 | 12 | 4 | 2 | 24.000 | 85-03312P | F03FR02229 |



Machines:

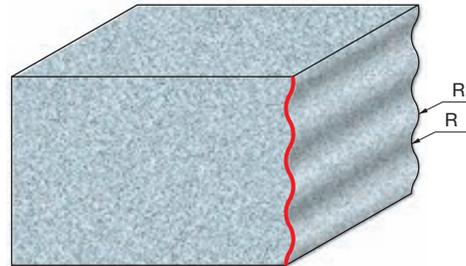
Hand-held routers, table routers and CNC machines.

Materials:

Softwood, hardwood, plywood, wood based panels and all solid surface materials.

Applications:

Increase gluing area for a stronger joint.

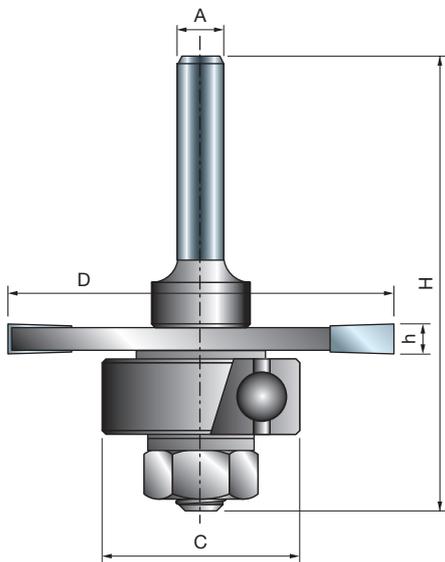


Joinery Bits



WING SLOTTING CUTTERS

63-



Machines:

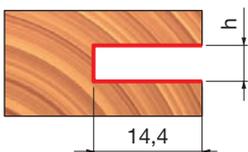
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

A great choice to mill slots and grooves for T-moldings, spline joints, tongue and groove joints and many other applications.



Hand-held Routers



Table Routers



Softwood



Hardwood



Plywood



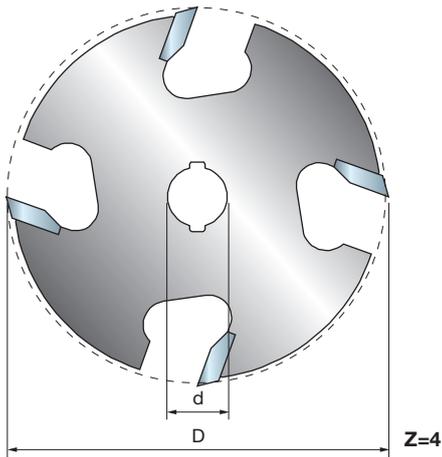
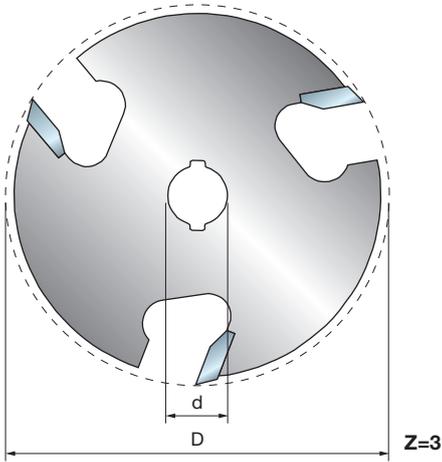
Wood Based Panels

| D mm | h mm | H mm | A mm | C mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---|-------------------|------------|------------|
| 50,8 | 1,5 | 60,3 | 6 | 22 | 3 | 24.000 | 63-09906P | F03FR02049 |
| 50,8 | 1,6 | 60,3 | 6 | 22 | 3 | 24.000 | 63-10006P | F03FR02055 |
| 50,8 | 2 | 60,3 | 6 | 22 | 3 | 24.000 | 63-10406P | F03FR02058 |
| 50,8 | 2,4 | 60,3 | 6 | 22 | 3 | 24.000 | 63-10606P | F03FR02061 |
| 50,8 | 2,5 | 60,3 | 6 | 22 | 3 | 24.000 | 63-11306P | F03FR02079 |
| 50,8 | 3 | 60,3 | 6 | 22 | 3 | 24.000 | 63-11406P | F03FR02085 |
| 50,8 | 3,2 | 60,3 | 6 | 22 | 3 | 24.000 | 63-10806P | F03FR02064 |
| 50,8 | 3,5 | 60,3 | 6 | 22 | 3 | 24.000 | 63-11506P | F03FR02091 |
| 50,8 | 4 | 60,3 | 6 | 22 | 3 | 24.000 | 63-10906P | F03FR02067 |
| 50,8 | 4,8 | 60,3 | 6 | 22 | 3 | 24.000 | 63-11006P | F03FR02070 |
| 50,8 | 5 | 60,3 | 6 | 22 | 3 | 24.000 | 63-11606P | F03FR02097 |
| 50,8 | 6 | 60,3 | 6 | 22 | 3 | 24.000 | 63-11106P | F03FR02073 |
| 50,8 | 6,4 | 60,3 | 6 | 22 | 3 | 24.000 | 63-11206P | F03FR02076 |
| 50,8 | 1,5 | 60,3 | 8 | 22 | 3 | 24.000 | 63-09908P | F03FR02052 |
| 50,8 | 2,5 | 60,3 | 8 | 22 | 3 | 24.000 | 63-11308P | F03FR02082 |
| 50,8 | 3 | 60,3 | 8 | 22 | 3 | 24.000 | 63-11408P | F03FR02088 |
| 50,8 | 3,5 | 60,3 | 8 | 22 | 3 | 24.000 | 63-11508P | F03FR02094 |
| 50,8 | 5 | 60,3 | 8 | 22 | 3 | 24.000 | 63-11608P | F03FR02100 |
| 50,8 | 1,5 | 60,3 | 12 | 22 | 3 | 24.000 | 63-14912P | F03FR02105 |
| 50,8 | 1,6 | 60,3 | 12 | 22 | 3 | 24.000 | 63-15012P | F03FR02108 |
| 50,8 | 2 | 60,3 | 12 | 22 | 3 | 24.000 | 63-15412P | F03FR02111 |
| 50,8 | 2,4 | 60,3 | 12 | 22 | 3 | 24.000 | 63-15612P | F03FR02114 |
| 50,8 | 2,5 | 60,3 | 12 | 22 | 3 | 24.000 | 63-16312P | F03FR02132 |
| 50,8 | 3 | 60,3 | 12 | 22 | 3 | 24.000 | 63-16412P | F03FR03241 |
| 50,8 | 3,2 | 60,3 | 12 | 22 | 3 | 24.000 | 63-15812P | F03FR02117 |
| 50,8 | 3,5 | 60,3 | 12 | 22 | 3 | 24.000 | 63-16512P | F03FR02137 |
| 50,8 | 4 | 60,3 | 12 | 22 | 3 | 24.000 | 63-15912P | F03FR02120 |
| 50,8 | 4,8 | 60,3 | 12 | 22 | 3 | 24.000 | 63-16012P | F03FR02123 |
| 50,8 | 5 | 60,3 | 12 | 22 | 3 | 24.000 | 63-16612P | F03FR02140 |
| 50,8 | 6 | 60,3 | 12 | 22 | 3 | 24.000 | 63-16112P | F03FR02126 |
| 50,8 | 6,4 | 60,3 | 12 | 22 | 3 | 24.000 | 63-16212P | F03FR02129 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|--------------|------------------|------------|------------|
|  | Washer | 17 x 8,4 x 1,6 | 2617M AG9 | F03F010005 |
|  | Hex nut | 7,94 x 6,75 | 2610M BB9 | F03F010003 |
|  | Ball bearing | 22 x 8 x 7,1 | 3102M AC9 | F03F010008 |

SLOTING CUTTERS

56- 58-



Machines:

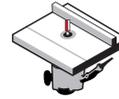
Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Produce slots and grooves on the workpiece. Slotting cutters are to be used with Freud's arbors series 60 (page 279) which come separately.



Hand-held Routers

Table Routers



Softwood

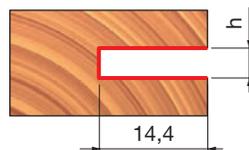
Hardwood

Plywood

Wood Based Panels

| D mm | h mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 50,8 | 1,5 | 8 | 3 | 24.000 | 56-09908P | F03FR02014 |
| 50,8 | 1,6 | 8 | 3 | 16.000 | 56-10008P | F03FR02015 |
| 50,8 | 2 | 8 | 3 | 24.000 | 56-10408P | F03FR02016 |
| 50,8 | 2,4 | 8 | 3 | 16.000 | 56-10608P | F03FR02017 |
| 50,8 | 2,5 | 8 | 3 | 24.000 | 56-11308P | F03FR02028 |
| 50,8 | 3 | 8 | 3 | 24.000 | 56-11408P | F03FR02029 |
| 50,8 | 3,2 | 8 | 3 | 24.000 | 56-10808P | F03FR02019 |
| 50,8 | 3,5 | 8 | 3 | 24.000 | 56-11508P | F03FR02030 |
| 50,8 | 4 | 8 | 3 | 24.000 | 56-10908P | F03FR02021 |
| 50,8 | 4,8 | 8 | 3 | 24.000 | 56-11008P | F03FR02023 |
| 50,8 | 5 | 8 | 3 | 24.000 | 56-11608P | F03FR02031 |
| 50,8 | 6 | 8 | 3 | 24.000 | 56-11108P | F03FR02025 |
| 50,8 | 6,4 | 8 | 3 | 24.000 | 56-11208P | F03FR02026 |

| D mm | h mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 50,8 | 1,5 | 8 | 4 | 16.000 | 58-09908P | F03FR02032 |
| 50,8 | 2 | 8 | 4 | 16.000 | 58-10408P | F03FR02033 |
| 50,8 | 2,5 | 8 | 4 | 16.000 | 58-11308P | F03FR02036 |
| 50,8 | 3 | 8 | 4 | 16.000 | 58-11408P | F03FR02037 |
| 50,8 | 5 | 8 | 4 | 24.000 | 58-11608P | F03FR02038 |
| 50,8 | 6 | 8 | 4 | 16.000 | 58-11108P | F03FR02034 |



SLOTING CUTTER ARBORS

60-



Hand-held Routers

Table Routers

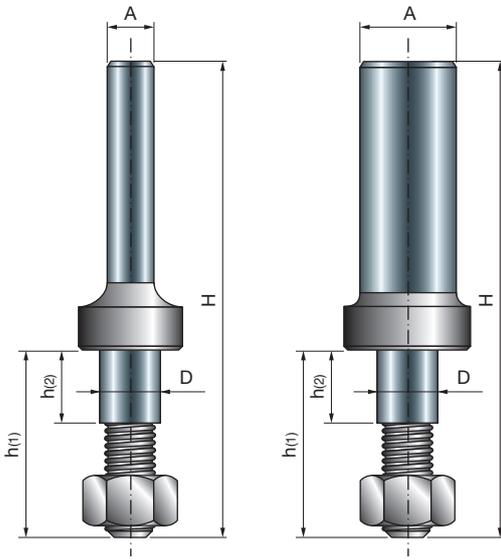


Softwood

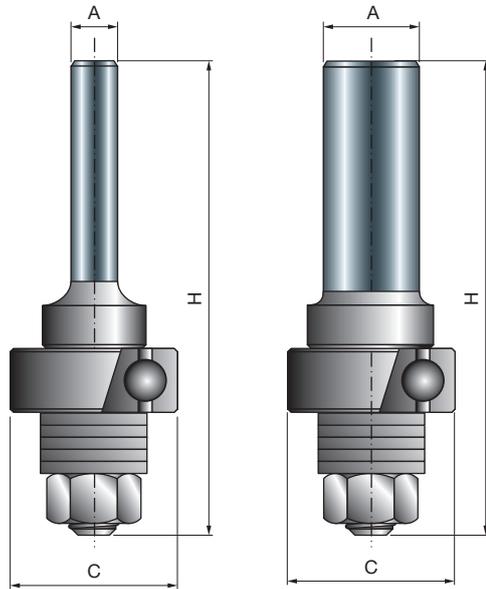
Hardwood

Plywood

Wood Based Panels



Type A



Type B

| D mm | h1 mm | h2 mm | H mm | C mm | A mm | A inch | Max RPM 1/min. | Freud Code | Art. No. |
|---------|----------|----------|---------|---------|---------|-----------|-------------------|------------------|------------|
| 7,94 | 24,6 | 10 | 60,3 | - | 6 | | 24.000 | 60-10006P | F03FR02039 |
| 7,94 | 24,6 | 10 | 60,3 | 22 | 6 | | 24.000 | 60-12006P | F03FR02044 |
| 7,94 | 24,6 | 10 | 60,3 | - | 8 | | 24.000 | 60-10008P | F03FR02040 |
| 7,94 | 24,6 | 10 | 60,3 | 22 | 8 | | 24.000 | 60-12008P | F03FR02045 |
| 7,94 | 24,6 | 10 | 60,3 | - | 12 | | 24.000 | 60-10212P | F03FR02042 |
| 7,94 | 24,6 | 10 | 60,3 | 22 | 12 | | 24.000 | 60-12212P | F03FR02046 |
| 7,94 | 24,6 | 10 | 60,3 | - | | 1/4 | 24.000 | 60-10025P | F03FR02041 |
| 7,94 | 24,6 | 10 | 60,3 | - | | 1/2 | 24.000 | 60-10250P | F03FR02043 |

Type A

60-10006P - 60-10008P - 60-10212P - 60-10025P - 60-10250P

| | Quantity | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|----------|-------------|------------------|------------------|------------|
| | 7 | Washer | 17 x 8,4 x 1,6 | 2617M AG9 | F03F010005 |
| | 1 | Hex nut | 7,94 x 6,75 | 2610M BB9 | F03F010003 |

Type B

60-12006P - 60-12008P - 60-12212P

| | Quantity | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|----------|--------------|------------------|------------------|------------|
| | 5 | Washer | 17 x 8,4 x 1,6 | 2617M AG9 | F03F010005 |
| | 1 | Hex nut | 7,94 x 6,75 | 2610M BB9 | F03F010003 |
| | 1 | Ball bearing | 22 x 8 x 7 | 3102M AC9 | F03F010008 |

Machines:

Hand-held routers and table routers.

Applications:

The perfect complement to Freud's slotting cutters. Compatible with any 8 mm bore hole slotting cutter.

BISCUIT JOINT SLOT CUTTER

63-



Hand-held Routers

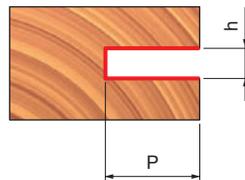
Table Routers



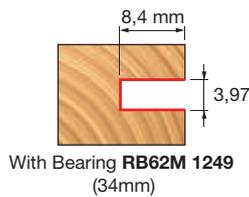
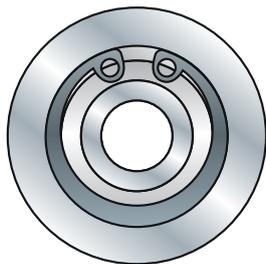
Softwood Hardwood Plywood Wood Based Panels

| D | h | H | C | P | A | Z | Max RPM | Freud Code | Art. No. |
|------|------|------|----------|---------------|---------|---|---------|------------------|------------|
| mm | mm | mm | mm | mm | mm inch | | 1/min. | | |
| 50,8 | 3,97 | 60,3 | 26-30-34 | 12,4-10,4-8,4 | 6 | 3 | 24.000 | 63-60906P | F03FR02143 |
| 50,8 | 3,97 | 60,3 | 26-30-34 | 12,4-10,4-8,4 | 8 | 3 | 24.000 | 63-60908P | F03FR02146 |
| 50,8 | 3,97 | 60,3 | 26-30-34 | 12,4-10,4-8,4 | 12 | 3 | 24.000 | 63-60912P | F03FR02149 |
| 50,8 | 3,97 | 60,3 | 26-30-34 | 12,4-10,4-8,4 | 1/4 | 3 | 24.000 | 63-60925P | F03FR02152 |
| 50,8 | 3,97 | 60,3 | 26-30-34 | 12,4-10,4-8,4 | 1/2 | 3 | 24.000 | 63-60950P | F03FR02155 |

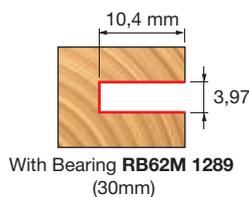
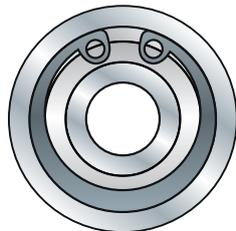
| Spare parts | Dimensions | Freud Code | Art. No. |
|-------------|--------------|----------------|------------------------------|
| | mm | | |
| | Hex nut | 7,94 x 6,75 | 2610M BB9 F03F010003 |
| | Washer | 17 x 8,4 x 1,6 | 2617M AG9 F03F010005 |
| | Washer | 14 x 8,4 x 1,6 | 2617M BG9 F03FR01668 |
| | Ball bearing | 26 x 10 x 8 | RB62M 1249 F03F011417 |
| | Ball bearing | 30 x 10 x 8 | RB62M 1289 F03F011418 |
| | Ball bearing | 34 x 10 x 8 | RB62ME DA9 F03FR01146 |



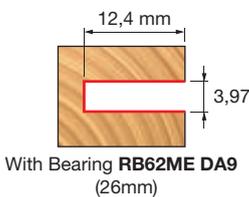
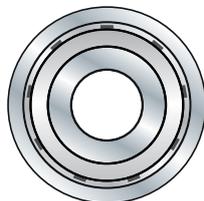
| C | P |
|------|------|
| mm | mm |
| Ø 26 | 12,4 |
| Ø 30 | 10,4 |
| Ø 34 | 8,4 |



Biscuit Size-00
47mm x 15mm



Biscuit Size-10
54mm x 19mm



Biscuit Size-20
59mm x 22mm



Machines:

Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Biscuit joining is one of the easiest and most economical methods of wood joinery. Each biscuit joint slot cutter is delivered with 3 different diameter ball bearings.

ADJUSTABLE TONGUE AND GROOVE CUTTER SET

99-



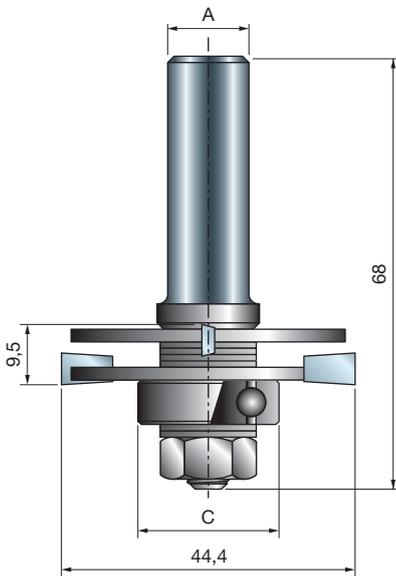
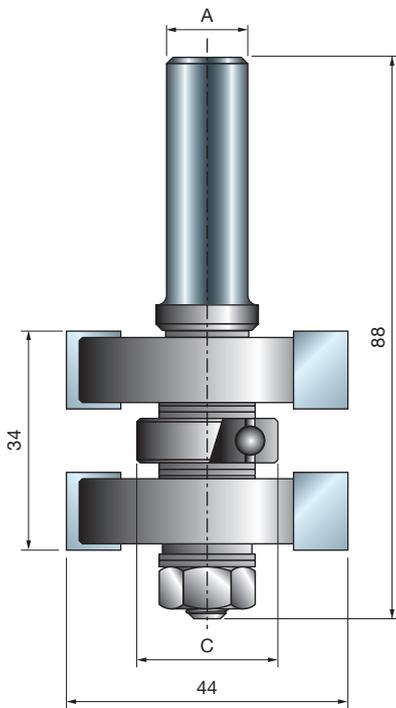
Table Routers



Softwood Hardwood Plywood Wood Based Panels

| D mm | h mm | H mm | A mm | C mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---|-------------------|------------|------------|
| 44 | 34 | 88 | 12 | 22 | 2 | 16.000 | 99-03612P | F03FR02432 |
| 44,4 | 9,5 | 68 | 12 | 22 | 2 | | | |

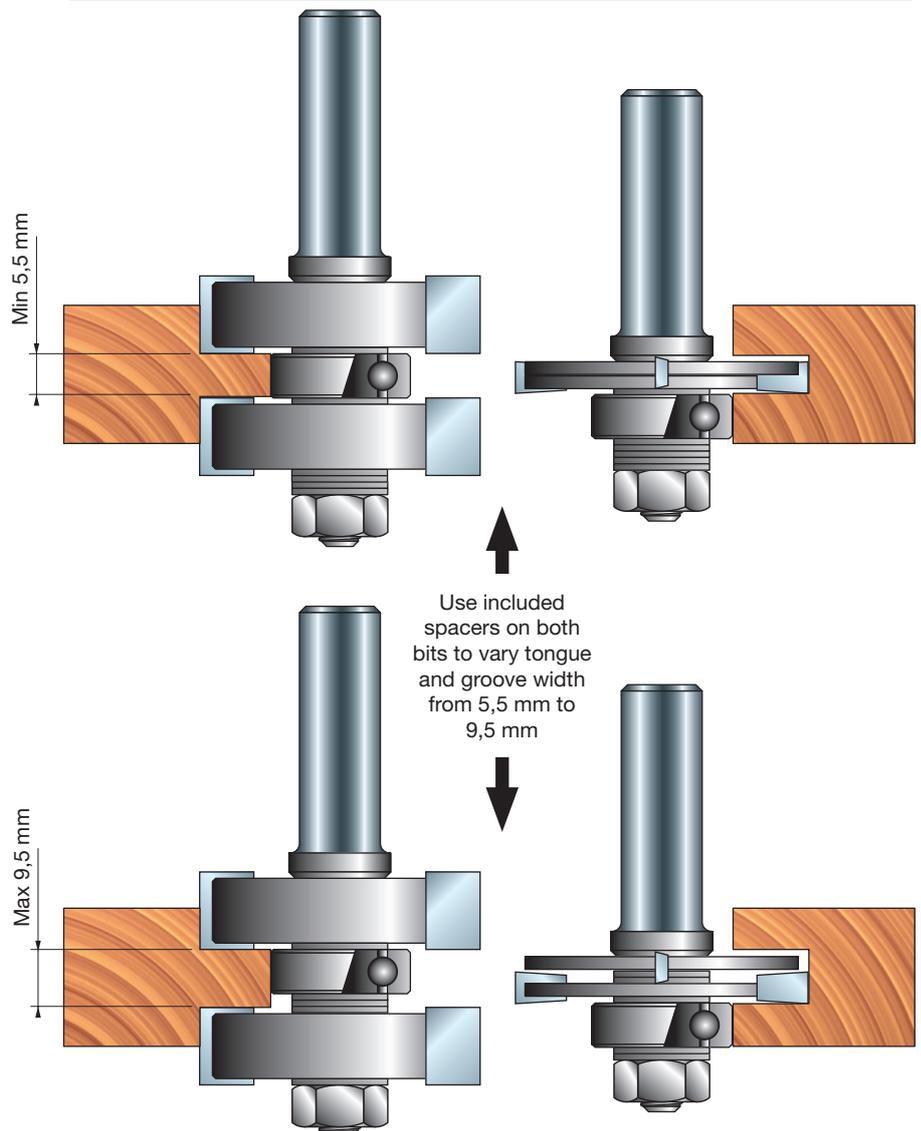
| Qty | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----|--------------|------------------|------------|------------|
| 2 | Hex nut | 7,94 x 6,75 | 2610M BB9 | F03F010003 |
| 2 | Washer | 14 x 8,4 x 1,6 | 2617M BG9 | F03FR01668 |
| 2 | Ball bearing | 22 x 8 x 7,1 | 3102M AC9 | F03F010008 |
| 4 | Spacer | 18 x 0,1 x 8 | AN01MP0019 | F03FC00392 |
| 4 | Spacer | 18 x 0,2 x 8 | AN01MP0029 | F03FC00393 |
| 2 | Spacer | 18 x 0,5 x 8 | AN01MP0059 | F03FC00395 |
| 8 | Spacer | 18 x 1 x 8 | AN01MP0109 | F03FC00396 |
| 4 | Spacer | 18 x 0,15 x 8 | AN01MPAA99 | F03FC00391 |

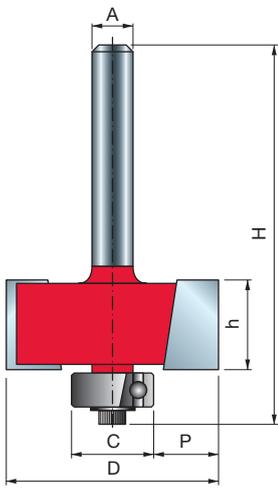


Machines:
Table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Suitable for any project requiring precise tongue and groove joints with perfectly finished surfaces.
The set includes one tongue and one grooving bit.

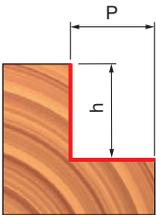




Machines:
Hand-held routers and table routers.

Material:
Softwood, hardwood, plywood and wood based panels.

Applications:
Use to make strong lap joints, cut recesses to let in the back panels of cabinets or create an interesting detail on built-up moulding.



| Set of 4 ball bearings | |
|------------------------|------|
| C | P |
| mm | mm |
| 9,53 | 12,7 |
| 12,7 | 11,1 |
| 15,88 | 9,53 |
| 19,05 | 7,94 |

| Set of 7 ball bearings | |
|------------------------|------|
| C | P |
| mm | mm |
| 9,53 | 12,7 |
| 12,7 | 11,1 |
| 15,88 | 9,53 |
| 19,05 | 7,94 |
| 22,22 | 6,35 |
| 28,58 | 3,18 |
| 34,92 | 0 |

RABBETING BITS

32-



Hand-held Routers

Table Routers



Softwood

Hardwood

Plywood

Wood Based Panels

| D | h | H | A | C | P | Z | Max RPM | Freud Code | Art. No. | |
|-------|------|------|----|------|------|------|---------|------------------|------------------|------------|
| mm | mm | mm | mm | mm | mm | | 1/min. | | | |
| 31,75 | 13,2 | 55,7 | 6 | 12,7 | 9,52 | 2 | 18.000 | 32-10006P | F03FR01745 | |
| 34,92 | 12,7 | 54,4 | 6 | 12,7 | 11,1 | 2 | 16.000 | 32-50006P | F03FR01750 | |
| 31,75 | 13,2 | 55,7 | 8 | 12,7 | 9,52 | 2 | 18.000 | 32-10008P | F03FR01746 | |
| 34,92 | 12,7 | 54,7 | 8 | 12,7 | 11,1 | 2 | 16.000 | 32-50008P | F03FR01751 | |
| 31,75 | 13,2 | 61,7 | 12 | 12,7 | 9,52 | 2 | 18.000 | 32-10212P | F03FR01748 | |
| 34,92 | 12,7 | 60,7 | 12 | 12,7 | 11,1 | 2 | 16.000 | 32-52012P | F03FR01758 | |
| 31,75 | 13,2 | 55,7 | | 1/4 | 12,7 | 9,52 | 2 | 18.000 | 32-10025P | F03FR01747 |
| 31,75 | 13,2 | 61,7 | | 1/2 | 12,7 | 9,52 | 2 | 18.000 | 32-10250P | F03FR01749 |

RABBETING BITS WITH BEARING SET

32-

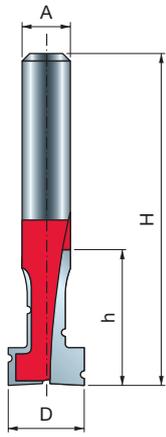
Rabbeting bits with a set of 4 ball bearings

| D | h | H | A | C | P | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|-----|------------|-----------|---|---------|------------------|------------|
| mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 34,92 | 12,7 | 54,4 | 6 | 9,53-19,05 | 7,94-12,7 | 2 | 16.000 | 32-50206P | F03FR01752 |
| 34,92 | 12,7 | 54,4 | 8 | 9,53-19,05 | 7,94-12,7 | 2 | 16.000 | 32-50208P | F03FR01753 |
| 34,92 | 12,7 | 60,7 | 12 | 9,53-19,05 | 7,94-12,7 | 2 | 16.000 | 32-52212P | F03FR01759 |
| 34,92 | 12,7 | 60,7 | 1/2 | 9,53-15,88 | 9,53-12,7 | 2 | 16.000 | 32-52250P | F03FR01760 |

Rabbeting bits with a set of 7 ball bearings

| D | h | H | A | C | P | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|----|------------|--------|---|---------|------------------|------------|
| mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 34,92 | 12,7 | 54,7 | 6 | 9,53-34,92 | 0-12,7 | 2 | 16.000 | 32-50406P | F03FR01755 |
| 34,92 | 12,7 | 54,4 | 8 | 9,53-34,92 | 0-12,7 | 2 | 16.000 | 32-50408P | F03FR01756 |
| 34,92 | 12,7 | 60,7 | 12 | 9,53-34,92 | 0-12,7 | 2 | 16.000 | 32-52412P | F03FR01761 |

| | Spare parts | Dimensions | Freud Code | Art. No. |
|--|--------------|---------------------|-------------------|------------|
| | | mm | | |
| | Screw | M3 x 7,6 | 2607M 001 | F03F010000 |
| | Allen key | 2,5 | 2619M CA9 | F03FA07432 |
| | Washer | 9 x 2 x 6 | FX07M AA9 | F03F010158 |
| | Washer | 12 x 1,1 x 4,8 | FX07M AB9 | F03F010159 |
| 32-5206P 32-5208P 32-52212P | Ball bearing | 9,53 x 3,2 x 4,76 | 3102M AA9 | F03F010006 |
| | Ball bearing | 12,7 x 4,98 x 4,76 | 3102M AB9 | F03F010007 |
| | Ball bearing | 15,88 x 4,97 x 4,76 | 3102M AJ9 | F03F010014 |
| 32-50406P 32-50408P 32-52412P | Ball bearing | 9,53 x 3,2 x 4,76 | 3102M AA9 | F03F010006 |
| | Ball bearing | 12,7 x 4,98 x 4,76 | 3102M AB9 | F03F010007 |
| | Ball bearing | 15,88 x 4,97 x 4,76 | 3102M AJ9 | F03F010014 |
| | Ball bearing | 19,05 x 8 x 4,76 | RB62M 1509 | F03F011422 |
| | Ball bearing | 9,53 x 3,2 x 4,76 | 3102M AA9 | F03F010006 |
| | Ball bearing | 12,7 x 4,98 x 4,76 | 3102M AB9 | F03F010007 |
| | Ball bearing | 15,88 x 4,97 x 4,76 | 3102M AJ9 | F03F010014 |
| | Ball bearing | 19,05 x 8 x 4,76 | RB62M 1509 | F03F011422 |
| | Ball bearing | 22,22 x 8 x 4,76 | RB62M 1529 | F03F011423 |
| | Ball bearing | 28,58 x 8 x 4,76 | RB62M 1549 | F03F011424 |
| | Ball bearing | 34,92 x 8 x 4,76 | RB62M 1569 | F03F011425 |



KEYHOLE BIT

70-



Hand-held Routers

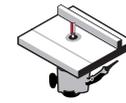
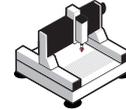


Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Machines:

Hand-held routers, table routers and CNC machines.

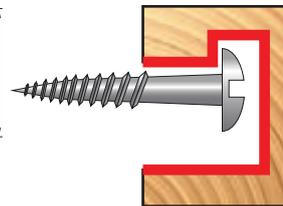
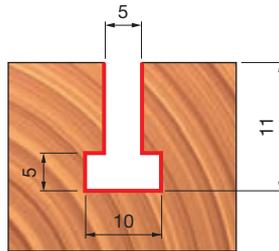
Materials:

Softwood, hardwood, plywood and wood based panels.

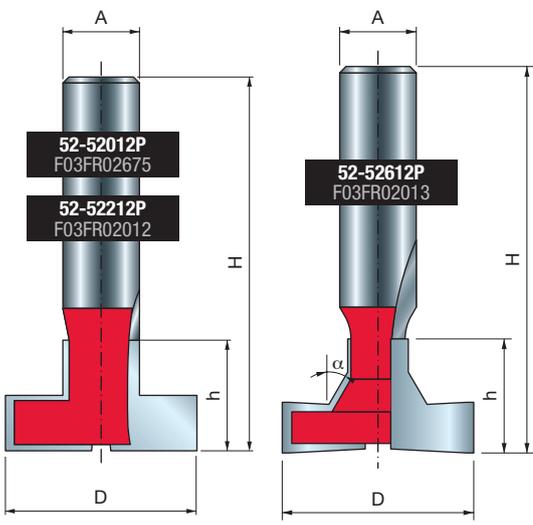
Applications:

The perfect way to hang flat workpieces. The large diameter bore hole allows nail or screw heads to enter the slot and the smaller diameter groove gives space for the shank of the nail or screw.

| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|------------|------------|
| 10 | 17 | 48,2 | 6 | 2 | 24.000 | 70-10406P | F03FR02159 |



Example of keyhole



T - SLOTTING BITS

52-



Hand-held Routers

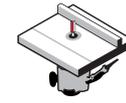
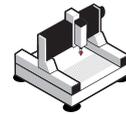


Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



| D mm | h mm | H mm | A mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|----------|---|-------------------|------------|------------|
| 28 | 16 | 59 | 12 | - | 2 | 22.000 | 52-52012P | F03FR02675 |
| 28,58 | 20,6 | 63,5 | 12 | - | 2 | 18.000 | 52-52212P | F03FR02012 |
| 30 | 18 | 61 | 12 | 30° | 2 | 18.000 | 52-52612P | F03FR02013 |

Machines:

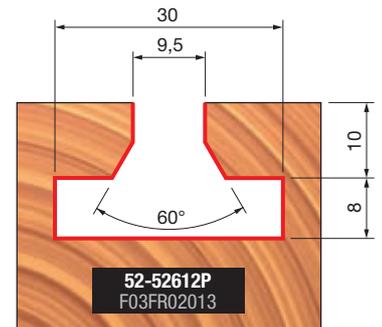
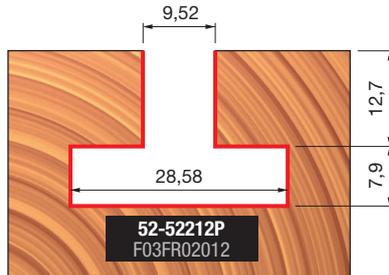
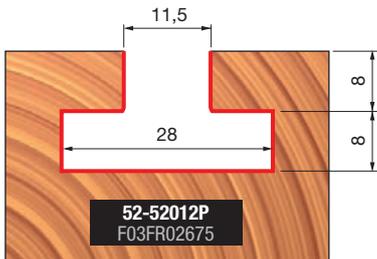
Hand-held routers, table routers and CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

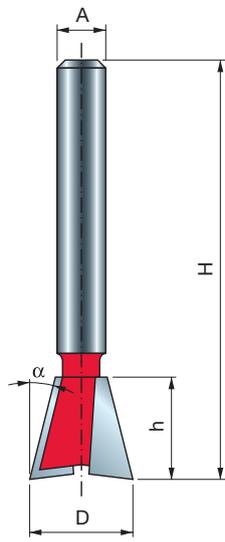
Applications:

Cut T shaped slots, used for many purposes.



DOVETAIL BITS

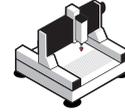
22-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Machines:

Hand-held routers, table routers and CNC machines.

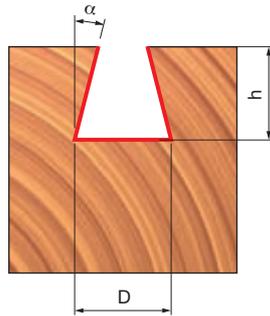
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Dovetail joints are the traditional choice for strong, attractive joints for drawers, boxes and exposed furniture joints.

| D | h | H | A | α | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|----|----------|---|---------|------------------|------------|
| mm | mm | mm | mm | inch | | 1/min. | | |
| 9,52 | 10,5 | 47,5 | 6 | | 2 | 24.000 | 22-10206P | F03FR01640 |
| 12,7 | 12,7 | 50,7 | 6 | | 2 | 24.000 | 22-10406P | F03FR01643 |
| 15,88 | 22,2 | 54,2 | 6 | | 2 | 24.000 | 22-10506P | F03FR01646 |
| 19,05 | 22,2 | 54,2 | 6 | | 2 | 24.000 | 22-10606P | F03FR01648 |
| 9,52 | 10,5 | 47,5 | 8 | | 2 | 24.000 | 22-10208P | F03FR01641 |
| 12,7 | 12,7 | 50,7 | 8 | | 2 | 24.000 | 22-10408P | F03FR01644 |
| 15,88 | 22,2 | 54,2 | 8 | | 2 | 24.000 | 22-10508P | F03FR01647 |
| 19,05 | 22,2 | 54,2 | 8 | | 2 | 24.000 | 22-10608P | F03FR01649 |
| 12,7 | 12,7 | 59,7 | 12 | | 2 | 24.000 | 22-11212P | F03FR01650 |
| 19,05 | 22,2 | 66,7 | 12 | | 2 | 24.000 | 22-11412P | F03FR01653 |
| 9,52 | 9,9 | 44,9 | | 1/4 | 2 | 24.000 | 22-10225P | F03FR01642 |
| 12,7 | 12,7 | 50,7 | | 1/4 | 2 | 24.000 | 22-10425P | F03FR01645 |
| 12,7 | 12,7 | 59,7 | | 1/2 | 2 | 24.000 | 22-11250P | F03FR01651 |



LOCK MITRE BITS 45°

99-

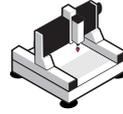


Table Routers

CNC Machines



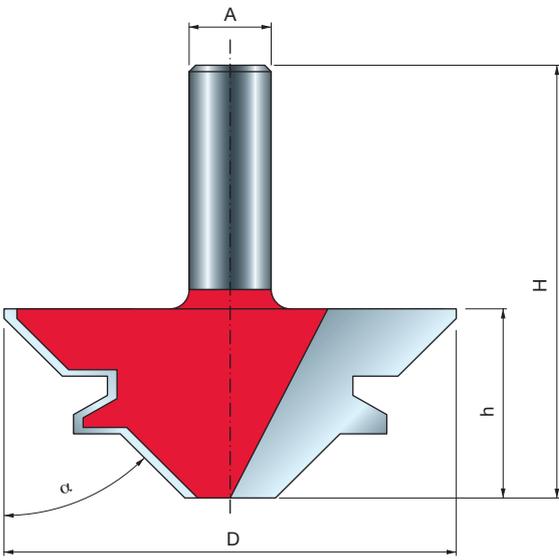
Softwood

Hardwood

Plywood

Wood Based Panels

| D mm | h mm | H mm | A mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|----------|---|-------------------|------------|------------|
| 55 | 23 | 61 | 12 | 45° | 2 | 16.000 | 99-03512P | F03FR02425 |
| 70 | 29,5 | 67,5 | 12 | 45° | 2 | 12.000 | 99-03412P | F03FR02424 |



Machines:

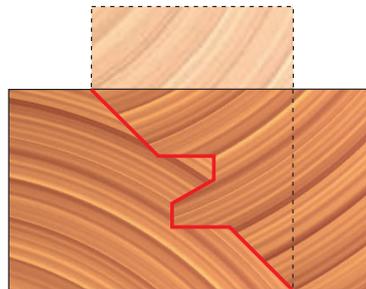
Table routers and CNC machines.

Materials:

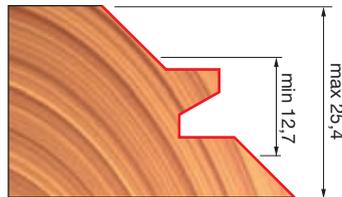
Softwood, hardwood, plywood and wood based panels.

Applications:

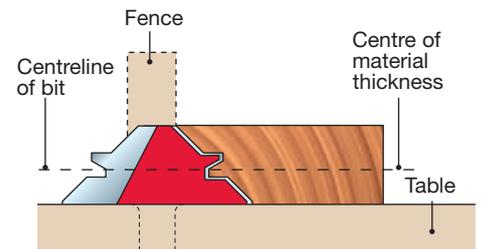
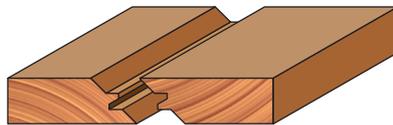
Create remarkably strong interlocking joints.



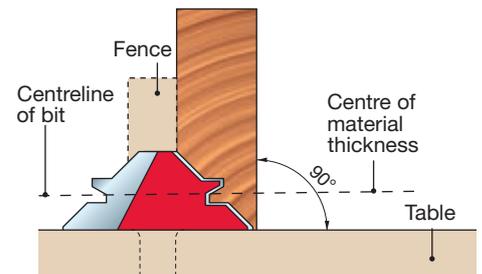
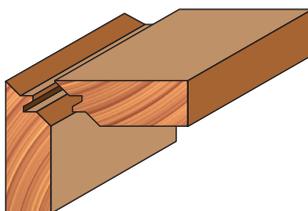
99-03412P
F03FR02424



Simple Joint



45° Mitre Join



2 PIECE LOCK MITRE BIT SET 22,5°

99-

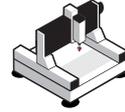
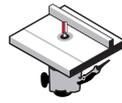


Table Routers

CNC Machines



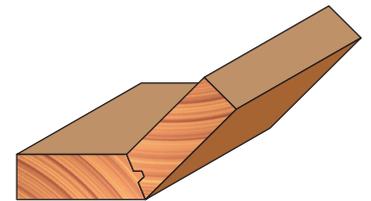
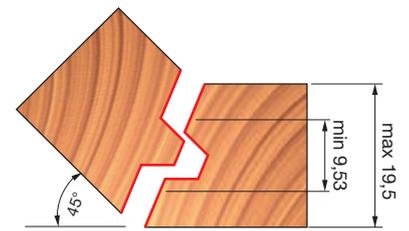
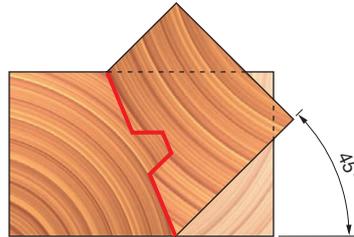
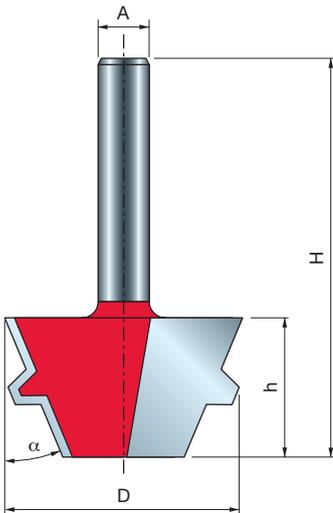
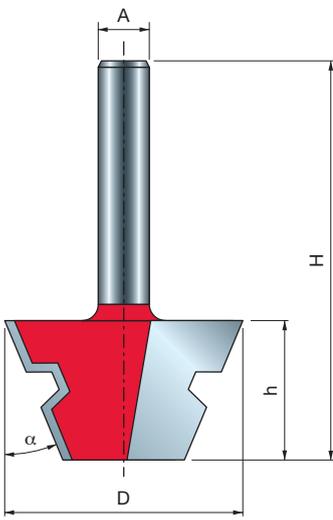
Softwood

Hardwood

Plywood

Wood Based Panels

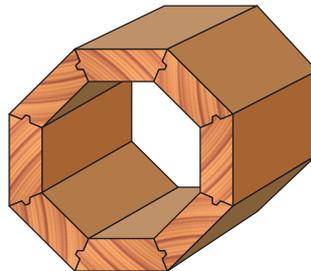
| D | h | H | A | α | Z | Max RPM | Freud Code | Art. No. |
|------|------|------|----|----------|---|---------|------------|------------|
| mm | mm | mm | mm | | | 1/min. | | |
| 37,3 | 22,2 | 54,2 | 8 | 22,5° | 2 | 24.000 | 99-04308P | F03FR02450 |



Machines:
Table routers and CNC machines.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Create remarkably strong interlocking joints.



REVERSIBLE GLUE JOINT BITS

99-

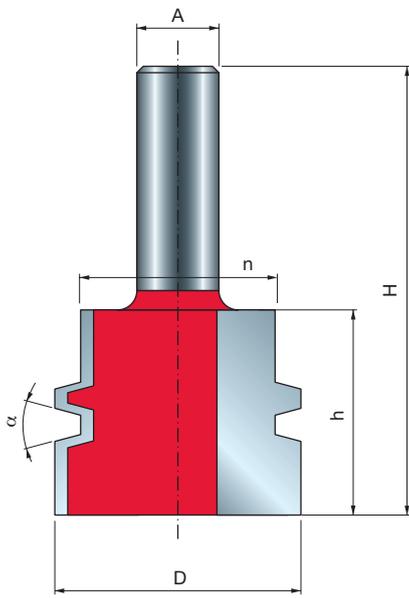
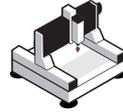


Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Machines:

Table routers and CNC machines.

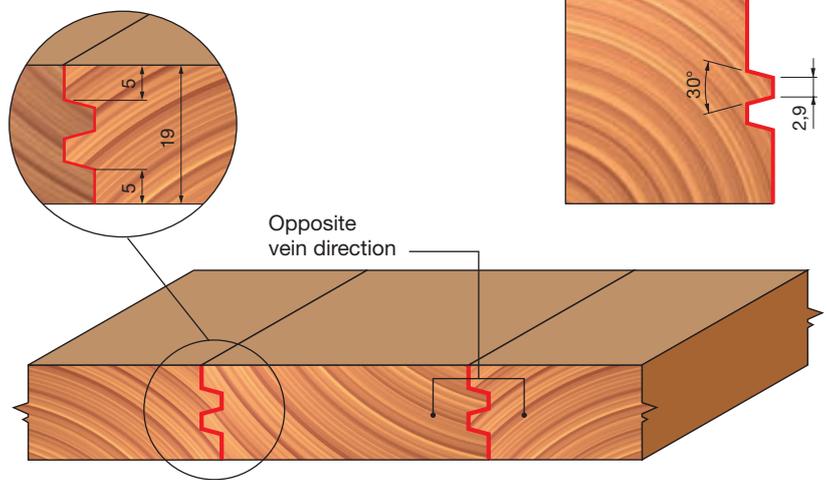
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Provide a stronger joint by increasing the gluing area.

| D | h | H | n | A | α | Z | Max RPM | Freud Code | Art. No. |
|----|----|----|------|----|----------|---|---------|------------|------------|
| mm | mm | mm | mm | mm | inch | | 1/min. | | |
| 38 | 32 | 70 | 30,2 | 12 | 15° | 2 | 16.000 | 99-03112P | F03FR02422 |
| 38 | 32 | 70 | 30,2 | | 15° | 2 | 16.000 | 99-03150P | F03FR02423 |



FINGER JOINT BIT

99-

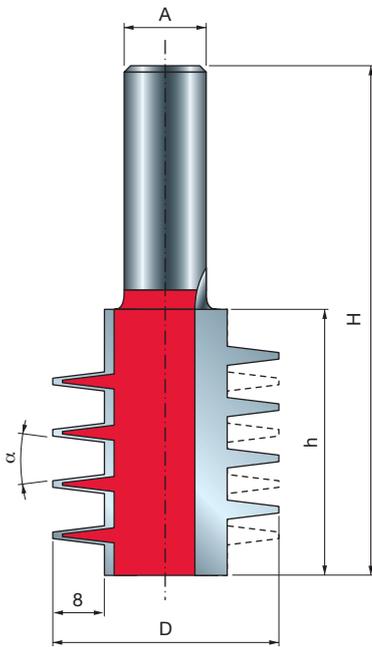
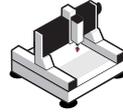


Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



| D | h | H | A | α | Z | Max RPM | Freud Code | Art. No. |
|----|------|------|----|----------|---|---------|------------|------------|
| mm | mm | mm | mm | | | 1/min. | | |
| 35 | 41,5 | 79,5 | 12 | 14° | 2 | 16.000 | 99-03712P | F03FR02440 |



Machines:

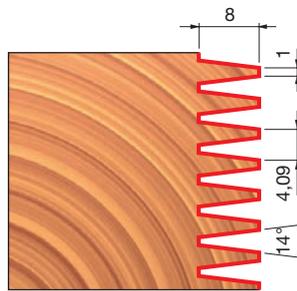
Table routers and CNC machines.

Materials:

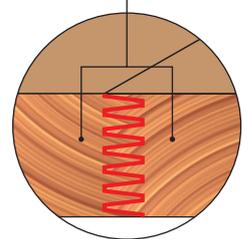
Softwood, hardwood, plywood and wood based panels.

Applications:

Create perfectly flat even surface and increase gluing area for a stronger joint.



Opposite vein direction



TOP BEARING FINGER JOINT BIT - TYPE A

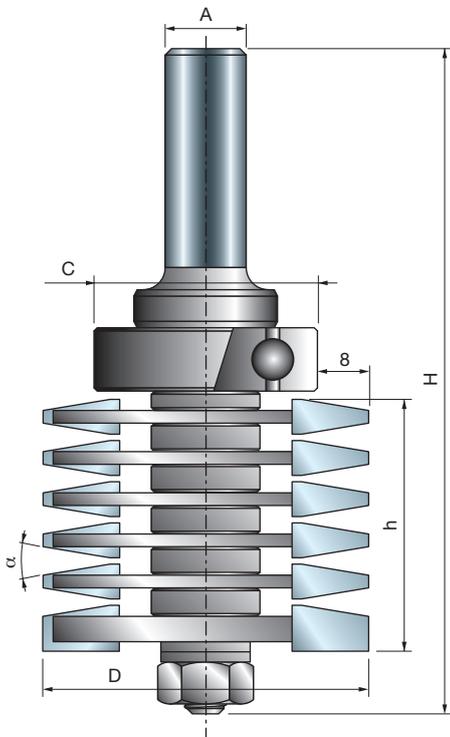
99-



Table Routers



Softwood Hardwood Plywood Wood Based Panels



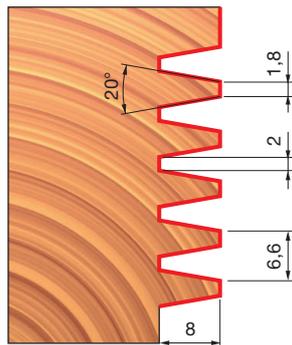
Machines:
Table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

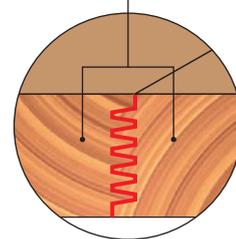
Applications:
Provide a stronger joint by increasing the surface area for gluing.

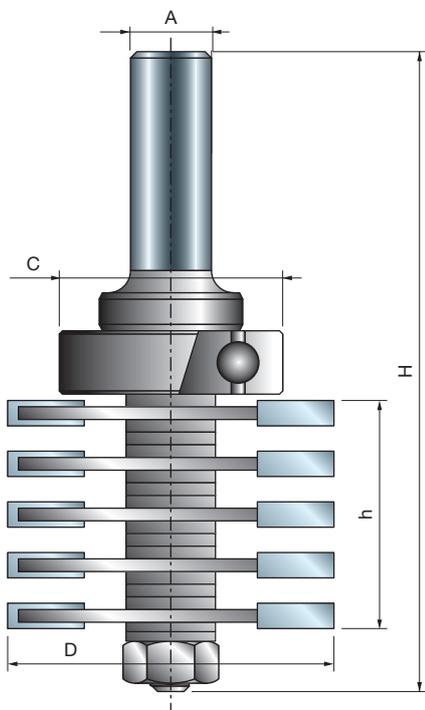
| D | h | H | A | C | α | Z | Max RPM | Freud Code | Art. No. |
|------|------|-----|----|----|----------|---|---------|------------|------------|
| mm | mm | mm | mm | mm | | | 1/min. | | |
| 50,8 | 45,2 | 108 | 12 | 35 | 20° | 2 | 24.000 | 99-03912P | F03FR02444 |

| Spare parts | | Dimensions | Freud Code | Art. No. |
|-------------|--------------|----------------|------------|------------|
| | | mm | | |
| | Hex nut | 7,94 x 6,75 | 2610M BB9 | F03F010003 |
| | Washer | 14 x 8,4 x 1,6 | 2617M BG9 | F03FR01668 |
| | Ball bearing | 35 x 15 x 11 | 3102M AI9 | F03F012285 |
| | Spacer | 18 x 0,1 x 8 | AN01MP0019 | F03FC00392 |
| | Spacer | 18 x 1 x 8 | AN01MP0109 | F03FC00396 |
| | Spacer | 18 x 2,5 x 8 | AN01MP0259 | F03FC00398 |
| | Spacer | 18 x 4,4 x 8 | AN01MP0449 | F03FC00399 |



Opposite vein direction





Machines:
Table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
Create perfectly flat even surface and increase gluing area for a stronger joint.

TOP BEARING FINGER JOINT BIT - TYPE B

99-



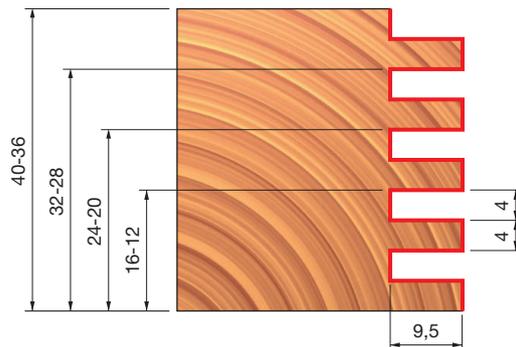
Table Routers



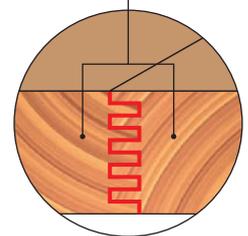
Softwood Hardwood Plywood Wood Based Panels

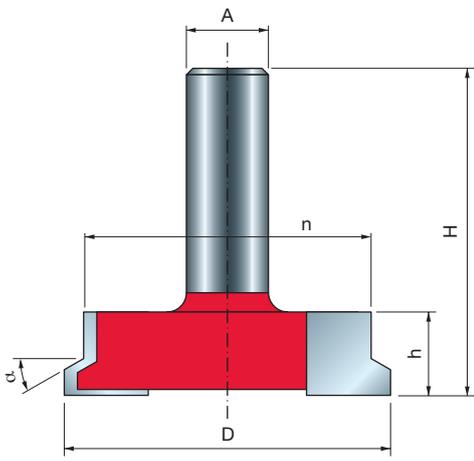
| D mm | h mm | H mm | A mm | C mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---|-------------------|------------|------------|
| 47 | 36 | 101 | 12 | 28 | 2 | 24.000 | 99-04212P | F03FR02447 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|--------------|------------------|------------|------------|
| Hex nut | 7,94 x 6,75 | 2610M BB9 | F03F010003 |
| Washer | 14 x 8,4 x 1,6 | 2617M BG9 | F03FR01668 |
| Ball bearing | 28 x 12 x 8 | 3102M AH9 | F03F010013 |
| Spacer | 18 x 0,2 x 8 | AN01MP0029 | F03FC00393 |
| Spacer | 18 x 1 x 8 | AN01MP0109 | F03FC00396 |
| Spacer | 18 x 0,5 x 8 | AN01MP0059 | F03FC00395 |
| Spacer | 18 x 4,4 x 8 | AN01MP0449 | F03FC00399 |



Opposite vein direction





DRAWER LOCK BIT

99-



Table Routers



Softwood Hardwood Plywood Wood Based Panels



| D mm | h mm | H mm | A mm | n mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|----------|---|-------------------|------------|------------|
| 50,5 | 13 | 49 | 12 | 44,5 | 30° | 2 | 16.000 | 99-24012P | F03FR02463 |

Machines:

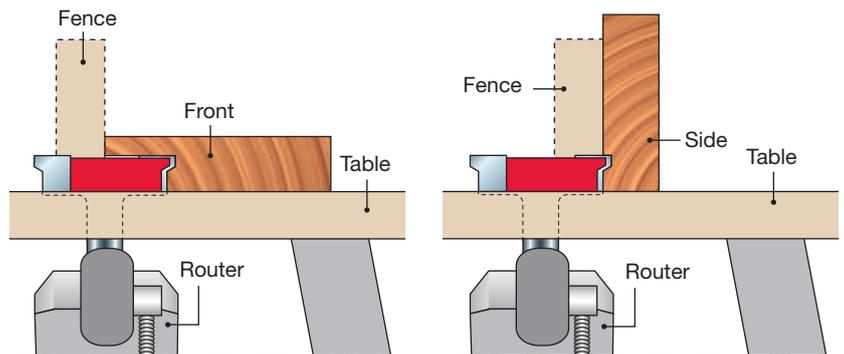
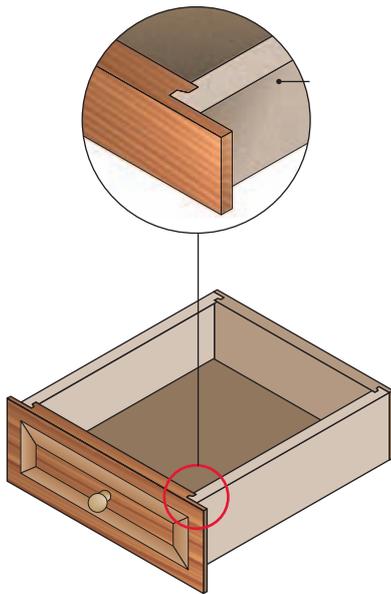
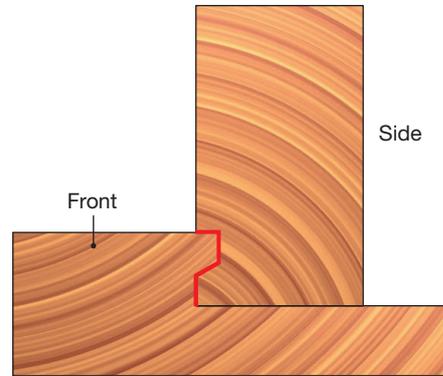
Table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

One bit produces both the front and side drawer joints.



DOOR PULL BIT

99-

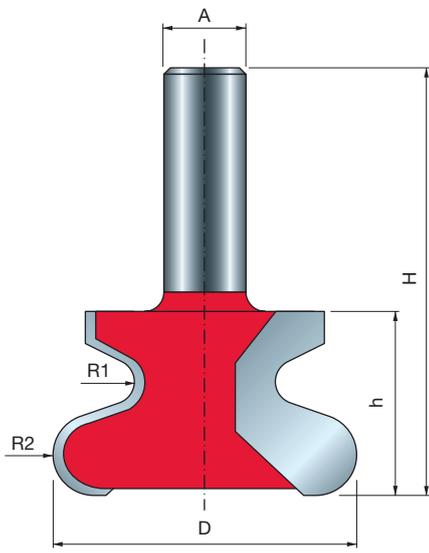


Table Routers



Softwood Hardwood Plywood Wood Based Panels

| D mm | h mm | H mm | A mm | R1 mm | R2 mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|----------|----------|---|-------------------|------------|------------|
| 47 | 28,7 | 66,7 | 12 | 3,2 | 6,35 | 2 | 16.000 | 99-00712P | F03FR02413 |



Machines:

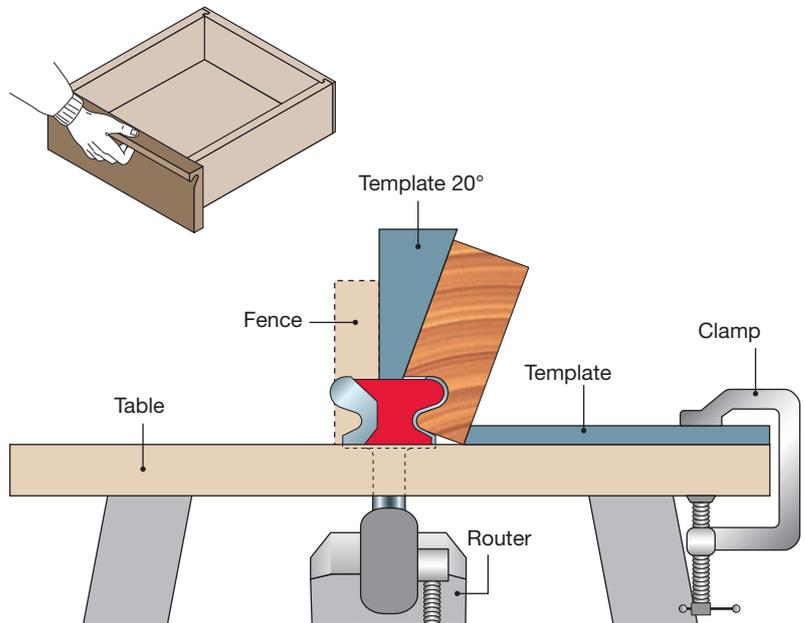
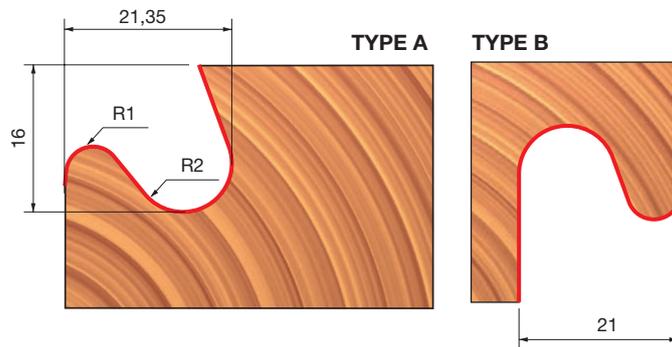
Table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Produce the finger pull groove found on popular contemporary cabinet doors.



MATCHED PROFILE AND SCRIBE BITS

99-



Table Routers



Softwood Hardwood Plywood Wood Based Panels



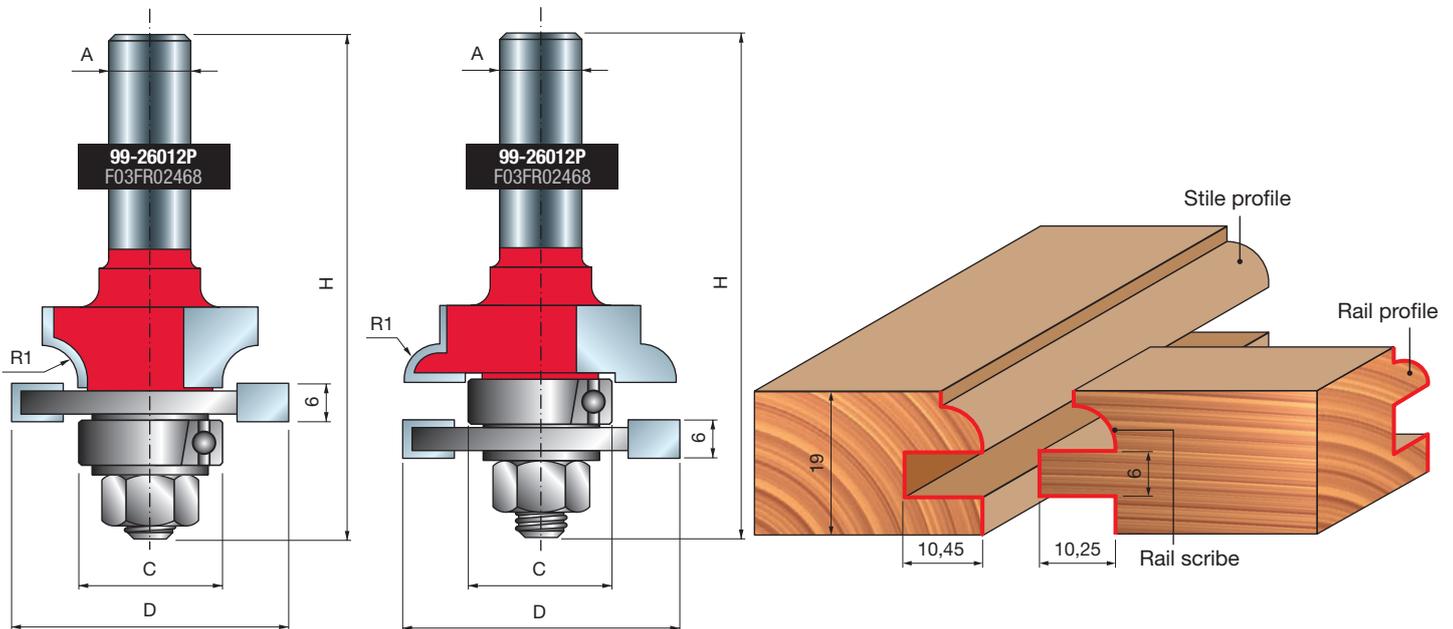
Machines:
Table routers.

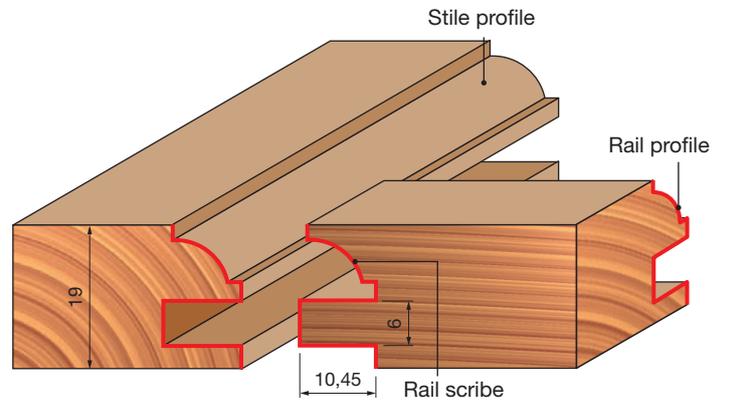
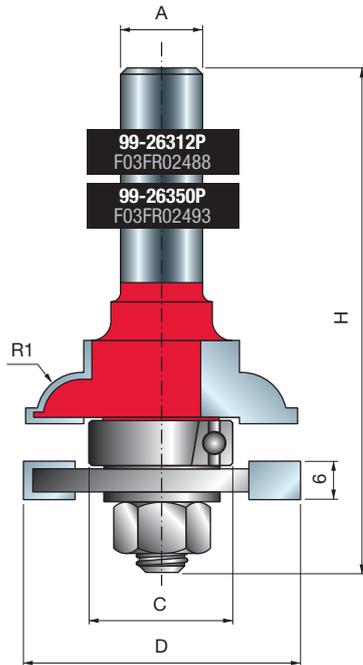
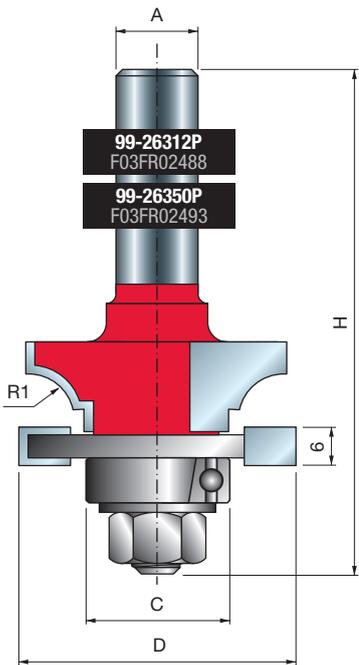
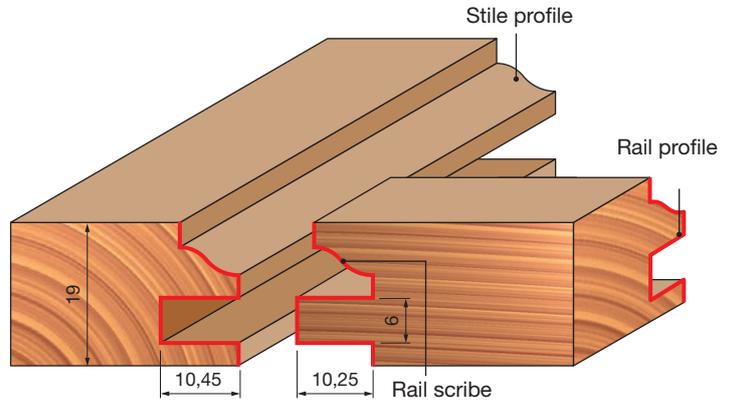
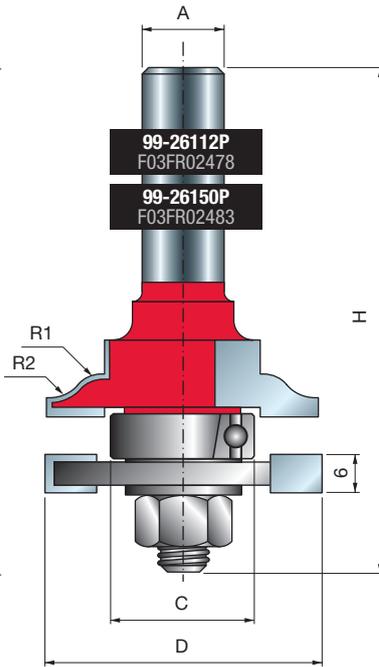
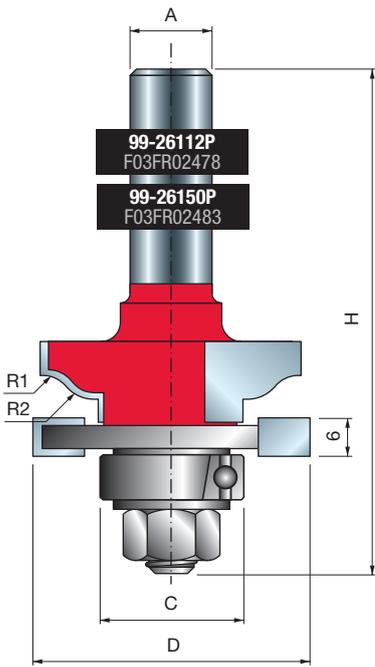
Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
These sets include rail and stile bits that are perfectly matched to produce perfect joints out of the box.
Each article number contains two items.

| D | H | A | R1 | R2 | C | Z | Max RPM | Freud Code | Art. No. |
|------|----|----|------|-----|-----|----|---------|------------------|------------|
| mm | mm | mm | inch | mm | mm | | 1/min. | | |
| 42,9 | 77 | 12 | 5,5 | - | 22 | 2 | 24.000 | 99-26012P | F03FR02468 |
| 42,9 | 77 | 12 | 4,5 | 5,5 | 22 | 2 | 24.000 | 99-26112P | F03FR02478 |
| 42,9 | 77 | 12 | 7 | - | 22 | 2 | 24.000 | 99-26312P | F03FR02488 |
| 42,9 | 77 | | 1/2 | 4,5 | 5,5 | 22 | 24.000 | 99-26150P | F03FR02483 |
| 42,9 | 77 | | 1/2 | 7 | - | 22 | 24.000 | 99-26350P | F03FR02493 |

| Spare parts | Dimensions | Freud Code | Art. No. |
|-------------|--------------|--------------|------------------------------|
| | mm | | |
| | Hex nut | 7,94 x 6,75 | 2610M BB9 F03F010003 |
| | Spacer | 18 x 0,1 x 8 | AN01MP0019 F03FC00392 |
| | Spacer | 18 x 0,2 x 8 | AN01MP0029 F03FC00393 |
| | Spacer | 18 x 0,5 x 8 | AN01MP0059 F03FC00395 |
| | Spacer | 18 x 1 x 8 | AN01MP0109 F03FC00396 |
| | Ball bearing | 22 x 8 x 7,1 | 3102M AC9 F03F010008 |





MATCHED PROFILE AND SCRIBE BITS

99-



Table Routers



Softwood Hardwood Plywood Wood Based Panels



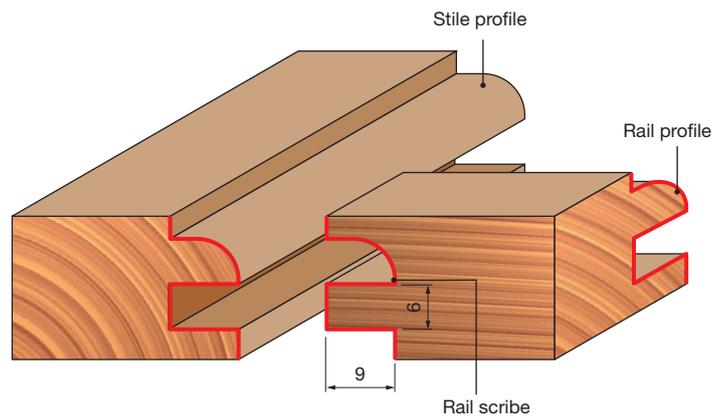
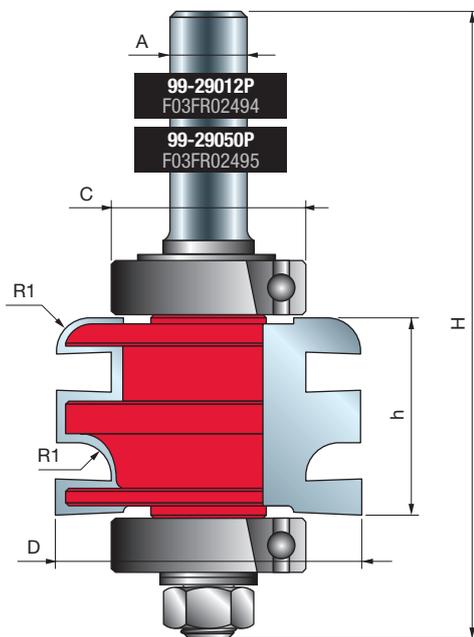
Machines:
Table routers.

Materials:
Softwood, hardwood, plywood and wood based panels.

Applications:
A simple, efficient method to create beautiful cabinet doors without having to reconfigure or change cutters or fence settings.

| D | h | H | A | R1 | R2 | C | Z | Max RPM | Freud Code | Art. No. |
|------|------|-----|-----|------|-----|----|----|---------|------------------|------------|
| mm | mm | mm | mm | inch | mm | mm | mm | 1/min. | | |
| 50,4 | 32,7 | 104 | 12 | 5,5 | - | 32 | 2 | 14.000 | 99-29012P | F03FR02494 |
| 50,4 | 32,7 | 104 | 12 | 5,5 | 4,5 | 32 | 2 | 14.000 | 99-29112P | F03FR02496 |
| 50,4 | 32,7 | 104 | 12 | 7 | - | 32 | 2 | 14.000 | 99-29312P | F03FR02498 |
| 50,4 | 32,7 | 104 | 1/2 | 5,5 | - | 32 | 2 | 14.000 | 99-29050P | F03FR02495 |
| 50,4 | 32,7 | 104 | 1/2 | 7 | - | 32 | 2 | 14.000 | 99-29350P | F03FR02499 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|----------------|---------------|-------------------|------------|
| | Hex nut | 7,94 x 6,75 | 2610M BB9 | F03F010003 |
| | Retaining ring | 15 x 13,9 | 2621ME 015 | F03FA07444 |
| | Ball bearing | 32 x 15 x 9 | 3102M AN9 | F03F010016 |
| | Spacer | 18 x 1 x 8 | AN01MP0109 | F03FC00396 |



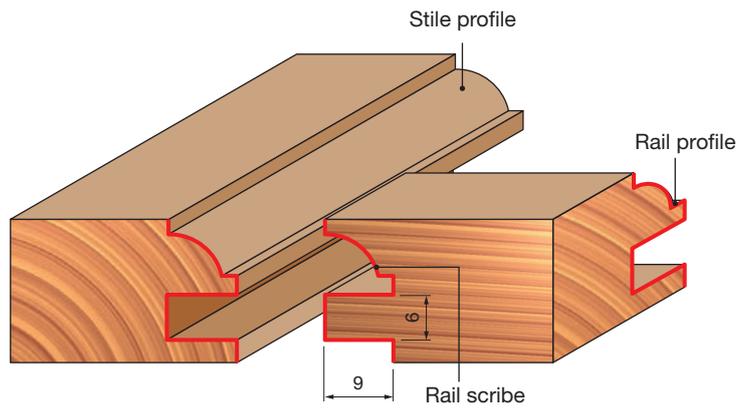
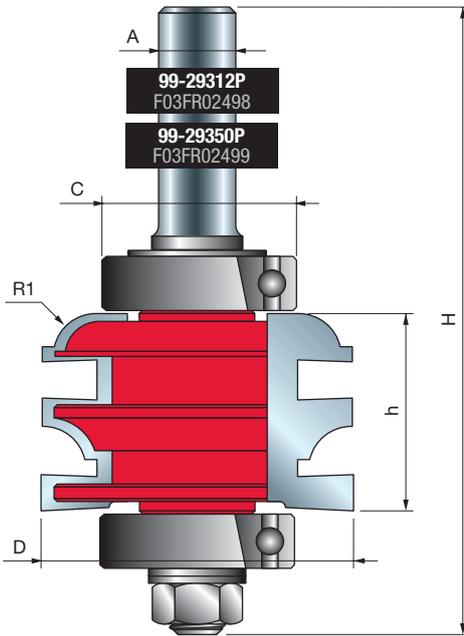
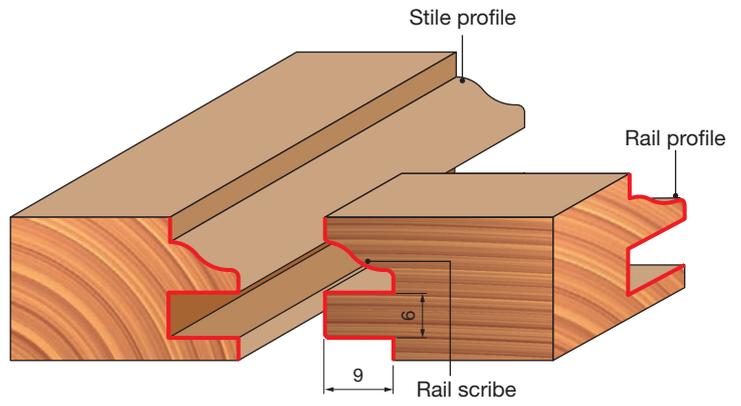
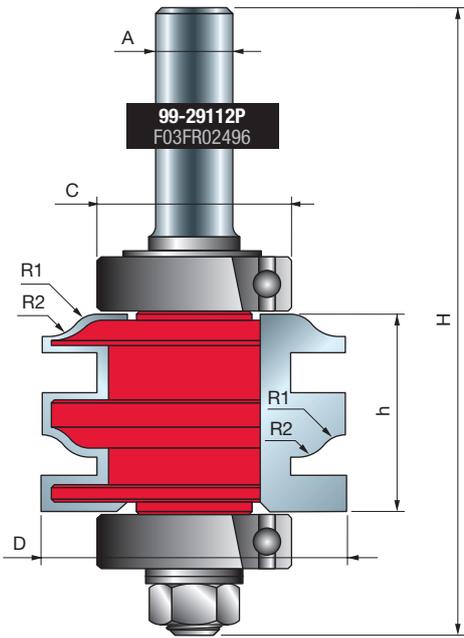




Table Routers



Softwood Hardwood Plywood Wood Based Panels



Machines:

Table routers.

Materials:

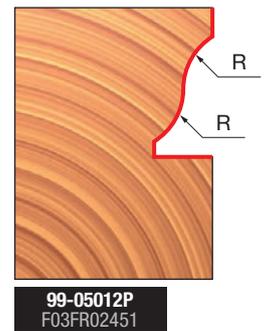
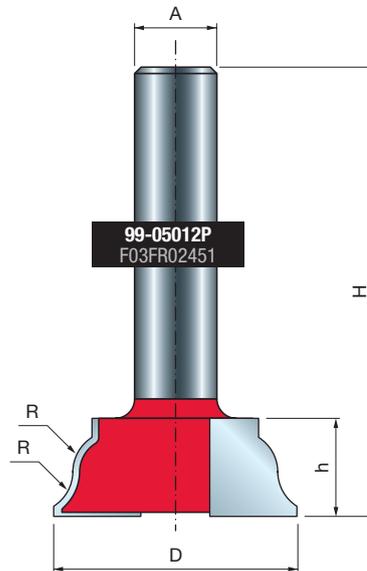
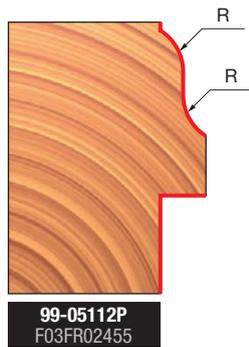
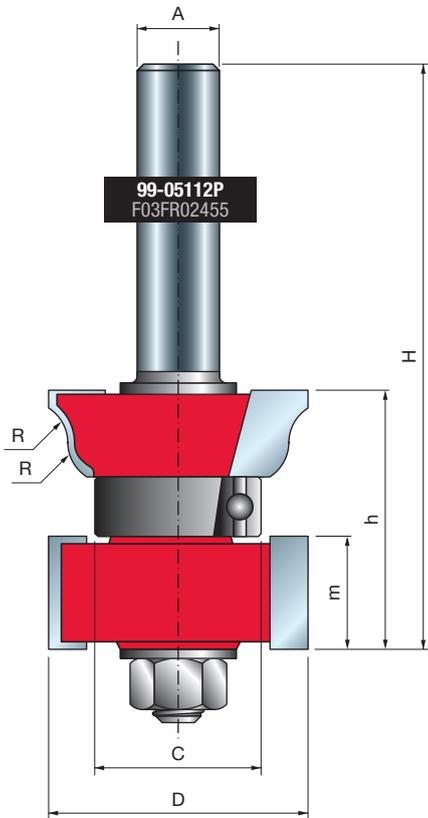
Softwood, hardwood, plywood and wood based panels.

Applications:

The two bits work together to produce a completely divided lite sash.

| D | h | H | A | m | C | R | Z | Max RPM | Freud Code | Art. No. |
|----|------|------|----|------|----|----|---|---------|------------|------------|
| mm | mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 34 | 35,9 | 78,4 | 12 | 14,5 | 22 | 6 | 2 | 16.000 | 99-05112P | F03FR02455 |
| 38 | 15,5 | 53,5 | 12 | - | - | 6 | 2 | 16.000 | 99-05012P | F03FR02451 |

| Spare parts | Dimensions | Freud Code | Art. No. |
|--------------|----------------|------------|------------|
| | mm | | |
| Hex nut | 7,94 x 6,75 | 2610M BB9 | F03F010003 |
| Washer | 14 x 8,4 x 1,6 | 2617M BG9 | F03FR01668 |
| Ball bearing | 22 x 8 x 7,1 | 3102M AC9 | F03F010008 |
| Spacer | 18 x 0,1 x 8 | AN01MP0019 | F03FC00392 |





RAISED PANEL BITS

99-

Machines:

Table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Create beautiful raised panels for cabinet doors or wall panelling.

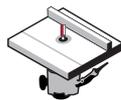
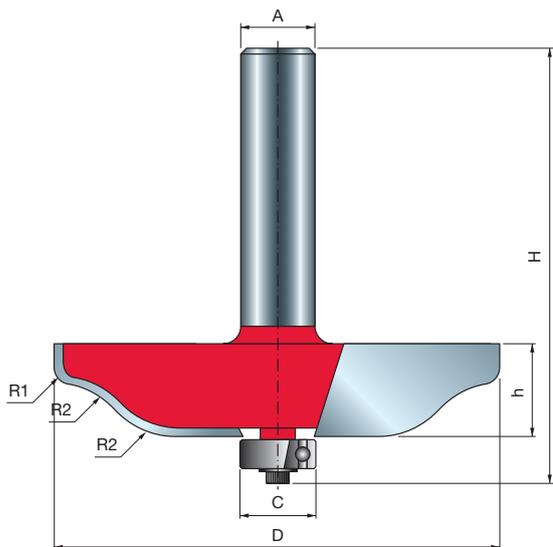


Table Routers



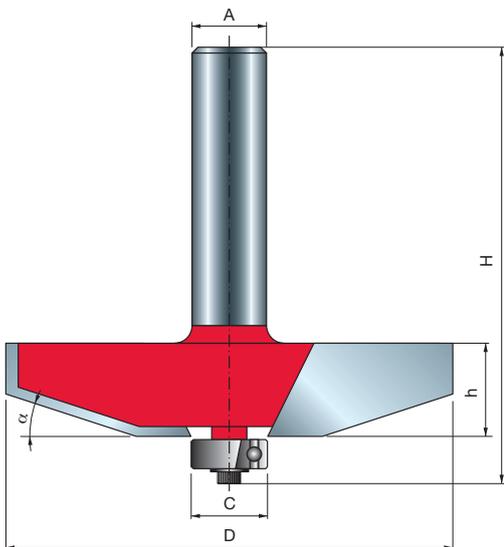
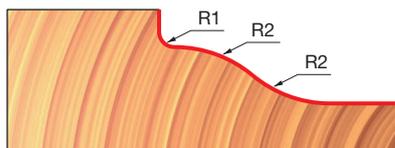
Softwood Hardwood Plywood Wood Based Panels



Type A

| D | h | H | A | C | R1 | R2 | Z | Max RPM | Freud Code | Art. No. |
|------|----|------|-----|------|----|----|---|---------|------------|------------|
| mm | mm | mm | mm | inch | mm | mm | | 1/min. | | |
| 76,2 | 16 | 64,7 | 12 | 12,7 | 2 | 16 | 2 | 12.000 | 99-22112P | F03FR02458 |
| 70 | 16 | 64,5 | 1/2 | 12,7 | 14 | 3 | 4 | 12.000 | 99-51050P | F03FR02504 |
| 89 | 16 | 64,5 | 1/2 | 12,7 | 20 | 4 | 4 | 10.000 | 99-52050P | F03FR02512 |

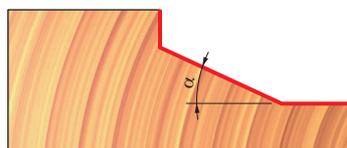
| Spare parts | Dimensions | Freud Code | Art. No. |
|--------------|--------------------|------------|------------|
| | mm | | |
| Screw | M3 x 7,6 | 2607M 001 | F03F010000 |
| Ball bearing | 12,7 x 4,98 x 4,76 | 3102M AB9 | F03F010007 |
| Washer | 12 x 1,1 x 4,8 | FX07M AB9 | F03F010159 |

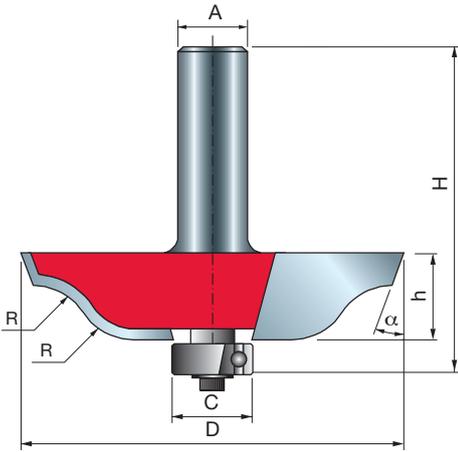


Type B

| D | h | H | A | C | α | Z | Max RPM | Freud Code | Art. No. |
|------|------|------|-----|------|-------|---|---------|------------|------------|
| mm | mm | mm | mm | inch | mm | | 1/min. | | |
| 63,5 | 16 | 60 | 12 | 12,7 | 25° | 2 | 12.000 | 99-22212P | F03FR02459 |
| 76,2 | 16 | 60 | 12 | 12,7 | 18° | 2 | 12.000 | 99-22312P | F03FR02460 |
| 89 | 16,1 | 64,5 | 1/2 | 12,7 | 16,5° | 4 | 10.000 | 99-51550P | F03FR02508 |

| Spare parts | Dimensions | Freud Code | Art. No. |
|--------------|--------------------|------------|------------|
| | mm | | |
| Screw | M3 x 7,6 | 2607M 001 | F03F010000 |
| Ball bearing | 12,7 x 4,98 x 4,76 | 3102M AB9 | F03F010007 |
| Washer | 12 x 1,1 x 4,8 | FX07M AB9 | F03F010159 |

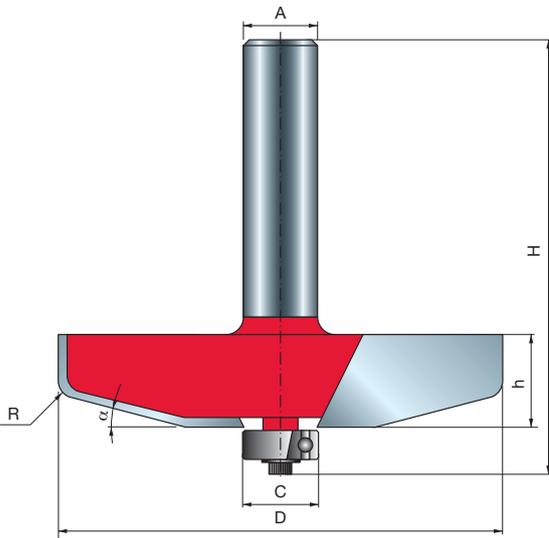
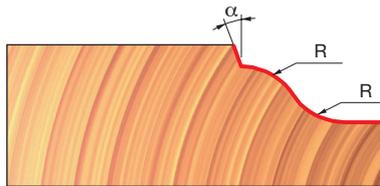




Type C

| D | h | H | A | C | α | R | Z | Max RPM | Freud Code | Art. No. |
|----|----|------|------|------|----------|----|---|---------|------------|------------|
| mm | mm | mm | inch | mm | | mm | | 1/min. | | |
| 70 | 16 | 64,5 | 1/2 | 12,7 | 20° | 11 | 4 | 12.000 | 99-51350P | F03FR02507 |

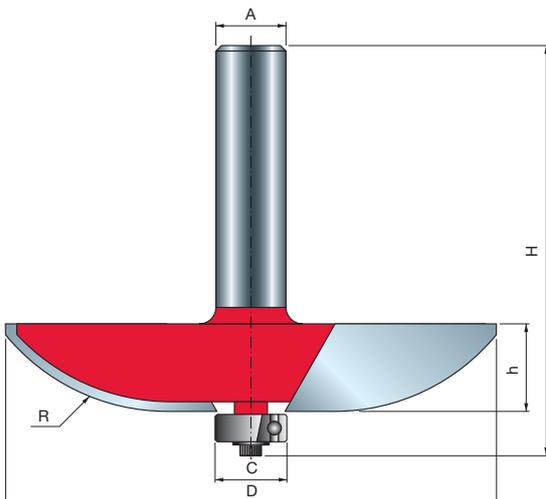
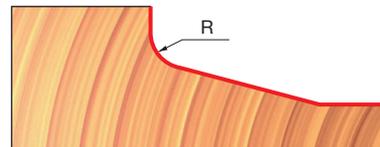
| Spare parts | Dimensions | Freud Code | Art. No. |
|--------------|--------------------|------------|------------|
| | mm | | |
| Screw | M3 x 7,6 | 2607M 001 | F03F010000 |
| Ball bearing | 12,7 x 4,98 x 4,76 | 3102M AB9 | F03F010007 |
| Washer | 12 x 1,1 x 4,8 | FX07M AB9 | F03F010159 |



Type D

| D | h | H | A | C | α | R | Z | Max RPM | Freud Code | Art. No. |
|------|----|----|----|------|----------|-----|---|---------|------------|------------|
| mm | mm | mm | mm | mm | | mm | | 1/min. | | |
| 76,2 | 16 | 60 | 12 | 12,7 | 15° | 4,8 | 2 | 12.000 | 99-22412P | F03FR02461 |

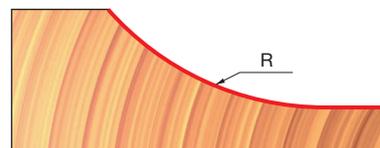
| Spare parts | Dimensions | Freud Code | Art. No. |
|--------------|--------------------|------------|------------|
| | mm | | |
| Screw | M3 x 7,6 | 2607M 001 | F03F010000 |
| Ball bearing | 12,7 x 4,98 x 4,76 | 3102M AB9 | F03F010007 |
| Washer | 12 x 1,1 x 4,8 | FX07M AB9 | F03F010159 |



Type E

| D | h | H | A | C | R | Z | Max RPM | Freud Code | Art. No. |
|----|----|------|------|------|------|---|---------|------------|------------|
| mm | mm | mm | inch | mm | mm | | 1/min. | | |
| 89 | 16 | 64,7 | 12 | 12,7 | 38,1 | 2 | 10.000 | 99-22512P | F03FR02462 |
| 89 | 16 | 64,5 | 1/2 | 12,7 | 38 | 4 | 10.000 | 99-51850P | F03FR02510 |

| Spare parts | Dimensions | Freud Code | Art. No. |
|--------------|--------------------|------------|------------|
| | mm | | |
| Screw | M3 x 7,6 | 2607M 001 | F03F010000 |
| Ball bearing | 12,7 x 4,98 x 4,76 | 3102M AB9 | F03F010007 |
| Washer | 12 x 1,1 x 4,8 | FX07M AB9 | F03F010159 |





RAISED PANEL BITS WITH BACK CUTTERS

99-

Machines:

Table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

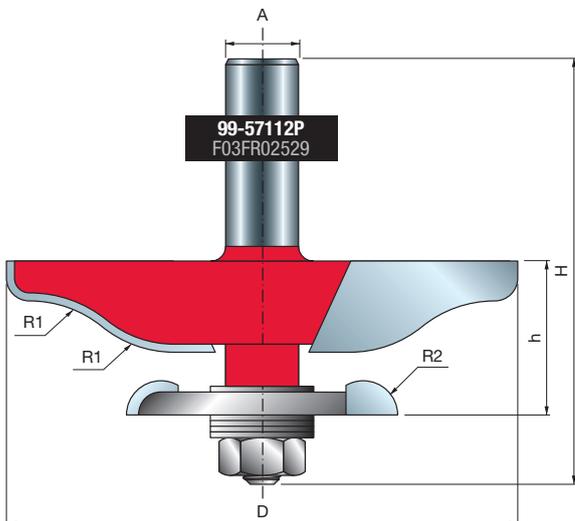
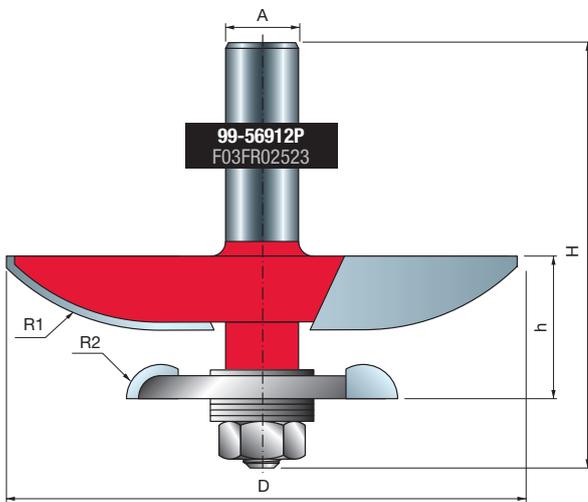
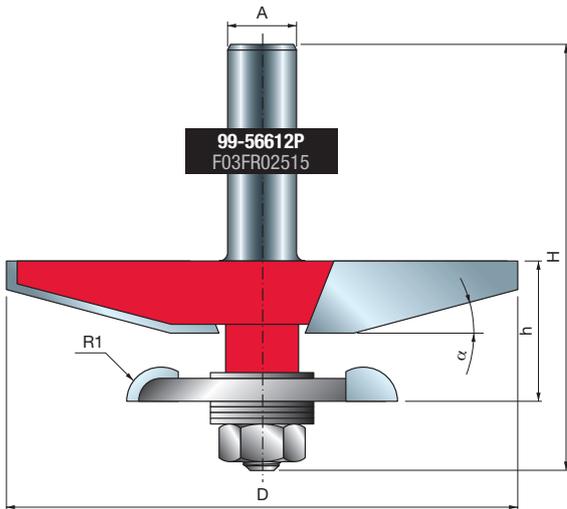
Create beautiful raised panels for cabinet doors or wall panelling. These raised panel bits include a backcutter that routs a rabbet on the back of the door panel.



Table Routers

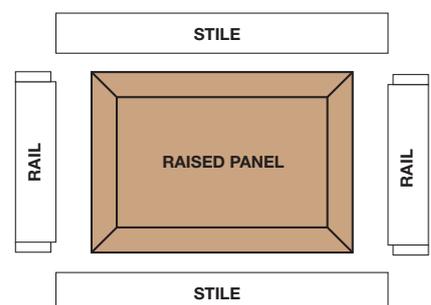
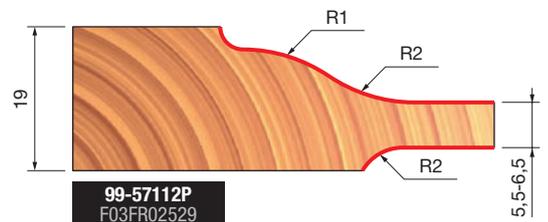
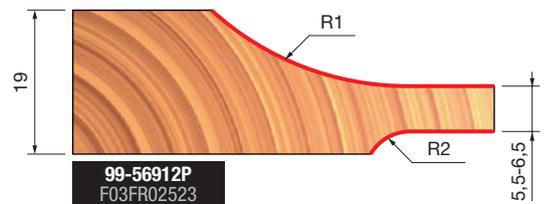
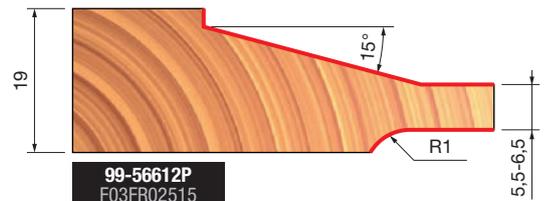


Softwood Hardwood Plywood Wood Based Panels



| D mm | h mm | H mm | A mm | α | R1 mm | R2 mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|------|------|----------|-------|-------|---|----------------|------------------|------------|
| 89 | 25 | 75 | 12 | 15° | 6 | - | 2 | 14.000 | 99-56612P | F03FR02515 |
| 89 | 25 | 75 | 12 | 15° | 38 | 6 | 2 | 14.000 | 99-56912P | F03FR02523 |
| 89 | 25 | 75 | 12 | 15° | 30 | 6 | 2 | 14.000 | 99-57112P | F03FR02529 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------|---------------|---------------|------------------------------|
| | Hex nut | 7,94 x 6,75 | 2610M BB9 F03F010003 |
| | Spacer | 18 x 0,1 x 8 | AN01MP0019 F03FC00392 |
| | Spacer | 18 x 0,2 x 8 | AN01MP0029 F03FC00393 |
| | Spacer | 18 x 0,5 x 8 | AN01MP0059 F03FC00395 |
| | Spacer | 18 x 1 x 8 | AN01MP0109 F03FC00396 |
| | Spacer | 18 x 0,15 x 8 | AN01MPAA99 F03FC00391 |



VERTICAL RAISED PANEL BITS

99-

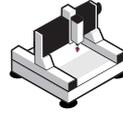


Table Routers

CNC Machines



Softwood

Hardwood

Plywood

Wood Based Panels

Machines:

Table routers and CNC machines.

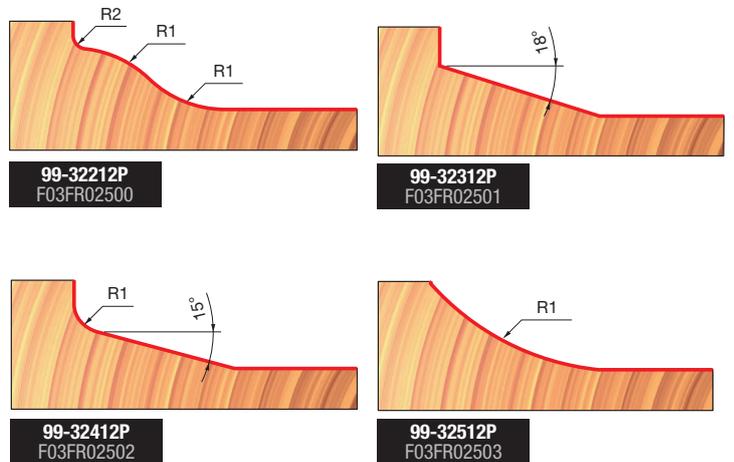
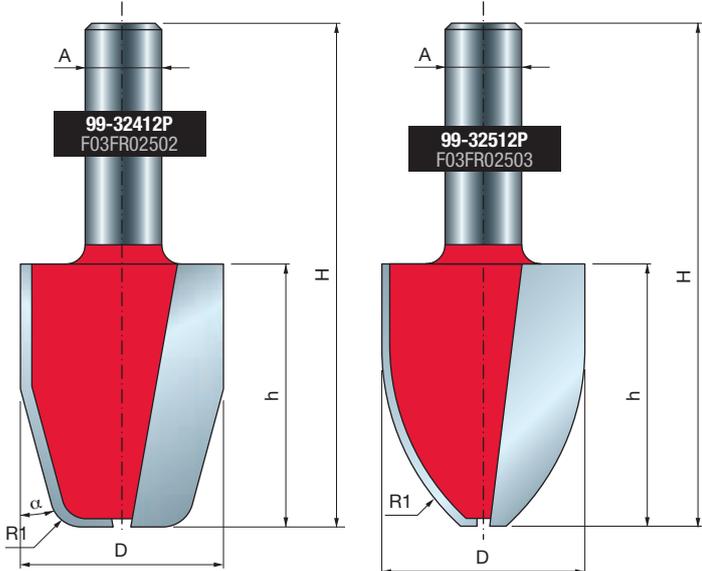
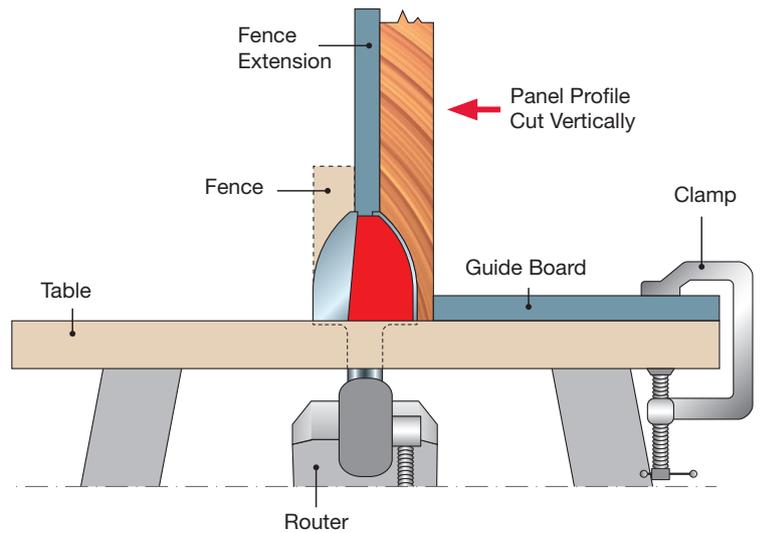
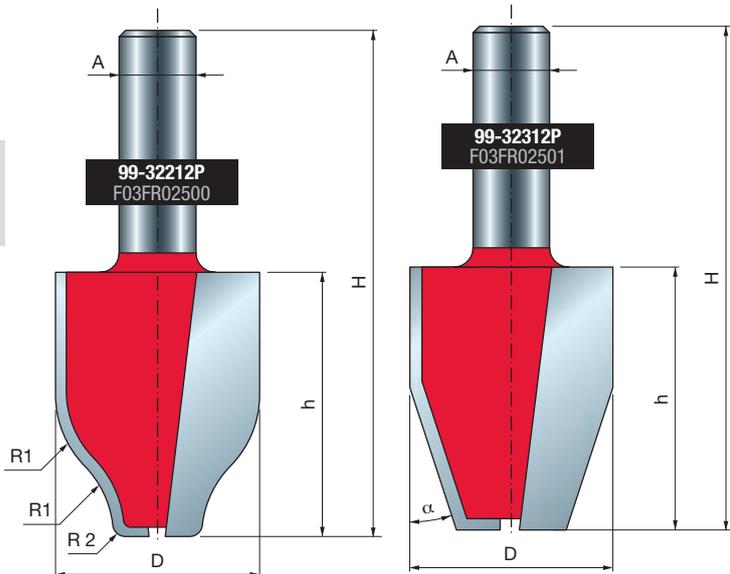
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Create beautiful raised panels for cabinet doors or wall panelling.

| D mm | h mm | H mm | A | α | R1 mm | R2 mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|----|----------|----------|----------|---|-------------------|------------|------------|
| 31,8 | 41,5 | 79,5 | 12 | - | 2 | 16 | 2 | 16.000 | 99-32212P | F03FR02500 |
| 31,8 | 41,5 | 79,5 | 12 | 18° | - | - | 2 | 16.000 | 99-32312P | F03FR02501 |
| 31,8 | 41,5 | 79,5 | 12 | 15° | 4,8 | - | 2 | 16.000 | 99-32412P | F03FR02502 |
| 31,8 | 41,5 | 79,5 | 12 | - | 38,1 | - | 2 | 16.000 | 99-32512P | F03FR02503 |



Surface Forming Bits





V-GROOVE BITS

20- PI01

Machines:

Hand-held routers, table routers and CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

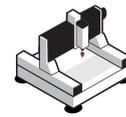
Perfect for V shaped grooves, signmaking, engraving and decorative details.



Hand-held Routers



Table Routers



CNC Machines



Softwood



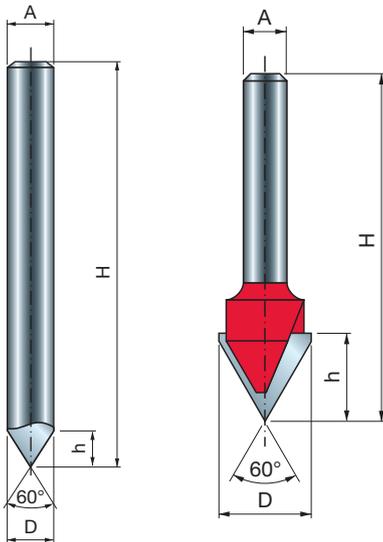
Hardwood



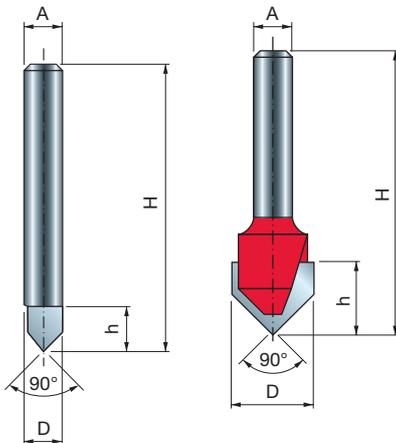
Plywood



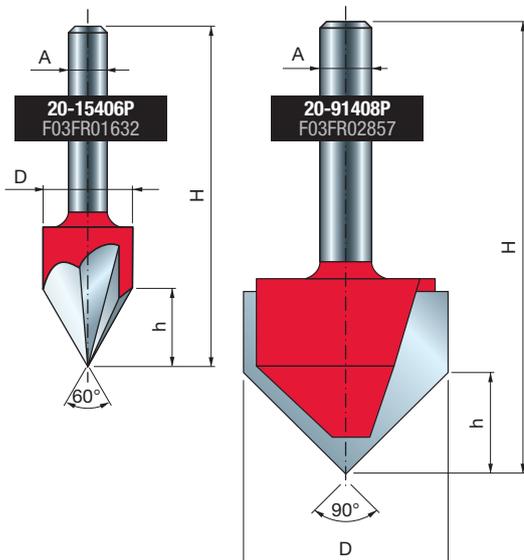
Wood Based Panels



• Solid Carbide Bit

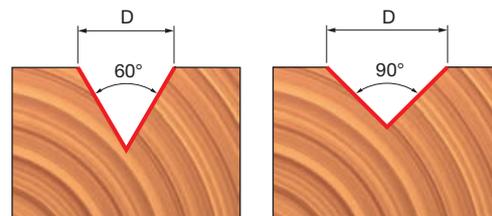


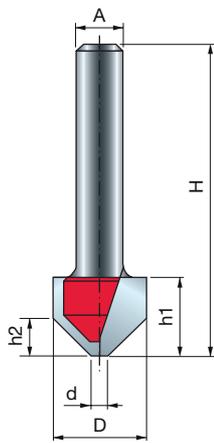
• Solid Carbide Bit



| D | h | H | A | α | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|-----|----------|---|---------|------------|------------|
| mm | mm | mm | mm | inch | | 1/min. | | |
| 6 | 6 | 38,1 | 6 | 90° | 1 | 24.000 | 20-10006P | F03FR01617 |
| 9,5 | 10 | 44,4 | 6 | 90° | 2 | 24.000 | 20-10206P | F03FR01619 |
| 12,7 | 10 | 44,4 | 6 | 90° | 2 | 24.000 | 20-10406P | F03FR01622 |
| 12,7 | 12,7 | 49,2 | 6 | 60° | 2 | 24.000 | 20-15206P | F03FR01629 |
| 12,7 | 11 | 57,3 | 6 | 60° | 3 | 24.000 | 20-15406P | F03FR01632 |
| 6 | 6 | 38,1 | 8 | 90° | 1 | 24.000 | 20-10008P | F03FR01618 |
| 8 | 6 | 70 | 8 | 60° | 1 | 30.000 | PI01MD6083 | F03FR00382 |
| 8 | 8 | 70 | 8 | 60° | 1 | 24.000 | 20-16008P | F03FR01634 |
| 9,5 | 10 | 44,4 | 8 | 90° | 2 | 24.000 | 20-10208P | F03FR01620 |
| 12,7 | 10 | 44,4 | 8 | 90° | 2 | 24.000 | 20-10408P | F03FR01623 |
| 12,7 | 12,7 | 50,8 | 8 | 60° | 2 | 24.000 | 20-15208P | F03FR01630 |
| 12,7 | 11 | 54 | 8 | 60° | 3 | 24.000 | 20-15408P | F03FR01633 |
| 31,75 | 16 | 51 | 8 | 90° | 2 | 24.000 | 20-91408P | F03FR02857 |
| 15,88 | 12,5 | 56,5 | 12 | 90° | 2 | 24.000 | 20-10612P | F03FR01625 |
| 19,05 | 12,5 | 57,2 | 12 | 90° | 2 | 24.000 | 20-10812P | F03FR01626 |
| 9,53 | 10 | 44,4 | 1/4 | 90° | 2 | 24.000 | 20-10225P | F03FR01621 |
| 12,7 | 10 | 44,4 | 1/4 | 90° | 2 | 24.000 | 20-10425P | F03FR01624 |
| 12,7 | 12,7 | 47,5 | 1/4 | 60° | 2 | 24.000 | 20-15225P | F03FR01631 |
| 12,7 | 12,7 | 54,7 | 1/2 | 90° | 2 | 24.000 | 20-10950P | F03FR01628 |

• Solid Carbide Bit





Machines:

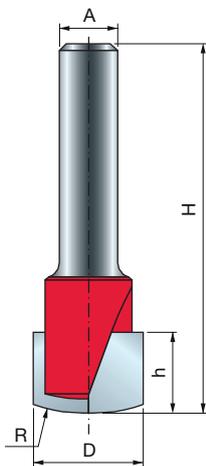
Hand-held routers, table routers and CNC machines.

Materials:

ACM (Aluminium Composite Material) panels, softwood, hardwood, plywood and wood based panels.

Applications:

Designed to create a V groove on ACM panels, ensuring an easy bending of the panel without fractures.



Machines:

Hand-held routers, table routers and CNC machines.

Materials:

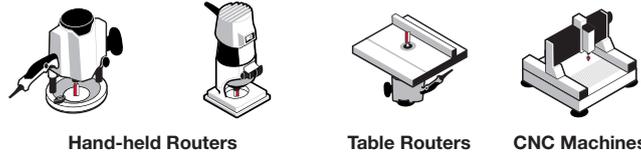
ACM (Aluminium Composite Material) panels, softwood, hardwood, plywood and wood based panels.

Applications:

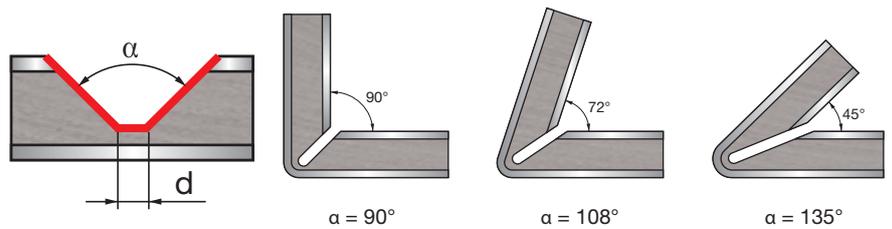
Designed to create a rectangular groove on thick ACM panels, ensuring an easy bending of the panel without fractures.

V-GROOVE BITS FOR ACM PANEL FOLDING

21-

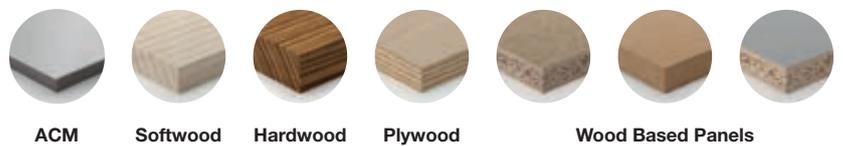
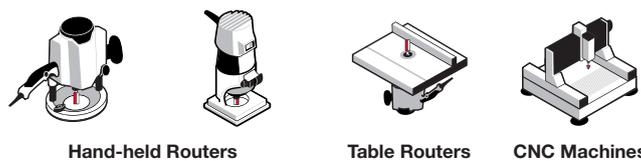


| D | h1 | h2 | H | A | d | α | Z | Max RPM | Freud Code | Art. No. | |
|-------|------|-----|------|----|------|----------|------|---------|------------|------------|------------|
| mm | mm | mm | mm | mm | inch | mm | | 1/min. | | | |
| 16 | 12,5 | 6,8 | 50,8 | 6 | 2,5 | 90° | 2 | 24.000 | 21-11206P | F03FR04018 | |
| 19,05 | 12,5 | 6 | 50,8 | 6 | 2,5 | 108° | 2 | 24.000 | 21-14606P | F03FR04021 | |
| 22,23 | 12,5 | 4,2 | 50,8 | 6 | 2,29 | 135° | 2 | 24.000 | 21-18206P | F03FR04024 | |
| 16 | 12,5 | 6,8 | 50,8 | 8 | 2,5 | 90° | 2 | 24.000 | 21-11208P | F03FR04019 | |
| 19,05 | 12,5 | 6 | 50,8 | 8 | 2,5 | 108° | 2 | 24.000 | 21-14608P | F03FR04022 | |
| 22,23 | 12,5 | 4,2 | 50,8 | 8 | 2,29 | 135° | 2 | 24.000 | 21-18208P | F03FR04025 | |
| 12,7 | 10,8 | 5,2 | 50,8 | | 1/4 | 2,29 | 90° | 2 | 24.000 | 21-11025P | F03FR04017 |
| 16 | 12,7 | 6,8 | 50,8 | | 1/4 | 2,5 | 90° | 2 | 24.000 | 21-11225P | F03FR04020 |
| 19,05 | 12,7 | 6 | 50,8 | | 1/4 | 2,5 | 108° | 2 | 24.000 | 21-14625P | F03FR04023 |
| 22,23 | 12,7 | 4,2 | 50,8 | | 1/4 | 2,29 | 135° | 2 | 24.000 | 21-18225P | F03FR04026 |

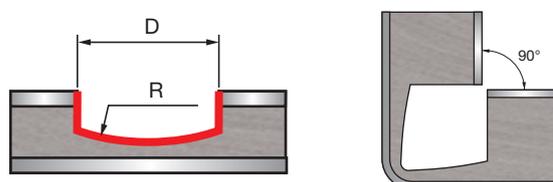


RECTANGULAR GROOVE BITS FOR ACM PANEL FOLDING

21-

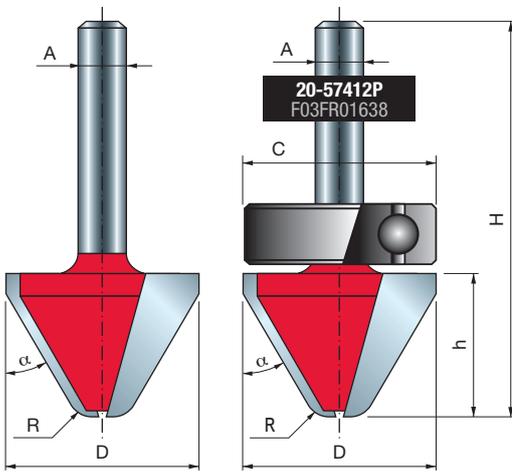


| D | h | H | A | R | Z | Max RPM | Freud Code | Art. No. | |
|-------|----|------|----|------|------|---------|------------|------------|------------|
| mm | mm | mm | mm | inch | mm | 1/min. | | | |
| 15,88 | 11 | 50 | 8 | 23,8 | 2 | 24.000 | 21-20008P | F03FR03967 | |
| 15,88 | 11 | 50,8 | | 1/4 | 23,8 | 2 | 24.000 | 21-20025P | F03FR03963 |



LETTERING BITS

20-



Machines:

Hand-held routers, table routers and CNC machines.
Bits with ball bearing are not recommended to be used on CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

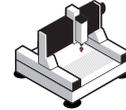
Produce a 60° angle V shape groove with a flat bottom for highly readable relief lettering.



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



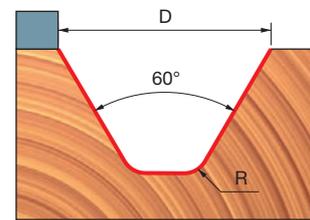
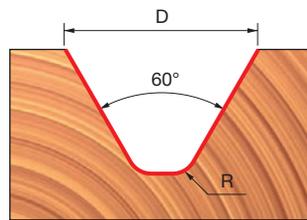
Wood Based Panels



Wood Based Panels

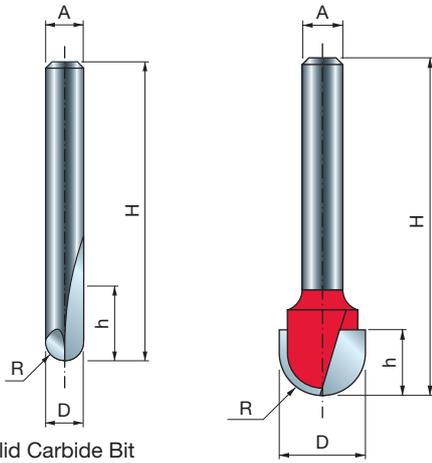


| D mm | h mm | H mm | A mm | C mm | R mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-------|------|-------|------|------|------|-----|---|----------------|------------|------------|
| 25,4 | 19 | 51,05 | 6 | - | 3 | 60° | 2 | 24.000 | 20-17206P | F03FR01635 |
| 25,4 | 19 | 51,05 | 8 | - | 3 | 60° | 2 | 24.000 | 20-17208P | F03FR01636 |
| 28,57 | 19 | 57 | 12 | - | 3 | 60° | 2 | 18.000 | 20-17412P | F03FR01637 |
| 28 | 19 | 67,15 | 12 | 28 | 3 | 60° | 2 | 18.000 | 20-57412P | F03FR01638 |



ROUND NOSE BITS

18-



• Solid Carbide Bit



Machines:

Hand-held routers, table routers and CNC machines.

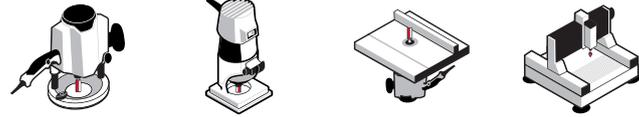
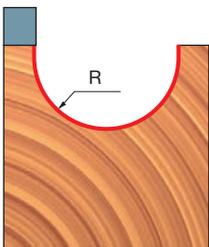
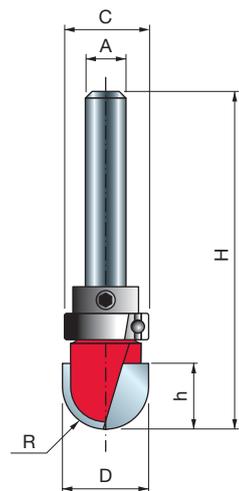
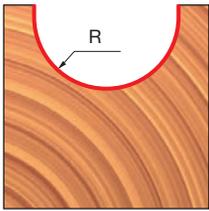
Bits with ball bearing are not recommended to be used on CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Perform beautiful semicircular engraved grooves in the workpiece.



Softwood Hardwood Plywood Wood Based Panels

| D | h | H | A | R | Z | Max RPM | Freud Code | Art. No. | |
|---------|------|------|----|------|------|---------|------------|------------|------------|
| mm | mm | mm | mm | inch | mm | 1/min. | | | |
| • 3,2 | 9,5 | 50,5 | 6 | 1,6 | 2 | 24.000 | 18-10006P | F03FR01581 | |
| • 4,8 | 9,5 | 50,5 | 6 | 2,4 | 2 | 24.000 | 18-10206P | F03FR01584 | |
| • 6 | 12,7 | 50,8 | 6 | 3 | 2 | 24.000 | 18-10406P | F03FR01587 | |
| • 9,52 | 9 | 46 | 6 | 4,8 | 2 | 24.000 | 18-10606P | F03FR01590 | |
| • 12 | 9 | 46 | 6 | 6 | 2 | 24.000 | 18-10806P | F03FR01593 | |
| • 15,88 | 11 | 50,8 | 6 | 8 | 2 | 24.000 | 18-11006P | F03FR01596 | |
| • 19,05 | 11 | 50,8 | 6 | 9,5 | 2 | 24.000 | 18-11206P | F03FR01599 | |
| • 3,2 | 9,5 | 50,5 | 8 | 1,6 | 2 | 24.000 | 18-10008P | F03FR01582 | |
| • 4,8 | 9,5 | 50,5 | 8 | 2,4 | 2 | 24.000 | 18-10208P | F03FR01585 | |
| • 6 | 12,7 | 50,8 | 8 | 3 | 2 | 24.000 | 18-10408P | F03FR01588 | |
| • 9,52 | 9 | 46 | 8 | 4,8 | 2 | 24.000 | 18-10608P | F03FR01591 | |
| • 12 | 9 | 46 | 8 | 6 | 2 | 24.000 | 18-10808P | F03FR01594 | |
| • 15,88 | 11 | 50,8 | 8 | 8 | 2 | 24.000 | 18-11008P | F03FR01597 | |
| • 19,05 | 11 | 50,8 | 8 | 9,5 | 2 | 24.000 | 18-11208P | F03FR01600 | |
| • 6 | 9,5 | 57 | 12 | 3 | 2 | 24.000 | 18-11412P | F03FR01602 | |
| • 12,7 | 31,7 | 71,5 | 12 | 6,35 | 2 | 24.000 | 18-11612P | F03FR01604 | |
| • 19,05 | 31,7 | 73 | 12 | 9,5 | 2 | 24.000 | 18-12212P | F03FR01606 | |
| • 25,4 | 31,7 | 73 | 12 | 12,7 | 2 | 24.000 | 18-12612P | F03FR01608 | |
| • 3,18 | 9,5 | 50,5 | | 1/4 | 1,59 | 2 | 24.000 | 18-10025P | F03FR01583 |
| • 4,76 | 6,4 | 50,5 | | 1/4 | 2,38 | 2 | 24.000 | 18-10225P | F03FR01586 |
| • 6,35 | 12,7 | 50,5 | | 1/4 | 3,18 | 2 | 24.000 | 18-10425P | F03FR01589 |
| • 9,52 | 9 | 45 | | 1/4 | 4,77 | 2 | 24.000 | 18-10625P | F03FR01592 |
| • 12,7 | 9 | 45,5 | | 1/4 | 6,35 | 2 | 24.000 | 18-10825P | F03FR01595 |
| • 15,88 | 11 | 48 | | 1/4 | 7,94 | 2 | 24.000 | 18-11025P | F03FR01598 |
| • 19,05 | 11 | 48 | | 1/4 | 9,53 | 2 | 24.000 | 18-11225P | F03FR01601 |
| • 6,35 | 12,7 | 61 | | 1/2 | 3,18 | 2 | 24.000 | 18-11450P | F03FR01603 |
| • 12,7 | 31,7 | 72,7 | | 1/2 | 6,35 | 2 | 24.000 | 18-11650P | F03FR01605 |
| • 19 | 31,7 | 73 | | 1/2 | 9,5 | 2 | 24.000 | 18-12250P | F03FR01607 |

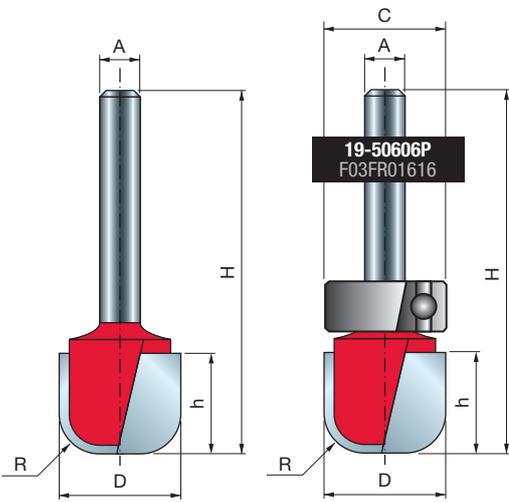
• Solid Carbide Bits

Bits with ball bearing (not suitable for CNC machines)

| D | h | H | A | R | C | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|----|-----|-------|---|---------|------------|------------|
| mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 15,88 | 11 | 59,5 | 6 | 8 | 15,8 | 2 | 24.000 | 18-51006P | F03FR01609 |
| 19,05 | 11,1 | 59,5 | 6 | 9,5 | 19 | 2 | 24.000 | 18-51206P | F03FR01611 |
| 15,88 | 11 | 59,5 | 8 | 8 | 15,8 | 2 | 24.000 | 18-51008P | F03FR01610 |
| 19,05 | 11 | 59,5 | 8 | 9,5 | 19,05 | 2 | 24.000 | 18-51208P | F03FR01612 |

WOOD BOWL BITS

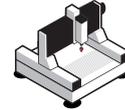
19- 99-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



Wood Based Panels

| D mm | h mm | H mm | A mm | R mm | C mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------|---|-------------------|------------------|------------|
| 19 | 15,9 | 64,1 | 6 | 6,35 | 19 | 2 | 24.000 | 19-5060P | F03FR01616 |
| 19,05 | 15,9 | 47,5 | 6 | 6,35 | - | 2 | 24.000 | 19-10606P | F03FR01613 |
| 19,05 | 15,9 | 47,5 | 8 | 6,35 | - | 2 | 24.000 | 19-10608P | F03FR01614 |
| 19,05 | 15,9 | 67 | 12 | 6,35 | - | 2 | 24.000 | 19-12612P | F03FR01615 |
| 31,75 | 15,8 | 53 | 12 | 6,35 | - | 2 | 18.000 | 99-02612P | F03FR02420 |

Machines:

Hand-held routers, table routers and CNC machines.

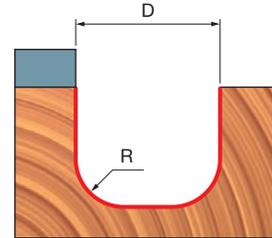
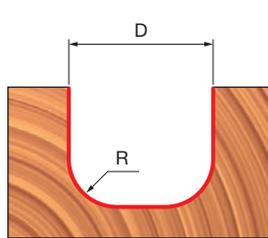
Bits with ball bearing are not recommended to be used on CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

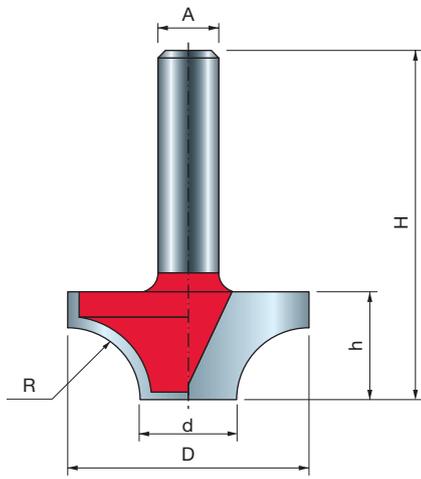
Applications:

Perform beautiful bowl shaped engraved grooves with a flat bottom in the workpiece.



OVOLO BITS

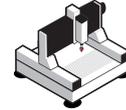
39-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Machines:

Hand-held routers, table routers and CNC machines.

Material:

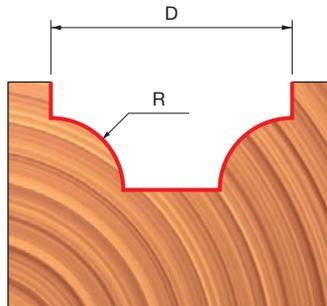
Softwood, hardwood, plywood and wood based panels.

Applications:

Create decorative grooves in moulding and furniture.

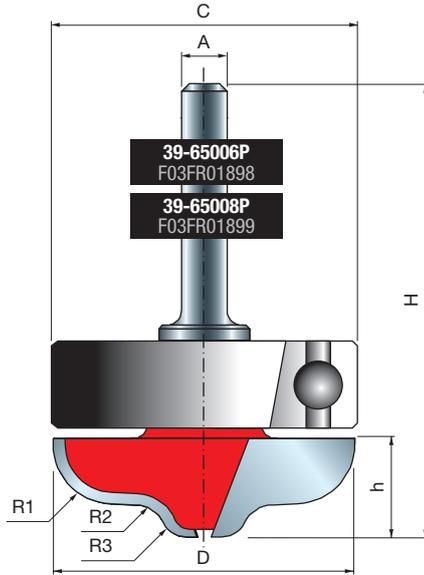
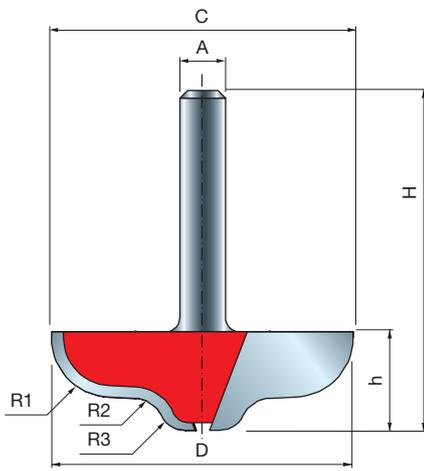
| D mm | h mm | H mm | A mm | R mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------|---|-------------------|------------|------------|
| 12,7 | 8 | 40 | 6 | 3,2 | 6,35 | 2 | 24.000 | 39-20206P | F03FR01871 |
| 24,7 | 12,7 | 44,7 | 8 | 6 | 12,7 | 2 | 24.000 | 39-20908P | F03FR01873 |
| 31,75 | 14,3 | 46,3 | 8 | 9,53 | 12,7 | 2 | 18.000 | 39-20808P | F03FR01872 |
| 63,5 | 33,3 | 71,3 | 12 | 25,4 | 12,7 | 2 | 12.000 | 39-23812P* | F03FR01874 |

* Not suitable for hand-held machines



DOUBLE COVE AND BEAD GROOVE BITS

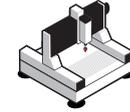
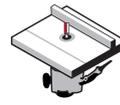
39-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



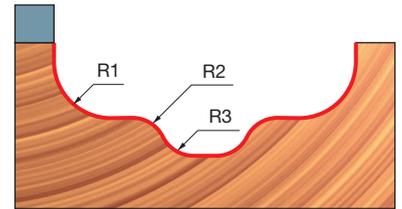
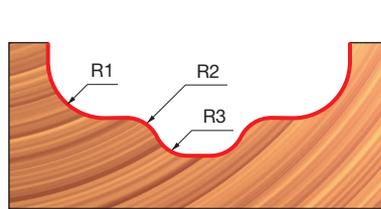
Plywood



Wood Based Panels



| D mm | h mm | H mm | A mm | C mm | R1 mm | R2 mm | R3 mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|----------|----------|----------|---|-------------------|------------------|------------|
| 39,6 | 13 | 45 | 6 | - | 7,9 | 4,2 | 3,4 | 2 | 16.000 | 39-60006P | F03FR01896 |
| 39,6 | 13 | 60,1 | 6 | 39,6 | 7,9 | 4,2 | 3,4 | 2 | 16.000 | 39-65006P | F03FR01898 |
| 39,6 | 13 | 45 | 8 | - | 7,9 | 4,2 | 3,4 | 2 | 16.000 | 39-60008P | F03FR01897 |
| 39,6 | 13 | 60,1 | 8 | 39,6 | 7,9 | 4,2 | 3,4 | 2 | 16.000 | 39-65008P | F03FR01899 |



Machines:

Hand-held routers, table routers and CNC machines.

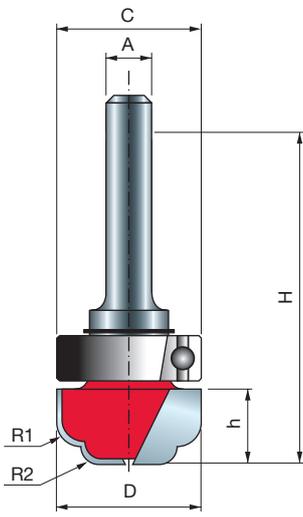
Bits with ball bearing are not recommended to be used on CNC machines.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Create decorative grooves in moulding and furniture.



Machines:

Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Use with templates to create decorative grooves in moulding and furniture.

TOP BEARING DOUBLE COVE GROOVE BIT

39-



Hand-held Routers

Table Routers



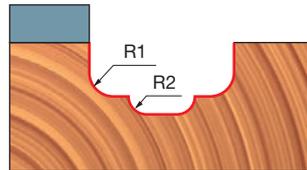
Softwood

Hardwood

Plywood

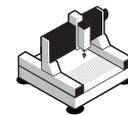
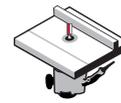
Wood Based Panels

| D | h | H | A | C | R1 | R2 | Z | Max RPM | Freud Code | Art. No. |
|----|-----|----|----|----|-----|-----|---|---------|------------|------------|
| mm | mm | mm | mm | mm | mm | mm | | 1/min. | | |
| 19 | 9,6 | 53 | 6 | 19 | 3,2 | 2,4 | 2 | 24.000 | 39-51206P | F03FR01887 |



COVE AND BEAD GROOVE BITS

39-



Hand-held Routers

Table Routers

CNC Machines

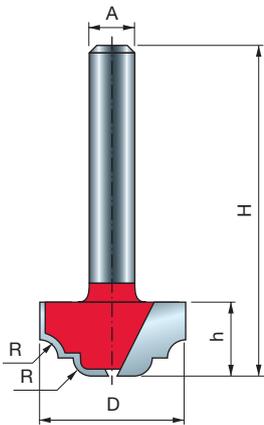


Softwood

Hardwood

Plywood

Wood Based Panels



Machines:

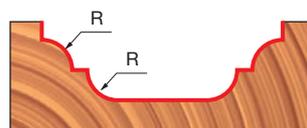
Hand-held routers, table routers and CNC machines.

Materials:

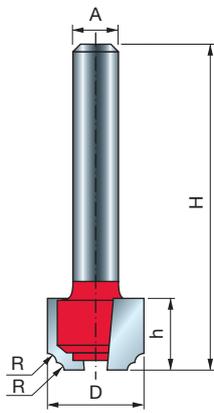
Softwood, hardwood, plywood and wood based panels.

Applications:

Create decorative grooves in moulding and furniture.



| D | h | H | A | R | Z | Max RPM | Freud Code | Art. No. |
|-------|------|------|----|------|------|---------|------------|----------------------|
| mm | mm | mm | mm | inch | mm | 1/min. | | |
| 19,05 | 9,8 | 41,8 | 6 | | 2,38 | 2 | 24.000 | 39-10006P F03FR01856 |
| 25,4 | 12,7 | 44,7 | 6 | | 3,18 | 2 | 24.000 | 39-10206P F03FR01860 |
| 19,05 | 9,8 | 41,8 | 8 | | 2,38 | 2 | 24.000 | 39-10008P F03FR01857 |
| 19 | 12,7 | 44,7 | 8 | | 4 | 2 | 24.000 | 39-10108P F03FR01859 |
| 25,4 | 12,7 | 44,7 | 8 | | 3,18 | 2 | 24.000 | 39-10208P F03FR01861 |
| 31,75 | 12,7 | 44,7 | 8 | | 4 | 2 | 18.000 | 39-11408P F03FR01863 |
| 31,75 | 12,7 | 50,7 | 12 | | 4 | 2 | 18.000 | 39-11412P F03FR01864 |
| 19,05 | 9,8 | 41,8 | | 1/4 | 2,38 | 2 | 24.000 | 39-10025P F03FR01858 |
| 25,4 | 12,7 | 44,7 | | 1/4 | 3,18 | 2 | 24.000 | 39-10225P F03FR01862 |



CLASSICAL BEADING GROOVE BITS

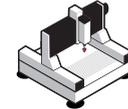
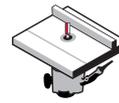
39-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



Wood Based Panels



Machines:

Hand-held routers, table routers and CNC machines.

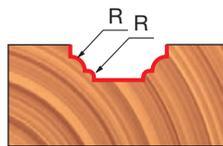
Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Create decorative grooves in moulding and furniture.

| D mm | h mm | H mm | A mm | A inch | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|-----------|---------|---|-------------------|------------|------------|
| 12,7 | 9,5 | 41,2 | 6 | | 1,2 | 2 | 24.000 | 39-30206P | F03FR01878 |
| 15,88 | 9,5 | 41,2 | 6 | | 2,38 | 2 | 24.000 | 39-30406P | F03FR01881 |
| 22,22 | 12 | 43,7 | 6 | | 3,18 | 2 | 24.000 | 39-30606P | F03FR01884 |
| 12,7 | 9,5 | 41,2 | 8 | | 1,2 | 2 | 24.000 | 39-30208P | F03FR01879 |
| 15,88 | 9,5 | 41,2 | 8 | | 2,38 | 2 | 24.000 | 39-30408P | F03FR01882 |
| 22,22 | 12 | 43,7 | 8 | | 3,2 | 2 | 24.000 | 39-30608P | F03FR01885 |
| 12,7 | 9,5 | 41,2 | | 1/4 | 1,2 | 2 | 24.000 | 39-30225P | F03FR01880 |
| 15,88 | 9,5 | 41,2 | | 1/4 | 2,38 | 2 | 24.000 | 39-30425P | F03FR01883 |
| 22,22 | 12 | 43,7 | | 1/4 | 3,18 | 2 | 24.000 | 39-30625P | F03FR01886 |



OGEE GROOVE BITS

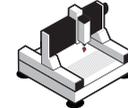
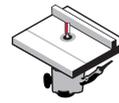
39-



Hand-held Routers



Table Routers



CNC Machines



Softwood



Hardwood



Plywood



Wood Based Panels



Wood Based Panels



Wood Based Panels



Machines:

Hand-held routers, table and CNC machines.

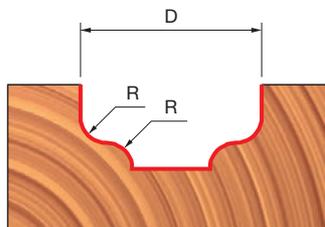
Materials:

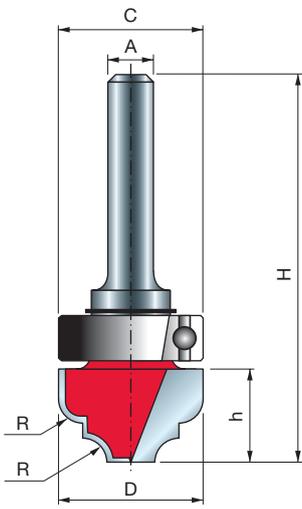
Softwood, hardwood, plywood and wood based panels.

Applications:

Create decorative grooves in moulding and furniture.

| D mm | h mm | H mm | A mm | A inch | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|-----------|---------|---|-------------------|------------|------------|
| 12,7 | 8 | 40 | 6 | | 1,59 | 2 | 24.000 | 39-15206P | F03FR01865 |
| 19,05 | 12,7 | 44,7 | 6 | | 6,35 | 2 | 24.000 | 39-24006P | F03FR01875 |
| 22,23 | 10,36 | 42,4 | 6 | | 3,18 | 2 | 24.000 | 39-15406P | F03FR01868 |
| 12,7 | 8 | 40 | 8 | | 1,6 | 2 | 24.000 | 39-15208P | F03FR01866 |
| 19,05 | 12,7 | 44,7 | 8 | | 6,4 | 2 | 24.000 | 39-24008P | F03FR01876 |
| 22,23 | 10,36 | 42,4 | 8 | | 3,2 | 2 | 24.000 | 39-15408P | F03FR01869 |
| 19,05 | 12,7 | 50,7 | 12 | | 6,4 | 2 | 24.000 | 39-24012P | F03FR01877 |
| 12,7 | 8 | 40 | | 1/4 | 1,59 | 2 | 24.000 | 39-15225P | F03FR01867 |
| 22,23 | 10,4 | 42,4 | | 1/4 | 3,18 | 2 | 24.000 | 39-15425P | F03FR01870 |





Machines:

Hand-held routers and table routers.

Materials:

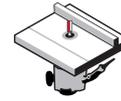
Softwood, hardwood, plywood and wood based panels.

Applications:

Use with templates to create decorative grooves in moulding and furniture.

TOP BEARING COVE AND BEAD GROOVE BITS

39-



Hand-held Routers

Table Routers



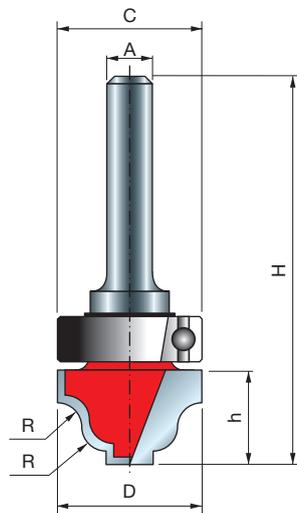
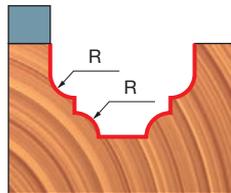
Softwood

Hardwood

Plywood

Wood Based Panels

| D | h | H | A | C | R | Z | Max RPM | Freud Code | Art. No. |
|----|------|------|----|------|----|------|---------|------------|------------|
| mm | mm | mm | mm | inch | mm | | 1/min. | | |
| 19 | 12,7 | 55,5 | 6 | | 19 | 3,18 | 24.000 | 39-53206P | F03FR01892 |
| 28 | 14 | 58,1 | 8 | | 28 | 3,18 | 18.000 | 39-53808P | F03FR01894 |
| 28 | 14 | 64,1 | 12 | | 28 | 3,18 | 18.000 | 39-53812P | F03FR01895 |
| 19 | 12,7 | 55,5 | | 1/4 | 19 | 3,18 | 24.000 | 39-53225P | F03FR01893 |



Machines:

Hand-held routers and table routers.

Materials:

Softwood, hardwood, plywood and wood based panels.

Applications:

Use with templates to create decorative grooves in moulding and furniture.

TOP BEARING FILLET OGEE GROOVE BITS

39-



Hand-held Routers

Table Routers



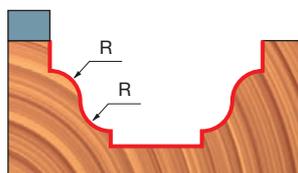
Softwood

Hardwood

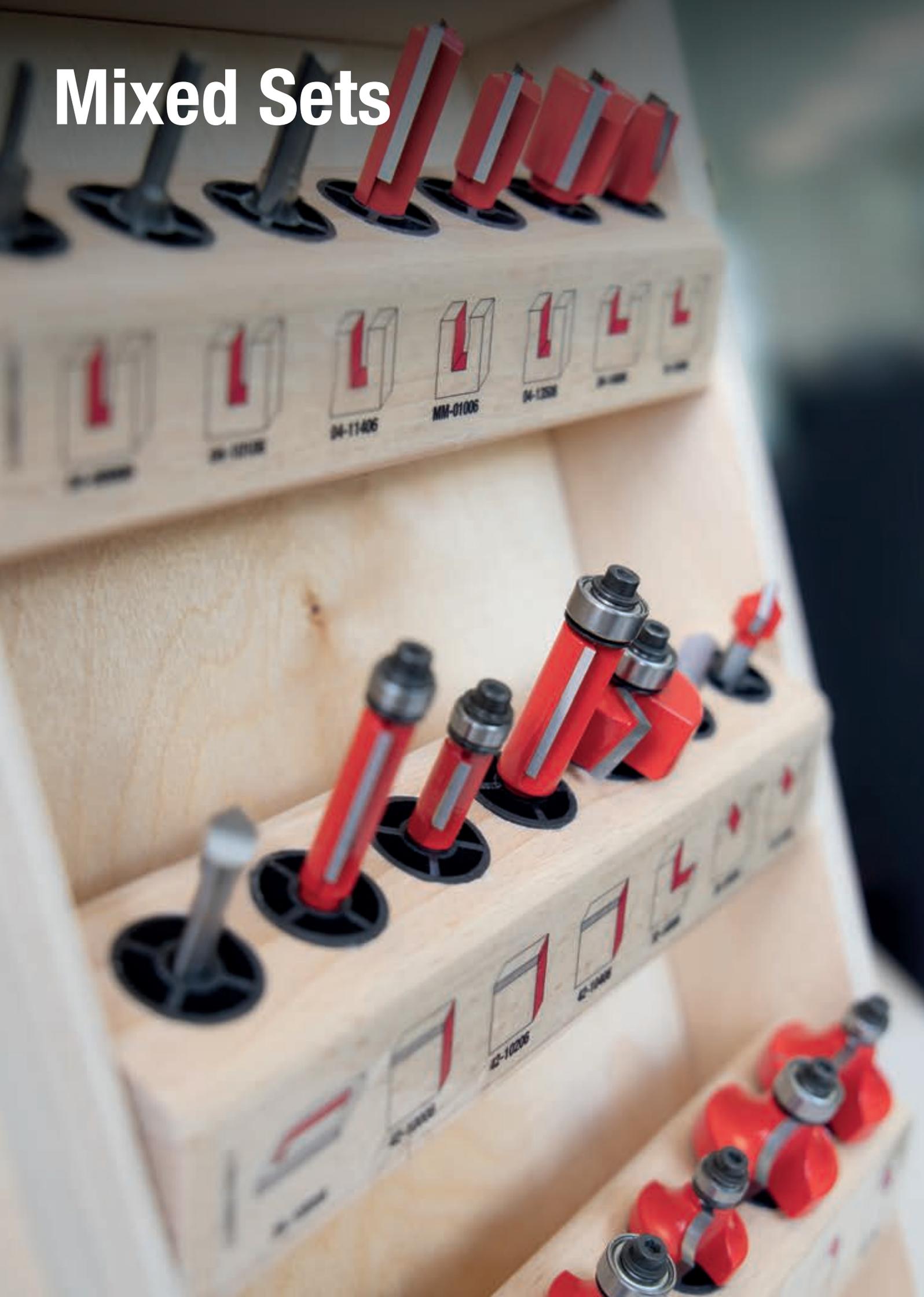
Plywood

Wood Based Panels

| D | h | H | A | C | R | Z | Max RPM | Freud Code | Art. No. |
|----|------|------|----|------|----|------|---------|------------|------------|
| mm | mm | mm | mm | inch | mm | | 1/min. | | |
| 19 | 12,5 | 55,5 | 6 | | 19 | 3,18 | 24.000 | 39-52206P | F03FR01888 |
| 28 | 14,4 | 58,1 | 8 | | 28 | 4 | 18.000 | 39-52808P | F03FR01890 |
| 28 | 14,4 | 64,1 | 12 | | 28 | 4 | 18.000 | 39-52812P | F03FR01891 |
| 19 | 12,5 | 55,5 | | 1/4 | 19 | 3,18 | 24.000 | 39-52225P | F03FR01889 |



Mixed Sets





BASIC SET 4 ROUTER BITS

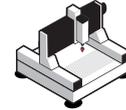
88-10606P (F03FR02255)



Hand-held Routers



Table Routers



CNC Machines*



Softwood



Hardwood



Plywood



Wood Based Panels



Set code 88-10606P (F03FR02255)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-----------------------------|----------------|-------|------|------|------|------|------|---|----------------|------------|------------|
| • Double flute straight bit | 244 | 6 | 16 | 50,8 | 6 | - | - | 2 | 24.000 | 04-11406P | F03FR01440 |
| Flush trim bit | 252 | 12,7 | 25,7 | 72,9 | 6 | 12,7 | - | 2 | 24.000 | 42-10406P | F03FR01938 |
| Roman ogee bit | 261 | 27 | 13,3 | 55,3 | 6 | 9,53 | 4 | 2 | 18.000 | 38-10006P | F03FR01805 |
| Rounding over bit | 256 | 31,75 | 18 | 59,7 | 6 | 12,7 | 9,53 | 2 | 18.000 | 34-11406P | F03FR01780 |

• Solid Carbide Bit



Additional spare parts included

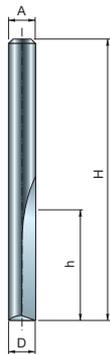
| Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|-------------------|------------|------------|
|  Allen key | 2,5 | 2619M CA9 | F03FA07432 |
|  Ball bearing | 9,53 x 3,2 x 4,76 | 3102M AA9P | F03F010006 |
|  Washer | 9 x 2 x 6 | FX07M AA9P | F03F010158 |

Machines:

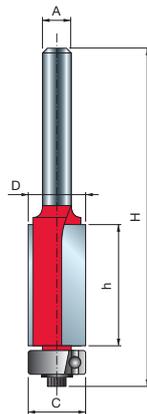
To identify the correct machine for each router bit, refer to the corresponding page reference of each router bit.

Materials:

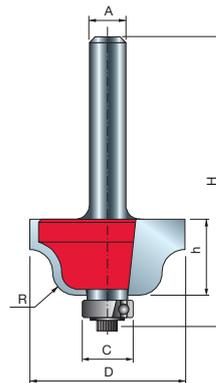
Softwood, hardwood, plywood and wood based panels.



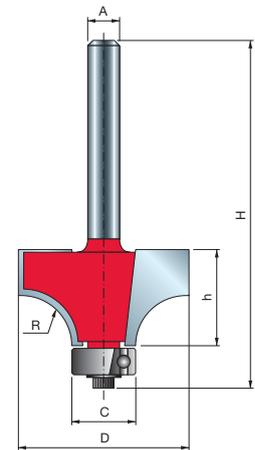
04-11406P
F03FR01440



42-10406P
F03FR01938



38-10006P
F03FR01805



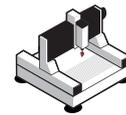
34-11406P
F03FR01780



STARTER 6 PIECE ROUTER BIT SET

91-10408P (F03FR02293)

91-10412P (F03FR02294)



Hand-held Routers

Table Routers

CNC Machines*



Softwood

Hardwood

Plywood

Wood Based Panels

Set code 91-10408P (F03FR02293)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | P mm | α | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-------------------|----------------|---------|---------|---------|---------|---------|---------|----------|---------|---|-------------------|------------------|------------|
| Rabbeting bit | 282 | 31,75 | 13,2 | 55,7 | 8 | 12,7 | 9,52 | - | - | 2 | 18.000 | 32-10008P | F03FR01746 |
| Chamfer bit | 257 | 44 | 18,5 | 61 | 8 | 12,7 | - | 45° | - | 2 | 16.000 | 40-10608P | F03FR01920 |
| Rounding over bit | 256 | 31,75 | 18 | 59,7 | 8 | 12,7 | - | - | 9,5 | 2 | 18.000 | 34-11408P | F03FR01781 |
| Round nose bit | 307 | 12 | 9 | 46 | 8 | - | - | - | 6 | 2 | 24.000 | 18-10808P | F03FR01594 |
| Cove bit | 258 | 38,1 | 16,4 | 58,9 | 8 | 12,7 | - | - | 12,7 | 2 | 16.000 | 30-10608P | F03FR01707 |
| Roman ogee bit | 261 | 35 | 18,5 | 60,5 | 8 | 9,53 | - | - | 6,35 | 2 | 16.000 | 38-10208P | F03FR01809 |

Set code 91-10412P (F03FR02294)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | P mm | α | R mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-------------------|----------------|---------|---------|---------|---------|---------|---------|----------|---------|---|-------------------|------------------|------------|
| Rabbeting bit | 282 | 31,75 | 13,2 | 61,7 | 12 | 12,7 | 9,52 | - | - | 2 | 18.000 | 32-10212P | F03FR01748 |
| Chamfer bit | 257 | 44 | 18,5 | 67 | 12 | 12,7 | - | 45° | - | 2 | 16.000 | 40-11412P | F03FR01922 |
| Rounding over bit | 256 | 31,75 | 18 | 65,7 | 12 | 12,7 | - | - | 9,53 | 2 | 18.000 | 34-12412P | F03FR01788 |
| Round nose bit | 307 | 12,7 | 31,7 | 71,5 | 12 | - | - | - | 6,35 | 2 | 24.000 | 18-11612P | F03FR01604 |
| Cove bit | 258 | 38,1 | 16,4 | 64,9 | 12 | 12,7 | - | - | 12,7 | 2 | 16.000 | 30-11412P | F03FR01713 |
| Roman ogee bit | 261 | 35 | 18,5 | 66,5 | 12 | 9,53 | - | - | 6,35 | 2 | 16.000 | 38-10612P | F03FR01812 |

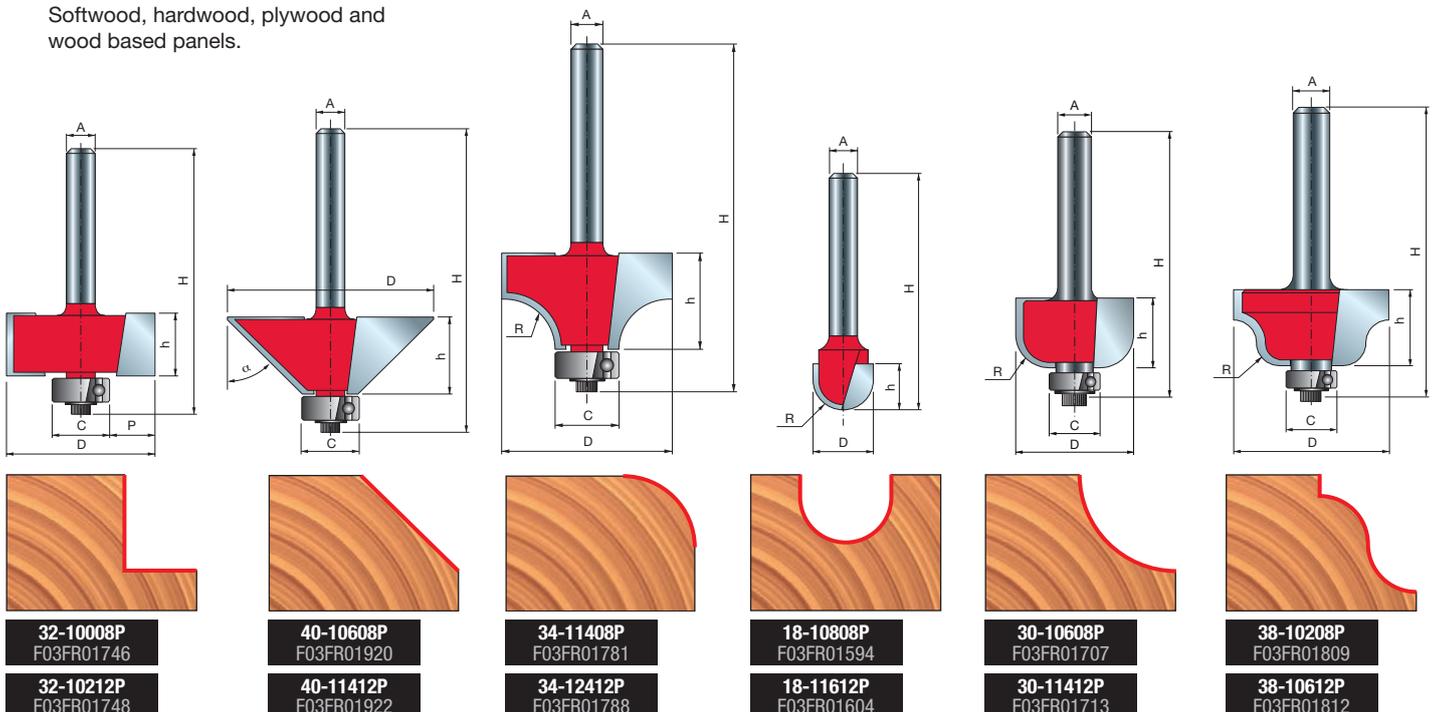


Machines:

To identify the correct machine for each router bit, refer to the corresponding page reference of each router bit.

Materials:

Softwood, hardwood, plywood and wood based panels.



32-10008P
F03FR01746

32-10212P
F03FR01748

40-10608P
F03FR01920

40-11412P
F03FR01922

34-11408P
F03FR01781

34-12412P
F03FR01788

18-10808P
F03FR01594

18-11612P
F03FR01604

30-10608P
F03FR01707

30-11412P
F03FR01713

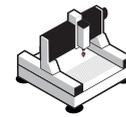
38-10208P
F03FR01809

38-10612P
F03FR01812



INTERMEDIATE 9 PIECE ROUTER BIT SET

88-10206P
(F03FR02250)



Hand-held Routers

Table Routers

CNC Machines*



Softwood

Hardwood

Plywood

Wood Based Panels

Set code 88-10206P (F03FR02250)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | S mm | R mm | P mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-----------------------------|----------------|-------|------|------|------|------|------|------|------|----------|---|----------------|------------------|------------|
| • Double flute straight bit | 244 | 6 | 16 | 50,8 | 6 | - | - | - | - | - | 2 | 24.000 | 04-11406P | F03FR01440 |
| Double flute straight bit | 244 | 9 | 25 | 63 | 6 | - | - | - | - | - | 2 | 24.000 | 04-12406P | F03FR01450 |
| Flush trim bit | 252 | 12,7 | 25,7 | 72,9 | 6 | 12,7 | 25,4 | - | - | - | 2 | 24.000 | 42-10406P | F03FR01938 |
| Mortising bit | 249 | 12,7 | 12,5 | 51 | 6 | - | - | - | - | - | 2 | 24.000 | 16-10006P | F03FR01565 |
| Rabbeting bit | 282 | 31,75 | 13,2 | 55,7 | 6 | 12,7 | - | - | 9,52 | - | 2 | 18.000 | 32-10006P | F03FR01745 |
| Dovetail bit | 285 | 12,7 | 12,7 | 50,7 | 6 | - | - | - | - | 14° | 2 | 24.000 | 22-10406P | F03FR01643 |
| Rounding over bit | 256 | 31,75 | 18 | 59,7 | 6 | 12,7 | - | 9,53 | - | - | 2 | 18.000 | 34-11406P | F03FR01780 |
| • Round nose bit | 307 | 6 | 12,7 | 50,8 | 6 | - | - | 3 | - | - | 2 | 24.000 | 18-10406P | F03FR01587 |
| Roman ogee bit | 261 | 27 | 13,3 | 54,7 | 6 | 9,53 | - | 4 | - | - | 2 | 18.000 | 38-10006P | F03FR01805 |

• Solid Carbide Bit

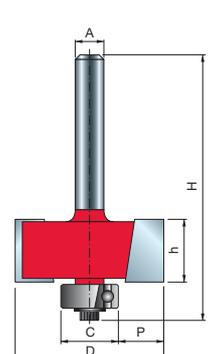
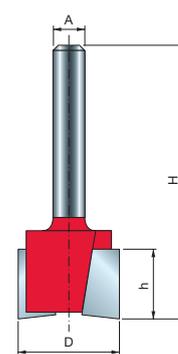
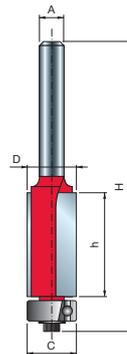
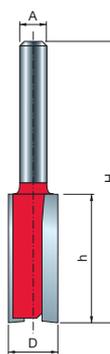
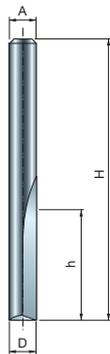


Machines:

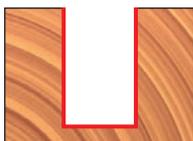
To identify the correct machine for each router bit, refer to the corresponding page reference of each router bit.

Materials:

Softwood, hardwood, plywood and wood based panels.



04-11406P
F03FR01440



04-12406P
F03FR01450



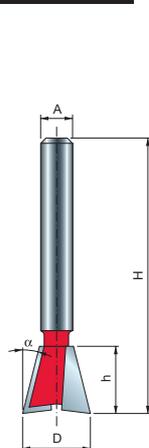
42-10406P
F03FR01938



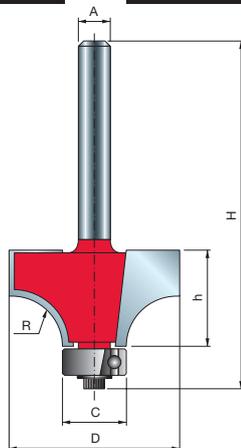
16-10006P
F03FR01565



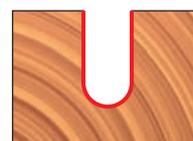
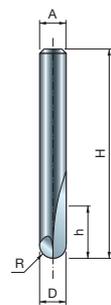
32-10006P
F03FR01745



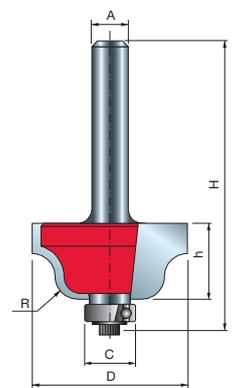
22-10406P
F03FR01643



34-11006P
F03FR01774



18-10406P
F03FR01587



38-10006P
F03FR01805



SUPER 13 PIECE ROUTER BIT SET

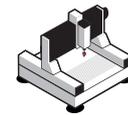
91-10008P (F03FR02275)
91-10012P (F03FR02277)



Hand-held Routers



Table Routers



CNC Machines*



Softwood



Hardwood



Plywood



Wood Based Panels



Set code 91-10008P (F03FR02275)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | R mm | P mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-----------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|----------|---|-------------------|------------------|------------|
| • Double flute straight bit | 244 | 6 | 16 | 50,8 | 8 | - | - | - | - | 2 | 24.000 | 04-11408P | F03FR01441 |
| Double flute straight bit | 245 | 12 | 31,8 | 63,8 | 8 | - | - | - | - | 2 | 24.000 | 04-13708P | F03FR01465 |
| Double flute straight bit | 245 | 20 | 19 | 56 | 8 | - | - | - | - | 2 | 24.000 | 04-15508P | F03FR01493 |
| Flush trim bit | 252 | 12,7 | 25,7 | 72,9 | 8 | 12,7 | - | - | - | 2 | 24.000 | 42-10408P | F03FR01939 |
| Mortising bit | 249 | 12,7 | 12,5 | 50,8 | 8 | - | - | - | - | 2 | 24.000 | 16-10008P | F03FR01566 |
| Rabbeting bit | 282 | 31,75 | 12,7 | 55,2 | 8 | 12,7 | - | 9,52 | - | 2 | 18.000 | 32-10008P | F03FR01746 |
| V-groove bit | 304 | 12,7 | 10 | 44,4 | 8 | - | - | - | 90° | 2 | 24.000 | 20-10408P | F03FR01623 |
| Chamfer bit | 257 | 44 | 18,5 | 61 | 8 | 12,7 | - | - | 45° | 2 | 16.000 | 40-10608P | F03FR01920 |
| Dovetail bit | 285 | 12,7 | 12,7 | 50,7 | 8 | - | - | - | 14° | 2 | 24.000 | 22-10408P | F03FR01644 |
| Rounding over bit | 256 | 31,75 | 18 | 59,7 | 8 | 12,7 | 9,53 | - | - | 2 | 18.000 | 34-11408P | F03FR01781 |
| • Round nose bit | 307 | 6 | 12,7 | 50,8 | 8 | - | - | 3 | - | 2 | 24.000 | 18-10408P | F03FR01588 |
| Cove bit | 258 | 38,1 | 16,4 | 58,9 | 8 | 12,7 | 12,7 | - | - | 2 | 16.000 | 30-10608P | F03FR01707 |
| Roman ogee bit | 261 | 35 | 18,5 | 60,5 | 8 | 9,53 | 6,35 | - | 2 | 2 | 16.000 | 38-10208P | F03FR01809 |

Set code 91-10012P (F03FR02277)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | R mm | P mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-----------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|----------|---|-------------------|------------------|------------|
| • Double flute straight bit | 244 | 6 | 19 | 64 | 12 | - | - | - | - | 2 | 24.000 | 12-09912P | F03FR01520 |
| Double flute straight bit | 245 | 13 | 25,4 | 66,7 | 12 | - | - | - | - | 2 | 24.000 | 12-11612P | F03FR01531 |
| Double flute straight bit | 245 | 19 | 25,4 | 63,4 | 12 | - | - | - | - | 2 | 24.000 | 12-15212P | F03FR01548 |
| Flush trim bit | 252 | 12,7 | 25,4 | 82,5 | 12 | 12,7 | - | - | - | 2 | 24.000 | 42-11012P | F03FR01942 |
| Mortising bit | 249 | 12,7 | 12,5 | 60,5 | 12 | - | - | - | - | 2 | 24.000 | 16-11012P | F03FR01573 |
| Rabbeting bit | 282 | 31,75 | 13,2 | 61,7 | 12 | 12,7 | - | 9,53 | - | 2 | 18.000 | 32-10212P | F03FR01748 |
| V-groove bit | 304 | 19,05 | 12,5 | 57,2 | 12 | - | - | - | 90° | 2 | 24.000 | 20-10812P | F03FR01626 |
| Chamfer bit | 257 | 44 | 18,5 | 67 | 12 | 12,7 | - | - | 45° | 2 | 16.000 | 40-11412P | F03FR01922 |
| Dovetail bit | 285 | 12,7 | 12,7 | 59,7 | 12 | - | - | - | 14° | 2 | 24.000 | 22-11212P | F03FR01650 |
| Rounding over bit | 156 | 31,75 | 18 | 65,7 | 12 | 12,7 | 9,53 | - | - | 2 | 18.000 | 34-12412P | F03FR01788 |
| • Round nose bit | 307 | 6 | 9,5 | 57 | 12 | - | - | 3 | - | 2 | 24.000 | 18-11412P | F03FR01602 |
| Cove bit | 258 | 38,1 | 16,4 | 64,9 | 12 | 12,7 | 12,7 | - | - | 2 | 16.000 | 30-11412P | F03FR01713 |
| Roman ogee bit | 261 | 35 | 18,5 | 66 | 12 | 9,53 | 6,35 | - | - | 2 | 16.000 | 38-10612P | F03FR01812 |

• Solid Carbide Bit



Machines:

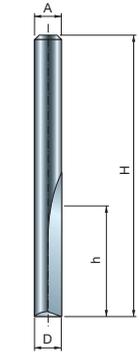
To identify the correct machine for each router bit, refer to the corresponding page reference of each router bit.

Materials:

Softwood, hardwood, plywood and wood based panels.

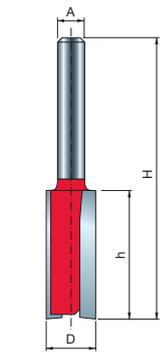
SUPER 13 PIECE ROUTER BIT SET

91-10008P (F03FR02275)
91-10012P (F03FR02277)



04-11408P
F03FR01441

12-09912P
F03FR01520

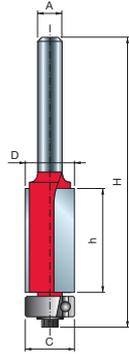


04-13708P
F03FR01465

12-11612P
F03FR01531

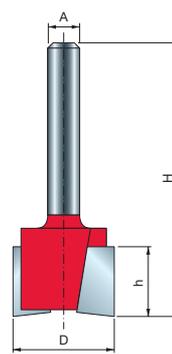
04-15508P
F03FR01493

12-15212P
F03FR01548



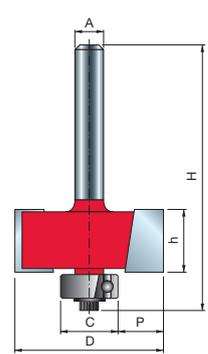
42-10408P
F03FR01939

42-11012P
F03FR01942



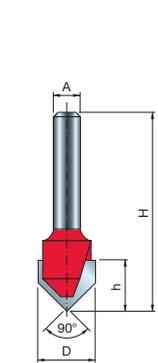
16-10008P
F03FR01566

16-11012P
F03FR01573



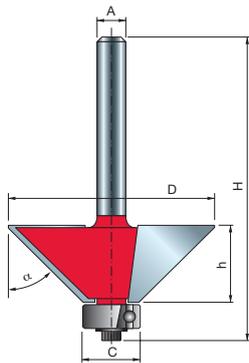
32-10008P
F03FR01746

32-10212P
F03FR01748



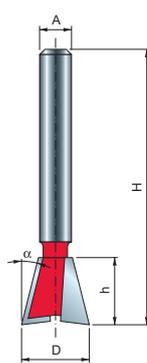
20-10812P
F03FR01626

20-10408P
F03FR01623



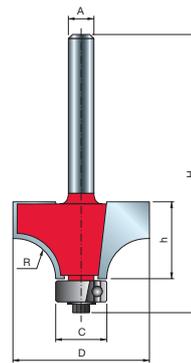
40-10608P
F03FR01920

40-11412P
F03FR01922



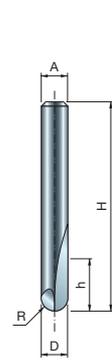
22-10408P
F03FR01644

22-11212P
F03FR01650



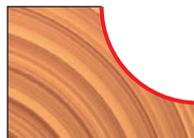
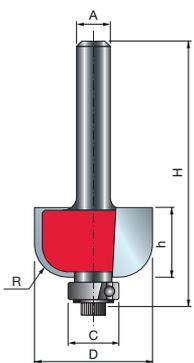
34-11408P
F03FR01781

34-12412P
F03FR01788



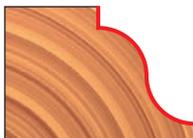
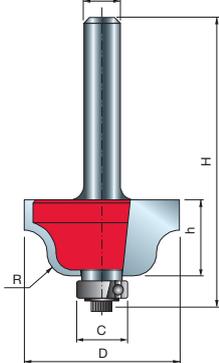
18-10408P
F03FR01588

18-11412P
F03FR01602



30-10608P
F03FR01707

30-11412P
F03FR01713



38-10208P
F03FR01809

38-10612P
F03FR01812



ADVANCED 15 PIECE ROUTER BIT SET

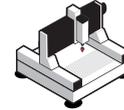
90-10006P
(F03FR02256)



Hand-held Routers



Table Routers



CNC Machines*



Softwood



Hardwood



Plywood



Wood Based Panels



Set code 90-10006P (F03FR02256)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | R mm | P mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-----------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|----------|---|-------------------|------------------|------------|
| • Double flute straight bit | 244 | 4 | 15,8 | 50,7 | 6 | - | - | - | - | 2 | 24.000 | 04-10106P | F03FR01420 |
| • Double flute straight bit | 244 | 6 | 16 | 50,8 | 6 | - | - | - | - | 2 | 24.000 | 04-11406P | F03FR01440 |
| • Double flute straight bit | 245 | 12 | 19 | 55,5 | 6 | - | - | - | - | 2 | 24.000 | 04-13506P | F03FR01460 |
| • Double flute straight bit | 245 | 19 | 19 | 54 | 6 | - | - | - | - | 2 | 24.000 | 04-14006P | F03FR01468 |
| • Panel pilot bit | 254 | 6 | 19 | 57 | 6 | - | - | - | - | 1 | 24.000 | 26-10006P | F03FR01664 |
| • Flush trim bit | 252 | 9,53 | 12,7 | 60,9 | 6 | 9,53 | - | - | - | 2 | 24.000 | 42-10206P | F03FR01935 |
| • Mortising bit | 249 | 12,7 | 12,5 | 51 | 6 | - | - | - | - | 2 | 24.000 | 16-10006P | F03FR01565 |
| • Rabbeting bit | 282 | 31,75 | 13,2 | 55,7 | 6 | 12,7 | - | 9,52 | - | 2 | 18.000 | 32-10006P | F03FR01745 |
| • V-groove bit | 304 | 12,7 | 10 | 44,4 | 6 | - | - | - | 90° | 2 | 24.000 | 20-10406P | F03FR01622 |
| • Chamfer bit | 257 | 44 | 18,5 | 61 | 6 | 12,7 | - | - | 45° | 2 | 16.000 | 40-10606P | F03FR01919 |
| • Dovetail bit | 285 | 12,7 | 12,7 | 47,5 | 6 | - | - | - | 14° | 2 | 24.000 | 22-10406P | F03FR01643 |
| • Rounding over bit | 256 | 31,75 | 18 | 59,7 | 6 | 12,7 | 9,53 | - | - | 2 | 18.000 | 34-11406P | F03FR01780 |
| • Round nose bit | 307 | 6 | 12,7 | 50,8 | 6 | - | 3 | - | - | 2 | 24.000 | 18-10406P | F03FR01587 |
| • Cove bit | 258 | 38,1 | 16,4 | 58,9 | 6 | 12,7 | 12,7 | - | - | 2 | 16.000 | 30-10606P | F03FR01706 |
| • Roman ogee bit | 261 | 27 | 13,3 | 54,7 | 6 | 9,53 | 4 | - | - | 2 | 18.000 | 38-10006P | F03FR01805 |

• Solid Carbide Bit



Machines:

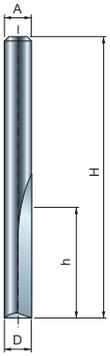
To identify the correct machine for each router bit, refer to the corresponding page reference of each router bit.

Materials:

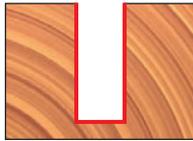
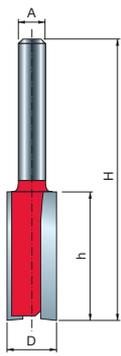
Softwood, hardwood, plywood and wood based panels.

ADVANCED 15 PIECE ROUTER BIT SET

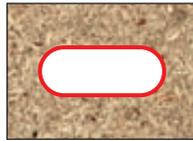
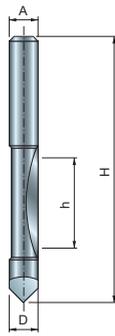
90-10006P
(F03FR02256)



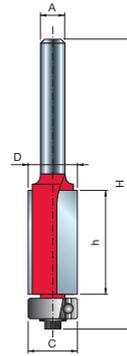
04-10106P
F03FR01420



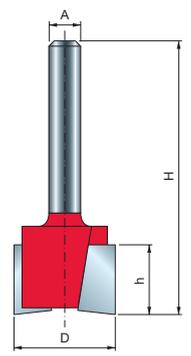
04-11406P
F03FR01440



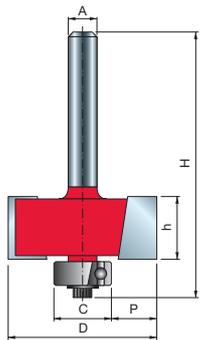
26-10006P
F03FR01664



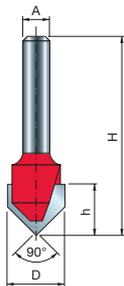
42-10206P
F03FR01935



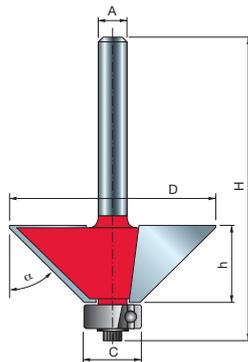
16-10006P
F03FR01565



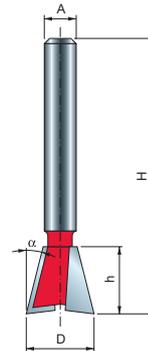
32-10006P
F03FR01745



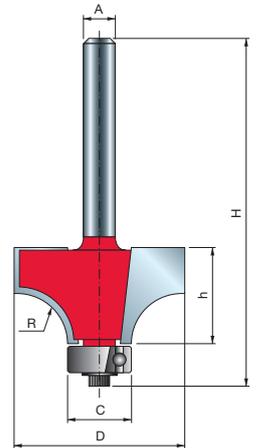
20-10406P
F03FR01622



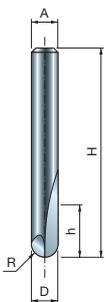
40-10606P
F03FR01919



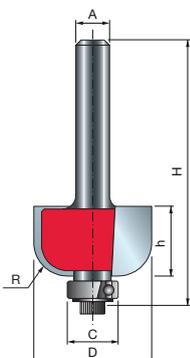
22-10406P
F03FR01643



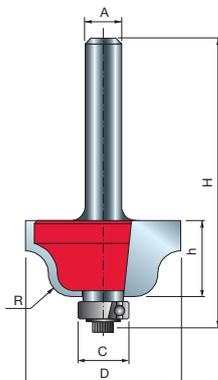
34-11406P
F03FR01780



18-10406P
F03FR01587



30-10606P
F03FR01706



38-10006P
F03FR01805



PROFESSIONAL 26 PIECE ROUTER BIT SET

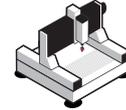
92-10006P
(F03FR02308)



Hand-held Routers



Table Routers



CNC Machines*



Softwood



Hardwood



Plywood



Wood Based Panels



Set code 92-10006P (F03FR02308)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | R mm | P mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|-----------------------------|----------------|---------|---------|---------|---------|---------|---------|---------|----------|---|-------------------|------------|------------|
| • Double flute straight bit | 244 | 3 | 9,5 | 44,5 | 6 | - | - | - | - | 2 | 24.000 | 04-09906P | F03FR01415 |
| • Double flute straight bit | 244 | 4 | 15,8 | 50,7 | 6 | - | - | - | - | 2 | 24.000 | 04-10106P | F03FR01420 |
| • Double flute straight bit | 244 | 6 | 16 | 50,8 | 6 | - | - | - | - | 2 | 24.000 | 04-11406P | F03FR01440 |
| • Double flute straight bit | 244 | 10 | 25,4 | 62,4 | 6 | - | - | - | - | 2 | 24.000 | MM-01006P | F03FR00330 |
| • Double flute straight bit | 245 | 12 | 19 | 55,5 | 6 | - | - | - | - | 2 | 24.000 | 04-13506P | F03FR01460 |
| • Double flute straight bit | 245 | 19 | 19 | 54 | 6 | - | - | - | - | 2 | 24.000 | 04-14006P | F03FR01468 |
| • Panel pilot bit | 254 | 6 | 19 | 57 | 6 | - | - | - | - | 1 | 24.000 | 26-10006P | F03FR01664 |
| • Flush trim bit | 252 | 9,53 | 25,8 | 72,4 | 6 | 9,53 | - | - | - | 2 | 24.000 | 42-10006P | F03FR01932 |
| • Flush trim bit | 252 | 9,53 | 12,7 | 60,9 | 6 | 9,53 | - | - | - | 2 | 24.000 | 42-10206P | F03FR01935 |
| • Flush trim bit | 252 | 12,7 | 25,7 | 72,9 | 6 | 12,7 | - | - | - | 2 | 24.000 | 42-10406P | F03FR01938 |
| • Mortising bit | 249 | 12,7 | 12,5 | 51 | 6 | - | - | - | - | 2 | 24.000 | 16-10006P | F03FR01565 |
| • Rabbeting bit | 282 | 31,75 | 13,2 | 55,7 | 6 | 12,7 | - | 9,5 | - | 2 | 18.000 | 32-10006P | F03FR01745 |
| • V-groove bit | 304 | 6 | 6 | 38,1 | 6 | - | - | - | 90° | 1 | 24.000 | 20-10006P | F03FR01617 |
| • V-groove bit | 304 | 12,7 | 10 | 44,4 | 6 | - | - | - | 90° | 2 | 24.000 | 20-10406P | F03FR01622 |
| • Chamfer bit | 257 | 44 | 18,5 | 61 | 6 | 12,7 | - | - | 45° | 2 | 16.000 | 40-10606P | F03FR01919 |
| • Dovetail bits | 285 | 12,7 | 12,7 | 47,5 | 6 | - | - | - | 14° | 2 | 24.000 | 22-10406P | F03FR01643 |
| • Rounding over bit | 256 | 25,4 | 12,7 | 55,2 | 6 | 12,7 | 6,35 | - | - | 2 | 24.000 | 34-11006P | F03FR01774 |
| • Rounding over bit | 256 | 31,75 | 18 | 59,7 | 6 | 12,7 | 9,53 | - | - | 2 | 18.000 | 34-11406P | F03FR01780 |
| • Rounding over bit | 256 | 25,4 | 12,7 | 54,7 | 6 | 9,53 | 6,35 | - | - | 2 | 24.000 | 36-11006P | F03FR01803 |
| • Rounding over bit | 256 | 31,75 | 18 | 59,2 | 6 | 9,53 | 9,53 | - | - | 2 | 18.000 | 36-11406P | F03FR01804 |
| • Round nose bit | 307 | 6 | 12,7 | 50,8 | 6 | - | 3 | - | - | 2 | 24.000 | 18-10406P | F03FR01587 |
| • Round nose bit | 307 | 9,52 | 9 | 46 | 6 | - | 4,8 | - | - | 2 | 24.000 | 18-10606P | F03FR01590 |
| • Cove bit | 258 | 22,23 | 13,2 | 54,7 | 6 | 9,53 | 6,35 | - | - | 2 | 24.000 | 30-10206P | F03FR01697 |
| • Cove bit | 258 | 38,1 | 16,4 | 58,9 | 6 | 12,7 | 12,7 | - | - | 2 | 16.000 | 30-10606P | F03FR01706 |
| • Roman ogee bit | 261 | 27 | 13,3 | 54,7 | 6 | 9,53 | 4 | - | - | 2 | 18.000 | 38-10006P | F03FR01805 |
| • Roman ogee bit | 261 | 35 | 18,5 | 60,5 | 6 | 9,53 | 6,4 | - | - | 2 | 16.000 | 38-10206P | F03FR01808 |

-- Solid Carbide Bit



Machines:

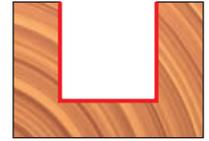
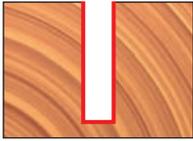
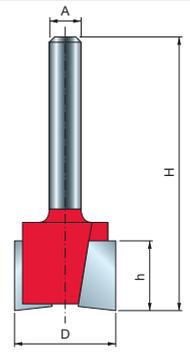
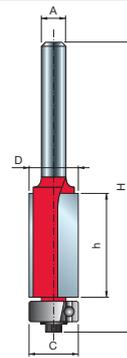
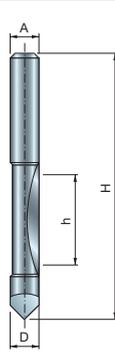
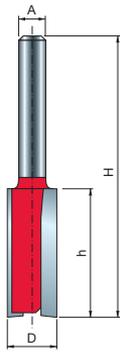
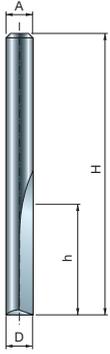
To identify the correct machine for each router bit, refer to the corresponding page reference of each router bit.

Materials:

Softwood, hardwood, plywood and wood based panels.

PROFESSIONAL 26 PIECE ROUTER BIT SET

92-10006P
(F03FR02308)



04-09906P
F03FR01415

04-10106P
F03FR01420

04-11406P
F03FR01420

04-09906P
F03FR01415

MM-01006P
F03FR00330

MM-13506P
F03FR01460

MM-14006P
F03FR01468

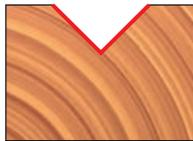
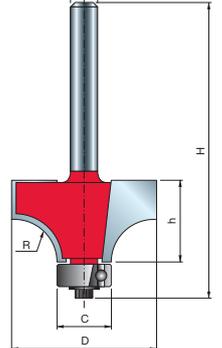
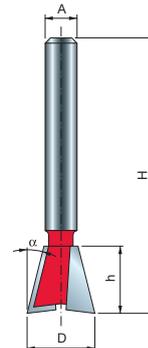
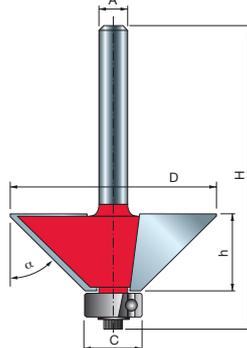
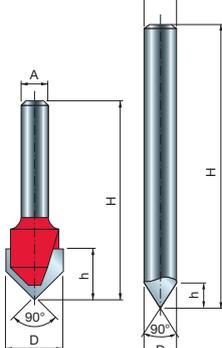
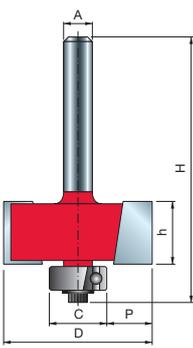
26-10006P
F03FR01664

42-10006P
F03FR01932

42-10206P
F03FR01935

42-10406P
F03FR01938

16-10006P
F03FR01565



32-10006P
F03FR01745

20-10006P
F03FR01617

20-10406P
F03FR01622

40-10606P
F03FR01919

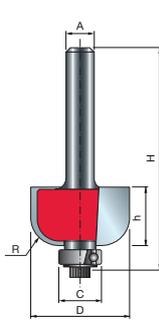
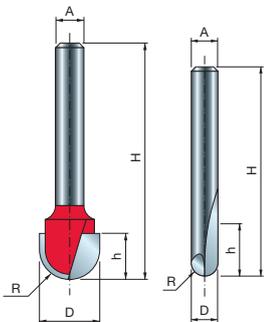
22-10406P
F03FR01643

34-11006P
F03FR01774

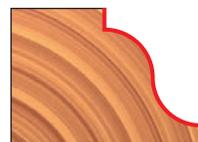
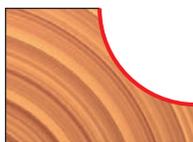
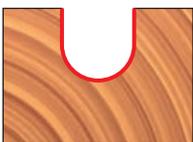
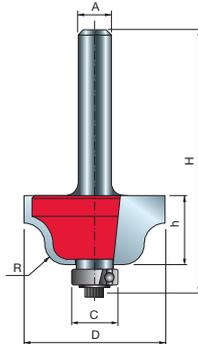
34-11406P
F03FR01780

36-11006P
F03FR01803

36-11406P
F03FR01804



*



18-10406P
F03FR01587

18-10606P*
F03FR01590

30-10206P
F03FR01697

30-10606P
F03FR01706

38-10006P
F03FR01805

38-10206P
F03FR01808



CABINET DOOR SET 3 ROUTER BITS

97-10212P
(F03FR02382)



Table Routers



Softwood Hardwood Plywood Wood Based Panels

Set Freud Code 97-10212P (F03FR02382)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | R1 mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------------------------------|----------------|------|------|------|------|------|-------|---|----------------|------------|------------|
| Raised panel bit | 300 | 89 | 16 | 64,7 | 12 | 12,7 | 38,1 | 2 | 10.000 | 99-22512P | F03FR02462 |
| Matched profile and scribe bits | 294 | 42,9 | - | 77 | 12 | 22 | 5,5 | 2 | 24.000 | 99-26012P | F03FR02468 |

The set includes one raised panel bit and two matched profile and scribe bits.

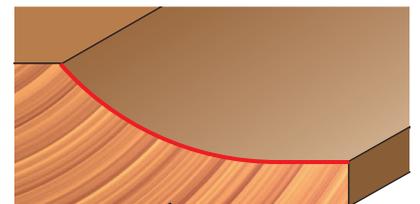
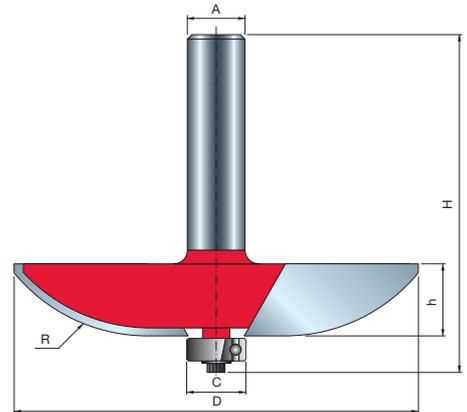
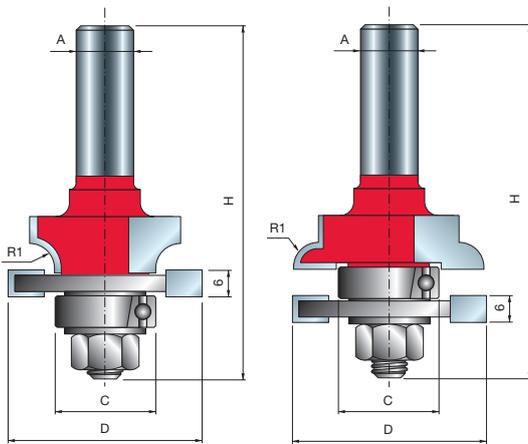


Machines:

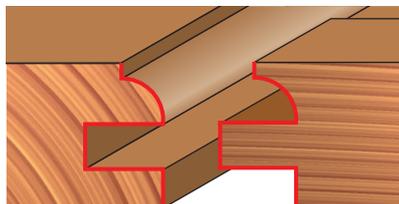
Table mounted routers.

Materials:

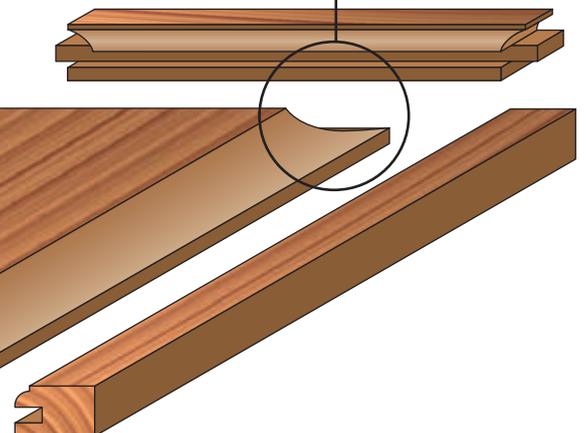
Softwood, hardwood, plywood and wood based panels.



99-22512P
F03FR02462



99-26012P
F03FR02468





CABINET DOOR SET 3 ROUTER BITS

97-10412P
(F03FR02396)



Table Routers



Softwood Hardwood Plywood Wood Based Panels

Set code 97-10412P (F03FR02396)

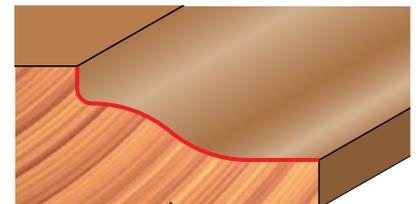
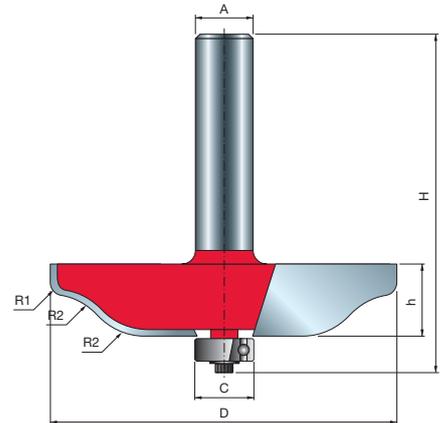
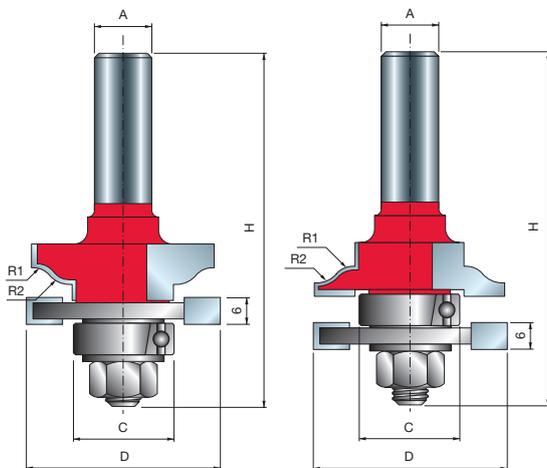
| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | R1 mm | R2 mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------------------------------|----------------|------|------|------|------|------|-------|-------|---|----------------|------------|------------|
| Raised panel bit | 299 | 76,2 | 16 | 64,7 | 12 | 12,7 | 2 | 16 | 2 | 12.000 | 99-22112P | F03FR02458 |
| Matched profile and scribe bits | 294 | 42,9 | - | 77 | 12 | 22 | 4,5 | 5,5 | 2 | 24.000 | 99-26112P | F03FR02478 |

The set includes one raised panel bit and two matched profile and scribe bits.

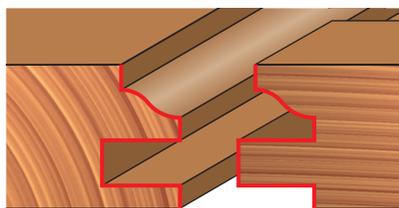


Machines:
Table mounted routers.

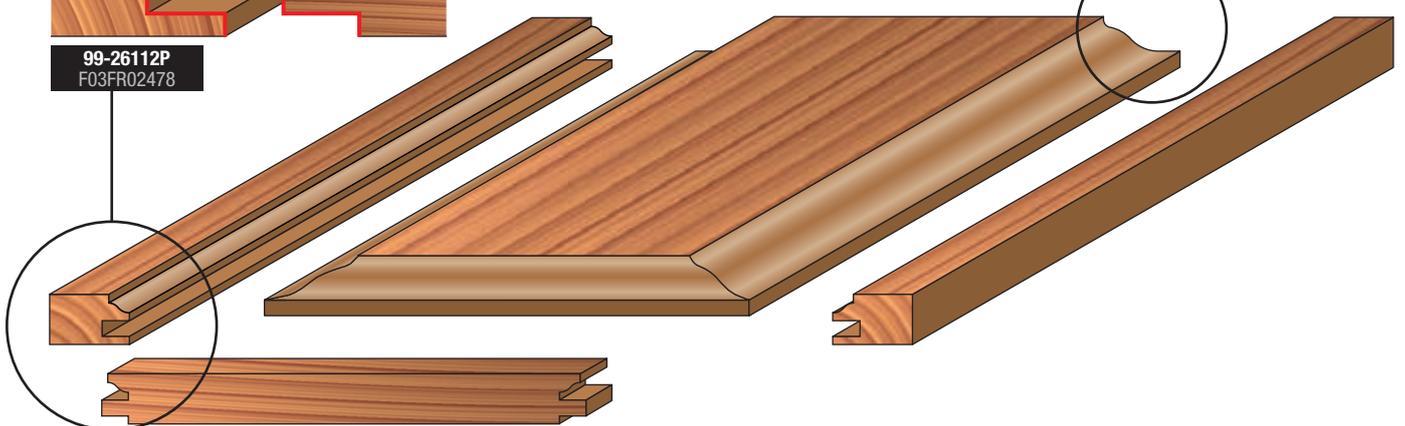
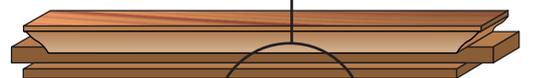
Materials:
Softwood, hardwood, plywood and wood based panels.

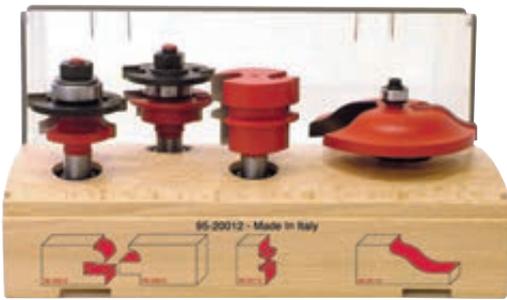


99-22112P
F03FR02458



99-26112P
F03FR02478





CABINET DOOR SET 4 ROUTER BITS

95-20012P
(F03FR02368)



Table Routers



Softwood Hardwood Plywood Wood Based Panels

Set code 95-20012P (F03FR02368)

| Bit type | Page reference | D mm | h mm | H mm | A mm | C mm | R1 mm | R2 mm | α | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------------------------------|----------------|---------|---------|---------|---------|---------|----------|----------|----------|---|-------------------|------------|------------|
| Reversible glue joint bit | 288 | 38 | 32 | 70 | 12 | - | - | - | 15° | 2 | 16.000 | 99-03112P | F03FR02422 |
| Raised panel bit | 299 | 76,2 | 16 | 64,7 | 12 | 12,7 | 2 | 16 | - | 2 | 12.000 | 99-22112P | F03FR02458 |
| Matched profile and scribe bits | 294 | 42,9 | - | 77 | 12 | 22 | 5,5 | - | - | 2 | 24.000 | 99-26012P | F03FR02468 |

The set includes one reversible glue joint bit, one raised panel bit and two matched profile and scribe bits.

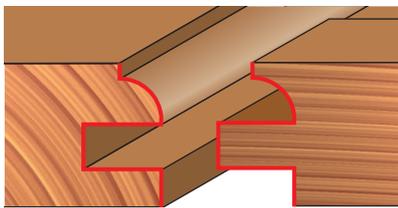


Machines:

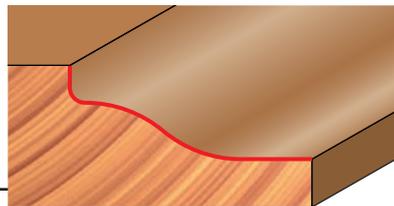
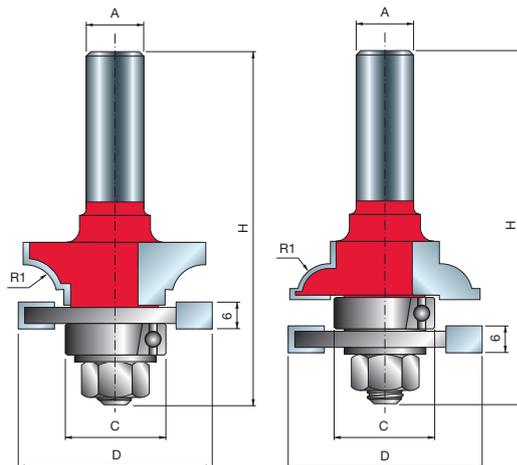
Hand-held routers and table routers.

Materials:

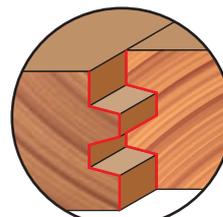
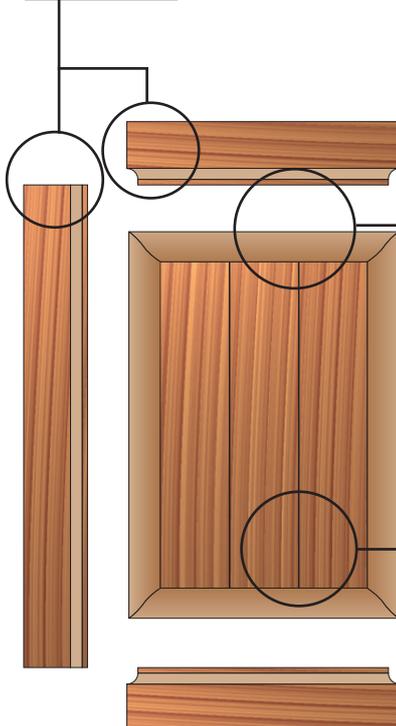
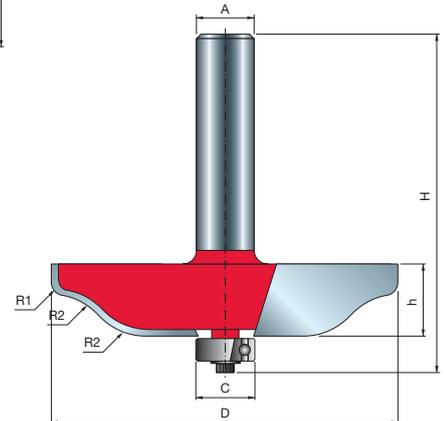
Softwood, hardwood, plywood and wood based panels.



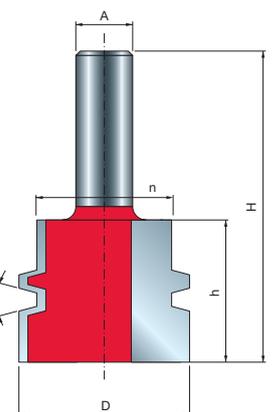
99-26012P
F03FR02468

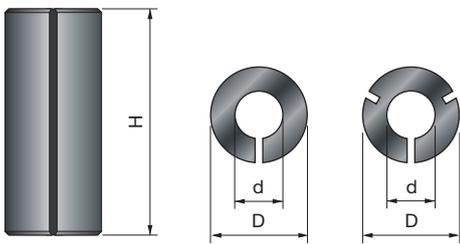


99-22112P
F03FR02458

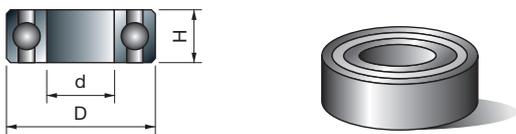


99-03112P
F03FR02422

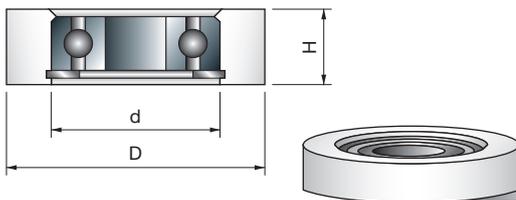




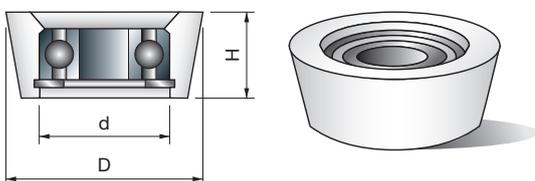
Reducing bushes for router bits.



Ball bearing for router bits.



Cylindrical rub collars for ball bearing.



Conical rub collars for ball bearing.

3105M

Reducing bushes

| D mm | H mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 8 | 25 | 6 | 3105MVY250 | F03FA10588 |
| 8 | 25 | 6,35 | 3105MVX250 | F03FA10587 |
| 9,5 | 25 | 6 | 3105MUY250 | F03FA10586 |
| 9,5 | 25 | 6,35 | 3105MUX250 | F03FA10585 |
| 9,5 | 25 | 8 | 3105MUV250 | F03FA10584 |
| 10 | 25 | 8 | 3105MTV250 | F03FA10582 |
| 12 | 25 | 6 | 3105MSY250 | F03FA10581 |
| 12 | 25 | 8 | 3105MSV250 | F03FA10580 |
| 12 | 25 | 10 | 3105MST250 | F03FA10579 |
| 12,7 | 25 | 6 | 3105MRY250 | F03FA10578 |
| 12,7 | 25 | 6,35 | 3105MRX250 | F03FA10577 |
| 12,7 | 25 | 8 | 3105MRV250 | F03FA10576 |
| 12,7 | 25 | 9,53 | 3105MRU250 | F03FA10575 |
| 16 | 25 | 13 | 3105MQ250 | F03FA10574 |

3102M

Ball bearings

| D mm | H mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 9,53 | 3,2 | 4,76 | 3102M AA9 | F03F010006 |
| 12 | 4 | 6,05 | 3102M BB9 | F03FA10568 |
| 12,7 | 4,98 | 4,76 | 3102M AB9 | F03F010007 |
| 13 | 5 | 4 | 3102M CD9 | F03FA14096 |
| 13 | 5 | 6 | 3102M AP9 | F03FA10558 |
| 14 | 4 | 8,05 | 3102M BC9 | F03FA10569 |
| 15 | 5 | 6 | 3102M AQ9 | F03FA10559 |
| 15,88 | 4,98 | 4,76 | 3102M AJ9 | F03F010014 |
| 16 | 5 | 5 | 3102M CC9 | F03FA14095 |
| 16 | 5 | 8 | 3102M AS9 | F03FA10561 |
| 19 | 6 | 6 | 3102M CA9 | F03FA14097 |
| 19 | 7 | 10 | 3102M AG9 | F03F010012 |
| 19,05 | 3,97 | 12,7 | 3102M CB9 | F03FA14098 |
| 19,05 | 6,35 | 12,7 | 3102M AV9 | F03F012286 |
| 22 | 7 | 8 | 3102M AC9 | F03F010008 |
| 28 | 8 | 12 | 3102M AH9 | F03F010013 |
| 32 | 9 | 15 | 3102M AN9 | F03F010016 |
| 35 | 11 | 15 | 3102M AI9 | F03F012285 |

RB62M

Sleeved bearings

| D mm | H mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 19,05 | 8 | 4,76 | RB62M 1509 | F03F011422 |
| 22,22 | 8 | 4,76 | RB62M 1529 | F03F011423 |
| 26 | 10 | 8 | RB62M 1249 | F03F011417 |
| 28,58 | 8 | 4,76 | RB62M 1549 | F03F011424 |
| 30 | 10 | 8 | RB62M 1289 | F03F011418 |
| 34 | 10 | 8 | RB62ME DA9 | F03FR01146 |
| 34,92 | 8 | 4,76 | RB62M 1569 | F03F011425 |
| 39,6 | 11,2 | 12 | RB62ME FB9 | F03FR01147 |

3103MC

Sleeved bearings with angle

| D mm | H mm | d mm | α | Freud Code | Art. No. |
|---------|---------|---------|----------|------------|------------|
| 19,05 | 6,35 | 4,8 | 10° | 3103MC HB9 | F03F010019 |
| 22,2 | 9 | 12,7 | 15° | 3103MC HC9 | F03FR01724 |

TOOLS

Tools shall be used only by persons of training and experience who have knowledge of how to use and handle tools.

The maximum rotational speed marked on the tool shall not be exceeded.

One piece tools with visible cracks shall not be used.

Clamping surfaces shall be cleaned to remove dirt, grease, oil and water.

Resin shall only be removed from light alloys with solvents that do not affect the mechanical characteristics of these materials.

Tools and tool bodies shall be clamped in such a way, that they shall not loosen during operation.

Tools with cylindrical shank must be clamped in a way that the mark of the maximum free shank length shall be covered, at least partially, by the clamping device or by the locking collet.

Care shall be taken of mounting tools to ensure that the clamping is by the hub respectively by the clamping surface of the tool and that the cutting edges are not in contact with each other or with the clamping elements.

Fastening screws and nuts shall be tightened using the appropriate spanners etc. and to the torque value provided by the manufacturer. Extension of the spanner or tightening using hammer blows shall not be permitted.

Clamping screws shall be tightened according to instructions provided by the manufacturer. Where instructions are not provided clamping screws shall be tightened in sequence from the centre outwards.

Use of fixed rings, e. g. pressed or held by adhesive fixing, in flanged sleeves, shall be permitted if made to the manufacturers specifications.

Repair and regrinding of tools shall only be allowed according to the tool manufacturer's instructions.

After repair and regrinding of tools it shall be ensured that the tools observe balancing requirements.

The design of composite (tipped) tools shall not be changed in the process of repair.

Composite tools shall be repaired by a competent person, i.e. a person of training and experience, who has knowledge of the design requirements and understands the level of safety to be achieved. Repair shall therefore include, e.g. use of spare parts which are in accordance with the specification of the original parts provided by the manufacturer.

Tolerances which ensure correct clamping shall be maintained.

For one piece tools care shall be taken that regrinding of the cutting edge will not cause weakening of the hub and the connection of the cutting edge to the hub.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer. Typically, safe handling involves the use of devices such as carrying hooks, proprietary handles, frames (e. g. for circular saw blades), boxes, trolleys etc.

The wearing of protective gloves improves the grip on the tool and further reduces the risk of injury.

Maintenance and modification of milling tools and related components and circular saw blades should always be in accordance with the design requirements/the manufacturer's instructions.

Maintenance and modification of milling tools and circular saw blades should only be carried out by a competent person, i. e. a person of training and experience, who has knowledge of the design requirements and understand levels of safety to be achieved.

When regrinding milling tools and circular saw blades, the minimum requirements of cutting blade thickness and cutting blade projection should be observed.

Composite tools should be repaired by persons experienced in and with understanding of design and use of milling tools for processing wood and similar materials, e.g. an expert with a relevant education and knowledge of the brazing process, including in particular the influence of the brazing process on tension in tool body and cutting material.

When brazing off worn tips and subsequently brazing on new tips it should be made sure that the tip is correctly mounted in the tool body and that the process does not result in critical tension in the tool body. After any type of maintenance, milling tools marked with MAN should

continue to observe the requirements of the standards related to tools for hand feed.

When modifying milling tools, e. g. modification of bore diameter, modification of shank, retipping of composite tools and similar, it should be ensured that the requirements of the standard relating to balancing are still observed.

After being modified and/or retipped, milling tools and circular saw blades should be marked according to the rules applying to new tools. However, the name/logo of the company making the modification/retipping should be added.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer.

Tools which weigh more than 15 kg may require the use of special handling devices or attachments, these will depend on the features that the manufacturer has designed into the tool to allow easy handling. The manufacturer can advise on the availability of necessary devices.

CLAMPING DEVICES

The speeds indicated on the clamping device and the tool to be clamped should be compared. For adjusting the speed on the machine the lower speed should be applied.

Screws and nuts should be tightened using the appropriate spanners; Clamping surfaces should be cleaned to remove dirt, grease, oil and water.

Clamping devices and tools should be mounted or clamped according to given torques, pressures and wrenches to be used; extension of spanners or tightening or loosening by means of hammer blows should not be permitted.

Maximum tool diameters and tool lengths should not be exceeded.

Shank diameters must be in accordance with the clamping range of the clamping devices.

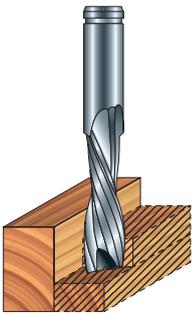
The minimum required clamping length must be kept.

Care should be taken that the data relevant to the safety of the clamped tool are always stored in the data medium.

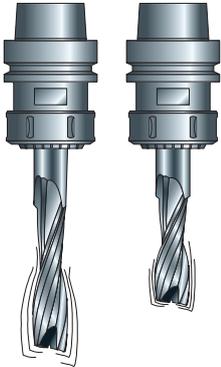
Repairs should only be carried out by a competent person, i.e. a person with professional training and experience, who has knowledge of the design, construction and safety requirements.

Repair should therefore include the use of spare parts which are in compliance with the specifications of the original parts.

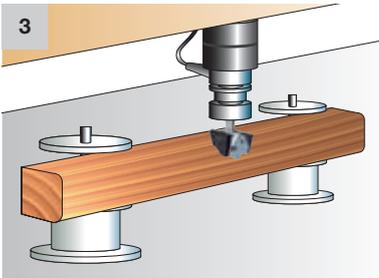
1



2



3

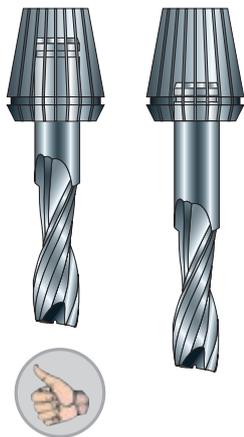


ADVICE FOR CORRECT USE

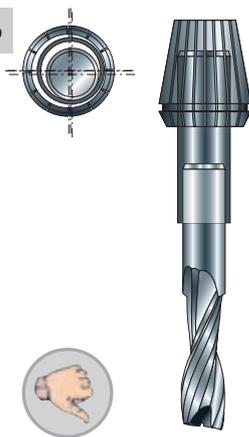
To reduce vibrations from the router bit, which can compromise the finish and cause damages to both the tool and the workpiece, it is necessary to respect the following conditions:

- For large removals, carry out more passes or proceed with a feedrate and RPM rate in proportion to the depth of cut (Fig. 1).
- A router bit with a shorter cutting height vibrates less than a router bit with the same diameter but with a longer cutting height (Fig. 2).
- Control your machine regularly (especially guides and ball bearings), making sure that there are no eccentricity problems, so as to avoid the arbor from vibrating hazardously.
- Accurately block the workpiece to the work table surface (Fig. 3).
- Respect the minimum fixing length of the shank with a preference to short chucks, with the aim of reducing eccentricity errors (Fig. 4a).
- For the same reason the use of extensions are generally avoided (Fig. 4b).
- Router bits with staggered cutters tend to leave marks caused by small eccentricity tolerances (Fig. 5).
- To identify eccentricity issues in a router bit or a chuck: make a milling on the workpiece, rotate the tool 90° on the chuck and repeat the operation. If the marks left on the wood are unvaried between the 2 processes then the tool is defective, if there's a difference the issue is probably on the chuck/collet.
- Do not exceed the maximum RPM limit marked on the tool. Higher RPM, extreme feedrate as well as an excessive cutting depth can cause the tool breakage.
- To avoid damaging router bits, we suggest controlling if the fixing surface of the chuck and the router bit are clean and that there are no imperfections (Fig. 6).
- Always choose router bits with the appropriate dimensions for the kind of work to carry out.
- Make sure that the workpiece is properly fixed to a support with appropriate dimensions. Place the locking devices (as suckers) sufficiently far from the tool path (Fig. 7).
- To avoid dangerous kick backs, we suggest fixing a spare piece of material and milling small parts of waste which have accumulated during the working process, by carrying out more passes (Fig. 8).

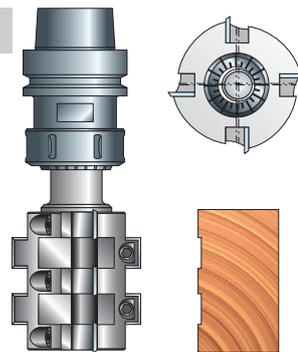
4a



4b



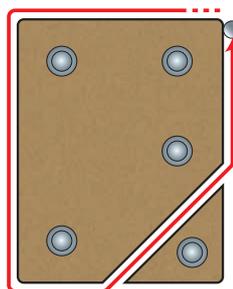
5



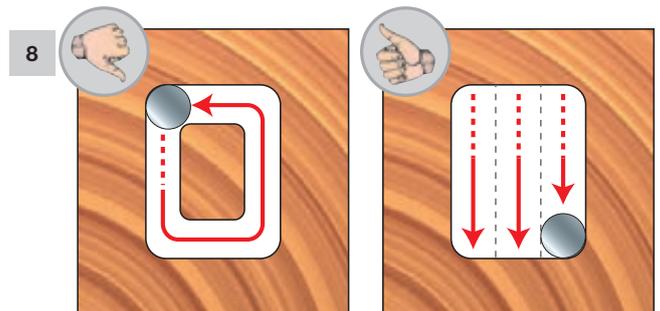
6



7



8



ROUTER BIT FEED AND SPEED FOR CNC

GET THE MOST OUT OF YOUR FREUD BITS BY ROUTING AT IDEAL FEED RATES AND SPEEDS

Read all safety warnings and all instructions provided with the router bit and in the machine manual. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

To reduce the risk of injury, always check to ensure the rated speed of the router bit is higher than or equal to the maximum speed marked on the CNC machine. Router bits running faster than their RATED SPEED can break and fly apart.

To get the longest life and the best cut quality from your bits, you need to match the feed rate of your CNC and the speed (RPM) of your router spindle to the material you are routing and the bit you are using. Routing at the best combination of feed rate and RPM is critical to quality of your work and the durability of your Freud router bits.

1) There is no hard-and-fast rule for precisely what feed rate and speed will be best for your project and your CNC. The formulas and chip load values in the chart below provide a good range of feeds and speeds for you to start with, but you should always make some test cuts with your bits in scrap material to be sure you get the best possible results. As you make your test cuts, observe the following best practices:

- Always consult your machine's operation manual for bit capacities and recommended feed rates.
- Always start with shallow passes in your test cuts to reduce strain on your bit and your CNC.
- You should start your tests with the lower feed rates yielded by our formulas to reduce the chance of bit breakage. (Freud's chart contains recommended starting points, and does not warranty against tool breakage).
- Carbide tipped bits should not be used to drill directly into the workpiece.

2) Second, you need to consider the design of the bit you are using:

- **Number of flutes, or cutting edges:** more flutes on a bit may produce a finer finish on the workpiece than a bit with fewer cutting edges, but only if your feed and speed are set correctly. Our formulas include a variable where you will enter the number of flutes of your bit so you can consider this factor.
- **Cutting depth:** this is the depth that will be routed in a single pass. Our feed and speed recommendations are based on a depth of cut that is no greater than the bit diameter, such as a 12 mm diameter bit routing a 12 mm deep pass. If you plan to rout deeper than this in a single pass, you must reduce your feed rate.
- If cut depth is 2X the bit diameter, reduce the chip load by at least 25%.
- If cut depth is 3X the bit diameter, reduce the chip load by at least 50%.

Please see example 3 on next page for more information.

Never exceed the recommended cutting depth listed on the router bit package or the bit's safety instructions!

3) Next, use the formulas below to calculate starting points for your test cuts. You will notice that our formulas use values called "**chip loads**" to determine the feed rates and speeds. The chip load is the size (thickness) of the chip produced as your bit cuts. Why does this matter? If your chip is very small, or just sawdust, then it will not carry enough heat away from the edge of the bit. Excessive heat will prematurely dull the edge of the solid Carbide or Carbide tipped router bit. If the chip is too large, it will leave a rough surface or edge on your workpiece.

ROUTER BIT FEED AND SPEED FOR CNC

* RECOMMENDED CHIP LOADS FOR FREUD CARBIDE TIPPED STRAIGHT AND PROFILE BITS

| Tool Diameter | MDF / Particle Board | Laminated Particle Board | Hardwood | Softwood | Acrylics / Plastics | Solid Surface / Hard Plastic | Plywood | Aluminum |
|---------------|----------------------|--------------------------|-------------|-------------|---------------------|------------------------------|-------------|----------|
| mm | mm | mm | mm | mm | mm | mm | mm | mm |
| 3 | 0.05 - 0.10 | 0.08 - 0.15 | 0.05 - 0.10 | 0.08 - 0.13 | 0.08 - 0.15 | 0.05 - 0.10 | 0.08 - 0.13 | N/A |
| 3,18 | 0.05 - 0.10 | 0.08 - 0.15 | 0.05 - 0.10 | 0.08 - 0.13 | 0.08 - 0.15 | 0.05 - 0.10 | 0.08 - 0.13 | N/A |
| 6 | 0.10 - 0.15 | 0.15 - 0.20 | 0.13 - 0.18 | 0.15 - 0.20 | 0.15 - 0.20 | 0.10 - 0.15 | 0.13 - 0.15 | N/A |
| 6,35 | 0.10 - 0.15 | 0.15 - 0.20 | 0.13 - 0.18 | 0.15 - 0.20 | 0.15 - 0.20 | 0.10 - 0.15 | 0.13 - 0.15 | N/A |
| 8 | 0.12 - 0.17 | 0.17 - 0.22 | 0.14 - 0.19 | 0.18 - 0.22 | 0.17 - 0.22 | 0.12 - 0.17 | 0.14 - 0.18 | N/A |
| 9,53 | 0.13 - 0.18 | 0.18 - 0.23 | 0.15 - 0.20 | 0.20 - 0.25 | 0.18 - 0.23 | 0.13 - 0.18 | 0.15 - 0.20 | N/A |
| 10 | 0.13 - 0.18 | 0.18 - 0.23 | 0.15 - 0.20 | 0.20 - 0.25 | 0.18 - 0.23 | 0.13 - 0.18 | 0.15 - 0.20 | N/A |
| 12 | 0.14 - 0.18 | 0.20 - 0.25 | 0.20 - 0.25 | 0.20 - 0.30 | 0.20 - 0.25 | 0.15 - 0.18 | 0.18 - 0.23 | N/A |
| 12,7 | 0.15 - 0.18 | 0.20 - 0.25 | 0.20 - 0.25 | 0.20 - 0.30 | 0.20 - 0.25 | 0.15 - 0.18 | 0.18 - 0.23 | N/A |
| 14 | 0.15 - 0.18 | 0.22 - 0.27 | 0.20 - 0.28 | 0.20 - 0.30 | 0.22 - 0.27 | 0.15 - 0.18 | 0.18 - 0.23 | N/A |
| 15,88 | 0.15 - 0.18 | 0.23 - 0.28 | 0.20 - 0.30 | 0.23 - 0.33 | 0.23 - 0.28 | 0.15 - 0.18 | 0.20 - 0.25 | N/A |
| 16 | 0.15 - 0.18 | 0.23 - 0.28 | 0.20 - 0.30 | 0.23 - 0.33 | 0.23 - 0.28 | 0.15 - 0.18 | 0.20 - 0.25 | N/A |
| 18 | 0.17 - 0.22 | 0.25 - 0.30 | 0.22 - 0.32 | 0.23 - 0.35 | 0.24 - 0.30 | 0.16 - 0.20 | 0.22 - 0.28 | N/A |
| 19,05 | 0.18 - 0.23 | 0.25 - 0.30 | 0.23 - 0.33 | 0.25 - 0.30 | 0.25 - 0.30 | 0.18 - 0.23 | 0.23 - 0.28 | N/A |
| 20 | 0.20 - 0.25 | 0.27 - 0.33 | 0.22 - 0.35 | 0.23 - 0.40 | 0.25 - 0.35 | 0.16 - 0.20 | 0.25 - 0.30 | N/A |

*This chart is a recommended starting point and does not warranty against tool breakage. Consult your machine's owners manual for bit capacities and recommended feed rates. Always make test cuts with shallow passes in scrap material to verify your feed & speed rates and cutting depths. Start your tests with the lower feed rates yielded by our formulas.

Here are the formulas to make feed and speed calculations using these values:

$$\text{Chip load} = \text{Feed rate} \div (\text{RPM} \times \text{number of flutes})$$

$$\text{Feed rate} = \text{RPM} \times \text{number of flutes} \times \text{chip load}$$

$$\text{RPM} = \text{Feed rate} \div (\text{number of flutes} \times \text{chip load})$$

Note:

Feed rate will be expressed in meters per minute.

Here are some examples:

- You decide to test a chip load of 0,20 mm for your cut. Your CNC spins the bit at 18,000 RPM, and the bit has 2 flutes (cutting edges). To determine the feed rate:
Feed Rate = 18.000 x 2 x 0,20 mm. Therefore, your feed rate should be 7,2 meters per minute.
- You already know that you want to use a feed rate of 7,2 meters per minute, and a speed of 18,000 RPM. Your bit has 2 flutes. To verify that the chip load will be within the recommended range:
chip load = 7,2 meters per minute ÷ (18.000 RPM x 2 flutes). Therefore, your chip load is 0,20 mm.
- Adjusting feed and speed for bit diameter: the chip loads in the table above are based a cutting depth that is equal to or less than the bit diameter. For deeper cuts, you need to adjust the chip load as follows:
If cut depth is 2X the bit diameter, reduce the chip load by at least 25%
If cut depth is 3X the bit diameter, reduce the chip load by at least 50%
For example, let's say that our chart calls for a chip load of 0,20 mm for your application, BUT you decide to use a 12 mm diameter bit routing 24 mm deep. Since your cutting depth is now 2X the bit diameter, you must reduce the chip load as follows: **0,2 mm x 0,75 = 0,15 mm chip load.**

Cutterheads and Brazed Cutters



Freud's cutterheads and brazed cutters are carefully crafted, using the finest materials and the most advanced technologies. Designed for the profile processing and window tooling industry, these tools deliver perfect finishing and unmatched precision in demanding applications. The portfolio includes the most comprehensive range of solutions and the greatest variety of profiles produced, always with flawless results. All cutterheads and brazed cutters contain Freud's unique and industry-first features.

Leading technology for cutterheads Page 334

PLANING

TM06M Helical planer cutterheads with disposable knives Page 337
 TM07M Planer cutterheads with disposable knives Page 338
 TM20M Multicut planer cutterheads with ball bearing Page 339
 TM21M Multicut planer cutterheads Page 340
 TP05M Planer cutterheads with HSS knives Page 341
 TPCZM Cutterheads with serrated profilable knives Page 342
 TM28M ISOprofil planer cutterheads with alternating shear angle Page 343
 T102M Modular planer cutterheads with disposable knives Page 344

REBATING

T182M Groove bead cutterheads with disposable knives Page 346
 T111M - T112M Disposable knives cutterheads for rebates Page 347
 T191M - T192M Disposable knives cutterheads for rebates Page 348
 T194M - T195M Disposable knives cutterheads for rebates Page 349
 T193M Disposable knives cutterheads for rebates Page 350
 T198M Adjustable rebate and groove cutterhead sets with disposable knives Page 351
 T199M Adjustable rebate and groove cutterhead sets with disposable knives Page 353
 TP48M ISOprofil cutterheads for door frames Page 354

JOINTING

TW23M - TW20M Jointing cutterheads Page 356
 TW22M Jointing cutterheads Page 357
 TW01M Finger joint cutterheads Page 359
 TW24M Adjustable finger joint cutterheads set Page 361

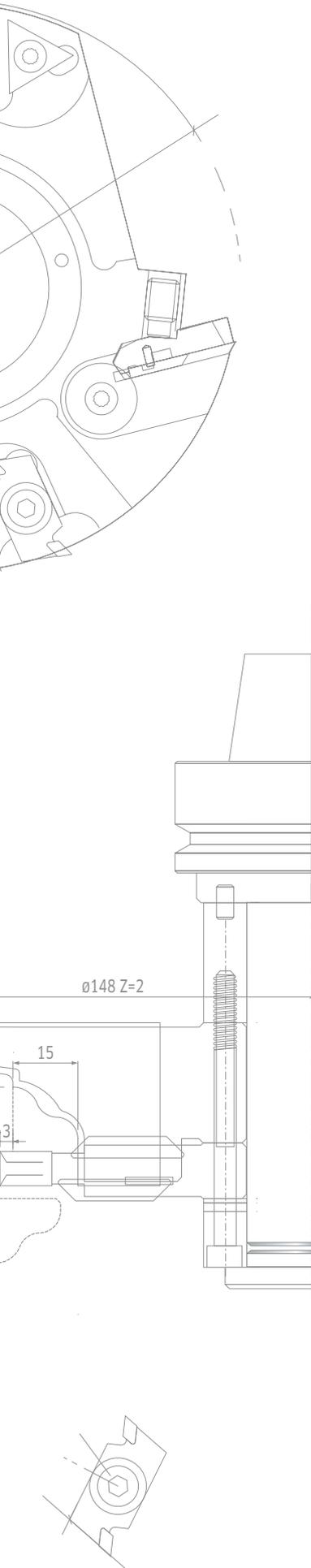
GROOVING

FI22M Brazed cutters for pockets Page 364
 FI02M BX3 Brazed cutters for biscuit jointers Page 365
 FI02M BZ3 Grooving brazed cutters for biscuit jointers with spurs Page 366
 FI02M Grooving brazed cutters Page 367
 FI05M Grooving brazed cutters Page 368
 FI14M Grooving brazed cutters Page 369
 FI07M Adjustable grooving cutters with spurs Page 370
 GL207M Dado set Page 371
 TG13M Grooving cutterheads for biscuit jointers Page 372
 TG11M Adjustable grooving cutterhead sets Page 373
 TG18MG Adjustable grooving cutterhead sets Page 374

PROFILING

T135M - TG35M Post forming cutterhead sets with disposable knives Page 377
 TP22M Multi radius cutterheads Page 379
 TP22M Multi radius cutterheads Page 380
 TP23M Multi radius cutterheads Page 381
 TP31M Multi radius cutterheads Page 382
 TP31M Multi radius cutterheads Page 383
 TP31M Multi radius cutterheads Page 384
 TP31M Multi radius cutterheads Page 385
 TP31M Multi radius cutterheads Page 386
 TP31M - TP31MS Multi radius cutterheads Page 387
 TP40M Multiprofile cutterheads Page 388
 TP44M Multiprofile cutterheads for flooring and cabinet doors Page 389
 TP32M Cutterhead sets for cabinet doors Page 392
 CP32M Knives for TP32M AA3 - TP32M AB3 Page 393
 TPSEM Cutterhead sets for cabinet doors Page 397
 CPSEM Knives for TPSEM AA3 - AB3 - AC3 Page 399
 TP42M Multiprofile cutterheads for doors Page 405
 TP46MAN Multiprofile cutterhead sets for doors (30-40 mm) Page 407
 CP46M Knives for cutterheads CP46M AB3, AC3, AF3, AG3 Page 408
 TP46MEC Multiprofile cutterhead sets for doors (38-40 mm) Page 409
 TD60M Door frames profile cutterhead Page 410
 TD61M Doors frames profiles cutterhead set Page 411
 CT61M Knives for cutterheads CT61M AA3 Page 412
 TD21M Raised panel cutterheads Page 413
 TD51M Raised panel cutterheads for softwood and hardwood Page 415
 TD52M - TD52MD Raised panel cutterheads for softwood and hardwood Page 417
 TD55MD - TD55MS Raised panel cutterheads Page 419
 TD55MD - TD55MS Raised panel cutterheads Page 421
 TG79MG Cutterhead sets for panelling and flooring Page 423
 TG99MG Cutterhead sets for panelling and flooring Page 433

Safe working practice Page 439
 Technological features Page 440
 Maintenance of tools Page 445



LEADING TECHNOLOGY

TiCo CARBIDE TECHNOLOGY

Freud's ownership and control of the entire Carbide manufacturing cycle ensures that the correct formula is used for every application, to constantly maximise the knives performance. For its universal knives Freud engineered 20 different Carbide recipes to achieve the highest performance on specific application needs.



TiCo Carbide

A specially formulated, highly compact Titanium Cobalt Carbide, engineered and manufactured by Freud.

It provides a sharper edge and flawless finish with a dramatically longer cutting life.

PREMIUM MATERIALS

Freud always selects the finest materials for its cutterheads.



Steel body

The cutter body in high quality Steel ensures maximum efficiency and performance in demanding applications, for the greatest results and durability.



Aluminium body

The cutter body in superior quality Ergal light alloy provides higher resistance and demands a lower machine engine power, for a maximised performance and efficiency.

DESIGN INNOVATION

Freud's special tooth designs and geometries are engineered to perform perfect cuts and deliver extraordinary durability.



Performance System Technology

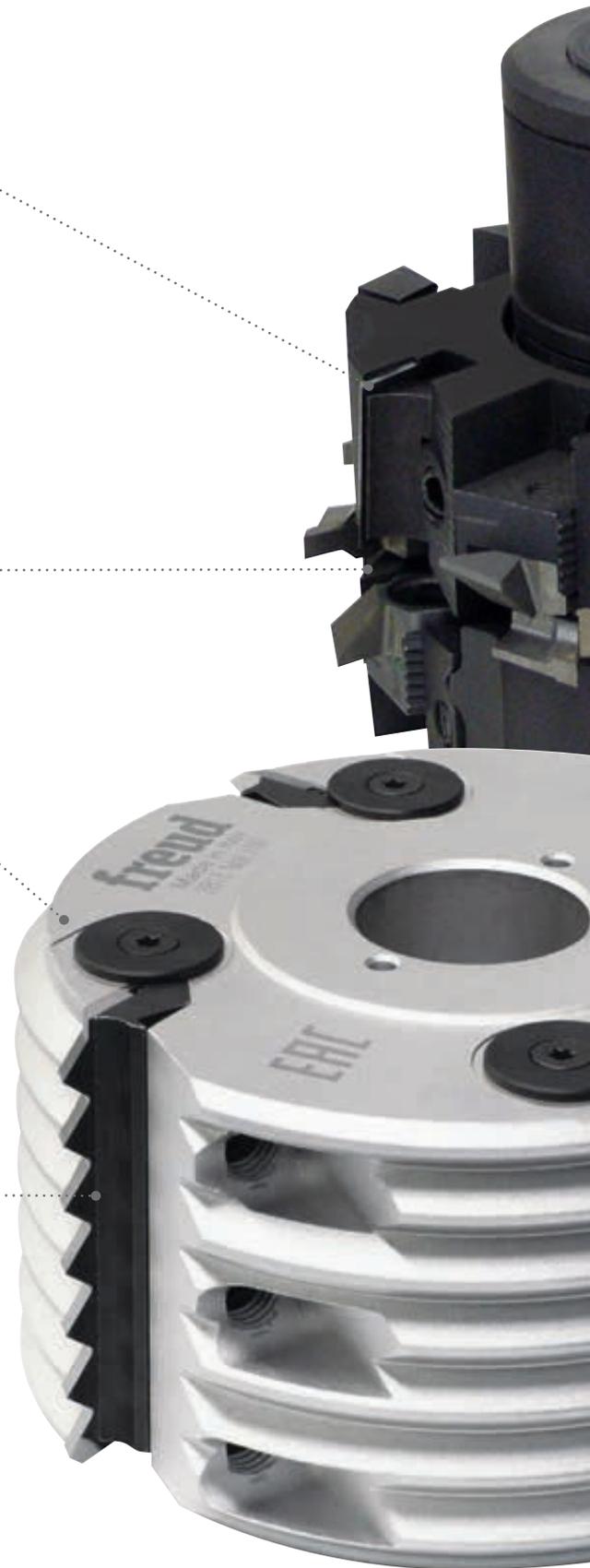
Freud's Performance System Technology knives are designed with extra thickness – 3mm – for up to 6 x resharpening cycles and a prolonged

durability.

These knives are available in a wide range of sizes.

EXTENSIVE RANGE

Freud offers the versatility to choose from a wide range of standard and custom cutterheads & brazed cutters, designed for automatic and manual feed machines that perform a great variety of profiles and material thicknesses.





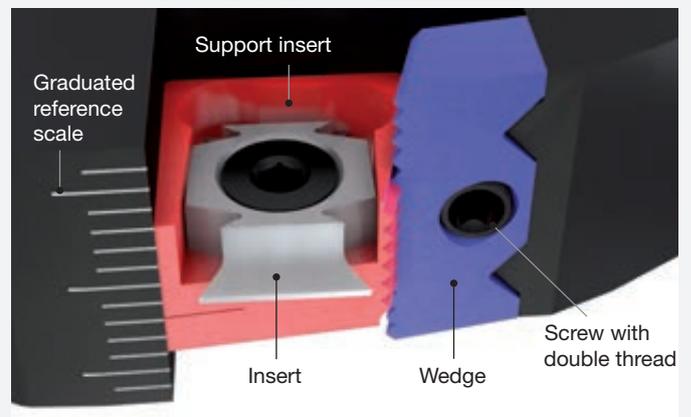
PIONEERING SOLUTIONS

Freud leverages its long-term expertise, engineering know-how and industrial competence to offer safer, faster and more efficient solutions to fulfill the most challenging market needs.

NSR - Regulation System

Freud's innovative system enables the replacement of the inserts directly on the machine.

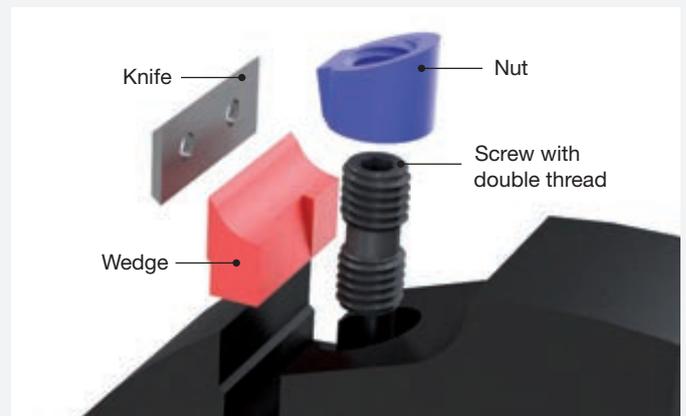
The NSR grants extraordinary precision – with no need for measuring instruments - leveraging Freud's specially grained set, for the perfect adjustment of the insert, with 1 mm steps and precision up to 1/100 of a mm.



HRL - High Resistant Locking System

Freud's innovative system maximises the productivity, thanks to the fast knife removal, enabled by the front screw that reduces the machine downtime.

This system ensures extra safety through a double thread that prevents accidental breakage.



Optimised chip flow concept

Freud's cutterheads are designed to produce chips, larger in size and smaller in weight, for the optimal chip discharge. The quick removal of the material waste from the gullets results in an extended tool lifetime.

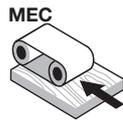
Planing



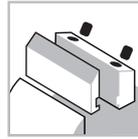


TM06M

Helical planer cutterheads with disposable knives



Automatic Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing, moulding and roughing.

Technical information:

Planer cutterhead with good finish when cutting a maximum depth of 20 mm.

- Dimension "B" indicates effective cutting length. The maximum tool length is B + 3,5 mm.
- Use in combination with item **T182M** to cut guiding rebates.
- Aluminium light alloy body.
- Rebore not available.
- Equipped with disposable knives with bevels (CG18M).

| Item | In conjunction with item: | Art. No. |
|------------|---------------------------|------------|
| TM06M Ø125 | T182M AB3 | F03FC20584 |
| TM06M Ø125 | T182M AA3 | F03FC20583 |
| TM06M PC3 | T182M CB3 | F03FC20586 |
| TM06M PH3 | T182M DB3 | F03FC20587 |

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|----|-------------------|------------|------------|
| 100 | 113 | 35 | 12 | 10.300 | TM06M PC3 | F03FC20384 |
| 100 | 183 | 35 | 20 | 10.300 | TM06M PH3 | F03FC20385 |
| 125 | 78,5 | 40 | 12 | 10.300 | TM06M AB3 | F03FC20371 |
| 125 | 130 | 40 | 21 | 10.300 | TM06M AD3 | F03FC20372 |
| 125 | 148,5 | 40 | 24 | 10.300 | TM06M AF3 | F03FC20373 |
| 125 | 183,5 | 40 | 30 | 10.300 | TM06M AH3 | F03FC20374 |
| 125 | 201 | 40 | 33 | 10.300 | TM06M AI3 | F03FC20375 |
| 125 | 236 | 40 | 39 | 10.300 | TM06M AM3 | F03FC20377 |

| | Spare parts | Dimensions | Freud Code | Art. No. |
|---|-------------|-----------------|------------|------------|
|  | Knife | 24 x 12 x 1,5 | CG18MBC310 | F03FH02919 |
|  | Wedge | 15 x 19,3 x 8 | CN09M AM9 | F03FC01288 |
|  | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
|  | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
|  | Allen key | 5 | CB03M EA9 | F03FA00169 |



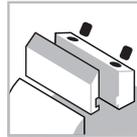
TM07M

Planer cutterheads with disposable knives

MEC



Automatic Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing, moulding and finishing.

Technical information:

Planer cutterhead with good finish when cutting a maximum depth of 5 - 6 mm.

- Use in combination with item **T182M** to cut guiding rebates.
- Aluminium light alloy body.
- Rebore not available.
- Equipped with disposable knives with bevels (CG18M).

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|----|-------------------|------------------|------------|
| 100 | 120 | 35 | 9 | 10.300 | TM07M AE3 | F03FC20416 |
| 100 | 180 | 35 | 12 | 10.300 | TM07M AF3 | F03FC20417 |
| 125 | 130 | 40 | 9 | 10.300 | TM07M GD3 | F03FC20418 |
| 125 | 138 | 40 | 9 | 10.300 | TM07M GE3 | F03FC20419 |
| 125 | 180 | 40 | 12 | 10.300 | TM07M GF3 | F03FC20420 |
| 125 | 226 | 40 | 15 | 10.300 | TM07M GG3 | F03FC20421 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------|------------------|-------------------|------------|
|  | Knife | 50 x 12 x 1,5 | CG18MFC310 | F03FH02921 |
|  | Wedge | 15 x 46 x 8 | CN09M AP9 | F03FC01290 |
|  | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
|  | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
|  | Allen key | 5 | CB03M EA9 | F03FA00169 |

| Item | In conjunction with item: | Art. No. |
|-------------------|---------------------------|------------|
| TM07M 0125 | T182M AB3 | F03FC20584 |
| TM07M | T182M AA3 | F03FC20583 |
| TM07M | T182M DB3 | F03FC20587 |

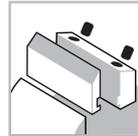


TM20M

Multicut planer cutterheads with ball bearing



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing

Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Planing and roughing.

Technical information:

Planer cutterhead with helical design ideal for roughing.

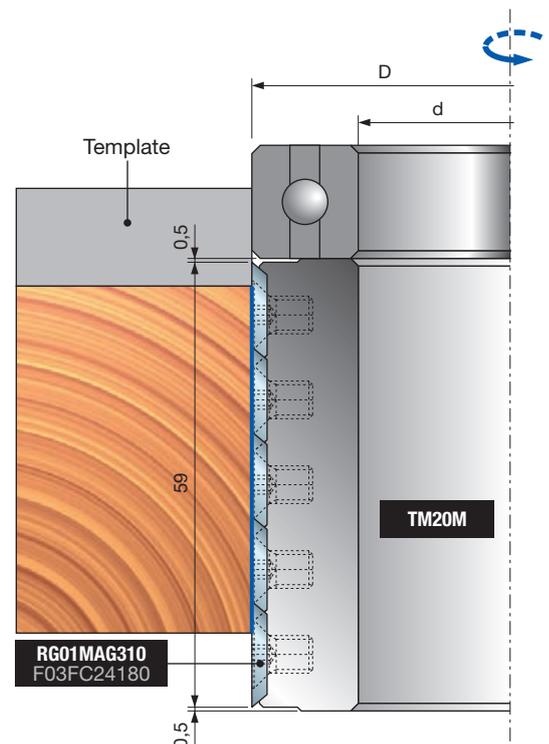
- Use in combination with ballbearing for round timbers.
- Aluminium light alloy body.
- Rebore not available.
- Equipped with 4 sides disposable spurs.

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|----|-------------------|------------------|------------|
| 55 | 59 | 30 | | 10 | 16.000 | TM20M ACC | F03FC22098 |
| 62 | 59 | 35 | | 10 | 16.000 | TM20M BCD | F03FC22099 |
| 68 | 59 | 40 | | 10 | 16.000 | TM20M CCE | F03FC22100 |
| 80 | 59 | 50 | | 10 | 16.000 | TM20M DCF | F03FC21977 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------|------------------|-------------------|------------|
|  | Spur | 14 x 14 x 2 | RG01MAG310 | F03FC24180 |
|  | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
|  | Torx key | T20 | CB03M CC9 | F03FA00167 |

Bearings for cutterheads TM20M (not included)

| For cutterhead | Art. No. | Dimensions mm | Freud Code | Art. No. |
|------------------|------------|------------------|------------------|------------|
| TM20M ACC | F03FC22098 | 55 x 13 x 30 | 3101M AC9 | F03FA10543 |
| TM20M BCD | F03FC22099 | 62 x 14 x 35 | 3101M AD9 | F03FA10544 |
| TM20M CCE | F03FC22100 | 68 x 15 x 40 | 3101M AE9 | F03FA10545 |
| TM20M DCF | F03FC21977 | 80 x 16 x 50 | 3101M AG9 | F03FA10547 |

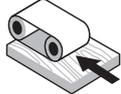




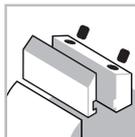
TM21M

Multicut planer cutterheads

MEC



Automatic Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing, moulding and roughing.

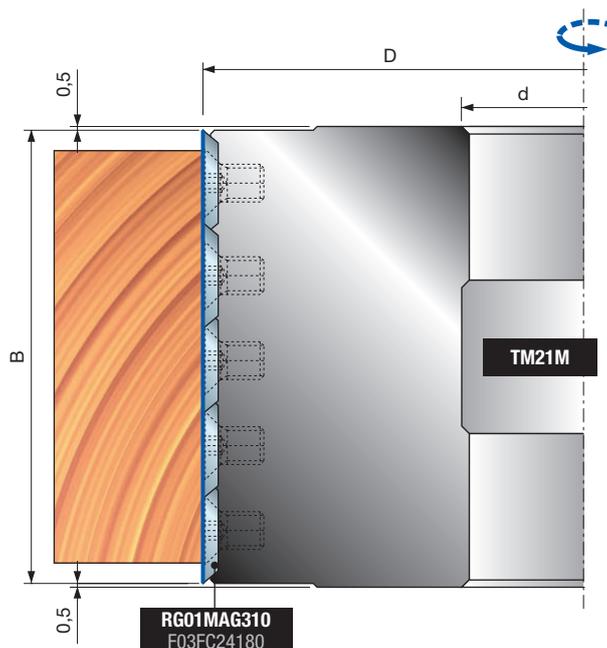
Technical information:

Planer cutterhead for automatic machines with helical design ideal for roughing.

- It can be used in combination with ballbearing for round timbers.
- Aluminium light alloy body.
- Rebore not available.
- Equipped with 4 sides disposable spurs.

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|----|-------------------|------------|------------|
| 100 | 60 | 30 | | 15 | 10.300 | TM21M ECC | F03FC20458 |
| 100 | 100 | 30 | | 27 | 10.300 | TM21M EEC | F03FC20459 |
| 125 | 130 | 40 | | 33 | 10.300 | TM21M HGE | F03FC20460 |
| 125 | 150 | 40 | | 39 | 10.300 | TM21M HHE | F03FC20461 |
| 125 | 180 | 40 | | 45 | 10.300 | TM21M HIE | F03FC20462 |

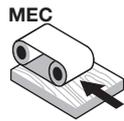
| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---|-------------|------------------|------------|------------|
|  | Spur | 14 x 14 x 2 | RG01MAG310 | F03FC24180 |
|  | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
|  | Torx key | T20 | CB03M CC9 | F03FA00167 |



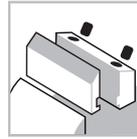


TP05M

Planer cutterheads with HSS knives



Automatic Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing, moulding and finishing.

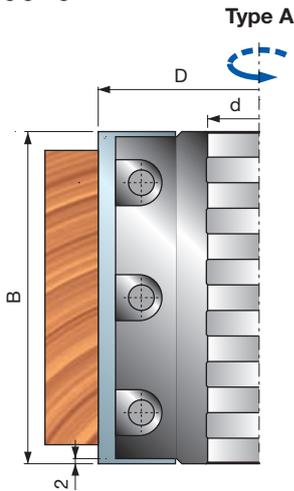
Technical information:

Planer cutterhead particularly indicated for softwood, maximum cutting depth 15 mm.

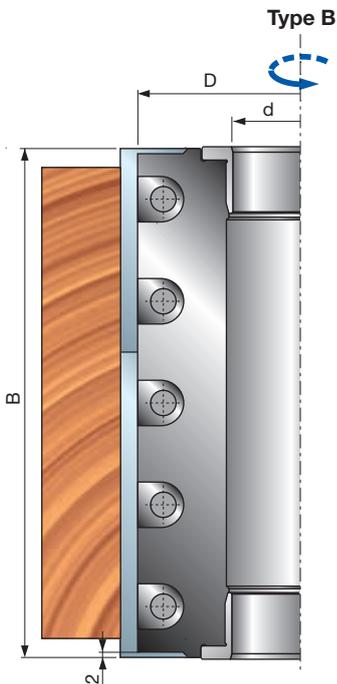
Type A: Cutterheads with traditional bore.

Type B: Bore realised on two side steel flanges fitted on Aluminium body:

- Better bore tolerances.
- Easy dismounting from the spindle.
- Rebore not available.
- Position the knives at the correct diameter with setting gauges.



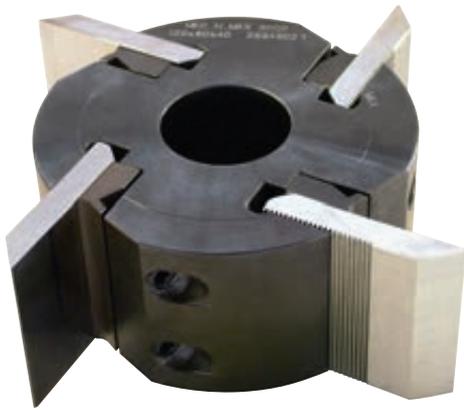
Type A



Type B

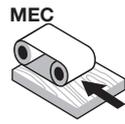
| | D | B | d | Z | Max RPM | Freud Code | Art. No. |
|--------|-----|-----|----|---|---------|------------|------------|
| | mm | mm | mm | | 1/min. | | |
| Type A | 125 | 100 | 40 | 4 | 10.300 | TP05M 100 | F03FC23661 |
| | 125 | 130 | 40 | 4 | 10.300 | TP05M 130 | F03FC21889 |
| | 125 | 150 | 40 | 4 | 10.300 | TP05M 150 | F03FC23663 |
| | 125 | 180 | 40 | 4 | 10.300 | TP05M 180 | F03FC24438 |
| | 125 | 200 | 40 | 4 | 10.300 | TP05M 200 | F03FC24439 |
| | 125 | 230 | 40 | 4 | 10.300 | TP05M 230 | F03FC21891 |
| Type B | 125 | 100 | 40 | 4 | 10.300 | TP05M 100B | F03FC24440 |
| | 125 | 130 | 40 | 4 | 10.300 | TP05M 130B | F03FC24442 |
| | 125 | 150 | 40 | 4 | 10.300 | TP05M 150B | F03FC24444 |
| | 125 | 180 | 40 | 4 | 10.300 | TP05M 180B | F03FC24446 |
| | 125 | 200 | 40 | 4 | 10.300 | TP05M 200B | F03FC23134 |
| | 125 | 230 | 40 | 4 | 10.300 | TP05M 230B | F03FC23135 |
| | 140 | 100 | 50 | 4 | 9.600 | TP05M 100C | F03FC24441 |
| | 140 | 130 | 50 | 4 | 9.600 | TP05M 130C | F03FC24443 |
| | 140 | 150 | 50 | 4 | 9.600 | TP05M 150C | F03FC24445 |
| | 140 | 180 | 50 | 4 | 9.600 | TP05M 180C | F03FC24447 |
| | 140 | 200 | 50 | 4 | 9.600 | TP05M 200C | F03FC23665 |
| | 140 | 230 | 50 | 4 | 9.600 | TP05M 230C | F03FC23666 |

| | Spare parts | Dimensions | Freud Code | Art. No. |
|-----|-------------|----------------|------------|------------|
| | | mm | | |
| | Screw | M10 x 25 | 2602M F19 | F03FA07353 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| 100 | Knife | 100 x 30 x 3 | CT01MDA202 | F03FA18167 |
| | Wedge | 96 x 19 x 8,5 | CN11M 096 | F03FC23670 |
| 130 | Knife | 130 x 30 x 3 | CT01MHA202 | F03FA18169 |
| | Wedge | 126 x 19 x 8,5 | CN11M 126 | F03FC21964 |
| 150 | Knife | 150 x 30 x 3 | CT01MLA202 | F03FA18171 |
| | Wedge | 146 x 19 x 8,5 | CN11M 146 | F03FC23672 |
| 180 | Knife | 180 x 30 x 3 | CT01MOA202 | F03FA18173 |
| | Wedge | 176 x 19 x 8,5 | CN11M 176 | F03FC24448 |
| 200 | Knife | 200 x 30 x 3 | CT01MPA202 | F03FA18174 |
| | Wedge | 196 x 19 x 8 | CN11M 196 | F03FC23132 |
| 230 | Knife | 230 x 30 x 3 | CT01MRA202 | F03FA18175 |
| | Wedge | 226 x 19 x 8,5 | CN11M 226 | F03FC21966 |

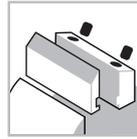


TPCZM

Cutterheads with serrated profilable knives



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Planing



Profiling

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing, moulding and profiling.

Technical information:

Suitable for profiling all softwoods and hardwoods.

- The serrated surface ensures a perfect knife placement and lock.
- This item is supplied without knives.
- Do not exceed the number of knives regrindings that leaves a maximum distance between the seat and the knife of 6,4 mm.
- Steel body.
- Rebore not available.

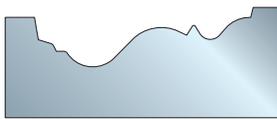
| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 122 | 60 | 40 | 4 | 9.000 | TPCZM CB9 | F03FC22116 |
| 122 | 80 | 40 | 4 | 9.000 | TPCZM CC9 | F03FC22117 |
| 122 | 100 | 40 | 4 | 9.000 | TPCZM CD9 | F03FC22119 |
| 122 | 150 | 40 | 4 | 9.000 | TPCZM CF9 | F03FC22223 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----|-------------|------------------|------------|------------|
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| CB9 | Wedge | 60 x 23,5 x 9,6 | CNB4M BA9 | F03FC21984 |
| CC9 | Wedge | 80 x 23,5 x 9,6 | CNB4M CA9 | F03FC21986 |
| CD9 | Wedge | 100 x 23,5 x 9,6 | CNB4M DA9 | F03FC21987 |
| CF9 | Wedge | 150 x 23,5 x 9,6 | CNB4M FA9 | F03FC21989 |

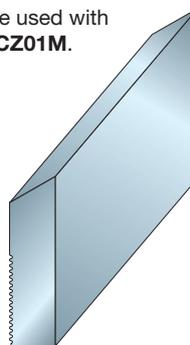
Raw knife



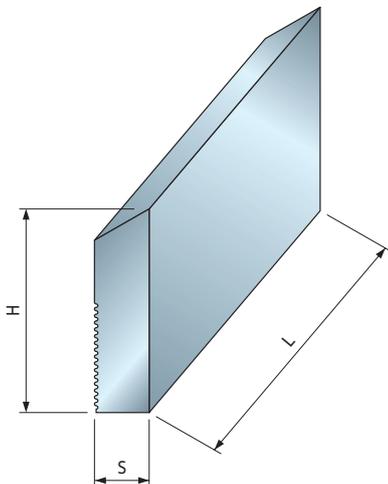
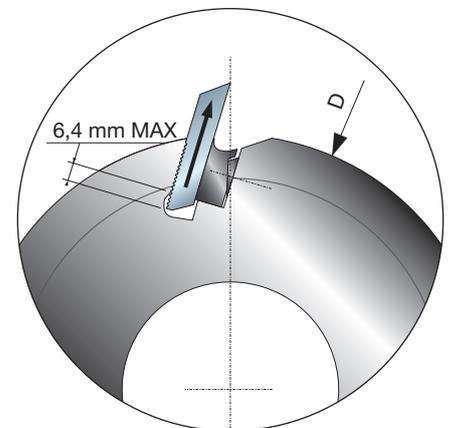
Profiled knife



It can be used with knives CZ01M.



Knife placement



CZ01M

HSS serrated back knives

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 60 | 50 | 8 | CZ01MDB202 | F03FA21895 |
| 80 | 50 | 8 | CZ01MDC202 | F03FA21896 |
| 100 | 50 | 8 | CZ01MDD202 | F03FA21897 |
| 150 | 50 | 8 | CZ01MDF202 | F03FA21898 |
| 60 | 60 | 8 | CZ01MHB202 | F03FA21899 |
| 80 | 60 | 8 | CZ01MHC202 | F03FA21900 |
| 100 | 60 | 8 | CZ01MHD202 | F03FA21901 |
| 150 | 60 | 8 | CZ01MHF202 | F03FA21902 |
| 60 | 70 | 8 | CZ01MNB202 | F03FA21903 |
| 80 | 70 | 8 | CZ01MNC202 | F03FA21904 |
| 100 | 70 | 8 | CZ01MND202 | F03FA21905 |
| 150 | 70 | 8 | CZ01MNF202 | F03FA21906 |

Profiling HSS knives with serrated surface.

- Suitable for Freud TPCZM planners.
- Suitable for cutting all softwoods and hardwoods.

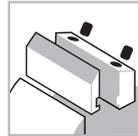


TM28M

ISOprofil planer cutterheads with alternating shear angle



Automatic Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing and finishing.

Technical information:

ISOprofil locking system planer head.

- Z2+2 alternative shear angle system, tool body in light Aluminium alloy.
- Available with both HM or HSS knives.
- Max thickness to be removed 3 mm, ideal for top finishing.
- Use in combination with **T182M** rebate cutterhead.
- Aluminium light alloy body.
- Rebore not available.
- HM and HSS knives can be resharpened up to 3 mm.

Tools supplied with HW knives

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 125 | 80 | 40 | 4 | 10.300 | TM28M AA3 | F03FC22081 |
| 125 | 130 | 40 | 4 | 10.300 | TM28M AD3 | F03FC22083 |
| 125 | 150 | 40 | 4 | 10.300 | TM28M AF3 | F03FC22085 |
| 125 | 180 | 40 | 4 | 10.300 | TM28M AH3 | F03FC22086 |
| 125 | 240 | 40 | 4 | 10.300 | TM28M AM3 | F03FC22089 |

Tools supplied with HSS knives

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 125 | 80 | 40 | 4 | 10.300 | TM28M AA2 | F03FC22080 |
| 125 | 130 | 40 | 4 | 10.300 | TM28M AD2 | F03FC22082 |
| 125 | 150 | 40 | 4 | 10.300 | TM28M AF2 | F03FC22084 |
| 125 | 180 | 40 | 4 | 10.300 | TM28M AH2 | F03FC22087 |
| 125 | 240 | 40 | 4 | 10.300 | TM28M AM2 | F03FC22088 |

ATB 15° tooth (Fig. 2)

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----------|-------------------|-------------------|-------------|------------|
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| AA2 - AA3 | Wedge | 76 x 19,5 x 11,5 | CN28M 080 | F03FC24599 |
| | HSS right knife | 82 x 19 x 4,5 | CP28MDAA201 | F03FC23958 |
| | HSS left knife | 82 x 19 x 4,5 | CP28MSAA201 | F03FC23968 |
| | HW right knife | 82 x 19 x 4,5 | CP28MDAA301 | F03FC23959 |
| | HW left knife | 82 x 19 x 4,5 | CP28MSAA301 | F03FC23969 |
| AD2 - AD3 | Wedge | 126 x 19,5 x 11,5 | CN28M 130 | F03FC24600 |
| | HSS right knife | 132 x 4,5 x 19 | CP28MDAD201 | F03FC23960 |
| | HSS left knife | 132 x 4,5 x 19 | CP28MSAD201 | F03FC23970 |
| | HW right knife | 132 x 4,5 x 19 | CP28MDAD301 | F03FC23961 |
| | HW left knife | 132 x 4,5 x 19 | CP28MSAD301 | F03FC23971 |
| AF2 - AF3 | Wedge | 146 x 19,5 x 11,5 | CN28M 150 | F03FC24601 |
| | HSS right knife | 152 x 4,5 x 19 | CP28MDAF201 | F03FC23962 |
| | HSS left knife | 152 x 4,5 x 19 | CP28MSAF201 | F03FC23972 |
| | HW right knife | 152 x 4,5 x 19 | CP28MDAF301 | F03FC23963 |
| | HW left knife | 152 x 4,5 x 19 | CP28MSAF301 | F03FC23973 |
| AH2 - AH3 | Wedge | 176 x 19,5 x 11,5 | CN28M 180 | F03FC24602 |
| | HSS right knife | 182 x 4,5 x 19 | CP28MDAH201 | F03FC23964 |
| | HSS left knife | 182 x 4,5 x 19 | CP28MSAH201 | F03FC23974 |
| | HW right knife | 182 x 4,5 x 19 | CP28MDAH301 | F03FC23965 |
| | HW left knife | 182 x 4,5 x 19 | CP28MSAH301 | F03FC23975 |
| AM2 - AM3 | Wedge | 236 x 19,5 x 11,5 | CN28M 240 | F03FC24603 |
| | HSS right knife | 242 x 4,5 x 19 | CP28MDAM201 | F03FC23966 |
| | HSS left knife | 242 x 4,5 x 19 | CP28MSAM201 | F03FC23976 |
| | HW right knife | 242 x 4,5 x 19 | CP28MDAM301 | F03FC23967 |
| | HW left knife | 242 x 4,5 x 19 | CP28MSAM301 | F03FC23977 |

Groove bead cutters

| Item | In conjunction with item: | Art. No. |
|-------|---------------------------|------------|
| TM28M | T182M EA3 | F03FC20588 |
| TM28M | T182M EB3 | F03FC20589 |

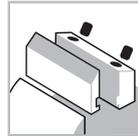
Aluminium light alloy body. For cleaning do not use products containing caustic soda. Can be used in combination with item T182M to cut guiding rebates.

T102M

Modular planer cutterheads with disposable knives



Automatic Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing and finishing.

Technical information:

Modular tool can be stacked and used in multiples thus enabling the machining of a wider area. Furthermore, one can either stack and use tool bearing the same identical knives (Picture A) or tool equipped with knives of different sizes, for example 50 mm - 30 mm (Picture B).

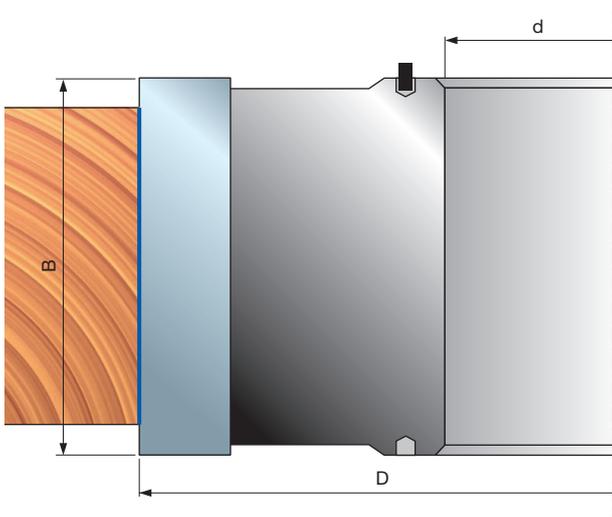
- Aluminium light alloy body.
- Rebore not available.
- Can be used in combination with item T182M to cut guiding rebates.

Groove bead cutters

| Item | In conjunction with item: | Art. No. |
|-----------------|---------------------------|------------|
| T102M AC3 - AF3 | T182M EA3 | F03FC20588 |
| T102M AC3 - AF3 | T182M EB3 | F03FC20589 |

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 125 | 30 | 32 | 4 | 10.300 | T102M AL3 | F03F668305 |
| 125 | 30 | 40 | 4 | 10.300 | T102M AF3 | F03FC20577 |
| 125 | 50 | 32 | 4 | 10.300 | T102M AI3 | F03F668304 |
| 125 | 50 | 40 | 4 | 10.300 | T102M AC3 | F03FC20575 |
| 125 | 50 | 50 | 4 | 10.300 | T102M AD3 | F03FC20576 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|------------------------|-------------|------------------|------------|------------|
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| AC3 - AD3 AI3 | Knife | 50 x 12 x 1,5 | CG08MFA310 | F03FH02907 |
| | Wedge | 15 x 46 x 8 | CN09M AP9 | F03FC01290 |
| AB3 - AE3 AF3 - AL3 | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
| | Wedge | 15 x 26 x 8 | CN09M AD9 | F03FC01283 |



Application examples

Fig. A

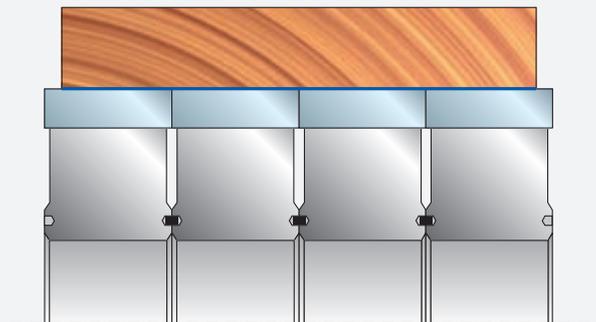
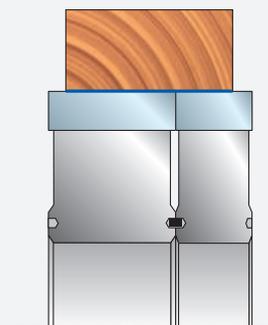


Fig. B

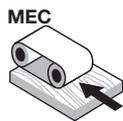


Rebating

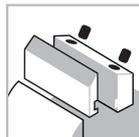


T182M

Groove bead cutterheads with disposable knives



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Rebating

| | D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|--------|---------|---------|---------|---|---|-------------------|-------------------|------------|
| Type A | 120 | 12 | 35 | 3 | 3 | 11.000 | T182M BB3 | F03FC20585 |
| | 120 | 12 | 35 | 2 | 2 | 11.000 | T182M CB3 | F03FC20586 |
| | 145 | 10 | 40 | 3 | 3 | 9.000 | T182M AB3* | F03FC20584 |
| | 150 | 10 | 40 | 4 | 2 | 9.000 | T182M EB3 | F03FC20589 |
| Type B | 150 | 10 | 40 | 3 | 3 | 9.000 | T182M DB3 | F03FC20587 |
| | 145 | 12 | 40 | 4 | 2 | 9.000 | T182M EA3 | F03FC20588 |
| | 145 | 12 | 40 | 3 | 3 | 9.000 | T182M AA3 | F03FC20583 |

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Rebating.

Technical information:

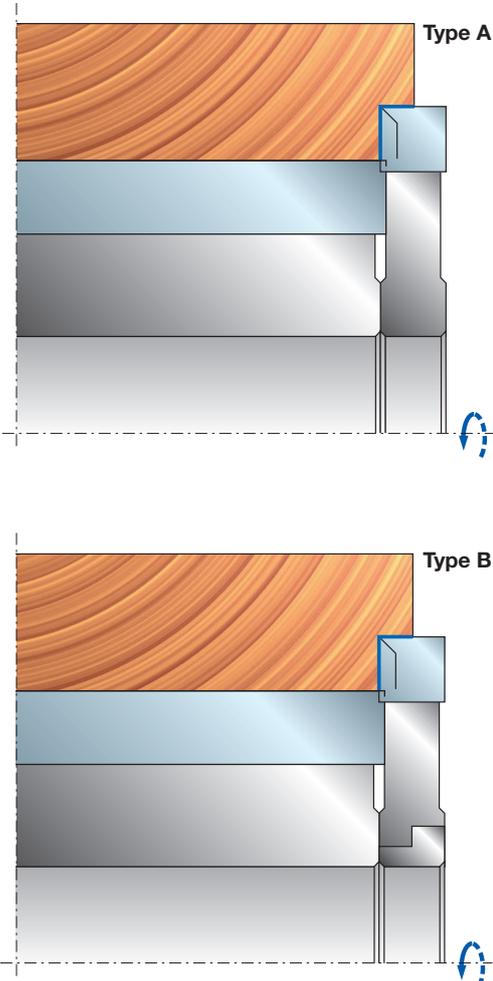
Tool to use in combination with **TM06M-TM07M** to cut guiding rebates.

- Item **T182M AB3**: suitable for Casadei and S.C.M. moulders.
- Steel body.
- Rebore not available.

| Item | Art. No. | In conjunction with item: |
|-------------------|------------|------------------------------|
| T182M AB3* | F03FC20584 | TM06M - TM07M 0125 |
| T182M AA3 | F03FC20583 | TM06M - TM07M 0125 |
| T182M CB3 | F03FC20586 | TM06M PC3 - TM06M PH3 |
| T182M DB3 | F03FC20587 | TM06M - TM07M |
| T182M EA3 | F03FC20588 | TM28M - T102M |
| T182M EB3 | F03FC20589 | TM28M - T102M |

Item **T182M**: use in combination with **TM06M-TM07M** to cut guiding rebates.

* For use on Casadei and S.C.M. moulders.



| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----|-------------|------------------|-------------------|------------|
| | Torx key | T20 | CB03M CC9 | F03FA00167 |
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| AA3 | Knife | 12 x 12 x 1,5 | CG08MBA310 | F03FH02903 |
| | Wedge | 15 x 10 x 8 | CN01M BA9 | F03FC01249 |
| | Flange | 68 x 10 x 40 | FX01M HC9 | F03FC15041 |
| | Screw | M6 x 16 | VT03M DI9 | F03FA04440 |
| | Allen key | 3 | CB03M AA9 | F03FA00162 |
| AB3 | Knife | 9,6 x 12 x 1,5 | CG08MMA310 | F03FH02910 |
| | Wedge | 15 x 8 x 8 | CN09M DB9 | F03FC01296 |
| | Screw | M5 x 16 | VT03M BB9 | F03FA04437 |
| | Allen key | 2,5 | 2619M CA9 | F03FA07432 |
| BB3 | Knife | 11 x 12 x 1,5 | CG08MNA310 | F03FH03254 |
| | Wedge | 15 x 10 x 8 | CN01M BA9 | F03FC01249 |
| | Screw | M6 x 16 | VT03M DI9 | F03FA04440 |
| | Allen key | 3 | CB03M AA9 | F03FA00162 |
| CB3 | Knife | 12 x 12 x 1,5 | CG06MAA310 | F03FH02889 |
| | Wedge | 15 x 10 x 8 | CN01M BA9 | F03FC01249 |
| | Screw | M6 x 16 | VT03M DI9 | F03FA04440 |
| | Allen key | 3 | CB03M AA9 | F03FA00162 |
| DB3 | Knife | 9,6 x 12 x 1,5 | CG08MBA310 | F03FH02903 |
| | Wedge | 15 x 8 x 8 | CN09M DB9 | F03FC01296 |
| | Screw | M5 x 16 | VT03M BB9 | F03FA04437 |
| | Allen key | 2,5 | 2619M CA9 | F03FA07432 |
| EA3 | Knife | 12 x 12 x 1,5 | CG08MBA310 | F03FH02903 |
| | Wedge | 15 x 10 x 8 | CN09MS AA9 | F03FC01323 |
| | Flange | 68 x 10 x 40 | FX01M HC9 | F03FC15041 |
| | Screw | M6 x 22 | VT19M AB9 | F03FA04491 |
| | Nut | 10 x 11,5 x 6 | VT20M AA9 | F03FA04497 |
| EB3 | Allen key | 3 | CB03M AA9 | F03FA00162 |
| | Knife | 9,6 x 12 x 1,5 | CG08MBA310 | F03FH02903 |
| | Wedge | 15 x 8 x 8 | CN09M AH9 | F03FC01285 |
| | Screw | M6 x 22 | VT19M AB9 | F03FA04491 |
| | Nut | 9 x 10,5 x 6 | VT20M GA9 | F03FC20669 |
| | Allen key | 3 | CB03M AA9 | F03FA00162 |

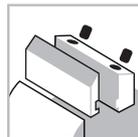


T111M - T112M

Disposable knives cutterheads for rebates



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Chipboard



Laminated Chipboard



MDF



Laminated MDF



Planing



Rebating

Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Planing and rebating.

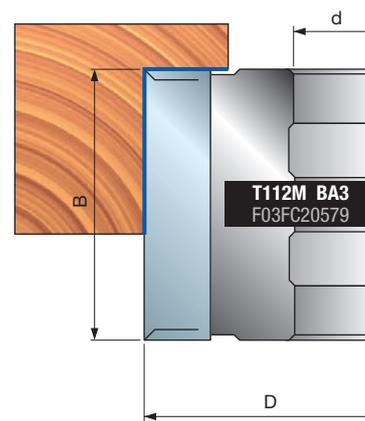
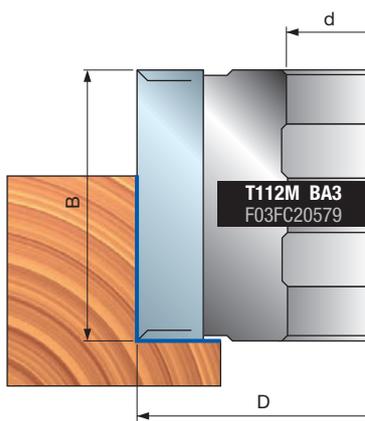
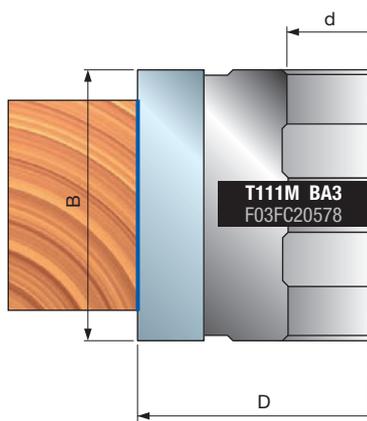
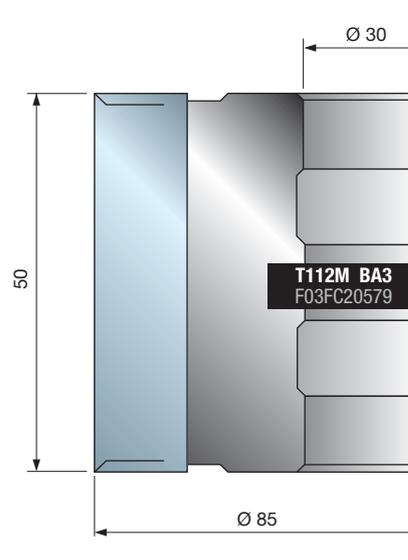
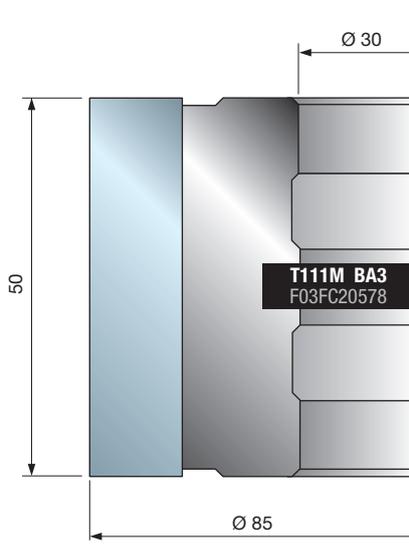
Technical information:

Disposable knives tool for planing and rebating.

- Aluminium light alloy body.
- Rebore not available.

| D | B | d | Z | V | Max RPM | Freud Code | Art. No. |
|----|----|----|---|---|---------|------------|------------|
| mm | mm | mm | | | 1/min. | | |
| 85 | 50 | 30 | 4 | | 12.000 | T111M BA3 | F03FC20578 |
| 85 | 50 | 30 | 4 | 4 | 12.000 | T112M BA3 | F03FC20579 |

| Spare parts | | Dimensions | Freud Code | Art. No. |
|-------------|-----------|---------------|------------|------------|
| | | mm | | |
| | Knife | 50 x 12 x 1,5 | CG08MFA310 | F03FH02907 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Wedge | 46 | CN01M KA9 | F03FC01255 |
| | Allen key | 4 | 2619M EA9 | F03FA07434 |
| | Torx key | T20 | CB03M CC9 | F03FA00167 |
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |



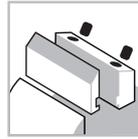


T191M - T192M

Disposable knives cutterheads for rebates



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Planing



Rebating



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Planing and rebating.

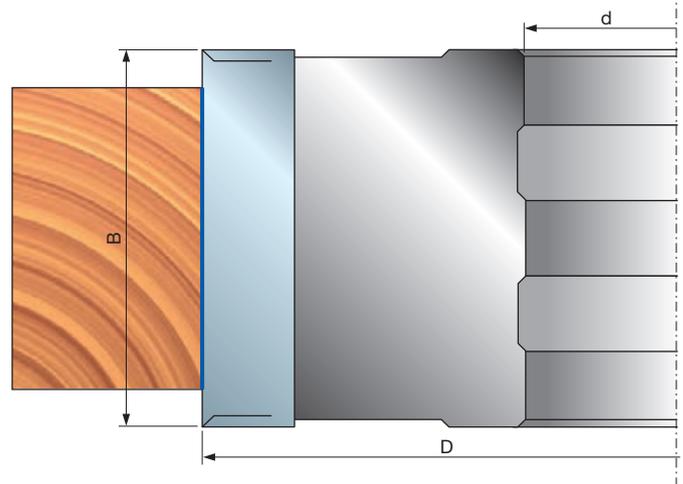
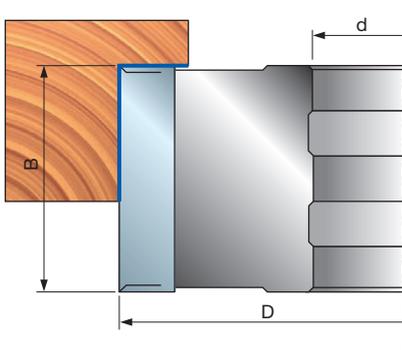
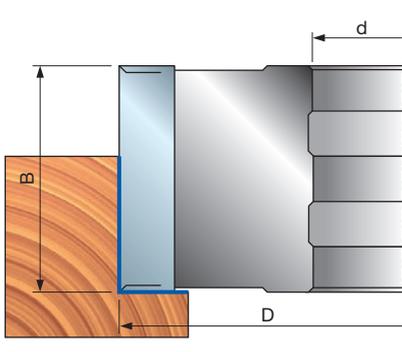
Technical information:

Disposable knives tool for planing and rebating with alternate shear angle.

- Steel body.
- Rebore not available.

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------------|------------|
| 125 | 50,4 | 30 | 4 | 4 | 10.300 | T191M BA3 | F03FC20600 |
| 125 | 50,4 | 35 | 4 | 4 | 10.300 | T191M BB3 | F03FC20601 |
| 125 | 50,4 | 40 | 4 | 4 | 10.300 | T191M BC3 | F03FC20602 |
| 125 | 50,4 | 50 | 4 | 4 | 10.300 | T191M BD3 | F03FC20603 |
| 125 | 50,4 | 30 | 2 | 4 | 10.300 | T192M BA3 | F03FC20604 |
| 125 | 50,4 | 35 | 2 | 4 | 10.300 | T192M BB3 | F03FC24963 |
| 125 | 50,4 | 40 | 2 | 4 | 10.300 | T192M BC3 | F03FC20605 |
| 125 | 50,4 | 50 | 2 | 4 | 10.600 | T192M VC3 | F03F703931 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. | |
|--------------|-------------|------------------|-------------------|------------------|------------|
| | Knife | 50 x 12 x 1,5 | CG08MFA310 | F03FH02907 | |
| | Wedge | 15 x 46 x 8 | CN09M AP9 | F03FC01290 | |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 | |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 | |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 | |
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 | |
| T112M | | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | | Torx key | T20 | CB03M CC9 | F03FA00167 |



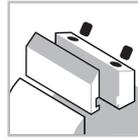


T194M - T195M

Disposable knives cutterheads for rebates



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing



Rebating



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Planing and rebating.

Technical information:

Disposable knives tool for planing and rebating with alternate shear angle.

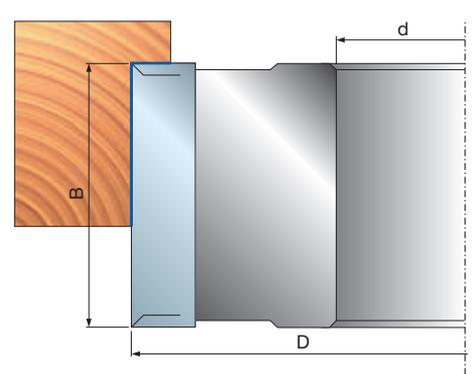
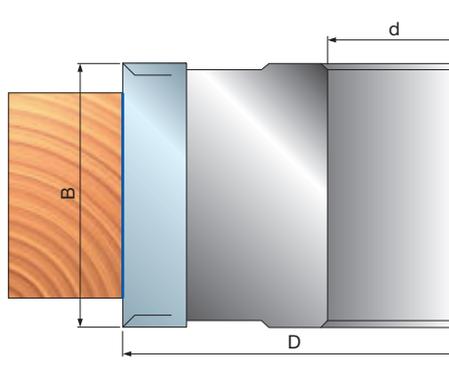
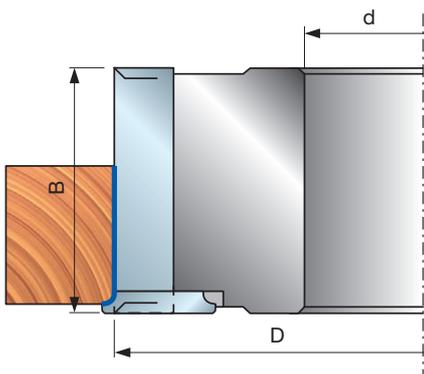
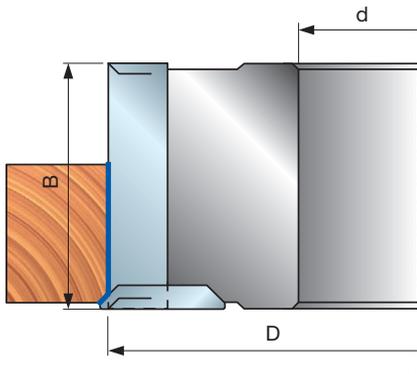
- Seat pockets for chamfering and rounding inserts (not included).
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------|------------|
| 125 | 30,4 | 32 | 4 | 4 | 10.300 | T194M AC3 | F03F668307 |
| 125 | 30,4 | 35 | 4 | 4 | 10.300 | T194M AB3 | F03FC20607 |
| 125 | 30,4 | 50 | 4 | 4 | 10.300 | T194M AD3 | F03FC25546 |
| 125 | 50,4 | 32 | 4 | 4 | 10.300 | T194M BC3 | F03F668308 |
| 125 | 50,4 | 35 | 4 | 4 | 10.300 | T194M BB3 | F03FC20608 |
| 125 | 50,4 | 50 | 4 | 4 | 10.300 | T194M BD3 | F03FC23634 |
| 125 | 50,4 | 35 | 2 | 4 | 10.300 | T195M BB3 | F03FC20610 |
| 125 | 30,4 | 50 | 2 | 4 | 10.300 | T195M BD3 | F03FC23582 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------|------------------|------------|------------|
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Torx key | T20 | CB03M CC9 | F03FA00167 |
| | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02907 |
| | Wedge | 15 x 26 x 8 | CN09M AD9 | F03FC01283 |
| | Knife | 50 x 12 x 1,5 | CG08MFA310 | F03FH02907 |
| | Wedge | 15 x 46 x 8 | CN09M AP9 | F03FC01290 |

Tool with seat pockets for the following inserts (not included):

| Inserts | | Dimensions mm | Freud Code | Art. No. |
|---------|-------|-------------------|-------------|------------|
| | Knife | 26 x 16 x 5 45° | IG61MSBA305 | F03FH03027 |
| | Knife | 26 x 16 x 5 R=1,5 | IG62MSAB305 | F03FH03031 |
| | Knife | 26 x 16 x 5 R=2 | IG62MSAC305 | F03FH03032 |
| | Knife | 26 x 16 x 5 R=3 | IG62MSAE305 | F03FH03033 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |



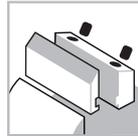


T193M

Disposable knives cutterheads for rebates



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Planing



Rebating



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Planing and rebating.

Technical information:

Disposable knives tool for planing and rebating with alternate shear angle.

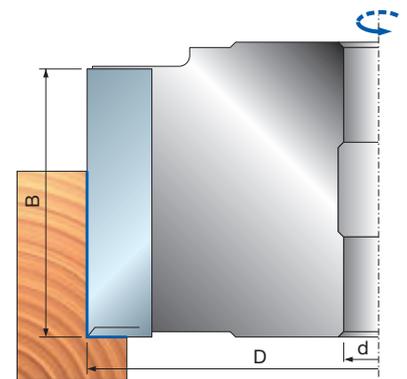
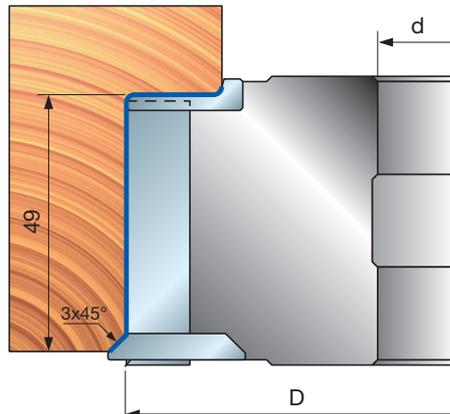
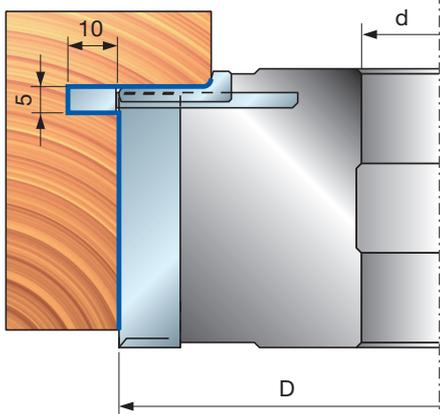
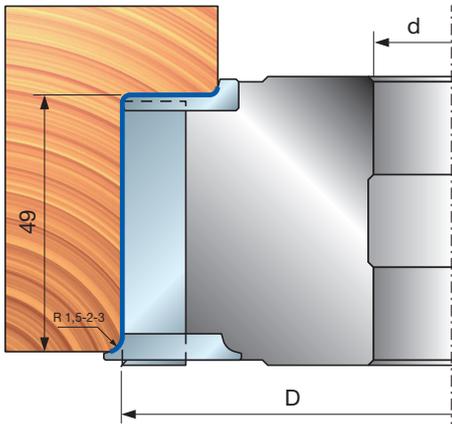
- Seat pockets for chamfering, rounding and grooving inserts (not included).
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------------|------------|
| 125 | 50 | 30 | 4 | 2 | 10.300 | T193M BA3 | F03FC20606 |
| 125 | 50 | 32 | 4 | 2 | 10.300 | T193M BC3 | F03F668306 |
| 140 | 50 | 50 | 4 | 2 | 9.600 | T193M BD3 | F03FC25545 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------------|------------------|-------------------|------------|
| | Knife | 50 x 12 x 1,5 | CG08MFA310 | F03FH02907 |
| | Wedge | 15 x 46 x 8 | CN09M AP9 | F03FC01290 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Adjustment ring | 16 x 11,9 x 2,6 | VT18M AG9 | F03FC20660 |
| | Screw | M6 x 10 | 2622M CB9 | F03FA07455 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |
| | Torx key | T20 | CB03M CC9 | F03FA00167 |

Tool with seat pockets for the following inserts (not included):

| Inserts | Dimensions mm | Freud Code | Art. No. | |
|---------|---------------------|-------------------|--------------------|------------|
| | Multipurpose insert | 15 | IG25MD15302 | F03FC24169 |
| | Multipurpose insert | 16 | IG25MD16302 | F03FC24170 |
| | Multipurpose insert | 18 | IG25MD18302 | F03FC24171 |
| | Screw | M6 x 10 | 2622M CB9 | F03FA07455 |
| | Knife | 26 x 16 x 5 45° | IG61MSBA305 | F03FH03027 |
| | Knife | 26 x 16 x 5 R=1,5 | IG62MSAB305 | F03FH03031 |
| | Knife | 26 x 16 x 5 R=2 | IG62MSAC305 | F03FH03032 |
| | Knife | 26 x 16 x 5 R=3 | IG62MSAE305 | F03FH03033 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Sector | 25 x 45 x 5 Z1 | SR11MDBD301 | F03FC24206 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |

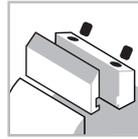


T198M

Adjustable rebate and groove cutterhead sets with disposable knives



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Planing



Rebating



Grooving



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing, rebating and grooving.

Technical information:

Disposable knives tool set with alternate shear angle.

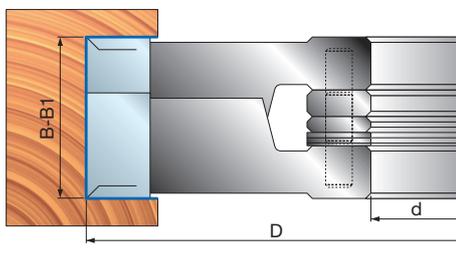
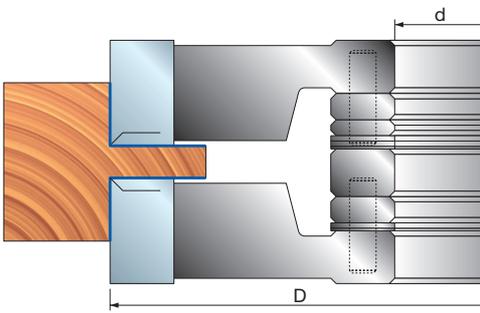
- Rebore not available.
- Seat pockets for chamfering, rounding and grooving inserts (not included).
- Steel body.
- Rebore not available.

| D mm | B-B1 mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|------------|---------|-----|-----|-------------------|------------------|------------|
| 140 | 20,5-39 | 30 | 2+2 | 2+2 | 9.600 | T198M FA3 | F03FC22428 |
| 140 | 20,5-39 | 32 | 2+2 | 2+2 | 9.600 | T198M FD3 | F03FC24270 |
| 140 | 20,5-39 | 35 | 2+2 | 2+2 | 9.600 | T198M FB3 | F03FC20612 |
| 140 | 20,5-39 | 40 | 2+2 | 2+2 | 9.600 | T198M FC3 | F03FC20613 |
| 140 | 30,4-59 | 30 | 2+2 | 2+2 | 9.600 | T198M GA3 | F03FC22590 |
| 140 | 30,4-59 | 32 | 2+2 | 2+2 | 9.600 | T198M GD3 | F03FC24271 |
| 140 | 30,4-59 | 35 | 2+2 | 2+2 | 9.600 | T198M GB3 | F03FC20614 |
| 140 | 30,4-59 | 40 | 2+2 | 2+2 | 9.600 | T198M GC3 | F03FC20615 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|------------|-------------|------------------|-------------------|------------|
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| | Nut | 15 x 13,3 x M10 | VT20M NA9 | F03FC20671 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Torx key | T20 | CB03M CC9 | F03FA00167 |
| FA3 | Spacers set | 50 x 20 x 30 | AN13M BA9 | F03FC22427 |
| FB3 | Spacers set | 55 x 20 x 35 | AN13M BB9 | F03FC00543 |
| FC3 | Spacers set | 60 x 20 x 40 | AN13M CB9 | F03FC00545 |
| FD3 | Spacers set | 52 x 21,1 x 32 | AN13M BE9 | F03FC24531 |
| FA3 | Knife | 20 x 12 x 1,5 | CG08MDA310 | F03FH02905 |
| FB3 | Wedge | 15 x 16 x 8 | CN09MD A09 | F03FC01306 |
| FD3 | Wedge | 15 x 16 x 8 | CN09MS A09 | F03FC01331 |
| GA3 | Spacers set | 50 x 30 x 30 | AN13M BD9 | F03FC22591 |
| GB3 | Spacers set | 55 x 30 x 35 | AN13M BC9 | F03FC00544 |
| GC3 | Spacers set | 60 x 30 x 40 | AN13M CC9 | F03FC00546 |
| GD3 | Spacers set | 52 x 31,1 x 32 | AN13M BF9 | F03FC24532 |
| GA3 | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
| GB3 | Wedge | 15 x 26 x 8 | CN09MD AD9 | F03FC01300 |
| GC3 | Wedge | 15 x 26 x 8 | CN09MS AD9 | F03FC01326 |

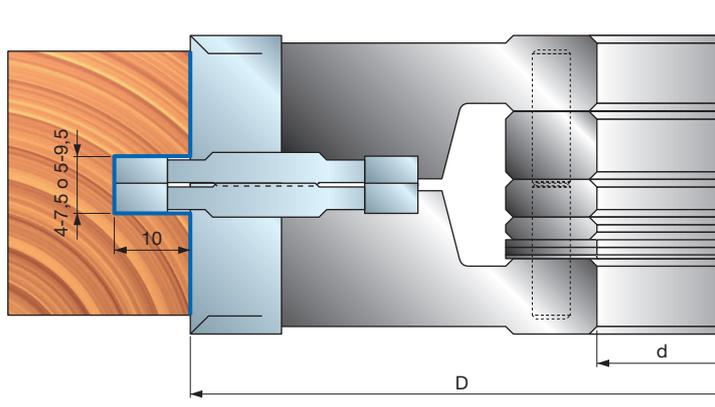
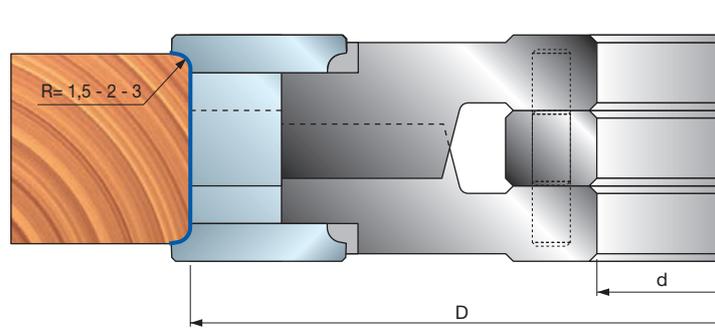
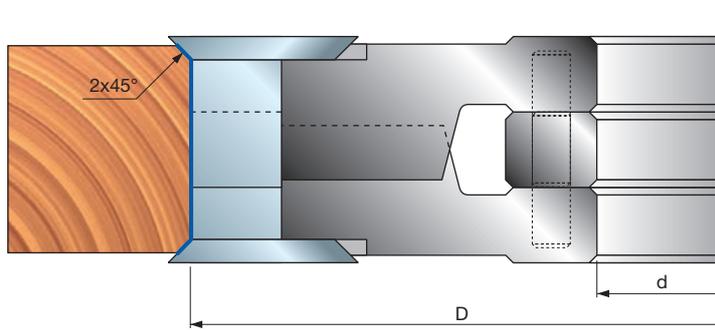
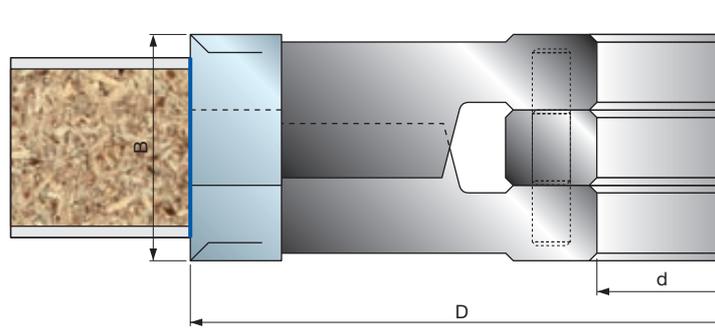
Tool with seat pockets for the following inserts (not included):

| | Inserts | Dimensions mm | Freud Code | Art. No. |
|--|-----------------|-------------------|--------------------|------------|
| | Grooving insert | 40 x 16 x 4 | IG04MDAA305 | F03FH03409 |
| | Grooving insert | 40 x 16 x 4 | IG04MSAA305 | F03FH02994 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Knife | 26 x 16 x 5 45° | IG61MDBA305 | F03FH03026 |
| | Knife | 26 x 16 x 5 45° | IG61MSBA305 | F03FH03027 |
| | Knife | 26 x 16 x 5 R=1,5 | IG62MDAB305 | F03FH03028 |
| | Knife | 26 x 16 x 5 R=2 | IG62MDAC305 | F03FH03029 |
| | Knife | 26 x 16 x 5 R=3 | IG62MDAE305 | F03FH03030 |
| | Knife | 26 x 16 x 5 R=1,5 | IG62MSAB305 | F03FH03031 |
| | Knife | 26 x 16 x 5 R=2 | IG62MSAC305 | F03FH03032 |
| | Knife | 26 x 16 x 5 R=3 | IG62MSAE305 | F03FH03033 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |



T198M

Adjustable rebate and grooves
cutterhead sets with disposable knives



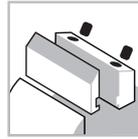


T199M

Adjustable rebate and groove cutterhead sets with disposable knives



Manual Feed



Clamping System



Steel Body



Softwood



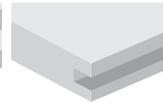
Hardwood



Planing



Rebating



Grooving



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Planing, rebating and grooving.

Technical information:

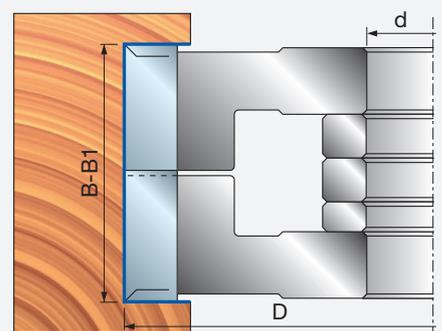
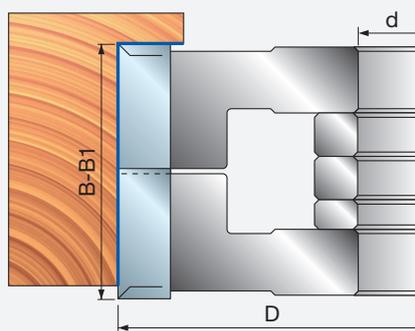
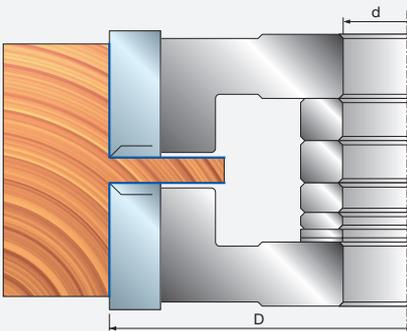
Disposable knives tool set with alternate shear angle.

- Seat pockets for chamfering, rounding and grooving inserts (not included).
- Steel body.
- Rebore not available.

| D mm | B-B1 mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|------------|---------|-----|-----|-------------------|------------------|------------|
| 140 | 30,4-59 | 30 | 2+2 | 2+2 | 9.600 | T199M GA3 | F03FC20624 |
| 140 | 30,4-59 | 32 | 2+2 | 2+2 | 9.600 | T199M GD3 | F03FC24474 |
| 140 | 30,4-59 | 35 | 2+2 | 2+2 | 9.600 | T199M GB3 | F03FC20625 |
| 140 | 30,4-59 | 40 | 2+2 | 2+2 | 9.600 | T199M GC3 | F03FC20626 |
| 140 | 30,4-59 | 50 | 2+2 | 2+2 | 9.600 | T199M GE3 | F03FC25267 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|------------|-------------|------------------|-------------------|------------|
| | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
| | Wedge | 12,3 x 26 x 8 | CN01MD GA9 | F03FC01263 |
| | Wedge | 12,3 x 26 x 8 | CN01MS GA9 | F03FC01266 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Torx key | T20 | CB03M CC9 | F03FA00167 |
| GA3 | Spacer set | 50 x 30 x 30 | AN03M AC9 | F03FC00446 |
| GB3 | Spacer set | 55 x 30 x 35 | AN03M BC9 | F03FC00456 |
| GC3 | Spacer set | 60 x 30 x 40 | AN03M CC9 | F03FC00467 |
| GD3 | Spacer set | 52 x 30 x 32 | AN03M DC9 | F03FC00475 |

A 10 pieces set of spacers: Thickness: 0,1 - 0,2 - 0,3 - 0,5 - 1 - 2 - 3 - 6 - 8 - 10 mm



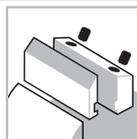


TP48M

ISOprofil cutterheads for door frames



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Rebating

Tool suitable for solid wood jamb board rebate machining.



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Rebating.

Technical information:

Performance tool for door rebating, front shear angle to guarantee a perfect step surface and a body able to reach 65 mm step depth.

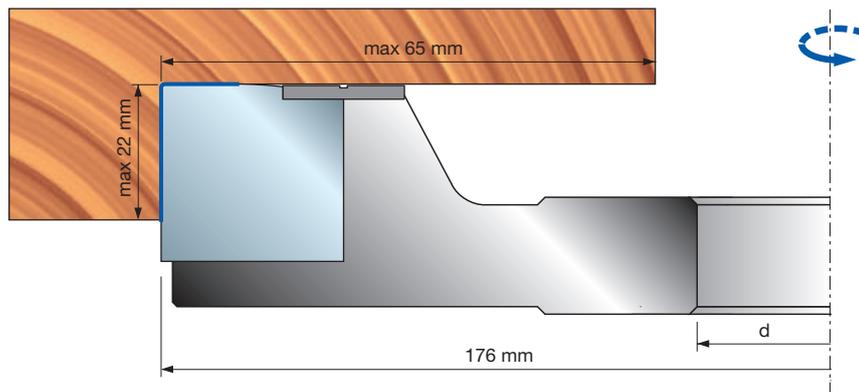
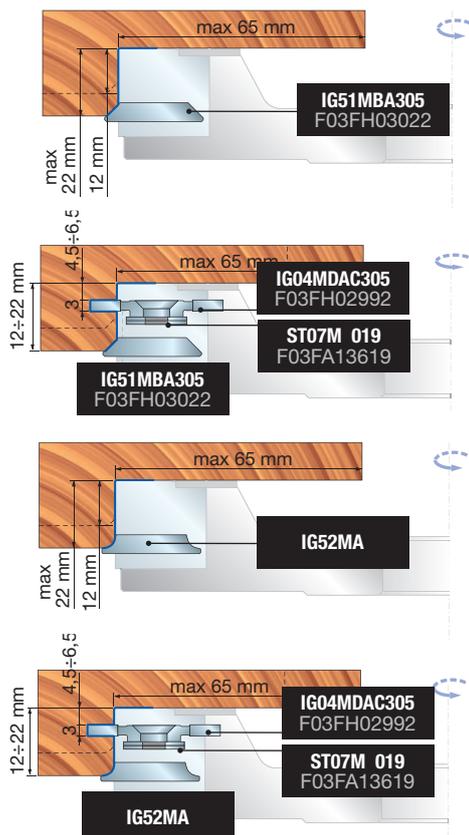
- Rounding and beveling insert to offer different solutions on step corners.
- Steel body.
- Rebore not available.
- Inserts to be ordered separately.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 176 | 23,5 | 35 | 2 | 8.000 | TP48M AB3 | F03F664005 |
| 176 | 23,5 | 50 | 2 | 8.000 | TP48M AD3 | F03FC25547 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|------------|------------|
| | Knife | 24 x 24 x 3 | CP48MAA301 | F03FC24310 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| | Wedge | 28 x 9,5 x 8 | CN03M BB9 | F03FA00585 |
| | Screw | M8 x 22 | VT19M BB9 | F03FA04493 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Torx key | T9 | CB03M CA9 | F03FA00165 |

Tool with seat pockets for the following inserts (not included):

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|---------------------|-------------------|-------------|------------|
| | Rounding insert | 22 x 16 x 5 R=1,5 | IG52MAB305 | F03FH03023 |
| | Rounding insert | 22 x 16 X 5 R=2 | IG52MAC305 | F03FH03024 |
| | Rounding insert | 22 x 16 X 5 R=3 | IG52MAE305 | F03FH03025 |
| | Beveling insert | 22 x 16 x 5 45° | IG51MBA305 | F03FH03022 |
| | Spacer for inserts | 13,6 x 0,1 x 7 | ST07M 019 | F03FA13619 |
| | Grooving insert | 40 x 16 x 3 | IG04MDAC305 | F03FH02992 |
| | Screw for IG51-IG52 | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Screw for IG04MD | M6 x 14,5 | VT16M AA9 | F03FA04476 |



Jointing

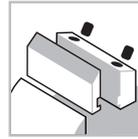




TW23M - TW20M Jointing cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Jointing



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Jointing.

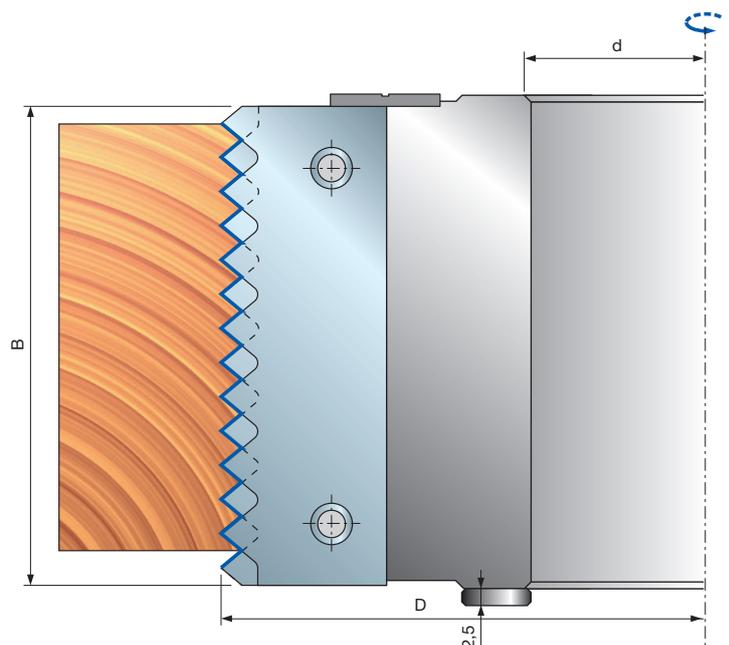
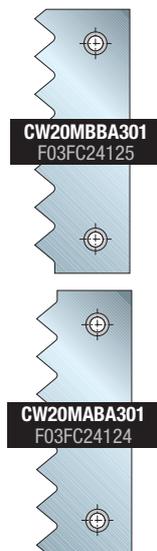
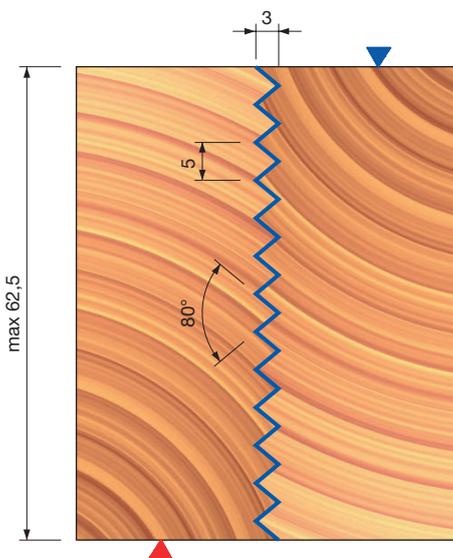
Technical information:

Performance knives tool to work long grain on short workpieces.

- Two different types of knives are fitted on the cutterhead to obtain a perfect joint with a 90° sharp edge.
- The max. timber thickness possible is 62,5 mm.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 140 | 70 | 30 | 4 | 9.600 | TW20M BA3 | F03FC22727 |
| 140 | 70 | 32 | 4 | 9.600 | TW20M BG3 | F03F676528 |
| 140 | 70 | 35 | 4 | 9.600 | TW20M BF3 | F03FC20564 |
| 140 | 70 | 50 | 4 | 9.600 | TW20M BD3 | F03FC25548 |
| 140 | 70 | 30 | 2 | 9.600 | TW23M BE3 | F03FC24404 |
| 140 | 70 | 32 | 2 | 9.600 | TW23M BG3 | F03F668303 |
| 140 | 70 | 35 | 2 | 9.600 | TW23M BF3 | F03FC20567 |
| 140 | 70 | 50 | 2 | 9.600 | TW23M BD3 | F03FC25549 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|-------------|------------|
| | Knife | 70 x 25 x 3 | CW20MABA301 | F03FC24124 |
| | Knife | 70 x 25 x 3 | CW20MBBA301 | F03FC24125 |
| | Wedge | 68 x 19 x 8 | CN11M C660A | F03FC01354 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Spacer | 50 x 2,5 x 30 | AN20M AI9 | F03FC00552 |
| | Spacer | 55 x 2,5 x 35 | AN20M BI9 | F03FC00553 |
| | Spacer | 52 x 2,5 x 32 | AN20M EI9 | F03FC24411 |



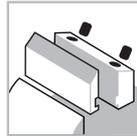


TW22M

Jointing cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Jointing



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Jointing.

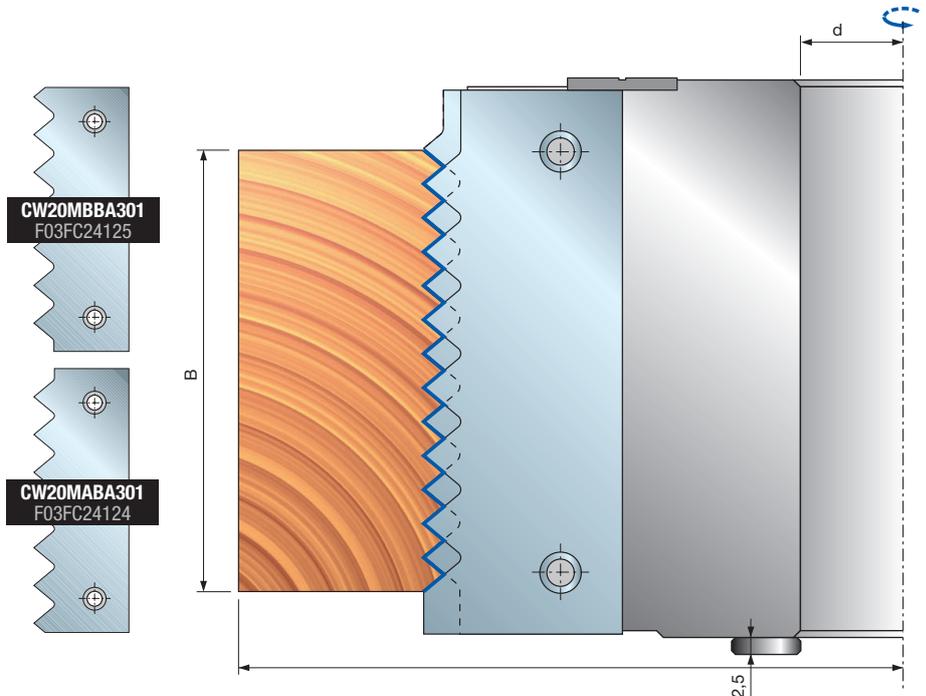
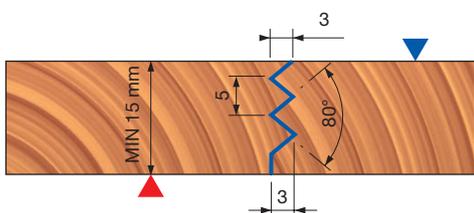
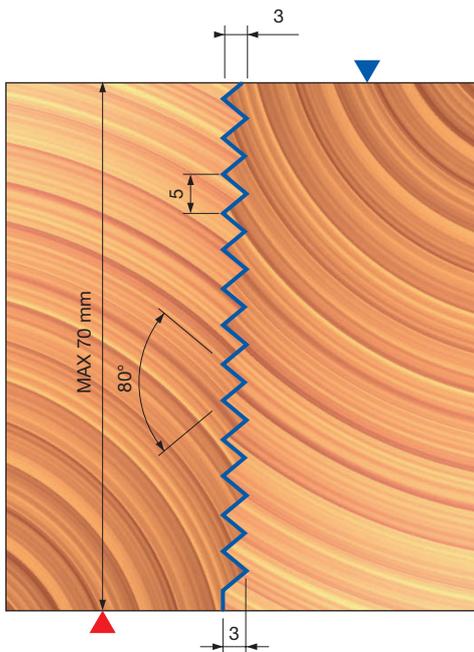
Technical information:

Performance knives tool to work long grain on short workpieces.

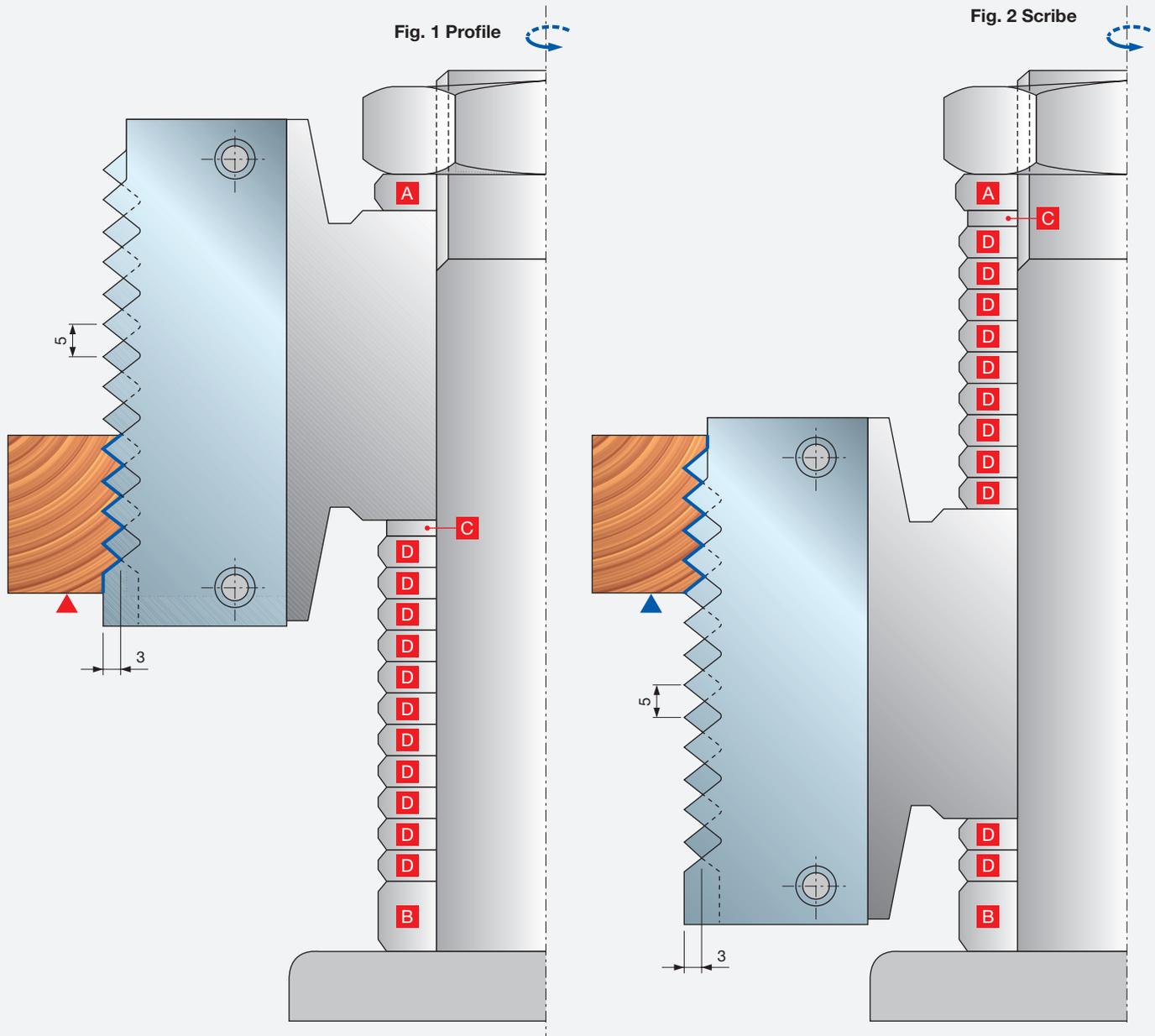
- Two different types of knives are fitted on the cutterhead to obtain a perfect joint with a 90° sharp edge.
- The max. timber thickness possible is 70 mm.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------|------------|
| 140 | 80 | 30 | 4 | - | 9.600 | TW22M BA3 | F03FC23047 |
| 140 | 80 | 32 | 4 | - | 9.600 | TW22M BG3 | F03FC24406 |
| 140 | 80 | 35 | 4 | - | 9.600 | TW22M BB3 | F03FC20566 |
| 140 | 80 | 50 | 4 | 2 | 9.600 | TW22M BD3 | F03FC24941 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. | |
|-----------|-------------------|------------------|---------------|------------|------------|
| | Knife | 80 x 29 x 3 | CW22MAAA301 | F03FC24126 | |
| | Knife | 80 x 29 x 3 | CW22MBAA301 | F03FC24127 | |
| | Wedge | 76 x 24 x 8 | CN13M AG9 | F03FC01388 | |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 | |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 | |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 | |
| | Allen key | 5 | CB03M EA9 | F03FA00169 | |
| TW22M BA3 | | Spacer | 50 x 2,5 x 30 | AN20M AI9 | F03FC00552 |
| TW22M BG3 | | Spacer | 52 x 2,5 x 32 | AN20M EI9 | F03FC24411 |
| TW22M BB3 | | Spacer | 55 x 2,5 x 35 | AN20M BI9 | F03FC00553 |



Application examples



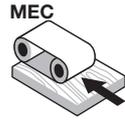
1: To obtain the profile, insert all spacers "C" and "D" below the tool as indicated in figure A.

2: To achieve the counterprofile remove spacer "C" and as many spacers "D" as the number of teeth "C" and in use, placing them above the tool as indicated in figure B. In the example above there are 9 teeth not in use (Fig. A), so 9 spacers "D" will be removed together with spacer "C" and placed above the tool (Fig. B).

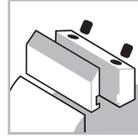
- Spacers "A-B": supplied with machine.
- Spacer "C": 2,5 mm thickness, equal to 1/2 the tooth's pitch, for the exactpositioning of the tool, in order to carry out the counter profile.
- Spacers "D": 5 mm thickness, (equal to the tooth's pitch) supplied onrequest; cod: **AN04M BB9**.

TW01M

Finger joint cutterheads



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Jointing



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Jointing.

Technical information:

Performance knives tool able to produce different jointing profiles on the same tool body.

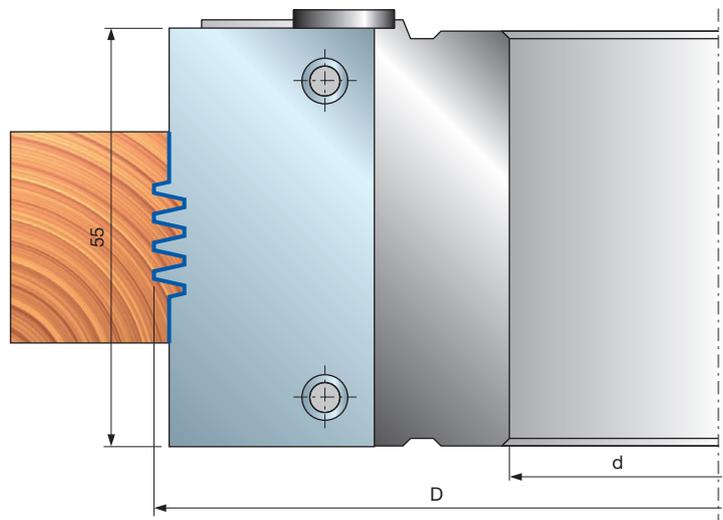
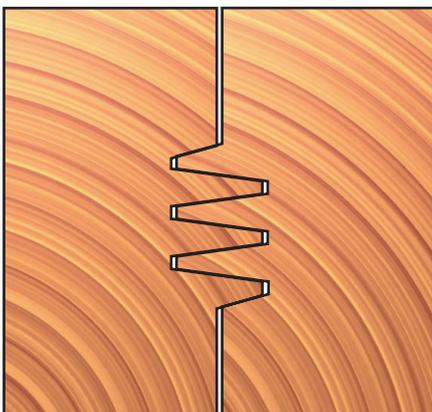
- Possible to adjust the type of joint (tight, regular, loose) by means of a thumb screw mechanism.
- Tool to work long and cross grain on short workpieces.
- The item does not include knives and support plates.
- Steel body.
- Rebore not available.

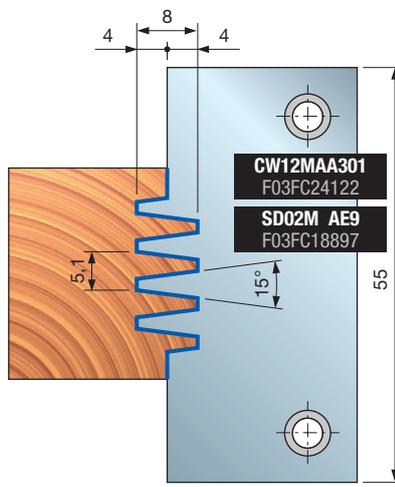
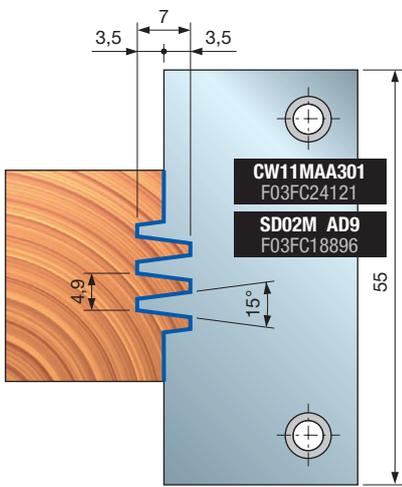
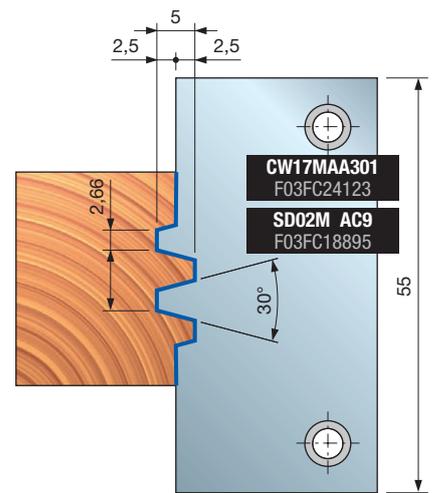
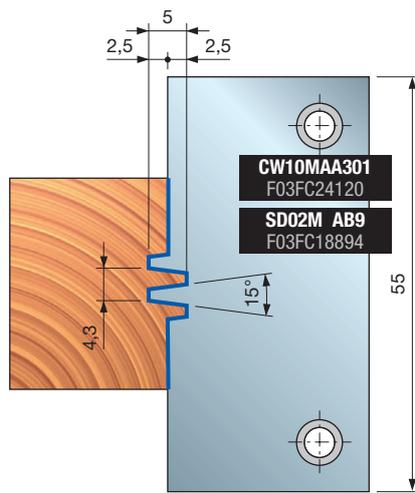
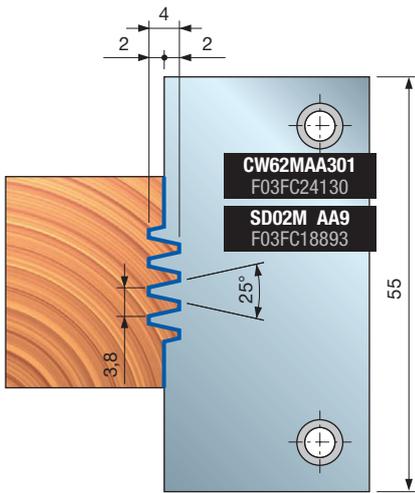
| D | B | d | Z | Max RPM | Freud Code | Art. No. |
|-----|----|----|---|---------|------------|------------|
| mm | mm | mm | | 1/min. | | |
| 150 | 55 | 35 | 4 | 9.600 | TW01M AB3 | F03FC20555 |

| Spare parts | | Dimensions | Freud Code | Art. No. |
|---|-------------------|----------------|-------------|------------|
| | | mm | | |
|  | Wedge | 53 x 19 x 8,5 | CN11M C510A | F03FC24405 |
|  | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
|  | Screw | M5 x 8 | VT08M AC9 | F03FC20652 |
|  | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
|  | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
|  | Screw | M4 x 6 | 2602M CE9 | F03FA07349 |
|  | Screw | M3 x 8 | 2607M AB9 | F03F010001 |
|  | Allen key | 5 | CB03M EA9 | F03FA00169 |

Order example

| Item | Art. No. | Dimensions | Quantity |
|------------|------------|------------------|----------|
| | | mm | PCS. |
| TW01M AB3 | F03FC20555 | 150 x 55 x 35 Z4 | 1 |
| CW10MAA301 | F03FC24120 | 55 x 29 x 3 | 4 |
| SD02M AB9 | F03FC18894 | 55 x 27 x 5,5 | 4 |

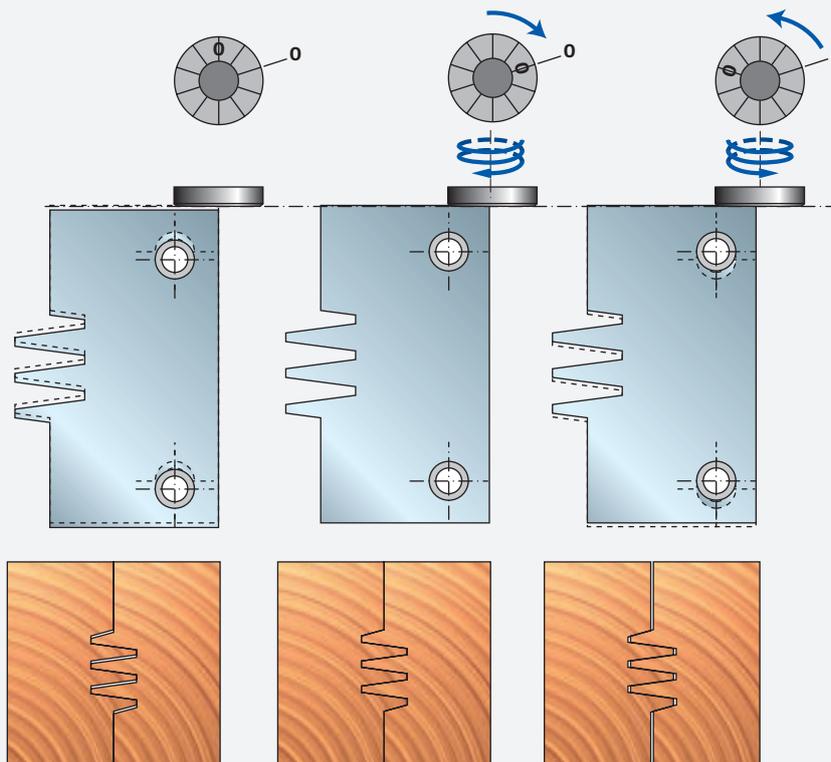




| Dimensions | Spare knives | Art. No. |
|-------------|--------------|------------|
| 55 x 29 x 3 | CW62MAA301 | F03FC24130 |
| 55 x 29 x 3 | CW10MAA301 | F03FC24120 |
| 55 x 29 x 3 | CW17MAA301 | F03FC24123 |
| 55 x 29 x 3 | CW11MAA301 | F03FC24121 |
| 55 x 29 x 3 | CW12MAA301 | F03FC24122 |

| Dimensions | Spare support plates | Art. No. |
|---------------|----------------------|------------|
| 55 x 27 x 5,5 | SD02M AA9 | F03FC18893 |
| 55 x 27 x 5,5 | SD02M AB9 | F03FC18894 |
| 55 x 27 x 5,5 | SD02M AC9 | F03FC18895 |
| 55 x 27 x 5,5 | SD02M AD9 | F03FC18896 |
| 55 x 27 x 5,5 | SD02M AE9 | F03FC18897 |

Adjustment examples:



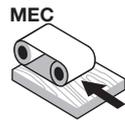
Regular joint

Tight joint

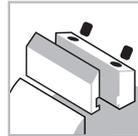
Loose joint

TW24M

Adjustable finger joint cutterheads set



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Jointing



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Jointing.

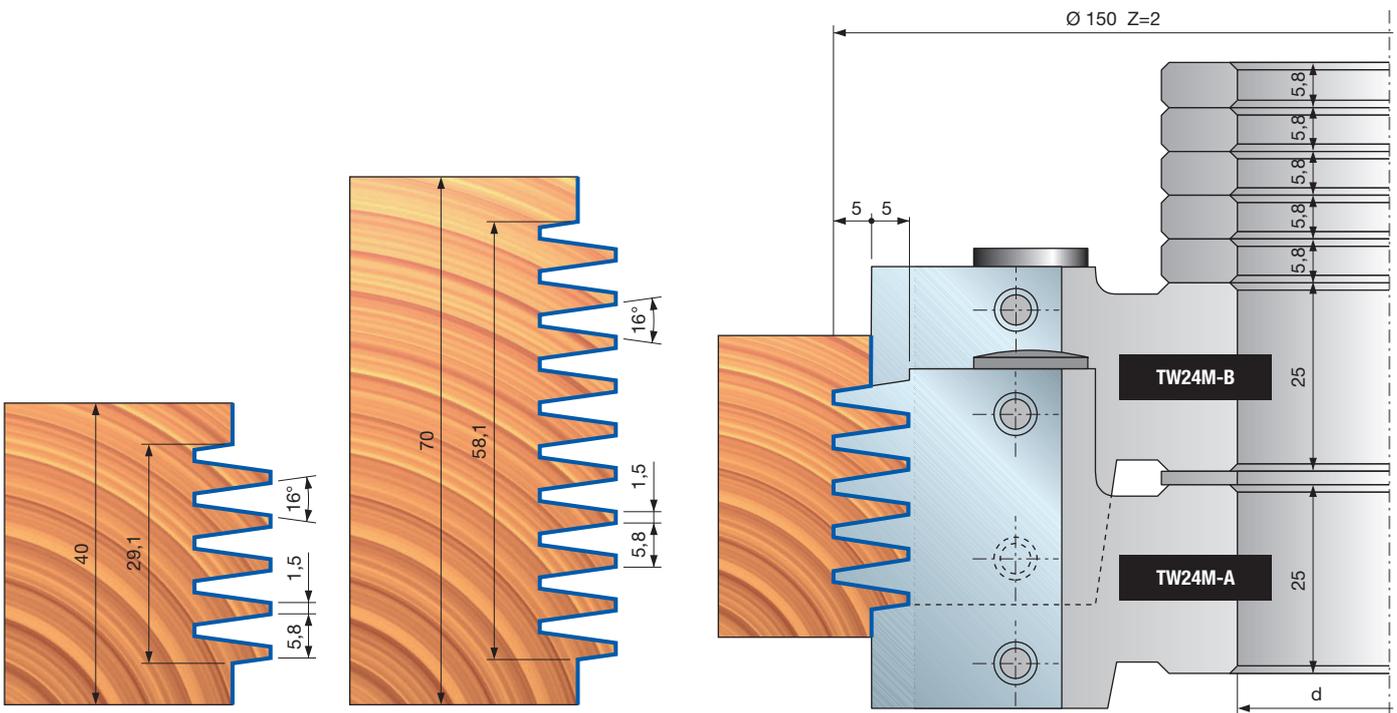
Technical information:

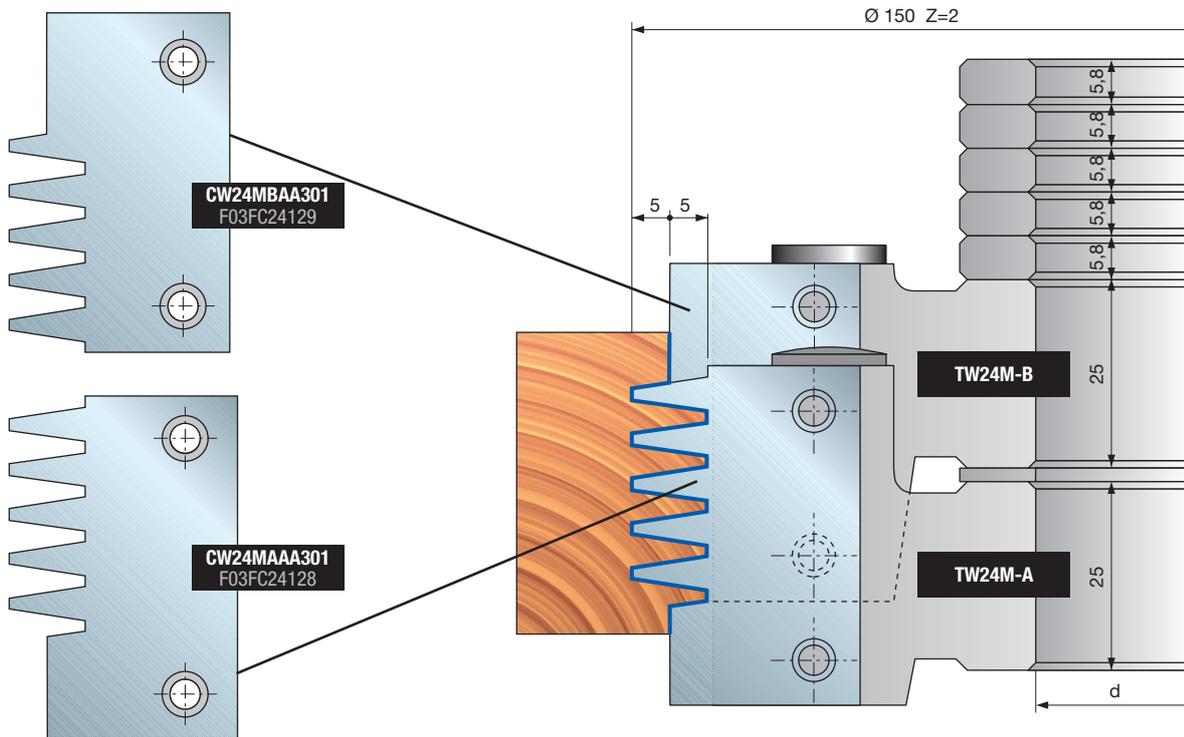
Adjustable tool to work long and cross grain on short workpieces.

- Adjustable for wood thicknesses between 40 and 70 mm.
- Cutterhead supplied with resharpenable HW knives and spacers.
- Steel body.
- Rebore not available.

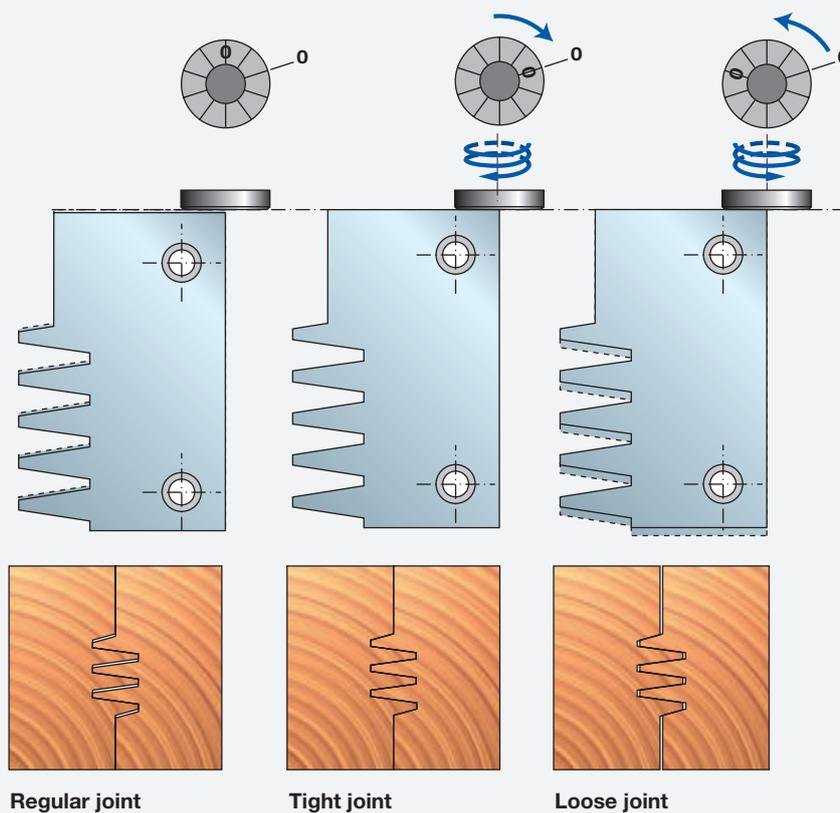
| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 150 | - | 30 | 2 | 9.000 | TW24M AA3 | F03FC24412 |
| 150 | - | 32 | 2 | 9.000 | TW24M AE3 | F03FC24413 |
| 150 | - | 35 | 2 | 9.000 | TW24M AB3 | F03FC20568 |
| 150 | - | 40 | 2 | 9.000 | TW24M AC3 | F03FC20569 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----|---------------------|------------------|-------------|------------|
| | Knife for tool. "A" | 45 x 30 x 3 | CW24MAAA301 | F03FC24128 |
| | Knife for tool. "B" | 45 x 30 x 3 | CW24MBAA301 | F03FC24129 |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| | Screw | M6 x 7 x 18 | VT08M AG9 | F03FC20653 |
| | Wedge | 41 x 17 x 8 | CN11M B410A | F03FC01352 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M4 x 6 | 2602M CE9 | F03FA07349 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Allen key | 2 | 2619M BA9 | F03FA07431 |
| AA3 | Set spacers | 50 x 5,8 x 30 | AN04M AC9 | F03FC00500 |
| AB3 | Set spacers | 55 x 5,8 x 35 | AN04M BC9 | F03FC00502 |
| AC3 | Set spacers | 60 x 5,8 x 40 | AN04M CC9 | F03FC00503 |
| AE3 | Set spacers | 82 x 5,8 x 32 | AN04M EC9 | F03FC24414 |





Adjustment examples:



Follow instructions below:

- Before rotating the adjusting screw, the clamping screw must be loosened.
- Rotating the adjusting screw clockwise, the tightness of the screw increases progressively (every notch on the adjusting screw corresponds to a movement of 1/10mm).
- The perfect alignment of the knives is 0:0 (the "0" on the adjusting screw with the "0" on the tool body). This alignment results in a tight joint.
- Rotate the adjusting screw anti-clockwise in order to loosen the joint.

Grooving



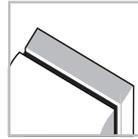


FI22M

Brazed cutters for pockets



Manual Feed



Brazed Cutters



Steel Body



Softwood



Hardwood



Grooving

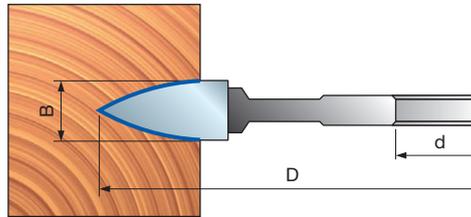
Machines:
Biscuit jointer.

Materials:
Softwood and hardwood.

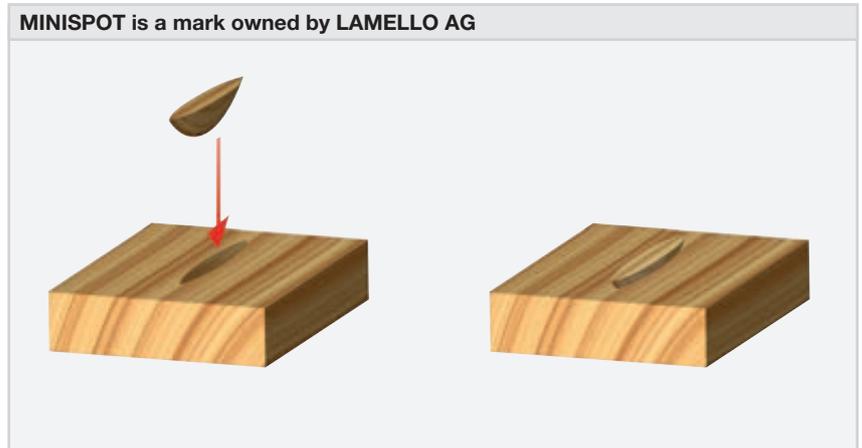
Applications:
Grooving.

- Technical information:**
Brazed cutter with non-stick coated body.
- Device for patching resin pockets, cracks, damaged edges and other wood flaws.
 - Steel body.
 - Rebore not available.

| D | B | d | Z | Max RPM | Freud Code | Art. No. |
|-----|----|----|-----|---------|------------|------------|
| mm | mm | mm | | 1/min. | | |
| 100 | 8 | 22 | 2+2 | 13.300 | FI22M AB3 | F03FS00680 |



MINISPOT is a mark owned by LAMELLO AG





FI02M Brazed cutters for biscuit jointers



Manual Feed



Brazed Cutters



Steel Body



Softwood



Hardwood



Chipboard



Laminated
Chipboard



MDF

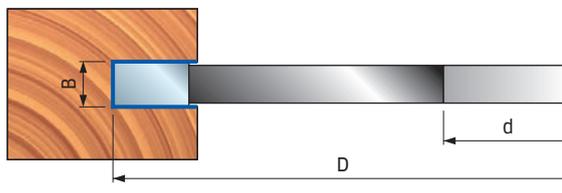


Laminated
MDF



Grooving

| D | B | d | Z | Max RPM | Freud Code | Art. No. |
|-----|------|----|---|---------|------------|------------|
| mm | mm | mm | | 1/min. | | |
| 100 | 3,95 | 22 | 6 | 23.000 | FI02M BX3 | F03FS00656 |



Machines:

Biscuit jointer.

Materials:

Softwood, hardwood and wood based panels.

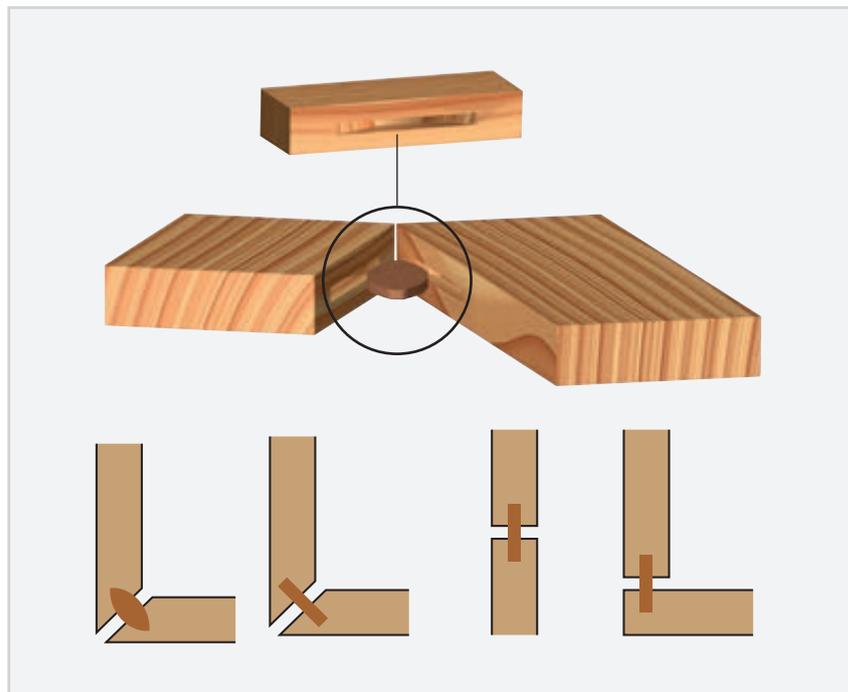
Applications:

Grooving.

Technical information:

Brazed cutter for corner joints with anti-kickback technology.

- Good quality grooving on softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.
- Steel body.
- Rebore not available.



FI02M

Grooving brazed cutters for biscuit jointers with spurs



Manual Feed



Brazed Cutters



Steel Body



Softwood



Hardwood



Chipboard



Laminated chipboard



MDF



Laminated MDF



Grooving



Machines:
Biscuit jointer.

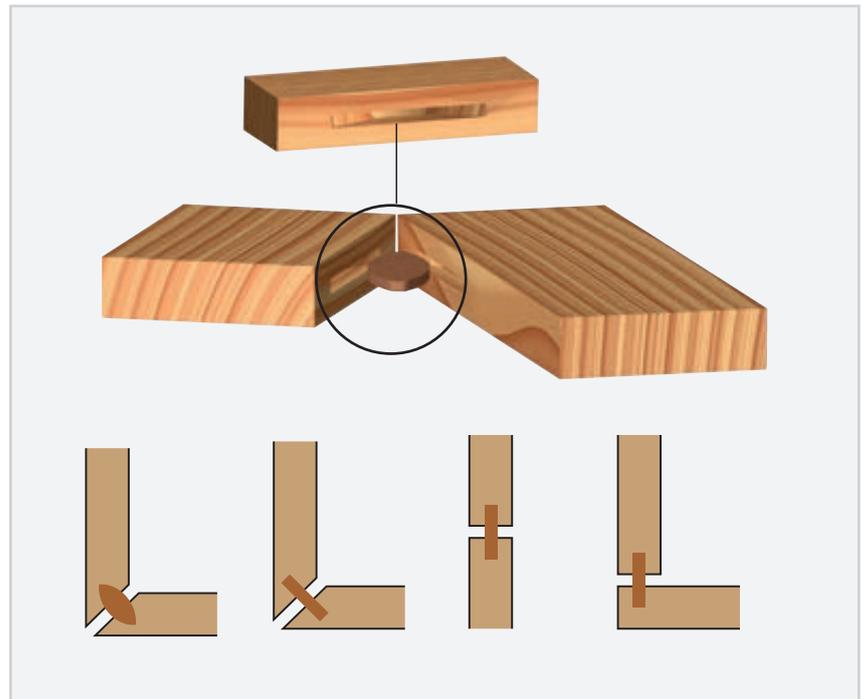
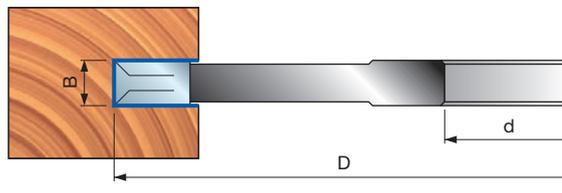
Materials:
Softwood, hardwood and wood based panels.

Applications:
Grooving.

Technical information:
Brazed cutters for corner joints.

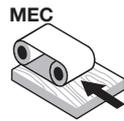
- Good quality grooving on softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.
- Steel body.
- Rebore not available.

| D | B | d | Z | V | Max RPM | Freud Code | Art. No. |
|-----|----|----|---|-------|---------|------------|------------|
| mm | mm | mm | | mm | 1/min. | | |
| 100 | 4 | 22 | 2 | 2 + 2 | 13.300 | FI02M BZ3 | F03FS00658 |



FI02M

Grooving brazed cutters



Automatic Feed



Brazed Cutter



Steel Body



Softwood



Hardwood



Chipboard



Laminated chipboard



MDF



Laminated MDF



Grooving

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

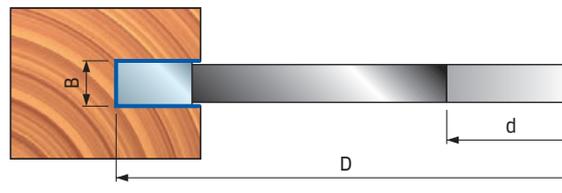
Grooving.

Technical information:

Brazed cutters for good quality grooving on softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.

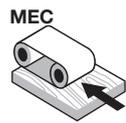
- Steel body.
- Rebore not available.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 120 | 4 | 35 | 6 | 12.000 | FI02M CD3 | F03FS00659 |
| 120 | 6 | 35 | 6 | 12.000 | FI02M CI3 | F03FS00660 |
| 140 | 4 | 35 | 6 | 10.000 | FI02M FE3 | F03FS00661 |
| 140 | 6 | 35 | 6 | 10.000 | FI02M FN3 | F03FS00662 |
| 140 | 8 | 35 | 6 | 10.000 | FI02M FS3 | F03FS00663 |
| 140 | 10 | 35 | 6 | 10.000 | FI02M FY3 | F03FS00664 |
| 140 | 12 | 35 | 6 | 10.000 | FI02M GB3 | F03FC07393 |
| 140 | 14 | 35 | 6 | 10.000 | FI02M GF3 | F03FC07400 |
| 140 | 16 | 35 | 6 | 10.000 | FI02M GK3 | F03FC07406 |
| 140 | 18 | 35 | 6 | 10.000 | FI02M GN3 | F03FC07409 |
| 140 | 20 | 35 | 6 | 10.000 | FI02M GP3 | F03FC07413 |

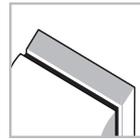


FI14M

Grooving brazed cutters



Automatic Feed



Brazed Cutter



Steel Body



Softwood



Hardwood



Chipboard



Laminated chipboard



MDF



Laminated MDF



Grooving



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

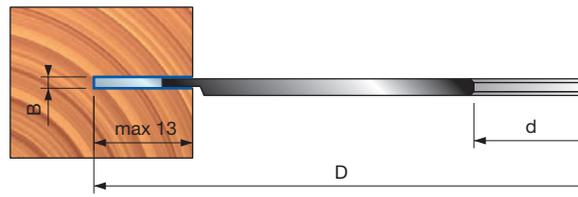
Grooving.

Technical information:

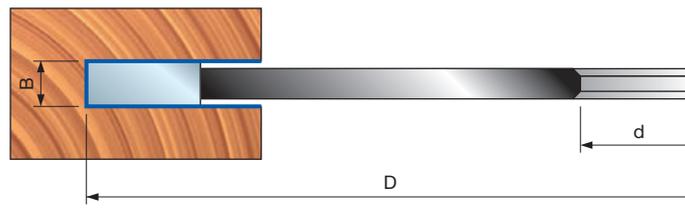
Brazed cutters for good quality grooving on softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.

- Steel body.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|----|-------------------|------------------|------------|
| 150 | 1,5 | 30 (50) | 18 | 14.500 | FI14M AA3 | F03FS00665 |
| 150 | 2 | 30 (50) | 18 | 14.500 | FI14M AE3 | F03FS00667 |
| 150 | 2,5 | 30 (50) | 18 | 14.500 | FI14M AH3 | F03FS00668 |
| 150 | 3 | 30 (50) | 18 | 14.500 | FI14M AM3 | F03FS00669 |
| 150 | 4 | 30 (50) | 18 | 14.500 | FI14M AR3 | F03FS00670 |
| 150 | 5 | 30 (50) | 18 | 14.500 | FI14M AZ3 | F03FS00673 |
| 180 | 3 | 30 (50) | 24 | 11.500 | FI14M DA3 | F03FS00677 |
| 180 | 4 | 30 (50) | 24 | 11.500 | FI14M DC3 | F03FS00678 |



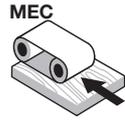
FI14M AA3
F03FS00665





FI07M

Adjustable grooving cutters with spurs



Automatic Feed



Brazed Cutter



Steel Body



Softwood



Hardwood



Chipboard



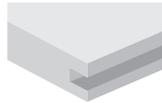
Laminated chipboard



MDF



Laminated MDF



Grooving

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Grooving.

Technical information:

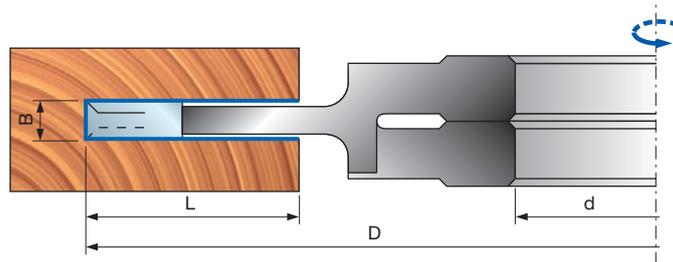
Brazed cutters for good quality adjustable grooving on softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.

- Adjustable with spacers.
- Steel body.
- Rebore not available.

| D mm | B-B1 mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|------------|---------|-----|-----|-------------------|------------------|------------|
| 150 | 3-5,5 | 35 | 2+2 | 2+2 | 9.000 | FI07M AB3 | F03FC07629 |
| 150 | 4-7,5 | 35 | 2+2 | 2+2 | 9.000 | FI07M AE3 | F03FC07634 |
| 150 | 7,5-14,5 | 35 | 2+2 | 2+2 | 9.000 | FI07M AL3 | F03FC07643 |
| 160 | 10-19,5 | 35 | 2+2 | 2+2 | 9.000 | FI07M BB3 | F03FC07655 |

Depth of cut

| L mm | D mm |
|---------|---------|
| 27 | 150 |
| 32 | 160 |



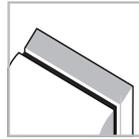


GL207M

Dado set



Manual Feed



Brazed Cutter



Steel Body



Softwood



Hardwood



Chipboard



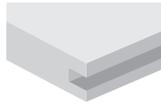
Laminated chipboard



MDF



Laminated MDF



Grooving

| D mm | B-B1 mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|------------|---------|----|-------------------|------------|------------|
| 207,1 | 6-22 | 30 | 34 | 8.500 | GL20701M | F03FS09237 |



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Grooving.

Technical information:

Tool set including 2 blades, 5 chippers and a spacers set for grooving thickness fine adjustment (Fig. 1).

- Steel body.

With 16 different combinations of the elements, it is possible to obtain a range of grooving thicknesses from 6 mm to 22 mm (7 mm excluded).

The matching pins in the set elements are preventing their mutual rotation (Fig. 2).

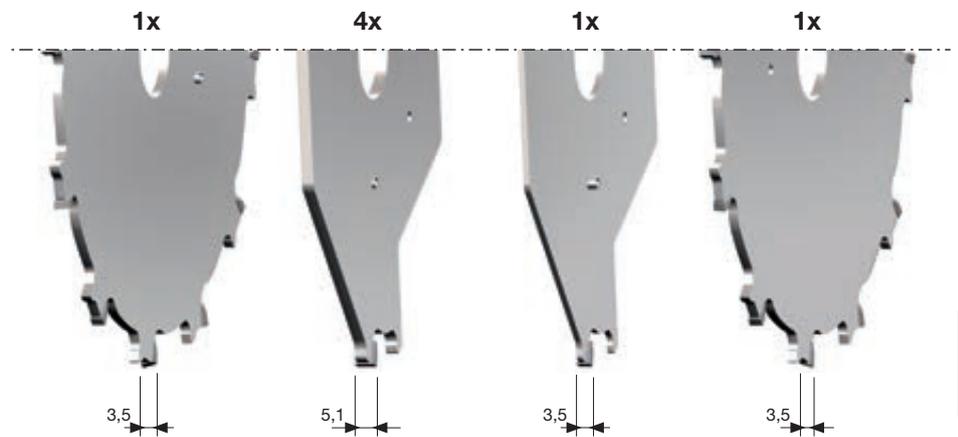
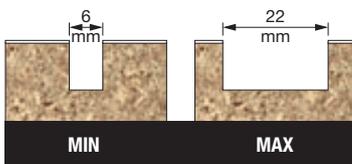
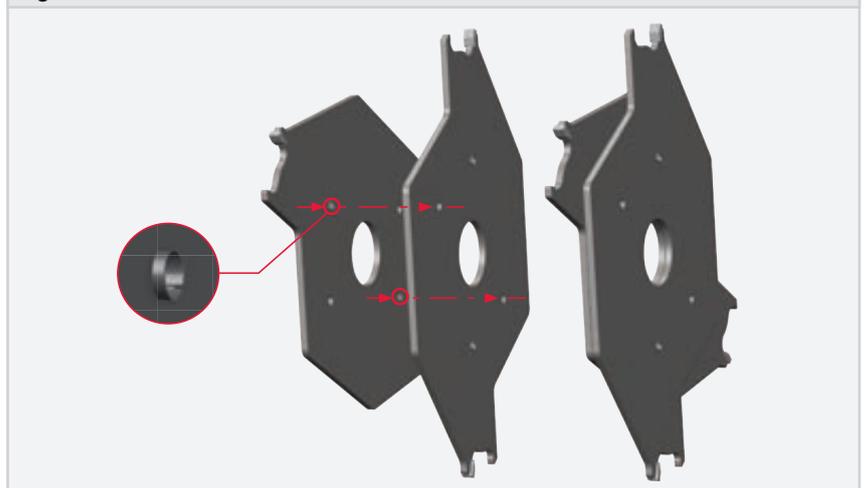


Fig. 1



Fig. 2



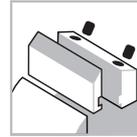


TG13M

Grooving cutterheads for biscuit jointers



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Chipboard



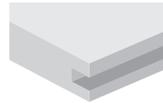
Laminated chipboard



MDF



Laminated MDF



Grooving

Machines:

Biscuit jointer.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Grooving.

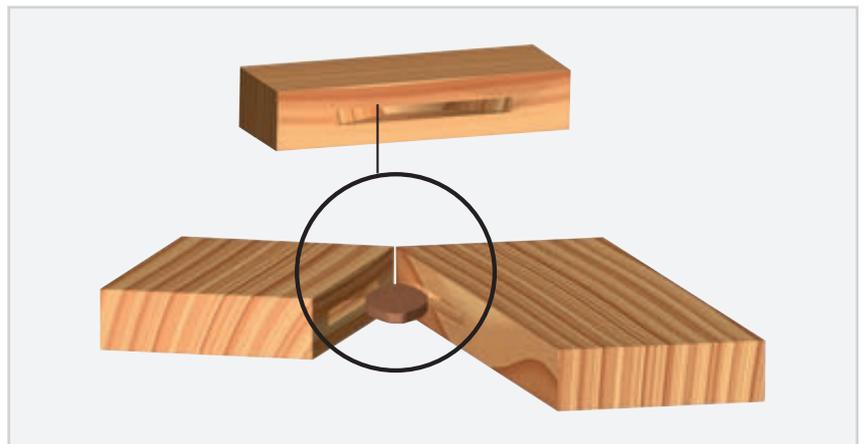
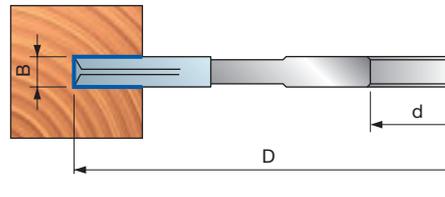
Technical information:

Disposable insert cutterhead for corner joints.

- Ideal for softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.
- Steel body.
- Rebore not available.

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------|------------|
| 100 | 4 | 22 | 4 | 4 | 10.500 | TG13M AA3 | F03FC20271 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|---------------|------------------|------------|------------|
| | Knife | 18 x 1,9 x 18 | CG03MAA310 | F03FH02876 |
| | Threaded ring | 11,6 x 1,5 x 4 | VT18M BA9 | F03FA04483 |
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| | Threaded ring | 9,4 x 1,7 x 4 | VT18M DA9 | F03FA04487 |
| | Screw | M4 x 3,2 | VT05M BB9 | F03FA04447 |
| | Torx key | T9 | CB03M CA9 | F03FA00165 |

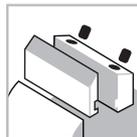


TG11M

Adjustable grooving cutterhead sets



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Chipboard



Laminated chipboard



MDF



Laminated MDF



Grooving

Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Grooving.

Technical information:

Disposable knives and insert set for adjustable grooves.

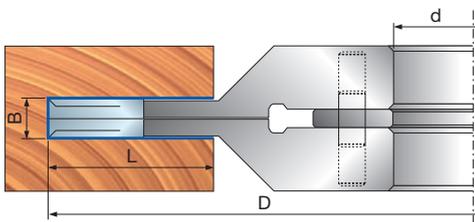
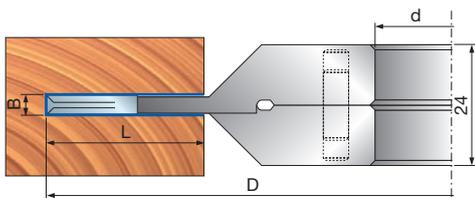
- Steel body.
- Rebore not available.

Depth of cut

| L mm | D mm |
|---------|---------|
| 30 | 160 |
| 40 | 200 |

Spare spacers set

| Dimensions mm | Code | Art. No. |
|------------------|-----------|------------|
| 50 x 8 x 30 | AN03M AH9 | F03FC00451 |
| 50 x 4 x 30 | AN03M AF9 | F03FC00449 |
| 50 x 12 x 30 | AN03M AI9 | F03FC00452 |
| 52 x 8 x 32 | AN03M GF9 | F03FC24529 |
| 52 x 4 x 32 | AN03M GE9 | F03FC24528 |
| 52 x 12 x 32 | AN03M GG9 | F03FC24530 |
| 55 x 8 x 35 | AN03M BH9 | F03FC00461 |
| 55 x 4 x 35 | AN03M BF9 | F03FC00459 |
| 55 x 12 x 35 | AN03M BI9 | F03FC00462 |
| 60 x 8 x 40 | AN11M CH9 | F03FC00532 |
| 60 x 4 x 40 | AN11M CF9 | F03FC00531 |
| 60 x 12 x 40 | AN11M CI9 | F03FC00533 |



| D mm | B-B1 mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|------------|---------|-----|-----|-------------------|------------|------------|
| 160 | 4 - 7,5 | 30 | 4+4 | 2+2 | 8.300 | TG11M AA3 | F03FC20228 |
| 160 | 4 - 7,5 | 32 | 4+4 | 2+2 | 8.300 | TG11M AE3 | F03FC24417 |
| 160 | 4 - 7,5 | 35 | 4+4 | 2+2 | 8.300 | TG11M AB3 | F03FC20229 |
| 160 | 4 - 7,5 | 40 | 4+4 | 2+2 | 8.300 | TG11M AC3 | F03FC20230 |
| 160 | 4 - 7,5 | 50 | 4+4 | 2+2 | 8.300 | TG11M AD3 | F03FC20231 |
| 160 | 8 - 15,5 | 30 | 2+2 | 2+2 | 8.300 | TG11M DA3 | F03FC20232 |
| 160 | 8 - 15,5 | 32 | 2+2 | 2+2 | 8.300 | TG11M DE3 | F03FC24418 |
| 160 | 8 - 15,5 | 35 | 2+2 | 2+2 | 8.300 | TG11M DB3 | F03FC20233 |
| 160 | 8 - 15,5 | 40 | 2+2 | 2+2 | 8.300 | TG11M DC3 | F03FC20234 |
| 160 | 8 - 15,5 | 50 | 2+2 | 2+2 | 8.300 | TG11M DD3 | F03FC23206 |
| 160 | 12,5 - 24 | 30 | 2+2 | 2+2 | 8.300 | TG11M TA3 | F03FC20237 |
| 160 | 12,5 - 24 | 32 | 2+2 | 2+2 | 8.300 | TG11M TE3 | F03FC24419 |
| 160 | 12,5 - 24 | 35 | 2+2 | 2+2 | 8.300 | TG11M TB3 | F03FC20238 |
| 160 | 12,5 - 24 | 40 | 2+2 | 2+2 | 8.300 | TG11M TC3 | F03FC20239 |
| 160 | 12,5 - 24 | 50 | 2+2 | 2+2 | 8.300 | TG11M TD3 | F03FC23207 |
| 200 | 4 - 7,5 | 32 | 4+4 | 2+2 | 6.600 | TG11M FE3 | F03FC24420 |
| 200 | 4 - 7,5 | 35 | 4+4 | 2+2 | 6.600 | TG11M FB3 | F03FC20235 |
| 200 | 8 - 15,5 | 35 | 2+2 | 2+2 | 7.000 | TG11M HB3 | F03FC20236 |
| 200 | 12,5 - 24 | 35 | 2+2 | 2+2 | 7.000 | TG11M VB3 | F03FC20240 |
| 200 | 12,5 - 24 | 50 | 2+2 | 2+2 | 7.000 | TG11M VD3 | F03FC25050 |

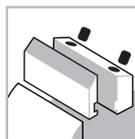
| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---------------|------------------|------------|------------|
| Knife | 18 x 1,9 x 18 | CG03MAA310 | F03FH02876 |
| Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| Screw | M4 x 3,2 | VT05M BB9 | F03FA04447 |
| Threaded ring | 11,6 x 1,5 x 4 | VT18M BA9 | F03FA04483 |
| Threaded ring | 9,4 x 1,7 x 4 | VT18M DA9 | F03FA04487 |
| Torx key | T9 | CB03M CA9 | F03FA00165 |
| Knife | 7,6 x 12 x 1,5 | CG08MAA310 | F03FH02902 |
| Wedge | 15 x 7,2 x 8 | CN09M DA9 | F03FC01295 |
| Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| Screw | M5 x 6 | VT05M AC9 | F03FA04446 |
| Screw | M5 x 16 | VT03M BB9 | F03FA04437 |
| Screw | M5 x 9,5 | VT08M AH9 | F03FC20654 |
| Allen key | 2,5 | 2619M CA9 | F03FA07432 |
| Torx key | T20 | CB03M CC9 | F03FA00167 |
| Knife | 12 x 12 x 1,5 | CG08MBA310 | F03FH02903 |
| Wedge | 15 x 10 x 8 | CN09M AA9 | F03FC01280 |
| Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| Screw | M6 x 22 | VT19M AB9 | F03FA04491 |
| Nut | 10 x 11,5 x 6 | VT20M AA9 | F03FA04497 |
| Allen key | 3 | CB03M AA9 | F03FA00162 |
| Torx key | T20 | CB03M CC9 | F03FA00167 |

TG18MG

Adjustable grooving cutterhead sets



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Chipboard



Laminated chipboard



MDF



Laminated MDF



Grooving

Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Grooving.

Technical information:

Disposable knives and insert set for adjustable grooves.

- Steel body.
- Rebore not available.

| D mm | B-B1 mm | d mm | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|------------|---------|-----|-------------------|------------|------------|
| 160 | 4-15 | 30 | 2+2 | 8.500 | TG18MG AA3 | F03FC24546 |
| 160 | 4-15 | 32 | 2+2 | 8.500 | TG18MG AE3 | F03FC24549 |
| 160 | 4-15 | 35 | 2+2 | 8.500 | TG18MG AB3 | F03FC24547 |
| 160 | 4-15 | 40 | 2+2 | 8.500 | TG18MG AC3 | F03FC24548 |
| 160 | 4-15 | 50 | 2+2 | 8.500 | TG18MG AD3 | F03FC25051 |
| 160 | 8-23 | 30 | 2+2 | 8.500 | TG18MG DA3 | F03FC24550 |
| 160 | 8-23 | 32 | 2+2 | 8.500 | TG18MG DE3 | F03FC24553 |
| 160 | 8-23 | 35 | 2+2 | 8.500 | TG18MG DB3 | F03FC24551 |
| 160 | 8-23 | 40 | 2+2 | 8.500 | TG18MG DC3 | F03FC24552 |
| 160 | 8-23 | 50 | 2+2 | 8.500 | TG18MG DD3 | F03FC25052 |
| 160 | 12,5-31,5 | 30 | 2+2 | 8.500 | TG18MG TA3 | F03FC24554 |
| 160 | 12,5-31,5 | 32 | 2+2 | 8.500 | TG18MG TE3 | F03FC24557 |
| 160 | 12,5-31,5 | 35 | 2+2 | 8.500 | TG18MG TB3 | F03FC24555 |
| 160 | 12,5-31,5 | 40 | 2+2 | 8.500 | TG18MG TC3 | F03FC24556 |
| 160 | 12,5-31,5 | 50 | 2+2 | 8.500 | TG18MG TD3 | F03FC25053 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|------------------------|---------------|------------------|------------|------------|
| | Knife | 7,6 x 12 x 1,5 | CG08MAA310 | F03FH02902 |
| | Wedge | 15 x 7,2 x 8 | CN09M DA9 | F03FC01295 |
| | Screw | M5 x 16 | VT03M BB9 | F03FA04437 |
| | Spur | 14 x 14 x 2 | RG01MAA310 | F03FH03034 |
| | Screw | M5 x 9,5 | VT08M AH9 | F03FC20654 |
| AA3 - ABS AC3 - AE3 | Knife | 18 x 1,9 x 18 | CG03MAA310 | F03FH02876 |
| | Screw | M4 x 3,2 | VT05M BB9 | F03FA04447 |
| | Threaded ring | 11,6 x 1,5 x 4 | VT18M BA9 | F03FA04483 |
| | Threaded ring | 9,4 x 1,7 x 4 | VT18M DA9 | F03FA04487 |
| DA3 - DB3 DC3 - DE3 | Torx key | T9 | CB03M CA9 | F03FA00165 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Torx key | T20 | CB03M CC9 | F03FA00167 |
| TA3 - TB3 TC3 - TE3 | Knife | 12 x 12 x 1,5 | CG08MBA310 | F03FH02903 |
| | Wedge | 15 x 10 x 8 | CN09M AA9 | F03FC01280 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M6 x 22 | VT19M AB9 | F03FA04491 |
| | Nut | 10 x 11,5 x 6 | VT20M AA9 | F03FA04497 |
| | Allen key | 3 | CB03M AA9 | F03FA00162 |
| | Torx key | T20 | CB03M CC9 | F03FA00167 |

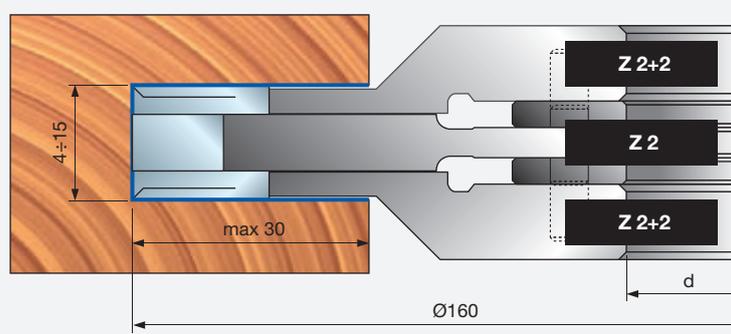
TG18MG

Adjustable grooving cutterheads sets

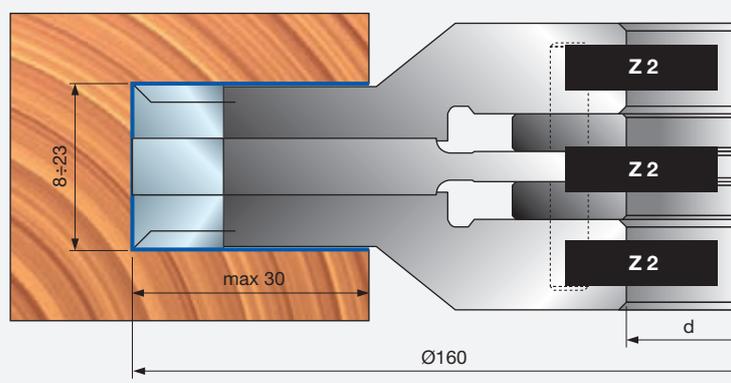
| | Spare spacers set | Dimensions mm | Freud Code | Art. No. |
|---|-------------------|----------------|------------|------------|
| ⊙ | Spacers set | 50 x 7,6 x 30 | AN03M AN9 | F03FC24566 |
| ⊙ | Spacers set | 52 x 7,6 x 32 | AN03M GH9 | F03FC24569 |
| ⊙ | Spacers set | 55 x 7,6 x 35 | AN03M BQ9 | F03FC24567 |
| ⊙ | Spacers set | 55 x 7,6 x 40 | AN11M CL9 | F03FC24568 |
| ⊙ | Spacers set | 50 x 11,6 x 30 | AN03M A09 | F03FC24570 |
| ⊙ | Spacers set | 52 x 11,6 x 32 | AN03M GI9 | F03FC24573 |
| ⊙ | Spacers set | 55 x 11,6 x 35 | AN03M BR9 | F03FC24571 |
| ⊙ | Spacers set | 55 x 11,6 x 40 | AN11M CM9 | F03FC24572 |
| ⊙ | Spacers set | 50 x 15,6 x 30 | AN03M AP9 | F03FC24574 |
| ⊙ | Spacers set | 52 x 15,6 x 32 | AN03M GL9 | F03FC24577 |
| ⊙ | Spacers set | 55 x 15,6 x 35 | AN03M BS9 | F03FC24575 |
| ⊙ | Spacers set | 55 x 15,6 x 40 | AN11M CN9 | F03FC24576 |

Example of profiles

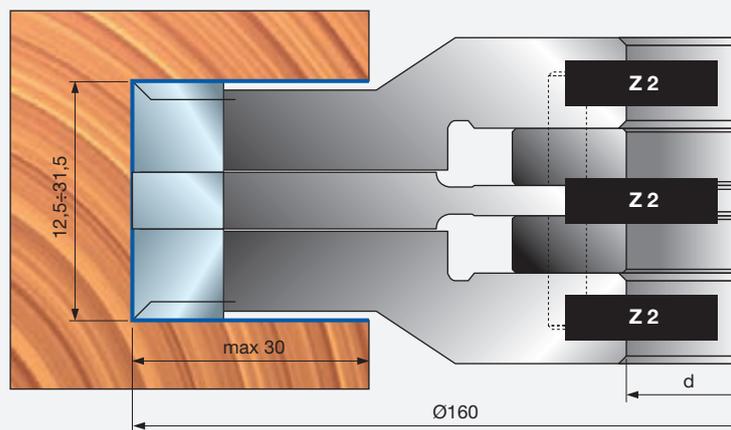
TG18MG
AA3 - AE3 - AB3 - AC3



TG18MG
DA3 - DE3 - DB3 - DC3



TG18MG
TA3 - TE3 - TB3 - TC3



Profiling



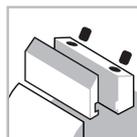


T135M - TG35M

Post forming cutterhead sets with disposable knives



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Chipboard



Laminated chipboard



MDF



Laminated MDF



Profiling

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Profiling.

Technical information:

Disposable knives cutterheads set indicated to work hardwood, melamine chipboard panels, veneer, bilaminated panels and MDF.

- Adjustable in terms of timber thickness and profile.
- Steel body.
- Rebores not available.
- Profile knives not included.
- Series of spacers (item AN03M CC9 - not included) with the following thicknesses: 0,1 - 0,2 - 0,3 - 0,5 - 1 - 2 - 3 - 6 - 8 - 10 mm.

T135M for planing

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 125 | 30 | 40 | 3 | 10.300 | T135M AC3 | F03FC20580 |
| 125 | 50 | 40 | 3 | 10.300 | T135M BC3 | F03FC20581 |

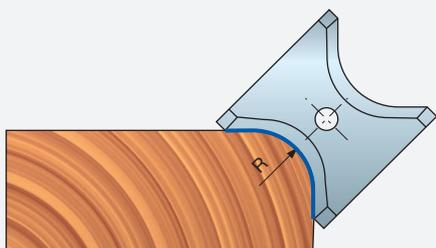
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------|------------------|------------|------------|
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| AC3 | | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
| | | 15 x 26 x 8 | CN09M AD9 | F03FC01283 |
| BC3 | | 50 x 12 x 1,5 | CG08MFA310 | F03FH02907 |
| | | 15 x 46 x 8 | CN09M AP9 | F03FC01290 |

TG35MD - TG35MS for rounding

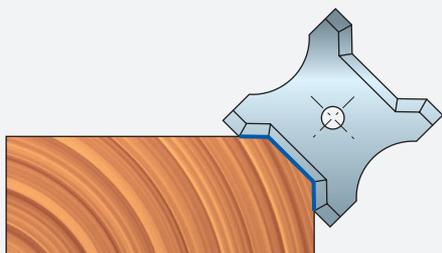
| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 140 | 13 | 40 | 3 | 10.300 | TG35MD EC3 | F03FC20280 |
| 148,6 | 20 | 40 | 3 | 10.300 | TG35MD CC3 | F03FC20278 |
| 156,2 | 26 | 40 | 3 | 10.300 | TG35MD DC3 | F03FC20279 |
| 140 | 13 | 40 | 3 | 10.300 | TG35MS EC3 | F03FC20283 |
| 148,6 | 20 | 40 | 3 | 10.300 | TG35MS CC3 | F03FC20281 |
| 156,2 | 26 | 40 | 3 | 10.300 | TG35MS DC3 | F03FC20282 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------|------------------|------------|------------|
| EC3 | | 12 x 11 x 8 | CN21M AC9 | F03FC01408 |
| | | M6 x 22 | VT19M AB9 | F03FA04491 |
| | | 10 x 11,5 x 6 | VT20M AA9 | F03FA04497 |
| CC3 | | 3 | CB03M AA9 | F03FA00162 |
| | | 18 x 18 x 8 | CN21M AA9 | F03FC01406 |
| | | M10 x 22 | VT19M MA9 | F03FA04496 |
| | | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| DC3 | | 5 | CB03M EA9 | F03FA00169 |
| | | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| | | 18 x 24 x 8 | CN21M AB9 | F03FC01407 |
| | | M10 x 22 | VT19M MA9 | F03FA04496 |
| | | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | 5 | CB03M EA9 | F03FA00169 | |
| | M5 x 7 x 16 | VT08M AE9 | F03FA04457 | |

Knives for rounding



Knives for chamfering



T135M - TG35M

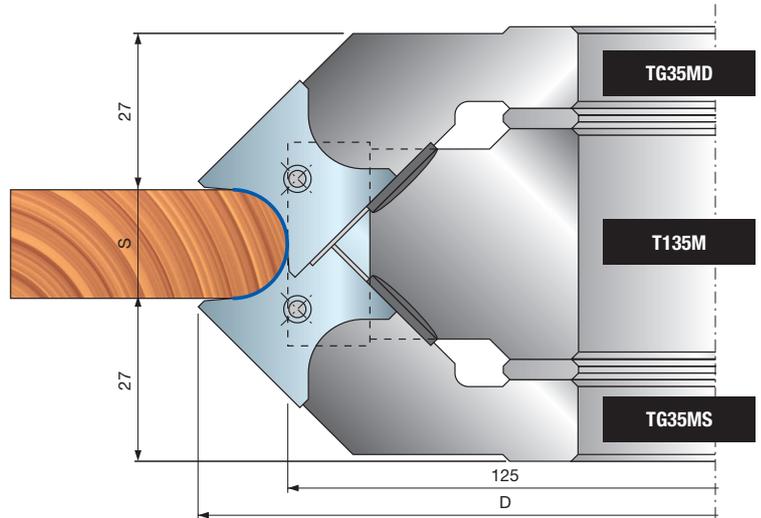
Post forming cutterhead sets with disposable knives

TG35MD EC3
TG35MS EC3

| S mm | |
|-----------|-----------|
| T135M AC3 | T135M BC3 |
| 4÷30 | 24÷50 |

Spare knives

| Dimensions mm | Radius mm | Freud Code | Art. No. |
|------------------|--------------|------------|------------|
| 13 x 16 x 2 | 45° | CG50MCE305 | F03FC23920 |
| 13 x 16 x 2 | 1 | CG50MCD305 | F03FC23919 |
| 13 x 16 x 2 | 2 | CG50MCA305 | F03FC23916 |
| 13 x 16 x 2 | 3 | CG50MCB305 | F03FC23917 |
| 13 x 16 x 2 | 4 | CG50MCC305 | F03FC23918 |

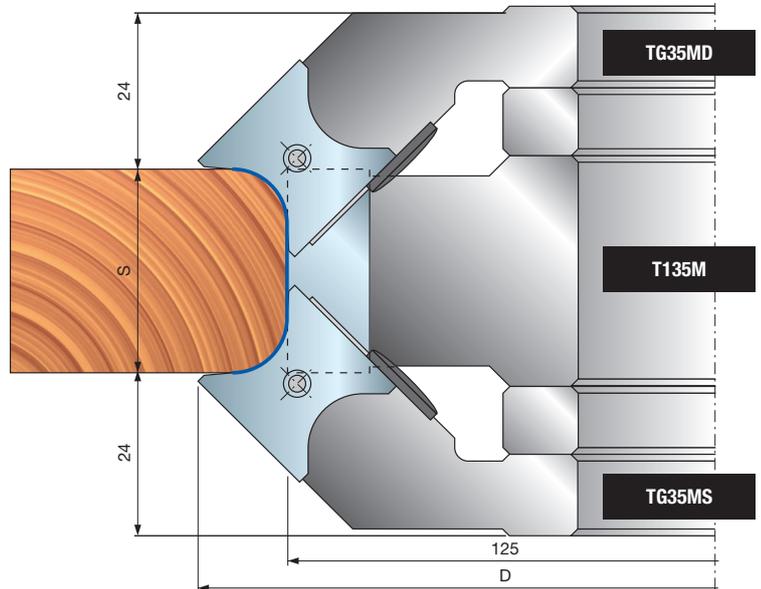


TG35MD CC3
TG35MS CC3

| S mm | |
|-----------|-----------|
| T135M AC3 | T135M BC3 |
| 10÷40 | 30÷60 |

Spare knives

| Dimensions mm | Radius mm | Freud Code | Art. No. |
|------------------|--------------|------------|------------|
| 20 x 21 x 2 | 45° | CG50MAE305 | F03FC23910 |
| 20 x 21 x 2 | 5 | CG50MAA305 | F03FC23906 |
| 20 x 21 x 2 | 6 | CG50MAB305 | F03FC23907 |
| 20 x 21 x 2 | 7 | CG50MAC305 | F03FC23908 |
| 20 x 21 x 2 | 8 | CG50MAD305 | F03FC23909 |

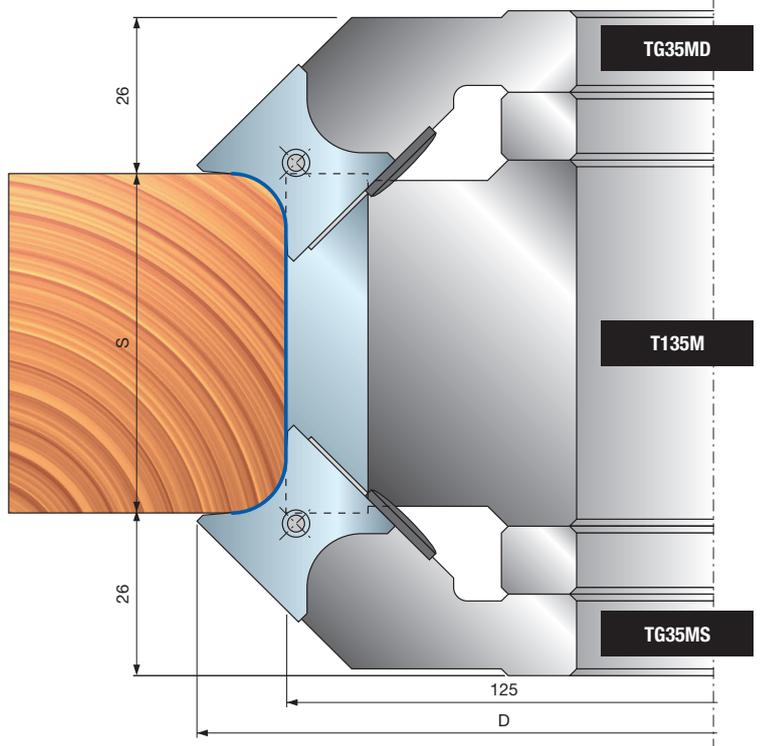


TG35MD DC3
TG35MS DC3

| S mm | |
|-----------|-----------|
| T135M AC3 | T135M BC3 |
| 18÷48 | 36÷68 |

Spare knives

| Dimensions mm | Radius mm | Freud Code | Art. No. |
|------------------|--------------|------------|------------|
| 26 x 24 x 2 | 45° | CG50MBE305 | F03FC23915 |
| 26 x 24 x 2 | 9 | CG50MBA305 | F03FC23911 |
| 26 x 24 x 2 | 10 | CG50MBB305 | F03FC23912 |
| 26 x 24 x 2 | 11 | CG50MBC305 | F03FC23913 |
| 26 x 24 x 2 | 12 | CG50MBD305 | F03FC23914 |



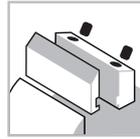


TP22M

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

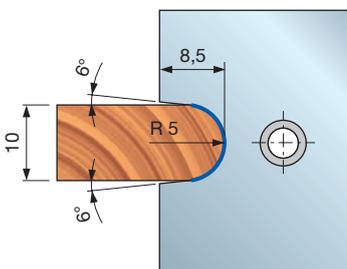
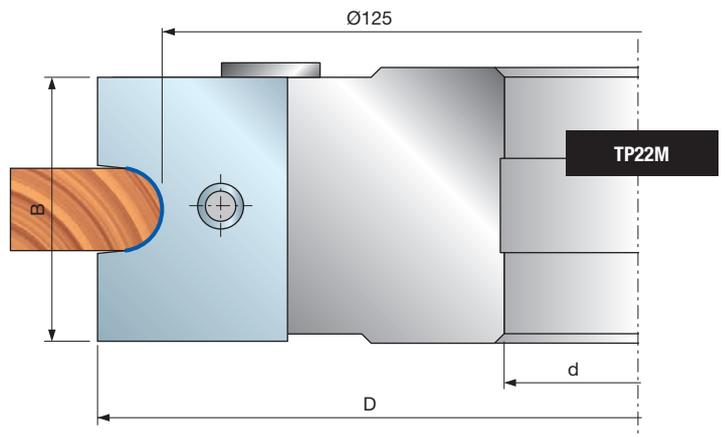
Technical information:

Performance knives tool for multiradius profiles.

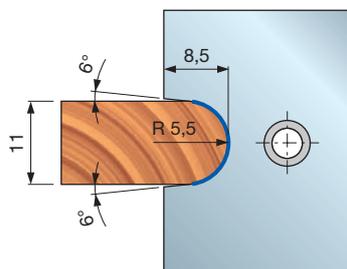
- Knives included.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Radius mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|--------------|-------------------|------------|------------|
| 142 | 35 | 30 | 2 | 5 - 5,5 - 6 | 9.000 | TP22M MA3 | F03F668939 |
| 142 | 35 | 32 | 2 | 5 - 5,5 - 6 | 9.000 | TP22M MB3 | F03F668633 |
| 142 | 35 | 40 | 2 | 5 - 5,5 - 6 | 9.000 | TP22M MC3 | F03FC20480 |

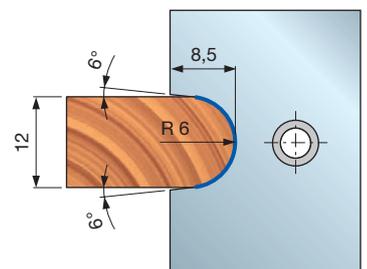
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|-------------|------------|
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Wedge | 33 x 23 x 8,5 | CN13M CI9A | F03FC23042 |
| | Knife | 35 x 24 x 3 R5 | CP22MM05001 | F03FC23952 |
| | Knife | 35 x 24 x 3 R5,5 | CP22MM05501 | F03FC23953 |
| | Knife | 35 x 24 x 3 R6 | CP22MM06001 | F03FC23954 |



CP22MM05001
F03FC23952



CP22MM05501
F03FC23953



CP22MM06001
F03FC23954

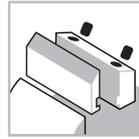


TP22M

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

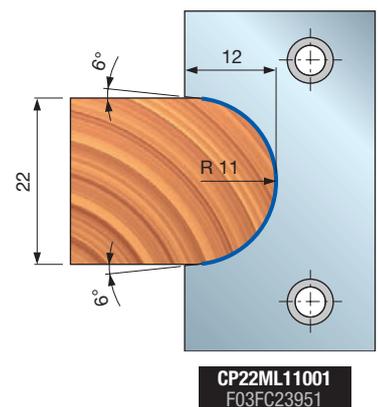
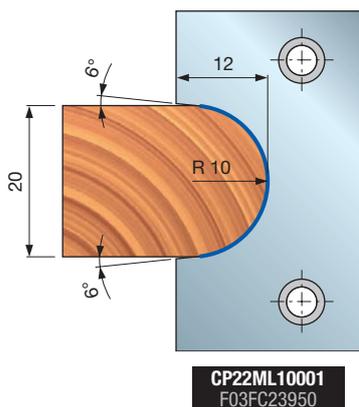
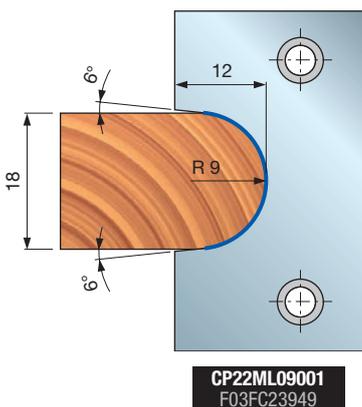
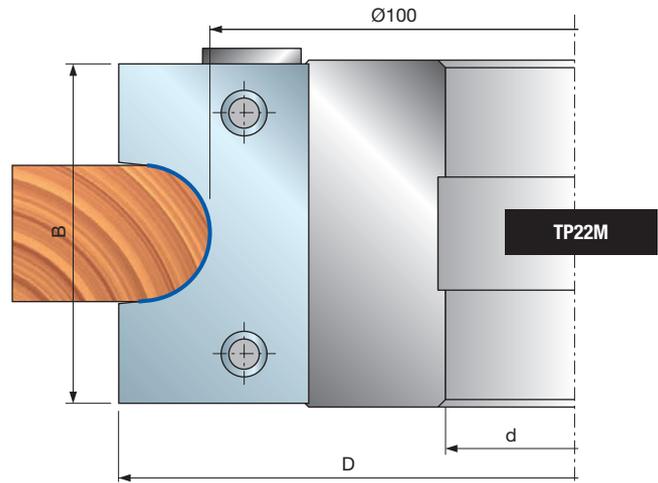
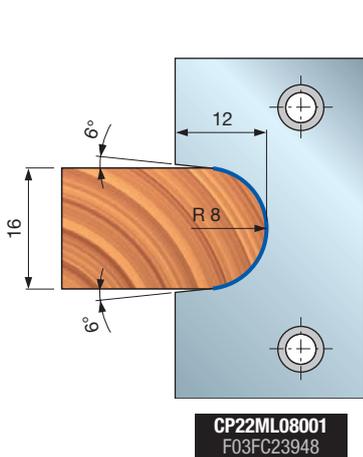
Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Radius mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|--------------|-------------------|------------|------------|
| 124 | 45 | 30 | 2 | 8-9-10-11 | 10.300 | TP22M LA3 | F03F668938 |
| 124 | 45 | 32 | 2 | 8-9-10-11 | 10.300 | TP22M LC3 | F03F668632 |
| 124 | 45 | 35 | 2 | 8-9-10-11 | 10.300 | TP22M LB3 | F03FC20479 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|-------------|------------|
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Wedge | 43 x 28 x 8,5 | CN13M CH9A | F03FC24449 |
| | Knife | 45 x 29 x 3 R8 | CP22ML08001 | F03FC23948 |
| | Knife | 45 x 29 x 3 R9 | CP22ML09001 | F03FC23949 |
| | Knife | 45 x 29 x 3 R10 | CP22ML10001 | F03FC23950 |
| | Knife | 45 x 29 x 3 R11 | CP22ML11001 | F03FC23951 |

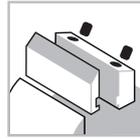


TP23M

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

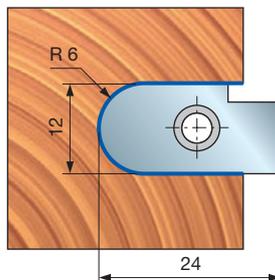
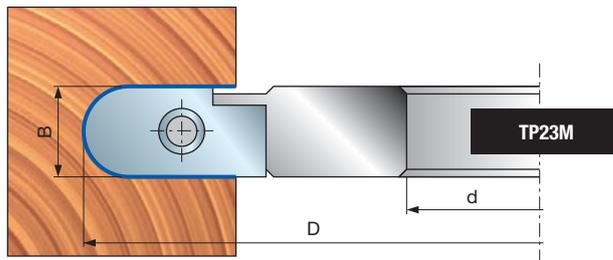
Technical information:

Performance knives tool for multiradius profiles.

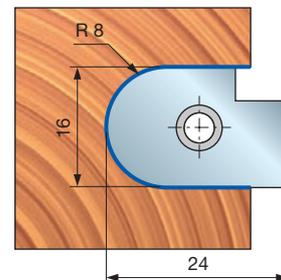
- Knives included.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Radius mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|--------------|-------------------|------------|------------|
| 120 | 12 | 30 | 2 | 6-8 | 9.500 | TP23M AA3 | F03FC24450 |
| 120 | 12 | 32 | 2 | 6-8 | 9.500 | TP23M AC3 | F03FC24451 |
| 120 | 12 | 35 | 2 | 6-8 | 9.500 | TP23M AB3 | F03FC20481 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|-------------|------------|
| | Knife | 12 x 24 x 3,5 R6 | CP23MA06001 | F03FC23955 |
| | Knife | 16 x 24 x 3,5 R8 | CP23MA08001 | F03FC23956 |
| | Screw | M6 x 10 | 2622M CB9 | F03FA07455 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 20 x 11,6 x 2,2 | VT18M AQ9 | F03FC21917 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |



CP23MA06001
F03FC23955



CP23MA08001
F03FC23956

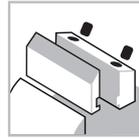


TP31M

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling

| D | B | d | Z | Radius | Max RPM | Freud Code | Art. No. |
|-----|----|----|---|--------|---------|------------|------------|
| mm | mm | mm | | mm | 1/min. | | |
| 150 | 24 | 30 | 2 | 8-10 | 9.000 | TP31M AA3 | F03FC22683 |
| 150 | 24 | 32 | 2 | 8-10 | 9.000 | TP31M AC3 | F03FC24558 |
| 150 | 24 | 35 | 2 | 8-10 | 9.000 | TP31M AB3 | F03FC20482 |

| Spare parts | | Dimensions | Freud Code | Art. No. |
|-------------|-------------------|-----------------|-------------|------------|
| | | mm | | |
| | Knife | 24 x 30 x 3 R8 | CP31MA08001 | F03FC23978 |
| | Knife | 24 x 30 x 3 R10 | CP31MA10001 | F03FC23979 |
| | Wedge | 18 x 17 x 8 | CN11M B180A | F03FC23171 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

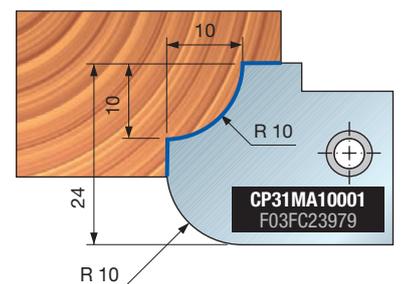
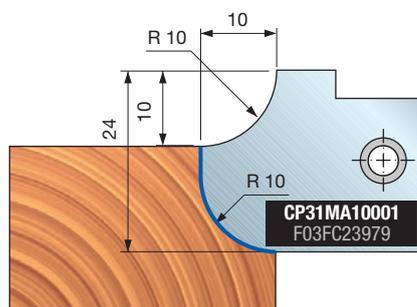
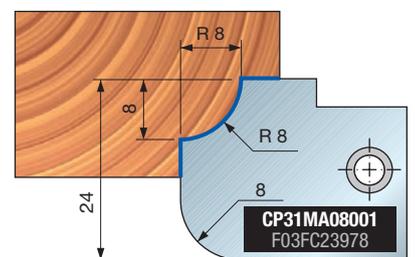
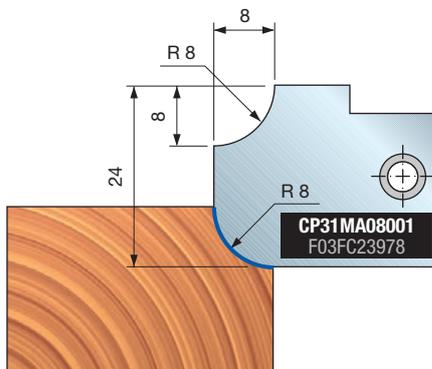
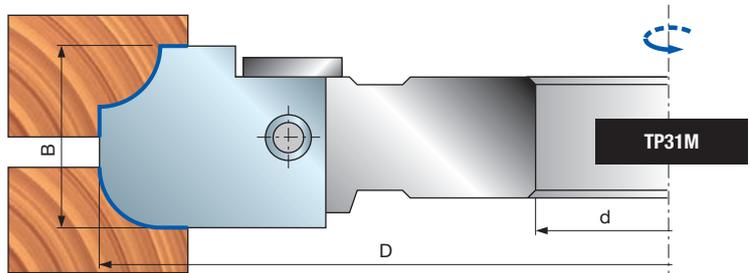
Applications:

Profiling.

Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.



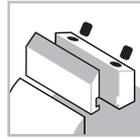


TP31M

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

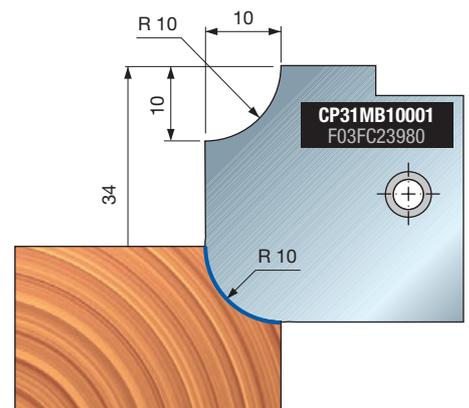
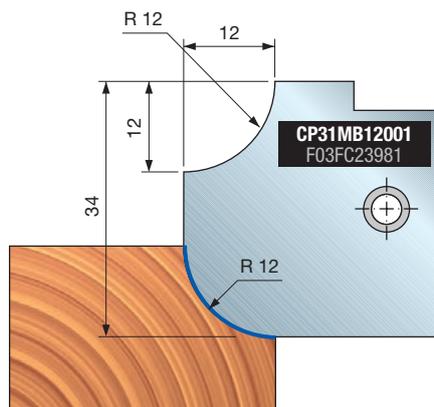
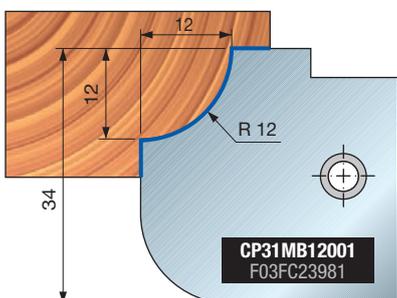
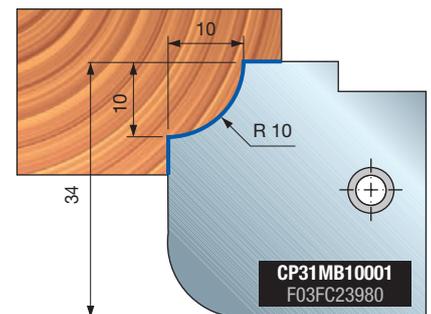
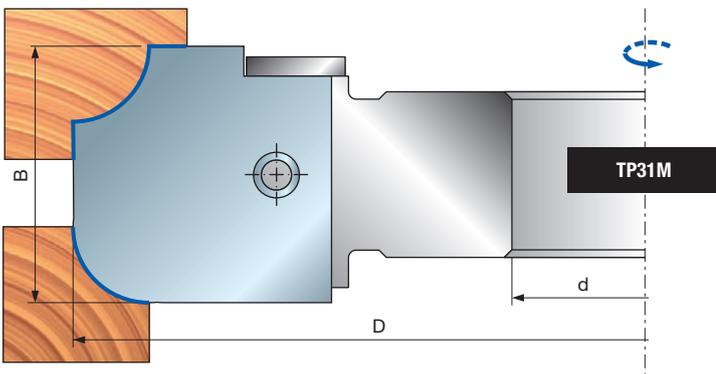
Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Radius mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|--------------|-------------------|------------|------------|
| 150 | 34 | 30 | 2 | 10-12 | 9.000 | TP31M EA3 | F03F668940 |
| 150 | 34 | 32 | 2 | 10-12 | 9.000 | TP31M EC3 | F03F668636 |
| 150 | 34 | 35 | 2 | 10-12 | 9.000 | TP31M EB3 | F03FC20484 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|-------------|------------|
| | Knife | 34 x 34 x 3 R10 | CP31MB10001 | F03FC23980 |
| | Knife | 34 x 34 x 3 R12 | CP31MB12001 | F03FC23981 |
| | Wedge | 32 x 32 x 8,5 | CN13M CF9A | F03FC01393 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |

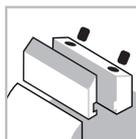


TP31M

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

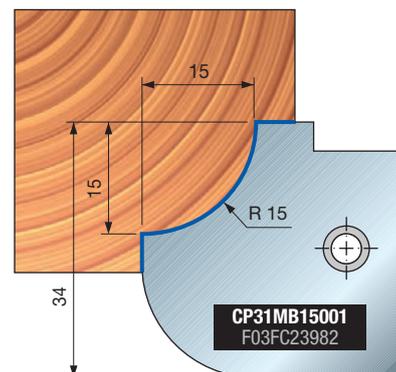
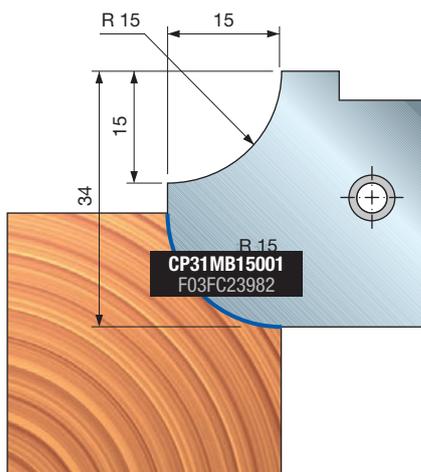
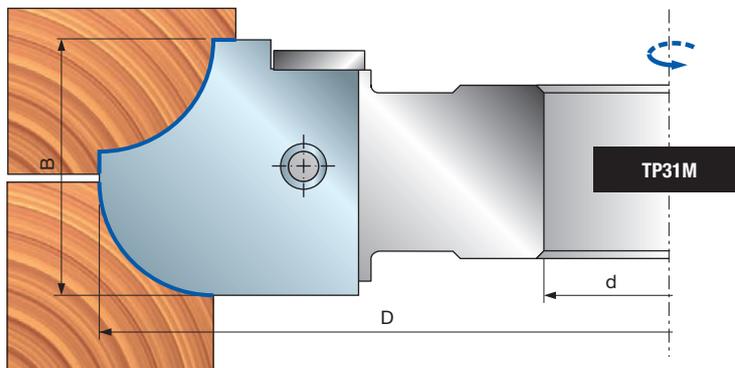
Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Radius mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|--------------|-------------------|------------|------------|
| 150 | 34 | 30 | 2 | 15 | 9.000 | TP31M FA3 | F03F668941 |
| 150 | 34 | 32 | 2 | 15 | 9.000 | TP31M FC3 | F03F668637 |
| 150 | 34 | 35 | 2 | 15 | 9.000 | TP31M FB3 | F03FC20485 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|-------------|------------|
| | Knife | 34 x 34 x 3 R15 | CP31MB15001 | F03FC23982 |
| | Wedge | 32 x 32 x 8,5 | CN13M CF9A | F03FC01393 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |

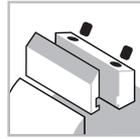


TP31M

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

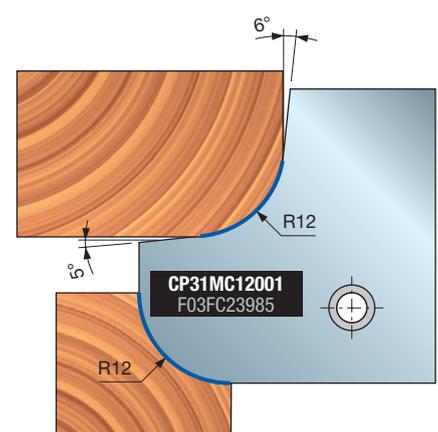
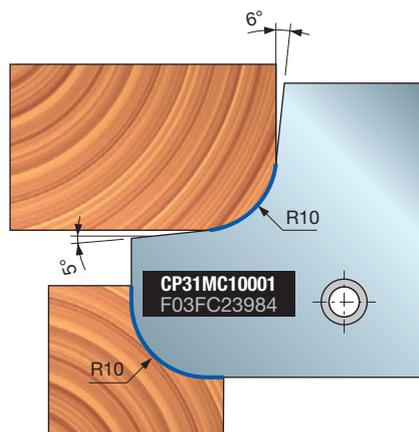
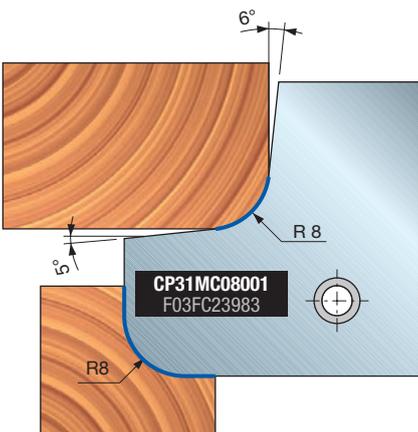
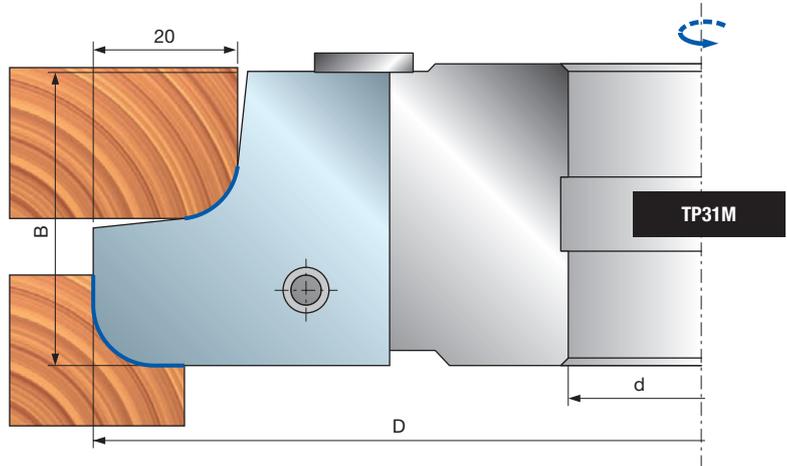
Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Radius mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|--------------|-------------------|------------|------------|
| 160 | 40 | 30 | 2 | 8-10-12 | 8.500 | TP31M GA3 | F03F668942 |
| 160 | 40 | 32 | 2 | 8-10-12 | 8.500 | TP31M GC3 | F03F668638 |
| 160 | 40 | 35 | 2 | 8-10-12 | 8.500 | TP31M GB3 | F03FC20486 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|-------------|------------|
| | Knife | 40 x 40 x 3 R8 | CP31MC08001 | F03FC23983 |
| | Knife | 40 x 40 x 3 R10 | CP31MC10001 | F03FC23984 |
| | Knife | 40 x 40 x 3 R12 | CP31MC12001 | F03FC23985 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |



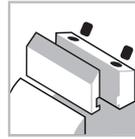


TP31M

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

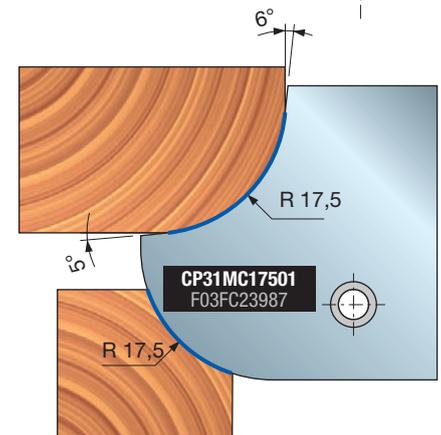
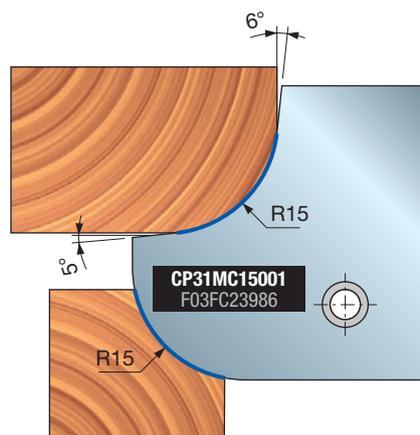
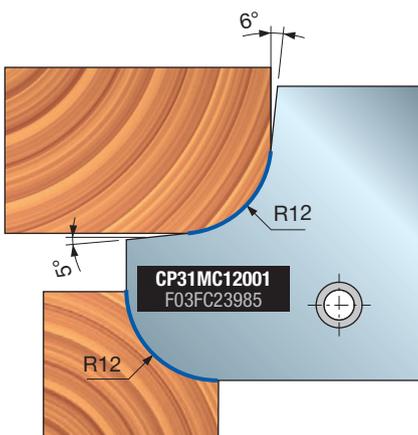
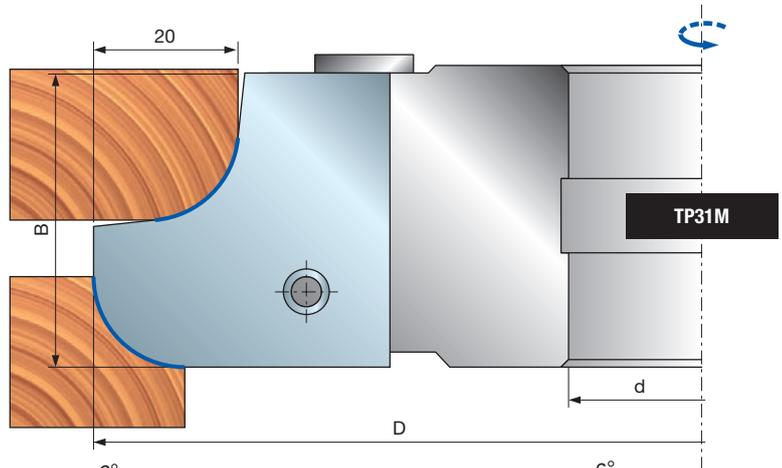
Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Radius mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|--------------|-------------------|------------|------------|
| 160 | 40 | 30 | 2 | 12-15-17,5 | 8.500 | TP31M HA3 | F03F668943 |
| 160 | 40 | 32 | 2 | 12-15-17,5 | 8.500 | TP31M HC3 | F03F668639 |
| 160 | 40 | 35 | 2 | 12-15-17,5 | 8.500 | TP31M HB3 | F03FC20487 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|-------------------|-------------|------------|
| | Knife | 40 x 40 x 3 R12 | CP31MC12001 | F03FC23985 |
| | Knife | 40 x 40 x 3 R15 | CP31MC15001 | F03FC23986 |
| | Knife | 40 x 40 x 3 R17,5 | CP31MC17501 | F03FC23987 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |

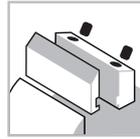


TP31M - TP31MS

Multi radius cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

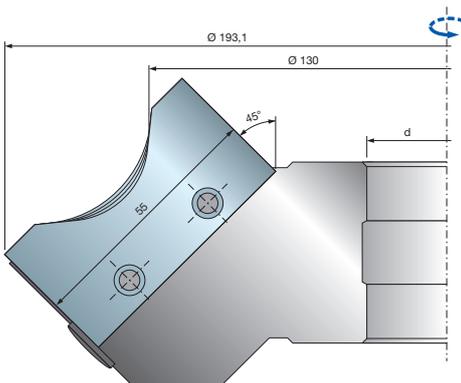
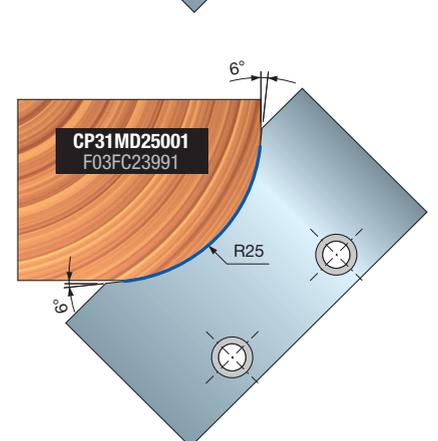
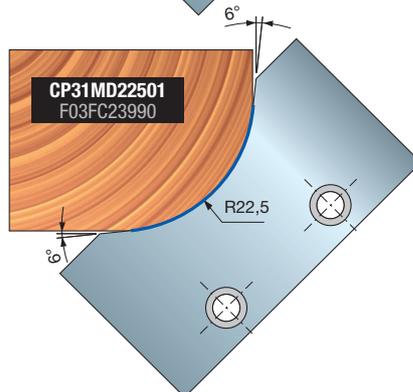
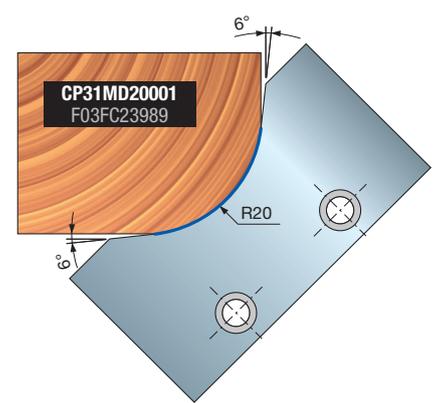
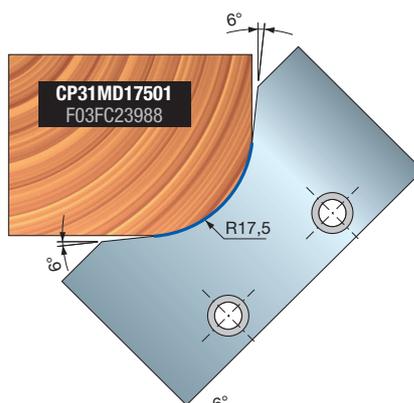
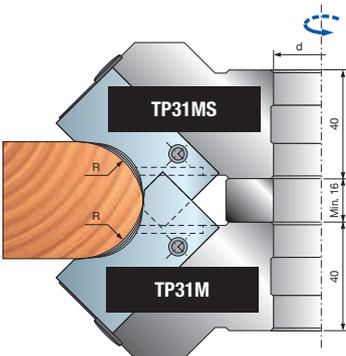
Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Left and right hand tools can be combined in 1 set.
- Aluminium light alloy body.
- Rebore not available.

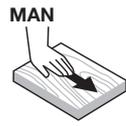
| D mm | B mm | d mm | Z | Radius mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-----------------|-------------------|------------|------------|
| 193,1 | 55 | 30 | 2 | 17,5-20-22,5-25 | 7.000 | TP31M DA3 | F03F668634 |
| 193,1 | 55 | 32 | 2 | 17,5-20-22,5-25 | 7.000 | TP31M DC3 | F03F668635 |
| 193,1 | 55 | 35 | 2 | 17,5-20-22,5-25 | 7.000 | TP31M DB3 | F03FC20483 |
| 193,1 | 55 | 30 | 2 | 17,5-20-22,5-25 | 7.000 | TP31MS DA3 | F03F668640 |
| 193,1 | 55 | 32 | 2 | 17,5-20-22,5-25 | 7.000 | TP31MS DC3 | F03F668641 |
| 193,1 | 55 | 35 | 2 | 17,5-20-22,5-25 | 7.000 | TP31MS DB3 | F03FC20488 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------------|-------------|------------|
| | Knife 55 x 29 x 3 R17,5 | CP31MD17501 | F03FC23988 |
| | Knife 55 x 29 x 3 R20 | CP31MD20001 | F03FC23989 |
| | Knife 55 x 29 x 3 R22,5 | CP31MD22501 | F03FC23990 |
| | Knife 55 x 29 x 3 R25 | CP31MD25001 | F03FC23991 |
| | Wedge 51 x 19 x 8 | CN11M C510 | F03FC23658 |
| | Screw M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| | Screw M10 x 25 | 2602M FI9 | F03FA07353 |
| | Allen key 5 | CB03M EA9 | F03FA00169 |

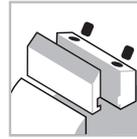


TP40M

Multiprofile cutterheads



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

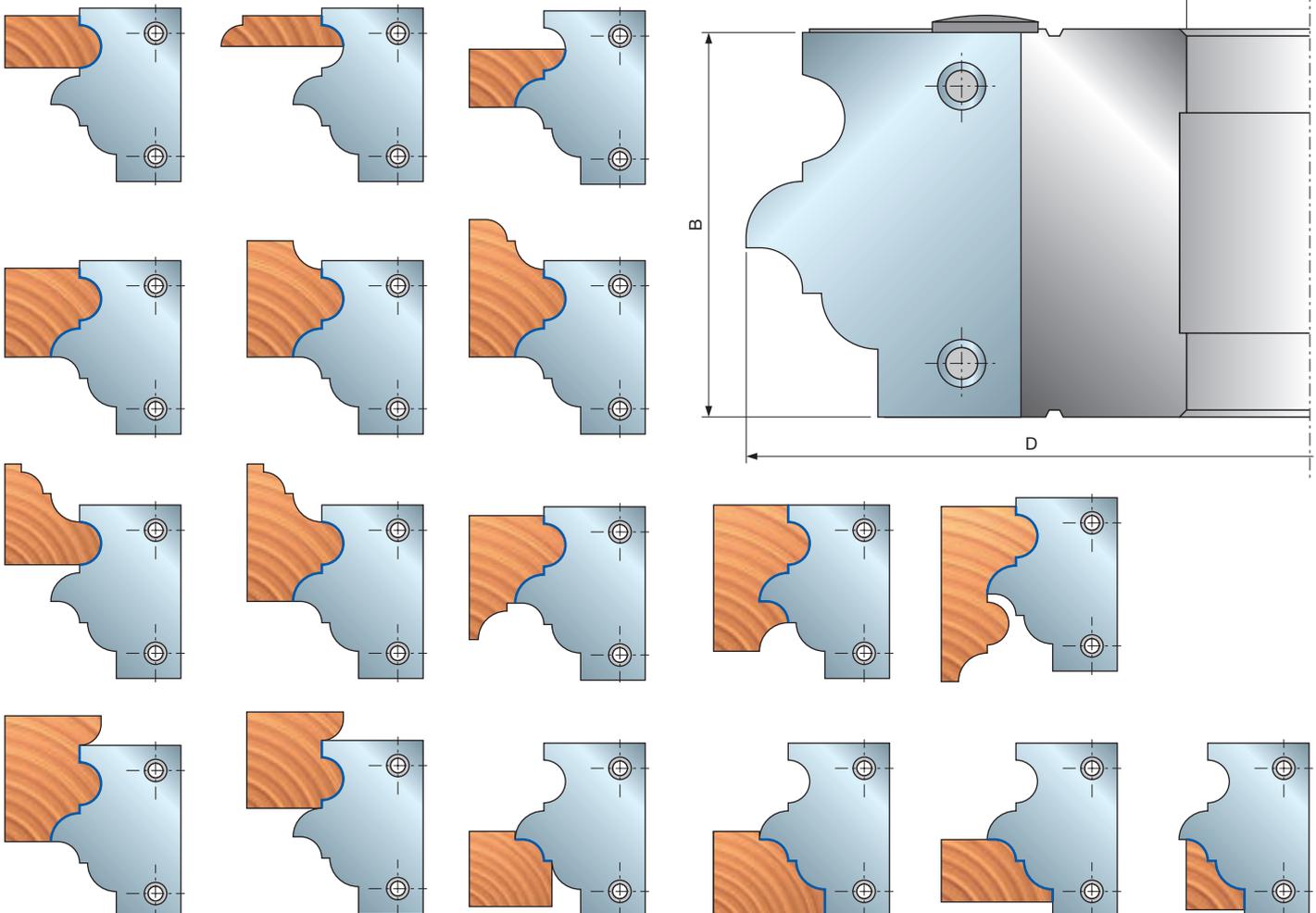
Technical information:

Multiprofile cutterhead with Performance knives.

- Steel body.
- Rebore not available.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 160 | 55 | 35 | 2 | 8.000 | TP40M AB3 | F03FC20493 |
| 160 | 55 | 50 | 2 | 8.000 | TP40M AD3 | F03FC24314 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--|-------------|------------------|------------|------------|
| | Knife | 55 x 39 x 3 | CP40MAA301 | F03FC24002 |
| | Wedge | 51 x 35 x 8 | CN13M AH9 | F03FC23048 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |



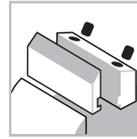


TP44M

Multiprofile cutterheads for flooring and cabinet doors



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

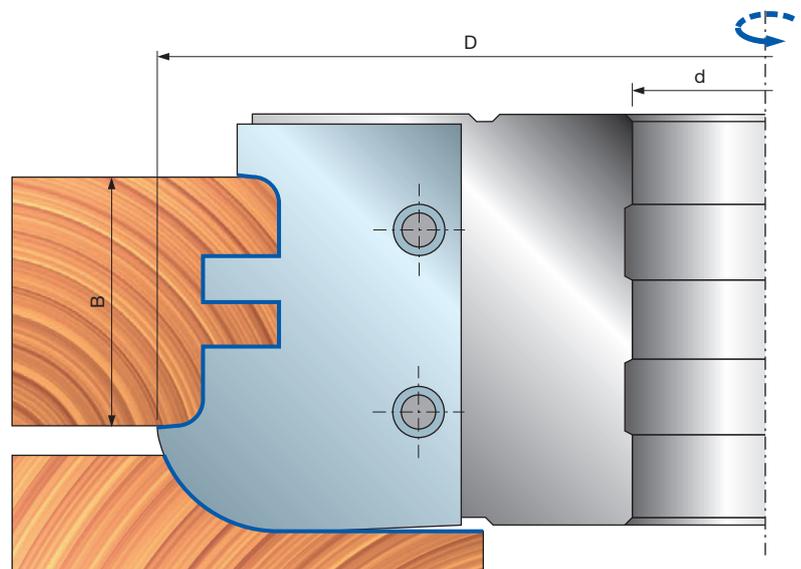
Multiprofile cutterhead with Performance knives for tongue, groove panels, flooring and cabinet doors.

- Mostly suitable for profiling on softwood, hardwood and exotic wood, with a top quality finish.
- The tool versatility allows the production of 20-22 mm thick cabinet doors, 13-17 mm and 20-22 mm thick floor boards and 26 or 33 mm thick shutters.
- The variously profiled knives are perfectly interchangeable and do not affect the minimum tool diameter.
- This item is supplied with knives.
- Aluminium light alloy body.
- Rebore not available.

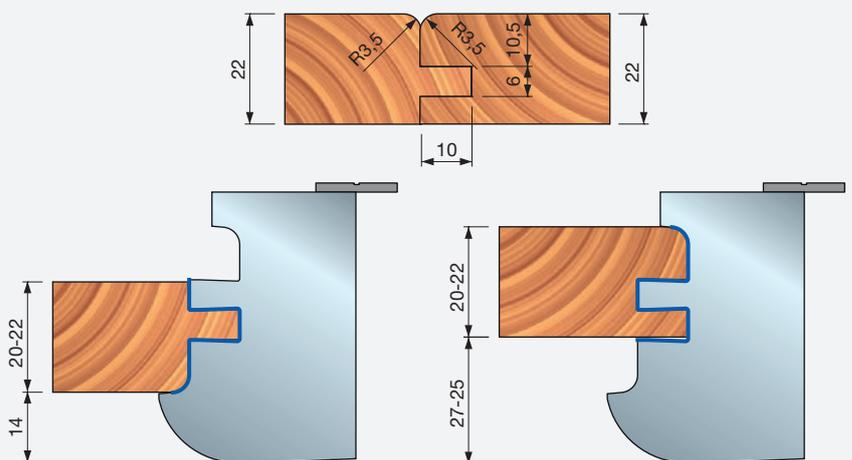
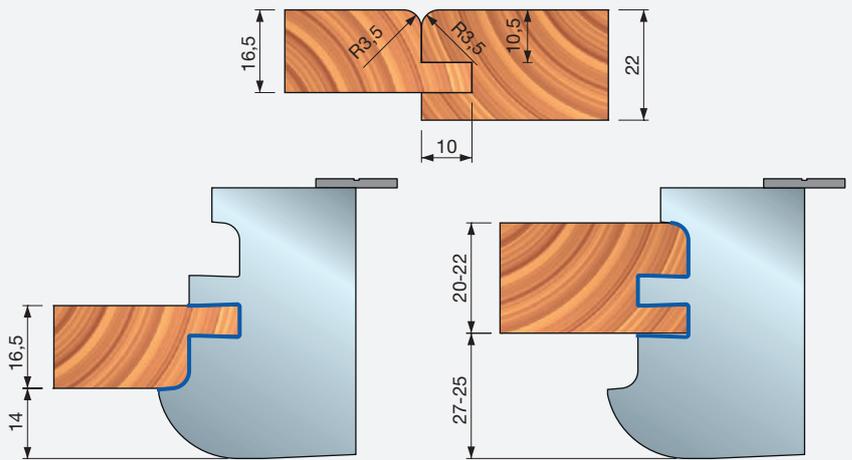
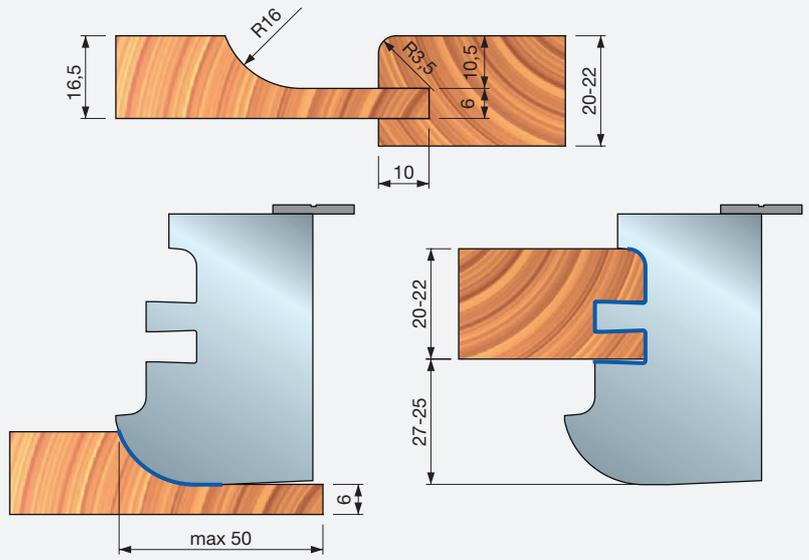
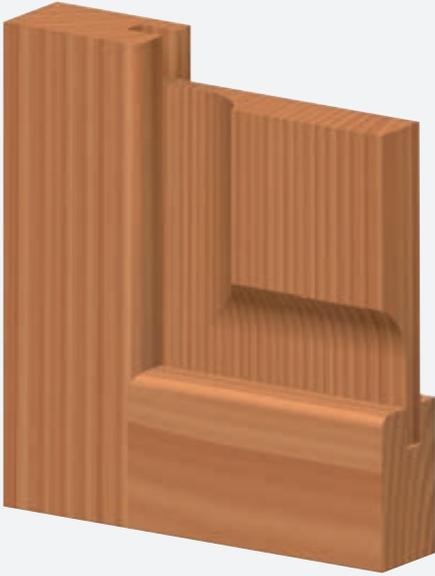
| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 160 | 55 | 30 | 2 | 8.500 | TP44M AA3 | F03F668643 |
| 160 | 55 | 32 | 2 | 8.500 | TP44M AC3 | F03F668644 |
| 160 | 55 | 35 | 2 | 8.500 | TP44M AB3 | F03FC20502 |
| 160 | 55 | 50 | 2 | 8.500 | TP44M AD3 | F03FC25268 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|------------|------------|
| | Wedge | 38 x 51 x 8 | CN13M CE9A | F03FC24964 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |

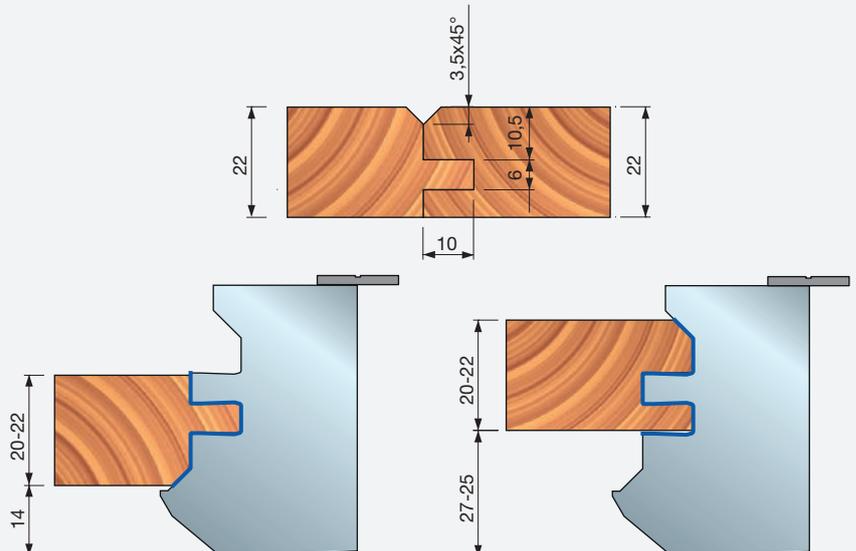
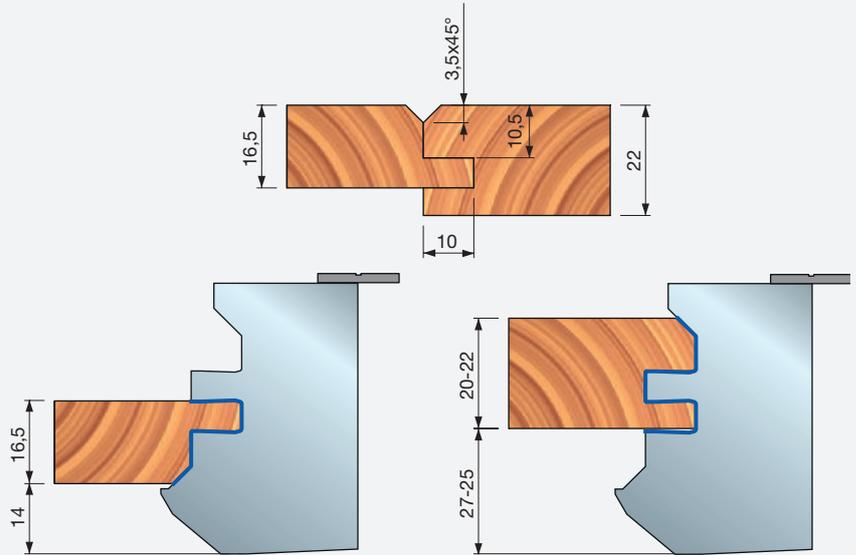
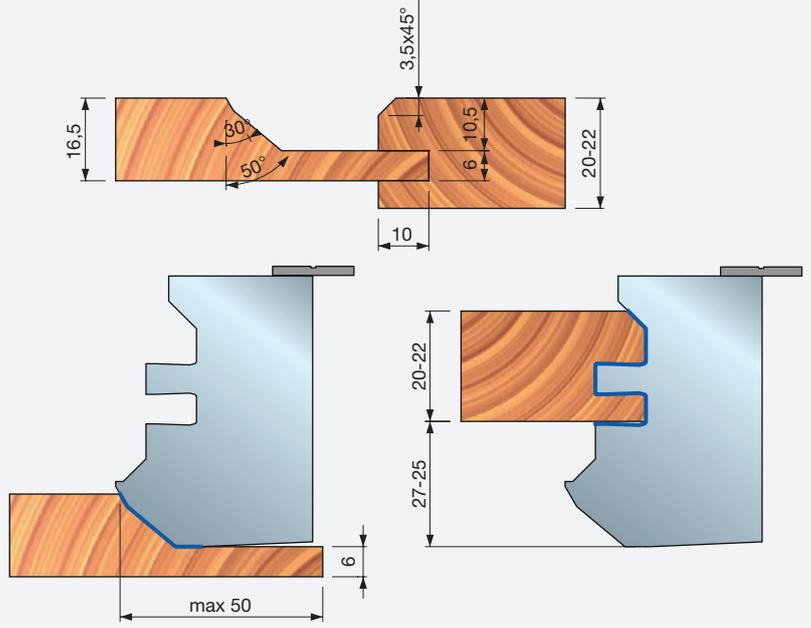
| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|------------|------------|
| 1 | Knife | 55 x 40 x 3 | CP44MAA301 | F03FC24012 |
| 2 | Knife | 55 x 40 x 3 | CP44MBA301 | F03FC24013 |



Profile 1



Profile 2

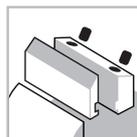




TP32M Cutterhead sets for cabinet doors



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

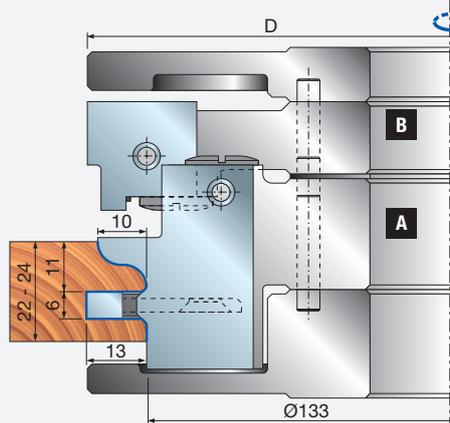
Performance knives tool set for cabinet doors. adjustable timber thickness 22-24 mm.

- Profile and counter-profile are both available with the same set (and different 0-point).
- The cutterhead set includes knives for tool B and mandatory flanges to work on manual feed machines.
- Profile knives and grooving inserts for tool A are not included, to be ordered separately.
- Steel body.
- Rebore not available.

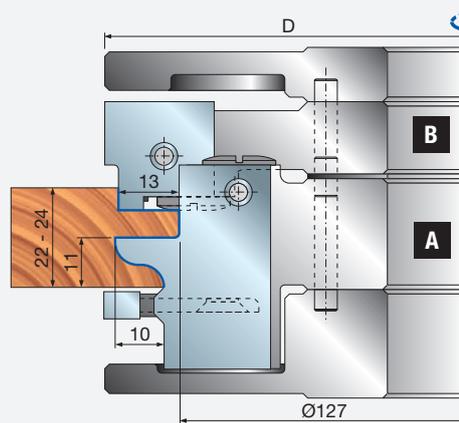
| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-----|-------------------|------------|------------|
| 159 | - | 30 | 2+2 | 8.500 | TP32M AA3 | F03FC24452 |
| 159 | - | 35 | 2+2 | 8.500 | TP32M AB3 | F03FC20489 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|--------------|-------------------|------------------|-------------|------------|
| AD2 - AD3 | Wedge | 43 x 19 x 8,5 | CN11M C410A | F03FC23536 |
| | Grooving insert | 34 x 6 x 16 | SR06MAB302 | F03FC24191 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
| | Wedge | 16 x 17 x 8 | CN11M B160A | F03FC24539 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |
| | Upper flange | 159 x 12 x 30 | FX32M AA9 | F03FC24578 |
| Lower flange | 159 x 24 x 30 | FX32M BA9 | F03FC24579 | |
| Upper flange | 159 x 12 x 35 | FX32M AB9 | F03FC15078 | |
| Lower flange | 159 x 24 x 35 | FX32M BB9 | F03FC15079 | |

Carrying out a groove

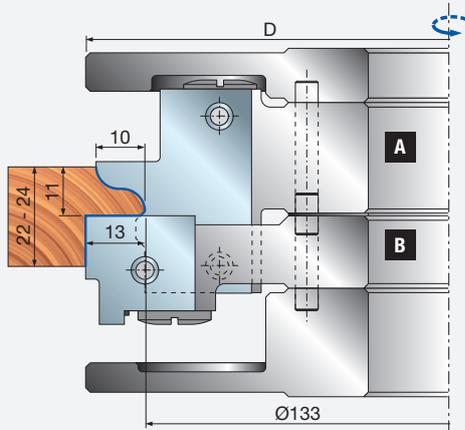


Carrying out a rebate

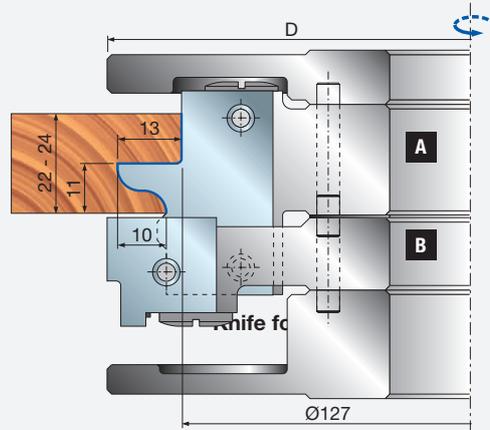


| | Spare knives | Dimensions mm | Freud Code | Art. No. |
|--|--------------|------------------|------------|------------|
| | Knife | 45 x 34 x 3 | CP32MAA301 | F03FC23992 |
| | Knife | 45 x 34 x 3 | CP32MBA301 | F03FC23993 |
| | Knife | 45 x 34 x 3 | CP32MCA301 | F03FC23994 |
| | Knife | 45 x 34 x 3 | CP32MDA301 | F03FC23995 |
| | Knife | 45 x 34 x 3 | CP32MEA301 | F03FC23996 |
| | Knife | 45 x 34 x 3 | CP32MFA301 | F03FC23997 |
| | Knife | 45 x 34 x 3 | CP32MGA301 | F03FC23998 |
| | Knife | 45 x 34 x 3 | CP32MHA301 | F03FC23999 |
| | Knife | 45 x 34 x 3 | CP32MIA301 | F03FC24000 |
| | Knife | 24 x 24 x 3 | CP32MLA301 | F03FC24001 |

Carrying out a groove



Carrying out a rebate



Order example for the profiles shown

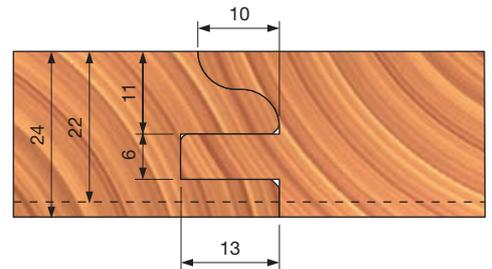
| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MAA301 | F03FC23992 |



Knives for
TP32M - A
Not included



Insert for
TP32M - B

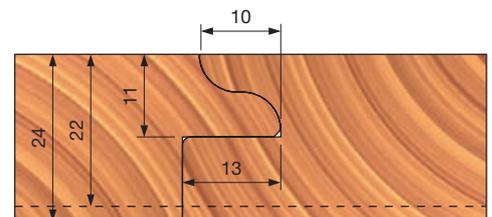


Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MAA301 | F03FC23992 |



Knives for
TP32M - A
Not included



Order example for the profiles shown

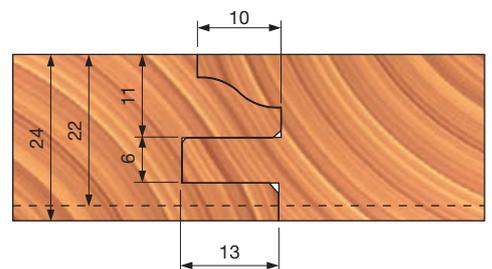
| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MBA301 | F03FC23993 |



Knives for
TP32M - A
Not included



Insert for
TP32M - B



CP32M

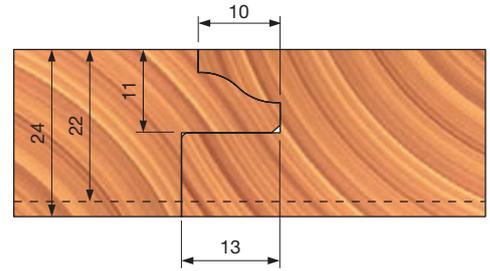
Knives for TP32M AA3 - TP32M AB3

Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MBA301 | F03FC23993 |



Knives for TP32M - A
Not included



Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MCA301 | F03FC23994 |
| 2 | 45 x 34 x 3 | CP32MDA301 | F03FC23995 |



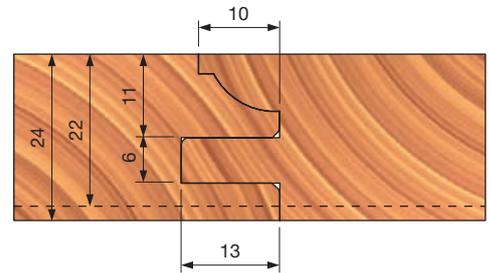
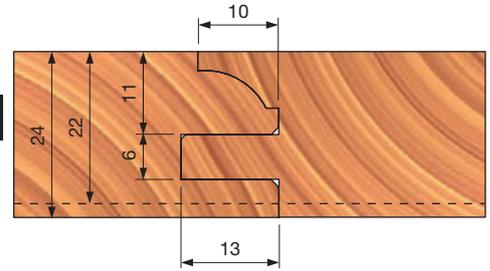
Knives for TP32M - A
Not included



Knives for TP32M - A
Not included



Insert for TP32M - B



Order example for the profiles shown

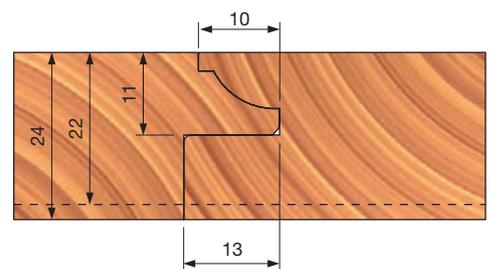
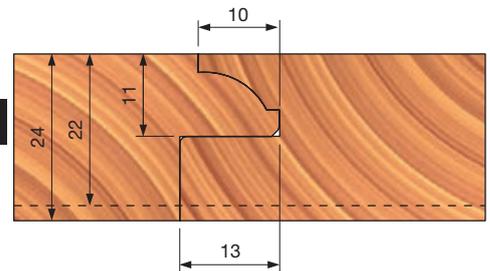
| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MCA301 | F03FC23994 |
| 2 | 45 x 34 x 3 | CP32MDA301 | F03FC23995 |



Knives for TP32M - A
Not included



Knives for TP32M - A
Not included



Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|---------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MEA301 | F03FC23996 |
| 2 | 45 x 34 x 3 | CP32MFA301 | F03FC23997 |



Knives for TP32M - A
Not included

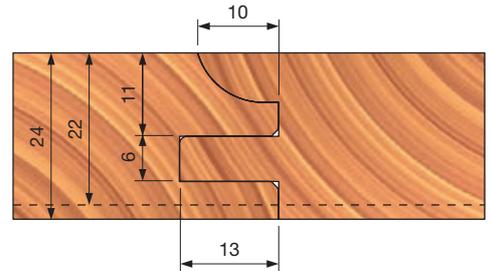
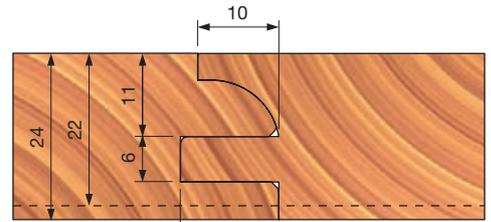


Knives for TP32M - A
Not included



SR06MAB302
F03FC24191

Insert for TP32M - B



Order example for the profiles shown

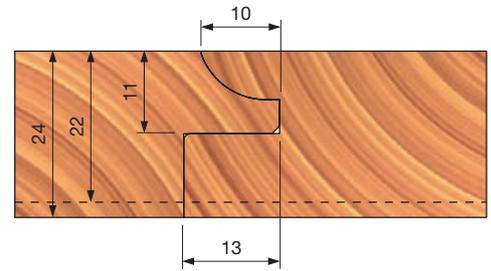
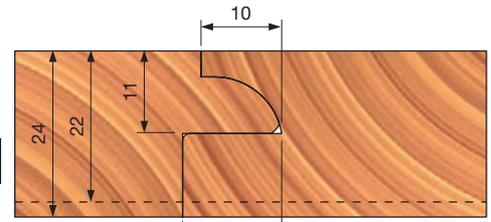
| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|---------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MEA301 | F03FC23996 |
| 2 | 45 x 34 x 3 | CP32MFA301 | F03FC23997 |



Knives for TP32M - A
Not included



Knives for TP32M - A
Not included



Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|---------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MGA301 | F03FC23998 |
| 2 | 45 x 34 x 3 | CP32MHA301 | F03FC23999 |



Knives for TP32M - A
Not included

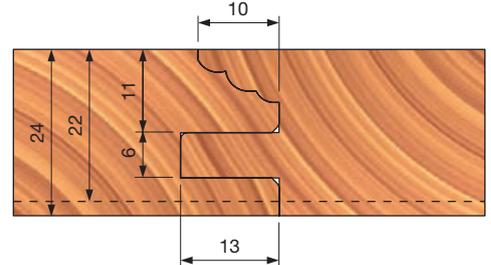
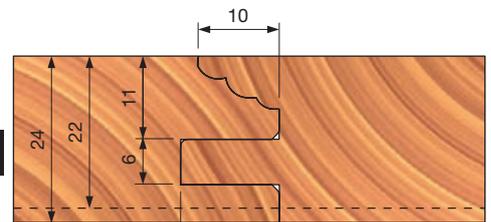


Knives for TP32M - A
Not included



SR06MAB302
F03FC24191

Insert for TP32M - B



Order example for the profiles shown

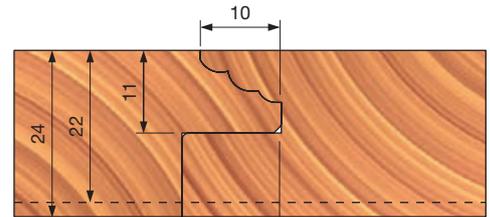
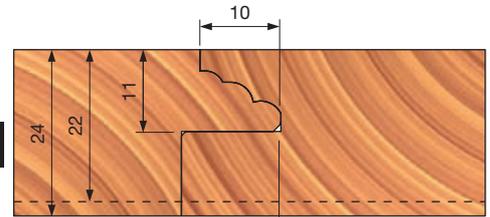
| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MGA301 | F03FC23998 |
| 2 | 45 x 34 x 3 | CP32MHA301 | F03FC23999 |



Knives for TP32M - A
Not included



Knives for TP32M - A
Not included



Order example for the profiles shown

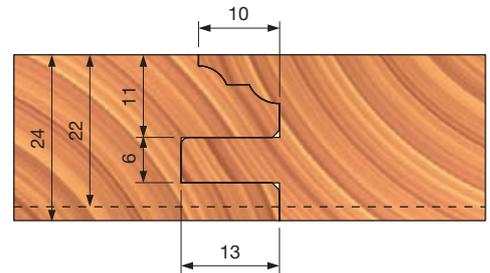
| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MIA301 | F03FC24000 |



Knives for TP32M - A
Not included



Insert for TP32M - B

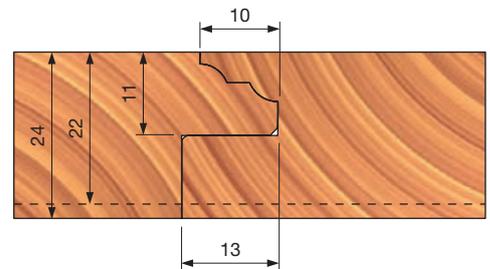


Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 159 x 30 | TP32M AA3 | F03FC24452 |
| 2 | 45 x 34 x 3 | CP32MIA301 | F03FC24000 |



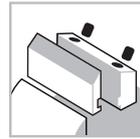
Knives for TP32M - A
Not included



TPSEM Cutterhead sets for cabinet doors



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Performance knives tool set for cabinet doors. adjustable timber thickness 22-30 mm.

- Profile and counter-profile are both available with the same set (and different 0-point).
- The cutterhead set includes knives for tool B and mandatory flanges to work on manual feed machines.
- Profile knives and grooving inserts for tool A are not included, to be ordered separately.
- Steel body.
- Rebore not available.

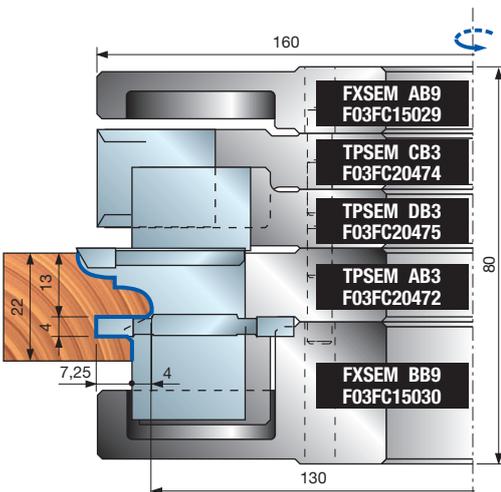
| D mm | B mm | d mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|------------|
| 160 | - | 30 | 8.500 | TPSEM22GA3 | F03FC23021 |
| 160 | - | 32 | 8.500 | TPSEM22GC3 | F03FC24432 |
| 160 | - | 35 | 8.500 | TPSEM22GB3 | F03FC20476 |
| 160 | - | 30 | 8.500 | TPSEM30GA3 | F03FC23024 |
| 160 | - | 32 | 8.500 | TPSEM30GC3 | F03FC24433 |
| 160 | - | 35 | 8.500 | TPSEM30GB3 | F03FC20477 |

Tools for TPSEM sets

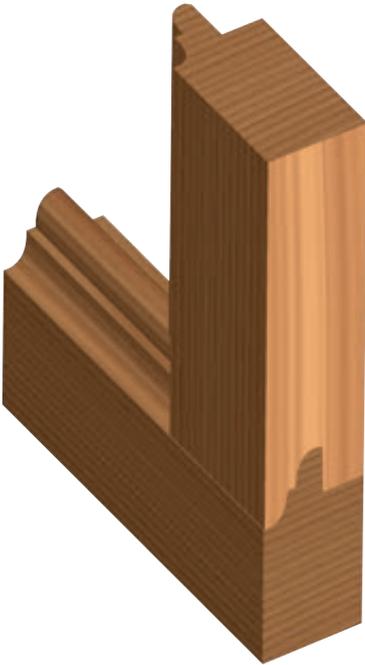
| | D mm | B mm | d mm | Z | V | Freud Code | Art. No. |
|-------|---------|---------|---------|---|---|------------|------------|
| 22GA3 | 135 | - | 30 | 2 | | TPSEM DA3 | F03FC22726 |
| | 152 | - | 30 | 2 | 4 | TPSEM CA3 | F03FC22725 |
| | 160 | - | 30 | 2 | 4 | TPSEM AA3* | F03FC22723 |
| 22GB3 | 138 | - | 35 | 2 | | TPSEM DB3 | F03FC20475 |
| | 152 | - | 35 | 2 | 4 | TPSEM CB3 | F03FC20474 |
| | 160 | - | 35 | 2 | 4 | TPSEM AB3* | F03FC20472 |
| 22GC3 | 138 | - | 32 | 2 | | TPSEM DC3 | F03FC24431 |
| | 152 | - | 32 | 2 | 4 | TPSEM CC3 | F03FC24430 |
| | 160 | - | 32 | 2 | 4 | TPSEM AC3* | F03FC24428 |
| 30GA3 | 135 | - | 30 | 2 | | TPSEM DA3 | F03FC22726 |
| | 152 | - | 30 | 2 | 4 | TPSEM CA3 | F03FC22725 |
| | 160 | - | 30 | 2 | 4 | TPSEM BA3* | F03FC22724 |
| 30GB3 | 138 | - | 35 | 2 | | TPSEM DB3 | F03FC20475 |
| | 152 | - | 35 | 2 | 4 | TPSEM CB3 | F03FC20474 |
| | 160 | - | 35 | 2 | 4 | TPSEM BB3* | F03FC20473 |
| 30GC3 | 138 | - | 32 | 2 | | TPSEM DC3 | F03FC24431 |
| | 152 | - | 32 | 2 | 4 | TPSEM CC3 | F03FC24430 |
| | 160 | - | 32 | 2 | 4 | TPSEM BC3* | F03FC24429 |

Knives for TPSEM sets

| | Spare knives | Dimensions mm | Freud Code | Art. No. |
|--|--------------|------------------|------------|------------|
| | Knife | 35 x 34 x 3 | CPSEMAB301 | F03FC23924 |
| | Knife | 35 x 34 x 3 | CPSEMAC301 | F03FC23925 |
| | Knife | 35 x 34 x 3 | CPSEMAD301 | F03FC23926 |
| | Knife | 35 x 34 x 3 | CPSEMAE301 | F03FC23927 |
| | Knife | 35 x 34 x 3 | CPSEMAF301 | F03FC23928 |
| | Knife | 35 x 34 x 3 | CPSEMAG301 | F03FC23929 |
| | Knife | 35 x 34 x 3 | CPSEMBB301 | F03FC23930 |
| | Knife | 35 x 34 x 3 | CPSEMBC301 | F03FC23931 |
| | Knife | 35 x 34 x 3 | CPSEMBD301 | F03FC23932 |
| | Knife | 35 x 34 x 3 | CPSEMBE301 | F03FC23933 |
| | Knife | 35 x 34 x 3 | CPSEMBF301 | F03FC23934 |
| | Knife | 35 x 34 x 3 | CPSEMBG301 | F03FC23935 |
| | Knife | 20 x 24 x 3 | CPSEMCA301 | F03FC23936 |
| | Knife | 17 x 24 x 3 | CPSEMDA301 | F03FC23937 |



TPSEM Cutterheads sets for cabinet doors



Spare parts for sets TPSEM22 - TPSEM30

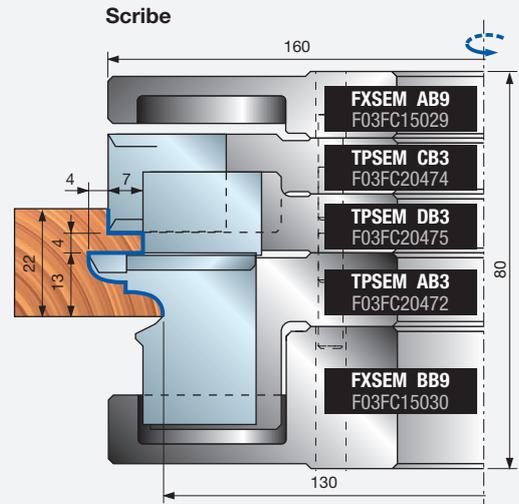
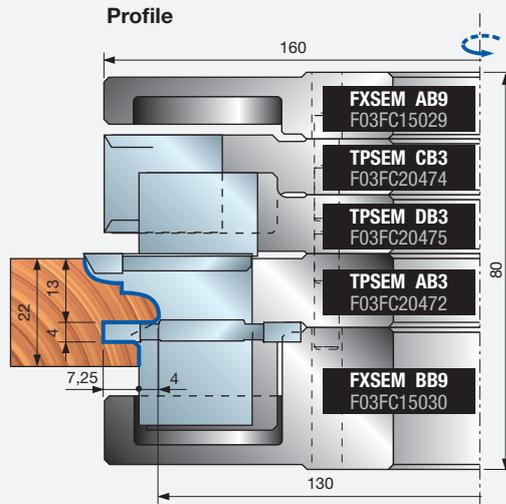
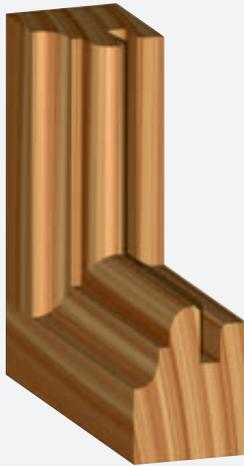
| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------------|-------------------|------------------|-----------------|-------------|
| AA3-AB3-AC3 | Deflector | 30,8 x 7 x 24,5 | ID04MSAA901 | F03FC24137 |
| | Grooving insert | 40 x 16 x 4 | IG04MSAA305 | F03FH02994 |
| | Spur insert | 34 x 4 x 16 | SR06MDAL302 | F03FC24196 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw for ID04M | M4 x 12 | VT05M DA9 | F03FC20647 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Positioning plate | 20 x 11,6 x 2,2 | VT18M AS9 | F03FC20665 |
| | BA3-BB3-BC3 | Deflector | 30,8 x 8 x 24,5 | ID04MSAD901 |
| Grooving insert | | 40 x 16 x 6 | IG04MSAD305 | F03FH02997 |
| Spur insert | | 34 x 4 x 16 | SR06MDAL302 | F03FC24196 |
| Screw | | M10 x 18 | VT03M CC9 | F03FA04438 |
| Screw | | M5 x 8 | VT05M AA9 | F03FA04444 |
| Screw for ID04M | | M4 x 12 | VT05M DA9 | F03FC20647 |
| Screw | | M6 x 15,5 | VT16M AD9 | F03FC20657 |
| Screw | | M6 x 13 | VT16M AE9 | F03FC20658 |
| Positioning plate | | 20 x 11,6 x 2,2 | VT18M AS9 | F03FC20665 |
| CA3-CB3-CC3 | | Wedge | 16 x 17 x 8 | CN11M B160A |
| | Knife | 20 x 24 x 3 | CPSEMCA301 | F03FC23936 |
| | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | DA3-DB3-DC3 | Wedge | 16 x 17 x 8 | CN11M B130A |
| Knife | | 17 x 24 x 3 | CPSEMCA301 | F03FC23937 |
| Screw | | M10 x 18 | VT03M CC9 | F03FA04438 |
| Screw | | M5 x 8 | VT05M AA9 | F03FA04444 |
| Positioning plate | | 20 x 11,6 x 2,2 | VT18M AR9 | F03FC20664 |



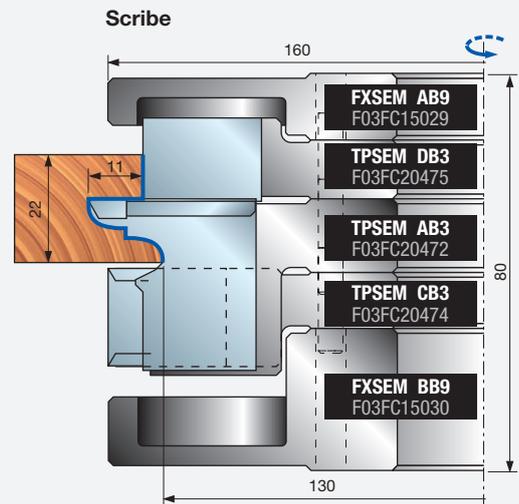
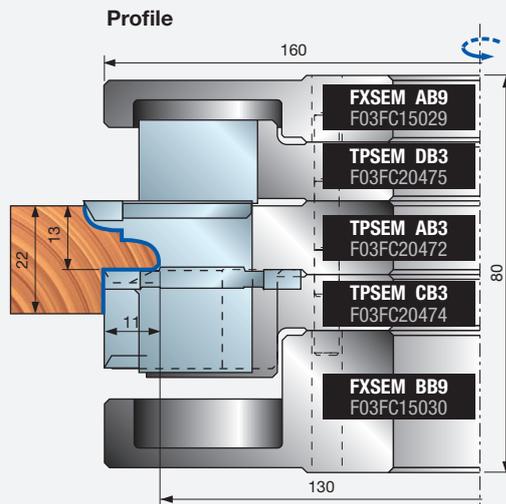
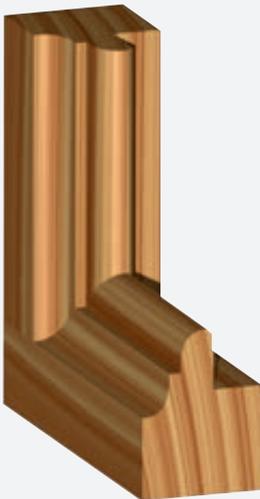
Spare parts for sets TPSEM22 - TPSEM30

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------|--------------|------------------|------------|------------|
| | Torx key | T20 | CB03M CC9 | F03FA00167 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |
| 22GA3 | Spacer set | 50 x 6,7 x 30 | AN03M BM9 | F03FC23022 |
| | Upper flange | 152 x 13,6 x 30 | FXSEM AA9 | F03FC23019 |
| | Lower flange | 152 x 28 x 30 | FXSEM BA9 | F03FC23020 |
| 22GB3 | Spacer set | 55 x 6,7 x 35 | AN03M BK9 | F03FC00463 |
| | Upper flange | 152 x 13,6 x 35 | FXSEM AB9 | F03FC15029 |
| | Lower flange | 152 x 28 x 35 | FXSEM BB9 | F03FC15030 |
| 22GC3 | Spacer set | 52 x 6,7 x 32 | AN03M B09 | F03FC24434 |
| | Upper flange | 152 x 13,6 x 32 | FXSEM AC9 | F03FC24436 |
| | Lower flange | 152 x 28 x 32 | FXSEM BC9 | F03FC24437 |
| 30GA3 | Spacer set | 50 x 7,7 x 30 | AN03M BN9 | F03FC23023 |
| | Upper flange | 152 x 13,6 x 30 | FXSEM AA9 | F03FC23019 |
| | Lower flange | 152 x 28 x 30 | FXSEM BA9 | F03FC23020 |
| 30GB3 | Spacer set | 55 x 7,7 x 35 | AN03M BL9 | F03FC00464 |
| | Upper flange | 152 x 13,6 x 35 | FXSEM AB9 | F03FC15029 |
| | Lower flange | 152 x 28 x 35 | FXSEM BB9 | F03FC15030 |
| 30GC3 | Spacer set | 52 x 7,7 x 32 | AN03M BP9 | F03FC24435 |
| | Upper flange | 152 x 13,6 x 32 | FXSEM AC9 | F03FC24436 |
| | Lower flange | 152 x 28 x 32 | FXSEM BC9 | F03FC24437 |

Carrying out a groove

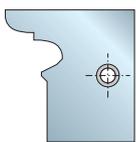


Carrying out a rebate



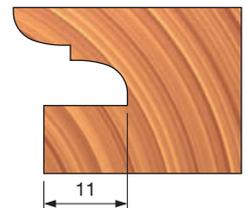
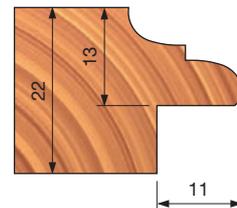
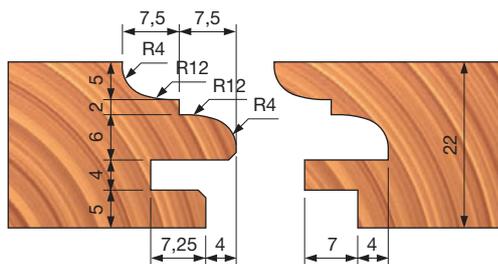
Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 160 x 35 | TPSEM22GB3 | F03FC20476 |
| 2 | 35 x 34 x 3 | CPSEMAB301 | F03FC23924 |

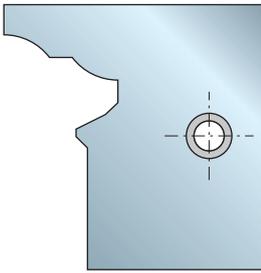


CPSEMAB301
F03FC23924

for TPSEM
AA3 - AB3 - AC3

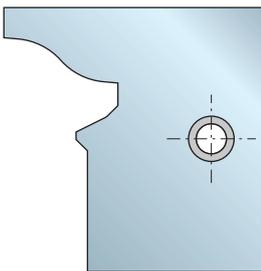
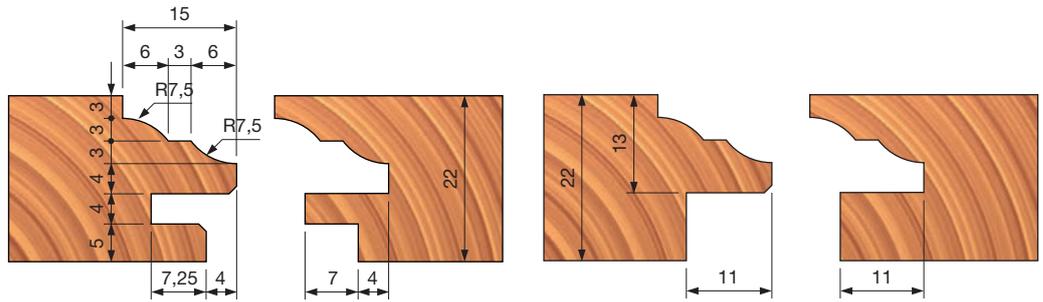


CPSEM Knives for TPSEM AA3 - AB3 - AC3 (Wood thickness: 22 mm)



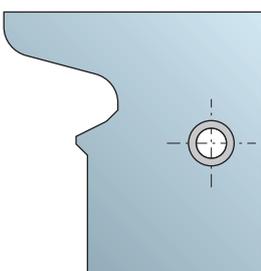
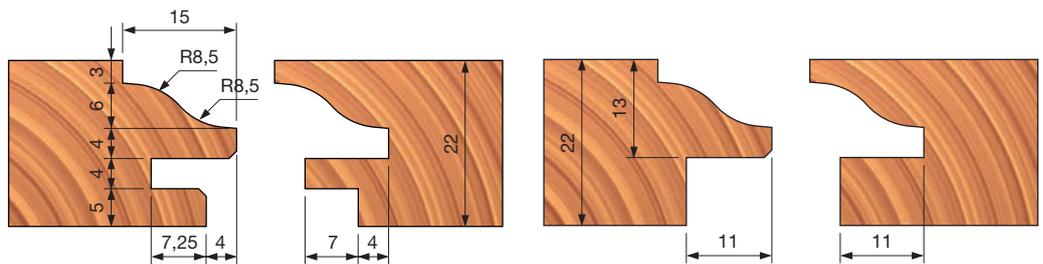
CPSEMAC301
F03FC23925

for TPSEM
AA3 - AB3 - AC3



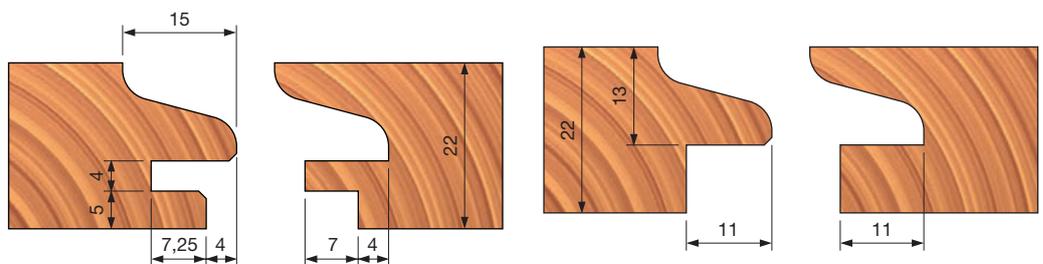
CPSEMAD301
F03FC23926

for TPSEM
AA3 - AB3 - AC3



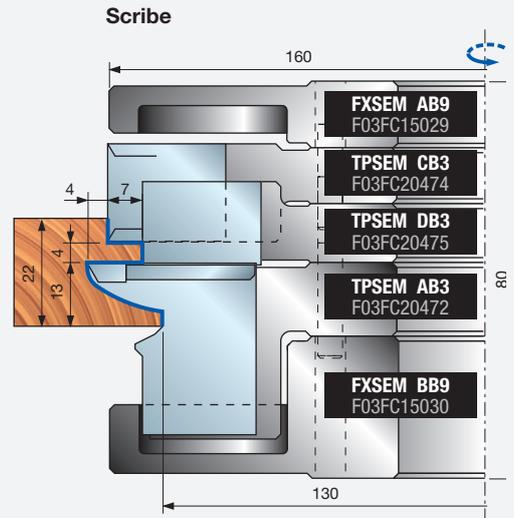
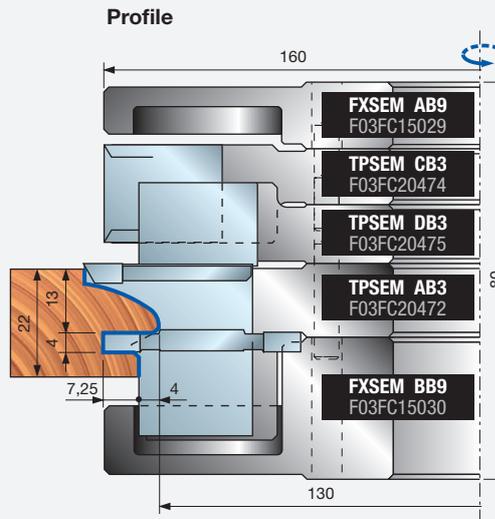
CPSEMAG301
F03FC23929

for TPSEM
AA3 - AB3 - AC3

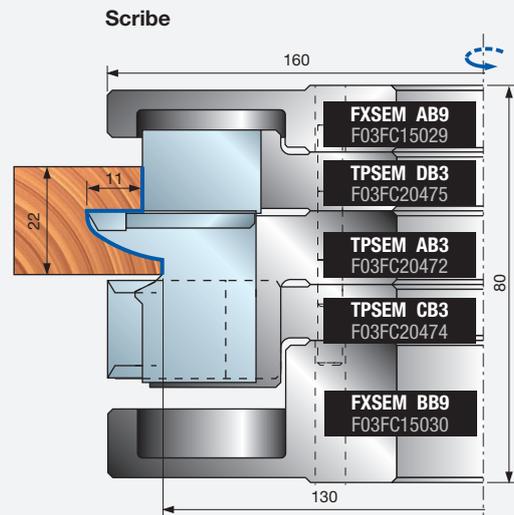
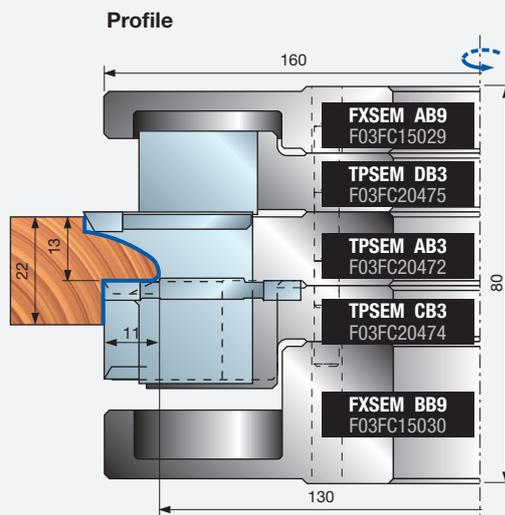


CPSEM Knives for TPSEM AA3 - AB3 - AC3 (Wood thickness: 22 mm)

Carrying out a groove

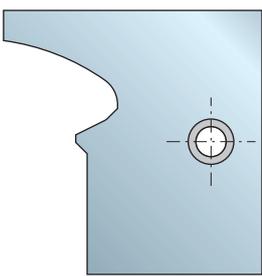


Carrying out a rebate



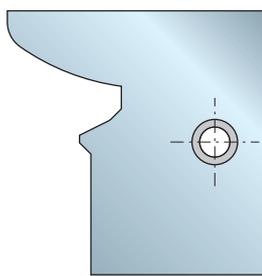
Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 160 x 35 | TPSEM22GB3 | F03FC20476 |
| 2 | 35 x 34 x 3 | CPSEMAE301 | F03FC23927 |
| 2 | 35 x 34 x 3 | CPSEMAF301 | F03FC23928 |



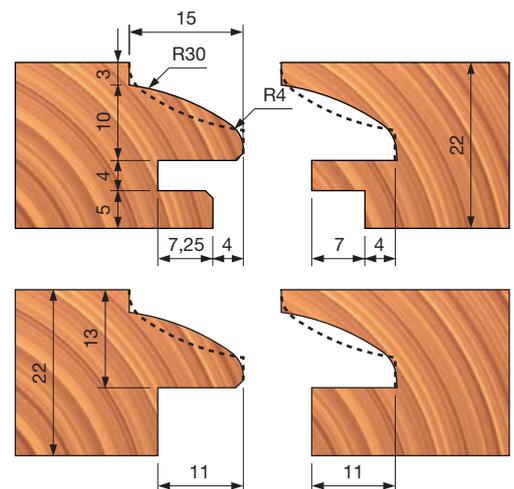
CPSEMAF301
F03FC23928

for TPSEM
AA3 - AB3 - AC3



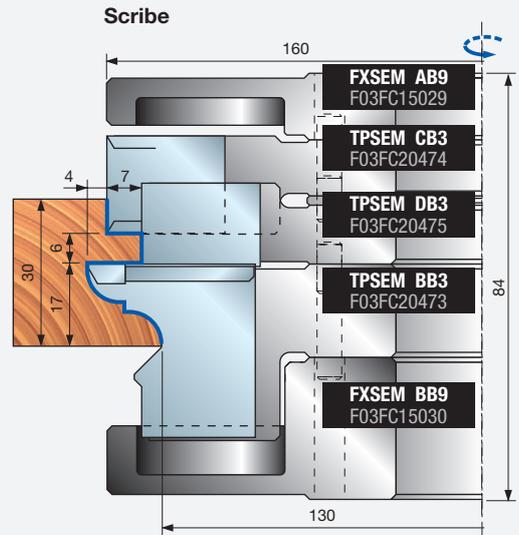
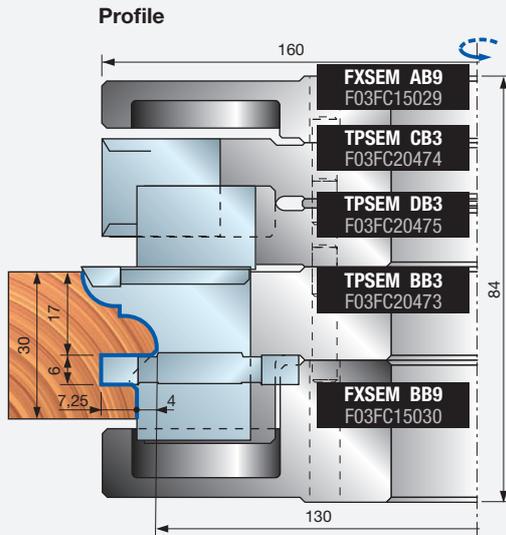
CPSEMAE301
F03FC23927

for TPSEM
AA3 - AB3 - AC3

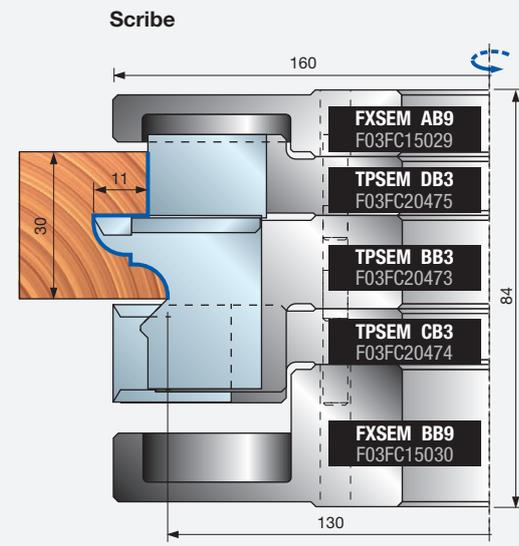
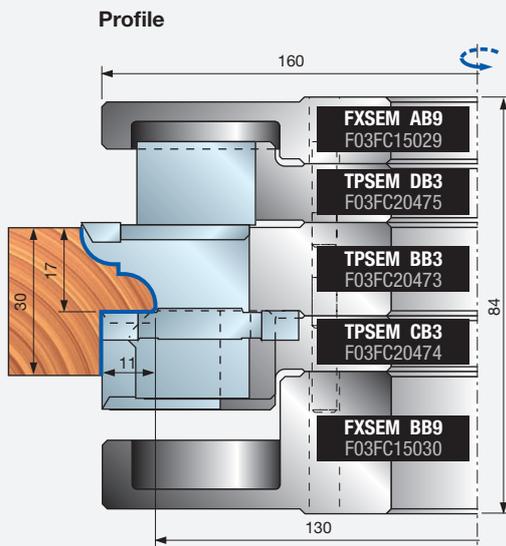


CPSEM Knives for TPSEM BA3 - BB3 - BC3 (Wood thickness: 30 mm)

Carrying out a groove

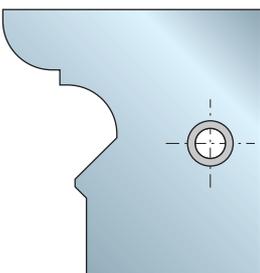


Carrying out a rebate



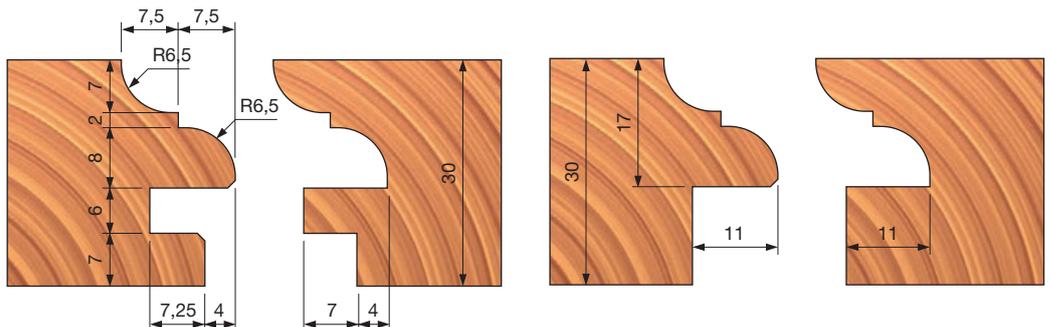
Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 160 x 35 | TPSEM30GB3 | F03FC20477 |
| 2 | 35 x 34 x 3 | CPSEMBB301 | F03FC23930 |

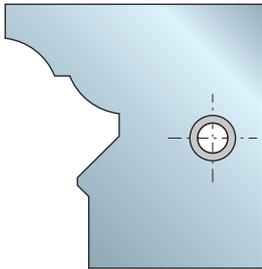


CPSEMBB301
F03FC23930

for TPSEM
BA3 - BB3 - BC3

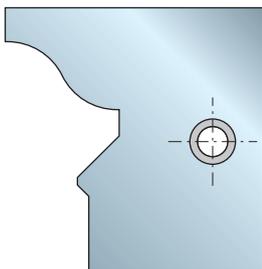
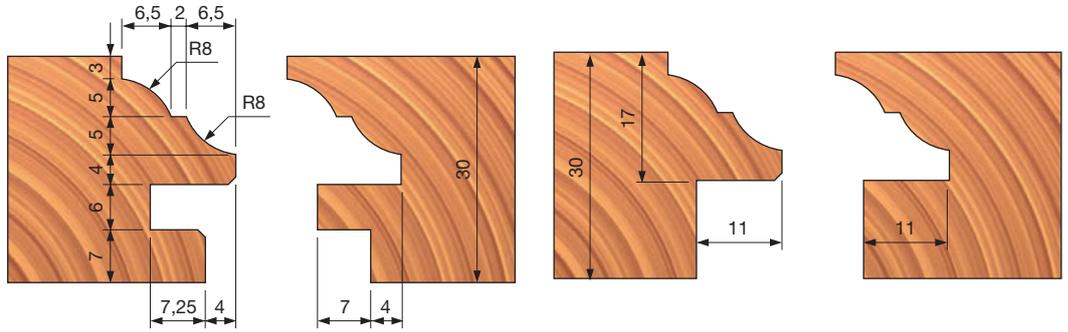


CPSEM Knives for TPSEM AA3 - AB3 - AC3 (Wood thickness: 30 mm)



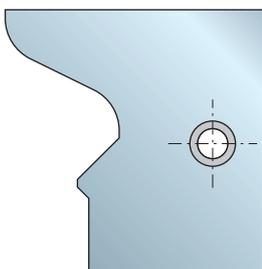
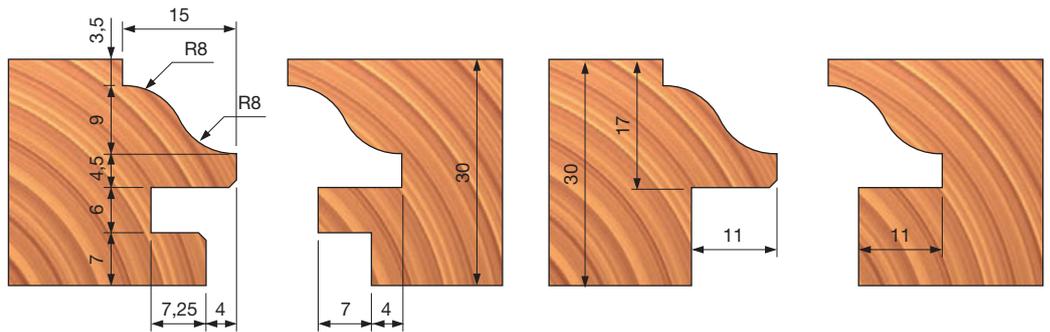
CPSEMBC301
F03FC23931

for TPSEM
BA3 - BB3 - BC3



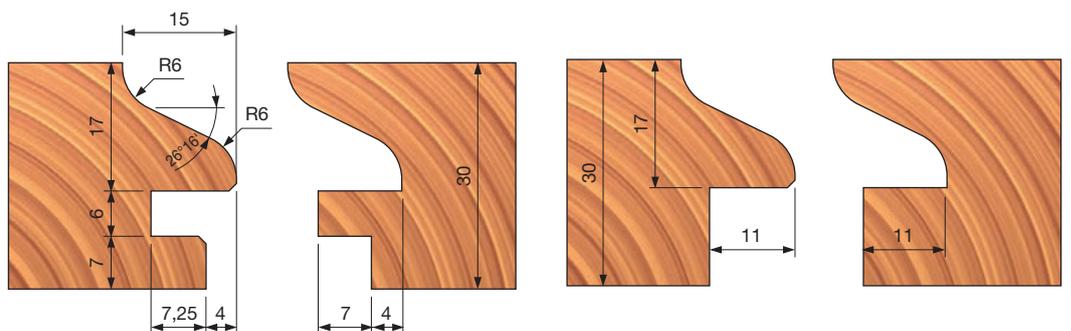
CPSEMBD301
F03FC23932

for TPSEM
BA3 - BB3 - BC3



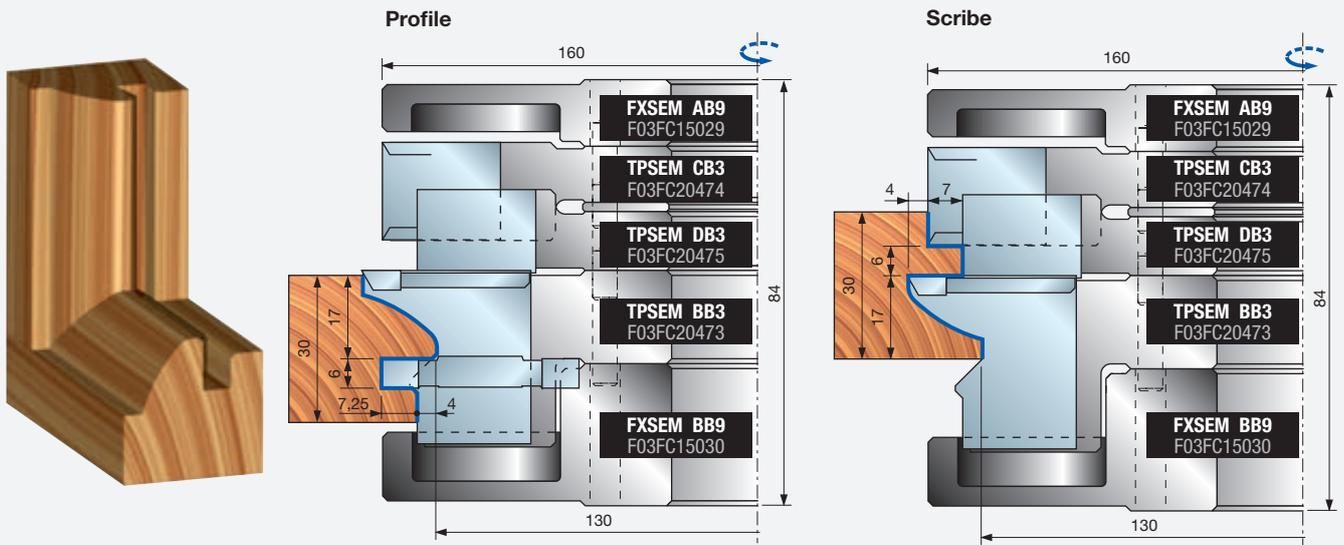
CPSEMBG301
F03FC23935

for TPSEM
BA3 - BB3 - BC3

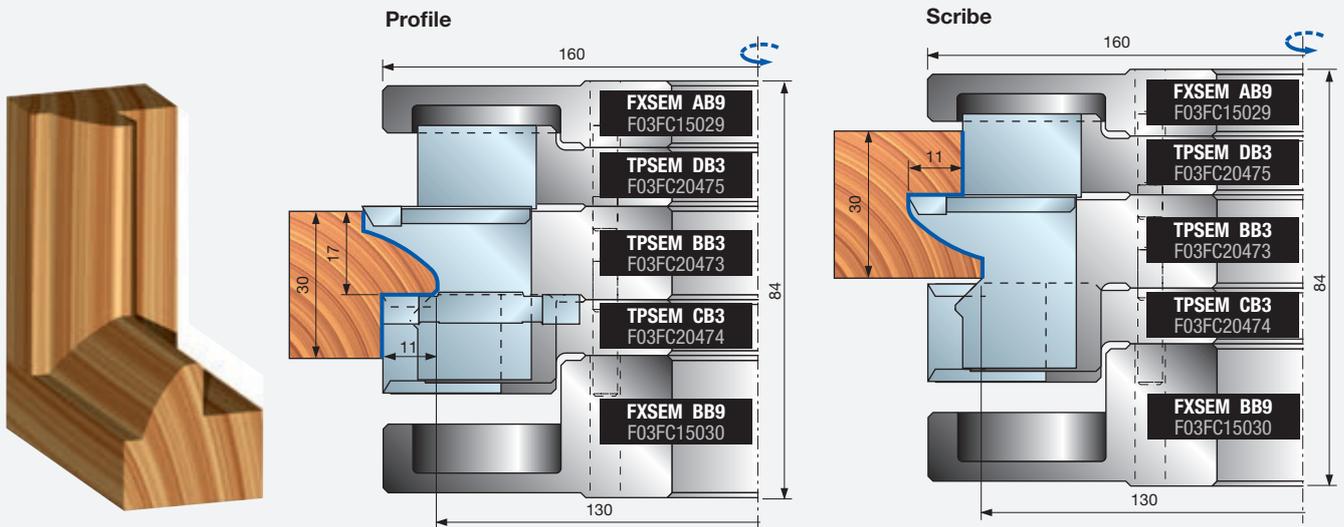


CPSEM Knives for TPSEM BA3 - BB3 - BC3 (Wood thickness: 30 mm)

Carrying out a groove

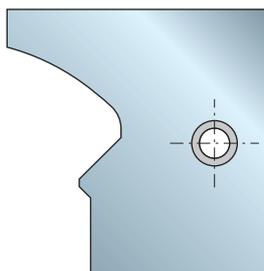


Carrying out a rebate



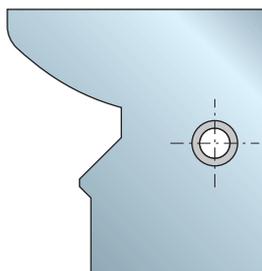
Order example for the profiles shown

| Pieces | Dimensions mm | Freud Code | Art. No. |
|--------|------------------|------------|------------|
| 1 | 160 x 35 | TPSEM30GB3 | F03FC20477 |
| 2 | 35 x 34 x 3 | CPSEMBE301 | F03FC23933 |
| 2 | 35 x 34 x 3 | CPSEMBF301 | F03FC23934 |



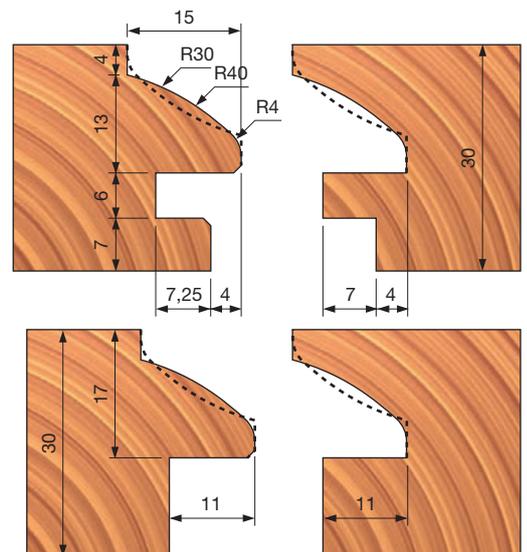
CPSEMBF301
F03FC23934

for TPSEM
BA3 - BB3 - BC3



CPSEMBE301
F03FC23933

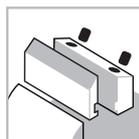
for TPSEM
BA3 - BB3 - BC3



TP42M Multiprofile cutterheads for doors



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Performance knives tool set for doors.

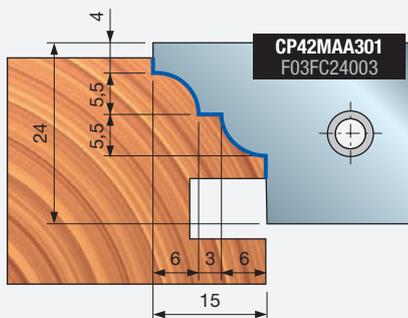
- Mostly suitable for profiling on softwood, hardwood and exotic wood, with a top quality finish.
- The tool versatility allows the production of 44-52 mm thick doors in 2 steps, taking care to adjust the tool programmed height accordingly.
- The variously profiled knives are perfectly interchangeable and do not affect the minimum tool diameter.
- This item is supplied without knives.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------|------------|
| 180 | 27 | 32 | 2 | 4 | 8.000 | TP42M AC3 | F03F676527 |
| 180 | 27 | 35 | 2 | 4 | 8.000 | TP42M AB3 | F03FC20494 |

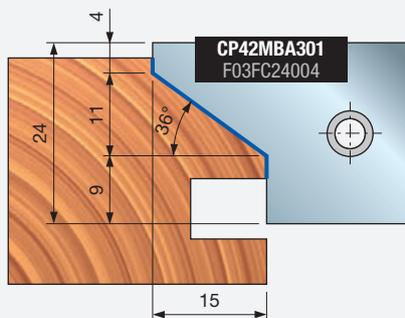
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-------------------|------------------|-------------|------------|
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Wedge | 21 x 19 x 8 | CN13M AS9A | F03FC24221 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Spur insert | 40 x 16 x 4 | IG05MDAA305 | F03FH02998 |
| | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Grooving insert | 34 x 8 x 16 | SR06MAM301 | F03FC24192 |
| | Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| | Allen key | 4 | CB03M BA9 | F03FA00163 |
| | Allen key | 5 | CB03M EA9 | F03FA00169 |

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|------------|------------|
| 1 | Knife | 24 x 34 x 3 | CP42MAA301 | F03FC24003 |
| 2 | Knife | 24 x 34 x 3 | CP42MBA301 | F03FC24004 |
| 3 | Knife | 24 x 34 x 3 | CP42MCA301 | F03FC24005 |

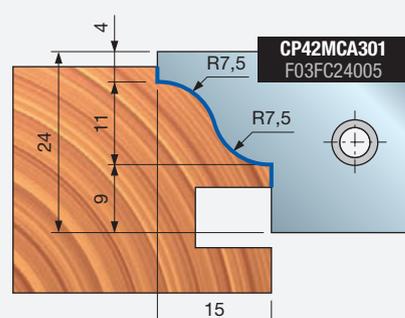
Profile 1



Profile 2

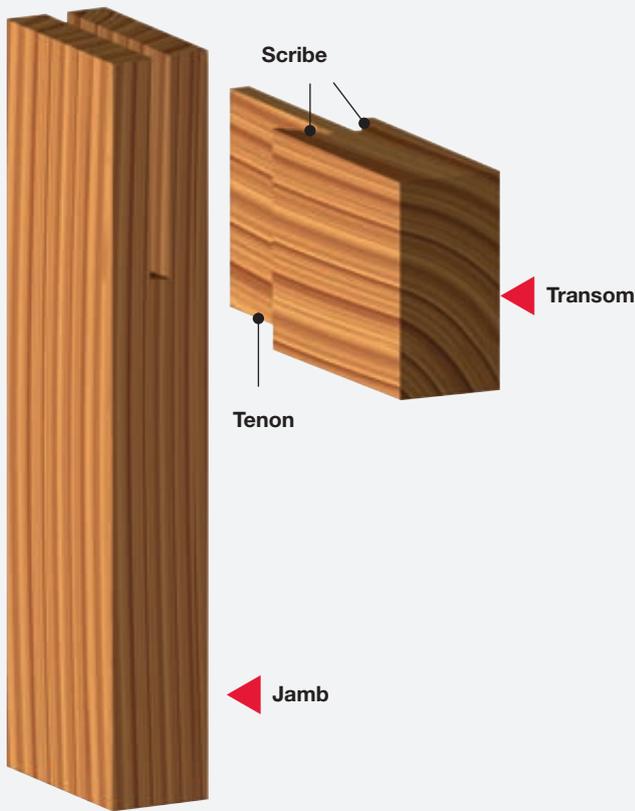


Profile 3

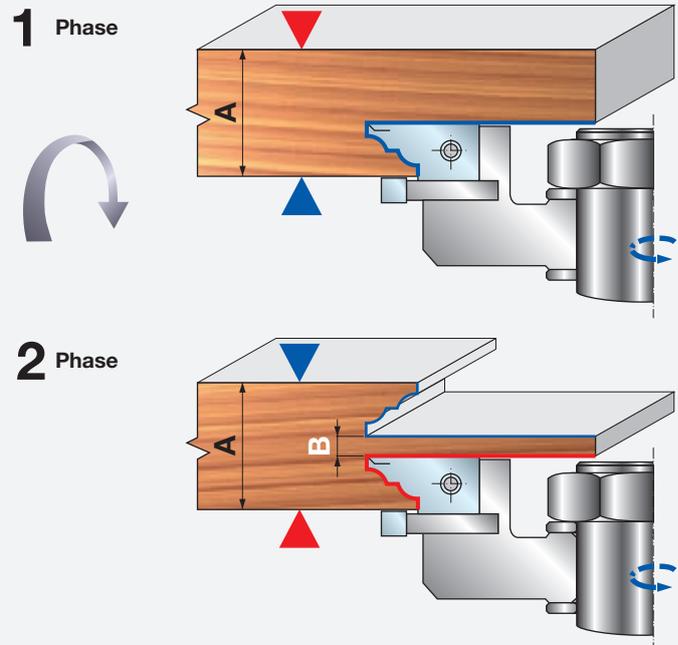


TP42M Multiprofile cutterheads for doors

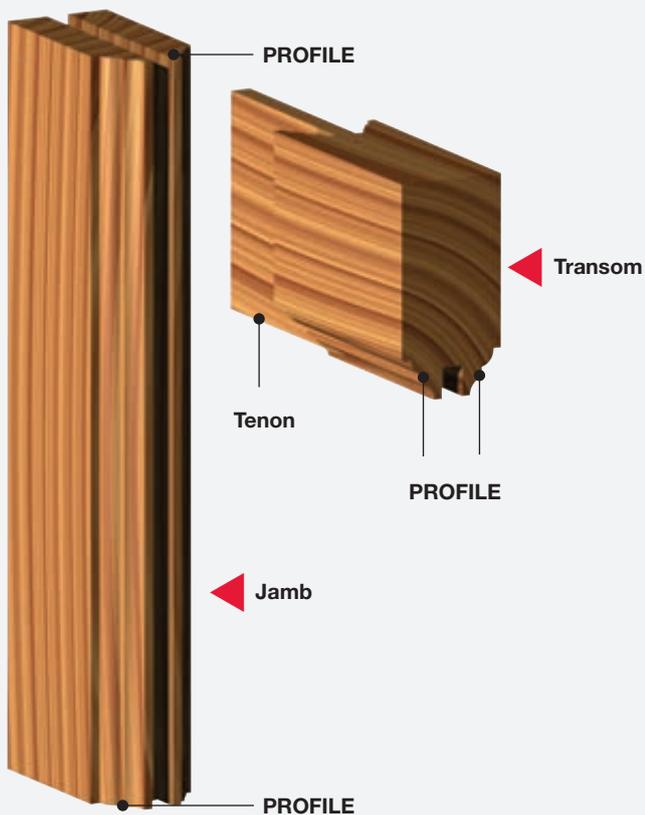
1 Door tenoning



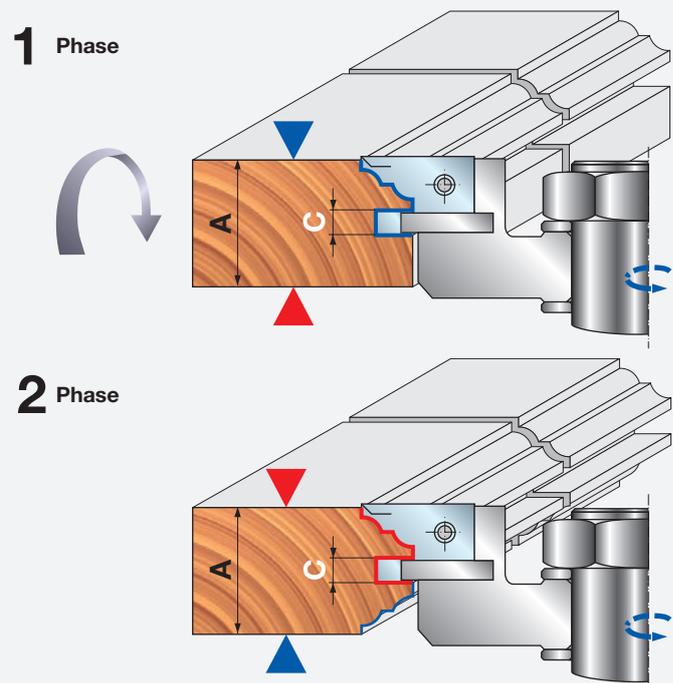
| A | Door thickness mm | B | Tenon thickness mm |
|---|----------------------|---|-----------------------|
| | 44 | | 8 |
| | 46 | | 10 |
| | 50 | | 14 |
| | 52 | | 16 |



2 Door frame profiling



| A | Door thickness mm | C | Groove thickness mm |
|---|----------------------|---|------------------------|
| | 44 | | 8 |
| | 46 | | 10 |
| | 50 | | 14 |
| | 52 | | 16 |



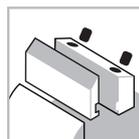


TP46MAN

Multiprofile cutterhead sets for doors (38-40 mm)



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Performance knives tool set for doors.

Adjustable timber thickness 38-40 mm.

- Profile and counter profile are both available with the same set (and same 0-point).
- The cutterhead set includes knives.
- Aluminium light alloy body.
- Rebore not available.

TP46MAN sets for manual feed

| Profile | D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|------------|------------|
| 1 | 174 | 78 | 30 | 2 | 7.500 | TP46MAN001 | F03FC20510 |
| 2 | 174 | 78 | 30 | 2 | 7.500 | TP46MAN002 | F03FC20511 |
| 3 | 174 | 78 | 30 | 2 | 7.500 | TP46MAN003 | F03FC20512 |
| 4 | 174 | 78 | 30 | 2 | 7.500 | TP46MAN004 | F03FC20513 |
| 5 | 174 | 78 | 30 | 2 | 7.500 | TP46MAN005 | F03FC20514 |
| 6 | 174 | 78 | 30 | 2 | 7.500 | TP46MAN006 | F03FC20515 |
| 7 | 174 | 78 | 30 | 2 | 7.500 | TP46MAN007 | F03FC20516 |
| 8 | 174 | 78 | 30 | 2 | 7.500 | TP46MAN008 | F03FC20517 |
| 1 | 174 | 78 | 32 | 2 | 7.500 | TP46MAN321 | F03FC24458 |
| 2 | 174 | 78 | 32 | 2 | 7.500 | TP46MAN322 | F03FC24459 |
| 3 | 174 | 78 | 32 | 2 | 7.500 | TP46MAN323 | F03FC24460 |
| 4 | 174 | 78 | 32 | 2 | 7.500 | TP46MAN324 | F03FC24461 |
| 5 | 174 | 78 | 32 | 2 | 7.500 | TP46MAN325 | F03FC24462 |
| 6 | 174 | 78 | 32 | 2 | 7.500 | TP46MAN326 | F03FC24463 |
| 7 | 174 | 78 | 32 | 2 | 7.500 | TP46MAN327 | F03FC24464 |
| 8 | 174 | 78 | 32 | 2 | 7.500 | TP46MAN328 | F03FC24465 |

Cutterheads for TP46M sets

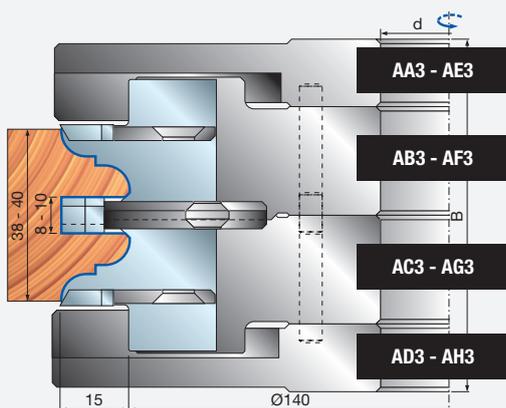
| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 174 | 31,5 | 30 | 2 | 8.300 | TP46M AB3 | F03FC20507 |
| 174 | 31,5 | 30 | 2 | 8.300 | TP46M AC3 | F03FC20508 |
| 174 | 31,5 | 32 | 2 | 8.300 | TP46M AF3 | F03FC24455 |
| 174 | 31,5 | 32 | 2 | 8.300 | TP46M AG3 | F03FC24456 |

Flanges for TP46MAN sets

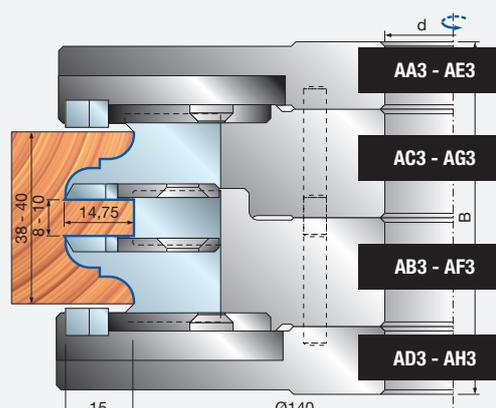
| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 174 | 18 | 30 | TP46M AA3 | F03FC20506 |
| 174 | 18 | 30 | TP46M AD3 | F03FC20509 |
| 174 | 18 | 32 | TP46M AE3 | F03FC24454 |
| 174 | 18 | 32 | TP46M AH3 | F03FC24457 |

See page 408-409 for spare parts.

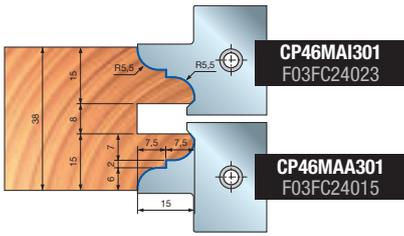
Example of profile



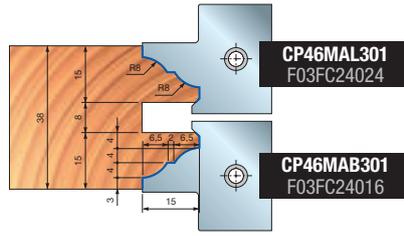
Example of scribe



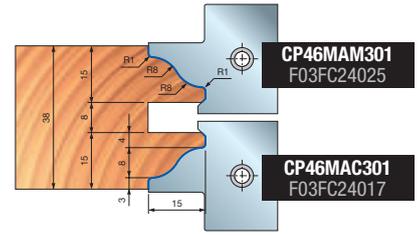
PROFILE 1



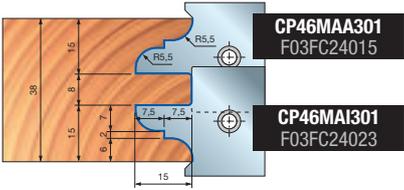
PROFILE 2



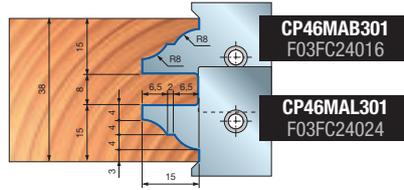
PROFILE 3



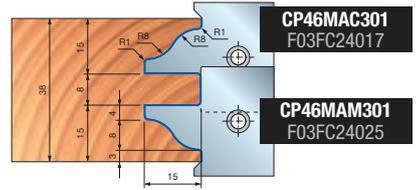
SCRIBE 1



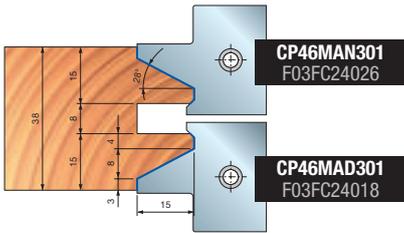
SCRIBE 2



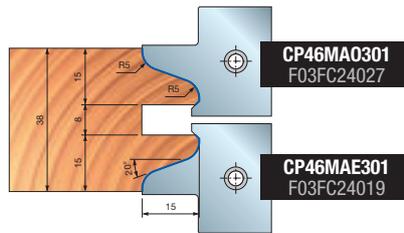
SCRIBE 3



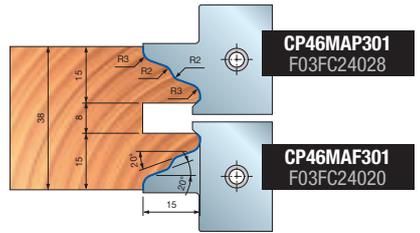
PROFILE 4



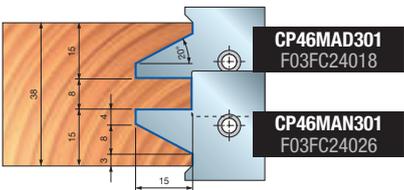
PROFILE 5



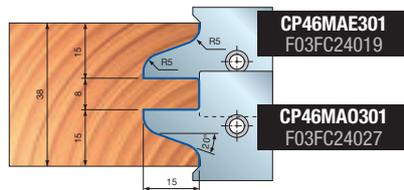
PROFILE 6



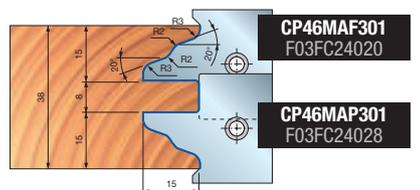
SCRIBE 4



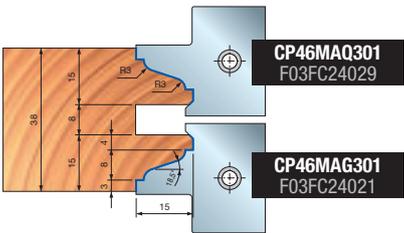
SCRIBE 5



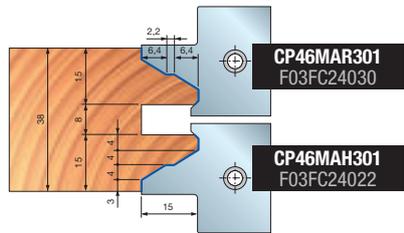
SCRIBE 6



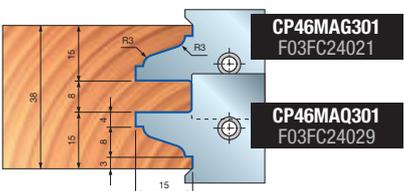
PROFILE 7



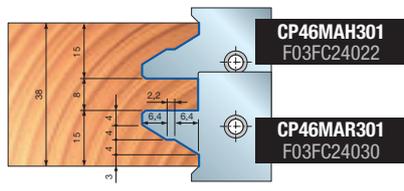
PROFILE 8



SCRIBE 7



SCRIBE 8





TP46MEC

Multiprofile cutterhead sets for doors (38-40 mm)



Automatic Feed Clamping System Aluminium Body



Softwood Hardwood



Profiling



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

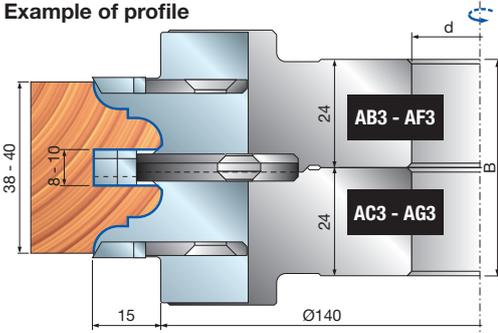
Performance knives tool set for doors.

Adjustable timber thickness 38-40 mm.

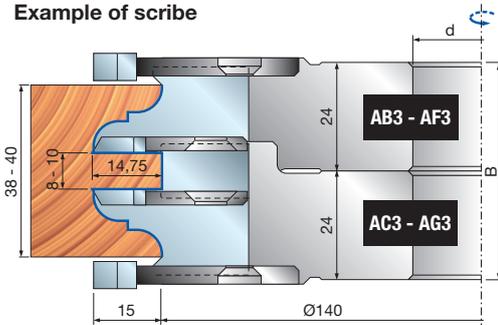
- Profile and counter profile are both available with the same set (and same 0-point).
- The cutterhead set includes knives.
- Aluminium light alloy body.
- Rebore not available.

| Profile | D mm | B mm | d mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|------|------|------|----------------|------------|------------|
| 1 | 170 | 48 | 30 | 7.500 | TP46MEC001 | F03FC20518 |
| 2 | 170 | 48 | 30 | 7.500 | TP46MEC002 | F03FC20519 |
| 3 | 170 | 48 | 30 | 7.500 | TP46MEC003 | F03FC20520 |
| 4 | 170 | 48 | 30 | 7.500 | TP46MEC004 | F03FC20521 |
| 5 | 170 | 48 | 30 | 7.500 | TP46MEC005 | F03FC20522 |
| 6 | 170 | 48 | 30 | 7.500 | TP46MEC006 | F03FC20523 |
| 7 | 170 | 48 | 30 | 7.500 | TP46MEC007 | F03FC20524 |
| 8 | 170 | 48 | 30 | 7.500 | TP46MEC008 | F03FC20525 |
| 1 | 170 | 48 | 32 | 7.500 | TP46MEC321 | F03FC24466 |
| 2 | 170 | 48 | 32 | 7.500 | TP46MEC322 | F03FC24467 |
| 3 | 170 | 48 | 32 | 7.500 | TP46MEC323 | F03FC24468 |
| 4 | 170 | 48 | 32 | 7.500 | TP46MEC324 | F03FC24469 |
| 5 | 170 | 48 | 32 | 7.500 | TP46MEC325 | F03FC24470 |
| 6 | 170 | 48 | 32 | 7.500 | TP46MEC326 | F03FC24471 |
| 7 | 170 | 48 | 32 | 7.500 | TP46MEC327 | F03FC24472 |
| 8 | 170 | 48 | 32 | 7.500 | TP46MEC328 | F03FC24473 |

Example of profile



Example of scribe



ATB 15° tooth (Fig. 2)

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----------|-------------|-------------------|----------------|------------------------|
| AB3 - AF3 | | Spacer | 50 x 2 x 30 | AN01MA0209 F03FC00035 |
| | | Spacer | 52 x 2 x 32 | AN01MX0209 F03FC24489 |
| | | Allen key | 4 | CB03M BA9 F03FA00163 |
| | | Allen key | 5 | CB03M EA9 F03FA00169 |
| | | Wedge | 28 x 34,5 x 8 | CN46M 001 F03FC01438 |
| | | Spur insert | 34 x 3,5 x 16 | SR06MDBA302 F03FC24197 |
| | | Sector | 25 x 45 x 6 Z1 | SR11MSBE301 F03FC24212 |
| | | Screw | M5 x 8 | VT05M AA9 F03FA04444 |
| | | Screw | M6 x 13 | VT16M AE9 F03FC20658 |
| | | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 F03FA04488 |
| AC3 - AG3 | | Screw | M10 x 16 | 2616M EE9 F03FA07426 |
| | | Wedge | 28 x 34,5 x 8 | CN46M 002 F03FC01439 |
| | | Spur insert | 34 x 3,5 x 16 | SR06MSBA302 F03FC24200 |
| | | Sector | 25 x 45 x 6 Z1 | SR11MDBE301 F03FC24207 |
| | | Screw | M5 x 8 | VT05M AA9 F03FA04444 |
| | | Screw | M6 x 11,5 | VT16M AB9 F03FA04477 |
| | | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 F03FA04488 |
| | | Screw | M10 x 16 | 2616M EE9 F03FA07426 |

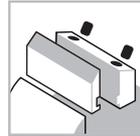


TD60M

Door frames profile cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

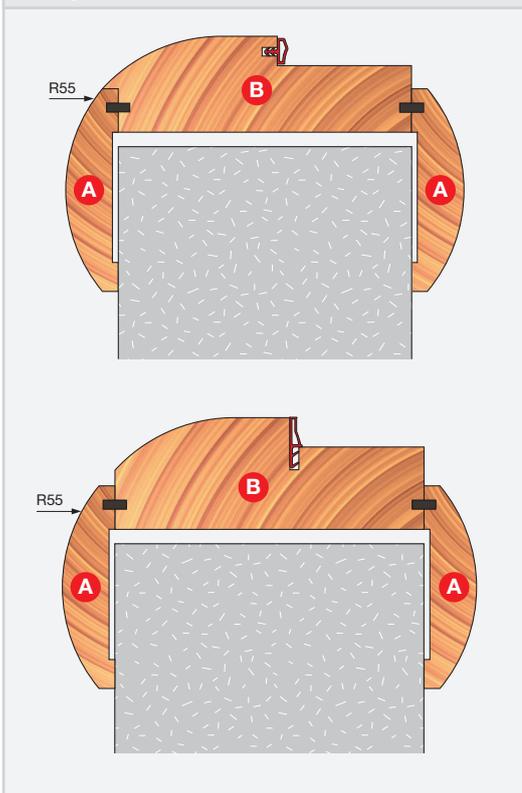
Panel sizing cutterhead with profiled knives suitable for door frames and door frame covers profiles.

- This tool is particularly suitable for profiling on hardwood and exotic wood, to produce door frames with rounded profile.
- Aluminium light alloy body.
- Rebore not available.

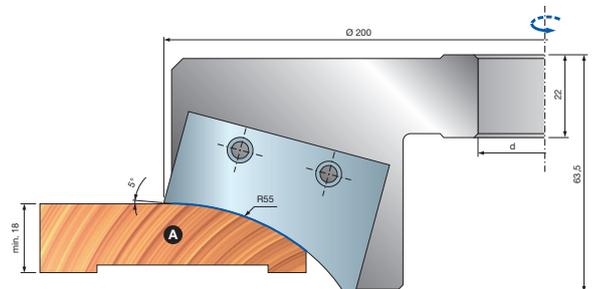
| D | B | d | Z | Max RPM | Freud Code | Art. No. |
|-----|----|----|---|---------|------------|------------|
| mm | mm | mm | | 1/min. | | |
| 200 | 55 | 32 | 3 | 7.000 | TD60M AC3 | F03F668631 |
| 200 | 55 | 35 | 3 | 7.000 | TD60M AB3 | F03FC20222 |

| Spare parts | | Dimensions | Freud Code | Art. No. |
|---|-----------|--------------|------------|------------|
| | | mm | | |
|  | Knife | 55 x 35 x 3 | CT60MAA301 | F03FC24114 |
|  | Wedge | 50 x 23 x 8 | CN60M AA9 | F03FC01446 |
|  | Screw | M10 x 25 | 2602M FI9 | F03FA07353 |
|  | Screw | M8 x 10 x 22 | VT08M AD9 | F03FA04456 |
|  | Allen key | 5 | CB03M EA9 | F03FA00169 |

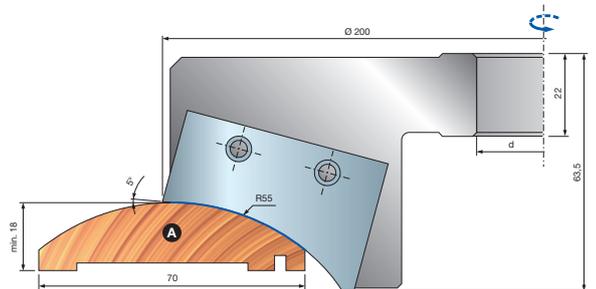
Example of door frame



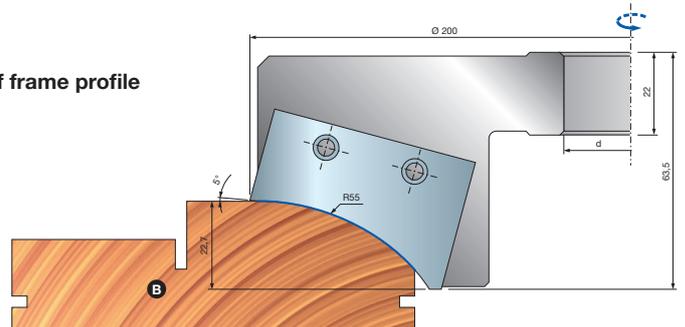
Step 1



Step 2



Example of frame profile



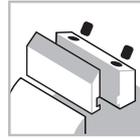


TD61M

Door frame profiles cutterhead set



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

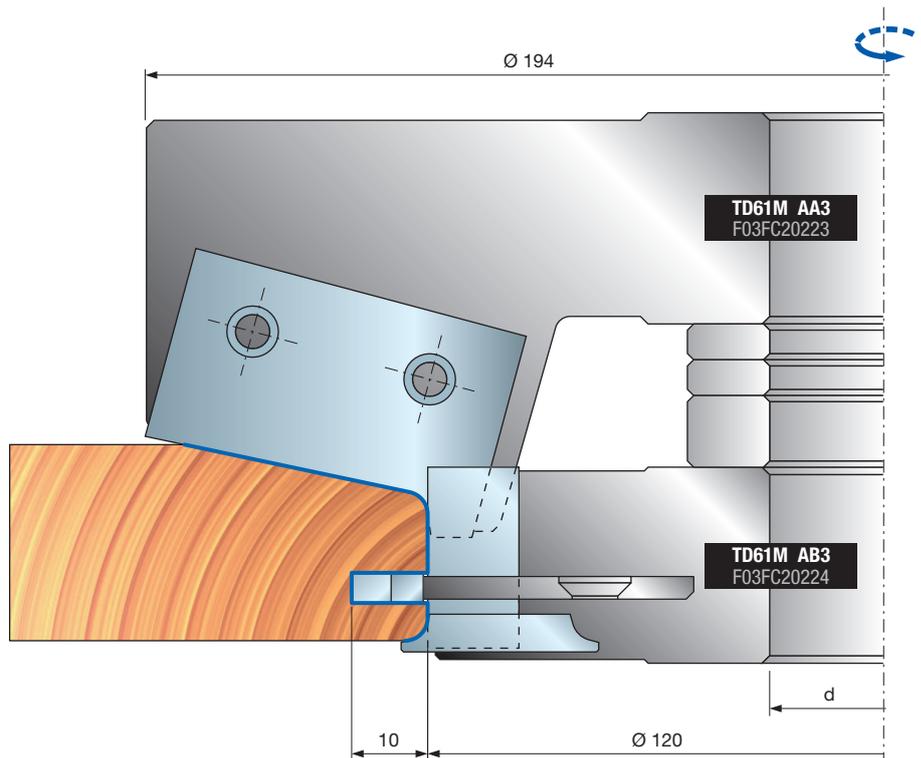
Technical information:

Multiple profile tools set for door frames.

- Aluminium light alloy body.
- Rebore not available.
- Performance knives to be ordered separately.

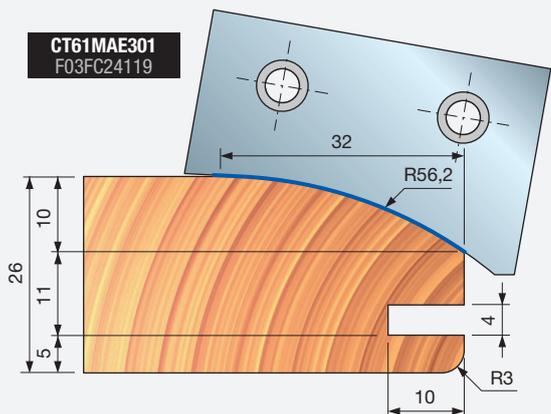
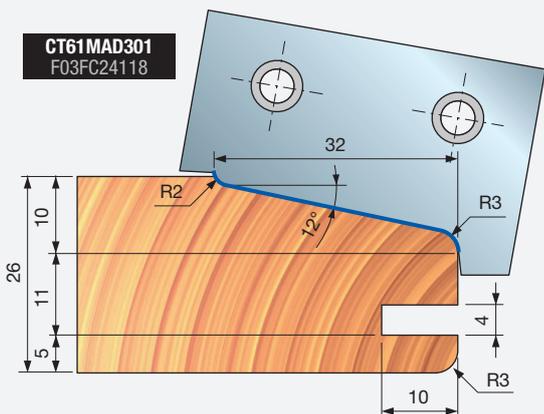
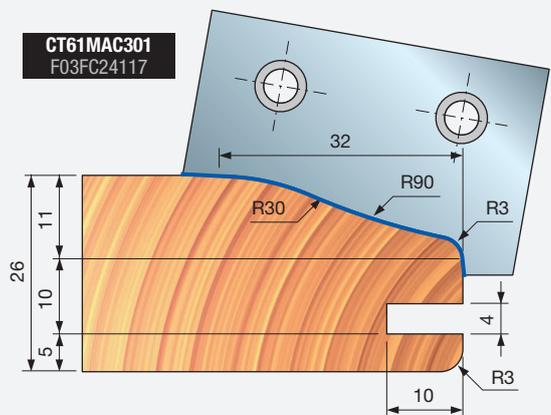
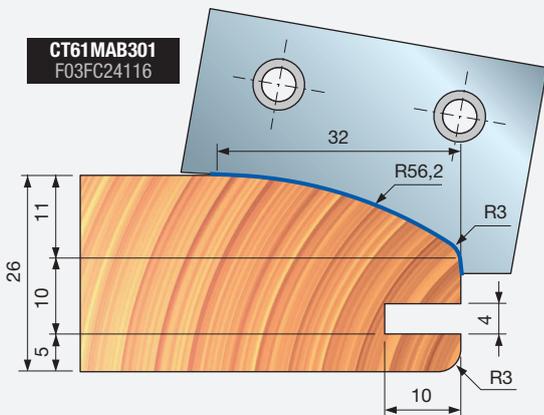
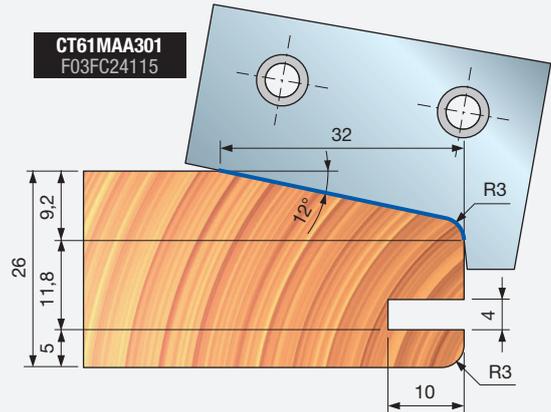
| D | B | d | Z | Max RPM | Freud Code | Art. No. |
|-----|----|----|---|---------|------------|------------|
| mm | mm | mm | | 1/min. | | |
| 194 | 59 | 30 | 2 | 7.000 | TD61M AA3 | F03FC20223 |
| 140 | 25 | 30 | 2 | 8.800 | TD61M AB3 | F03FC20224 |

| | Spare parts | Dimensions | Freud Code | Art. No. |
|-----|-------------|------------------|-----------------|------------------------|
| | | mm | | |
| AA3 | | Screw | M10 x 18 | VT03M CC9 F03FA04438 |
| | | Screw | M8 x 10 x 22 | VT08M AD9 F03FA04456 |
| | | Allen key | 5 | CB03M EA9 F03FA00169 |
| AB3 | | Knife | 24 x 12 x 1,5 | CG08MOA310 F03FH02911 |
| | | Wedge | 15 x 20 x 8 | CN09MD AK9 F03FC01304 |
| | | Nut | 15 x 13,3 x M10 | VT20M MA9 F03FC20670 |
| | | Screw | M10 x 22 | VT19M MA9 F03FA04496 |
| | | Sector | 25 x 45 x 4 Z1 | SR11MDBC301 F03FC24205 |
| | | Screw | M5 x 8 | VT05M AA9 F03FA04444 |
| | | Rounding insert | 26 x 16 x 5 R3 | IG62MSAE305 F03FH03033 |
| | | Screw for IG62MS | M6 x 14,5 | VT16M AA9 F03FA04476 |
| | | Allen key | 4 | CB03M BA9 F03FA00163 |
| | | Torx key | T20 | CB03M CC9 F03FA00167 |



| Dimensions mm | Spare knives | Art. No. |
|------------------|-------------------|------------|
| 45 x 30 x 3 | CT61MAA301 | F03FC24115 |
| 45 x 30 x 3 | CT61MAB301 | F03FC24116 |
| 45 x 30 x 3 | CT61MAC301 | F03FC24117 |
| 45 x 30 x 3 | CT61MAD301 | F03FC24118 |
| 45 x 30 x 3 | CT61MAE301 | F03FC24119 |

Profiles obtainable using both the cutterheads TD61M AA3 and TD61M AB3



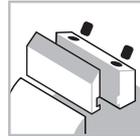


TD21M

Raised panel cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Performance knives raised panel with 5 different profiles available.

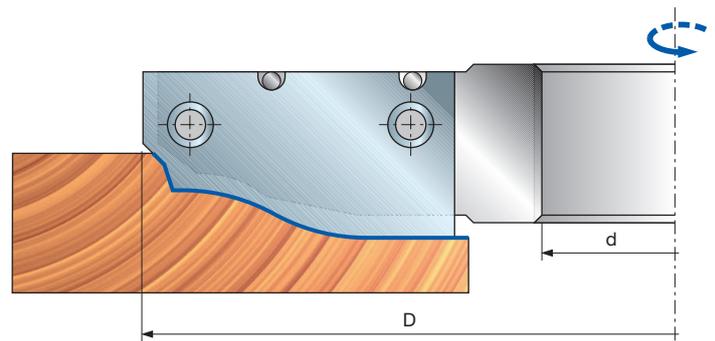
- Aluminium light alloy body.
- Rebore not available.
- Knives to be ordered separately.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------------|------------|
| 140 | - | 30 | 2 | 9.600 | TD21M HA3 | F03FC24421 |
| 140 | - | 32 | 2 | 9.600 | TD21M HC3 | F03FC24422 |
| 140 | - | 35 | 2 | 9.600 | TD21M HB3 | F03FC23145 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|---|-------------------|------------------|------------------|------------|
|  | Screw | M6 x 10 | 2622M CB9 | F03FA07455 |
|  | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
|  | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
|  | Positioning plate | 33 x 3 x 16 | VT18M AI9 | F03FC20661 |
|  | Allen key | 4 | CB03M BA9 | F03FA00163 |

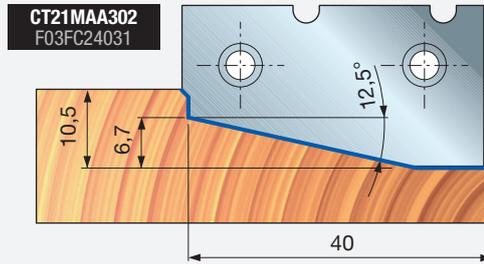
Profiled knives

| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|--|--------------|------------------|-------------------|------------|
| 1  | Knife | 41 x 22 x 3,5 | CT21MAA302 | F03FC24031 |
| 2  | Knife | 41 x 22 x 3,5 | CT21MBA302 | F03FC24032 |
| 3  | Knife | 41 x 22 x 3,5 | CT21MCA302 | F03FC24033 |
| 4  | Knife | 41 x 22 x 3,5 | CT21MDA302 | F03FC24034 |
| 5  | Knife | 41 x 22 x 3,5 | CT21MEA302 | F03FC24035 |

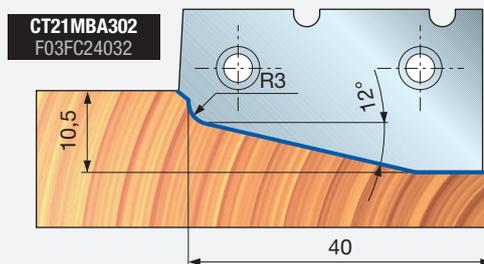


Example of profiles

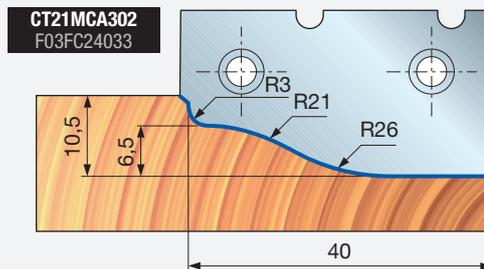
PROFILE 1



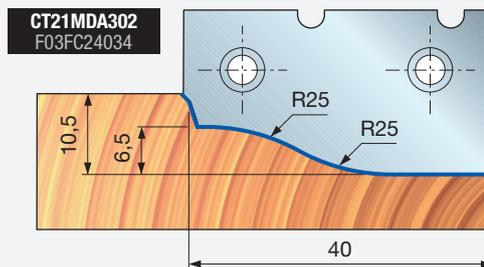
PROFILE 2



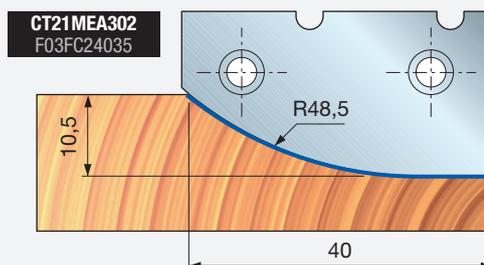
PROFILE 3



PROFILE 4



PROFILE 5



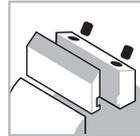


TD51M

Raised panel cutterheads for softwood and hardwood



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

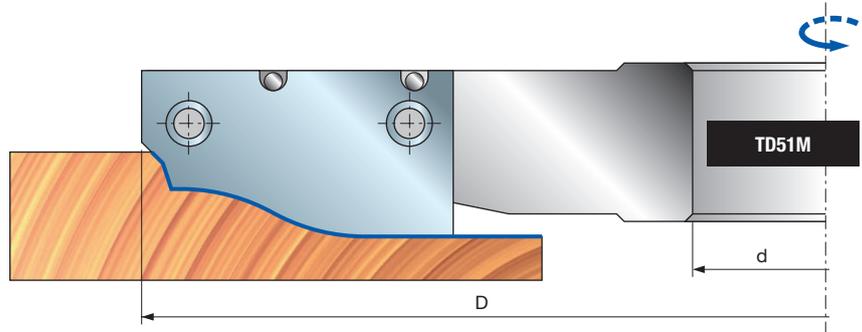
Technical information:

Performance knives raised panel with 5 different profiles available designed to fit knives for softwood and hardwood.

- Designed to perfectly cut softwood or hardwood with two knives, with both along the grain or end grain feeding.
- This result has been achieved by choosing different cutting angles according to the type of wood to be machined.
- Only two knives are to be fitted on the tool at one time, in opposite direction.
- The dimensions of the knives for cutting hardwood and softwood are different but the same profile is achieved.
- This item is supplied without knives.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-----|-------------------|------------|------------|
| 180 | - | 30 | 2+2 | 7.500 | TD51M AA3 | F03FC20209 |
| 180 | - | 32 | 2+2 | 7.500 | TD51M AC3 | F03FC24423 |
| 180 | - | 35 | 2+2 | 7.500 | TD51M AB3 | F03FC20210 |
| 180 | - | 50 | 2+2 | 7.500 | TD51M AD3 | F03FC20211 |

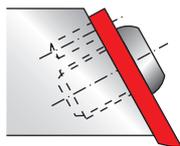
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|----------|------------------|------------|------------|
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Torx key | 4 | CB03M BB9 | F03FA00164 |



1 Knife



2 Knife



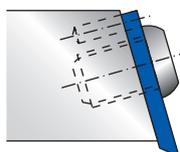
2 Knives for Softwood

| Profile | Dimensions mm | Freud Code | Art. No. |
|---------|------------------|------------|------------|
| | 41 x 28 x 3,5 | CT51MAA302 | F03FC24036 |
| | 41 x 28 x 3,5 | CT51MBA302 | F03FC24037 |
| | 41 x 28 x 3,5 | CT51MCA302 | F03FC24038 |
| | 41 x 28 x 3,5 | CT51MDA302 | F03FC24039 |
| | 41 x 28 x 3,5 | CT51MEA302 | F03FC24040 |

2 Knife



1 Knife

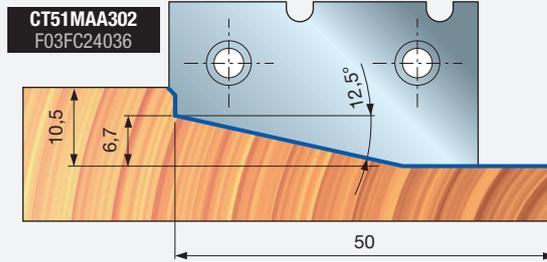


2 Knives for Hardwood

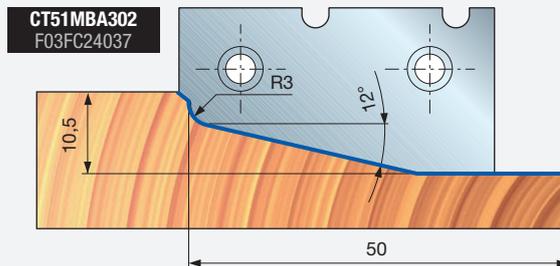
| Profile | Dimensions mm | Freud Code | Art. No. |
|---------|------------------|------------|------------|
| | 41 x 22 x 3,5 | CT21MAA302 | F03FC24031 |
| | 41 x 22 x 3,5 | CT21MBA302 | F03FC24032 |
| | 41 x 22 x 3,5 | CT21MCA302 | F03FC24033 |
| | 41 x 22 x 3,5 | CT21MDA302 | F03FC24034 |
| | 41 x 22 x 3,5 | CT21MEA302 | F03FC24035 |

Example of profiles

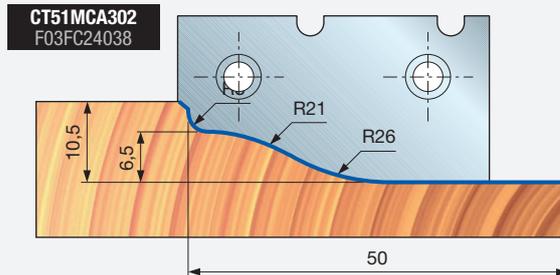
PROFILE 1



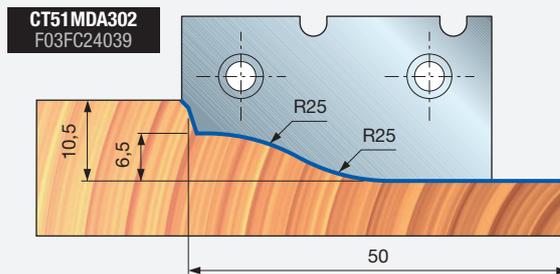
PROFILE 2



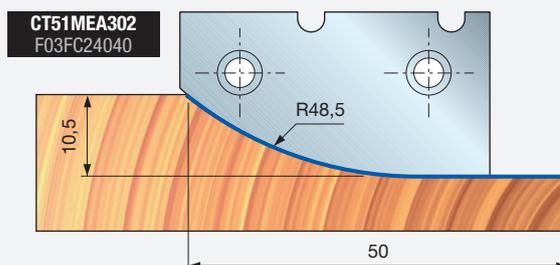
PROFILE 3



PROFILE 4



PROFILE 5



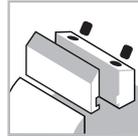


TD52M TD52MD

Raised panel cutterheads for softwood and hardwood



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Performance knives raised panel with 5 different profiles available designed to fit knives for softwood and hardwood.

- This tool is designed to perfectly cut softwood or hardwood with two knives, with both along the grain or end grain feeding.
- This result has been achieved by choosing different cutting angles according to the type of wood to be machined.
- Only two knives are to be fitted on the tool at one time, in opposite direction.
- The dimensions of the knives for cutting hardwood and softwood are different but the same profile is achieved.
- This item is supplied without knives.
- Aluminium light alloy body. For cleaning do not use products containing caustic soda.
- Rebore not available.

Items are supplied with knives

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-----|-------------------|------------|------------|
| 200 | 25 | 30 | 2+2 | 7.000 | TD52M CA3 | F03FC24424 |
| 200 | 25 | 30 | 2+2 | 7.000 | TD52MD CA3 | F03FC24426 |
| 200 | 25 | 32 | 2+2 | 7.000 | TD52M CC3 | F03FC24425 |
| 200 | 25 | 32 | 2+2 | 7.000 | TD52MD CC3 | F03FC24427 |
| 200 | 25 | 35 | 2+2 | 7.000 | TD52M CB3 | F03FC20212 |
| 200 | 25 | 35 | 2+2 | 7.000 | TD52MD CB3 | F03FC20214 |

Items are supplied without knives

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-----|-------------------|------------|------------|
| 200 | 25 | 30 | 2+2 | 7.000 | TD52M HA3 | F03F668623 |
| 200 | 25 | 30 | 2+2 | 7.000 | TD52MD HA3 | F03F668625 |
| 200 | 25 | 32 | 2+2 | 7.000 | TD52M HC3 | F03F668624 |
| 200 | 25 | 32 | 2+2 | 7.000 | TD52MD HC3 | F03F668626 |
| 200 | 25 | 35 | 2+2 | 7.000 | TD52M HB3 | F03FC20213 |
| 200 | 25 | 35 | 2+2 | 7.000 | TD52MD HB3 | F03FC20215 |

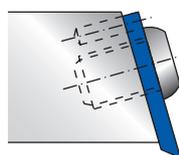
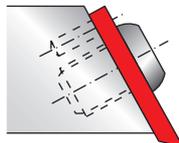
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|----------|------------------|------------|------------|
| | Washer | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | Screw | M6 x 12 | 2607M 006 | F03FA07456 |
| | Torx key | 4 | CB03M BB9 | F03FA00164 |

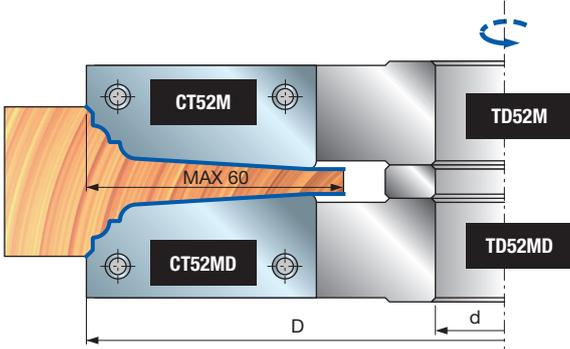
2 Knives for Softwood

| Profile | Dimensions mm | Freud Code | Art. No. |
|---------|------------------|-------------|------------|
| 2 | 55 x 30 x 3,5 | CT52MTB301 | F03FC24057 |
| | | CT52MDTB301 | F03FC24052 |
| 3 | 55 x 30 x 3,5 | CT52MTC301 | F03FC24058 |
| | | CT52MDTC301 | F03FC24053 |
| 4 | 55 x 30 x 3,5 | CT52MTD301 | F03FC24059 |
| | | CT52MDTD301 | F03FC24054 |
| 5 | 55 x 30 x 3,5 | CT52MTE301 | F03FC24060 |
| | | CT52MDTE301 | F03FC24055 |

2 Knives for Hardwood

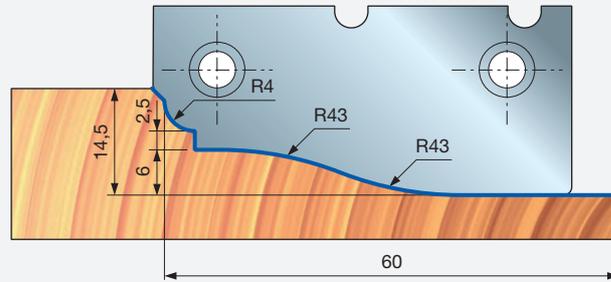
| Profile | Dimensions mm | Freud Code | Art. No. |
|---------|------------------|-------------|------------|
| 2 | 55 x 25 x 3,5 | CT52MDB301 | F03FC24042 |
| | | CT52MDD301 | F03FC24045 |
| 3 | 55 x 25 x 3,5 | CT52MDC301 | F03FC24043 |
| | | CT52MDDC301 | F03FC24046 |
| 4 | 55 x 25 x 3,5 | CT52MDD301 | F03FC24049 |
| | | CT52MDD301 | F03FC24047 |
| 5 | 55 x 25 x 3,5 | CT52MDE301 | F03FC24050 |
| | | CT52MDDE301 | F03FC24048 |



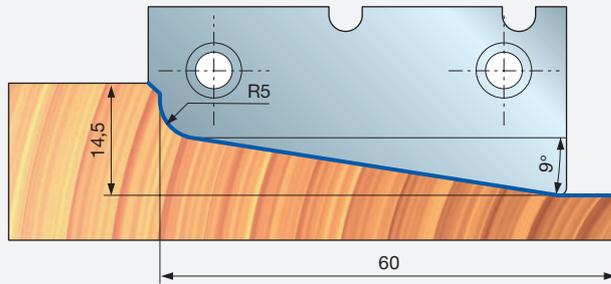


Example of profiles

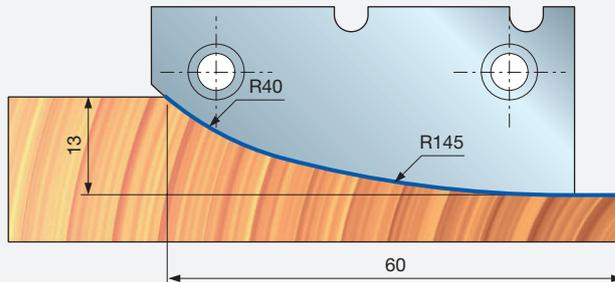
PROFILE 2



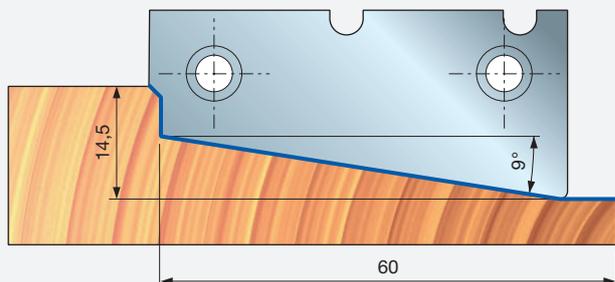
PROFILE 3

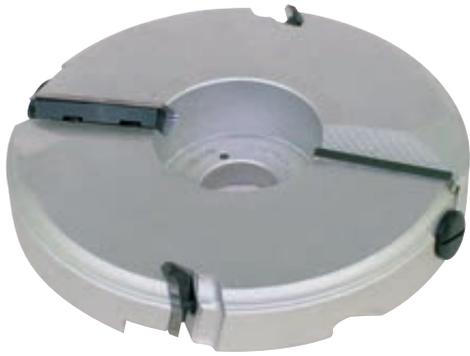


PROFILE 4



PROFILE 5



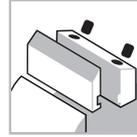


TD55MD TD55MS

Raised panel cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

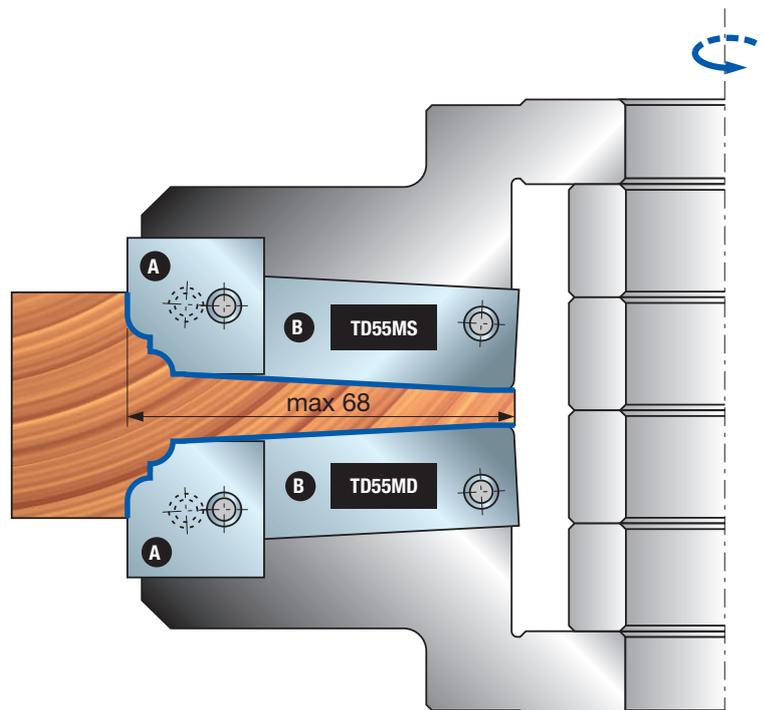
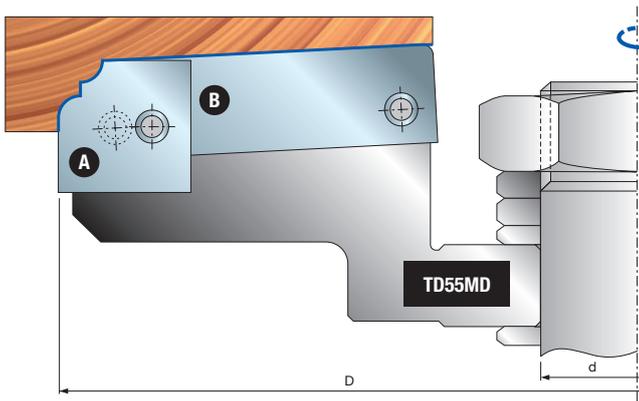
Performance knives raised panel with 4 different profiles available.

- The Z 2+2 design allows the tool to impact the wood perfectly along the entire depth profile (max 65mm).
- Raised panels are available in left and right hand and both can work combined for a one step profile.
- It is possible to fit 4 types of standard knives for machining 4 different profiles (see drawings).
- Due to the particular tool geometry, this item is particularly indicated for cutting deep profiles.
- These items are supplied without knives.
- Aluminium light alloy body. For cleaning do not use products containing caustic soda.
- Rebore not available.

| D mm | B mm | d* mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|----------|-----|-------------------|-------------------|------------|
| 210 | - | 30 | 2+2 | 6.500 | TD55MD BA3 | F03F668627 |
| 210 | - | 32 | 2+2 | 6.500 | TD55MD BC3 | F03F668628 |
| 210 | - | 35 | 2+2 | 6.500 | TD55MD BB3 | F03FC20217 |
| 210 | - | 30 | 2+2 | 6.500 | TD55MS BA3 | F03F668629 |
| 210 | - | 32 | 2+2 | 6.500 | TD55MS BC3 | F03F668630 |
| 210 | - | 35 | 2+2 | 6.500 | TD55MS BB3 | F03FC20219 |

* Size shown between brackets is the max. rebore possible

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|---------------|-------------|------------------|--------------------|------------|
| | Screw | M10 x 25 | 2602M FI9 | F03FA07353 |
| | Screw | M8 x 10 x 22 | VT08M AD9 | F03FA04456 |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| | Allen key | 5 | CB03M EC9 | F03FA00171 |
| TD55MS TD55MD | Wedge A | 21 x 23 x 8 | CN55MD AA9A | F03FC24544 |
| | Wedge B | 61 x 18 x 8 | CN55MD BA9 | F03FC01441 |
| | Wedge A | 21 x 23 x 8 | CN55MS AA9A | F03FC24545 |
| | Wedge B | 61 x 18 x 8 | CN55MS BA9 | F03FC01443 |



Knives for TD55MD

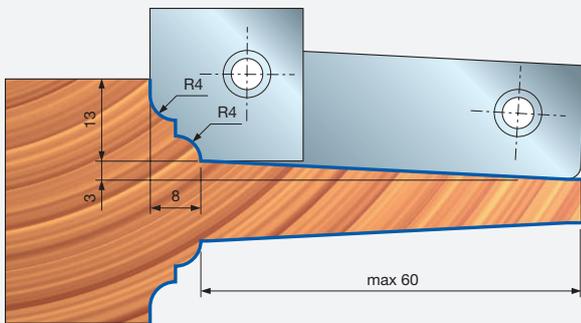
| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|-------------|------------|
| 1 | Knife A | 23 x 24 x 3 | CT55MDAA301 | F03FC24078 |
| | Knife B | 65 x 20 x 3 | CT55MDBA301 | F03FC24087 |
| 2 | Knife A | 23 x 24 x 3 | CT55MDAB301 | F03FC24079 |
| | Knife B | 65 x 20 x 3 | CT55MDBB301 | F03FC24088 |
| 3 | Knife A | 23 x 24 x 3 | CT55MDAC301 | F03FC24080 |
| | Knife B | 65 x 20 x 3 | CT55MDBC301 | F03FC24089 |
| 4 | Knife A | 23 x 24 x 3 | CT55MDAE301 | F03FC24082 |
| | Knife B | 65 x 20 x 3 | CT55MDBE301 | F03FC24091 |

Knives for TD55MS

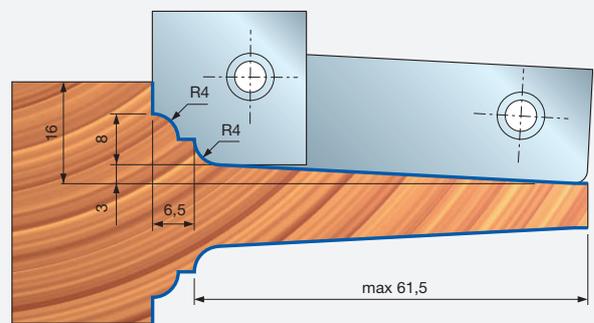
| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|-------------|------------|
| 1 | Knife A | 23 x 24 x 3 | CT55MSAA301 | F03FC24096 |
| | Knife B | 65 x 20 x 3 | CT55MSBA301 | F03FC24105 |
| 2 | Knife A | 23 x 24 x 3 | CT55MSAB301 | F03FC24097 |
| | Knife B | 65 x 20 x 3 | CT55MSBB301 | F03FC24106 |
| 3 | Knife A | 23 x 24 x 3 | CT55MSAC301 | F03FC24098 |
| | Knife B | 65 x 20 x 3 | CT55MSBC301 | F03FC24107 |
| 4 | Knife A | 23 x 24 x 3 | CT55MSAE301 | F03FC24100 |
| | Knife B | 65 x 20 x 3 | CT55MSBE301 | F03FC24109 |

Example of profiles

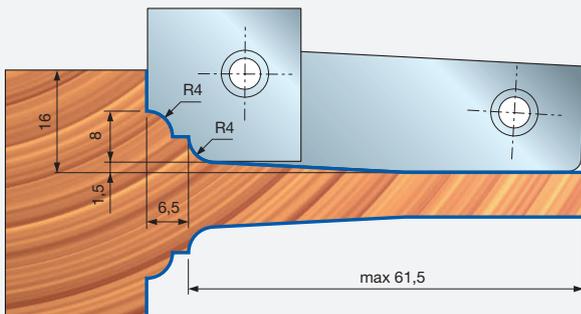
PROFILE 1



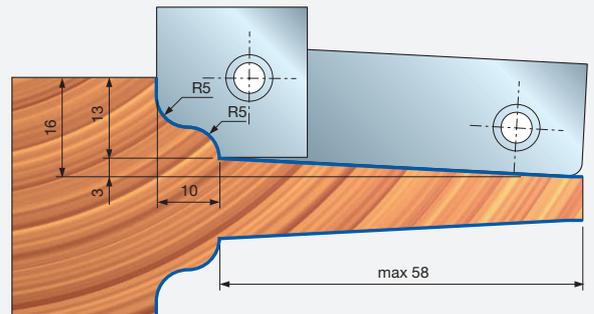
PROFILE 2



PROFILE 3



PROFILE 4



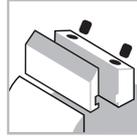


TD55MD TD55MS

Raised panel cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

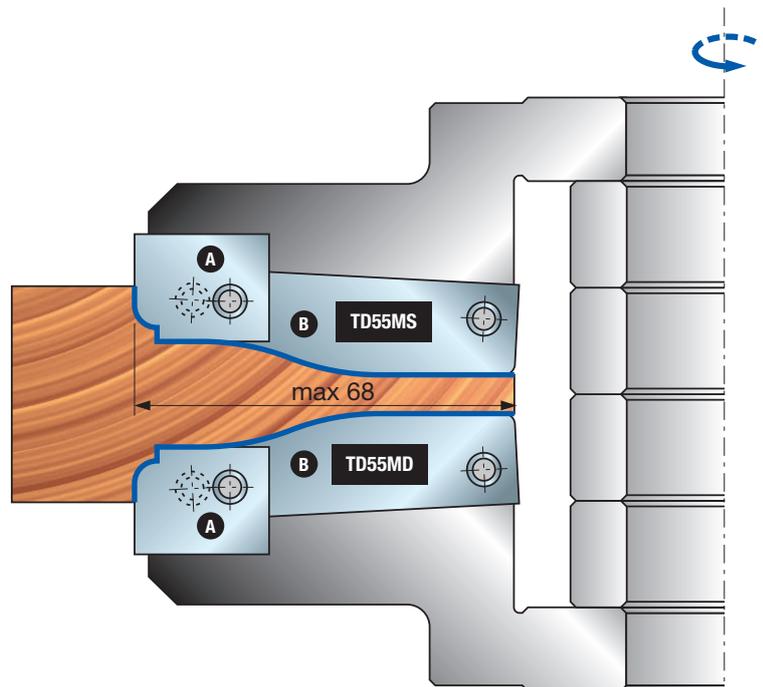
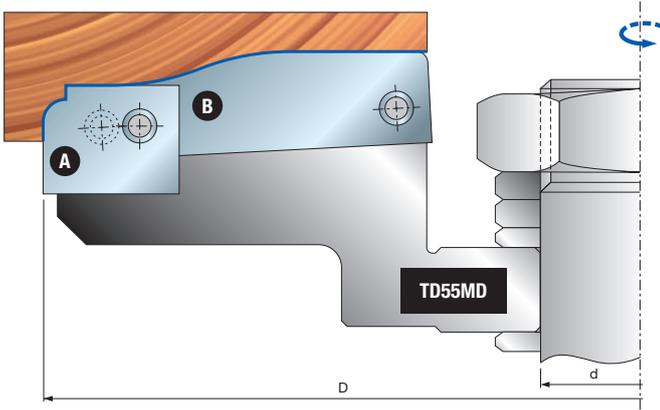
Technical information:

Performance knives raised panel with 4 different profiles available.

- The Z 2+2 design allows the tool to impact the wood perfectly along the entire depth profile (max 65mm).
- Raised panels are available in left and right hand and both can work combined for a one step profile.
- Is possible to fit 4 types of standard knives for machining 4 different profiles (see drawings).
- Due to the particular tool geometry, this item is particularly indicated for cutting deep profiles.
- These items are supplied without knives.
- Aluminium light alloy body.
- Rebore not available.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-----|-------------------|-------------------|------------|
| 210 | - | 30 | 2+2 | 6.500 | TD55MD CA3 | F03F668934 |
| 210 | - | 32 | 2+2 | 6.500 | TD55MD CC3 | F03F668935 |
| 210 | - | 35 | 2+2 | 6.500 | TD55MD CB3 | F03FC20218 |
| 210 | - | 30 | 2+2 | 6.500 | TD55MS CA3 | F03F668936 |
| 210 | - | 32 | 2+2 | 6.500 | TD55MS CC3 | F03F668937 |
| 210 | - | 35 | 2+2 | 6.500 | TD55MS CB3 | F03FC20220 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|------------------|-------------|------------------|--------------------|------------|
| | Screw | M10 x 25 | 2602M FI9 | F03FA07353 |
| | Screw | M8 x 10 x 22 | VT08M AD9 | F03FA04456 |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| | Allen key | 5 | CB03M EC9 | F03FA00171 |
| TD55MD TD55MS | Wedge A | 21 x 23 x 8 | CN55MD AA9A | F03FC24544 |
| | Wedge B | 61 x 18 x 8 | CN55MD BA9 | F03FC01441 |
| | Wedge A | 21 x 23 x 8 | CN55MS AA9A | F03FC24545 |
| | Wedge B | 61 x 18 x 8 | CN55MS BA9 | F03FC01443 |



Knives for TD55MD

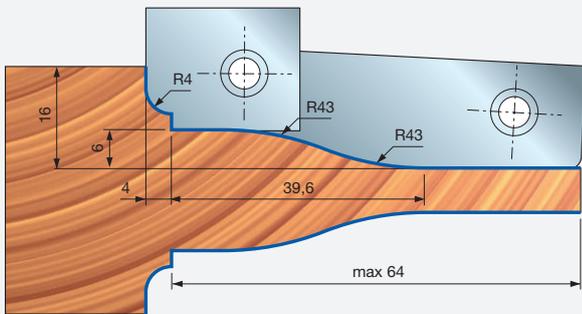
| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|-------------|------------|
| 1 | Knife A | 20 x 24 x 3 | CT55MDAD301 | F03FC24081 |
| | Knife B | 65 x 20 x 3 | CT55MDBD301 | F03FC24090 |
| 2 | Knife A | 20 x 24 x 3 | CT55MDAG301 | F03FC24084 |
| | Knife B | 65 x 20 x 3 | CT55MDBG301 | F03FC24093 |
| 3 | Knife A | 20 x 24 x 3 | CT55MDAH301 | F03FC24085 |
| | Knife B | 65 x 20 x 3 | CT55MDBH301 | F03FC24094 |
| 4 | Knife A | 20 x 24 x 3 | CT55MDAI301 | F03FC24086 |
| | Knife B | 65 x 20 x 3 | CT55MDBI301 | F03FC24095 |

Knives for TD55MS

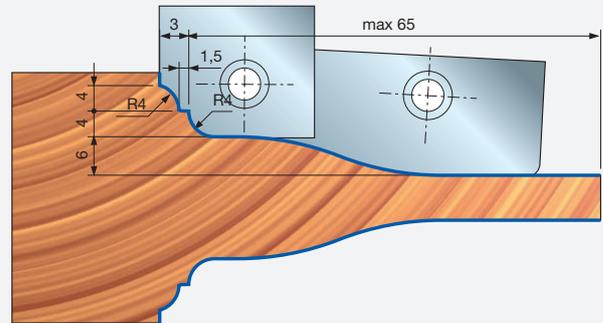
| Profile | Spare knives | Dimensions mm | Freud Code | Art. No. |
|---------|--------------|------------------|-------------|------------|
| 1 | Knife A | 20 x 24 x 3 | CT55MSAD301 | F03FC24099 |
| | Knife B | 65 x 20 x 3 | CT55MSBD301 | F03FC24108 |
| 2 | Knife A | 20 x 24 x 3 | CT55MSAG301 | F03FC24102 |
| | Knife B | 65 x 20 x 3 | CT55MSBG301 | F03FC24111 |
| 3 | Knife A | 20 x 24 x 3 | CT55MSAH301 | F03FC24103 |
| | Knife B | 65 x 20 x 3 | CT55MSBH301 | F03FC24112 |
| 4 | Knife A | 20 x 24 x 3 | CT55MSAI301 | F03FC24104 |
| | Knife B | 65 x 20 x 3 | CT55MSBI301 | F03FC24113 |

Example of profiles

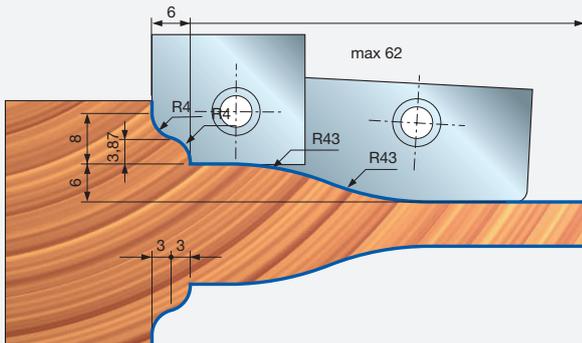
PROFILE 1



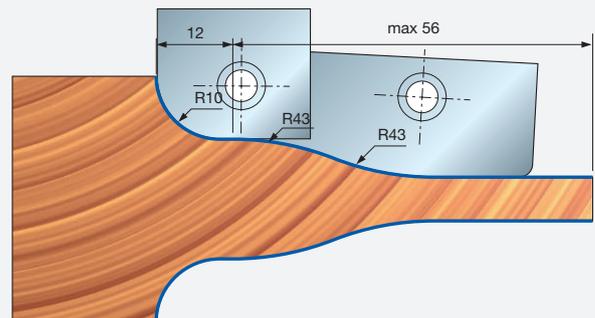
PROFILE 2



PROFILE 3



PROFILE 4



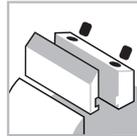


TG79MG

Cutterhead sets for panelling and flooring



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Z2 cutterhead sets for panelling and flooring; tongue and groove both available.

- 16 different combinations available in terms of profile and timber thickness (from 12 to 38 mm) tools sets provided with sleeves to fit different machine spindles.
- Steel body.
- Rebore not available.
- Optional inserts to be ordered separately.

Sleeves for off side spindle

| Dimensions mm | Sleeve code | Art. No. |
|------------------|-------------|------------|
| Ø50 x 110 x 30 | BF10MS AA9 | F03FC00661 |
| Ø50 x 110 x 32 | BF10MS AL9 | F03FC24538 |
| Ø50 x 110 x 35 | BF10MS AB9 | F03FC00662 |
| Ø50 x 110 x 40 | BF10MS AC9 | F03FC00663 |

Sleeves for fence side spindle

| Dimensions mm | Sleeve code | Art. No. |
|------------------|-------------|------------|
| Ø50 x 110 x 30 | BF10MD AA9 | F03FC00616 |
| Ø50 x 110 x 32 | BF10MD AL9 | F03FC24533 |
| Ø50 x 110 x 35 | BF10MD AB9 | F03FC00617 |
| Ø50 x 110 x 40 | BF10MD AC9 | F03FC00618 |

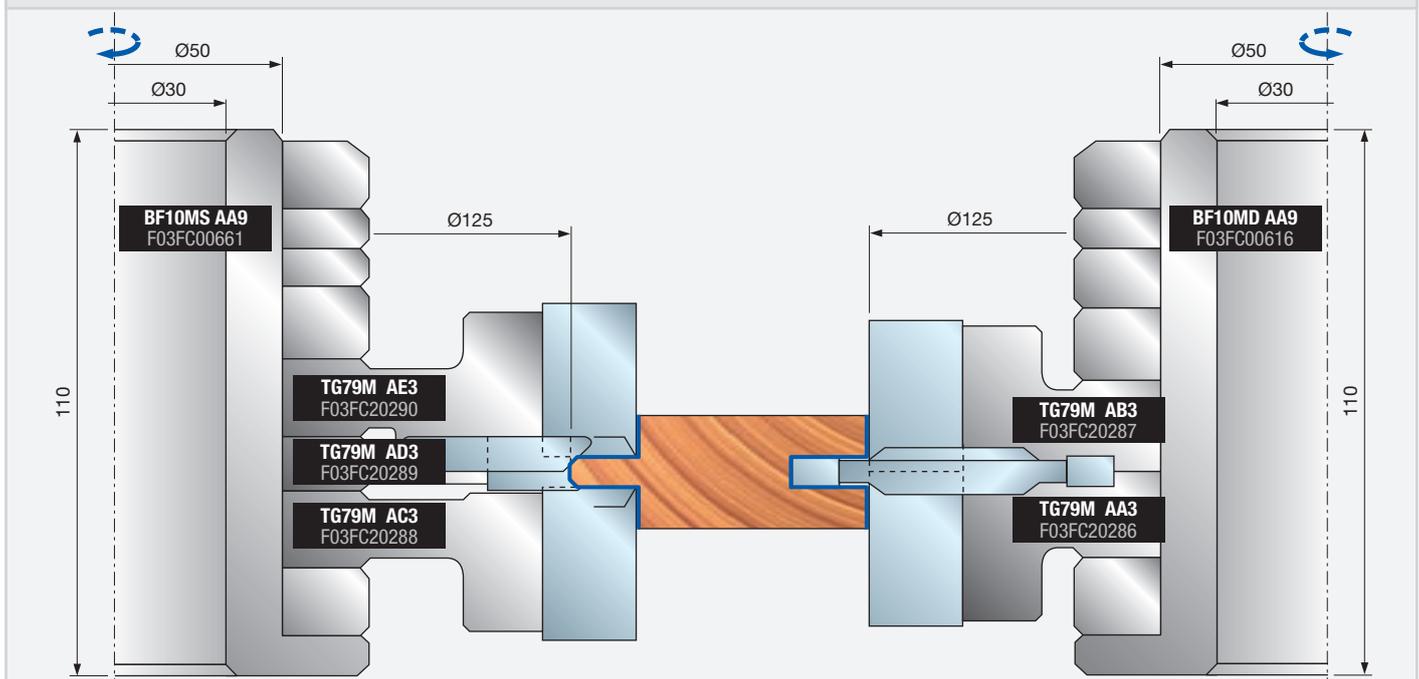


Profiling

| Profile | Tongue set | Art. No. | Groove set | Art. No. |
|---------|------------|------------|------------|------------|
| 1 | TG79MG 002 | F03FC20305 | TG79MG 001 | F03FC20304 |
| 2 | TG79MG 003 | F03FC20306 | TG79MG 001 | F03FC20304 |
| 3 | TG79MG 006 | F03FC20309 | TG79MG 004 | F03FC20307 |
| 4 | TG79MG 025 | F03FC20320 | TG79MG 020 | F03FC20315 |
| 5 | TG79MG 007 | F03FC20310 | TG79MG 005 | F03FC20308 |
| 6 | TG79MG 026 | F03FC20321 | TG79MG 021 | F03FC20316 |
| 7 | TG79MG 027 | F03FC20322 | TG79MG 022 | F03FC20317 |
| 8 | TG79MG 028 | F03FC20323 | TG79MG 023 | F03FC20318 |
| 9 | TG79MG 029 | F03FC20324 | TG79MG 024 | F03FC20319 |
| 10 | TG79MG 010 | F03FC20313 | TG79MG 008 | F03FC20311 |
| 11 | TG79MG 035 | F03FC20330 | TG79MG 030 | F03FC20325 |
| 12 | TG79MG 011 | F03FC20314 | TG79MG 009 | F03FC20312 |
| 13 | TG79MG 036 | F03FC20331 | TG79MG 031 | F03FC20326 |
| 14 | TG79MG 037 | F03FC20332 | TG79MG 032 | F03FC20327 |
| 15 | TG79MG 038 | F03FC20333 | TG79MG 033 | F03FC20328 |
| 16 | TG79MG 039 | F03FC20334 | TG79MG 034 | F03FC20329 |

Cutterhead set TG79MG 002

Cutterhead set TG79MG 001



TG79MG

Cutterheads sets for panelling and flooring

Tools for TG79MG sets

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------------|------------|
| 125 | 20 | 50 | 2 | - | 9.000 | TG79M AA3 | F03FC20286 |
| 125 | 20 | 50 | 2 | - | 9.000 | TG79M AB3 | F03FC20287 |
| 143 | 20 | 50 | 2 | 2 | 9.000 | TG79M AC3 | F03FC20288 |
| 128 | 8 | 50 | 2 | - | 9.000 | TG79M AD3 | F03FC20289 |
| 143 | 20 | 50 | 2 | 2 | 9.000 | TG79M AE3 | F03FC20290 |
| 144 | 20 | 50 | 2 | 2 | 9.000 | TG79M AF3 | F03FC20291 |
| 125 | 20 | 50 | - | - | 9.000 | TG79M AI3 | F03FC20292 |
| 125 | 20 | 50 | - | - | 9.000 | TG79M AM3 | F03FC20294 |
| 143 | 20 | 50 | - | - | 9.000 | TG79M AM3 | F03FC20296 |
| 143 | 20 | 50 | - | - | 9.000 | TG79M A03 | F03FC20298 |

The above codes are intended without sleeve, which should be ordered separately.

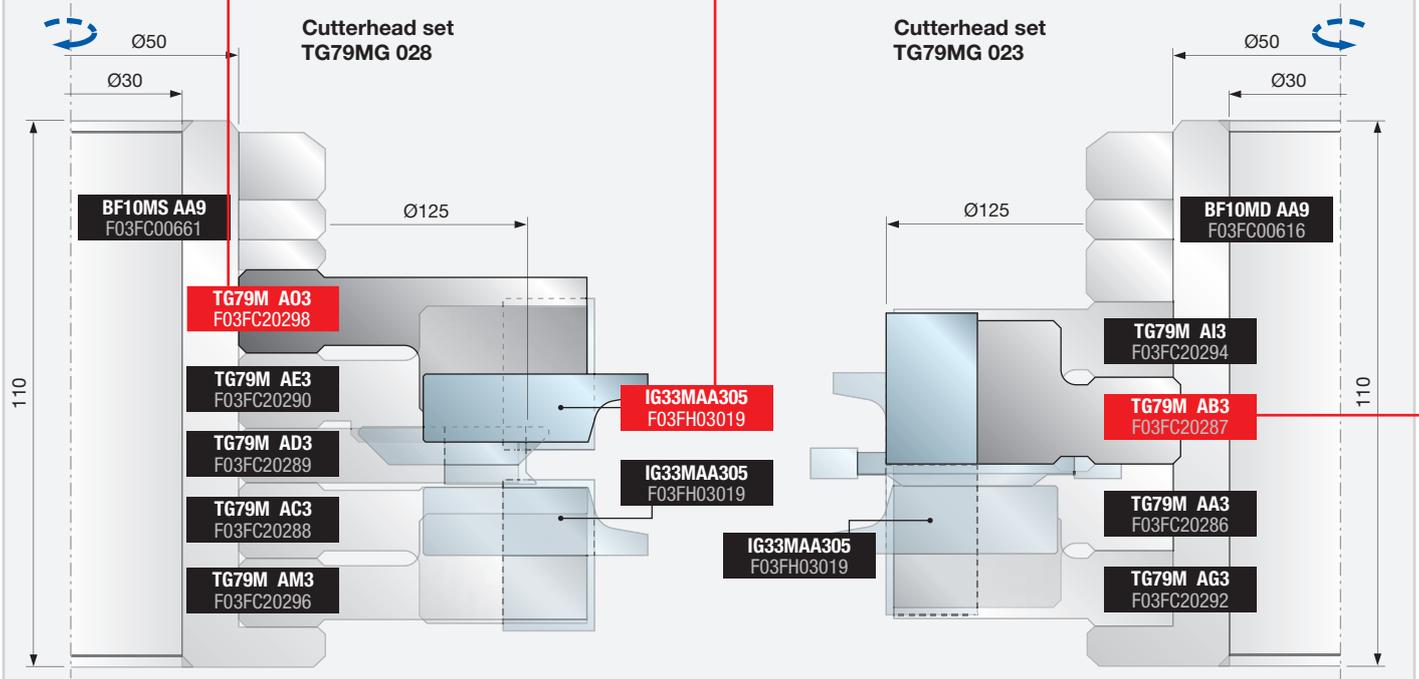
Spare parts for TG79MG tools

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----------|-----------------|------------------|--------------------|------------|
| AA3 | Knife | 20 x 12 x 1,5 | CG08MDA310 | F03FH02905 |
| | Wedge | 16 | CN01M DA9 | F03FC01251 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Grooving insert | 40 x 16 x 4 | IG04MDAA305 | F03FH03409 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| AB3 | Knife | 20 x 12 x 1,5 | CG08MDA310 | F03FH02905 |
| | Wedge | 16 | CN01M DA9 | F03FC01251 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Grooving insert | 40 x 16 x 4 | IG04MSAA305 | F03FH02994 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| AC3 | Knife | 20 x 12 x 1,5 | CG08MDA310 | F03FH02905 |
| | Wedge | 16 | CN01M DA9 | F03FC01251 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| AD3 | Knife | 7,5 x 12 x 1,5 | CG01MOB310 | F03FC23814 |
| | Wedge | 14 x 7,2 x 8 | CN09M AT9 | F03FC01294 |
| | Screw | M5 x 19 | VT11M AA9 | F03FA04468 |
| AE3 - AF3 | Knife | 20 x 12 x 1,5 | CG08MDA310 | F03FH02905 |
| | Wedge | 16 | CN01M DA9 | F03FC01251 |
| | Screw | M8 x 16 | VT03M AA9 | F03FA04435 |
| | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Beveled insert | 22 x 16 x 5 45° | IG51MBA305 | F03FH03022 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |

Optional inserts for TG79MG tools

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----------------------|-----------------|-------------------|-------------------|------------|
| AG3 - AI3 - AM3 - A03 | Beveled insert | 22 x 16 x 5 45° | IG51MBA305 | F03FH03022 |
| | Rounding insert | 22 x 16 x 5 R=1,5 | IG52MAB305 | F03FH03023 |
| | Rounding insert | 22 x 16 X 5 R=2 | IG52MAC305 | F03FH03024 |
| | Rounding insert | 22 x 16 X 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Rounding insert | 25,5 x 16 x 9 R3 | IG33MAA305 | F03FH03019 |
| | Rounding insert | 25,5 x 16 x 9 R=5 | IG33MAB305 | F03FH03020 |
| | Beveling insert | 25,5 x 16 x 9 45° | IG33MAD305 | F03FH03021 |
| | Screw | M6 x 15,5 | VT16M AD9 | F03FC20657 |

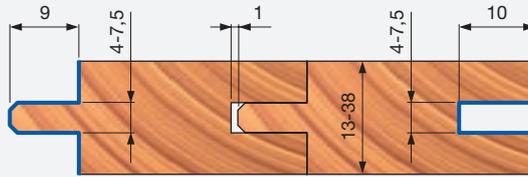
Example for choosing spare parts



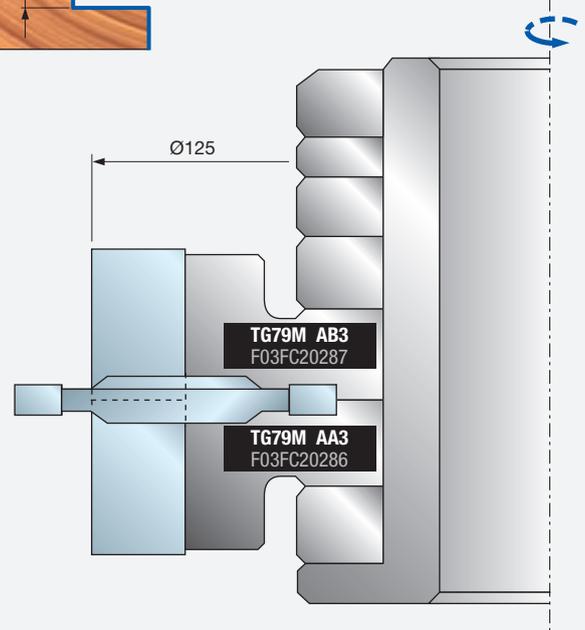
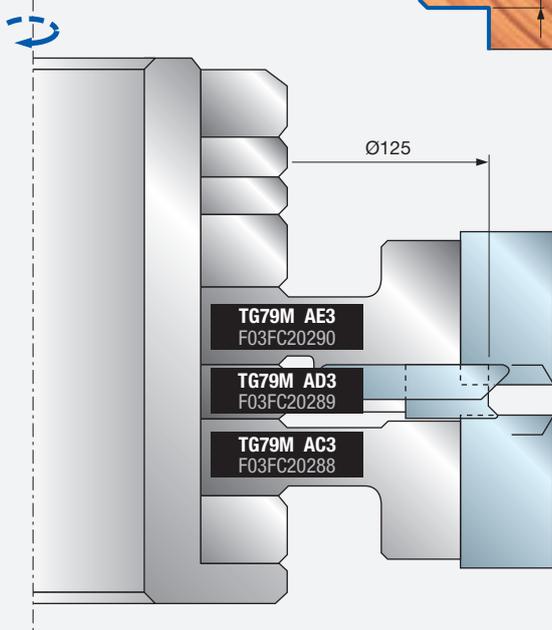
Examples of programming

PROFILE 1

Cutterhead set
TG79MG 002

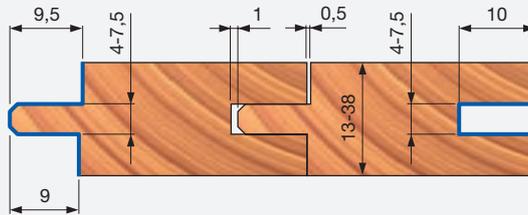


Cutterhead set
TG79MG 001

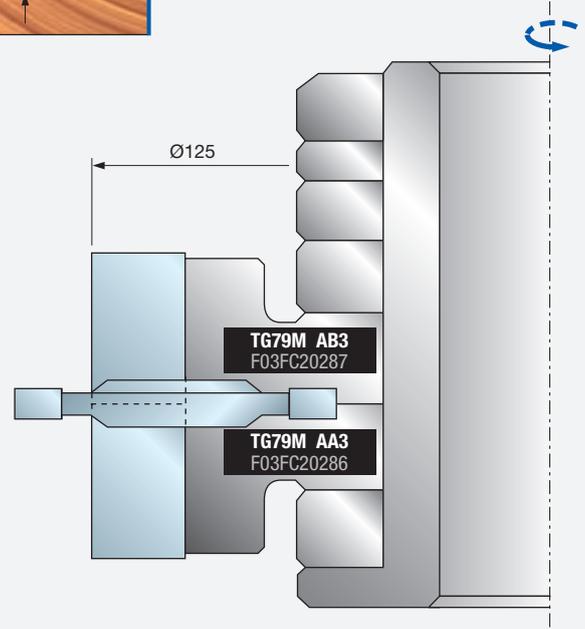
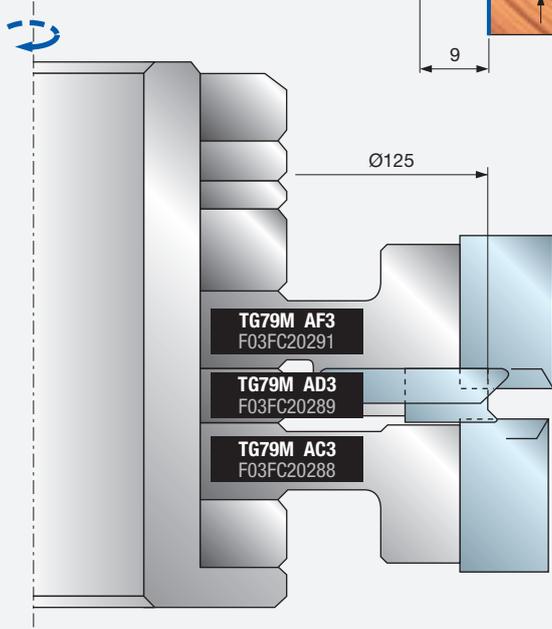


PROFILE 2

Cutterhead set
TG79MG 003



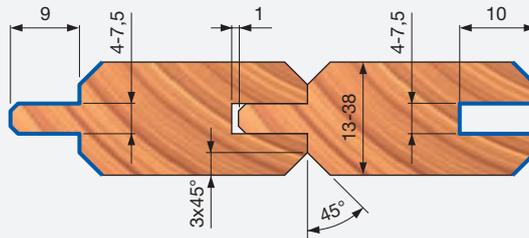
Cutterhead set
TG79MG 001



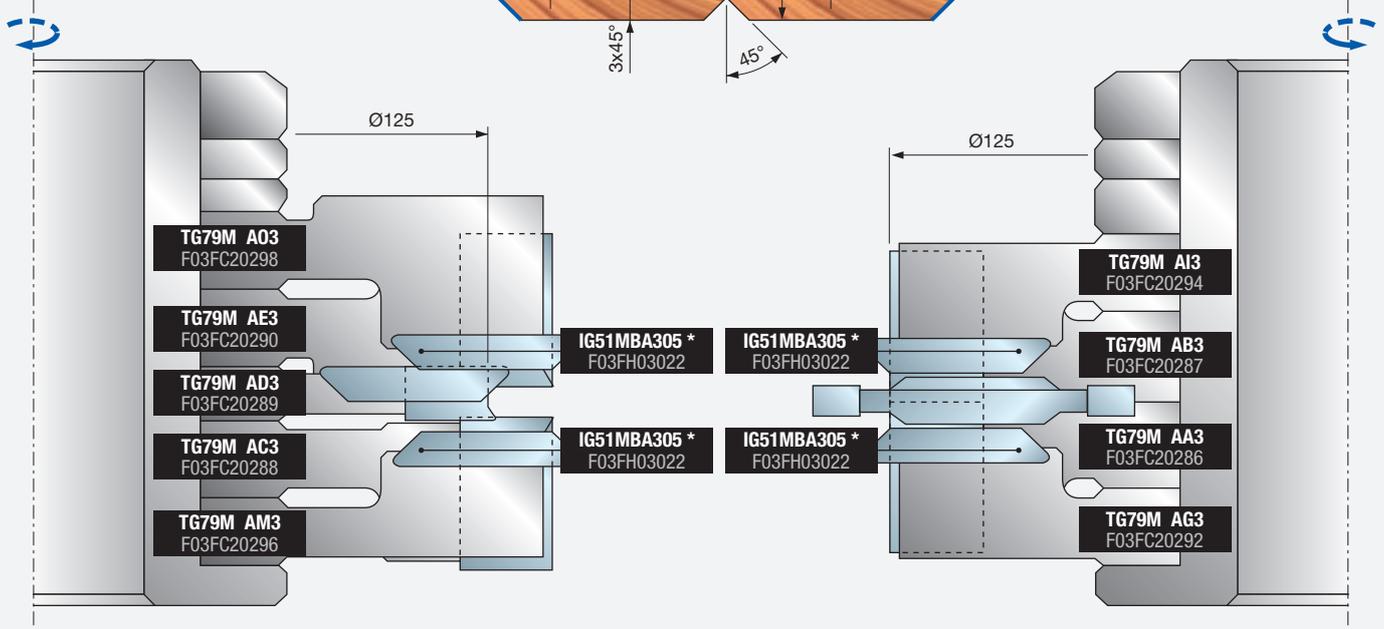
Examples of programming

PROFILE 3

Cutterhead set
TG79MG 006

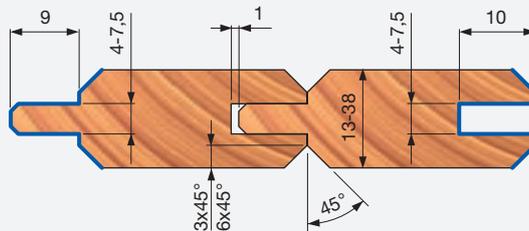


Cutterhead set
TG79MG 004

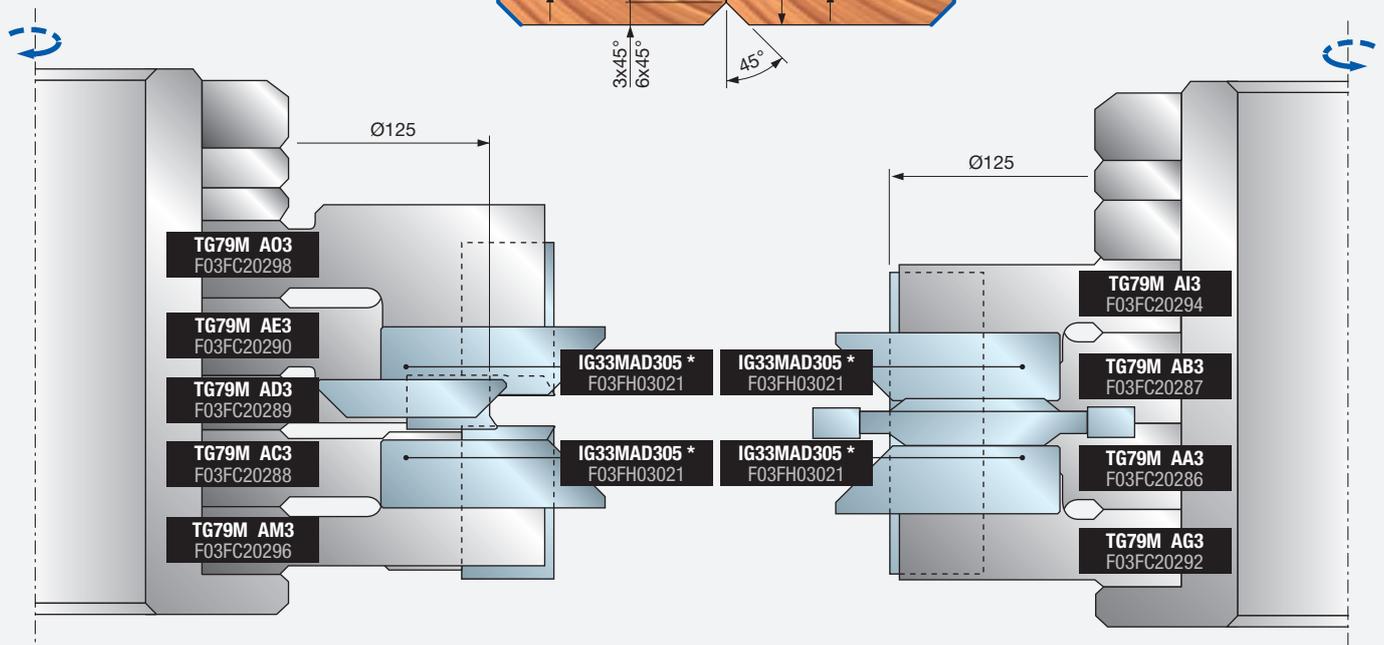


PROFILE 4

Cutterhead set
TG79MG 025



Cutterhead set
TG79MG 020

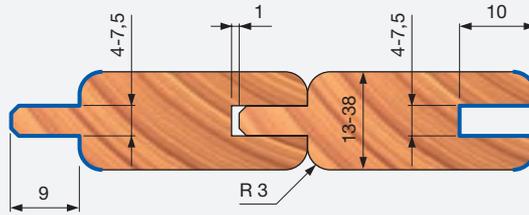


* Inserts are not included

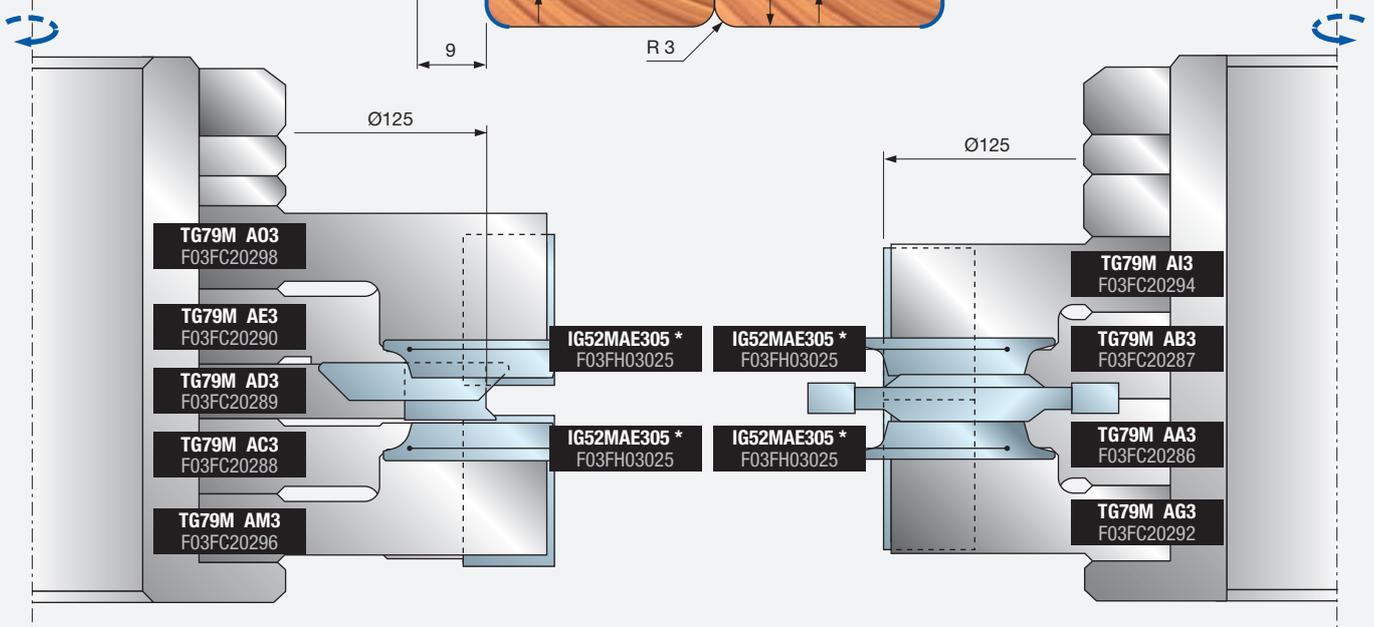
Examples of programming

PROFILE 5

Cutterhead set
TG79MG 007

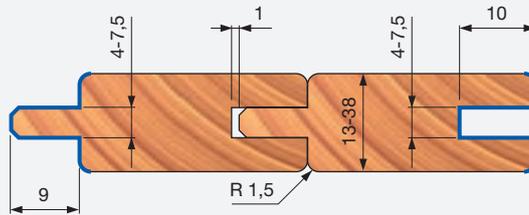


Cutterhead set
TG79MG 005

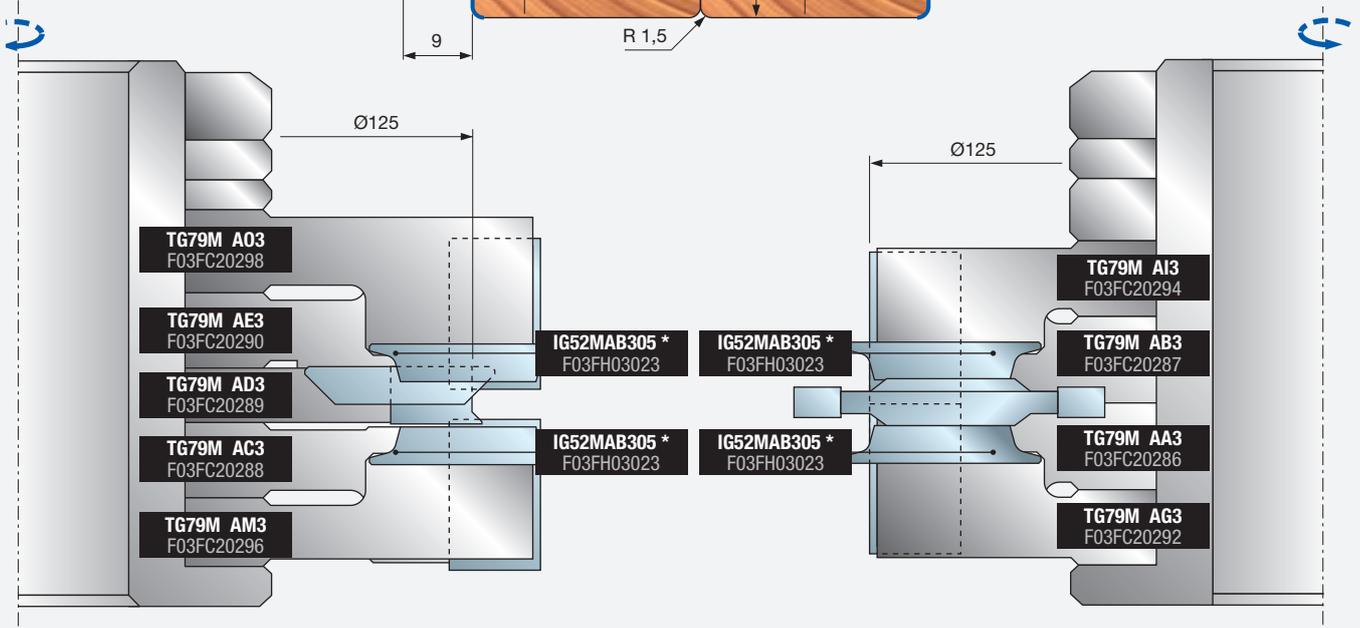


PROFILE 6

Cutterhead set
TG79MG 026



Cutterhead set
TG79MG 021

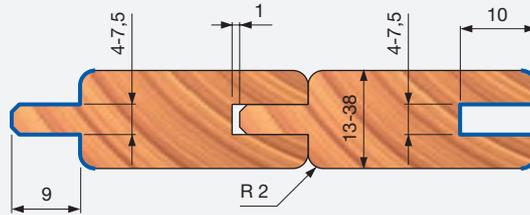


* Inserts are not included

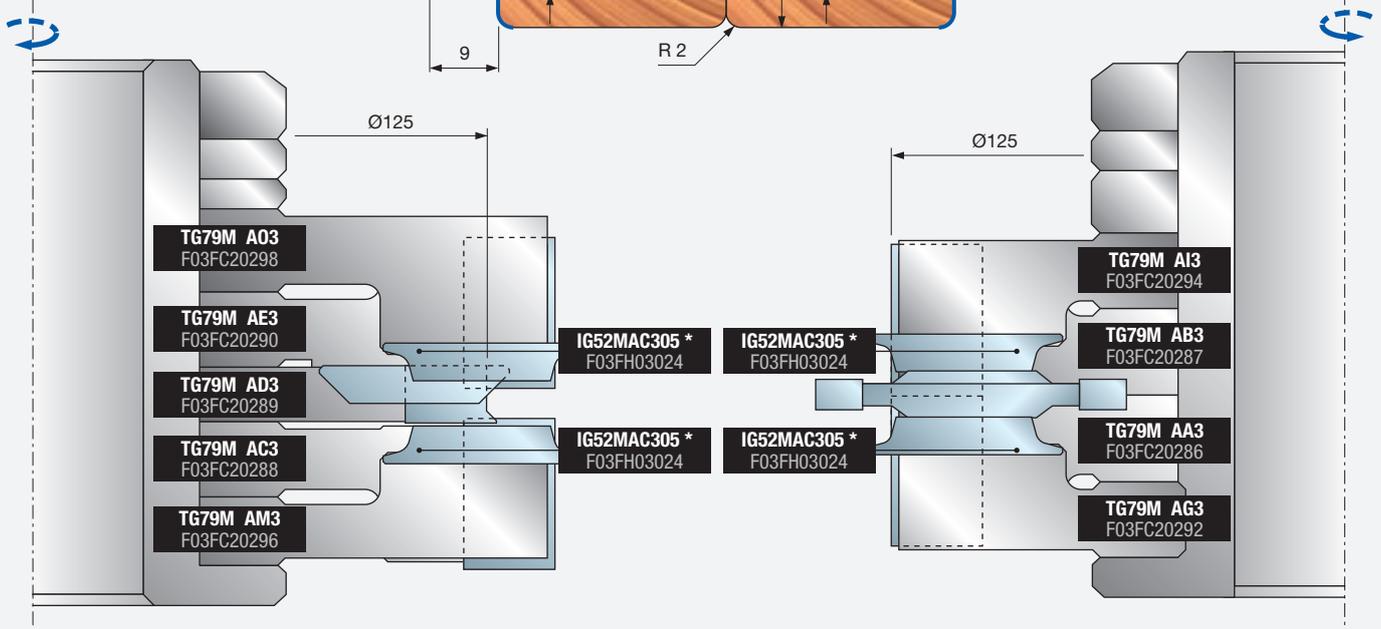
Examples of programming

PROFILE 7

Cutterhead set
TG79MG 027

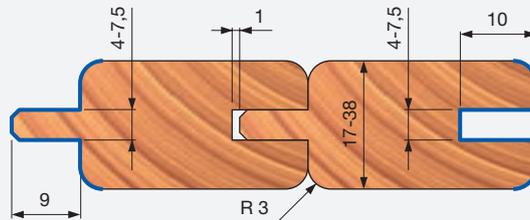


Cutterhead set
TG79MG 022

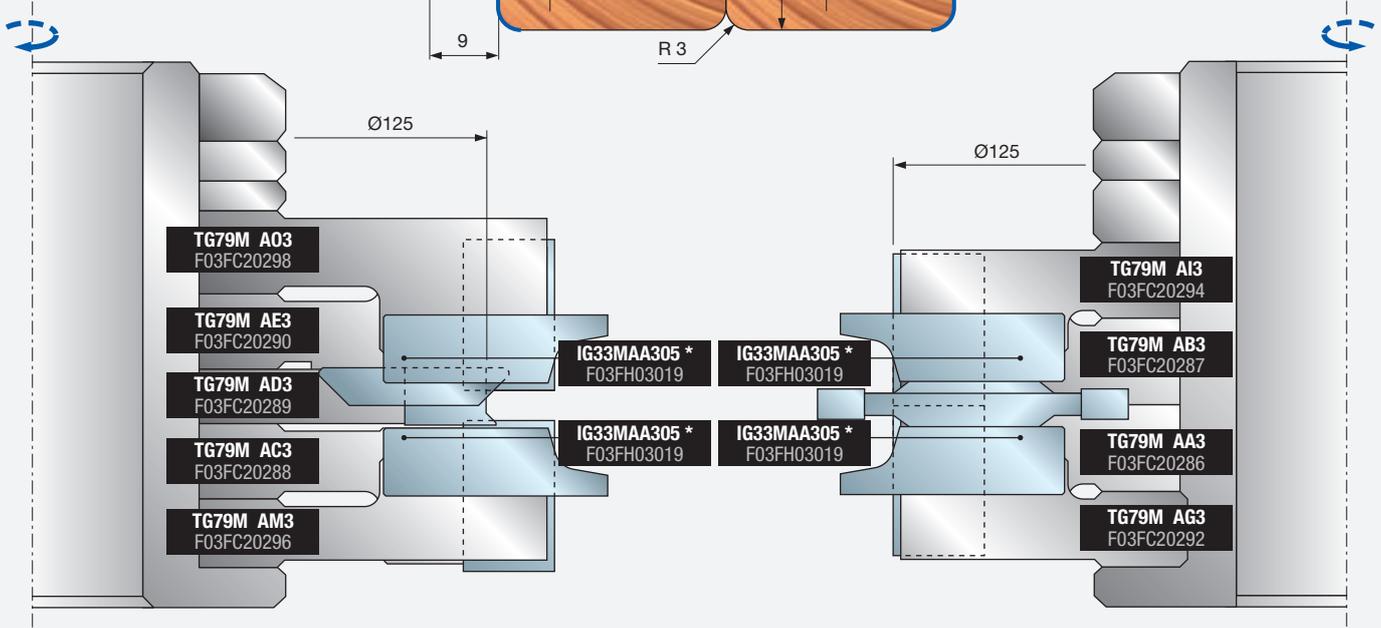


PROFILE 8

Cutterhead set
TG79MG 028



Cutterhead set
TG79MG 023

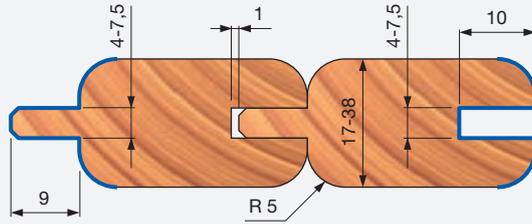


* Inserts are not included

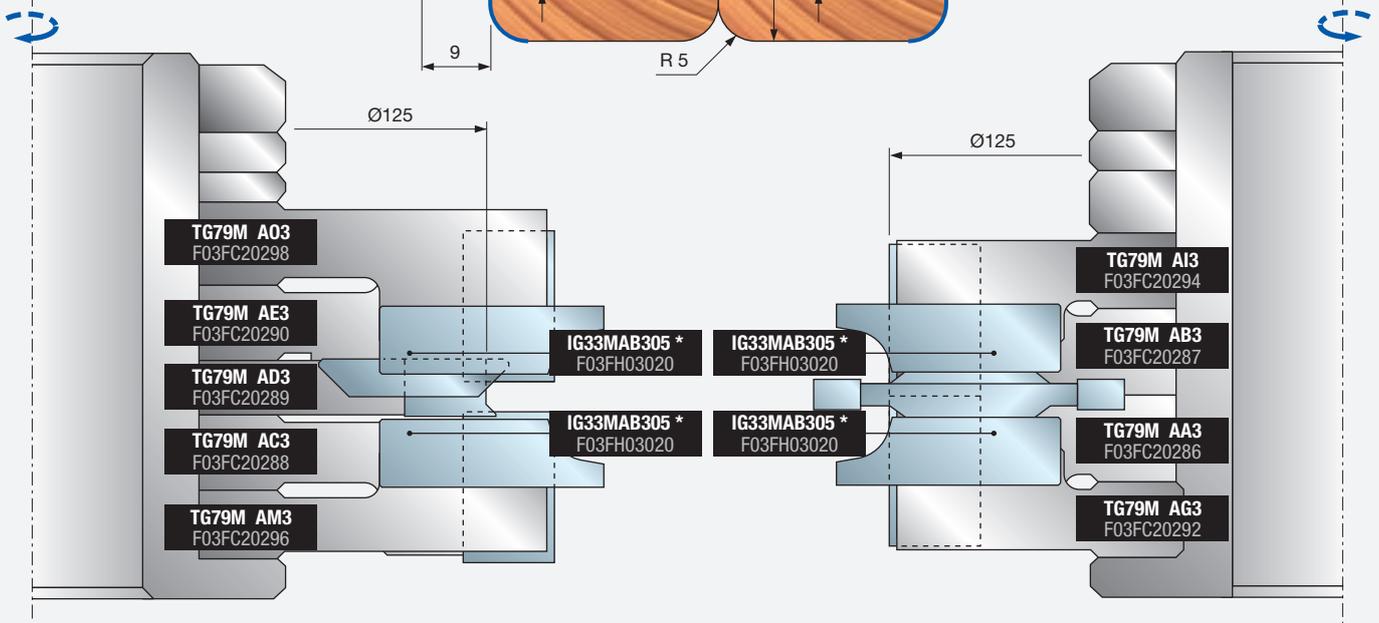
Examples of programming

PROFILE 9

Cutterhead set
TG79MG 029

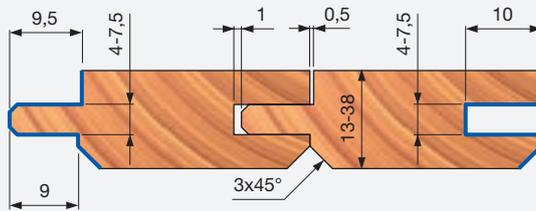


Cutterhead set
TG79MG 024

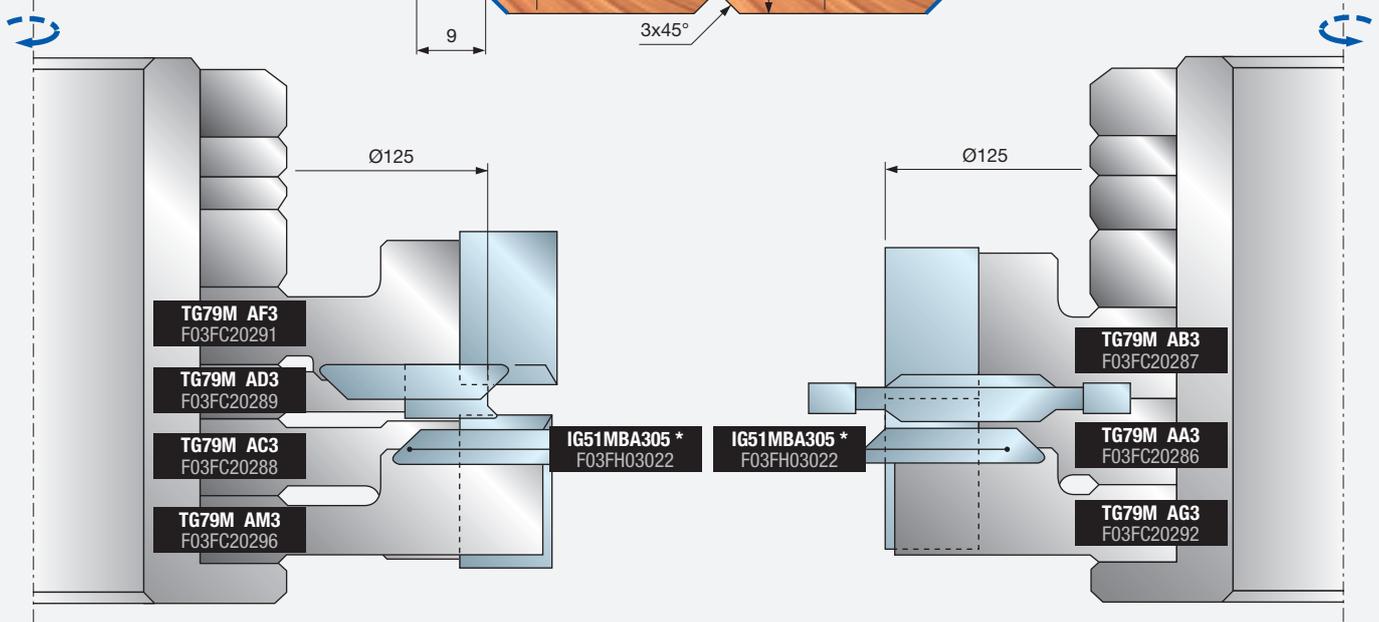


PROFILE 10

Cutterhead set
TG79MG 010



Cutterhead set
TG79MG 008

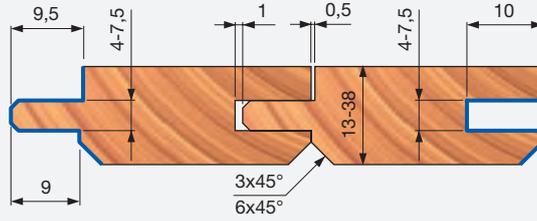


* Inserts are not included

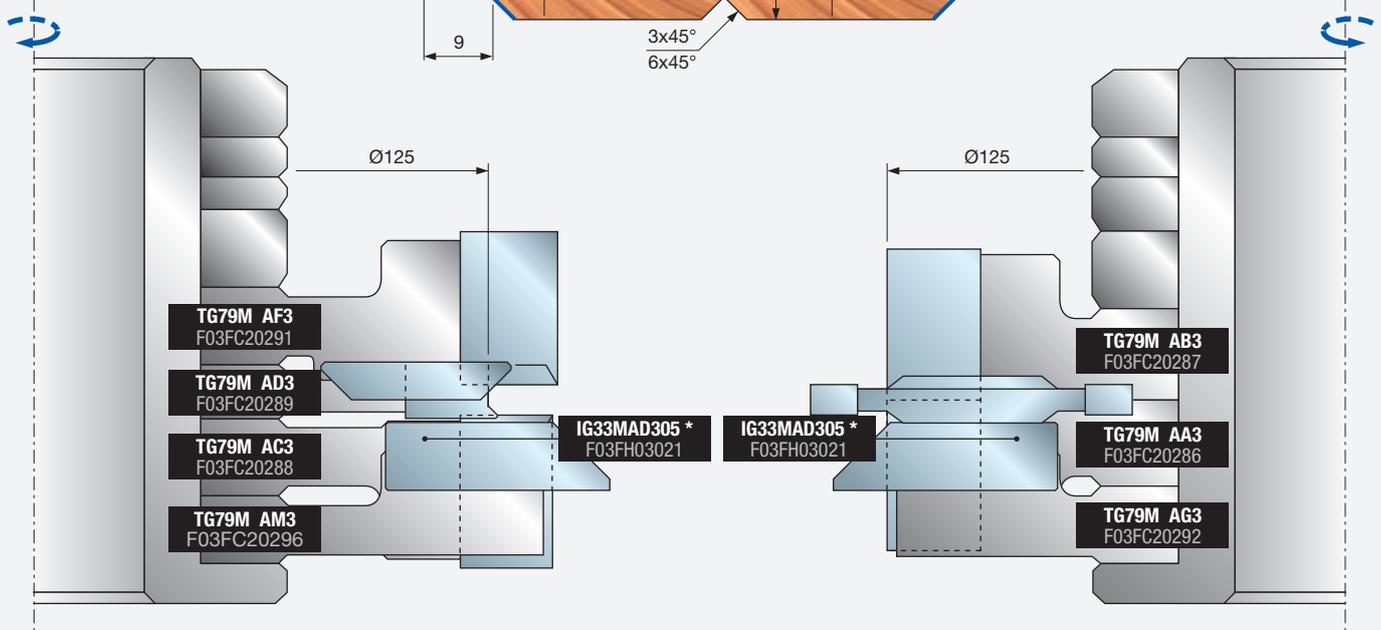
Examples of programming

PROFILE 11

Cutterhead set
TG79MG 035

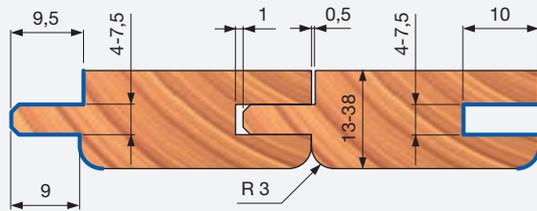


Cutterhead set
TG79MG 030

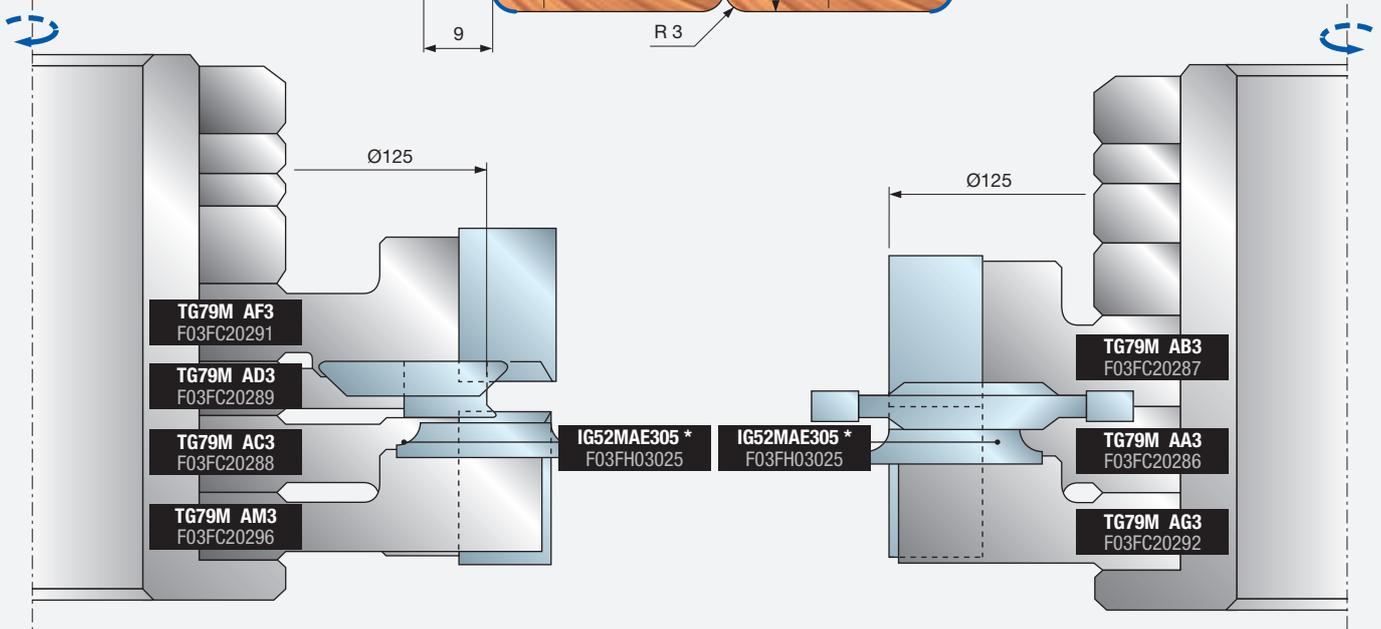


PROFILE 12

Cutterhead set
TG79MG 011



Cutterhead set
TG79MG 009

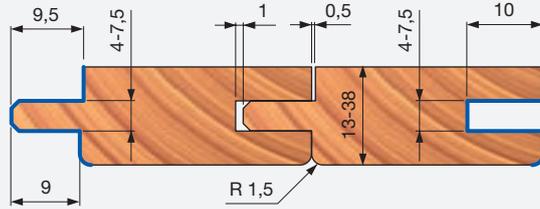


* Inserts are not included

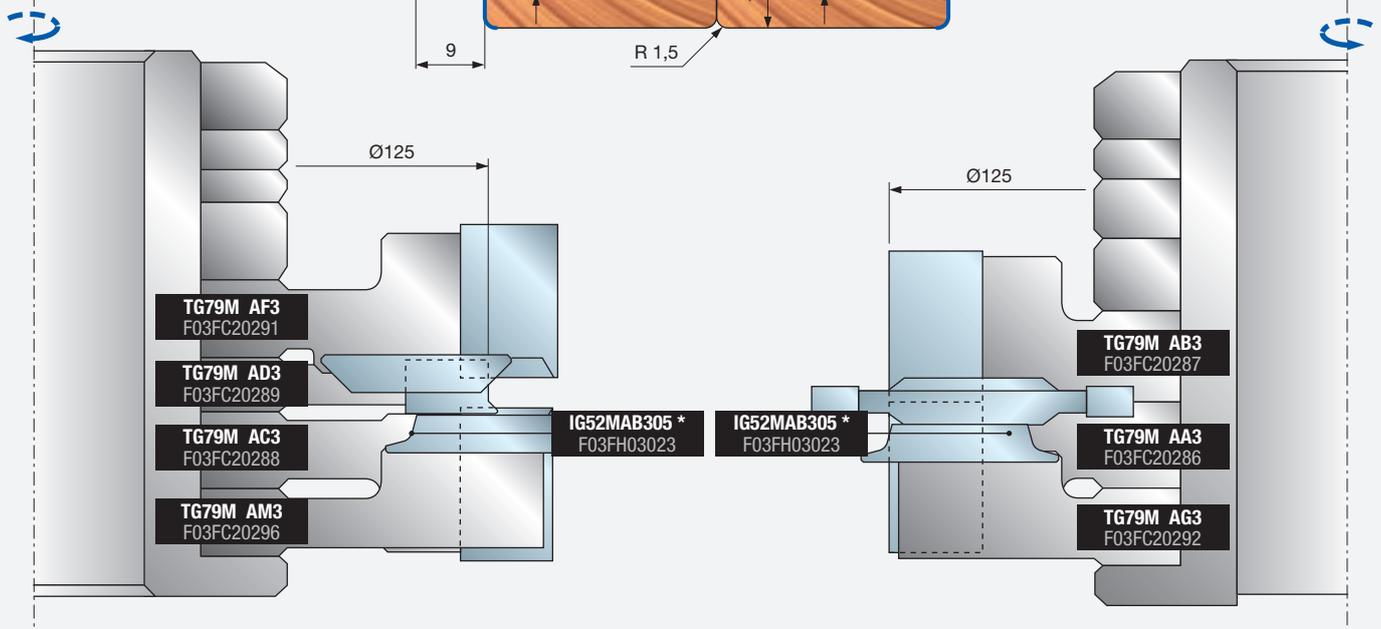
Examples of programming

PROFILE 13

Cutterhead set
TG79MG 036

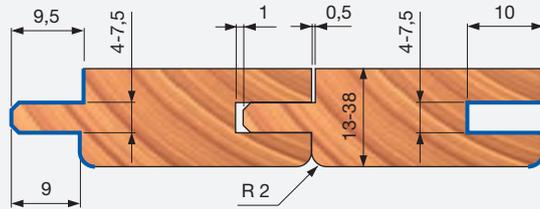


Cutterhead set
TG79MG 031

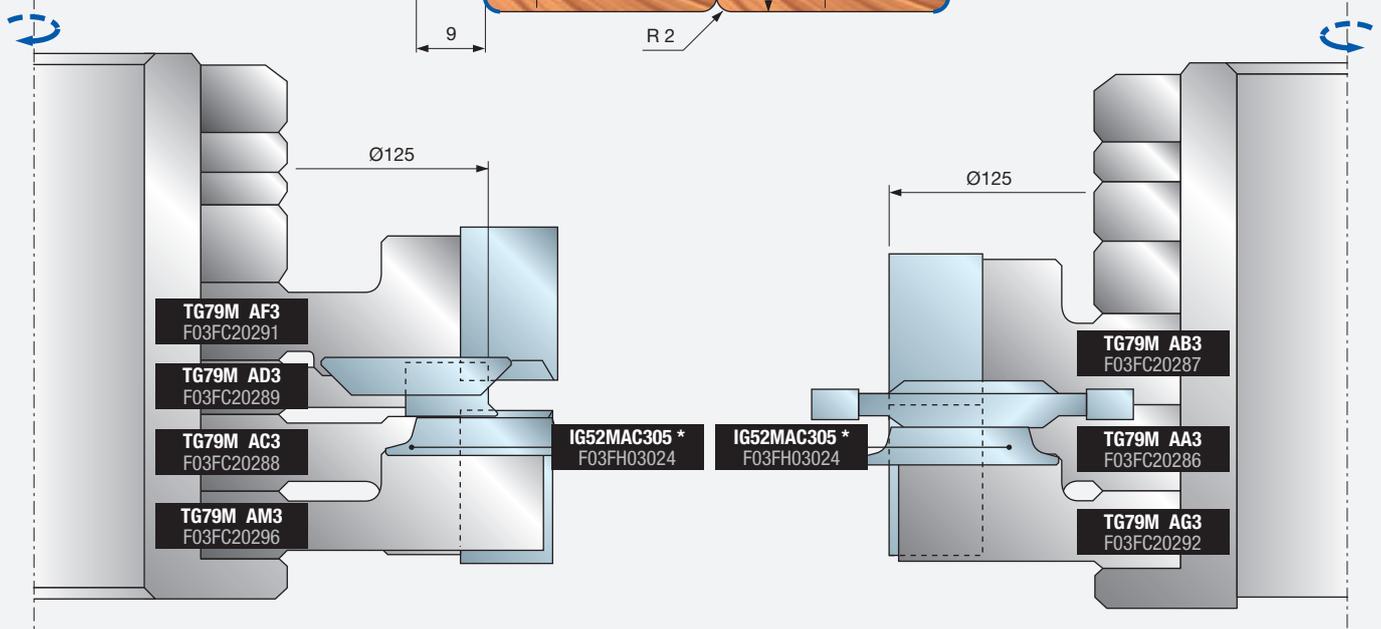


PROFILE 14

Cutterhead set
TG79MG 037



Cutterhead set
TG79MG 032

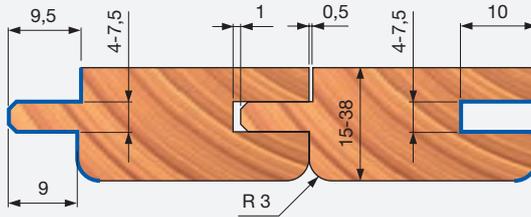


* Inserts are not included

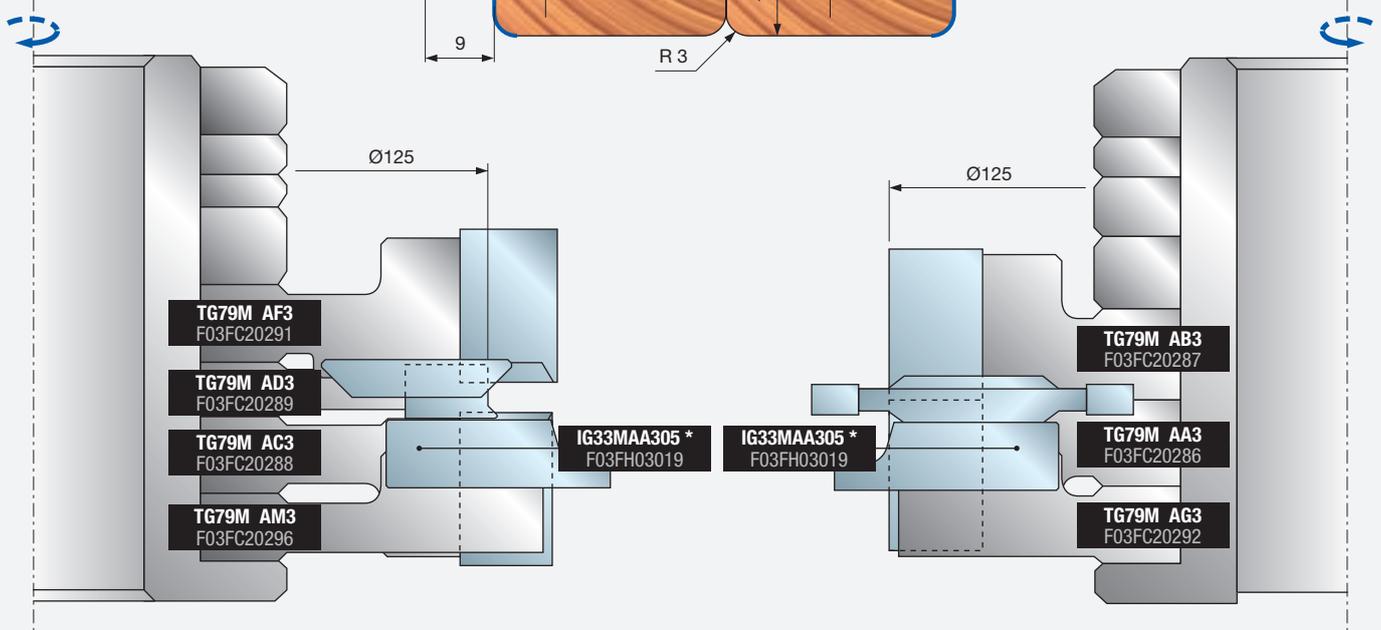
Examples of programming

PROFILE 15

Cutterhead set
TG79MG 038

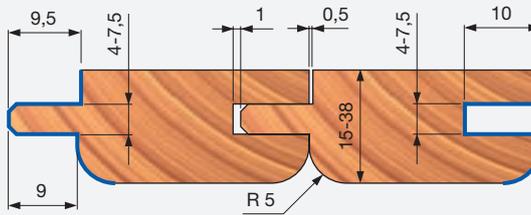


Cutterhead set
TG79MG 033

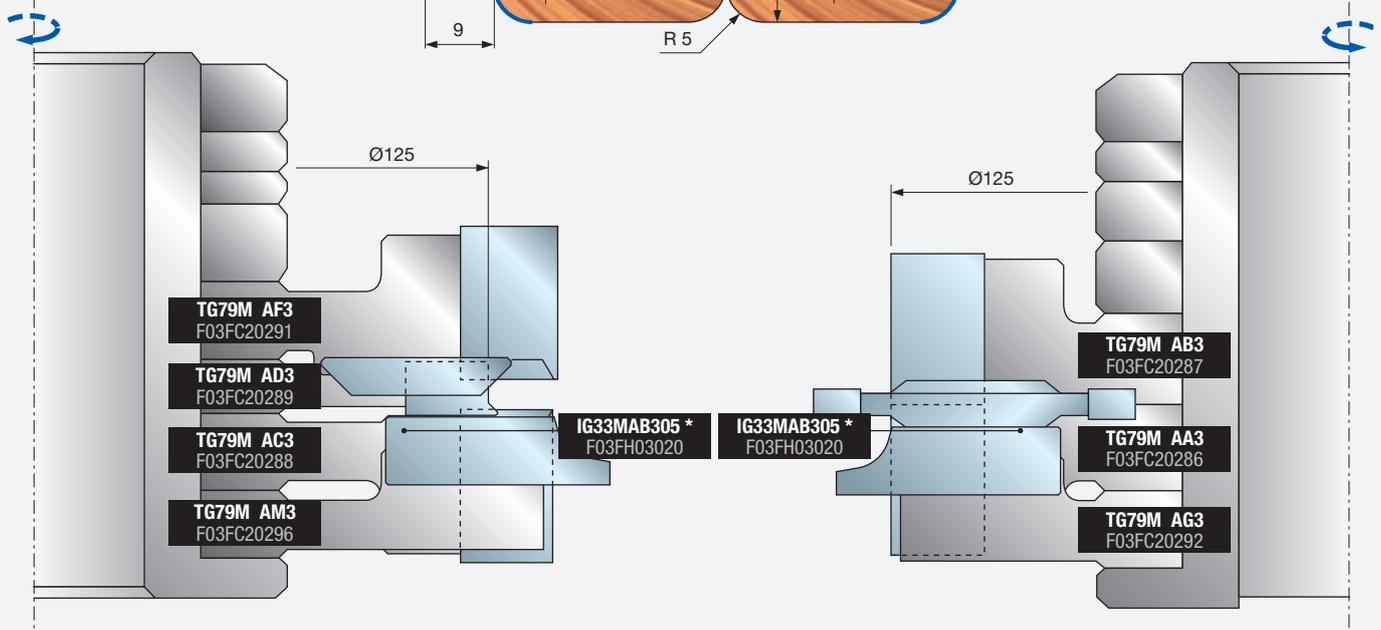


PROFILE 16

Cutterhead set
TG79MG 039



Cutterhead set
TG79MG 034

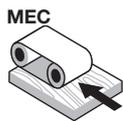


* Inserts are not included

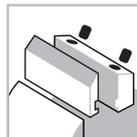


TG99MG

Cutterheads sets for panelling and flooring



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Z4 cutterhead sets for panelling and flooring; tongue and groove both available.

- 16 different combinations available in terms of profile and timber thickness (from 12 to 38 mm) tools sets provided with sleeves to fit different machine spindles.
- Steel body.
- Rebore not available.
- Optional inserts to be ordered separately.

Sleeves for fence side spindle

| Dimensions mm | Sleeve code | Art. No. |
|----------------|-------------|------------|
| Ø50 x 110 x 30 | BF10MD AA9 | F03FC00616 |
| Ø50 x 110 x 32 | BF10MD AL9 | F03FC24533 |
| Ø50 x 110 x 35 | BF10MD AB9 | F03FC00617 |
| Ø50 x 110 x 40 | BF10MD AC9 | F03FC00618 |

Sleeves for off side spindle

| Dimensions mm | Sleeve code | Art. No. |
|----------------|-------------|------------|
| Ø50 x 110 x 30 | BF10MS AA9 | F03FC00661 |
| Ø50 x 110 x 32 | BF10MS AL9 | F03FC24538 |
| Ø50 x 110 x 35 | BF10MS AB9 | F03FC00662 |
| Ø50 x 110 x 40 | BF10MS AC9 | F03FC00663 |

| Profile | Tongue set | Art. No. | Groove set | Art. No. |
|---------|------------|------------|------------|------------|
| A | TG99MG002 | F03FC22132 | TG99MG001 | F03FC22131 |
| B | TG99MG003 | F03FC22133 | TG99MG001 | F03FC22131 |
| C | TG99MG009 | F03FC22140 | TG99MG008 | F03FC22139 |
| D | TG99MG011 | F03FC22142 | TG99MG010 | F03FC22141 |
| E | TG99MG005 | F03FC22135 | TG99MG004 | F03FC22134 |
| F | TG99MG007 | F03FC22137 | TG99MG006 | F03FC22136 |
| G | TG99MG013 | F03FC22145 | TG99MG012 | F03FC22143 |
| H | TG99MG015 | F03FC22146 | TG99MG014 | F03FC22144 |

The above codes are intended without sleeve, which should be ordered separately.

Tools for TG99MG sets

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|------|---|---|----------------|------------|------------|
| 125 | 30 | 50 | 4 | - | 10.300 | TG99M EA3 | F03FC22120 |
| 125 | 30 | 50 | 4 | - | 10.300 | TG99M EB3 | F03FC22121 |
| 137 | 30 | 50 | 4 | 2 | 9.600 | TG99M EC3 | F03FC22122 |
| 137 | 30 | 50 | 4 | 2 | 9.600 | TG99M ED3 | F03FC22123 |
| 138 | 20 | 50 | 4 | 2 | 9.600 | TG99M EE3 | F03FC22124 |
| 137 | 12 | 50 | 4 | - | 9.600 | TG99M EF3 | F03FC22125 |
| 125 | 30 | 50 | 4 | - | 10.300 | TG99M EG3 | F03FC22126 |
| 149 | 12 | 50 | 4 | 2 | 9.000 | TG99M EH3 | F03FC22127 |
| 143 | 20 | 50 | 4 | 2 | 9.000 | TG99M EI3 | F03FC22128 |
| 142 | 12 | 50 | 4 | - | 9.000 | TG99M EK3 | F03FC22129 |
| 169 | 12 | 50 | 4 | 2 | 8.300 | TG99M EL3 | F03FC22130 |

Cutterhead set TG99MG002

Cutterhead set TG99MG001

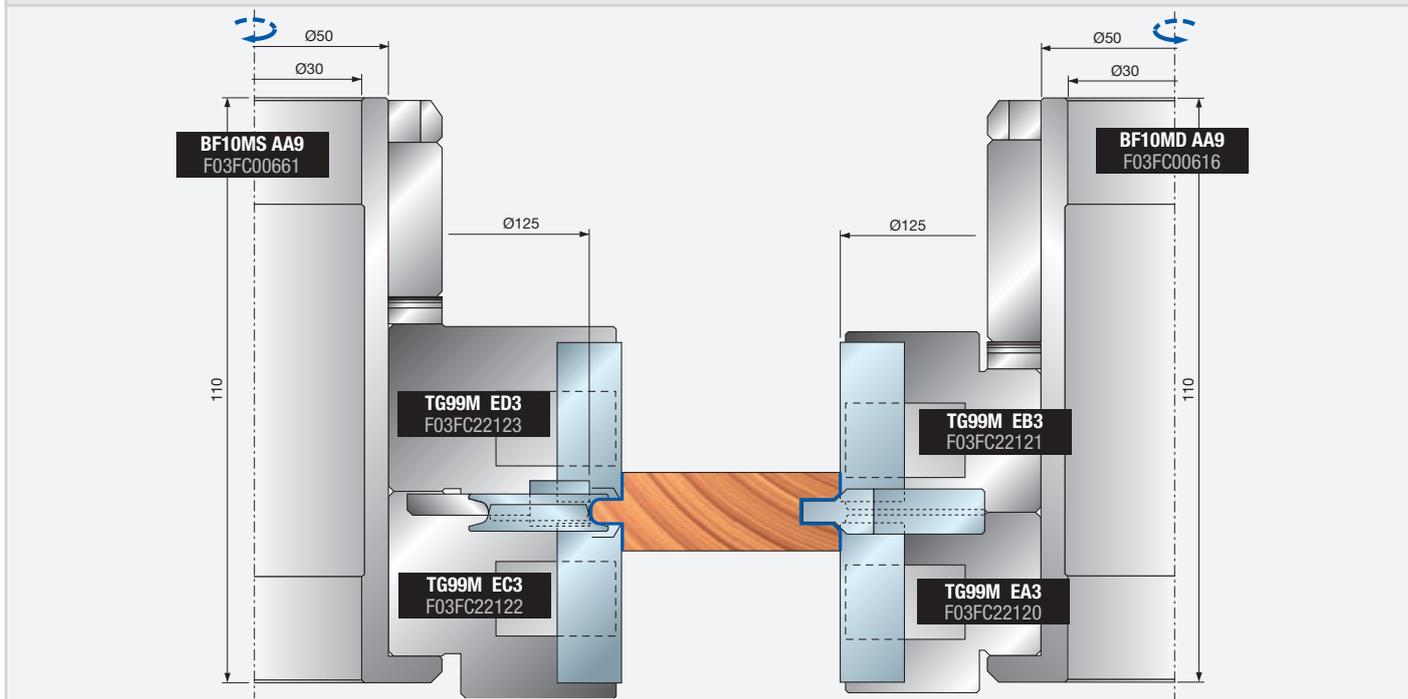
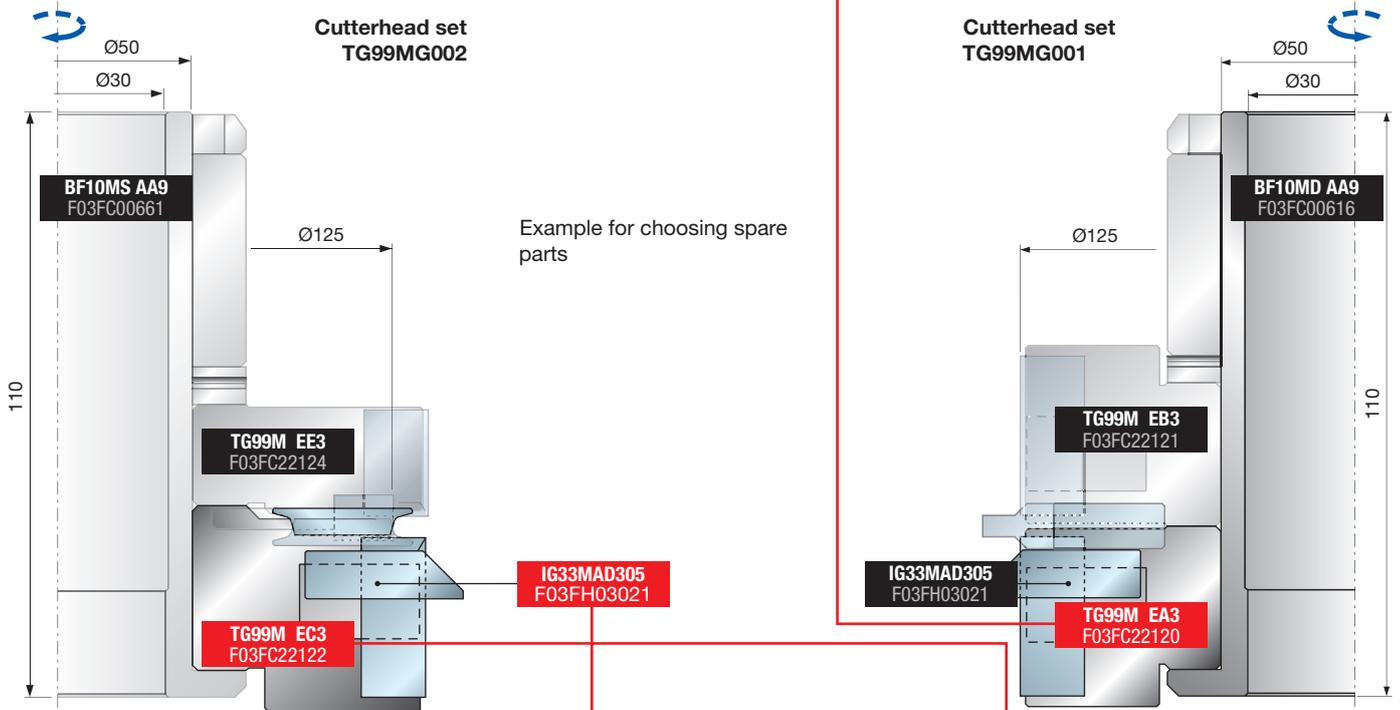


Chart for choosing spare parts

| Spare parts | Dimensions mm | Freud Code | Art. No. | For cutterheads TG99M | | | | | | | | | | | |
|----------------------|-------------------|-------------|------------|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| | | | | EA3 | EB3 | EC3 | ED3 | EE3 | EF3 | EG3 | EH3 | EI3 | EK3 | EL3 | |
| Knife | 12 x 12 x 1,5 | CG26MBA310 | F03FH02937 | | | | | | | • | | | | • | • |
| Wedge | 15 x 10 x 8 | CN09M AA9 | F03FC01280 | | | | | | | | | | | • | • |
| Nut | 10 x 11,5 x 6 | VT20M AA9 | F03FA04497 | | | | | | | • | | | | • | • |
| Screw | M6 x 22 | VT19M AB9 | F03FA04491 | | | | | | | • | | | | • | • |
| Knife | 20 x 12 x 1,5 | CG26MDA310 | F03FH02939 | | | | | | | | | | | • | |
| Wedge | 15 x 16 x 8 | CN09MD A09 | F03FC01306 | | | | | | | | | | | • | |
| Screw | M10 x 22 | VT19M MA9 | F03FA04496 | • | • | • | • | • | | • | | | | • | |
| Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 | | | • | • | • | | | | | | • | |
| Knife | 30 x 12 x 1,5 | CG26MEA310 | F03FH02940 | • | • | • | • | | | • | | | | | |
| Wedge | 15 x 26 x 8 | CN09MD AD9 | F03FC01300 | • | | | • | | | | | | | • | |
| Wedge | 15 x 26 x 8 | CN09MS AD9 | F03FC01326 | | | • | | | | • | | | | | |
| Nut | 15 x 13,3 x M10 | VT20M NA9 | F03FC20671 | • | • | | | | | • | | | | | |
| Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 | | | • | • | • | | | | | | • | |
| Screw | M10 x 22 | VT19M MA9 | F03FA04496 | • | • | • | • | • | | • | | | | • | |
| Wedge | 28 x 9,5 x 8 | CN03M BB9 | F03FA00585 | • | • | • | • | | | | | | | | |
| Screw | M8 x 22 | VT19M BB9 | F03FA04493 | • | • | • | • | | | | | | | | |
| Wedge | 14 x 21,5 x 22 | CN03M BA9 | F03FA00584 | • | • | • | • | | | | | | | | |
| Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 | | | • | • | • | | | | | • | • | • |
| Screw | M5x8 | VT05M AA9 | F03FA04444 | | | • | • | • | | | | | • | • | • |
| Spur insert | 34 x 9 x 16 | SR06MSBB301 | F03FC24201 | | | • | | | | | | | • | | • |
| Screw | M6 x 13 | VT16M AE9 | F03FC20658 | | | • | | | | | | | • | | • |
| Beveled grooves ins. | 32,7 x 16 x 8,5 | IG16MAA301 | F03FC24161 | • | • | | | | | | | | | | |
| Screw | M6 x 15,5 | VT16M AD9 | F03FC20657 | • | • | | | | | | | | | | |
| Grooving insert | 40 x 16 x 4 | IG04MSAA305 | F03FH02994 | | | | | | | • | | | | | |
| Beveled insert | 35 x 4 x 7 | IG17MDAA305 | F03FC24162 | | | | | | | | | | | • | |
| Beveled insert | 22 x 16 x 5 45° | IG51MBA305 | F03FH03022 | | | | | | | • | | | | | |
| Rounding insert | 22 x 16 x 5 R=1,5 | IG52MAB305 | F03FH03023 | | | • | • | • | | | | | • | • | • |
| Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 | • | • | | | | | | | | | | |
| Torx key | T9 | CB03M CA9 | F03FA00165 | • | • | • | • | • | • | • | • | • | • | • | • |
| Allen key | 3 | CB03M AA9 | F03FA00162 | • | • | • | • | • | • | • | • | • | • | • | • |
| Allen key | 4 | CB03M BA9 | F03FA00163 | • | • | • | • | • | • | • | • | • | • | • | • |

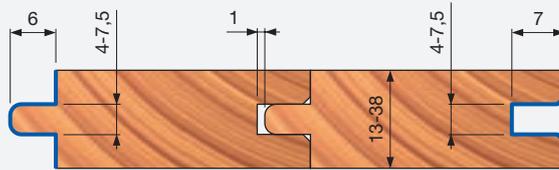


| Optional spare parts | Dimensions mm | Freud Code | Art. No. | For cutterheads TG99M | | | |
|----------------------|-------------------|------------|------------|-----------------------|-----|-----|-----|
| | | | | EA3 | EB3 | EC3 | ED3 |
| Beveling insert | 25,5 x 16 x 9 45° | IG33MAD305 | F03FH03021 | • | • | • | • |
| Rounding insert | 25,5 x 16 x 9 R3 | IG33MAA305 | F03FH03019 | • | • | • | • |
| Rounding insert | 25,5 x 16 x 9 R5 | IG33MAB305 | F03FH03020 | • | • | • | • |
| Screw | M6x15,5 | VT16M AD9 | F03FC20657 | • | • | • | • |

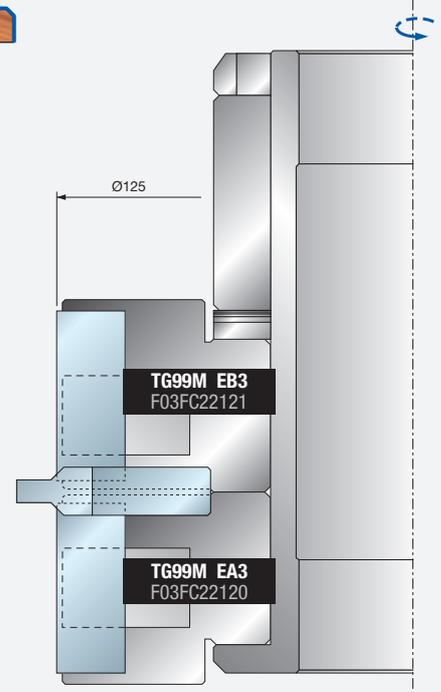
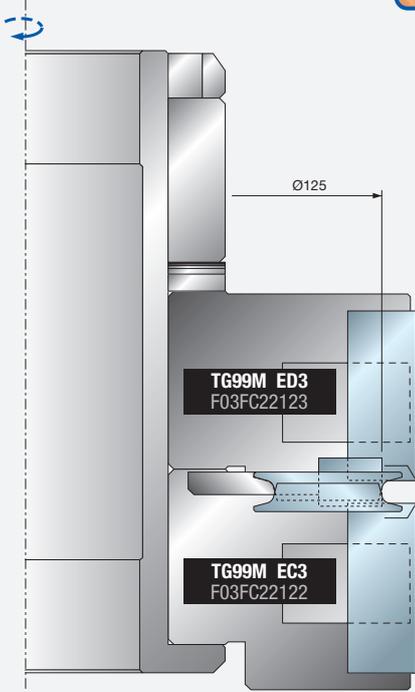
Examples of programming

PROFILE A

Cutterhead set
TG99MG002

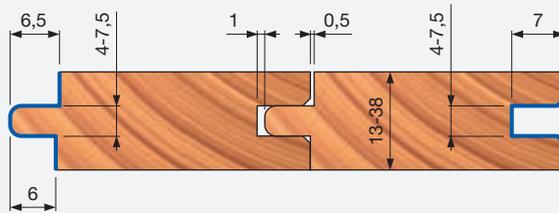


Cutterhead set
TG99MG001

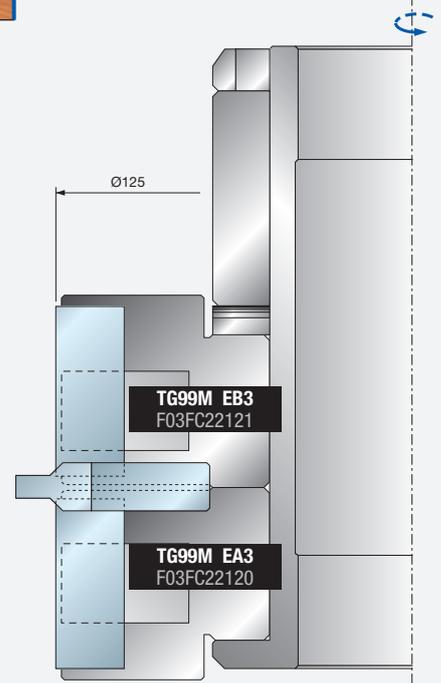
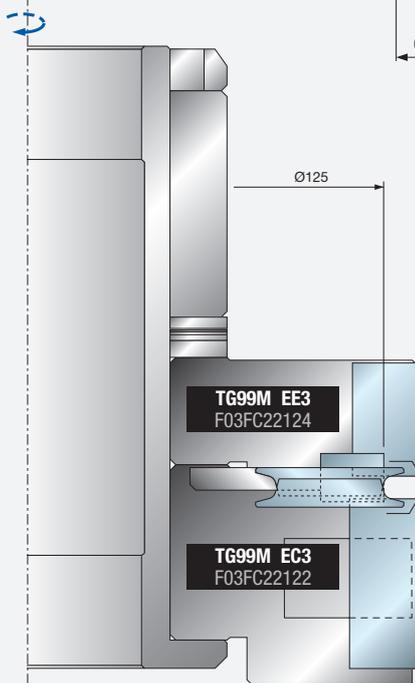


PROFILE B

Cutterhead set
TG99MG003



Cutterhead set
TG99MG001

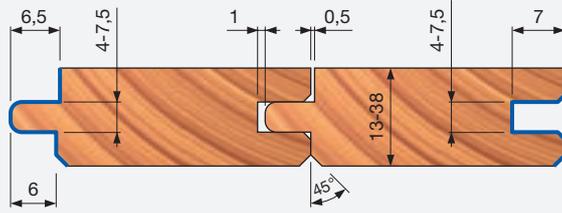
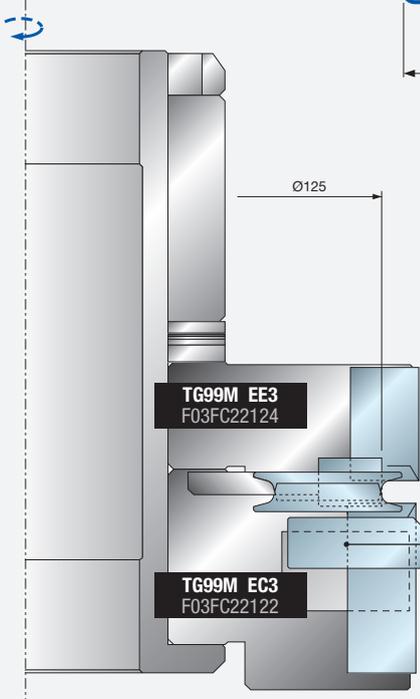


* Inserts are not included

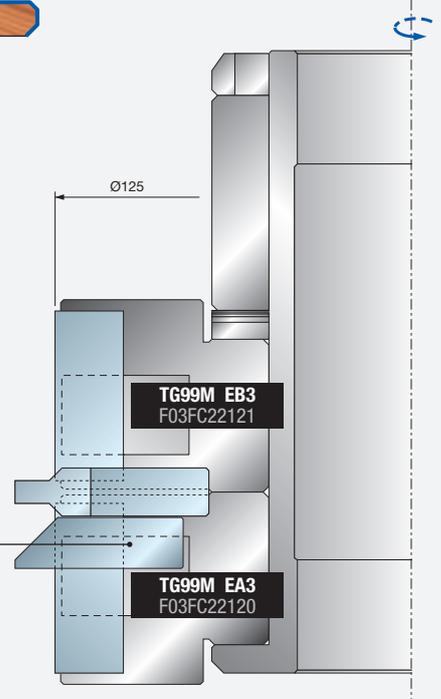
Examples of programming

PROFILE C

Cutterhead set
TG99MG009



Cutterhead set
TG99MG008

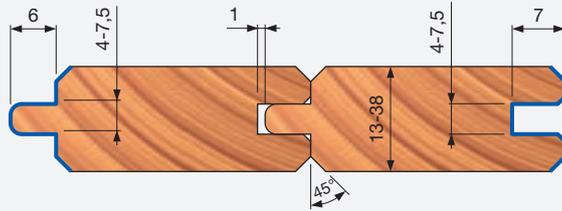
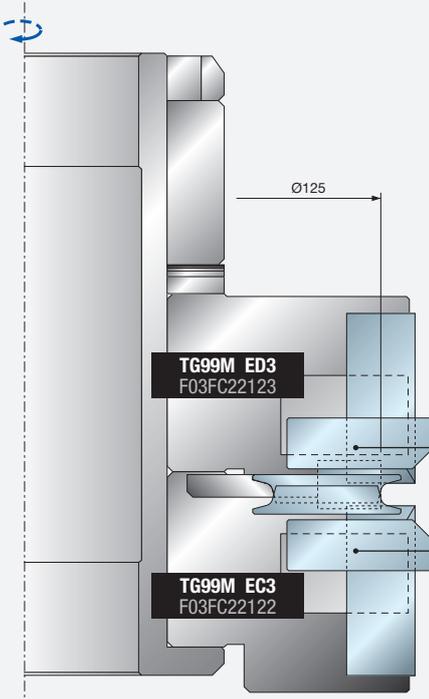


IG33MAD305 *
F03FH03021

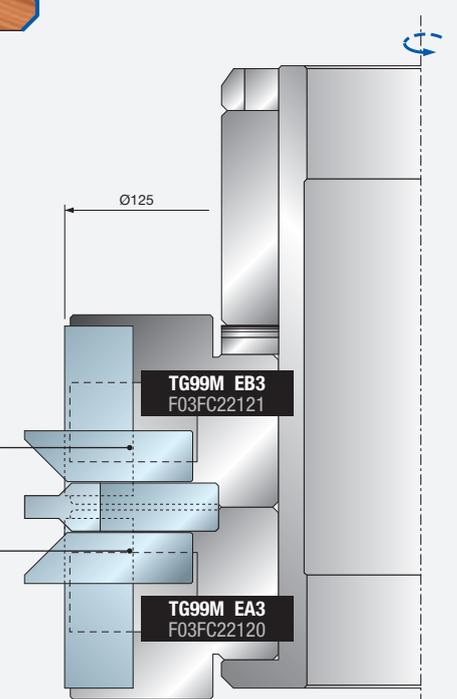
IG33MAD305 *
F03FH03021

PROFILE D

Cutterhead set
TG99MG011



Cutterhead set
TG99MG010



IG33MAD305 *
F03FH03021

IG33MAD305 *
F03FH03021

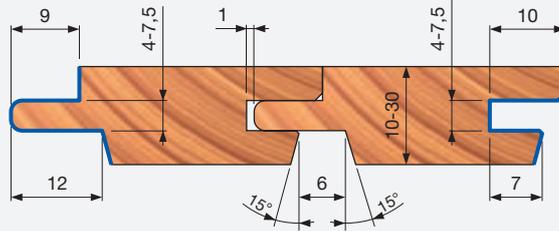
IG33MAD305 *
F03FH03021

IG33MAD305 *
F03FH03021

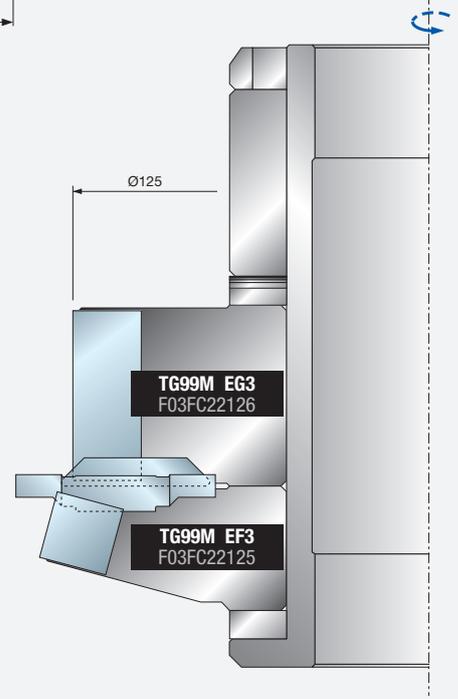
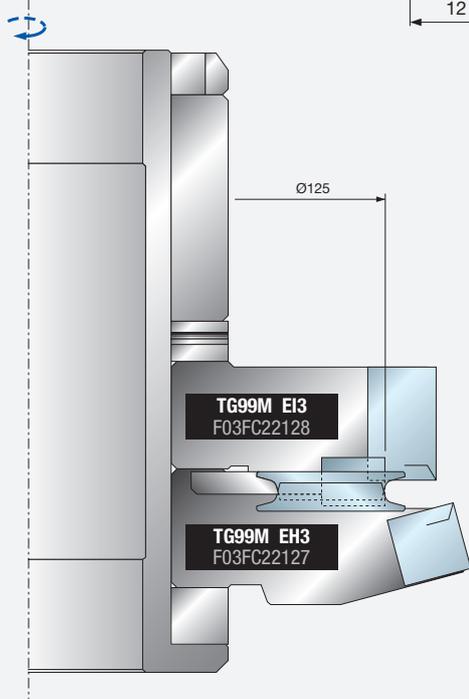
Examples of programming

PROFILE E

Cutterhead set
TG99MG005

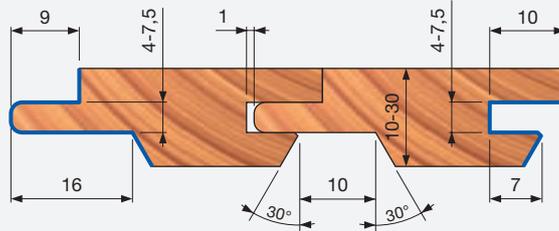


Cutterhead set
TG99MG004

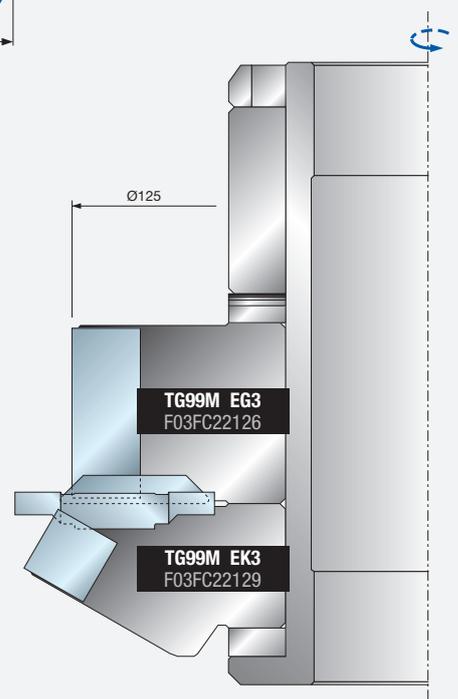
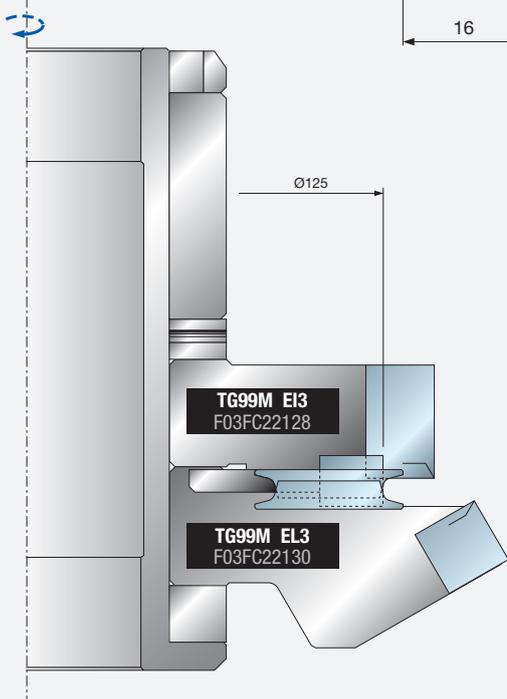


PROFILE F

Cutterhead set
TG99MG007



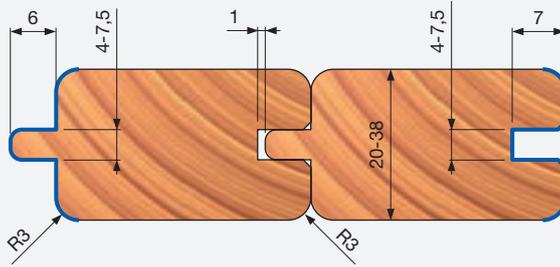
Cutterhead set
TG99MG006



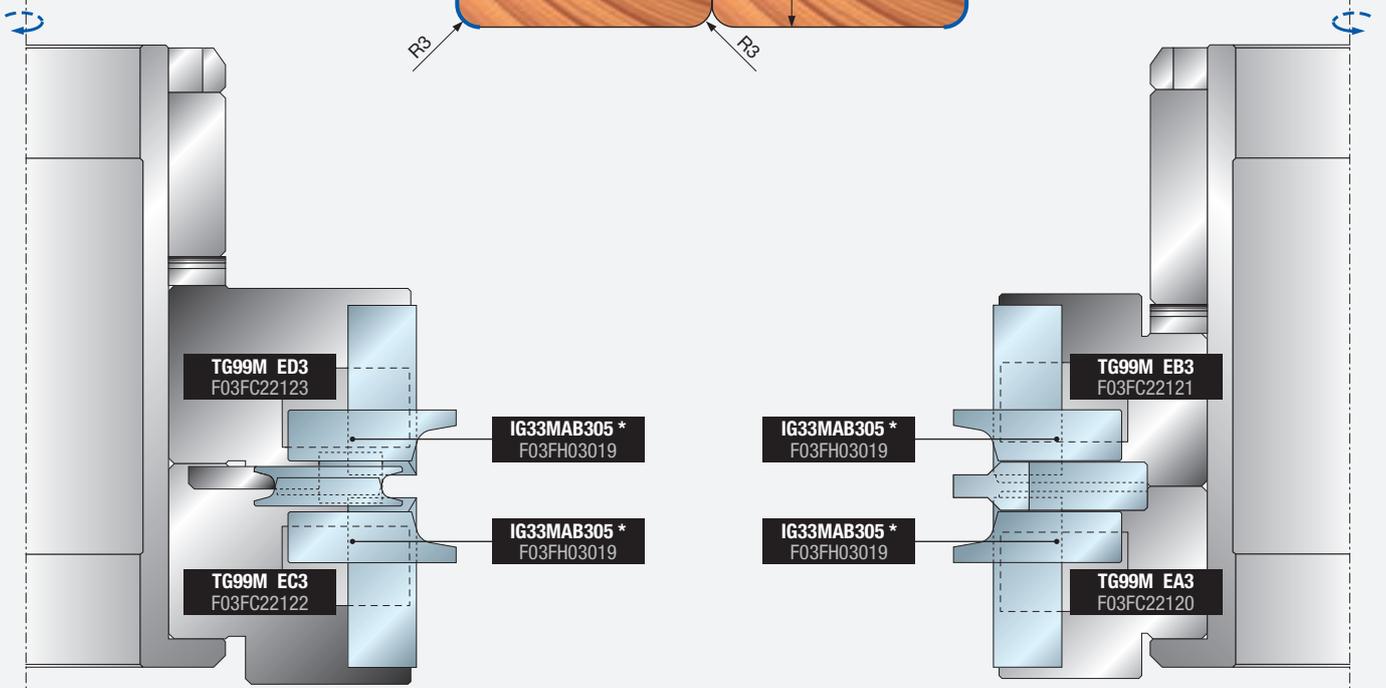
Examples of programming

PROFILE G

Cutterhead set
TG99MG013

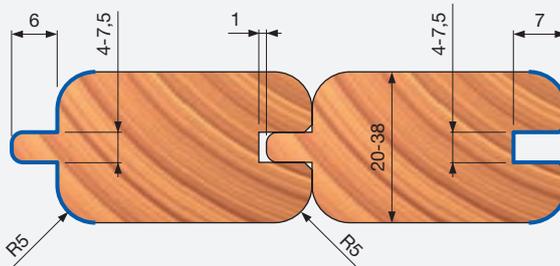


Cutterhead set
TG99MG012

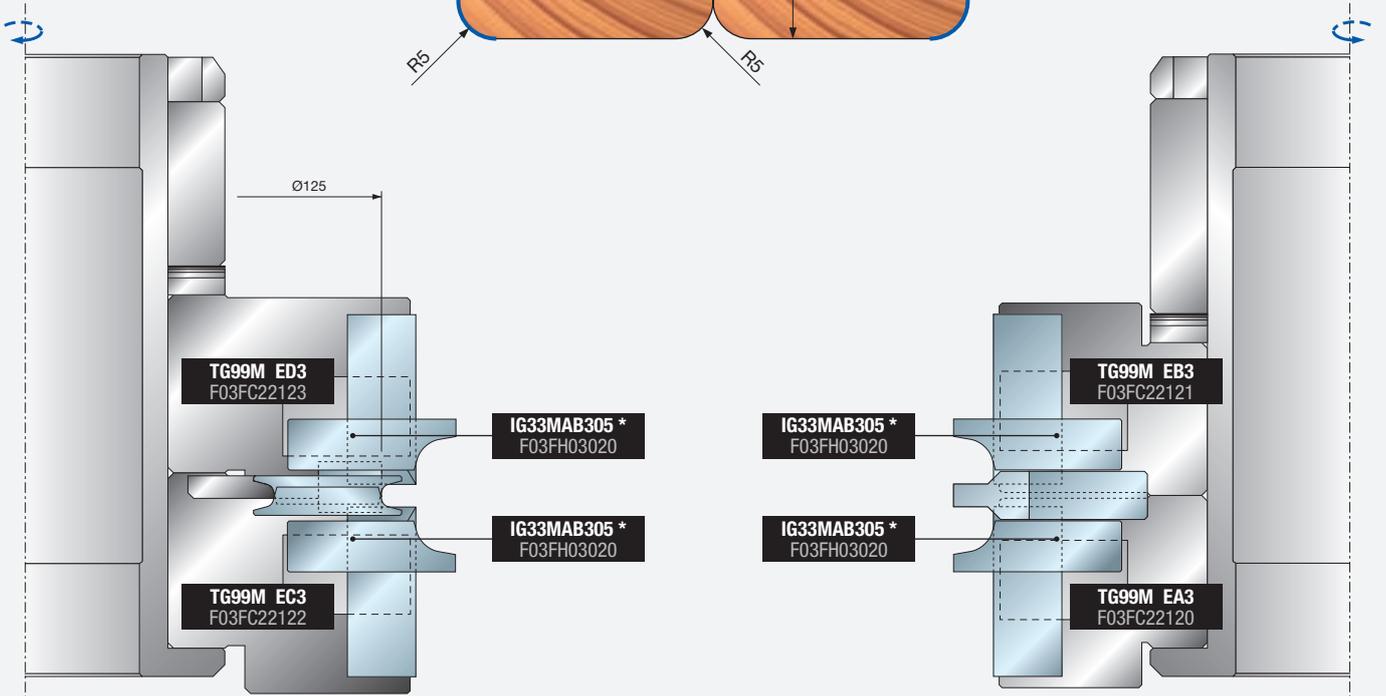


PROFILE H

Cutterhead set
TG99MG015



Cutterhead set
TG99MG014



The tools have been designed and manufactured in accordance with the European Safety Standard EN-847

TOOLS

Tools shall be used only by persons of training and experience who have knowledge of how to use and handle tools.

The maximum rotational speed marked on the tool shall not be exceeded.

Circular saw blades, the bodies of which are cracked, shall be scrapped (repairing is not permitted).

One piece tool with visible cracks shall not be used.

Clamping surfaces shall be cleaned to remove dirt, grease, oil and water.

- Resin shall only be removed from light alloys with solvents that do not affect the mechanical characteristics of these materials.

Tools and tool bodies shall be clamped in such a way that they shall not loosen during operation. Tools with cylindrical shank must be clamped in a way that the mark of the maximum free shank length shall be covered, at least partially, by the clamping device or by the locking collet.

- During assembly procedures, attention must be paid that knives, inserts and spurs do not collide with other elements. Fastening screws and nuts shall be tightened using the appropriate spanners etc. and to the torque value provided by the manufacturer. Extension of the spanner or tightening using hammer blows shall not be permitted.

Clamping screws shall be tightened according to instructions provided by the manufacturer. Where instructions are not provided clamping screws shall be tightened in sequence from the centre outwards.

Use of fixed rings, e. g. pressed or held by adhesive fixing, in flanged sleeves, shall be permitted if made to the manufacturers specifications.

- Repair and regrinding of tools shall only be allowed according to the tool manufacturer's instructions.

After repair and regrinding of tools it shall be ensured that the tools observe balancing requirements.

The design of composite (tipped) tools shall not be changed in the process of repair.

- Composite tools shall be repaired by a competent person, i.e. a person of training and experience, who has knowledge of the design requirements and understands the level of safety to be achieved. Repair shall therefore include, e.g. use of spare parts which are in accordance with the specification of the original parts provided by the manufacturer.

- Tolerances which ensure correct clamping shall be maintained. For one piece tools care shall be taken that regrinding of the cutting edge will not cause weakening of the hub and the connection of the cutting edge to the hub.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer. Typically, safe handling involves the use of devices such as carrying hooks, proprietary handles, frames (e. g. for circular saw blades), boxes, trolleys etc. The wearing of protective gloves improves the grip on the tool and further reduces the risk of injury.

Maintenance and modification of milling tools and related components and circular saw blades should always be in accordance with the design requirements/the manufacturer's instructions.

Maintenance and modification of milling tools and circular saw blades should only be carried out by a competent person, i. e. a person of training and experience, who has knowledge of the design requirements and understand levels of safety to be achieved.

When regrinding milling tools and circular saw blades, the minimum requirements of cutting blade thickness and cutting blade projection should be observed.

Composite tools should be repaired by persons experienced in and with understanding of design and use of milling tools for processing wood and similar materials, e.g. an expert with a relevant education and knowledge of the brazing process, including in particular the influence of the brazing process on tension in tool body and cutting material. When brazing off worn tips and subsequently brazing on new tips it should be made sure that the tip is correctly mounted in the tool body and that the process does not result in critical tension in the tool body.

- After any type of maintenance, milling tools marked with MAN should continue to observe the requirements of the standards related to tools for hand feed.

When modifying milling tools, e. g. modification of bore diameter, modification of shank, retipping of composite tools and similar, it should be ensured that the requirements of the standard relating to balancing are still observed.

After being modified and/or retipped, milling tools and circular saw blades should be marked according to the rules applying to new tools. However, the name/logo of the company making the modification/ retipping should be added.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer. Tools which weigh more than 15 kg may require the use of special handling devices or attachments, these will depend on the features that the manufacturer has designed into the tool to allow easy handling. The manufacturer can advise on the availability of necessary devices.

CLAMPING DEVICES

The speeds indicated on the clamping device and the tool to be clamped should be compared. For adjusting the speed on the machine the lower speed should be applied.

Screws and nuts should be tightened using the appropriate spanners. Clamping surfaces should be cleaned to remove dirt, grease, oil and water.

Clamping devices and tools should be mounted or clamped according to given torques, pressures and wrenches to be used.

Extension of spanners or tightening or loosening by means of hammer blows should not be permitted.

Maximum tool diameters and tool lengths should not be exceeded.

Shank diameters must be in accordance with the clamping range of the clamping devices.

The minimum required clamping length must be kept.

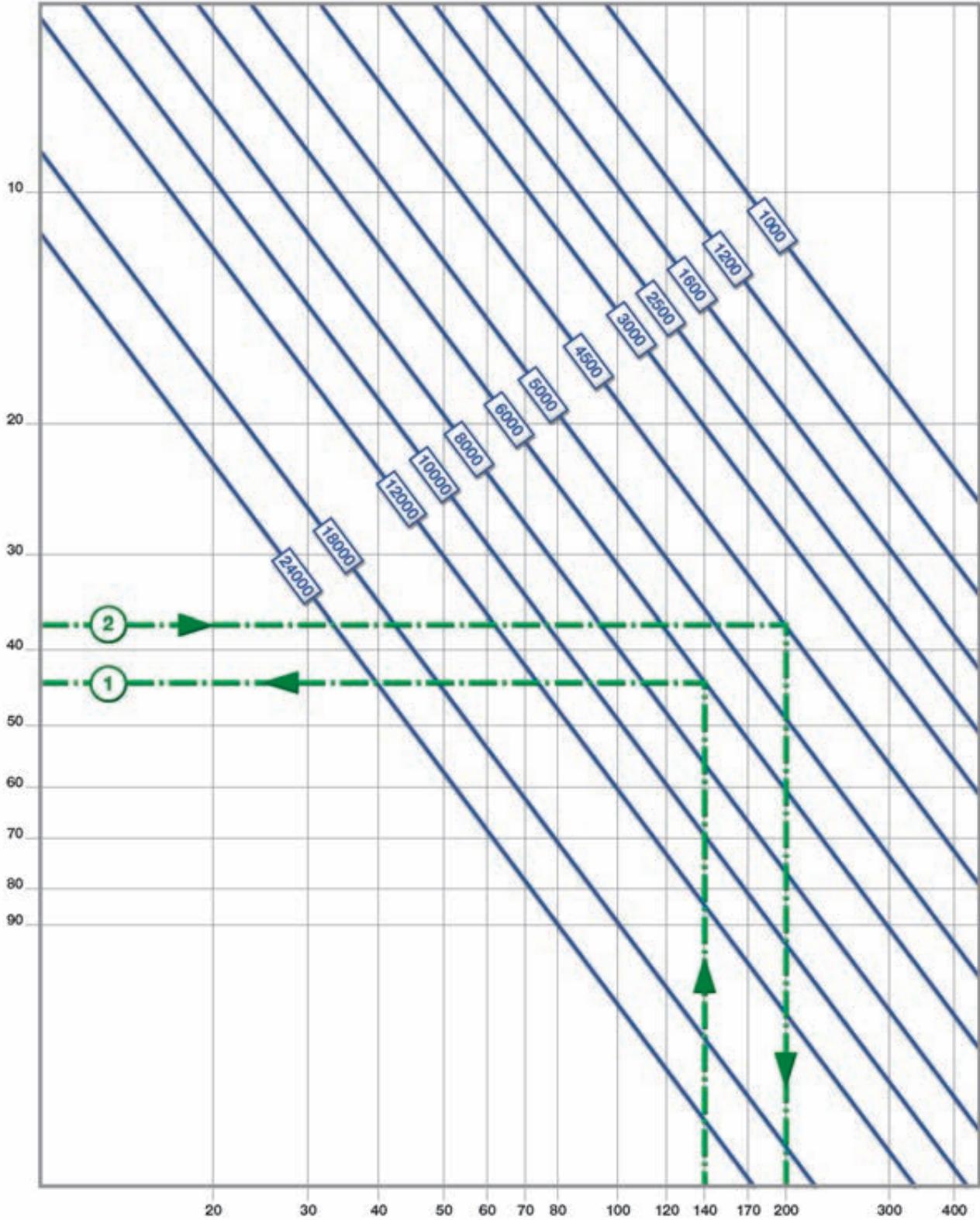
Care should be taken that the data relevant to the safety of the clamped tool are always stored in the data medium.

Repairs should only be carried out by a competent person, i.e. a person with professional training and experience, who has knowledge of the design, construction and safety requirements.

Repair should therefore include the use of spare parts which are in compliance with the specifications of the original parts.

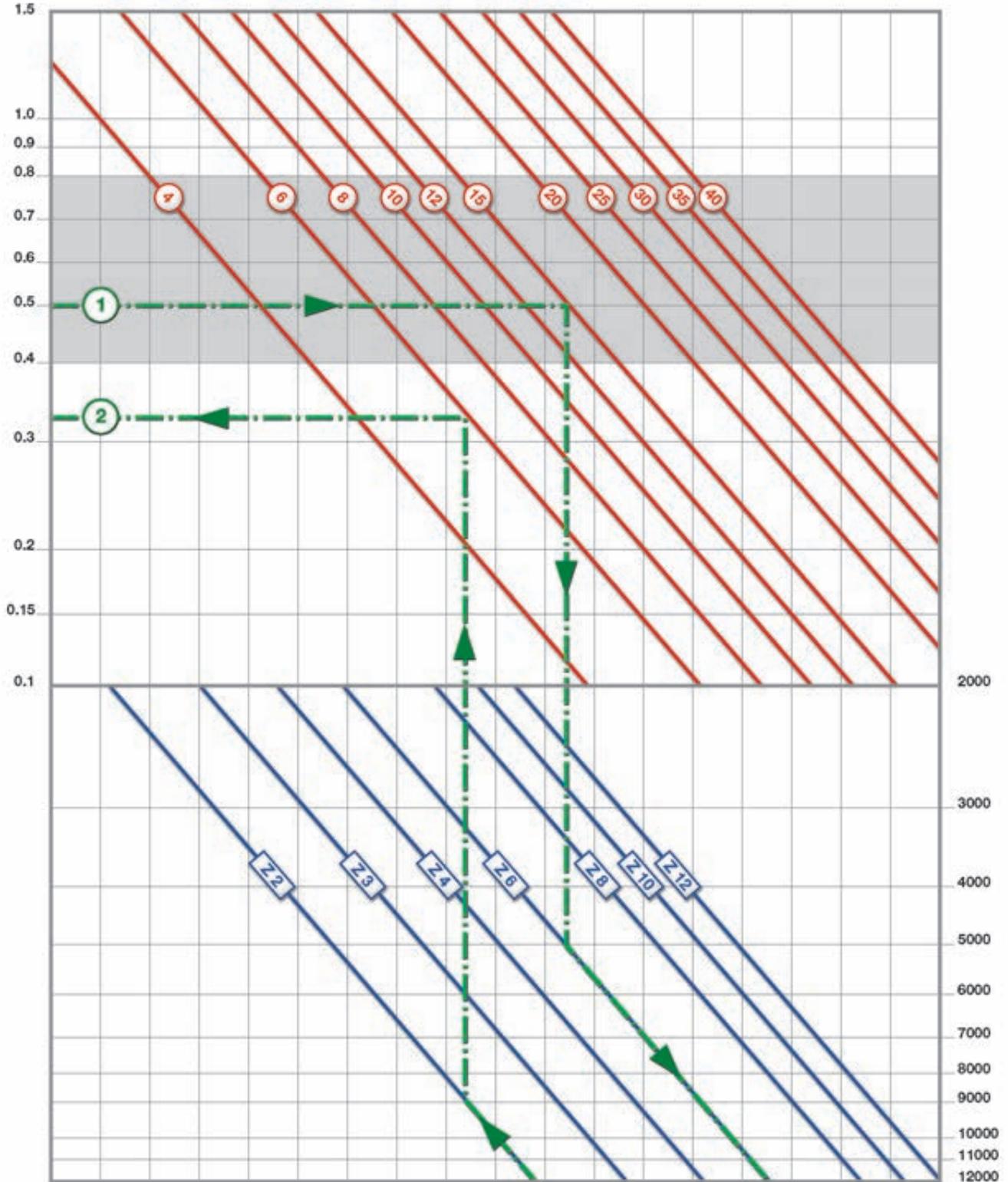
TECHNOLOGICAL FEATURES

Technical diagram to obtain tip speed, diameter and RPM of a cutting tool



TECHNOLOGICAL FEATURES

Technical diagram to obtain number of teeth, feed rate, RPM and grade of finish of a cutting tool

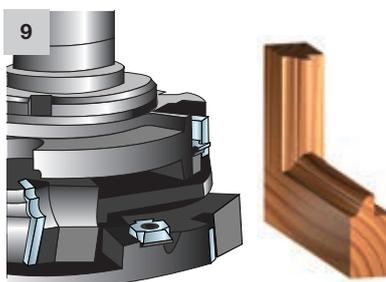
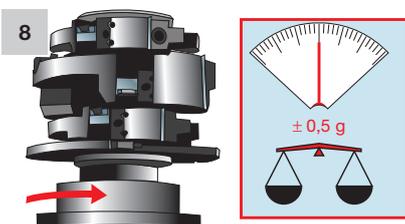
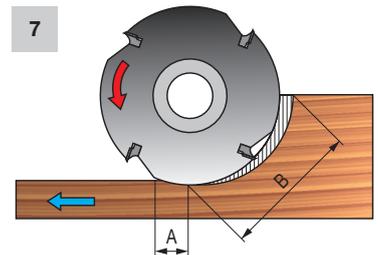
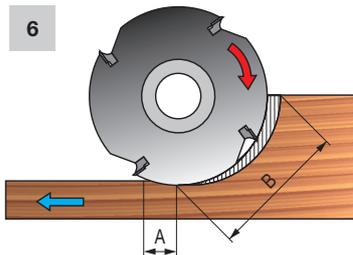
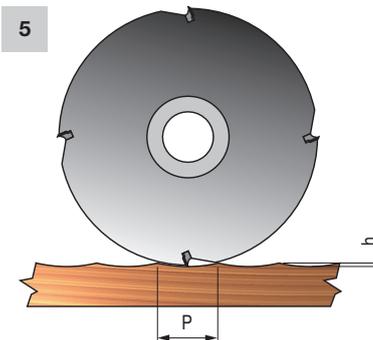
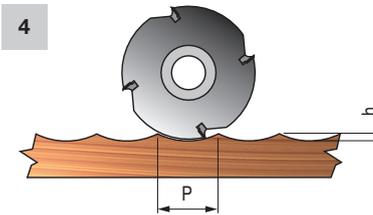
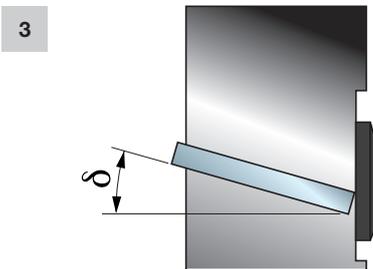
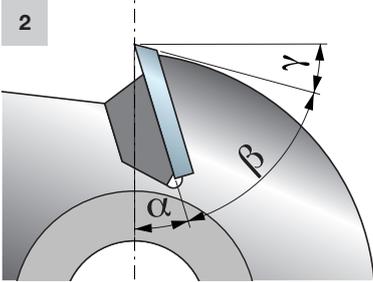


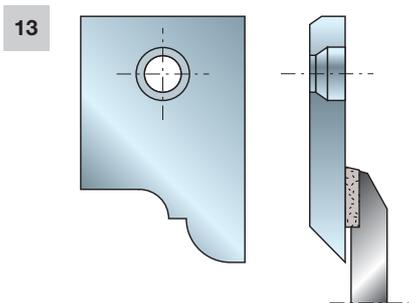
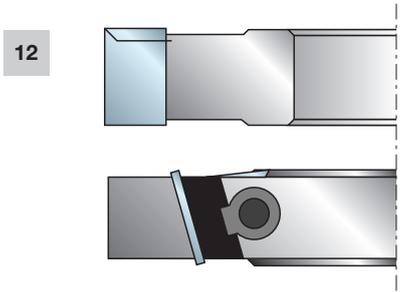
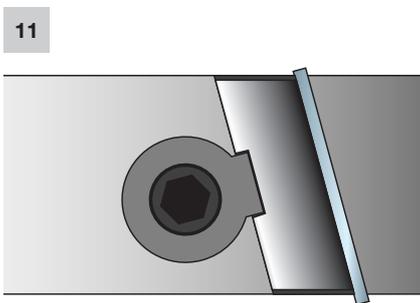
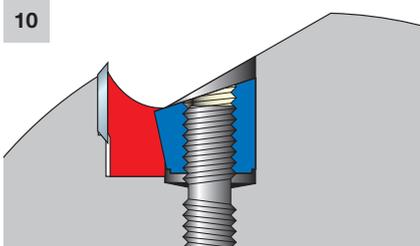


TECHNOLOGICAL FEATURES

TECHNICAL FEATURES OF TRADITIONAL CUTTERHEADS

- Freud's exclusive HW used to construct each cutter, is produced according to the kind of work which the tool will undergo, in order to obtain the best duration and quality finish possible. Special instruments guarantee precision and therefore perfect replacement of the knives we produce without the need to modify the cutterhead even after prolonged use (Fig. 1 shows hard metal under the microscope).
- The most characteristic angles of a cutterhead are (Fig. 2 and 3):
 - **Hook angle (α)**: depends on the type of material to be cut.
 - **Wedge angle (β)**: this angle is a direct consequence of angles α and γ .
 - **Clearance angle (γ)**: depends on the material to be cut and the thickness of the cutting edge.
 - **Shear angle (δ)**: necessary to obtain a better penetration into the material to be cut and a gradual removal of the chips. When the tools have different diameters, this angle allows the hook angle to remain constant.
- The work piece finish is given by the surface roughness and depends on many factors: the feed rate, the tool's RPM, if the tool cuts against or with the feed and the tool's general geometry such as the hook, wedge and shear angles.
- The tool's diameter also influences the work piece finish (Fig. 4 and 5). If the feed rate and the tool's RPM are the same, the pitch (P) will also be the same, therefore the depth and the surface roughness (h) is reduced as the diameter of the tool increases.
- The tool cuts "with the feed" when the rotation and feed direction are the same (Fig. 6), the tool cuts "against the feed" when the rotation and feed direction are opposite (Fig. 7).
- During the removal of the chips, two areas can be distinguished: A and B (Fig. 6 and 7): area A is where the material is compressed if the rotation is "against the feed"; area B is where the tool penetrates the material and removes the chips.
- Every tool is designed by our research and development department based on the clients specific needs and the same technology is applied to manufacturing machines that, combined with highly specialised workers, allow precision levels never reached before in the woodworking field.
- Every tool is balanced to remove vibrations caused by bizarre distribution of the tool's mass, harmful during the woodworking process. Three balancing operations are done: first on the single tool, second on the set and finally, the third, on the entire group of tools that will be fitted on the same spindle (Fig. 8).
- The final tuning operation is done in the testing room and consists of simulating actual working conditions: each set is used to cut a wood sample of the requested profile. All of these testing phases allow Freud to supply the client with a product that is ready for use and immediately operational, allowing added savings for the client (Fig.9).

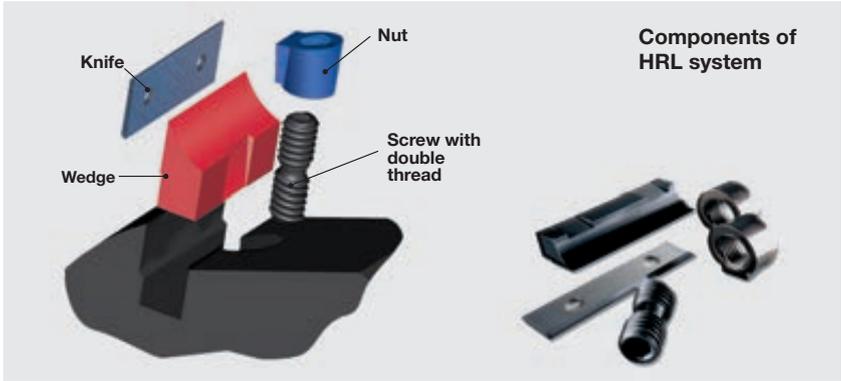




TECHNOLOGICAL FEATURES

ADVANTAGES OF TRADITIONAL CUTTERHEADS

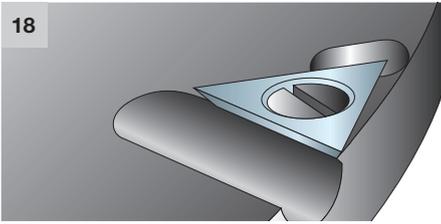
- A cutterhead is a rotating tool consisting of various cutting edges, geometrically fitted on its circumference. The cutting edges are 1,5 mm thick disposable knives, mechanically locked to the tool's body (Fig. 12). With respect to brazed cutters, cutterheads with disposable knives have numerous advantages, in fact, to change a used or damaged knife it is not necessary to dismount the cutterhead from the machine, but simply loosen the screw that holds it in its seat. On the other hand a brazed cutter must be changed altogether and a substitute available so as to avoid time wastage.
- The HRL Locking System takes advantage of the centrifugal forces generated by the tool rotation in order to block itself. This characteristic, along with other single elements avoid the risk of accidental breakage or expulsion of the knives. The HRL Locking System is also synonymous of strength; the use of only specially treated components and the precision of this method guarantees a practically unlimited number of locking and unlocking operations without compromising the efficiency. (Fig. 10 and 11).



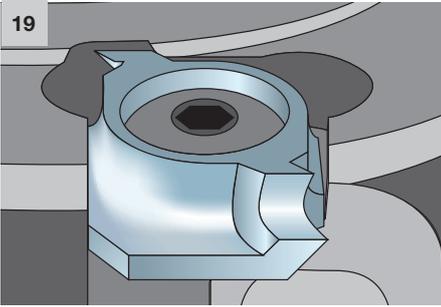
- Performance System knives are constructed in hard metal, which Freud produces in 6 grades of hardness, second to the material to be worked: softwoods and hardwoods, heavy, abrasive, chipboard, melamine, laminated, MDF etc. It is possible to use HW with a high grade of hardness, so as to permit a superior hold of 30% more with respect to the HW used for brazed cutting edges destined to work very abrasive materials.
- Other than being a solution that practically substitutes brazed cutters, thanks to the interchangeability of the profiles on the same tool and the duration of the tool itself, there is a notable advantage and convenience when working on overhead CNC router machines, where machine downtimes can result costly: in fact the changing of a used or damaged knife does not require the dismounting of the cutterhead from the machine, since it is sufficient to loosen the screw that holds it in place. Instead a brazed cutter must be completely changed and a substitute available to avoid time wastage.
- Freud has an entire range of tools with performance, standard or personalised knives for manual or overhead CNC router machines (Fig. 14).
- The Performance System results advantageous, even when confronted to traditional cutterheads, thanks to the easiness of sharpening, low operational cost and the need of no particular machinery (the use of a flat grinding wheel or surface grinding machine is sufficient - see Fig. 15) or specialised personnel.
- Even after sharpening, performance knives maintain their original profile (Fig.16) and the tool's cutting diameter, considering maximum loses of 0,15-0,20 mm.
- Suggestions for correct sharpening on surface grinding machine or flat grinding machine:
 - 1) Fix support TA01M or TAO2M (Fig. 16) onto the surface grinding machine or flat grinding machine.
 - 2) Fix the knives with the screws that are supplied.
 - 3) Proceed with the sharpening of the entire set of knives.
 Use of abundant cooling liquid during sharpening is recommended. Use diamond grinding wheels (Fig. 17) with the following characteristics: D6A2-C100-054.
- On request, sharpening can be carried out at our premises by simply sending us the complete set of knives and indicating on the order the code OPTAFF AA9.



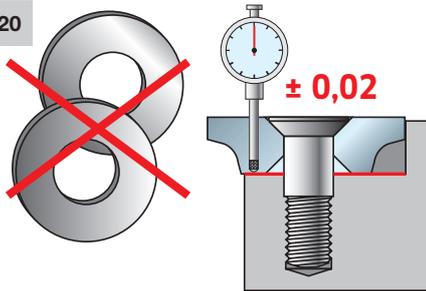
18



19

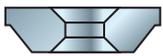
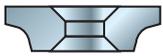


20

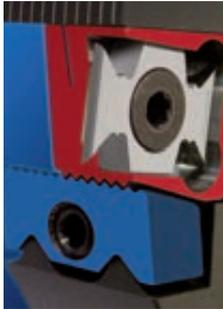


21

R = 1,5 - 2 - 3



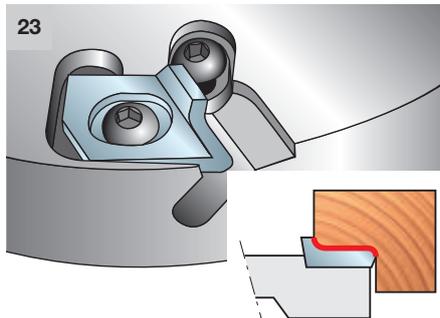
3 x 45°



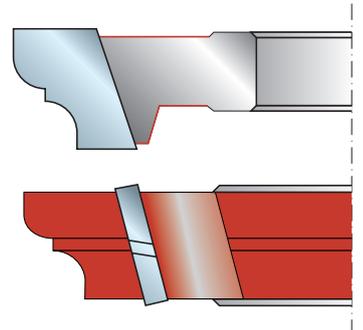
22



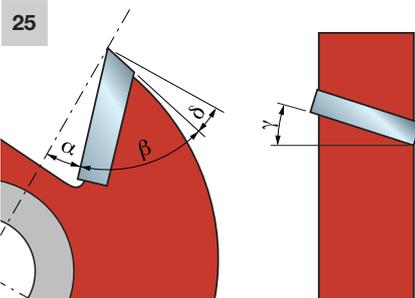
23



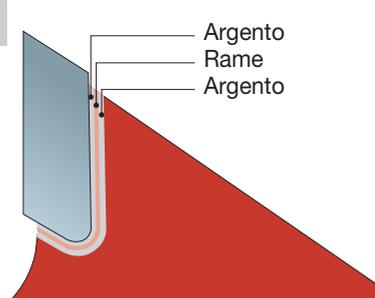
24



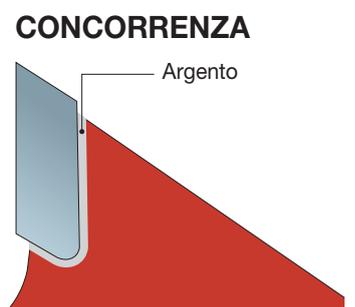
25



26



27

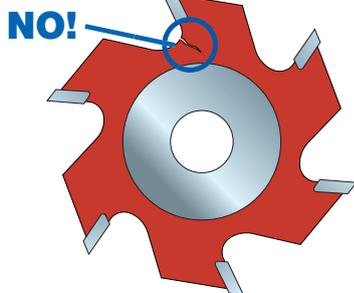


TECHNOLOGICAL FEATURES

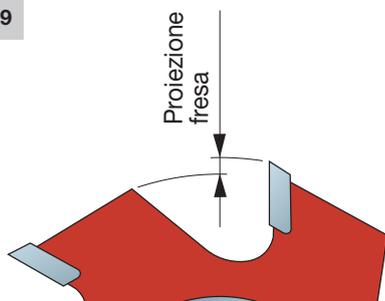
INSERTS AND SPURS

- The triangular spur (Fig. 18) is a component produced in HW to give the cutting edge a long life, used on cutterheads and on Performance tools to give a better finish on rebates. The width of the cutting surface (22 mm) and the position of the spur (positive hook angle) guarantees a perfect finish without leaving a trace (the length of the rebate is less than the length of the spur).
Another important characteristic is the size of the chip discharge area in front of the spur: this allows excellent chip discharge and therefore the spur is more efficient (Fig. 19).
- The rounding and beveling inserts are used to remove sharp angles from the work piece. These inserts give a better quality finish allowing various wood coatings to deposit more uniformly.
Inserts with a shear angle allow a better finish when the wood is cut across the grain. Inserts and their seats are manufactured with extreme precision and this allows them to be replaced without the need of spacing rings (Fig. 20).
- The new NSR Adjustable Insert System is the only one that allows adjustments without the need of measuring instruments. This particular system allows the inserts to be adjusted with precision of a hundredth of a millimetre on the entire length of the tool. The indelible reference marks are etched with extreme precision by lasers and allow a rapid and simple repositioning of the insert (Fig. 21). Fig. 22 shows the components. The inserts have a positive hook angle and a shear angle that allows an excellent finish on any type of material. The same seat can be fitted with rounding inserts or beveling inserts.
- The rounding spur combines the characteristics of a rounding insert and a spur. With a single operation, the rebate is internally and externally rounded and finished. These solid carbide inserts are manufactured with various rebate depths to satisfy clients needs. Extremely good finish is guaranteed by the inserts shear - hook angle combination.
In the same seats, different inserts can be fitted so that the same tool can cut rebates of different depths (Fig. 23).
- A cutter is a rotating tool consisting of various cutting edges, geometrically fitted on its circumference (Fig. 24). The cutting edges are HW or HSS inserts, fixed to the tool's body in a definitive way (brazed).
- Brazed cutterhead angles (Fig. 25) are similar to those described on the technical pages relative to the cutterheads and have much the same function (see page 97).
- The teeth in hard metal are brazed on to the cutters body with a special tin-metal alloy of copper-silver-copper, insuring a resistant soldering, permitting the teeth to absorb eventual blows due to kick-back and guaranteeing a longer duration of both the teeth and the cutter itself (Fig. 26-27).
- With regards to rotation and feed rate, for working in concordance or discordance, see page 98.
- Other than standard products, Freud offers personalised tools based on the client's needs.

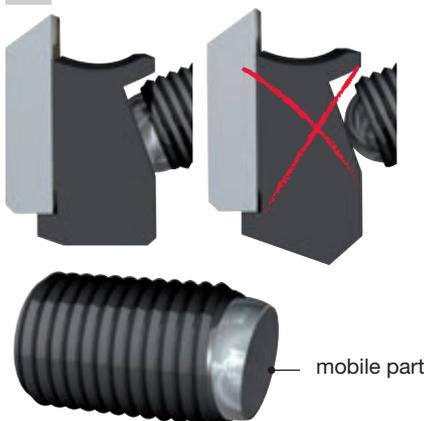
28



29

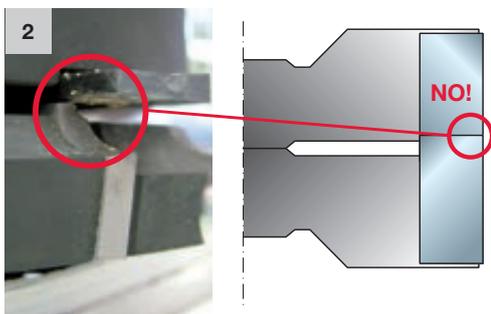


1

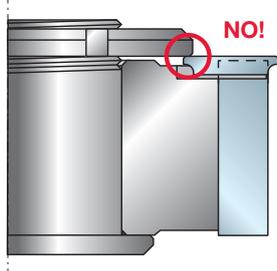


Screws with spherical insert, for ISOprofil System

2



3



TECHNOLOGICAL FEATURES

For the use of brazed cutters, return to the norms already described in the section relative to cutterheads (page 97). Furthermore:

- Tools with visible cracks cannot be used (Fig. 28).
- The maintenance, repairing and modification of brazed cutters must be carried out in accordance with the manufacturers specific instructions. Furthermore they must always be carried out by competent and qualified personnel with the right understanding of the kind of safety levels to be reached.
- When sharpening brazed cutters, always respect the minimum projection foreseen for the cutting edges (Fig. 29).
- For the removal of used parts or the soldering of new cutting edges, insure that these are correctly mounted so as to avoid creating critical tension points on the tool's body.
- Modifying a brazed cutter, e.g. the diameter of the bore, or applying cutting edges, insure that the requirements applied by the norm relative to dynamic balancing are still respected.

MAINTENANCE OF TOOLS

- On ISOprofil clamping system, proper locking is obtained when the flat surface of the spherical insert completely adheres to the wedge (Fig. 1).
- When mounting tools, insure that locking reacts against the body and the cutting edges are not in contact with each other (Fig. 2) or with any other locking elements (Fig. 3).
- Tools compiling a set, must be repaired by experienced and fully trained personnel, with the knowledge of the design requirements and security levels to be reached
- After any type of maintenance work, a tool marked "MAN" must continue to respect the requirements imposed by the norm relative to tools with manual feed. The use of tools for manual feed without deflectors if originally provided is not allowed.
- Wearing gloves increases grip and reduces the risk of injury. Tools for manual feed without deflectors if originally provided is not allowed.
- To avoid injury, tools must be handled with care using special appliances so as to transport them without exposing the user to injuries.

INSTRUCTIONS FOR CLEANING

Clamping surfaces must be free of dirt, grease, oil and water (Fig. 4). Resins must be removed from tools with light alloy bodies using cleaners that do not damage the aluminium and compromise the materials mechanical features. Accurately clean the tool after every knife change.

Washing: Tools must be washed with water and an appropriate cleaning product (contact local dealer if more info needed) that doesn't affect the body materials (manganese phosphated steel or aluminium alloy) burnished steel components (screws, washers) and carbide inserts (titanium, cobalt carbide). Use of ultrasonic machines decrease washing time and improves cleaning in the inner parts of the tools.

Drying: After the washing operations, tools must be dried by means of drainage and/or compressed air.

Oiling: If the tools are ready to be immediately used or stored for future use, always oil all the parts with a layer of an anti-rust protective fluid.

Before storing the tools always clean them from dirt and resin by washing, drying and oiling operations. Store the tools in a dry place.

4



Window Tooling

Freud produces a comprehensive range of standard and custom window systems, engineered and designed with advanced technologies and cutting-edge solutions. This increases the window & door efficiency levels and guarantees compliance to the latest energy regulations for buildings. The superior quality solutions include a number of innovative projects and designs to produce windows & doors CE certified, via Freud Cascading Service.



WINDOW TOOLING

| | |
|---|----------|
| Leading technology for window tooling | Pag. 448 |
| Cascading Service | Pag. 450 |

PROFILING

Throughfeed machines tool sets

| | | |
|--------------------|---|----------|
| ST12MG 800-801 | Profiling cutterhead sets for internal and external doors | Pag. 453 |
| ST12MG 820-821-822 | Tenoning cutterhead sets | Pag. 455 |
| ST12MG 840-841-842 | Cutterhead sets for doors rebates | Pag. 458 |
| ST12MG 302 | Bead recovery cutterhead sets | Pag. 460 |
| ST12MG 830 | Cutterhead sets for door frames | Pag. 461 |
| TP43M | Cutterhead sets for vertical slat shutters | Pag. 462 |
| TP45M | Cutterhead sets for lifting-sliding doors | Pag. 464 |

CNC tool sets

| | | |
|------------------------|---|----------|
| ST16MGC13 700-701 | Profiling CNC sets for internal doors without bead recovery | Pag. 465 |
| ST16MG 702-703-704 | CNC Set for internal doors profiling with bead recovery | Pag. 467 |
| ST16MG 705-706-707-708 | CNC Scribing sets for internal doors | Pag. 469 |
| ST16MG 820-821 | CNC Sets for door rebates | Pag. 471 |
| ST16MG 830 | Window tooling set for door frame internal profiling | Pag. 472 |

Router bits for bead recovery

| | | |
|--------|-----------------------------------|----------|
| PR01MD | Bead profiling router bits | Pag. 473 |
| PCARM | Bead recovering router bits | Pag. 474 |

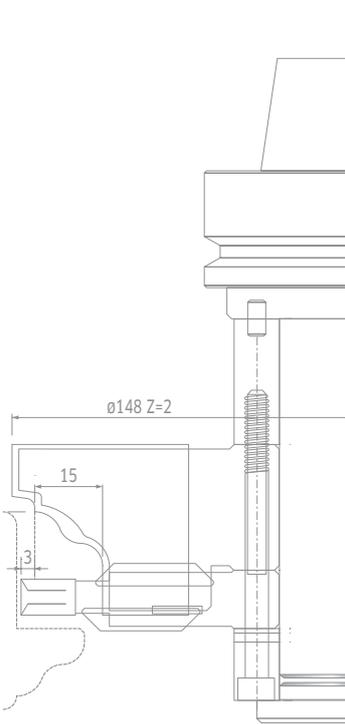
BORING

Drill bits for hinges

| | | |
|--------|-----------------------------------|----------|
| PA01MD | HS Stepped drill for hinges | Pag. 476 |
|--------|-----------------------------------|----------|

| | |
|-----------------------------|----------|
| Safe working practice | Pag. 477 |
|-----------------------------|----------|

| | |
|--|----------|
| HRL - High Resistance Locking System | Pag. 478 |
| NSR Regulation System | Pag. 479 |
| Profiled and resharpenable Performance System knives | Pag. 479 |
| Automatic diameter recovery system | Pag. 480 |



LEADING TECHNOLOGY

TiCo CARBIDE TECHNOLOGY

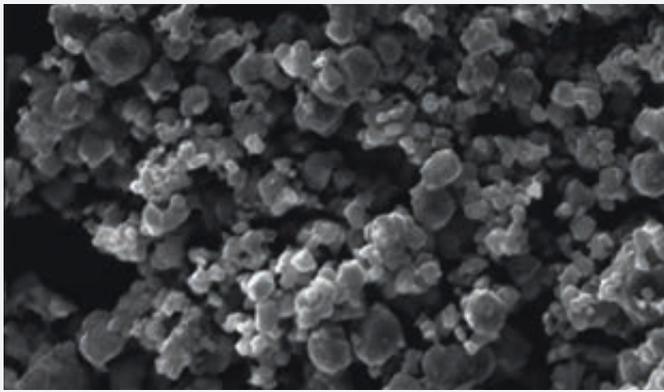
Freud ownership and control of the entire Carbide manufacturing cycle ensures that the correct formula is used for every application, to constantly maximise the knives performance.



TiCo Carbide

A specially formulated, highly compact Titanium Cobalt Carbide, engineered and manufactured by Freud.

It provides a sharper edge and flawless finish with a dramatically longer cutting life.



DESIGN INNOVATION

The design of Freud's special knives is engineered to perform perfect cuts and deliver extraordinary durability. The ISOprofil cutterheads are developed to work with 17 different knives.

Split Edge knives

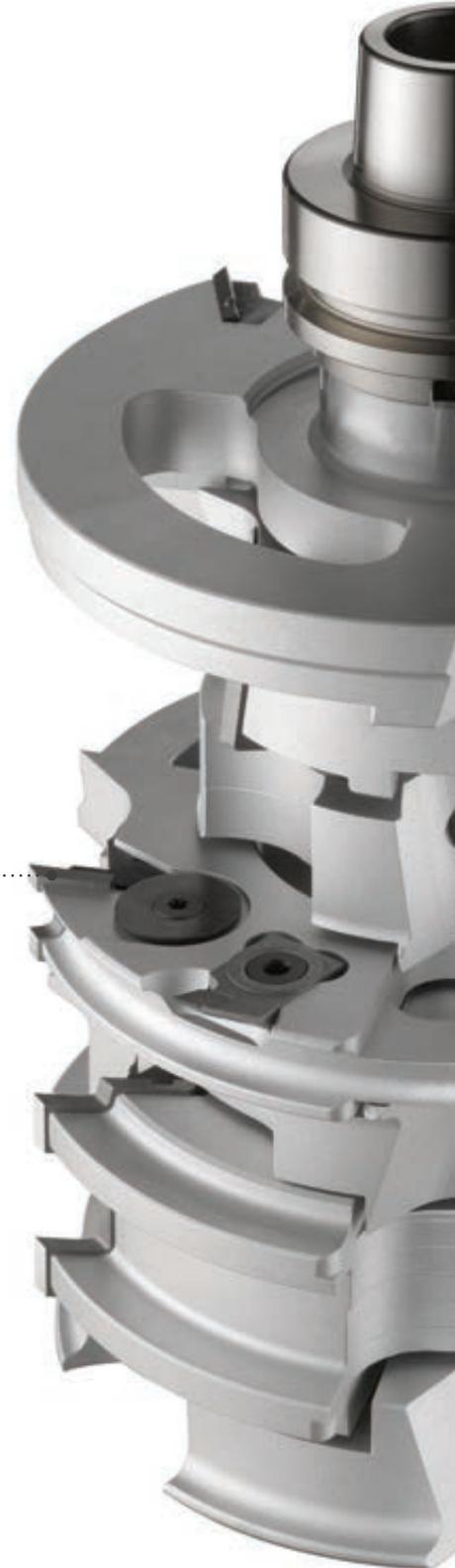
Freud Split Edge knives reduce cutting pressure and prevent edge chip out.

These knives, resharpenable up to 6 times, both enhance the productivity and increase profitability, always delivering a flawless door and window joint profiling.

Performance System knives

Freud Performance System knives are designed with extra thickness - 3 mm - for up to 6 x resharpening cycles and a prolonged durability.

These knives are available in a wide range of sizes.





PIONEERING SOLUTIONS

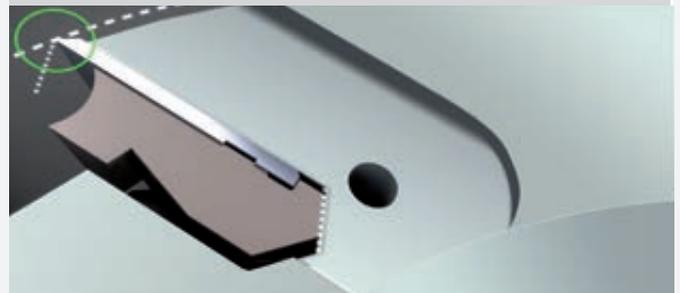
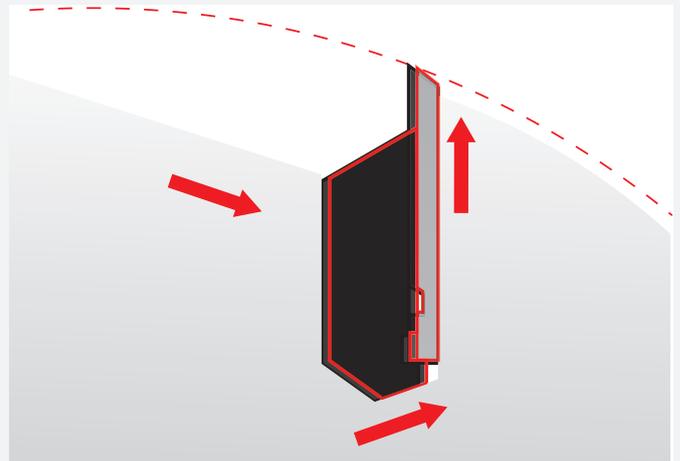
Freud's continuous investment in R&D and its superior knowledge of the industry provide cutting-edge and patented solutions, for maximum production efficiency and increased safety.



ISOprofil technologies

Freud's **ISOprofil** is the only patented system in the world, with an automatic cutting profile recovery, at a rotating speed of 70 m/s.

The **High Speed ISOprofil (H.S.I.)** leverages this innovative technology at higher speed - 100 m/s - offering a solution for automated CNC machines as well as automated and throughfeed machines.



The ISOprofil solutions feature an exclusive and extra safe locking system that allows the use of resharpenable knives, also at high rotating speed and feed-rates, delivering higher production in a shorter time.



The easy access to knives and their fast repositioning after sharpening reduce the set-up & maintenance time and, consequently, the machine downtime.

Hybrid technologies

Freud leverages the Hybrid technology, a combination of property and tested locking systems that processes, in one step only, the two-step phases of pre-cutting and finishing.

This results in an impeccable finishing and in an increased productivity.

Cascading Service



CE CERTIFICATION FREUD CASCADING



Freud is a “System House“ certified by the prestigious IFT Rosenheim Institute.

The offer to customers is more than a selection of premium cutting tools and it is enriched by a comprehensive Cascading Service.

Freud has developed a wide range of innovative projects and design solutions to produce windows & doors CE certified, leveraging a solid technical know-how, mastered over decades of experience in the window tooling industry.

The systems are tested and released using the designs and the window components (gaskets, hardware, Aluminium profiles etc.) of the main Italian and European System Houses.

Therefore, customers have access to a 100% turnkey solution, inclusive of all components and work cycles and completed by the competent assistance of Freud Customer Service, available also to fulfill specific needs.

In addition, Freud offers a broad ST12MG range for standard CNC tools to create tilt & turn, lift & slide, pivot windows as well as internal & external doors.

Freud Cascading Service includes:

- Documentation management via Freud's Quasar software.
- Training, technical support and post sales assistance.
- Factory Production Control (FPC) to manufacture products compliant to the stated performance parameters.
- Freud's Customer Service assistance.

Wood Window

| System | Frame thickness mm | Sash Thickness mm | Hardware axis mm |
|--------------|-----------------------|----------------------|---------------------|
| Ermetic | 56-58-64 | 56-58-64 | 9 |
| Ermetic 17 | 58-64-68 | 58-64-68 | 9 |
| Eurost | 56-58-64-68 | 56-58-64-68 | 9 |
| Eurost 17 | 58-64-68 | 58-64-68 | 9 |
| Freumex | 56-58-64-68 | 56-58-64-68 | 9 |
| Freumex 17 | 58-64-68 | 58-64-68 | 9 |
| Euronorm | 68-70 | 68-70 | 9 |
| Freumex C13 | 68-78-80 | 68-78-80-92 | 13 |
| Euronorm C13 | 68 - 78 - 80 | 68 - 78 - 80 | 13 |
| Freumex HP | 80-92 | 80-92 | 13 |
| Euronorm HP | 80-92 | 80-92 | 13 |
| Ghost | 68-80 | 68-80 | 13 |
| Luce | 80 | 68 | 13 |
| Fox 92 | 92 | 92 | 13 |
| Excellence | 68-78-88-98 | 68-78-88-98 | 13 |

Wood/Aluminium Window

| System | Frame thickness mm | Sash Thickness mm | Hardware axis mm |
|---------------|-----------------------|----------------------|---------------------|
| Ermetic | 56-56 | 56-64 | 9 |
| Ermetic 17 | 58-58 | 58-68 | 9 |
| Eurost | 58-61 | 58-68 | 9 |
| Eurost 17 | 58-63 | 58-68 | 9 |
| Freumex | 56-61 | 56-68 | 9 |
| Freumex 17 | 58-63 | 58-68 | 9 |
| Euronorm | 63 | 68 | 9 |
| Freumex C13 | 65 | 68 | 13 |
| Euronorm C13 | 68 | 68 | 13 |
| Freumex HP | 77 | 80 | 13 |
| Euronorm HP | 77-79 | 80 | 13 |
| Ghost | 68-80 | 68-80 | 13 |
| Luce Freumex | 74 | 68 | 13 |
| Luce Euronorm | 73 | 68 | 13 |
| Easy slim | 58 | 68 | 13 |
| Excellence | 68-72-82-92 | 68-78-88-98 | 13 |

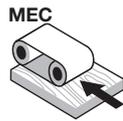
Profiling



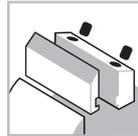


ST12MG

Profiling cutterhead sets for internal and external doors



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling



Machines:

Automatic feed and window tooling machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Tool set for internal door profile with a 140 mm zero diameter.

- Performance cutterheads are designed to work with 17 different knives.
- Adjustable timber thickness from 44 to 70 mm. tool set is provided on sleeve to fit every machine spindle dimension.
- Steel body.
- Sleeve and Performance knives to be ordered separately.

Groove bead cutters

| Dimensions mm | Sleeve code | Art. No. |
|---------------|-------------|------------|
| Ø70 x 90 x 30 | BF10MD EA9 | F03FC24536 |
| Ø70 x 90 x 32 | BF10MD EL9 | F03FC24537 |
| Ø70 x 90 x 35 | BF10MD EB9 | F03FC00633 |
| Ø70 x 90 x 40 | BF10MD EC9 | F03FC00634 |
| Ø70 x 90 x 50 | BF10MD ED9 | F03FC00635 |

| Wood thickness mm | Double-glazing thickness adj. mm |
|-------------------|----------------------------------|
| 44 | 5 ÷ 8 |
| 56 | 13 ÷ 20 |
| 58 | 15 ÷ 22 |
| 64 | 21 ÷ 28 |
| 68 | 25 ÷ 32 |
| 70 | 27 ÷ 34 |

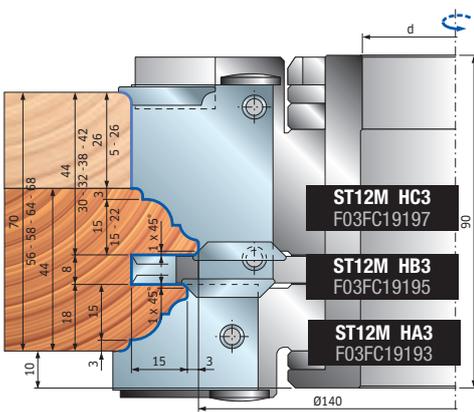
Tool set zero diameter: 140 mm

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|------|---|---|----------------|------------|------------|
| 186 | - | - | 2 | - | 7.300 | ST12MG 800 | F03FC19647 |
| 186 | - | - | 2 | - | 7.300 | ST12MG 801 | F03FC19648 |

Tools for ST12MG-800 and ST12MG-801 sets

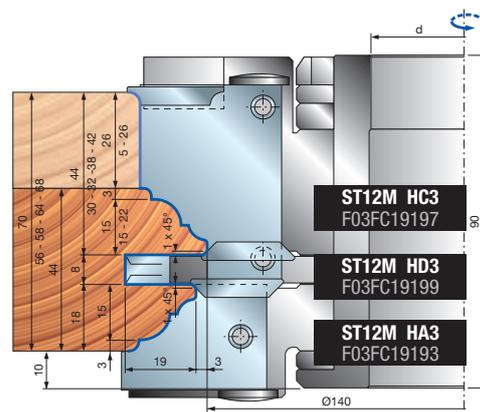
| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|------|------|------|---|---|----------------|------------|------------|
| 186 | 29 | 70 | 2 | - | | ST12M HA3 | F03FC19193 |
| 176 | 8 | 70 | 2 | 4 | | ST12M HB3 | F03FC19195 |
| 176 | 58,5 | 70 | 2 | - | | ST12M HC3 | F03FC19197 |
| 184 | 8 | 70 | 2 | 4 | | ST12M HD3 | F03FC19199 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----------|-----------------|-----------------|------------|------------|
| HA3 | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| HC3 | Rounding insert | 22 x 16 x 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Wedge | 28 x 9,5 x 8 | CN03M BB9 | F03FA00585 |
| | Screw | M8 x 22 | VT19M BB9 | F03FA04493 |
| HB3 - HD3 | Knife | 7,6 x 12 x 1,5 | CG06MHA310 | F03FH02897 |
| | Wedge | 15 x 7,2 x 8 | CN09M DA9 | F03FC01295 |
| | Screw | M5 x 19 | VT11M AA9 | F03FA04468 |
| | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M5 x 6 | VT05M AC9 | F03FA04446 |
| | Beveling insert | 22 x 16 x 5 | IG51MBA305 | F03FH03022 |
| | Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |



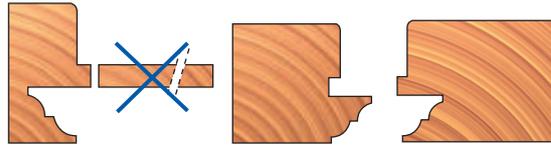
Set ST12MG-800

No. 7+7 interchangeable profiles.



Set ST12MG-801

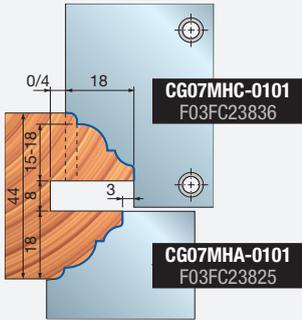
No. 7+7 interchangeable profiles. With anti-torsion pin for assembly of elements with counter profile.



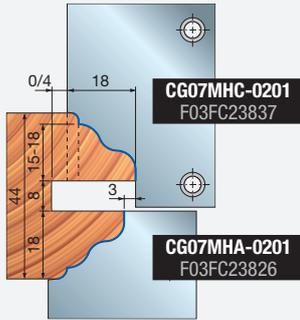
Jamb and transom with ST12MG-801 set: by cutting the tenon as shown, the counter profile with anti-torsion pin is obtained.

Profiles with 3 mm external rounding for cutterheads: ST12M HC3 - ST12M HA3

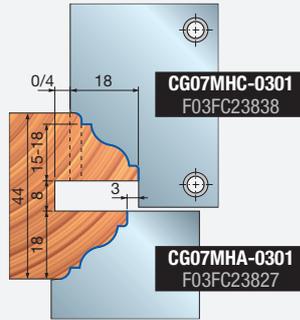
PROFILE 1



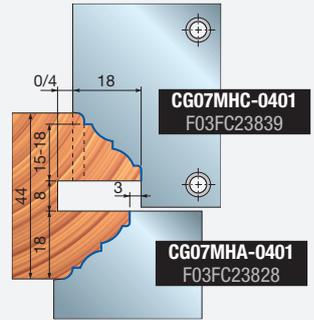
PROFILE 2



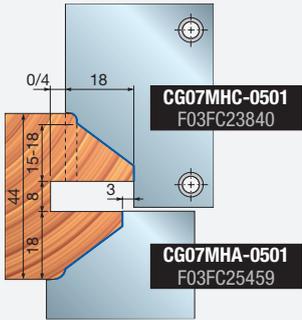
PROFILE 3



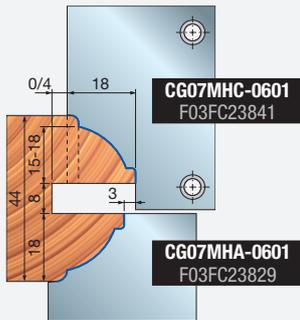
PROFILE 4



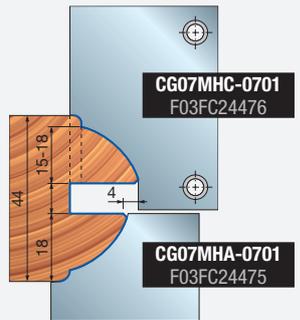
PROFILE 5



PROFILE 6

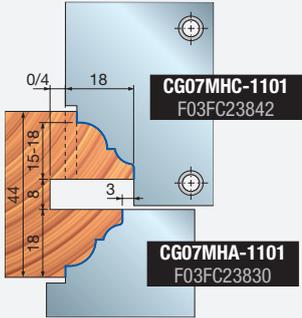


PROFILE 7

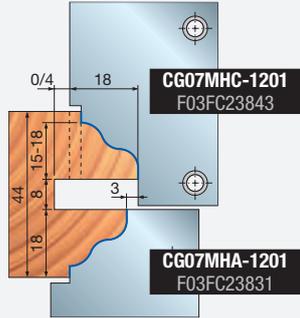


Profiles without external rounding for cutterheads: ST12M HC3 - ST12M HA3

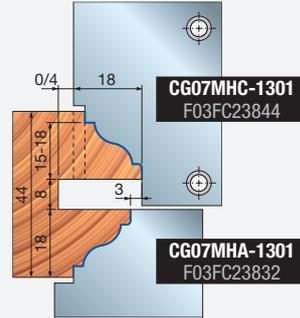
PROFILE 11



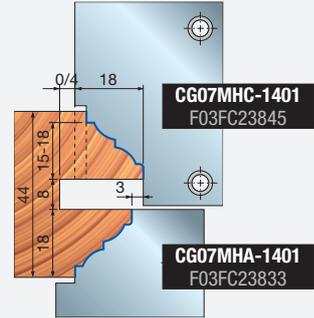
PROFILE 12



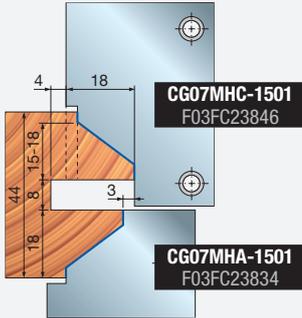
PROFILE 13



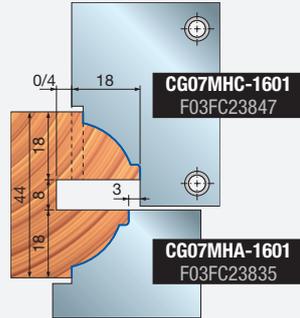
PROFILE 14



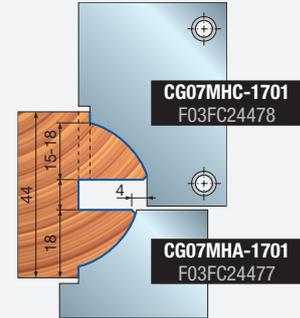
PROFILE 15



PROFILE 16

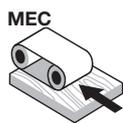


PROFILE 17

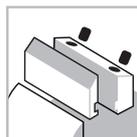


ST12MG

Tenoning cutterhead sets



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling

Tool set zero diameter: 300 mm

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------|------------|
| 294 | - | - | - | - | 5.000 | ST12MG 820 | F03FC19649 |
| 294 | - | - | - | - | 5.000 | ST12MG 821 | F03FC19650 |
| 294 | - | - | - | - | 5.000 | ST12MG 822 | F03FC19651 |

Tools for ST12MG-820, ST12MG-821, ST12MG-822 sets

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------|------------|
| 264 | 8 | 70 | 2 | 4 | | ST12M DB3 | F03FC19081 |
| 294 | 26 | 70 | 2 | - | | ST12M HF3 | F03FC19200 |
| 300 | 26 | 70 | 2 | - | | ST12M HG3 | F03FC19201 |
| 264 | 30 | 70 | 2 | 2 | | ST12M HH3 | F03FC19202 |



Machines:

Automatic feed and window tooling machines.

Materials:

Softwood and hardwood.

Applications:

Scriming.

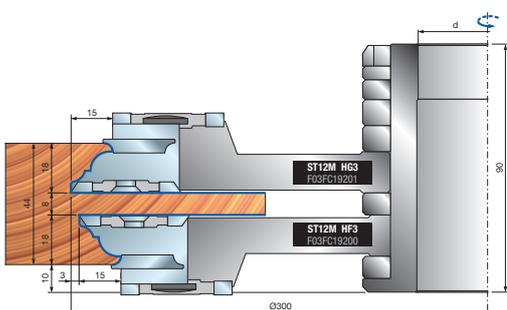
Technical information:

Tool set for internal door profile with a 300 mm zero diameter.

- Performance cutterheads are designed to work with 17 different knives (to be combined with ST12MG 800-801 profiles).
- Adjustable timber thickness from 44 to 70 mm, tool set is both available with and without bead recovery version and provided on sleeve to fit every machine spindle dimension.
- Steel body.
- Sleeve and Performance knives to be ordered separately.

| Dimensions mm | Sleeve code | Art. No. |
|------------------|-------------|------------|
| Ø70 x 90 x 30 | BF10MD EA9 | F03FC24536 |
| Ø70 x 90 x 32 | BF10MD EL9 | F03FC24537 |
| Ø70 x 90 x 35 | BF10MD EB9 | F03FC00633 |
| Ø70 x 90 x 40 | BF10MD EC9 | F03FC00634 |
| Ø70 x 90 x 50 | BF10MD ED9 | F03FC00635 |

BF10MD sleeves and knives for cutterheads HF3 and HG3 are not included.

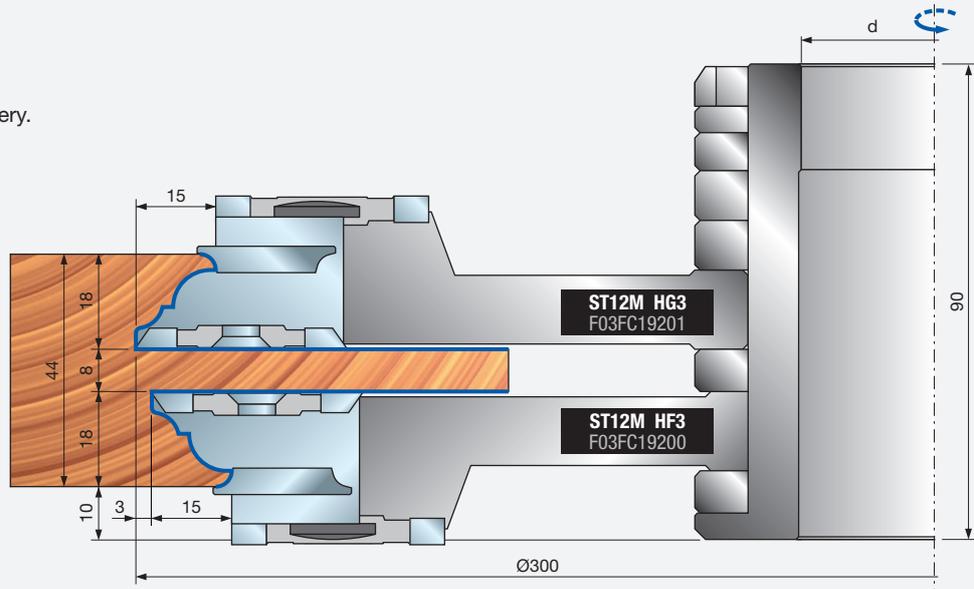


| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|-----|-----------------|------------------|-------------|------------|
| DB3 | Knife | 7,6 x 12 x 1,5 | CG06MHA310 | F03FH02897 |
| | Wedge | 15 x 7,2 x 8 | CN09M DA9 | F03FC01295 |
| | Screw | M5 x 19 | VT11M AA9 | F03FA04468 |
| | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Grooving insert | 40 x 5 x 8 | SR01MSAA301 | F03FC24186 |
| | Screw | M6 x 10 | VT01M AA9 | F03FA04429 |
| | Threaded ring | 11,7 x 2,5 x 4 | VT18M BB9 | F03FA04484 |
| | Screw | M4 x 6,5 | VT05M BD9 | F03FA04449 |
| | Screw | M5 x 6 | VT05M AC9 | F03FA04446 |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| HF3 | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Spur insert | 40 x 16 x 4 | IG05MDAA305 | F03FH02998 |
| | Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| | Rounding insert | 22 x 16 X 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| HG3 | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Spur insert | 40 x 16 x 4 | IG05MSAA305 | F03FH02999 |
| | Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| | Rounding insert | 22 x 16 X 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Knife | 30 x 12 x 15 | CG06MDA310 | F03FH02892 |
| HH3 | Wedge | 15 x 26 x 8 | CN09MS AD9 | F03FC01326 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Rounding insert | 22 x 16 X 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Wedge | 14 x 21,5 x 22 | CN03M BA9 | F03FA00584 |
| | Wedge | 28 x 9,5 x 8 | CN03M BB9 | F03FA00585 |
| | Screw | M8 x 22 | VT19M BB9 | F03FA04493 |

Profiles with 3 mm external rounding for cutterheads: ST12M HC3 - ST12M HA3

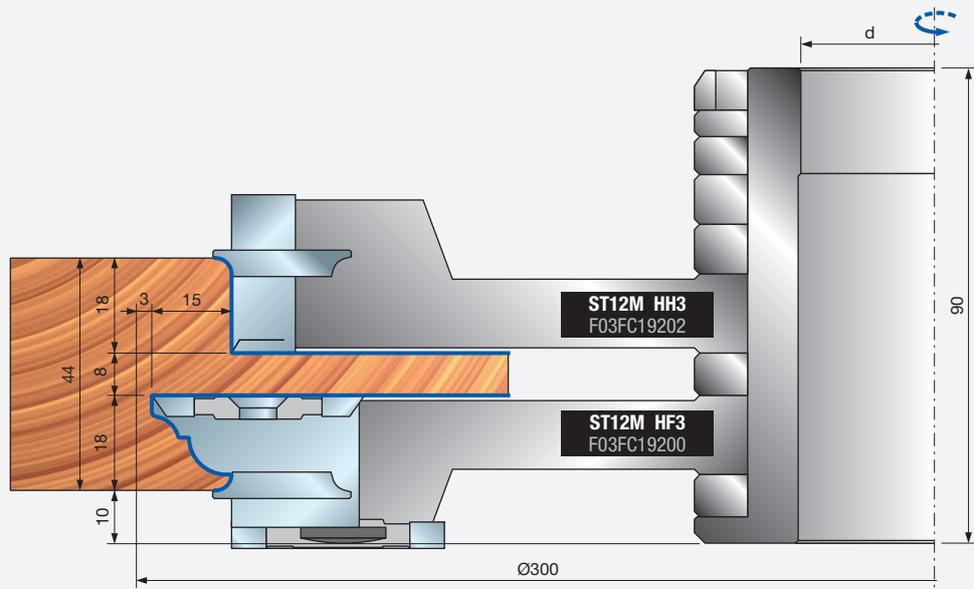
Set ST12MG-820

Single tenon.
For profile without bead recovery.



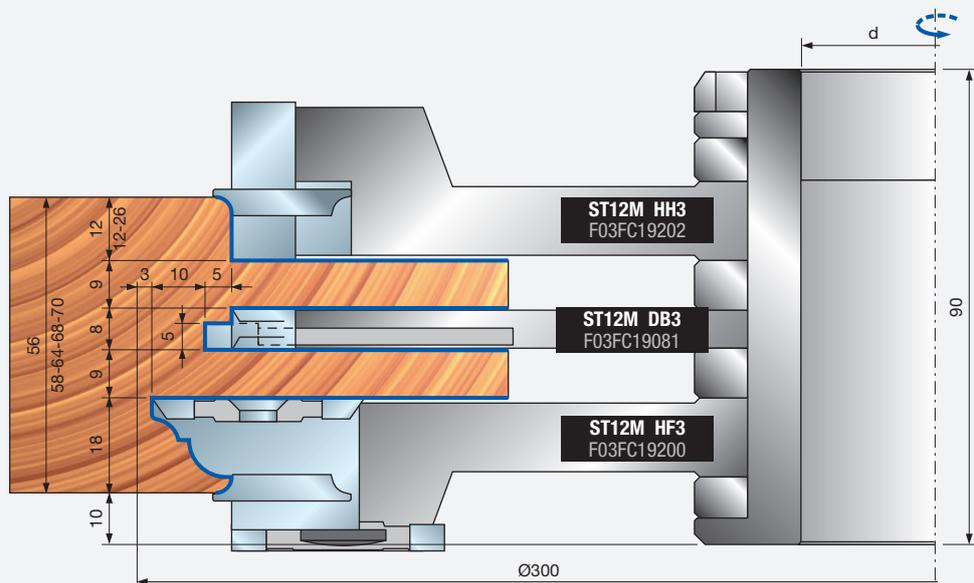
Set ST12MG-821

Single tenon.
For profile with bead recovery.



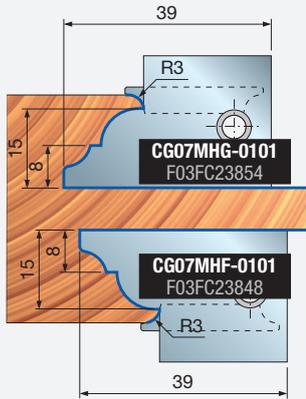
Set ST12MG-822

Double tenon.
For profile with bead recovery.

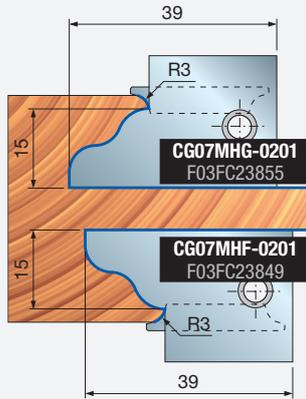


Scribes with 3 mm external rounding for cutterheads: ST12M HG3 - ST12M HF3

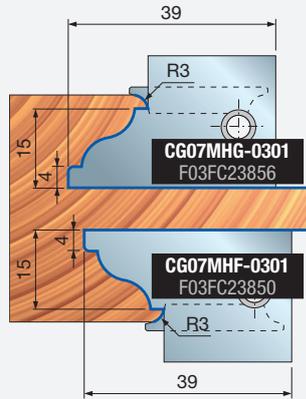
SCRIBE 1



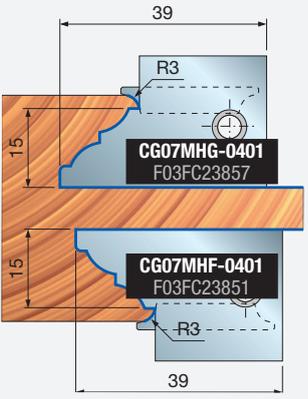
SCRIBE 2



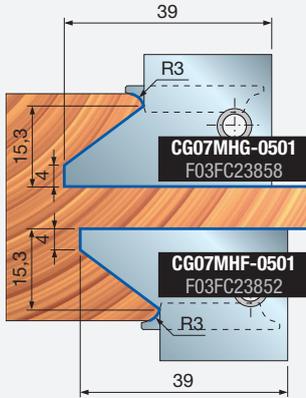
SCRIBE 3



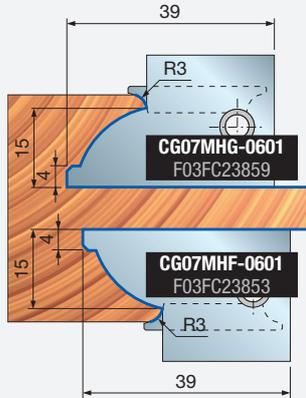
SCRIBE 4



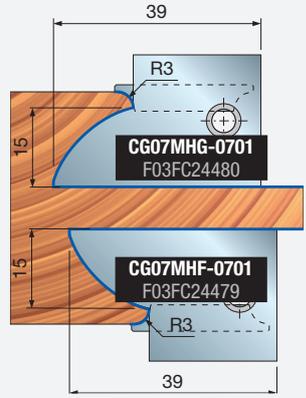
SCRIBE 5



SCRIBE 6

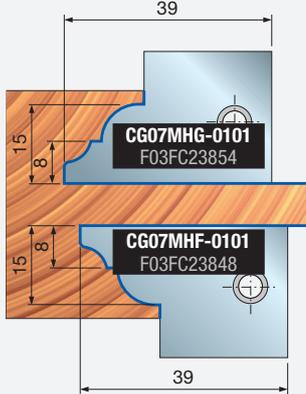


SCRIBE 7

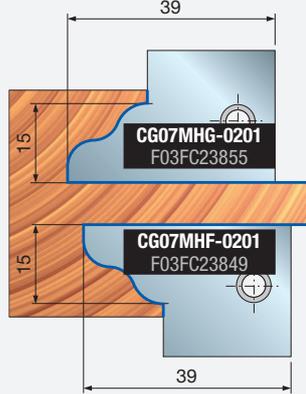


Scribes without external rounding for cutterheads: ST12M HG3 - ST12M HF3

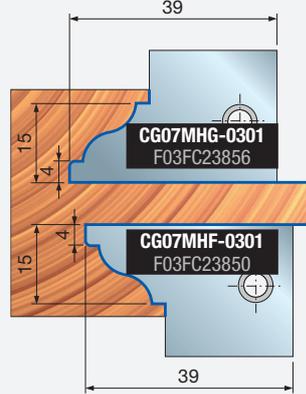
SCRIBE 11



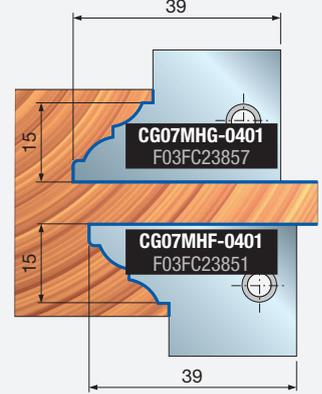
SCRIBE 12



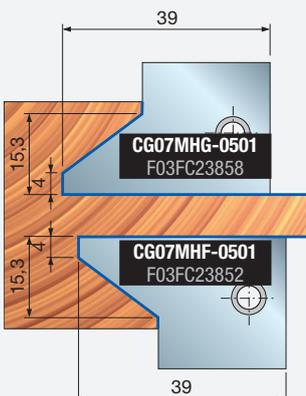
SCRIBE 13



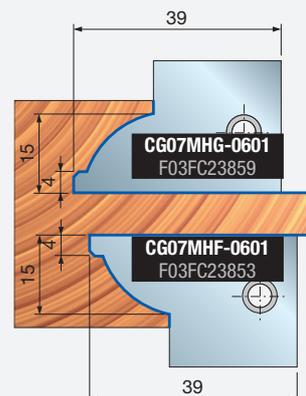
SCRIBE 14



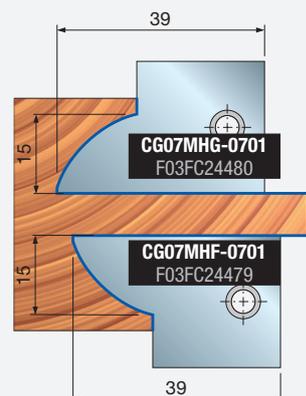
SCRIBE 15



SCRIBE 16



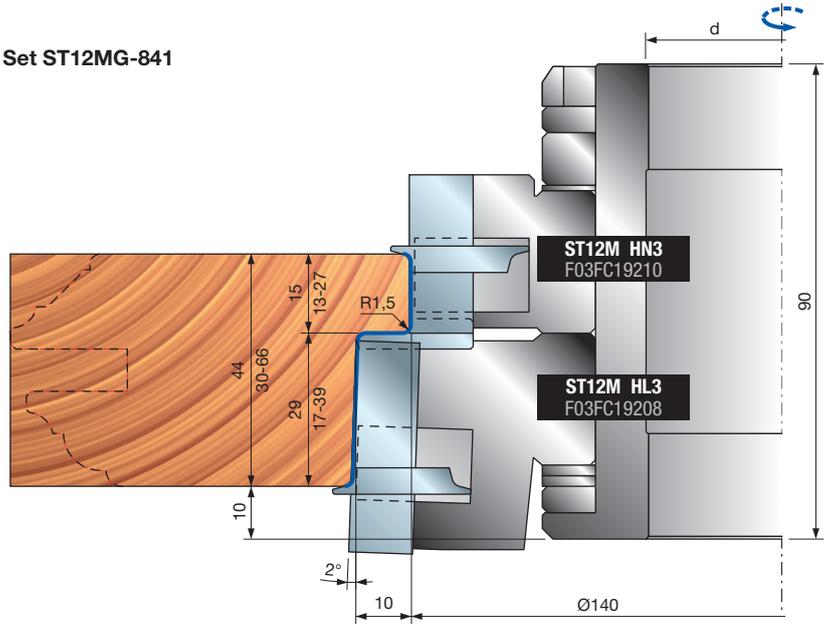
SCRIBE 17



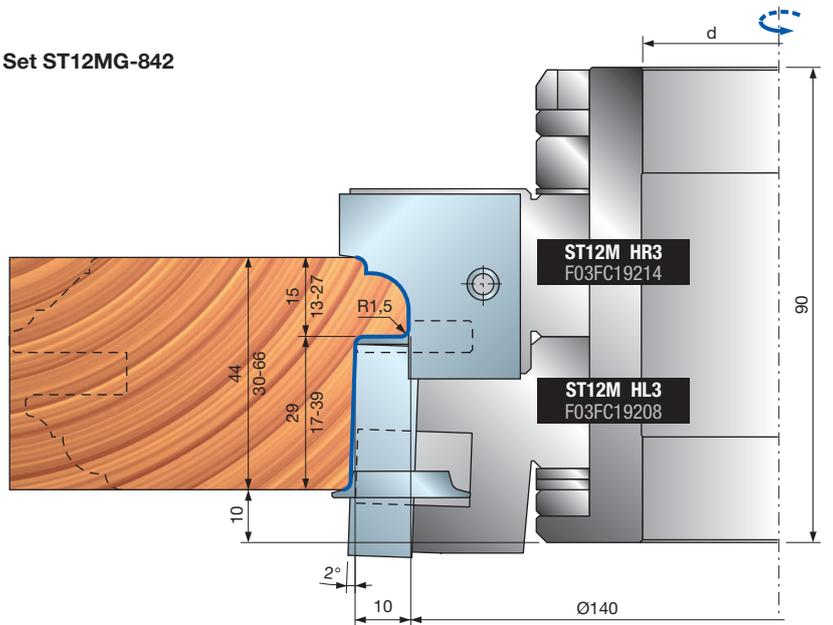
ST12MG

Cutterhead sets for door rebates

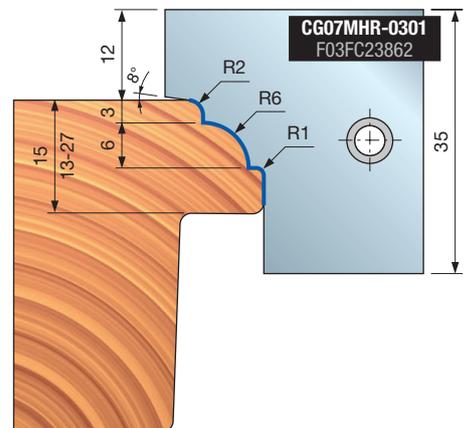
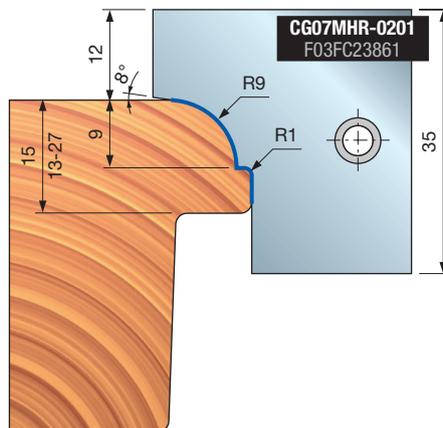
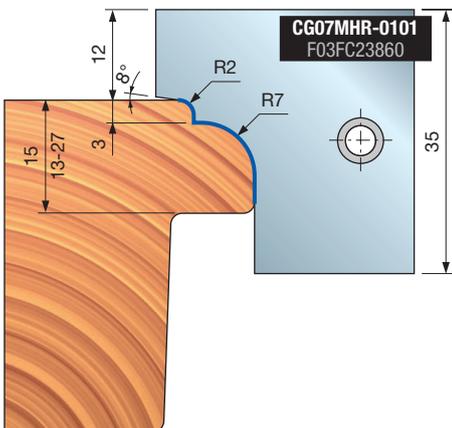
Set ST12MG-841



Set ST12MG-842



Knives for cutterhead ST12M HR3

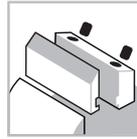




ST12MG Bead recovery cutterhead sets



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling

Machines:

Automatic feed and window tooling machines.

Materials:

Softwood and hardwood.

Applications:

Bead recovering.

Technical information:

Cutterhead for bead recovery with a 140 mm zero diameter.

- Adjustable Timber thickness from 44 to 70 mm.
- Bead thickness from 15 to 22 mm.
- Tool set is provided on sleeve to fit every machine spindle dimension.
- Steel body.

| Dimensions mm | Sleeve code | Art. No. |
|------------------|-------------|------------|
| Ø60 x 90 x 30 | BF10MD DA9 | F03FC24534 |
| Ø60 x 90 x 32 | BF10MD DL9 | F03FC24535 |
| Ø60 x 90 x 35 | BF10MD DB9 | F03FC00630 |
| Ø60 x 90 x 40 | BF10MD DC9 | F03FC00631 |
| Ø60 x 90 x 50 | BF10MD DD9 | F03FC00632 |

Tool set zero diameter: 140 mm

| D mm | B mm | d mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|------------|------------|
| 200 | - | - | 9.000 | ST12MG 302 | F03FC19584 |

Tools for ST12MG-302

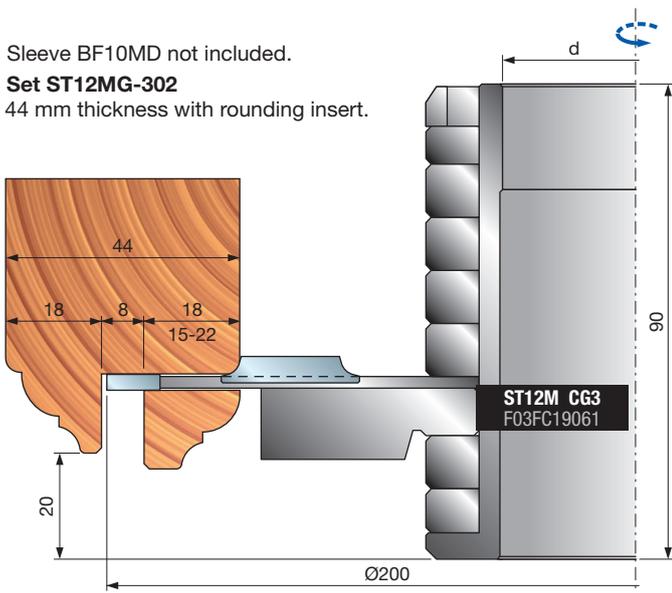
| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 144 | 13,5 | 60 | 2 | | ST12M CG3 | F03FC19061 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------------|------------------|-------------|------------|
| | Saw blade | 200 x 3 x 60 Z34 | LL02M20060 | F03FC15418 |
| | Screw | M6 x 10 | VT01M AA9 | F03FA04429 |
| | Rounding insert | 22 x 16 X 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Rounding insert | 18 x 26 x 8,5 | IG23MDAE305 | F03FC24163 |
| | Screw | M6 x 15,5 | VT16M AD9 | F03FC20657 |

Sleeve BF10MD not included.

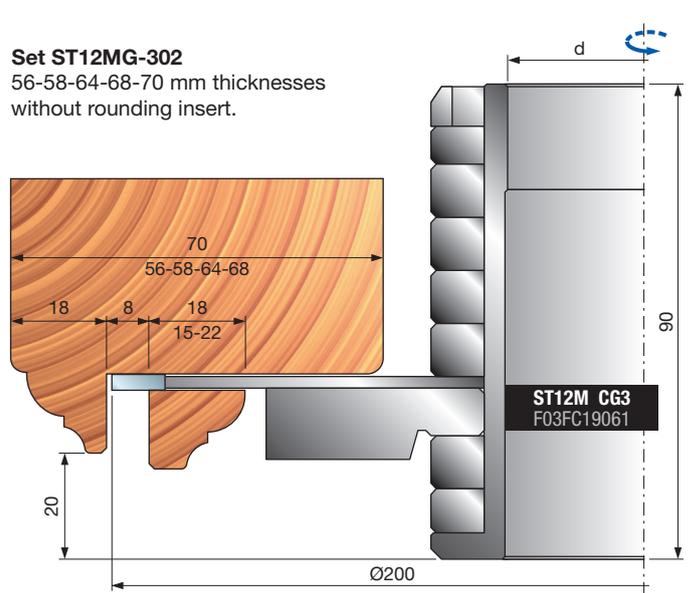
Set ST12MG-302

44 mm thickness with rounding insert.



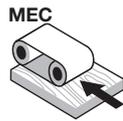
Set ST12MG-302

56-58-64-68-70 mm thicknesses without rounding insert.

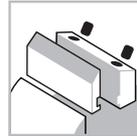


ST12MG

Cutterhead sets for door frames



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Rebating



Machines:

Automatic feed and window tooling machines.

Materials:

Softwood and hardwood.

Applications:

Rebating.

Technical information:

Performance tool for door rebating, front shear angle to guarantee a perfect step surface, rounding and beveling insert to offer different solutions on step corners.

- Cutterhead is provided on sleeve to fit every machine spindle dimension.
- Steel body.
- Sleeve and inserts to be ordered separately.

BF10MD sleeve is not included.

| Dimensions mm | Sleeve code | Art. No. |
|------------------|-------------------|------------|
| Ø70 x 90 x 30 | BF10MD EA9 | F03FC24536 |
| Ø70 x 90 x 32 | BF10MD EL9 | F03FC24537 |
| Ø70 x 90 x 35 | BF10MD EB9 | F03FC00633 |
| Ø70 x 90 x 40 | BF10MD EC9 | F03FC00634 |
| Ø70 x 90 x 50 | BF10MD ED9 | F03FC00635 |

Tools supplied with HW knives

| D mm | B mm | d mm | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|-------------------|-------------------|------------|
| 218 | - | - | 6.500 | ST12MG 830 | F03FC19652 |

Tools supplied with HSS knives

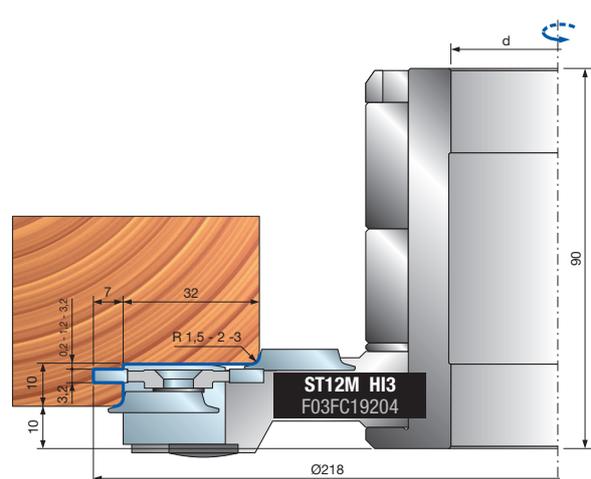
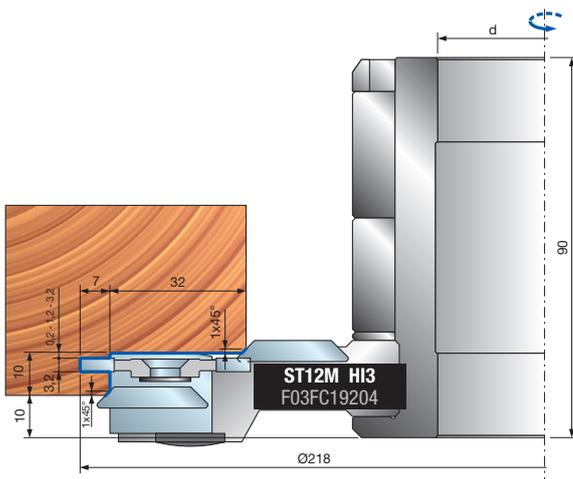
| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------------|------------|
| 204 | 24 | 70 | 2 | | ST12M HI3 | F03FC19204 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---------------------------|------------------|--------------------|------------|
| Knife | 20 x 25 x 3 | CG07MDHI301 | F03FC23824 |
| Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| Grooving insert | 40 x 16 x 3 | IG04MDAC305 | F03FH02992 |
| Screw IG04MD | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| Screw for IG51M and IG52M | M6 x 11,5 | VT16M AB9 | F03FA04477 |

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---------------------------|------------------|--------------------|------------|
| Knife | 20 x 25 x 3 | CG07MDHI301 | F03FC23824 |
| Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 |
| Grooving insert | 40 x 16 x 3 | IG04MDAC305 | F03FH02992 |
| Screw IG04MD | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| Screw for IG51M and IG52M | M6 x 11,5 | VT16M AB9 | F03FA04477 |

With seat pockets for beveling inserts IG51M or radius inserts IG52M (R= 1,5 - 2 - 3 mm). (Not included).

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|---------------------|------------------|------------------|------------|
| Rounding insert | 22 x 16 X 5 R=3 | IG52Mi | F03FH03025 |
| Beveling insert | 22 x 16 x 5 45° | IG51Mi | F03FH03022 |
| Screw for IG51-IG52 | M6 x 13 | VT16M AE9 | F03FC20658 |



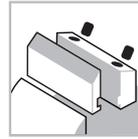


TP43M

Cutterhead sets for vertical slat shutters



Automatic Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling

Tool set zero diameter: 125 mm

| D | B | d | Z | Max RPM | Freud Code | Art. No. |
|-----|----|----|-----|---------|------------|------------|
| mm | mm | mm | | 1/min. | | |
| 139 | - | - | 2+2 | 9.600 | TP43M MD3 | F03FC20497 |
| 147 | - | - | 2+2 | 9.000 | TP43M FD3 | F03FC20496 |

| Tool | Spare parts | Dimensions | Freud Code | Art. No. | |
|------|----------------|--------------|--------------|-------------|------------|
| | | mm | | | |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 | |
| | Screw | M5 x 7 x 16 | VT08M AE9 | F03FA04457 | |
| | Set of spacers | 70 x 5 x 50 | AN01MD0509 | F03FC00175 | |
| | Set of spacers | 70 x 17 x 50 | AN04MTP43 | F03FC00517 | |
| | Set of spacers | 70 x 22 x 50 | AN01MD2209 | F03FC00194 | |
| MD3 | | Knife | 34 x 24 x 3 | CP43M1MD301 | F03FC24009 |
| | | Knife | 34 x 24 x 3 | CP43M2MD301 | F03FC24011 |
| FD3 | | Knife | 35 x 29 x 3 | CP43M1FD301 | F03FC24008 |
| | | Knife | 35 x 29 x 3 | CP43M2FD301 | F03FC24010 |
| | | Spacer | 70 x 10 x 50 | AN01MD1009 | F03FC00182 |



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Performance cutterheads set for vertical slat shutters.

- Profile and counterprofile set can perfectly work as a left and right hand rotation tool (with different sleeves). Tools are provided on sleeve (to be ordered separately) to fit every machine spindle dimension.
- Steel body.
- Performance System knives included.

Right-hand sleeves

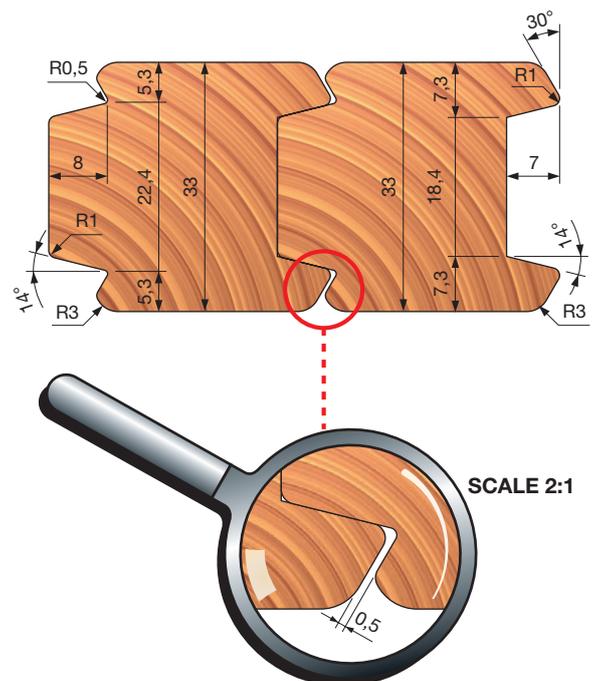
| Dimensions | Sleeve code | Art. No. |
|----------------|-------------|------------|
| mm | | |
| Ø50 x 110 x 30 | BF10MD AA9 | F03FC00616 |
| Ø50 x 110 x 32 | BF10MD AL9 | F03FC24533 |
| Ø50 x 110 x 35 | BF10MD AB9 | F03FC00617 |
| Ø50 x 110 x 40 | BF10MD AC9 | F03FC00618 |

Left-hand sleeves

| Dimensions | Sleeve code | Art. No. |
|----------------|-------------|------------|
| mm | | |
| Ø50 x 110 x 30 | BF10MS AA9 | F03FC00661 |
| Ø50 x 110 x 32 | BF10MS AL9 | F03FC24538 |
| Ø50 x 110 x 35 | BF10MS AB9 | F03FC00662 |
| Ø50 x 110 x 40 | BF10MS AC9 | F03FC00663 |

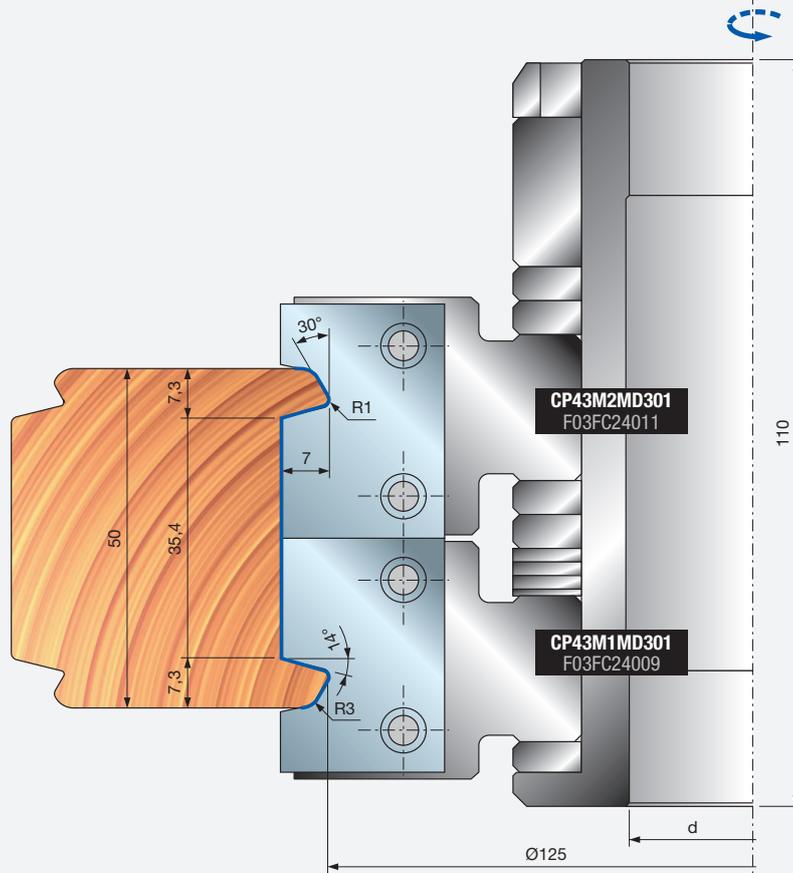
Sleeves must be ordered separately.

Please note: The sets can be ordered with clockwise rotation with BF10MS sleeve.

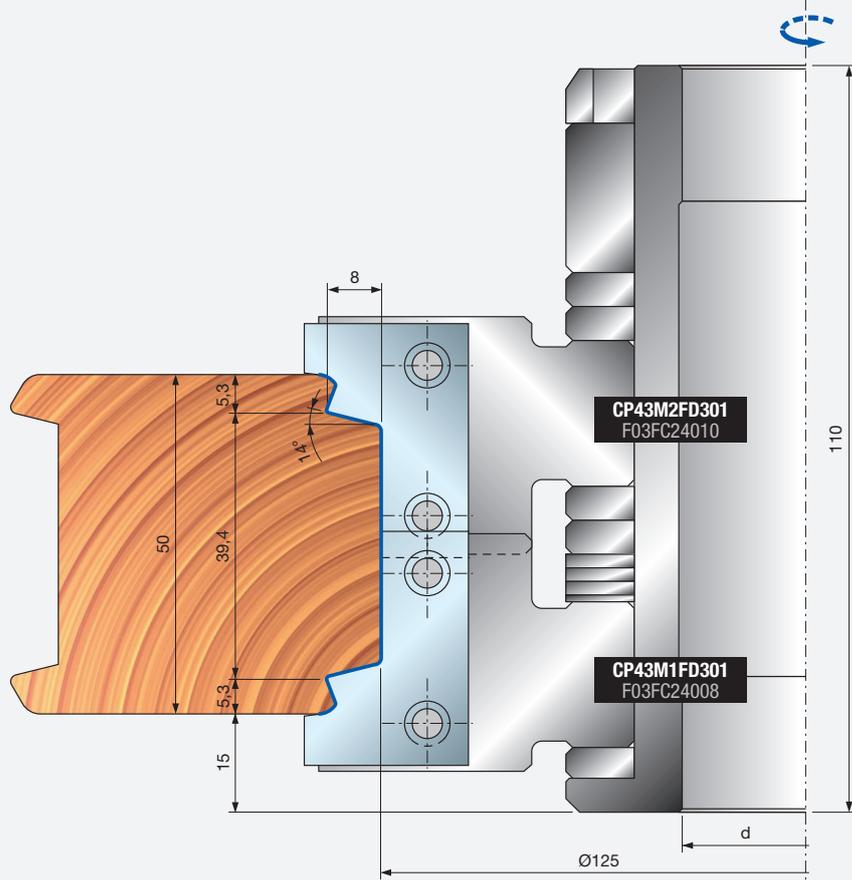


Cutterheads sets for vertical slat shutters

Set TP43M MD3



Set TP43M FD3



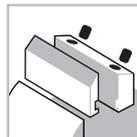


TP45M

Cutterhead sets for lifting-sliding doors



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

Cutterhead tool set for lift and sliding doors with maximum weight of 250 Kg using hardware.

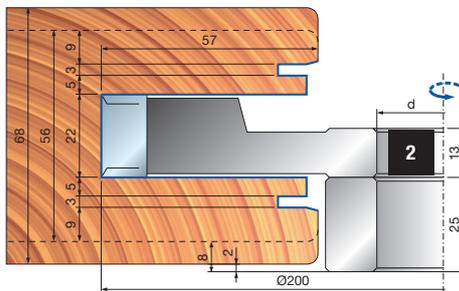
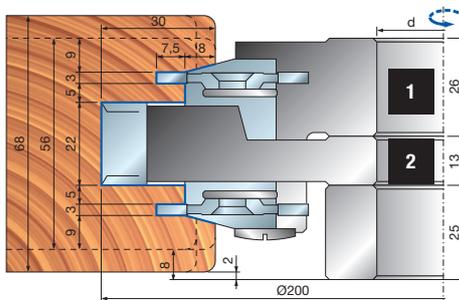
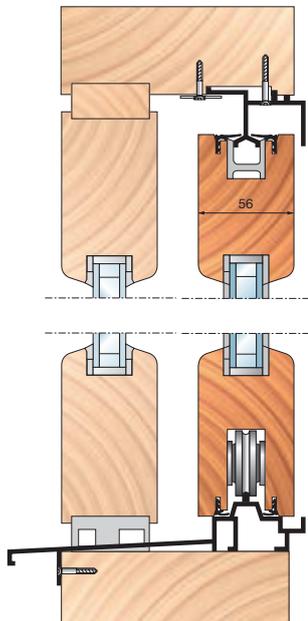
- HS25 from MAICO, AGB or G.U.
- Steel body.
- Knives included.

| D | B | d | Z | Max RPM | Freud Code | Art. No. |
|-----|----|----|---|---------|------------|------------|
| mm | mm | mm | | 1/min. | | |
| 200 | 45 | 30 | 2 | 7.000 | TP45M AA3 | F03FC23136 |
| 200 | 45 | 32 | 2 | 7.000 | TP45M AC3 | F03FC24453 |
| 200 | 45 | 35 | 2 | 7.000 | TP45M AB3 | F03FC20503 |

| | Spare parts | Dimensions | Freud Code | Art. No. | |
|-----|-------------|-----------------|--------------|------------|------------|
| | | mm | | | |
| 1 | | T20 | CB03M CC9 | F03FA00167 | |
| | | 4 | CB03M BA9 | F03FA00163 | |
| | | 5 | CB03M EA9 | F03FA00169 | |
| | | 45 x 25 x 3 | CP45MAA301 | F03FC24014 | |
| | | M5 x 16 x 7 | VT08M AE9 | F03FA04457 | |
| | | M10 x 18 | VT03M CC9 | F03FA04438 | |
| | | 40 x 16 x 3 | IG04MDAC305 | F03FH02992 | |
| | | 40 x 16 x 3 | IG04MSAC305 | F03FH02996 | |
| | | M6 x 14,5 | VT16M AA9 | F03FA04476 | |
| | | 30,8 x 6 x 24,5 | ID04MDAC901 | F03FC24135 | |
| 2 | | 30,8 x 6 x 24,5 | ID04MSAC901 | F03FC24139 | |
| | | M4 x 12 | VT05M DA9 | F03FC20647 | |
| | | 21,6 x 12 x 1,5 | CG06MTA310 | F03FC23821 | |
| | | 15 x 20 x 8 | CN09M A09 | F03FC01289 | |
| | | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 | |
| | | M10 x 22 | VT19M MA9 | F03FA04496 | |
| | | 22,86 x 2,5 | RG02MAA305 | F03FH03041 | |
| | | M5 x 8 | VT05M AA9 | F03FA04444 | |
| | AB3 | | 50 x 25 x 30 | AN01MB2509 | F03FC00110 |
| | AC3 | | 52 x 25 x 32 | AN01MX2509 | F03FC24512 |
| AA3 | | 55 x 25 x 35 | AN01MA2509 | F03FC00059 | |

This item is supplied with 25 mm thick ring for base programming.

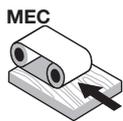
For doors with maximum weight of 250 Kg using hardware HS25 from MAICO, AGB or G.U.





ST16MG

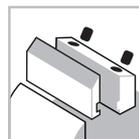
Profiling CNC sets for internal doors without bead recovery



Automatic Feed



CNC Machines



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Internal door profiling.

Technical information:

CNC tool set for internal door profile without bead recovery.

- ISOpofil cutterheads are designed to work with 17 different knives.
- Timber thickness 44 mm.
- Chuck and Performance knives to be ordered separately.
- Aluminium light alloy body.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|---------------------|------------|
| 154 | 123 | - | 2 | 8.500 | ST16MGC13700 | F03FC23497 |
| 154 | 123 | - | 2 | 8.500 | ST16MGC13701 | F03FC23498 |

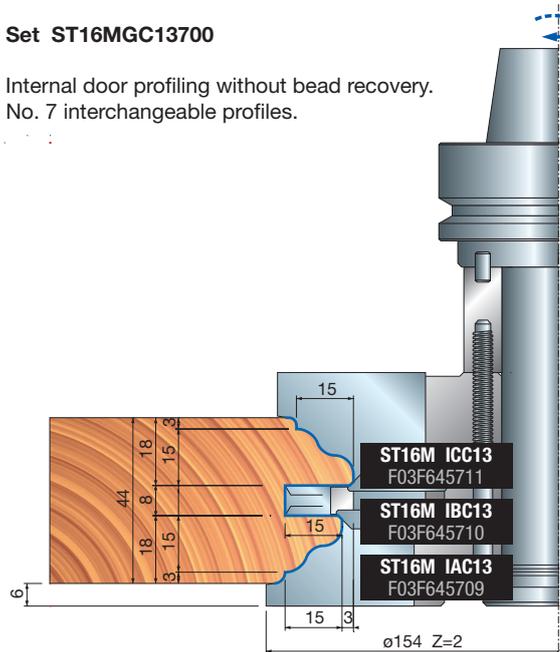
Cutterheads for ST16MGC13700 and ST16MGC13701 sets

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|--------------------|------------|
| 144 | 15 | 30 | 2 | | ST16M IBC13 | F03F645710 |
| 148 | 38 | 30 | 2 | | ST16M ICC13 | F03F645711 |
| 152 | 15 | 30 | 2 | | ST16M IDC13 | F03F645712 |
| 154 | 23,7 | 30 | 2 | | ST16M IAC13 | F03F645709 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|----------------|--|-------------------|-----------------|------------------------------|
| IAC13 ICC13 | | Screw | M5 x 8 | VT05M AA9 F03FA04444 |
| | | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 F03FA04489 |
| | | Screw | M10 x 16 | 2616M EE9 F03FA07426 |
| IAC13 ICC13 | | Wedge | 21 x 42,5 x 8 | CN33M IA9 F03FC23308 |
| | | Wedge | 34,5 x 42,5 x 8 | CN33M IC9 F03FC23309 |
| IBC13 IDC13 | | Knife | 7,6 x 12 x 1,5 | CG62MHA310 F03FH02956 |
| | | Wedge | 15 x 7,2 x 8 | CN09M DA9 F03FC01295 |
| | | Beveling insert | 22 x 16 x 5 | IG51MBA305 F03FH03022 |
| | | Spur | 22,86 x 2,5 | RG02MAA305 F03FH03041 |
| | | Screw | M5 x 6 | VT05M AC9 F03FA04446 |
| | | Screw | M5 x 19 | VT11M AA9 F03FA04468 |
| | | Screw | M6 x 13 | VT16M AE9 F03FC20658 |

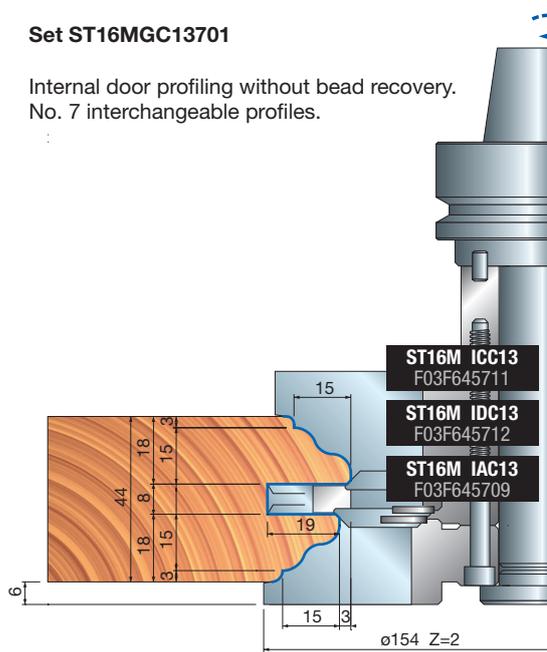
Set ST16MGC13700

Internal door profiling without bead recovery.
No. 7 interchangeable profiles.

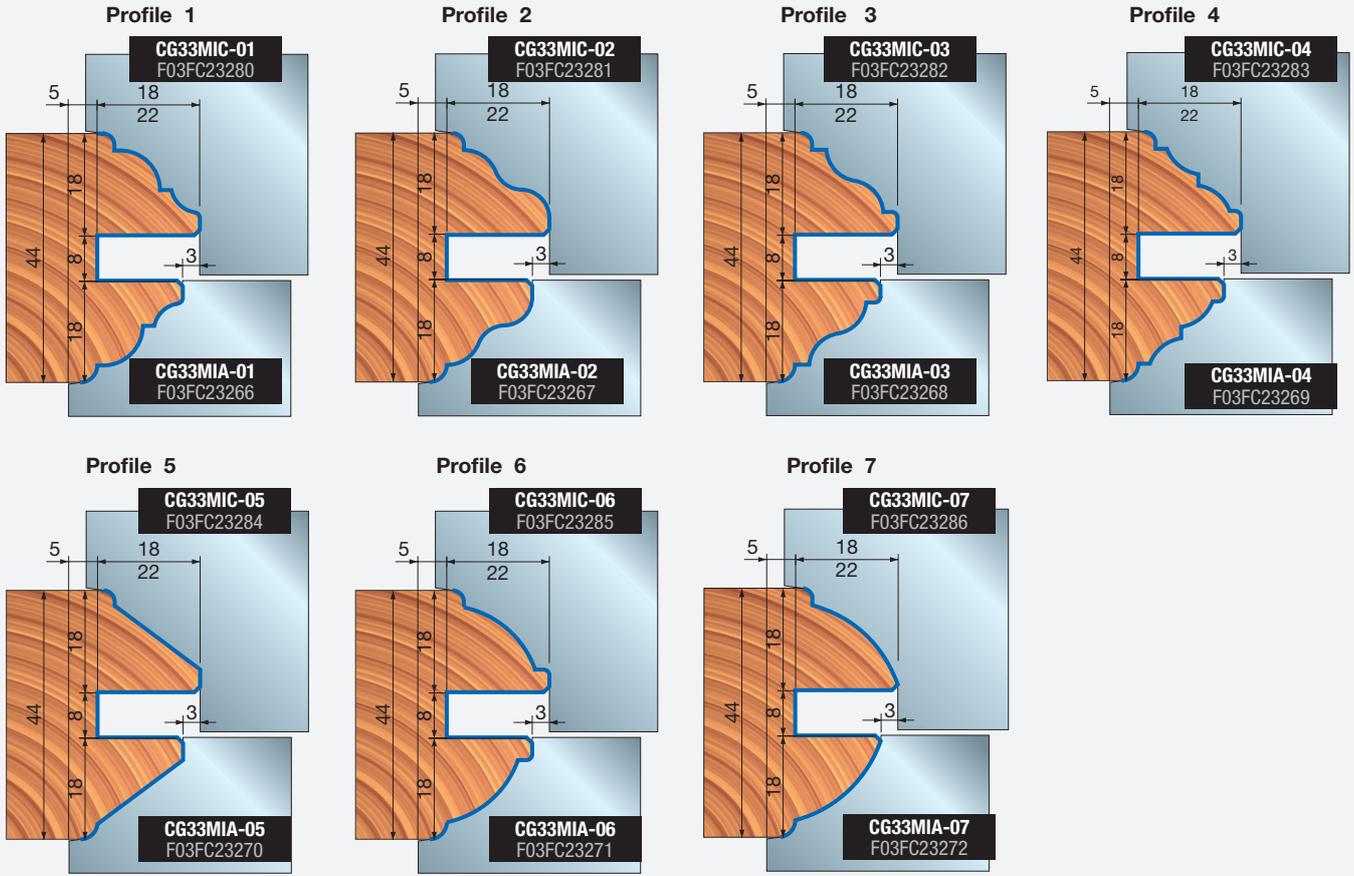


Set ST16MGC13701

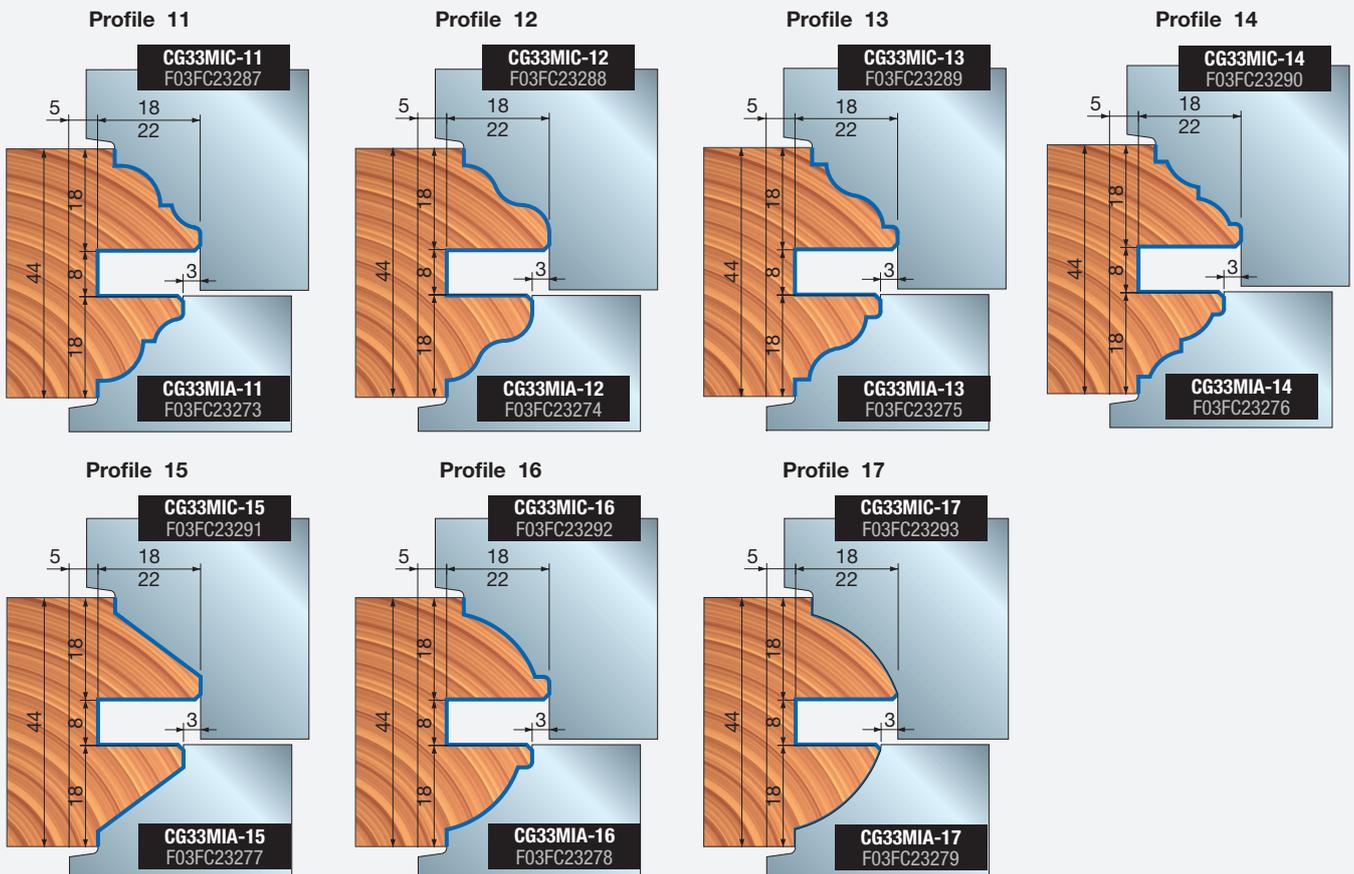
Internal door profiling without bead recovery.
No. 7 interchangeable profiles.



Profiling with external rounding - Knives for cutterheads ST16MIAC13 - ST16MICC13



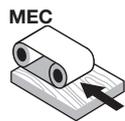
Profiling without external rounding - Knives for cutterheads ST16MIAC13 - ST16MICC13





ST16MG

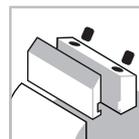
CNC sets for internal doors profiling with bead recovery



Automatic Feed



CNC Machines



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Rebating



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Internal door profiling.

Technical information:

CNC tool set for internal door profile with bead recovery.

- ISOprofil cutterheads are designed to work with 17 different knives.
- Timber thickness 44 mm.
- Chuck and Performance knives to be ordered separately.
- Aluminium light alloy body.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|---------------------|------------|
| 148 | 123 | - | 2 | 9.000 | ST16MGC13702 | F03FC23499 |
| 154 | 123 | - | 2 | 8.500 | ST16MGC13703 | F03FC23500 |
| 154 | 123 | - | 2 | 8.500 | ST16MGC13704 | F03FC23501 |

Tools for ST16MGC13702, ST16MGC13703 and ST16MGC13704 sets

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|--------------------|------------|
| 144 | 15 | 30 | 2 | | ST16M IBC13 | F03F645710 |
| 148 | 38 | 30 | 2 | | ST16M ICC13 | F03F645711 |
| 151 | 22 | 30 | 2 | | ST16M IFC13 | F03F645714 |
| 151 | 33 | 30 | 2 | | ST16M IEC13 | F03F645713 |
| 152 | 15 | 30 | 2 | | ST16M IDC13 | F03F645712 |
| 154 | 23,7 | 30 | 2 | | ST16M IAC13 | F03F645709 |

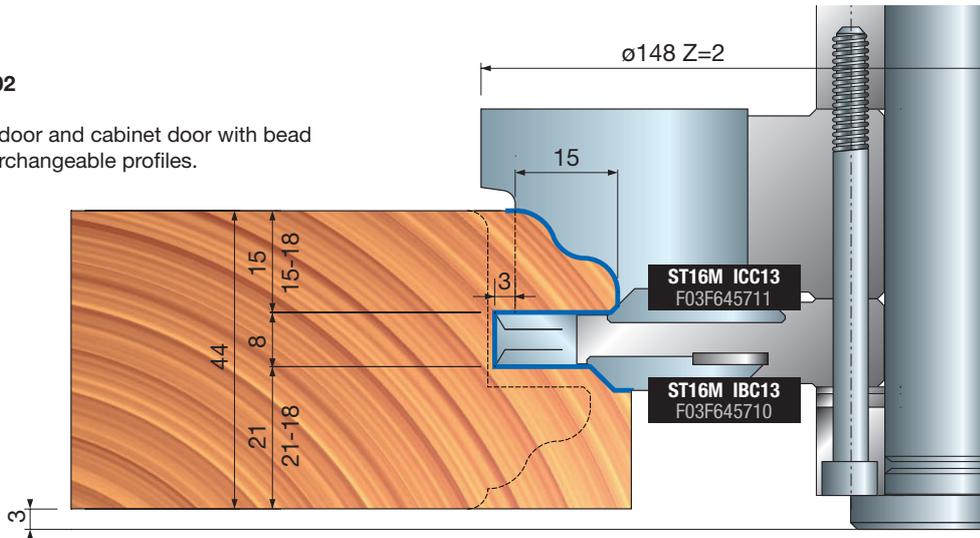
| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|----------------|-------------------|------------------|-------------------|------------|
| IAC13 ICC13 | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
| ICC13 | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| | Wedge | 34,5 x 42,5 x 8 | CN33M IC9 | F03FC23309 |
| AA2 - AA3 | Wedge | 15 x 7,2 x 8 | CN09M DA9 | F03FC01295 |
| | Beveling insert | 22 x 16 x 5 | IG51MBA305 | F03FH03022 |
| AA2 - AA3 | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Knife | 7,6 x 12 x 1,5 | CG62MHA310 | F03FH02956 |
| AA2 - AA3 | Screw | M5 x 6 | VT05M AC9 | F03FA04446 |
| | Screw | M5 x 19 | VT11M AA9 | F03FA04468 |
| AA2 - AA3 | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Knife | 30 x 12 x 1,5 | CG62MDA310 | F03FH02951 |
| AA2 - AA3 | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Knife | 21,6 x 12 x 1,5 | CG62MTA310 | F03FC25458 |
| AA2 - AA3 | Wedge | 15 x 20 x 8 | CN09MD AK9 | F03FC01304 |
| | Rounding insert | 22 x 16 x 5 R=3 | IG52MAE305 | F03FH03025 |
| AA2 - AA3 | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |

ST16MG

CNC set for internal doors profiling with bead recovery

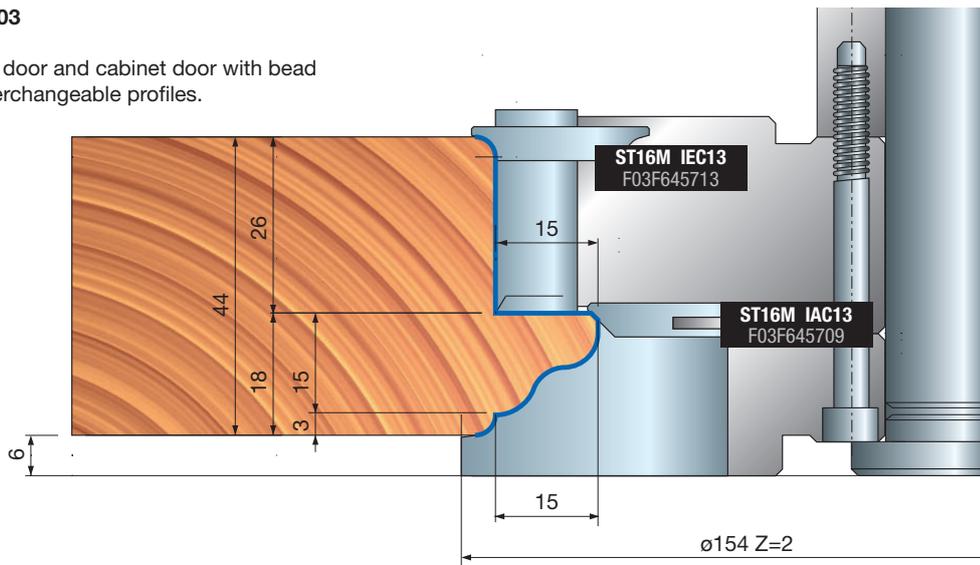
Set ST16MGC13702

Internal profiling of door and cabinet door with bead recovery. No. 7 interchangeable profiles.



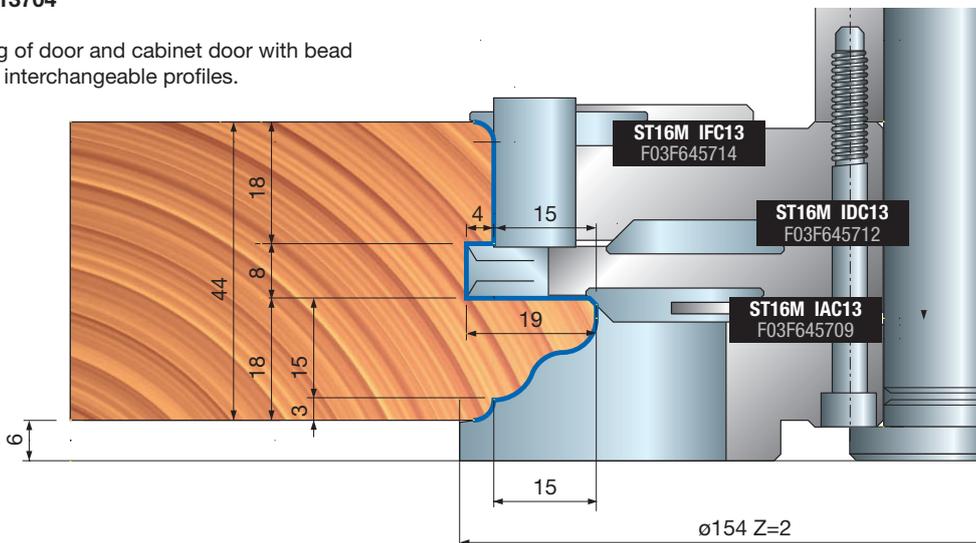
Set ST16MGC13703

Internal profiling of door and cabinet door with bead recovery. No. 7 interchangeable profiles.



Set ST16MGC13704

Internal profiling of door and cabinet door with bead recovery. No. 7 interchangeable profiles.





ST16MG

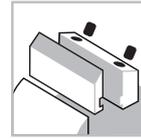
CNC scribing sets for internal doors



Automatic Feed



CNC Machines



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Rebating



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Door profile scribing.

Technical information:

CNC tool set for internal door counterprofile.

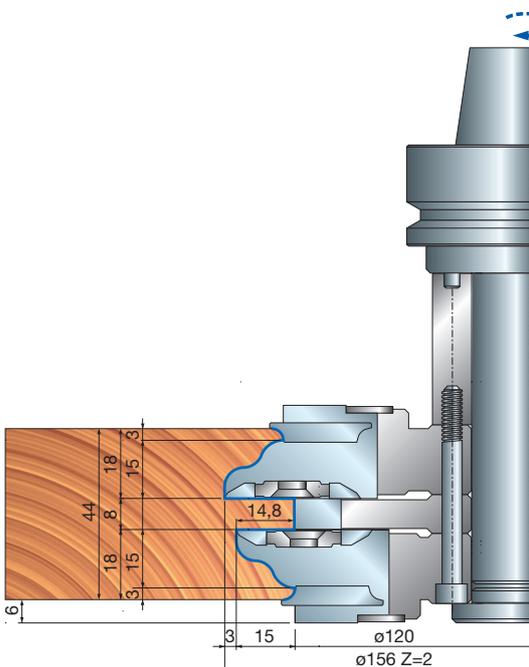
- ISOprofil cutterheads are designed to work with 6 different knives (please refer to ST16MGC13 700-701-702-703-704 profiles).
- Timber thickness 44 mm.
- Chuck and Performance knives to be ordered separately.
- Aluminium light alloy body.

| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|--------------|------------|
| 156 | 123 | - | 2 | 8.500 | ST16MGC13705 | F03FC23502 |
| 156 | 123 | - | 2 | 8.500 | ST16MGC13706 | F03FC23503 |
| 150 | 123 | - | 2 | 9.000 | ST16MGC13707 | F03FC23504 |
| 150 | 123 | - | 2 | 9.000 | ST16MGC13708 | F03FC23505 |

Tools for ST16MGC13705, ST16MGC13706, ST16MGC13707 and ST16MGC13708 sets

| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|-------------|------------|
| 112,4 | 10 | 30 | 2 | - | | ST16M IJC13 | F03F645718 |
| 120,4 | 10 | 30 | 2 | - | | ST16M IHC13 | F03F645716 |
| 127 | 22 | 30 | 2 | 4 | | ST16M ILC13 | F03F645720 |
| 127 | 30,5 | 30 | 2 | 2 | | ST16M IKC13 | F03F645719 |
| 150 | 24 | 30 | 2 | 4 | | ST16M IGC13 | F03F645715 |
| 156 | 24 | 30 | 2 | 4 | | ST16M IIC13 | F03F645717 |

| | Spare parts | Dimensions mm | Freud Code | Art. No. |
|----------------|-------------------|------------------|-------------|------------|
| IGC13 | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| | Wedge | 20,5 x 42,5 x 8 | CN33M IG9 | F03FC23310 |
| | Spur insert | 40 x 16 x 4 | IG05MSAA305 | F03FH02999 |
| | Rounding insert | 22 x 16 x 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| IHC13 IJC13 | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Knife | 8,6 x 12 x 1,5 | CG62MJA310 | F03FH02958 |
| | Wedge | 15 x 7,2 x 8 | CN09M DA9 | F03FC01295 |
| | Screw | M5 x 19 | VT11M AA9 | F03FA04468 |
| | Screw | M10 x 16 | 2616M EE9 | F03FA07426 |
| | Wedge | 20,5 x 42,5 x 8 | CN33M IIG9 | F03FC23311 |
| | Spur insert | 40 x 16 x 4 | IG05MDAA305 | F03FH02998 |
| IIC13 | Rounding insert | 22 x 16 x 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| | Positioning plate | 22 x 1,7 x 6,5 | VT18M GA9 | F03FA04488 |
| | Knife | 30 x 12 x 1,5 | CG62MDA310 | F03FH02951 |
| | Wedge | 15 x 26 x 8 | CN09MD AD9 | F03FC01300 |
| IKC13 | Rounding insert | 22 x 16 x 5 R=3 | IG52MAE305 | F03FH03025 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Knife | 21,6 x 12 x 1,5 | CG62MTA310 | F03FC25458 |
| | Wedge | 15 x 20 x 8 | CN09MD AK9 | F03FC01304 |
| | Rounding insert | 22 x 16 x 5 R=3 | IG52MAE305 | F03FH03025 |
| ILC13 | Spur | 22,86 x 2,5 | RG02MAA305 | F03FH03041 |
| | Screw | M5 x 8 | VT05M AA9 | F03FA04444 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Reduced nuts | 15 x 13,3 x M10 | VT20M NA9 | F03FC20671 |

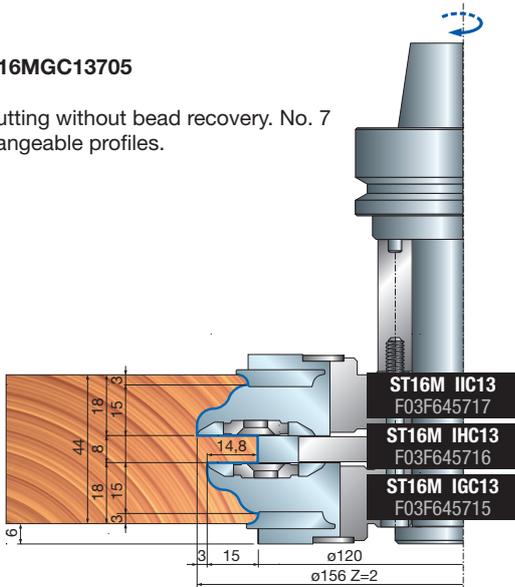


ST16MG

CNC scribing sets for internal doors

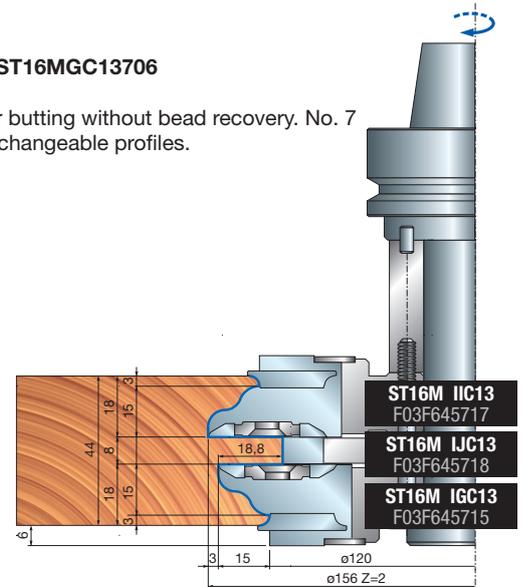
Set ST16MGC13705

Door butting without bead recovery. No. 7 interchangeable profiles.



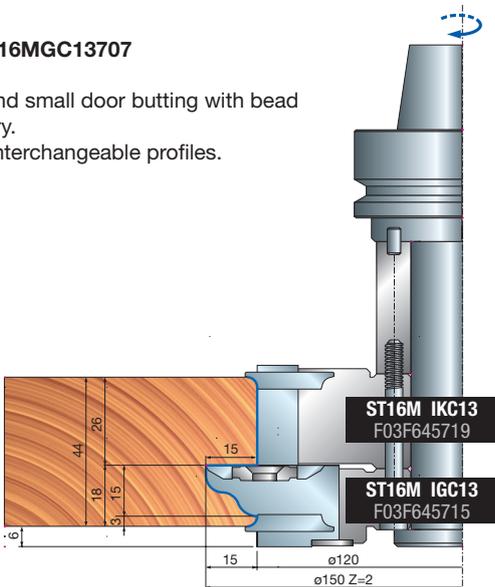
Set ST16MGC13706

Door butting without bead recovery. No. 7 interchangeable profiles.



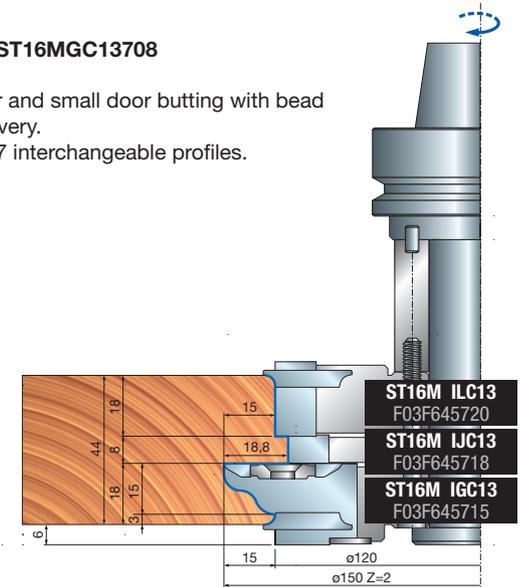
Set ST16MGC13707

Door and small door butting with bead recovery. No. 7 interchangeable profiles.

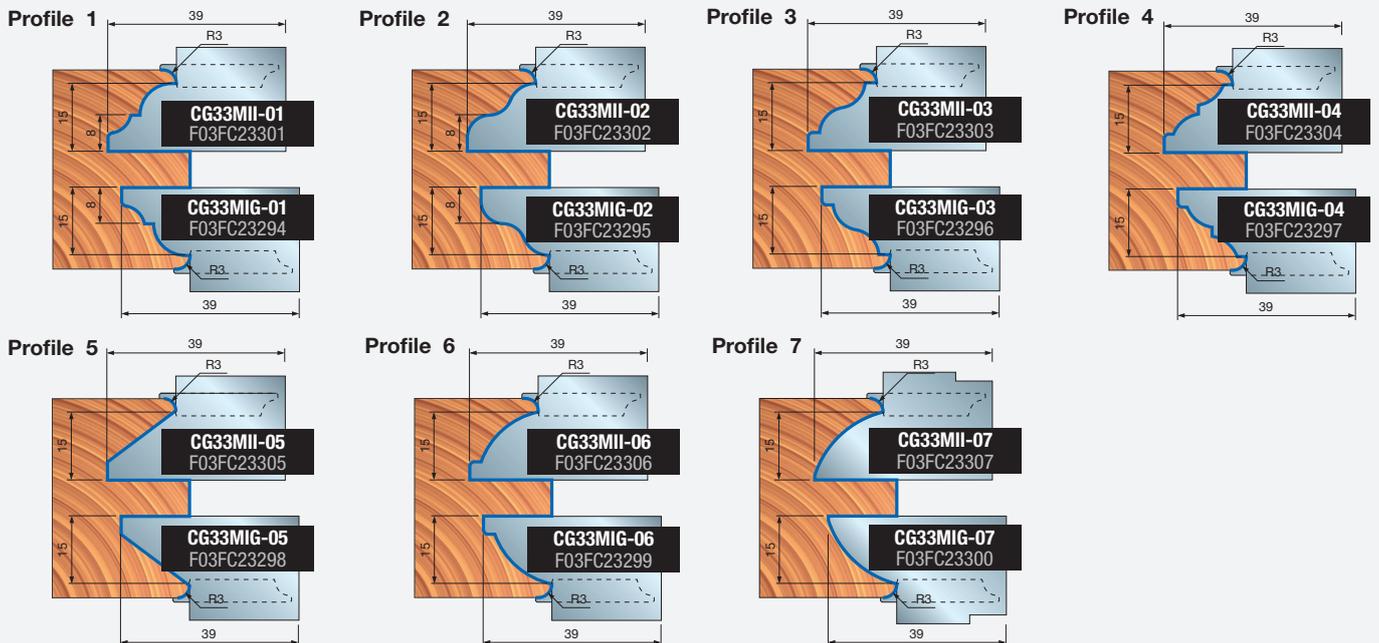


Set ST16MGC13708

Door and small door butting with bead recovery. No. 7 interchangeable profiles.



Profiling with 3 mm external rounding - Knives for cutterheads ST16M IGC13 - ST16M IIC13





ST16MG

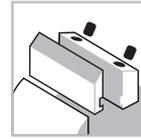
CNC sets for door rebates



Automatic Feed



CNC Machines



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Rebating

Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

Door rebate profiling.

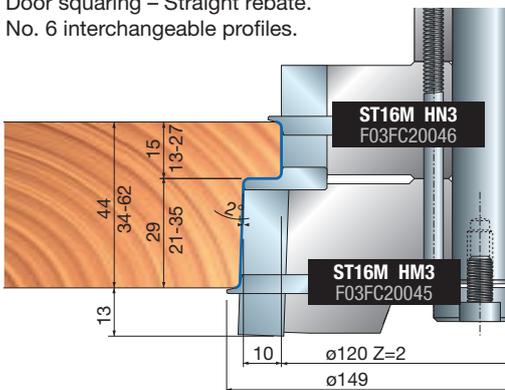
Technical information:

Adjustable CNC tool set for internal door rebates.

- Adjustable rebate dimension with NSR system
- Chuck to be ordered separately.
- Aluminium light alloy body. For cleaning do not use products containing caustic soda.
- The tools for **ST16MG 820** and **ST16MG 821** are supplied without chuck.

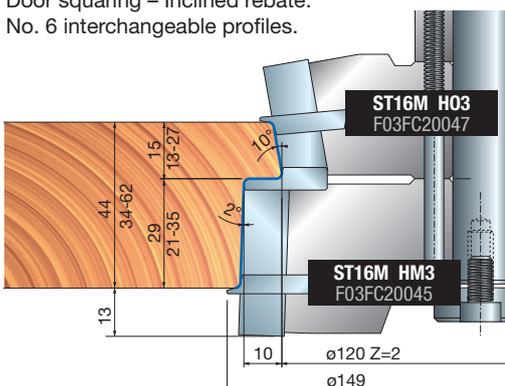
Set ST16MG 820

Door squaring – Straight rebate.
No. 6 interchangeable profiles.



Set ST16MG 821

Door squaring – Inclined rebate.
No. 6 interchangeable profiles.



| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|-------------------|------------|
| 149 | 127 | - | 2 | 9.000 | ST16MG 820 | F03FC20127 |
| 149 | 127 | - | 2 | 9.000 | ST16MG 821 | F03FC20128 |

Tools for ST16MG 820 and ST16MG 821 sets

| D mm | B mm | d mm | Z | l | Freud Code | Art. No. |
|---------|---------|---------|---|---|------------------|------------|
| 120 | 30 | 30 | 2 | 2 | ST16M HN3 | F03FC20046 |
| 128,4 | 30 | 30 | 2 | 2 | ST16M H03 | F03FC20047 |
| 141,8 | 40 | 30 | 2 | 4 | ST16M HM3 | F03FC20045 |

| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|---------------------|-------------------|--------------------|------------|
| | Knife | 40 x 12 x 1,5 | CG08MLA310 | F03FH02909 |
| | Wedge | 15 x 36 x 8 | CN09MS AR9 | F03FC01334 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Multipurpose insert | 10 | IG25MS10302 | F03FC24172 |
| | Screw | M6 x 10 | 2622M CB9 | F03FA07455 |
| | Adjustment ring | 16 x 11,9 x 2,6 | VT18M AG9 | F03FC20660 |
| | Wedge | 28 x 9,5 x 8 | CN03M BB9 | F03FA00585 |
| | Screw | M8 x 22 | VT19M BB9 | F03FA04493 |
| | Rounding insert | 22 x 16 x 5 R=1,5 | IG52MAB305 | F03FH03023 |
| | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
| | Wedge | 15 x 26 x 8 | CN09MD AD9 | F03FC01300 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Rounding insert | 22 x 16 x 5 R=1,5 | IG52MAB305 | F03FH03023 |
| | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Wedge | 28 x 9,5 x 8 | CN03M BB9 | F03FA00585 |
| | Screw | M8 x 22 | VT19M BB9 | F03FA04493 |
| | Knife | 30 x 12 x 1,5 | CG08MEA310 | F03FH02906 |
| | Wedge | 15 x 26 x 8 | CN09MS AD9 | F03FC01326 |
| | Nut | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
| | Screw | M10 x 22 | VT19M MA9 | F03FA04496 |
| | Rounding insert | 22 x 16 x 5 R=1,5 | IG52MAB305 | F03FH03023 |
| | Screw | M6 x 13 | VT16M AE9 | F03FC20658 |
| | Wedge | 28 x 9,5 x 8 | CN03M BB9 | F03FA00585 |
| | Screw | M8 x 22 | VT19M BB9 | F03FA04493 |



ST16MG

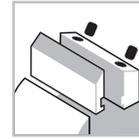
Window tooling set for door frame internal profiling



Automatic Feed



CNC Machines



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling



Rebating



Machines:

CNC overhead routing machines.

Materials:

Softwood and hardwood.

Applications:

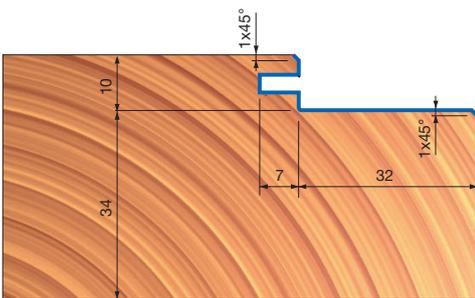
Door frame profiling.

Technical information:

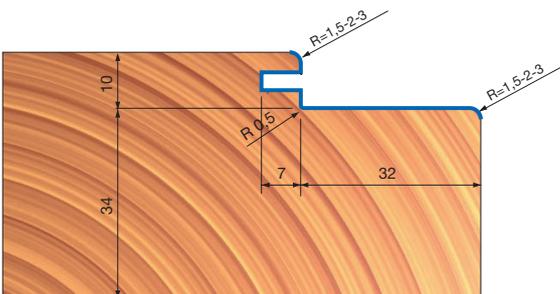
Performance CNC tool set suitable for door frames.

- Front shear angle to guarantee a perfect step surface, rounding and beveling insert to offer different solutions on step corners chuck and radius/chamfer inserts to be ordered separately.
- Aluminium light alloy body. For cleaning do not use products containing caustic soda.

With Beveling inserts



With Rounding inserts



| D mm | B mm | d mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|-------------------|------------|------------|
| 158 | 123 | - | 2 | 9.000 | ST16MG 830 | F03FC20129 |

Tools for ST16MG 830 set

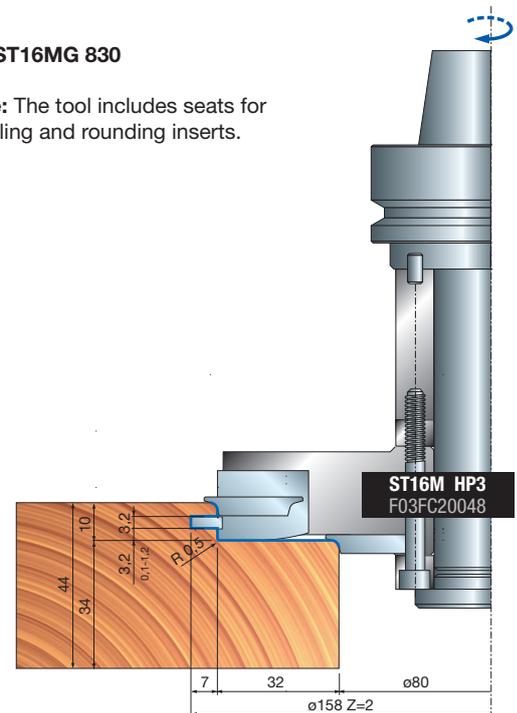
| D mm | B mm | d mm | Z | V | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---|---|-------------------|------------|------------|
| 141 | 29 | 30 | 2 | 2 | | ST16M HP3 | F03FC20048 |

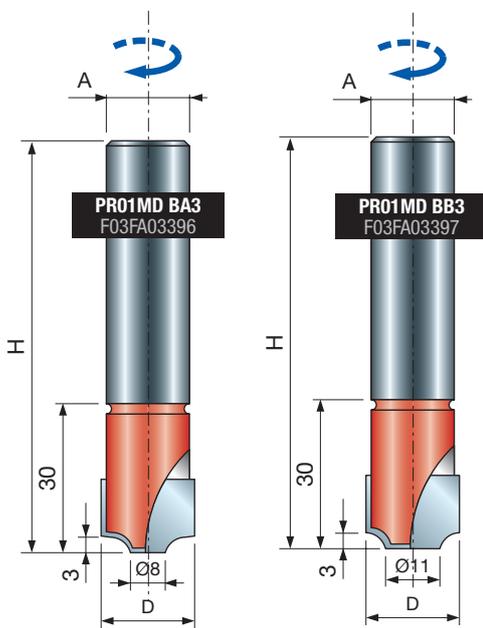
| Spare parts | | Dimensions mm | Freud Code | Art. No. |
|-------------|-----------------|------------------|-------------|------------|
| | Knife | 18,5 x 24 x 3 | CG30M02401 | F03FC23905 |
| | Screw | 5 x 7 x 18 | VT08M AE9 | F03FA04457 |
| | Screw | M10 x 18 | VT03M CC9 | F03FA04438 |
| | Grooving insert | 40 x 16 x 3 | IG04MDAC305 | F03FH02992 |
| | Screw | M6 x 14,5 | VT16M AA9 | F03FA04476 |

| Optional inserts | | Dimensions mm | Freud Code | Art. No. |
|------------------|-----------------|-------------------|------------|------------|
| | Beveling insert | 22 x 16 x 5 45° | IG51MBA305 | F03FH03022 |
| | Rounding insert | 22 x 16 x 5 R=1,5 | IG52MAB305 | F03FH03023 |
| | Rounding insert | 22 x 16 x 5 R=2 | IG52MAC305 | F03FH03024 |
| | Rounding insert | 22 x 16 x 5 R=3 | IG52MAE305 | F03FH03025 |

Set ST16MG 830

Note: The tool includes seats for beveling and rounding inserts.





PR01MD

Bead profiling router bits



CNC Router



Brazed Cutters



Softwood



Hardwood



Profiling

| D | h | H | A | Z | Max RPM | Freud Code | Art. No. |
|----|----|----|----|---|---------|------------|------------|
| mm | mm | mm | mm | | 1/min. | | |
| 20 | - | 80 | 20 | 2 | 18.000 | PR01MD BA3 | F03FA03396 |
| 20 | - | 80 | 20 | 2 | 18.000 | PR01MD BB3 | F03FA03397 |

Machines:

CNC machines.

Materials:

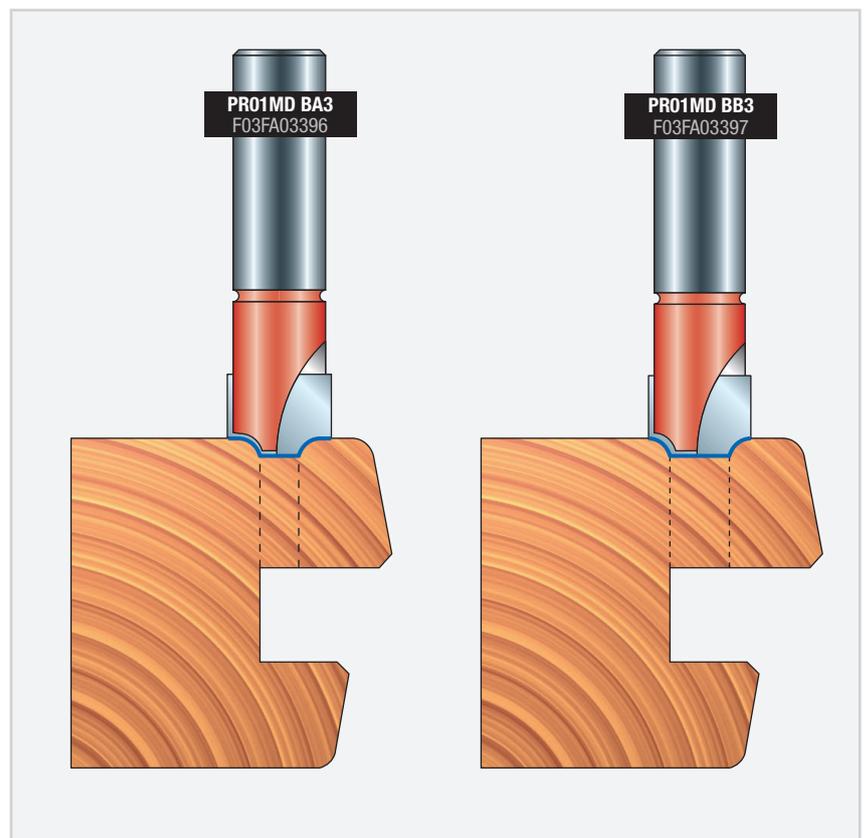
Softwood and hardwood.

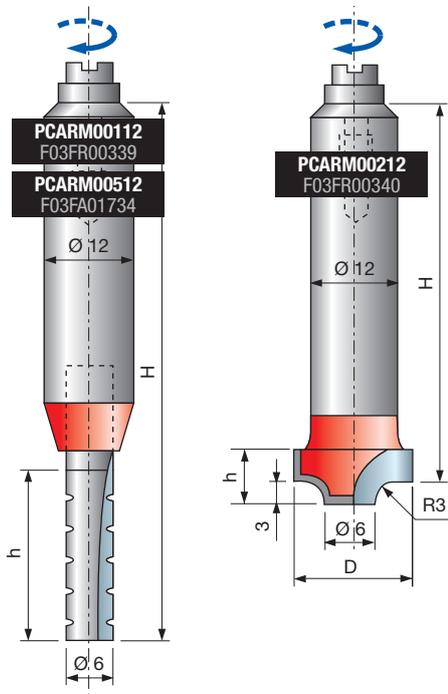
Applications:

Profiling.

Technical information:

Suitable for window bead recovery operations.
Manufactured in steel with brazed HW tips.



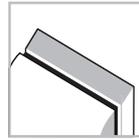


PCARM

Bead recovering router bits



CNC Routers



Brazed Cutters



Softwood



Hardwood



Profiling

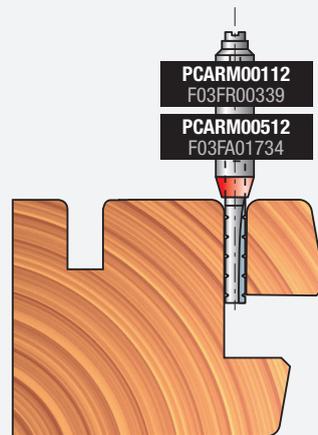
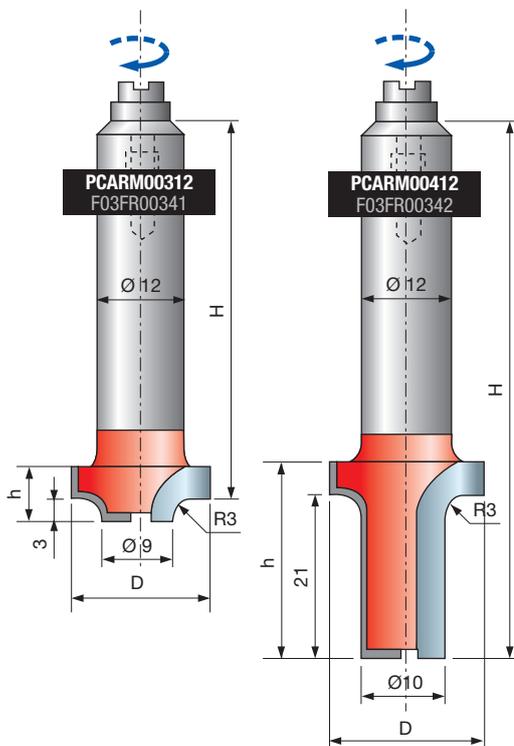
| D mm | h mm | H mm | A mm | Z | Max RPM 1/min. | Freud Code | Art. No. |
|---------|---------|---------|---------|---|-------------------|------------|------------|
| 6 | 23,5 | 71 | 12 | 1 | 24.000 | PCARM00112 | F03FR00339 |
| 6 | 30 | 80 | 12 | 1 | 24.000 | PCARM00512 | F03FA01734 |
| 16 | 8 | 56 | 12 | 2 | 24.000 | PCARM00212 | F03FR00340 |
| 19 | 8 | 56 | 12 | 2 | 24.000 | PCARM00312 | F03FR00341 |
| 20 | 26 | 71 | 12 | 2 | 24.000 | PCARM00412 | F03FR00342 |

Machines:
CNC machines.

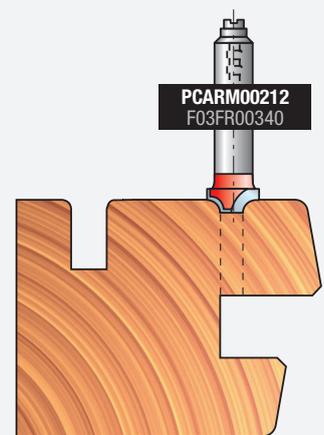
Materials:
Softwood and hardwood.

Applications:
Profiling.

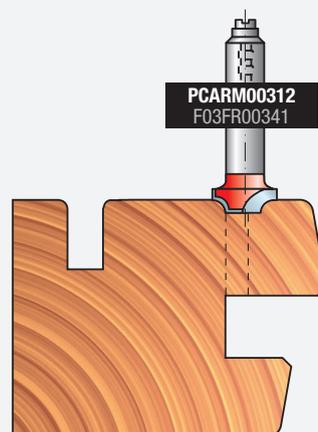
Technical information:
Suitable for arch window bead recovery operations.
• Manufactured in steel with brazed HW tips.



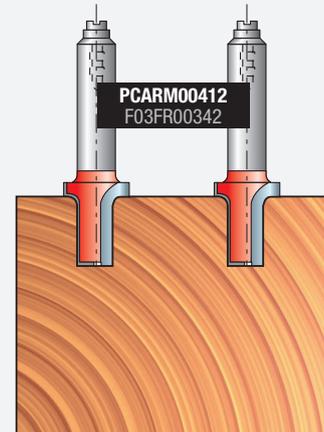
20-28 mm bead recovery bit.



Bead profiling bit.



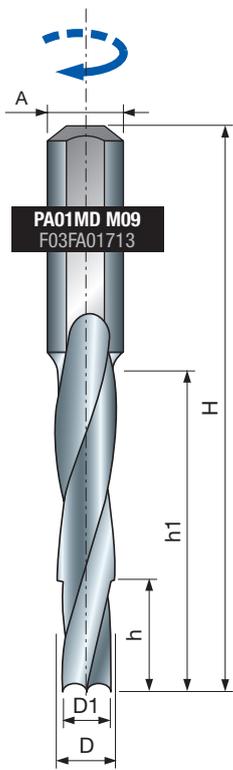
Bead profiling bit.



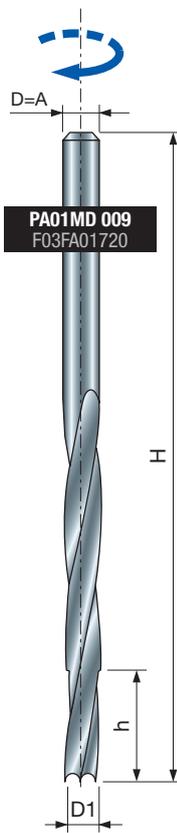
Arch tracing bit.

Boring





PA01MD M09
F03FA01713



PA01MD 009
F03FA01720

Machines:
Boring and CNC machines.

Materials:
Softwood and hardwood.

Applications:
Boring.

Technical information:
Right hand rotation router bit with double diameter for window hinges.

PA01MD HS stepped drill for hinges



Boring Machines

CNC Routers

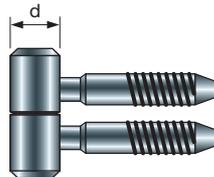


Softwood

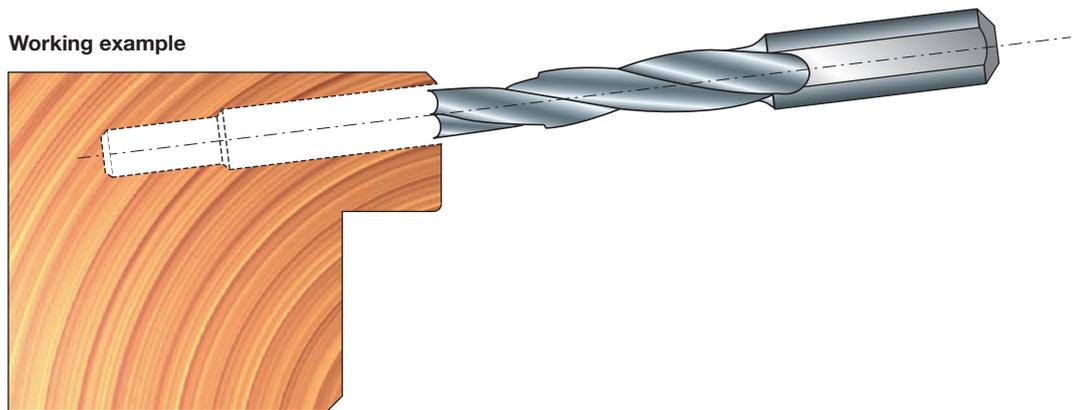
Hardwood

| D1 | D | h | h1 | H | A | d | Freud Code | Art. No. |
|-----|-----|----|----|-----|----|----|------------|------------|
| mm | mm | mm | mm | mm | mm | mm | | |
| 3,8 | 5 | 20 | 40 | 75 | 10 | 9 | PA01MD M09 | F03FA01713 |
| 5,2 | 6,5 | 15 | 50 | 85 | 10 | 13 | PA01MD M13 | F03FA01715 |
| 5,5 | 7 | 15 | 55 | 90 | 10 | 14 | PA01MD M14 | F03FA01716 |
| 6 | 7,7 | 15 | 60 | 95 | 10 | 16 | PA01MD M16 | F03FA01717 |
| 6,6 | 8,2 | 20 | 70 | 105 | 10 | 18 | PA01MD M18 | F03FA01718 |
| 6,7 | 8,7 | 20 | 80 | 115 | 10 | 20 | PA01MD M20 | F03FA01719 |

| D1 | D | h | h1 | H | A | d | Freud Code | Art. No. |
|-----|------|----|-----|-----|------|----|------------|------------|
| mm | mm | mm | mm | mm | mm | mm | | |
| 4,5 | 5,25 | 10 | 45 | 83 | 5,25 | 9 | PA01MD 009 | F03FA01720 |
| 5,8 | 6,75 | 20 | 85 | 155 | 6,75 | 13 | PA01MD 013 | F03FA01722 |
| 6,3 | 7,25 | 19 | 95 | 165 | 7,25 | 14 | PA01MD 014 | F03FA01723 |
| 6,7 | 7,75 | 25 | 100 | 165 | 7,75 | 16 | PA01MD 016 | F03FA01724 |
| 7,7 | 8,75 | 20 | 70 | 121 | 8,75 | 18 | PA01MD 018 | F03FA01725 |



Working example



The tools have been designed and manufactured in accordance with the European Safety Standard EN-847

TOOLS

Tools shall be used only by persons of training and experience who have knowledge of how to use and handle tools.

The maximum rotational speed marked on the tool shall not be exceeded.

Circular saw blades, the bodies of which are cracked, shall be scrapped (repairing is not permitted).

One piece tool with visible cracks shall not be used.

Clamping surfaces shall be cleaned to remove dirt, grease, oil and water.

- Resin shall only be removed from light alloys with solvents that do not affect the mechanical characteristics of these materials.

Tools and tool bodies shall be clamped in such a way that they shall not loosen during operation. Tools with cylindrical shank must be clamped in a way that the mark of the maximum free shank length shall be covered, at least partially, by the clamping device or by the locking collet.

- During assembly procedures, attention must be paid that knives, inserts and spurs do not collide with other elements. Fastening screws and nuts shall be tightened using the appropriate spanners etc. and to the torque value provided by the manufacturer. Extension of the spanner or tightening using hammer blows shall not be permitted.

Clamping screws shall be tightened according to instructions provided by the manufacturer. Where instructions are not provided clamping screws shall be tightened in sequence from the centre outwards.

Use of fixed rings, e. g. pressed or held by adhesive fixing, in flanged sleeves, shall be permitted if made to the manufacturers specifications.

- Repair and regrinding of tools shall only be allowed according to the tool manufacturer's instructions.

After repair and regrinding of tools it shall be ensured that the tools observe balancing requirements.

The design of composite (tipped) tools shall not be changed in the process of repair.

- Composite tools shall be repaired by a competent person, i.e. a person of training and experience, who has knowledge of the design requirements and understands the level of safety to be achieved. Repair shall therefore include, e.g. use of spare parts which are in accordance with the specification of the original parts provided by the manufacturer.

- Tolerances which ensure correct clamping shall be maintained. For one piece tools care shall be taken that regrinding of the cutting edge will not cause weakening of the hub and the connection of the cutting edge to the hub.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer. Typically, safe handling involves the use of devices such as carrying hooks, proprietary handles, frames (e. g. for circular saw blades), boxes, trolleys etc. The wearing of protective gloves improves the grip on the tool and further reduces the risk of injury.

Maintenance and modification of milling tools and related components and circular saw blades should always be in accordance with the design requirements/the manufacturer's instructions.

Maintenance and modification of milling tools and circular saw blades should only be carried out by a competent person, i. e. a person of training and experience, who has knowledge of the design requirements and understand levels of safety to be achieved.

When regrinding milling tools and circular saw blades, the minimum requirements of cutting blade thickness and cutting blade projection should be observed.

Composite tools should be repaired by persons experienced in and with understanding of design and use of milling tools for processing wood and similar materials, e.g. an expert with a relevant education and knowledge of the brazing process, including in particular the influence of the brazing process on tension in tool body and cutting material. When brazing off worn tips and subsequently brazing on new tips it should be made sure that the tip is correctly mounted in the tool body and that the process does not result in critical tension in the tool body.

- After any type of maintenance, milling tools marked with MAN should continue to observe the requirements of the standards related to tools for hand feed.

When modifying milling tools, e. g. modification of bore diameter, modification of shank, retipping of composite tools and similar, it should be ensured that the requirements of the standard relating to balancing are still observed.

After being modified and/or retipped, milling tools and circular saw blades should be marked according to the rules applying to new tools. However, the name/logo of the company making the modification/ retipping should be added.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer. Tools which weigh more than 15 kg may require the use of special handling devices or attachments, these will depend on the features that the manufacturer has designed into the tool to allow easy handling. The manufacturer can advise on the availability of necessary devices.

CLAMPING DEVICES

The speeds indicated on the clamping device and the tool to be clamped should be compared. For adjusting the speed on the machine the lower speed should be applied.

Screws and nuts should be tightened using the appropriate spanners. Clamping surfaces should be cleaned to remove dirt, grease, oil and water.

Clamping devices and tools should be mounted or clamped according to given torques, pressures and wrenches to be used.

Extension of spanners or tightening or loosening by means of hammer blows should not be permitted.

Maximum tool diameters and tool lengths should not be exceeded.

Shank diameters must be in accordance with the clamping range of the clamping devices.

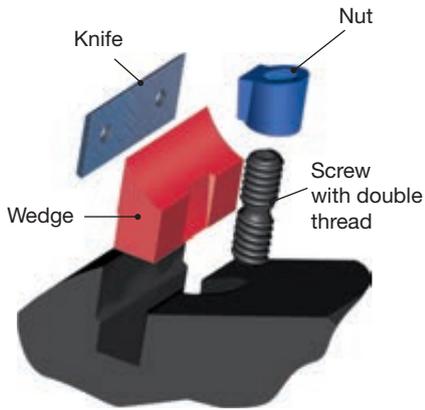
The minimum required clamping length must be kept.

Care should be taken that the data relevant to the safety of the clamped tool are always stored in the data medium.

Repairs should only be carried out by a competent person, i.e. a person with professional training and experience, who has knowledge of the design, construction and safety requirements.

Repair should therefore include the use of spare parts which are in compliance with the specifications of the original parts.

HRL HIGH RESISTANCE LOCKING SYSTEM



Components of HRL system



THE MOST TRIED AND TESTED SYSTEM:

Refined after many years of continuous improvements, both technologically as well as in the materials used to construct each component, without, however, losing sight of the functionality and security of the product. Furthermore, the HRL Locking System has undergone accurate controls, even from the mechanical and technological point of view.

THE SAFEST SYSTEM:

Thanks to its wedge shaped design, the HRL Locking System takes advantage of centrifugal forces determined by the tool's rotation in order to block itself. For this reason as well as the oversized components, there is no risk of accidental breakage or expulsion of the knife.

THE MOST PRECISE SYSTEM:

All seats and components are constructed using precision levels never before reached in the woodworking tools industry, guaranteeing an always perfect and efficient positioning.

THE SIMPLEST SYSTEM:

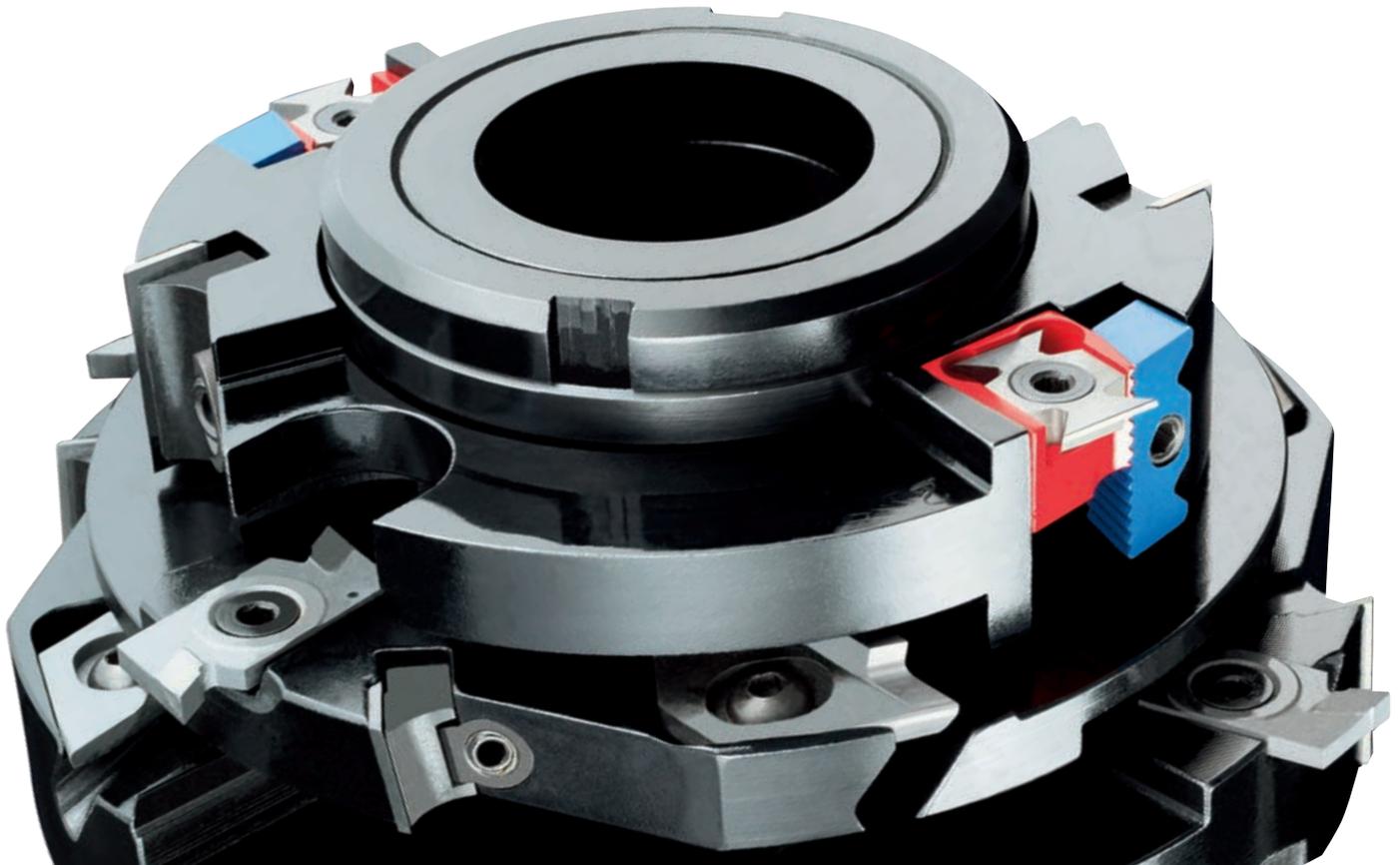
Complexity is not always synonymous of efficiency! There are other more complex locking methods than ours, but none as efficient. Our research centre has been able to carry out its realisation whilst keeping in consideration 2 fundamental points: have as few components as possible so as to be able to change knives quickly, even in the most difficult conditions.

THE STRONGEST SYSTEM:

The use of wedges which have undergone special thermic treatment, the oversized screws and the precision of the HRL Locking System, guarantee an almost unlimited number of changes, without reducing its efficiency and in the most difficult conditions.

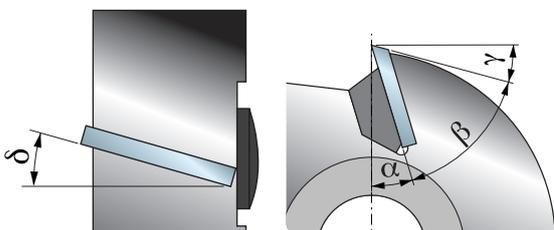
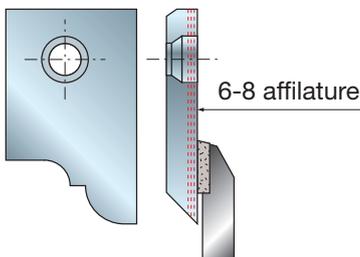
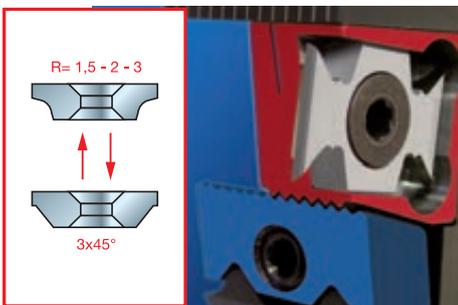
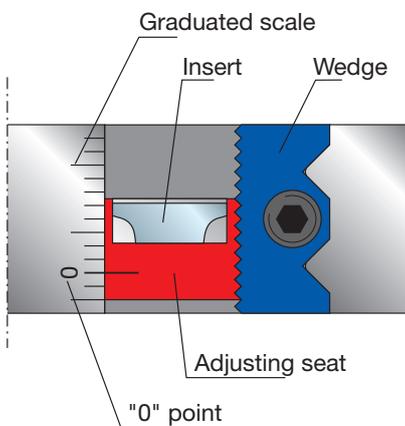
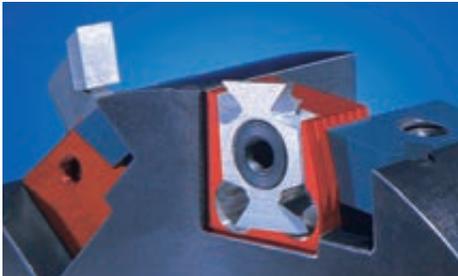
THE EASIEST SYSTEM TO MAINTAIN:

The use of only frontal screws, allow knife changes, without taking the tool off the operating machine, therefore reducing actual machine stoppages. It has been demonstrated by repeated tests, that a large frontal screw is less likely to become clogged up compared to a small one, whatever may be its position.





Components of NSR system



NSR REGULATION SYSTEM

- The NSR system, is currently the only one on the market which allows you to regulate and change the inserts directly on to the machine and without the need of any particular measuring instruments thanks to its particular technological characteristics and not to mention its constructive precision. The specially grained surface allows you to regulate the insert's height with increments of 1 mm and with precision of up to 1/100 of a mm, which in time will remain constant even after hundreds of changes. Furthermore the regulation is continuous along the thickness of the tool and not limited to fixed positions as happens with older systems.
- Special reference marks are incisioned using laser technology at intervals of 2 mm, in correspondence to the grain's pass, allowing the user to carry out the easiest and most rapid positioning with absolute precision.
- Special incisioned markings consent a safe reference even after years of use. In the same seat and changing only the serrated support, it is possible to mount certain elements: rounding inserts, beveling inserts, inserts for grooves and spurs second to the necessity of use. Furthermore the insert has a positive cutting angle (hook angle) and a shear angle so as to consent the maximum finish possible on any type of workpiece.
- The insert's position with the NSR system is simple and requires the use of only a key. The very same key is also used to change the insert and is made up of very few components. With a simple gest, it is possible to take the insert off the serrated support or modify its position without even taking the tool of the operating machine, therefore avoiding useless and damaging machine stoppages.
- The exclusive type of hard metal used is produced directly by our own company. The hard metal is accurately controlled and its microstructure is modified second to the kind of use it will have to undergo, so as to obtain the best possible duration in correspondence to the kind of finish required.

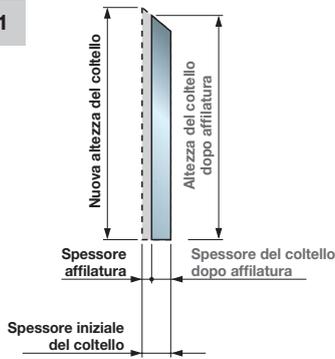
PROFILED AND RESHARPENABLE PERFORMANCE SYSTEM KNIVES

- Whereas on a traditional cutterhead, disposable blades are mounted with a thickness of 1.5 mm, on a Performance System cutter head, blades are mounted that can be sharpened 6 to 8 times, with a thickness of 3 mm, with straight or shaped profile. The second kind of tool undergoes more complex working to allow housing of blades with different profiles on the same body.
- Performance System knives are constructed in hard metal, which Freud produces in 6 grades of hardness, second to the material to be worked: softwoods and hardwoods, heavy, abrasive, chipboard, melamine, laminated, MDF etc. It is possible to use HW with a high grade of hardness, so as to permit a superior hold of 30% more with respect to the HW used for brazed cutting edges destined to work very abrasive materials.
- Other than being a solution that practically substitutes brazed cutters, thanks to the interchangeability of the profiles on the same tool and the duration of the tool itself, there is a notable advantage and convenience when working on overhead CNC router machines, where machine stoppages can result costly: infact the changing of a used or damaged knife does not require the dismounting of the cutterhead from the machine, since it is sufficient to loosen the screw that holds it in place. Instead a brazed cutter must be completely changed and a substitute available to avoid time wastage.
- Freud has an entire range of tools with performance, standard or personalised knives for manual or overhead CNC router machines.
- Even after sharpening, performance knives maintain their original profile and the tool's cutting diameter, considering maximum loses of 0,15-0,20 mm.
- We have already seen the economic advantage as compared to braze-welded tools. But the Performance System is also advantageous if compared to traditional cutterheads, thanks to the ease with which blades can be sharpened and the low cost of this operations, since no special machinery is required (all that is required is a grinder or a sharpener). Specialised personnel is also not required.

THE MOST CHARACTERISTIC ANGLES OF A CUTTERHEAD ARE:

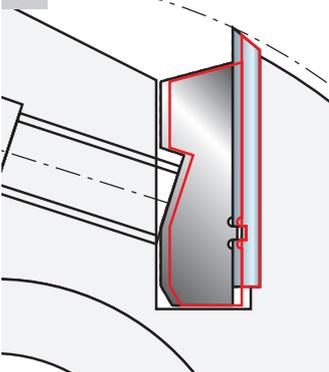
- **Hook angle (α):** depends on the type of material to be cut.
- **Wedge angle (β):** this angle is a direct consequence of angles α and γ .
- **Clearance angle (γ):** depends on the material to be cut and the thickness of the cutting edge.
- **Shear angle (δ):** necessary to obtain a better penetration into the material to be cut and a gradual removal of the chips. When the tools have different diameters, this angle allows the hook angle to remain constant.

1

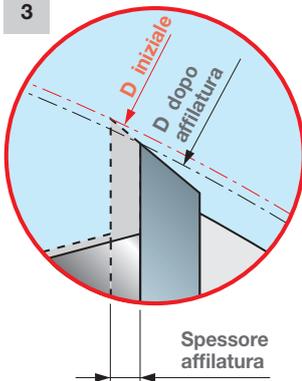


2

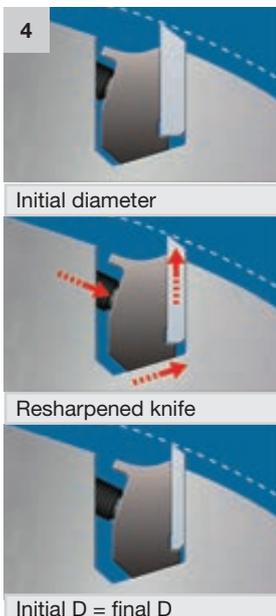
TRADITIONAL system



3

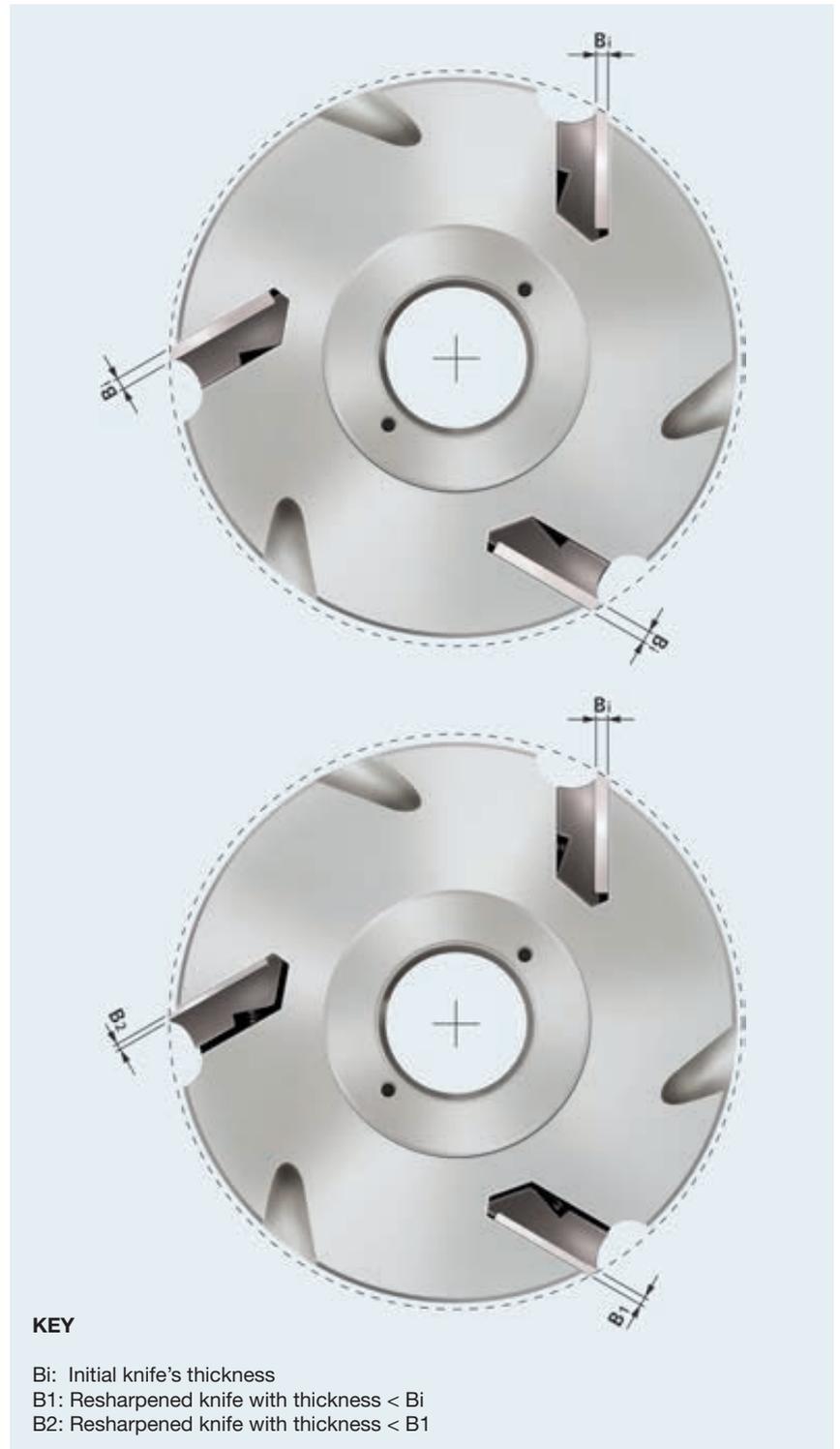


4



AUTOMATIC DIAMETER RECOVERY SYSTEM

As is known, sharpening Performance System knives implicates variations in the tool cutting diameter that cause the tool to carry out an incorrect profile. The removal of material parallel to the knife surface causes a reduction in its thickness, its height (Fig. 1 and 2) and therefore in the diameter of the tool itself (Fig. 3). The introduction of this ISOprofil system consents us to avoid in a definitive way the reduction of the diameter, with extreme operative simplicity and without the need of auxiliary measuring instruments to verify the correct functionality of the knife after sharpening. The idea is fundamentally based on the geometrical form of the wedge and its positioning seats on the tool (Fig. 4). Tightning the locking screw, pushes the wedge until it locks the knife on to the tool. The wedge running on the inclined surface blocks the knife and rises until it compensates the reduction in the cutting diameter, determined by the sharpening. Those liable to draw particular advantage, are those who use numerically controlled machines with the necessity of maintaining a tool with a constant diameter, without having to intervene on the reprogramming of the operating machine, so as to compensate dimensional errors that may derive from sharpening.

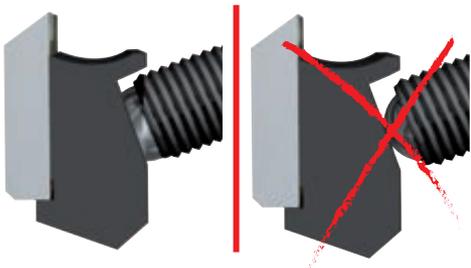


AUTOMATIC DIAMETER RECOVERY SYSTEM

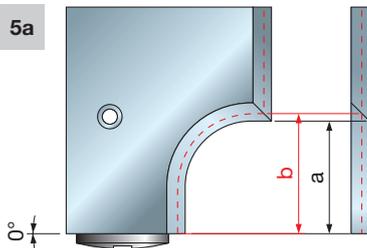
Furthermore, in order to maintain the profile of Performance knives even after several resharpenings, Freud has invented and adopted a simple but determined device, by also creating a relief angle on the support side of the knife on the positioning screw (Fig. 5a). In this way whilst sharpening is carried out, the profile does not vary, as would happen with a traditional knife. The user is surely to gain an advantage from the new system. Carrying out work where there are resharpenable knives to create the profile and the scribe (Fig. 6), it is evident that the maintenance of original shape allows to obtain a perfect fitting all through the knives' life, even after 8-10 sharpenings, without regulation of guides or CNC axes. In this way you can enjoy the reduced operating costs of "Performance" knives, without any limitation in comparison to disposable knives. In the second example (Fig. 5b), thanks to the clearance angle on the underside, the sharpened knife would move to the value ΔS , until it rests on the positioning screw, maintaining an unaltered width a .



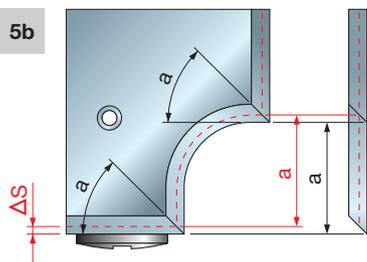
Screws with spherical insert, for ISOprofil System



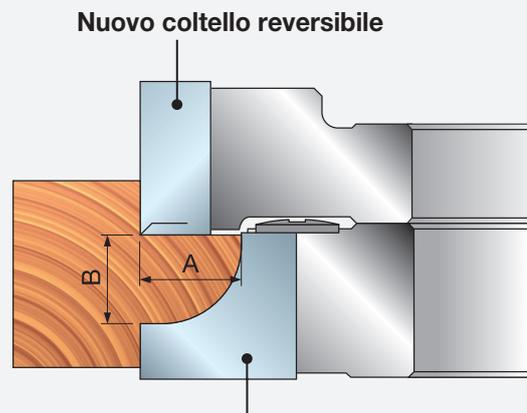
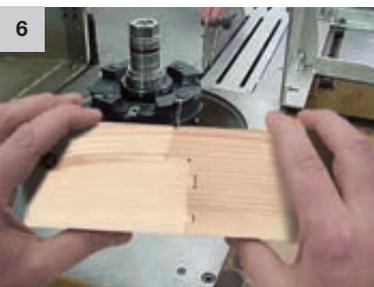
Proper locking is obtained when the flat surface of the spherical insert completely adheres to the wedge.



Traditional knife

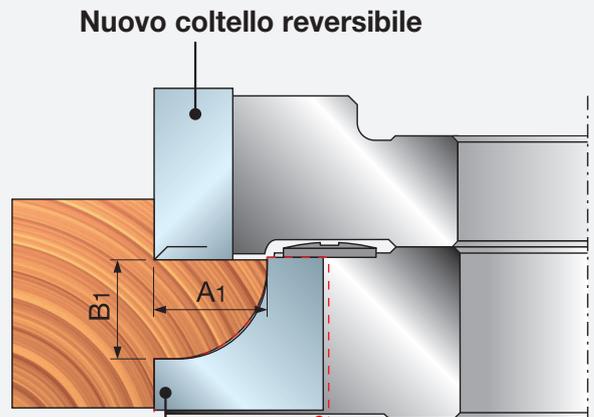


New type of knife



Nuovo coltello Performance

$A = A_1$
 $B = B_1$



Coltello Performance

Nuovo coltello Performance

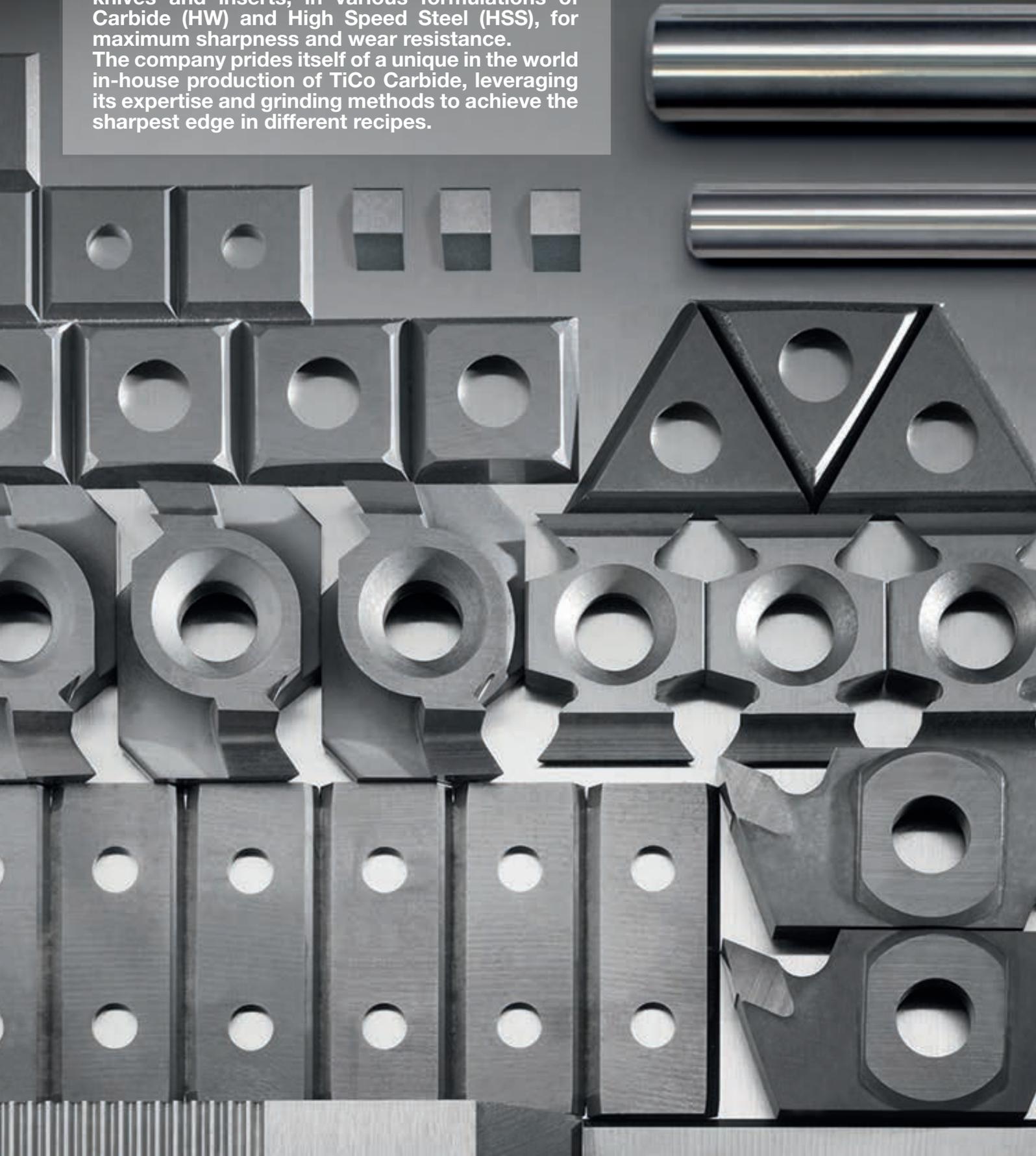
ABSOLUTE QUALITY

- The use of smart machines connected to a complex information system and the use of highly specialised personnel makes it possible to achieve a level of precision never before seen in the field of woodworking tools.
- Each tool is computer-designed in our design department, optimising characteristics based on customer needs. This leads to a tool with the utmost in performance for the desired applications.
- Each tool is then balanced to eliminate vibrations due to uneven distribution of the ferrous mass that would occur during work. Three different balancing operations are performed. The first is on the single tool, and the second is on the complete group. The third, of extreme importance, is on the set of groups that will be assembled on the machine shaft.
- Each tool is checked with a computerised system that makes it possible to verify, even before final testing, the precision of the required group.
- All of these working and verification phases mean that Freud can provide clients with a turnkey product that is immediately productive and therefore economically profitable.
- Fine tuning is performed by the testing department, where a production simulation is carried out. For each single group, a wood sample is worked with the requested profile. In this way, the customer is provided with a system that can be used right away without the need for any further adaptation.



Knives and Inserts in HW and HSS

Freud offers the most comprehensive range of knives and inserts, in various formulations of Carbide (HW) and High Speed Steel (HSS), for maximum sharpness and wear resistance. The company prides itself of a unique in the world in-house production of TiCo Carbide, leveraging its expertise and grinding methods to achieve the sharpest edge in different recipes.



Leading technology for knives and inserts..... Page 486
 HW - Industrial quality knives - Choose the right tool..... Page 488

KNIVES

Disposable knives in HW for planing & rebating

CG08M HW - 35° Disposable knives..... Page 491
 CG01M HW - 35° Disposable knives..... Page 491
 CG10M HW - 35° Disposable knives..... Page 492
 CG26M HW - 35° Disposable knives..... Page 492
 CG05M HW - 35° Disposable knives..... Page 492
 CG04M HW - 35° Disposable knives..... Page 493
 CG20M HW - 35° Disposable knives..... Page 493
 CG06M HW - 40° Disposable knives..... Page 493
 CG66M HW - 40° Disposable knives..... Page 494
 CG76M HW - 40° Disposable knives..... Page 494
 CG62M HW - 45° Disposable knives..... Page 495
 CG22M HW - 45° Disposable knives..... Page 495
 CG17M HW - 40° Disposable knives with end bevels..... Page 495
 CG18M HW - 40° Disposable knives with end bevels..... Page 496
 CG19M HW - 35° Disposable knives with end bevels..... Page 496
 CG50M HW - 35° Disposable knives for TG35M Page 499
 CGSEM HW - Split-Edge knives Page 498

Customised knives in HW

CG400 HW - Customised knives..... Page 496
 CG401 HW - Customised knives..... Page 497
 CG402 HW - Customised profiled knives..... Page 497
 CG403 HW - Customised profiled knives..... Page 497
 CG404 HW - Customised profiled knives..... Page 499
 CG405 HW - Customised profiled knives..... Page 499
 CG501 HW - Customised Split-Edge knives..... Page 498
 CG502 HW - Customised Split-Edge knives..... Page 498
 CK01 HW - Knives 2 mm thickness - special profiling..... Page 500
 CK02 HW - Performance knives 3 mm thickness - special profiling Page 501

Blanks in HW for profiling

0317M HW - Blanks for profiling - 3 mm thickness Page 502
 0318M HW - Blanks for profiling - 3 mm thickness Page 503
 0339M HW - Blanks for profiling - 2 mm thickness - mirror finished..... Page 504

HSS Knives for planing

CT01M 18%W HSS knives - Standard dimensions..... Page 505
 CT010S 18%W HSS knives - Special dimensions..... Page 505
 CZ01M HSS serrated back knives Page 505
 CP01M 18%W HSS planing knives - Standard dimensions..... Page 506
 CP010S 18%W HSS planing knives - Special dimensions..... Page 506

SPURS

Spurs in HW for roughing and rebating

RG01M HW - Square disposable spurs - Type A..... Page 508
 RG01M HW - Square disposable spurs - Type B..... Page 508
 RG01M HW - Square disposable spurs - Type C..... Page 508
 RG02M HW - Triangular disposable spurs Page 509
 RG03M HW - Triangular disposable spurs with radius..... Page 509

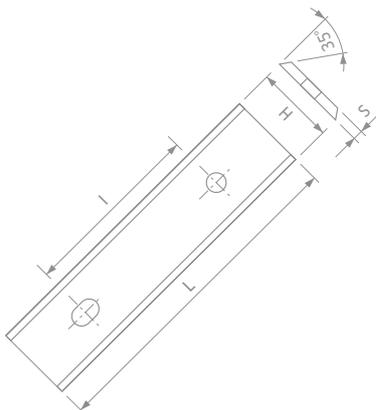
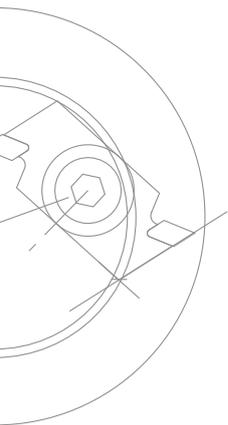
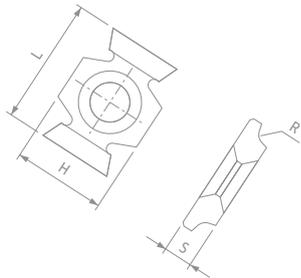
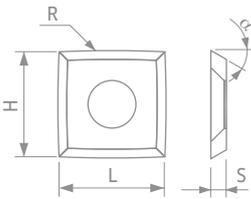
Spurs in HW for planing and finishing

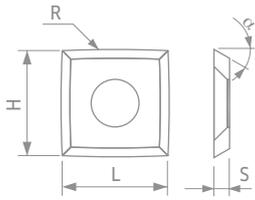
RR01 HW - Razor with rounded corners..... Page 510
 RR10 HW - 30° razor with rounded edges..... Page 510
 RR11 HW - 30° razor with both rounded corners and edges Page 510

INSERTS

Inserts in HW for beveling & rounding

IG25MD - IG25MS HW - Multipurpose inserts Page 512
 IG01M HW - 45° Beveling inserts Page 512
 IG02M HW - Rounding inserts Page 513
 IG21MD - IG21MS HW - 45° Beveling inserts with shear angle Page 513
 IG22MD - IG22MS HW - Rounding inserts with shear angle Page 514
 IG33M HW - 45° Beveling inserts with shear angle Page 514
 IG33M HW - Rounding inserts with shear angle..... Page 515
 IG51M HW - 45° Beveling inserts with shear angle Page 515
 IG52M HW - Rounding inserts with shear angle..... Page 516
 IG61MD - IG61MS HW - Beveling inserts with anti-kickback design Page 516
 IG62MD - IG62MS HW - Rounding inserts with anti-kickback design Page 517





Inserts in HW for grooving

| | | |
|-----------------|--|----------|
| IG04MD - IG04MS | HW - Grooving inserts..... | Page 517 |
| ID04MD - ID04MS | Deflectors for inserts IG04MD and IG04MS..... | Page 518 |
| CG03M | HW - Disposable knives with four cutting edges | Page 518 |
| IG05MD - IG05MS | HW - Spur inserts..... | Page 518 |
| IG17MD | HW - Insert for beveled grooves | Page 519 |
| SR01MD - SR01MS | HW - Grooving inserts..... | Page 519 |
| SR06MD | HW - Multipurpose inserts | Page 519 |
| SR06M | HW - Grooving inserts..... | Page 520 |
| SR06MD - SR06MS | HW - Multipurpose inserts | Page 520 |
| SR11MD - SR11MS | HW - Grooving inserts..... | Page 520 |
| IG03M | HW - Anti capillary groove inserts..... | Page 521 |
| IG11M | HW - Anti capillary groove inserts..... | Page 521 |
| ID11MD - ID11MS | Deflectors for inserts IG11M | Page 521 |
| IG10MD - IG10MS | HW - Inserts for gasket seats..... | Page 522 |
| ID10MD - ID10MS | Deflectors for inserts IG10MD and IG10MS..... | Page 522 |
| IG13MD - IG13MS | HW - Inserts for sealing strip seats | Page 523 |
| ID13MD - ID13MS | Deflectors for inserts IG13MD and IG13MS..... | Page 523 |
| IG14MD - IG14MS | HW - Inserts for frame rebates..... | Page 524 |
| IG15MD - IG15MS | HW - Inserts for glass sealing | Page 524 |
| IG16M | HW - Inserts for glass sealing | Page 525 |
| IG16MD - IG16MS | HW - Inserts for glass sealing | Page 525 |
| | Safe working practice..... | Page 526 |
| | Technical features..... | Page 527 |

LEADING TECHNOLOGY

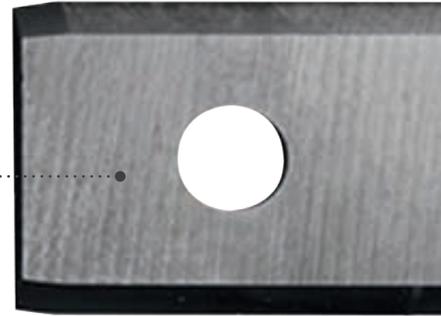
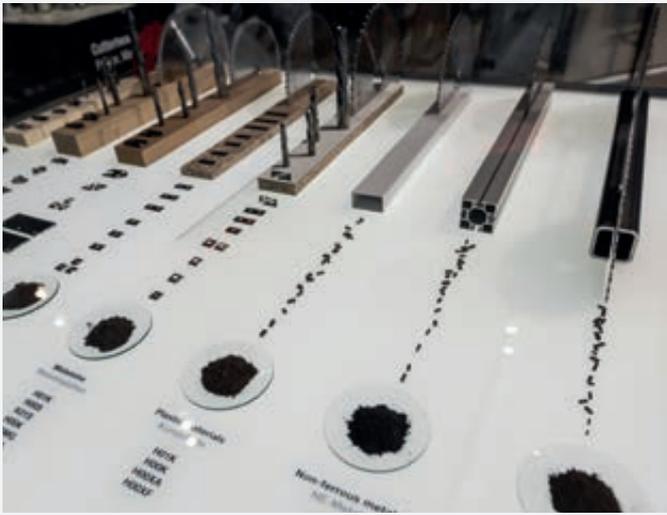
TiCo CARBIDE TECHNOLOGY



For its premium cutters Freud offers more than 20 Carbide blends, formulated both for standard and custom applications, crafted to deliver the correct grade, an optimised relief angle and maximum sharpness.

TiCo Carbide

A specially formulated, highly compact Titanium Cobalt Carbide, engineered and manufactured by Freud. It provides a sharper edge and flawless finish with a dramatically longer cutting life.



CARBIDE INNOVATION

The continuous investment in new Carbide recipe development maintains the knives performance at unmatched quality levels.

For its new Carbide Rounded Razors, Freud has formulated a dedicated fine-grain Carbide (**K01S**), specifically engineered to achieve a high level of hardness and tenacity. The formula guarantees the greatest resistance to wear and impact.





PIONEERING SOLUTIONS

Freud's production process, from raw material selection to final grinding, is based on the industry's most sophisticated manufacturing technologies, for knives and inserts with superior wear resistance.

Advanced testing methods and strict controls, throughout the entire cycle, guarantee 100% product compliance to quality parameters.



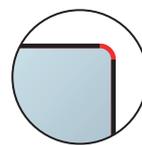
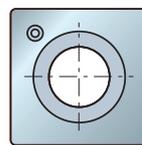
Freud takes pride in producing the sharpest knives in the world, in different Carbide formulas (cutting edge minimum roughness μm 0.12-0.15). This remarkable result is achieved leveraging a solid know-how and the most advanced grinding methods.

The sharpness of the cutting edge provides higher resistance to cutting pressure and abrasion, delivering extended lifetime and perfect finishing on wood and wood derivatives.

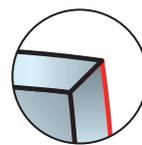
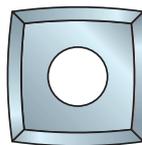
DESIGN INNOVATION

Freud leverages its market knowledge and technical know-how to constantly develop new geometries and shapes for its knives and inserts.

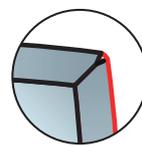
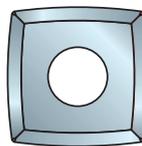
For its new range of Carbide Rounded Razors, for example, Freud has developed designs with rounded corners, rounded edges and with a combination of both, to achieve the highest results in demanding applications that require a perfect quality of cut.



RR01
razor with rounded corners



RR10
razor with rounded edges



RR11
razor with both rounded corners and edges

HW - INDUSTRIAL QUALITY KNIVES

CHOOSE THE RIGHT TOOL

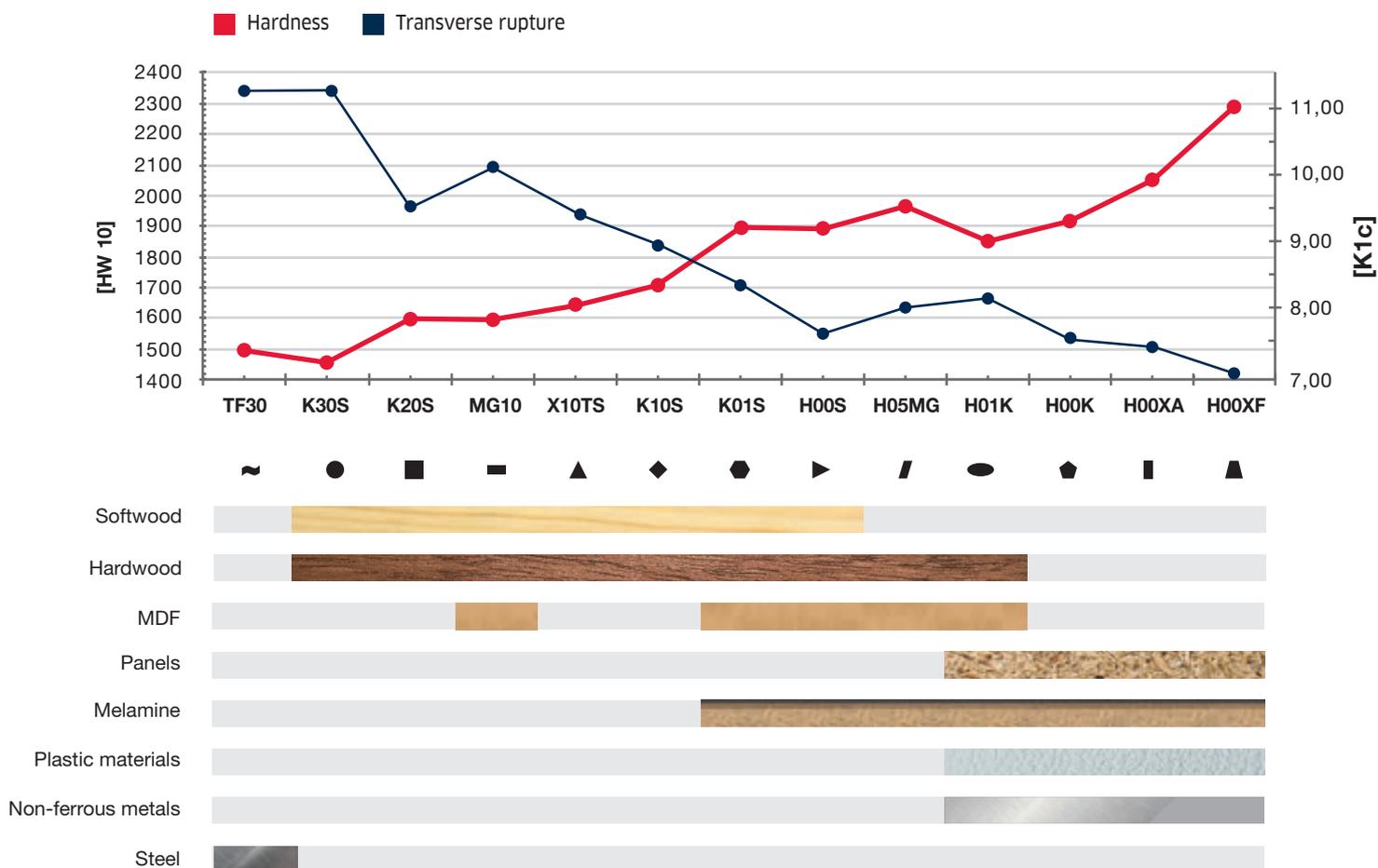
| APPLICATION | | PERFORMANCE | RELIEF ANGLES | FREUD CODE |
|---|--------------------|-------------|---------------|---------------|
|  | Universal | ● | 35° | CG26M |
| | | ● | 35° | CG01M - CG10M |
| | | ● | 35° | CG08M |
| | | ● | 35° | CG19M |
|  | Softwood | ● | 35° | CG26M |
| | | ● | 35° | CG01M - CG10M |
| | | ● | 35° | CG08M |
| | | ● | 35° | CG19M |
| | | ● | 40° | CG76M |
| | | ● | 40° | CG66M |
| | | ● | 40° | CG06M |
| | | ● | 40° | CG18M |
| | | ● | 45° | CG62M |
| ● | 45° | CG22M | | |
|  | Hardwood | ● | 35° | CG26M |
| | | ● | 35° | CG01M - CG10M |
| | | ● | 35° | CG08M |
| | | ● | 35° | CG19M |
| | | ● | 40° | CG76M |
| | | ● | 40° | CG66M |
| | | ● | 40° | CG06M |
| | | ● | 40° | CG17M |
| | | ● | 40° | CG18M |
| | | ● | 45° | CG62M |
| ● | 45° | CG22M | | |
|  | Plywood panels | ● | 35° | CG04M* |
| | | ● | 35° | CG05M |
| | | ● | 35° | CG01M - CG10M |
| | | ● | 35° | CG08M |
| | | ● | 35° | CG19M |
|  | Laminate chipboard | ● | 35° | CG20M* |
| | | ● | 35° | CG04M* |
| | | ● | 35° | CG05M |
| | | ● | 35° | CG26M |
| | | ● | 35° | CG01M - CG10M |
| | | ● | 35° | CG08M |
| | | ● | 35° | CG19M |
|  | MDF | ● | 35° | CG20M* |
| | | ● | 35° | CG04M* |
| | | ● | 35° | CG05M |
| | | ● | 35° | CG26M |
| | | ● | 35° | CG01M - CG10M |
| | | ● | 35° | CG08M |
| | | ● | 35° | CG19M |
| | | ● | 40° | CG76M |
| ● | 40° | CG66M | | |
|  | HDF | ● | 35° | CG20M* |
| | | ● | 35° | CG04M* |
|  | Plastics | ● | 35° | CG20M* |
| | | ● | 35° | CG26M |
| | | ● | 35° | CG01M - CG10M |
| | | ● | 35° | CG08M |
| | | ● | 35° | CG19M |

HW - INDUSTRIAL QUALITY KNIVES CHOOSE THE RIGHT TOOL

| RELIEF ANGLE | CODE | APPLICATION | | | | | | | | HW | HARDNESS HV 10 | |
|--------------|---------------|-------------|----------|----------|---------|-----------|-----|-----|----------|-------|-------------------|------|
| | | Universal | Softwood | Hardwood | Plywood | Laminated | MDF | HDF | Plastics | | | |
| 35° | CG20M* | - | - | - | - | ● | ● | ● | ● | H00XF | ▲ | 2300 |
| 35° | CG04M* | - | - | - | ◐ | ◑ | ◑ | ◑ | - | H00XA | ■ | 2070 |
| 35° | CG05M | - | - | - | ◐ | ◑ | ◑ | - | - | H00K | ▲ | 1960 |
| 35° | CG26M | ◐ | ◑ | ◑ | - | ◑ | ◑ | - | ◑ | H01K | ● | 1870 |
| 35° | CG01M - CG10M | ◑ | ◑ | ◑ | ◑ | ◑ | ◑ | - | ◑ | H00S | ▶ | 1860 |
| 35° | CG08M | ◑ | ◑ | ◑ | ◑ | ◑ | ◑ | - | ◑ | K01S | ◆ | 1850 |
| 35° | CG19M | ◑ | ◑ | ◑ | ◑ | ◑ | ◑ | - | ◑ | H00S | ▶ | 1860 |
| 40° | CG76M | - | ◑ | ● | - | - | ◑ | - | - | H01K | ● | 1870 |
| 40° | CG66M | - | ◑ | ◑ | - | - | ◑ | - | - | X10TS | ▲ | 1650 |
| 40° | CG06M | - | ◑ | ◑ | - | - | - | - | - | K30S | ● | 1430 |
| 40° | CG17M | - | - | ● | - | - | - | - | - | K10S | ◆ | 1620 |
| 40° | CG18M | - | ◑ | ◑ | - | - | - | - | - | K30S | ● | 1430 |
| 45° | CG62M | - | ● | ◑ | - | - | - | - | - | X10TS | ▲ | 1650 |
| 45° | CG22M | - | ◑ | ◑ | - | - | - | - | - | K30S | ● | 1430 |

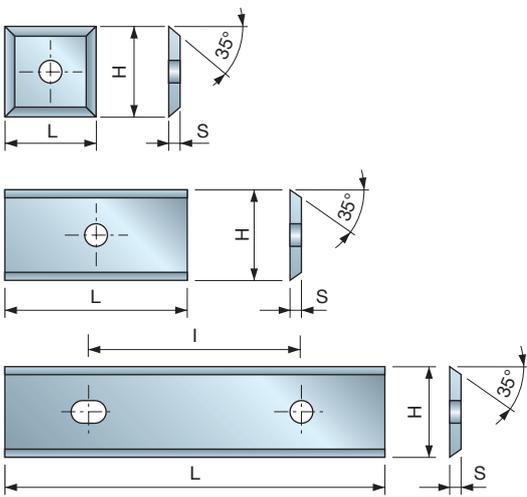
* Not for board containing foreign materials

● Ultimate performance
 ◑ High performance
 ◐ Standard performance
 ◒ Basic performance
 - Not recommended



Knives





**HW
K01S**

12 mm disposable knives made by K01S
Freud's Carbide with 35° relief angle.

- Ideal for a universal use.

CG08M

HW - 35° Disposable knives



| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 7,6 | 12 | 1,5 | - | CG08MAA310 | F03FH02902 |
| 8,6 | 12 | 1,5 | - | CG08MJA310 | F03FH03349 |
| 9,6 | 12 | 1,5 | - | CG08MMA310 | F03FH02910 |
| 11,6 | 12 | 1,5 | - | CG08MNA310 | F03FH03254 |
| 12 | 12 | 1,5 | - | CG08MBA310 | F03FH02903 |
| 15 | 12 | 1,5 | - | CG08MCA310 | F03FH02904 |
| 15,6 | 12 | 1,5 | - | CG08MGB310 | F03FH03350 |
| 16,3 | 12 | 1,5 | - | CG08MJD310 | F03FH03351 |
| 16,6 | 12 | 1,5 | - | CG08MJB310 | F03FH03352 |
| 20 | 12 | 1,5 | - | CG08MDA310 | F03FH02905 |
| 24 | 12 | 1,5 | - | CG08MOA310 | F03FH02911 |
| 25,8 | 12 | 1,5 | 14 | CG08MJC310 | F03FH03353 |
| 30 | 12 | 1,5 | 14 | CG08MEA310 | F03FH02906 |
| 40 | 12 | 1,5 | 26 | CG08MLA310 | F03FH02909 |
| 50 | 12 | 1,5 | 26 | CG08MFA310 | F03FH02907 |
| 60 | 12 | 1,5 | 26 | CG08MGA310 | F03FH02908 |

CG01M

HW - 35° Disposable knives



Type A

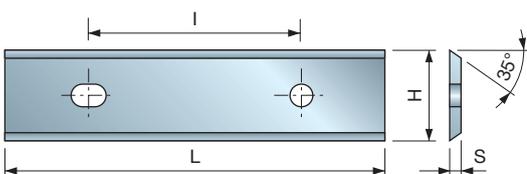
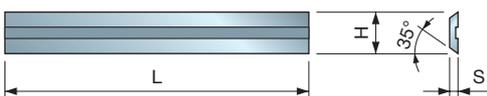
| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 20 | 5,5 | 1,1 | - | CG01MDB310 | F03FH02735 |
| 30 | 5,5 | 1,1 | - | CG01MEB310 | F03FH02850 |
| 40 | 5,5 | 1,1 | - | CG01MFJ310 | F03FH02853 |
| 50 | 5,5 | 1,1 | - | CG01MFB310 | F03FH02852 |

Type B

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 20 | 5,5 | 1,1 | - | CG01MBX310 | F03FH03713 |
| 25 | 5,5 | 1,1 | - | CG01MCX310 | F03FH03715 |
| 30 | 5,5 | 1,1 | - | CG01MEX310 | F03FH03717 |
| 40 | 5,5 | 1,1 | - | CG01MDX310 | F03FH03719 |
| 50 | 5,5 | 1,1 | - | CG01MFX310 | F03FH03721 |

Type C

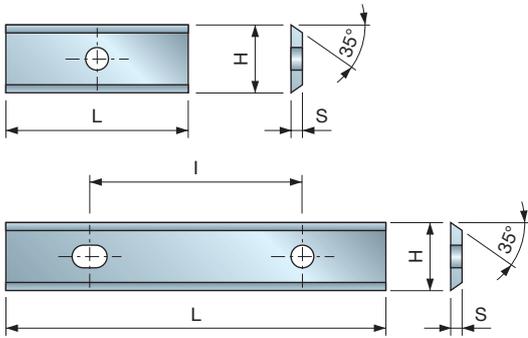
| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 80 | 13 | 2,2 | 60 | CG01MHA301 | F03FA18134 |
| 100 | 13 | 2,2 | 60 | CG01MIA301 | F03FA18182 |
| 120 | 13 | 2,2 | 60 | CG01MKA301 | F03FA18183 |



**HW
H00S**

12 mm Disposable knives made by H00S
Freud's Carbide with 35° relief angle.

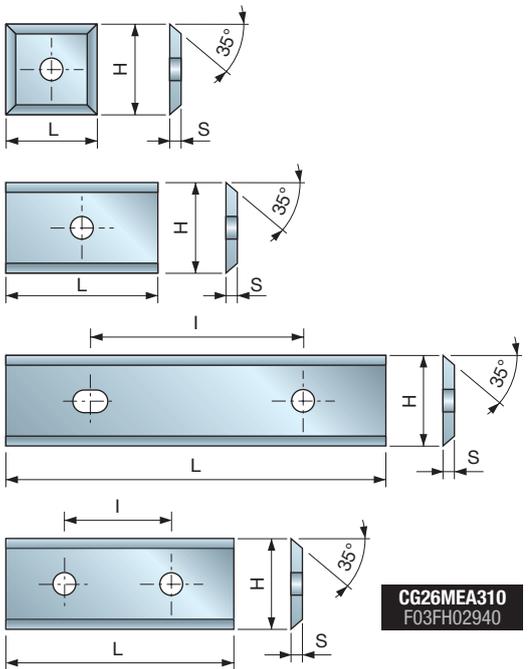
- Ideal for a universal use.



**HW
H00S**

12 mm Disposable knives made by H00S
Freud's Carbide with 35° relief angle.

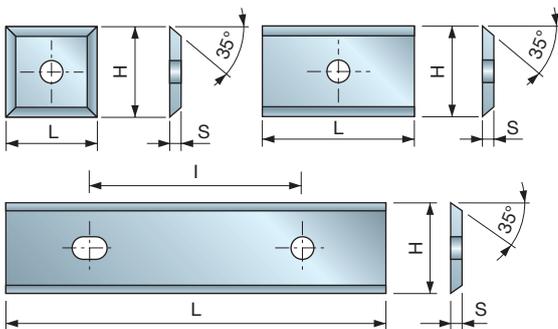
- Ideal for a universal use.



**HW
H01K**

12 mm Disposable knives made by H01K
Freud's Carbide with 35° relief angle.

- Ideal for a universal use.



**HW
H00K**

12 mm Disposable knives made by H00K
Freud's Carbide with 35° relief angle.

- Ideal for wood composites

CG10M

HW - 35° Disposable knives



| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 7,5 | 9 | 1,5 | - | CG10MAA310 | F03FC23863 |
| 9,6 | 9 | 1,5 | - | CG10MBA310 | F03FC23864 |
| 12 | 9 | 1,5 | - | CG10MCA310 | F03FC23865 |
| 14,6 | 9 | 1,5 | - | CG10MEA310 | F03FH02912 |
| 20 | 9 | 1,5 | - | CG10MGA310 | F03FH02913 |
| 30 | 9 | 1,5 | 14 | CG10MHA310 | F03FH02914 |
| 40 | 9 | 1,5 | 26 | CG10MIB310 | F03FH02916 |
| 50 | 9 | 1,5 | 26 | CG10MIA310 | F03FH02915 |
| 60 | 9 | 1,5 | 26 | CG10MKA310 | F03FH02917 |

CG26M

HW - 35° Disposable knives



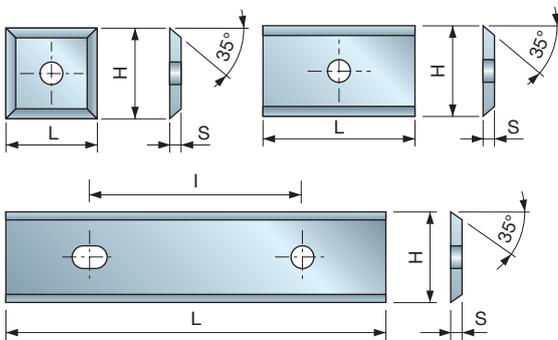
| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 7,6 | 12 | 1,5 | - | CG26MAA310 | F03FH02936 |
| 8,6 | 12 | 1,5 | - | CG26MJA310 | F03FH04114 |
| 9,6 | 12 | 1,5 | - | CG26MMA310 | F03FH02944 |
| 10,6 | 12 | 1,5 | - | CG26MUE310 | F03FH02947 |
| 11,6 | 12 | 1,5 | - | CG26MNA310 | F03FH02945 |
| 12 | 12 | 1,5 | - | CG26MBA310 | F03FH02937 |
| 15 | 12 | 1,5 | - | CG26MCA310 | F03FH02938 |
| 18,6 | 12 | 1,5 | - | CG26MJE310 | F03FC23866 |
| 20 | 12 | 1,5 | - | CG26MDA310 | F03FH02939 |
| 20,6 | 12 | 1,5 | - | CG26MJF310 | F03FC23867 |
| 22,6 | 12 | 1,5 | - | CG26MJG310 | F03FC23868 |
| 24 | 12 | 1,5 | - | CG26MOA310 | F03FH02946 |
| 30 | 12 | 1,5 | 14 | CG26MEA310 | F03FH02940 |
| 40 | 12 | 1,5 | 26 | CG26MLA310 | F03FH02943 |
| 50 | 12 | 1,5 | 26 | CG26MFA310 | F03FH02941 |
| 60 | 12 | 1,5 | 26 | CG26MGA310 | F03FH02942 |

CG05M

HW - 35° Disposable knives



| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 12 | 12 | 1,5 | - | CG05MBA310 | F03FH02885 |
| 20 | 12 | 1,5 | - | CG05MDA310 | F03FH02886 |
| 30 | 12 | 1,5 | 14 | CG05MEA310 | F03FH02887 |
| 50 | 12 | 1,5 | 26 | CG05MFA310 | F03FH02888 |



**HW
H00XA**

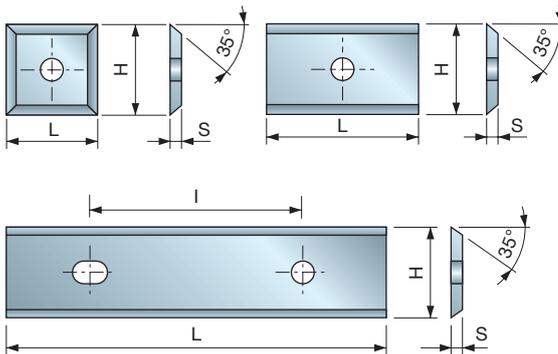
12 mm Disposable knives made by H00XA
Freud's Carbide with 35° relief angle.
• Ideal for wood composites.

CG04M

HW - 35° Disposable knives



| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 12 | 12 | 1,5 | - | CG04MBA310 | F03FH02880 |
| 15 | 12 | 1,5 | - | CG04MCA310 | F03FH02881 |
| 20 | 12 | 1,5 | - | CG04MDA310 | F03FH02882 |
| 30 | 12 | 1,5 | 14 | CG04MEA310 | F03FH02883 |
| 50 | 12 | 1,5 | 26 | CG04MFA310 | F03FH02884 |



**HW
H00XF**

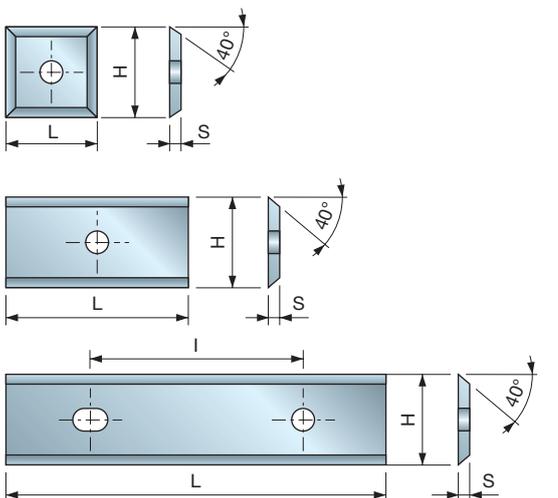
12 mm Disposable knives made by H00XF
Freud's Carbide with 35° relief angle.
• Especially indicated to work melamine
chipboard panels, MDF, HDF wood
composites and plastic materials.

CG20M

HW - 35° Disposable knives



| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 9,6 | 12 | 1,5 | - | CG20MMA310 | F03FH03354 |
| 12 | 12 | 1,5 | - | CG20MBA310 | F03FH02923 |
| 15 | 12 | 1,5 | - | CG20MCA310 | F03FH03355 |
| 20 | 12 | 1,5 | - | CG20MDA310 | F03FH02924 |
| 30 | 12 | 1,5 | 14 | CG20MEA310 | F03FH02925 |
| 40 | 12 | 1,5 | 26 | CG20MLA310 | F03FH03356 |
| 50 | 12 | 1,5 | 26 | CG20MFA310 | F03FH02926 |
| 60 | 12 | 1,5 | 26 | CG20MGA310 | F03FH03357 |



**HW
K30S**

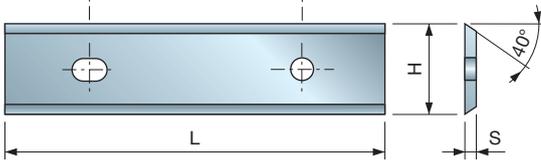
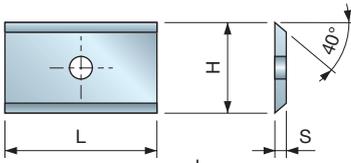
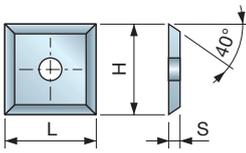
12 mm Disposable knives made by K30S
Freud's Carbide with 40° relief angle.
• Particularly indicated for natural softwood and
hardwood.

CG06M

HW - 40° Disposable knives



| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 7,6 | 12 | 1,5 | - | CG06MHA310 | F03FH02897 |
| 8,6 | 12 | 1,5 | - | CG06MJA310 | F03FH02899 |
| 9,6 | 12 | 1,5 | - | CG06MIA310 | F03FH02898 |
| 11 | 12 | 1,5 | - | CG06MUE310 | F03FC23822 |
| 11,6 | 12 | 1,5 | - | CG06MLA310 | F03FH02901 |
| 12 | 12 | 1,5 | - | CG06MAA310 | F03FH02889 |
| 12,6 | 12 | 1,5 | - | CG06MLB310 | F03FC23819 |
| 13,6 | 12 | 1,5 | - | CG06MOZ310 | F03FC23820 |
| 14,6 | 12 | 1,5 | - | CG06MBA310 | F03FH02890 |
| 15,6 | 12 | 1,5 | - | CG06MGB310 | F03FH02896 |
| 16,3 | 12 | 1,5 | - | CG06MJD310 | F03FC23817 |
| 16,6 | 12 | 1,5 | - | CG06MJB310 | F03FC23815 |
| 18 | 12 | 1,5 | - | CG06MUF310 | F03FC23823 |
| 20 | 12 | 1,5 | - | CG06MCA310 | F03FH02891 |
| 24 | 12 | 1,5 | - | CG06MKA310 | F03FH02900 |
| 25,8 | 12 | 1,5 | 14 | CG06MJC310 | F03FC23816 |
| 26,6 | 12 | 1,5 | 14 | CG06MKB310 | F03FC23818 |
| 30 | 12 | 1,5 | 14 | CG06MDA310 | F03FH02892 |
| 40 | 12 | 1,5 | 26 | CG06MEA310 | F03FH02893 |
| 50 | 12 | 1,5 | 26 | CG06MFA310 | F03FH02894 |
| 60 | 12 | 1,5 | 26 | CG06MGA310 | F03FH02895 |



**HW
X10TS**

12 mm Disposable knives made by X10TS
Freud's Carbide with 40° relief angle.

- Suitable for natural softwood, hardwood and plywood.
- Not suitable for chipboard and laminates.

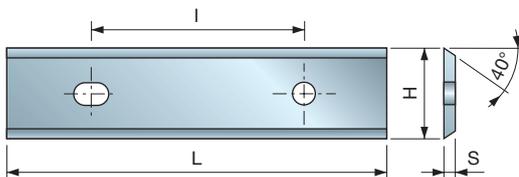
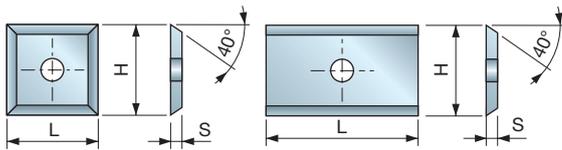
CG66M

HW - 40° Disposable knives



Softwood Hardwood Plywood

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 7,6 | 12 | 1,5 | - | CG66MHA310 | F03FH02969 |
| 8,6 | 12 | 1,5 | - | CG66MJA310 | F03FH02971 |
| 9,6 | 12 | 1,5 | - | CG66MIA310 | F03FH02970 |
| 11 | 12 | 1,5 | - | CG66MUE310 | F03FH03814 |
| 11,6 | 12 | 1,5 | - | CG66MLA310 | F03FH02973 |
| 12 | 12 | 1,5 | - | CG66MAA310 | F03FH02961 |
| 13 | 12 | 1,5 | - | CG66MLB310 | F03FH03815 |
| 13,6 | 12 | 1,5 | - | CG66MOZ310 | F03FC23922 |
| 14,6 | 12 | 1,5 | - | CG66MBA310 | F03FH02962 |
| 15,6 | 12 | 1,5 | - | CG66MGB310 | F03FH02968 |
| 16,3 | 12 | 1,5 | - | CG66MJD310 | F03FH03816 |
| 17 | 12 | 1,5 | - | CG66MJB310 | F03FH03817 |
| 18 | 12 | 1,5 | - | CG66MJG310 | F03FH03818 |
| 18 | 12 | 1,5 | - | CG66MUF310 | F03FH03819 |
| 19 | 12 | 1,5 | - | CG66MJE310 | F03FH03820 |
| 20 | 12 | 1,5 | - | CG66MCA310 | F03FH02963 |
| 21 | 12 | 1,5 | - | CG66MJF310 | F03FH03821 |
| 22 | 12 | 1,5 | - | CG66MTA310 | F03FH03822 |
| 24 | 12 | 1,5 | - | CG66MKA310 | F03FH02972 |
| 27 | 12 | 1,5 | 14 | CG66MKB310 | F03FH03823 |
| 30 | 12 | 1,5 | 14 | CG66MDA310 | F03FH02964 |
| 40 | 12 | 1,5 | 26 | CG66MEA310 | F03FH02965 |
| 50 | 12 | 1,5 | 26 | CG66MFA310 | F03FH02966 |
| 60 | 12 | 1,5 | 26 | CG66MGA310 | F03FH02967 |



**HW
H01K**

12 mm Disposable knives made by H01K
Freud's Carbide with 40° relief angle.

- Particularly indicated for hardwood and abrasive wood.
- Not ideal for chipboard.

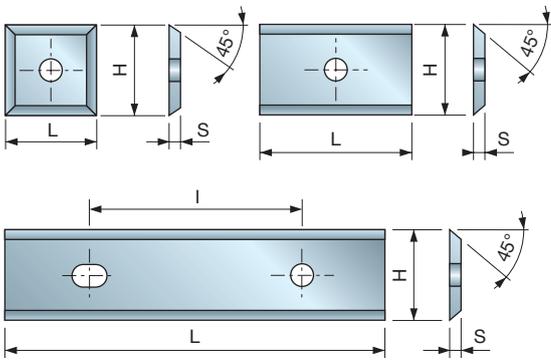
CG76M

HW - 40° Disposable knives



Softwood Hardwood MDF

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 12 | 12 | 1,5 | - | CG76MAA310 | F03FH02975 |
| 14,6 | 12 | 1,5 | - | CG76MBA310 | F03FH02976 |
| 20 | 12 | 1,5 | - | CG76MCA310 | F03FH02977 |
| 24 | 12 | 1,5 | - | CG76MKA310 | F03FH02982 |
| 30 | 12 | 1,5 | 14 | CG76MDA310 | F03FH02978 |
| 40 | 12 | 1,5 | 26 | CG76MEA310 | F03FH02979 |
| 50 | 12 | 1,5 | 26 | CG76MFA310 | F03FH02980 |
| 60 | 12 | 1,5 | 26 | CG76MGA310 | F03FH02981 |



CG62M

HW - 45° Disposable knives



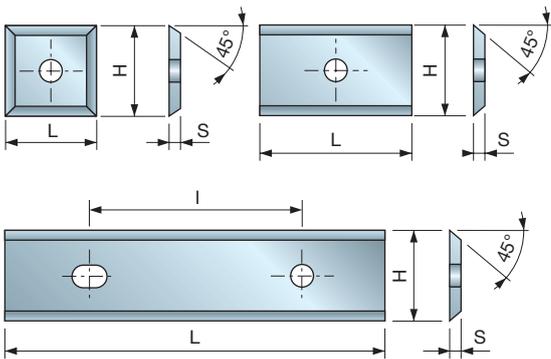
Softwood Hardwood Plywood

HW X10TS

12 mm Disposable knives made by X10TS
Freud's Carbide with 45° relief angle.

- Suitable for natural softwood, hardwood and plywood.
- Not suitable for chipboard and laminates.

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 7,6 | 12 | 1,5 | - | CG62MHA310 | F03FH02956 |
| 8,6 | 12 | 1,5 | - | CG62MJA310 | F03FH02958 |
| 9,6 | 12 | 1,5 | - | CG62MIA310 | F03FH02957 |
| 11,6 | 12 | 1,5 | - | CG62MLA310 | F03FH02960 |
| 12 | 12 | 1,5 | - | CG62MAA310 | F03FH02948 |
| 13,6 | 12 | 1,5 | - | CG62MOZ310 | F03FC23921 |
| 14,6 | 12 | 1,5 | - | CG62MBA310 | F03FH02949 |
| 15,6 | 12 | 1,5 | - | CG62MGB310 | F03FH02955 |
| 20 | 12 | 1,5 | - | CG62MCA310 | F03FH02950 |
| 24 | 12 | 1,5 | - | CG62MKA310 | F03FH02959 |
| 30 | 12 | 1,5 | 14 | CG62MDA310 | F03FH02951 |
| 40 | 12 | 1,5 | 26 | CG62MEA310 | F03FH02952 |
| 50 | 12 | 1,5 | 26 | CG62MFA310 | F03FH02953 |
| 60 | 12 | 1,5 | 26 | CG62MGA310 | F03FH02954 |



CG22M

HW - 45° Disposable knives



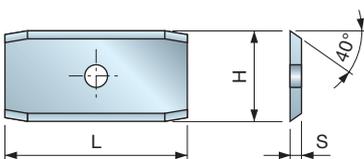
Softwood Hardwood

HW K30S

12 mm Disposable knives made by K30S
Freud's Carbide with 45° relief angle.

- Particularly indicated for natural softwood.

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 7,6 | 12 | 1,5 | - | CG22MHA310 | F03FH02933 |
| 9,6 | 12 | 1,5 | - | CG22MIA310 | F03FH02934 |
| 14,6 | 12 | 1,5 | - | CG22MBA310 | F03FH02927 |
| 20 | 12 | 1,5 | - | CG22MCA310 | F03FH02928 |
| 25 | 12 | 1,5 | 14 | CG22MVB310 | F03FH02935 |
| 30 | 12 | 1,5 | 14 | CG22MDA310 | F03FH02929 |
| 40 | 12 | 1,5 | 26 | CG22MEA310 | F03FH02930 |
| 50 | 12 | 1,5 | 26 | CG22MFA310 | F03FH02931 |
| 60 | 12 | 1,5 | 26 | CG22MGA310 | F03FH02932 |



CG17M

HW - 40° Disposable knives with end bevels



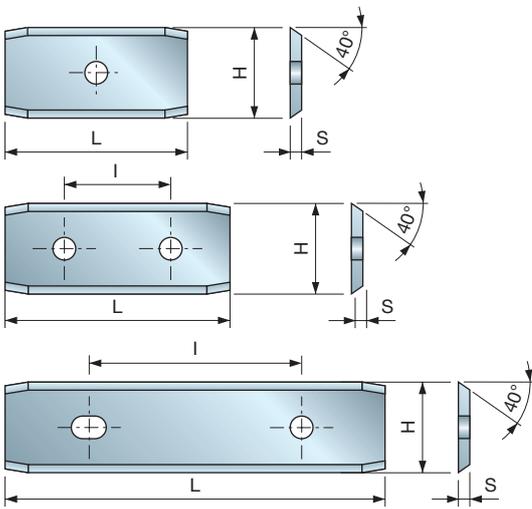
Softwood Hardwood

HW K10S

12 mm Disposable knives made by K10S
Freud's Carbide with 40° relief angle and bevel
on both cutting edges.

- Suitable for hardwood with particularly sandy and abrasive surfaces (exotic woods).

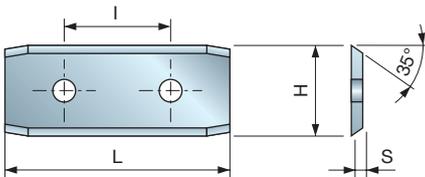
| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 24 | 12 | 1,5 | CG17MBC310 | F03FH02918 |



**HW
K30S**

12 mm Disposable knives made by K30S Freud's Carbide with 40° relief angle and bevel on both cutting edges.

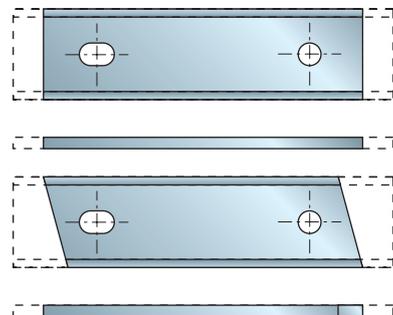
- Particularly indicated for natural softwood and hardwood.



**HW
H00S**

12mm Disposable knives made by H00S Freud's Carbide with 35° relief angle and bevel on both cutting edges.

- Ideal for universal use.



Disposable knives with 2 cutting edges without side clearance.

- Minimum order quantity: 1 set of 10 knives of the same type.
- The codes are just a guideline and should be used for ordering purposes only.
- In case of orders specify type of Carbide.

CG18M

HW - 40° Disposable knives with end bevels

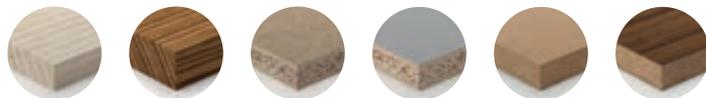


Softwood Hardwood

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 24 | 12 | 1,5 | - | CG18MBC310 | F03FH02919 |
| 30 | 12 | 1,5 | 14 | CG18MDC310 | F03FH02920 |
| 50 | 12 | 1,5 | 26 | CG18MFC310 | F03FH02921 |

CG19M

HW - 35° Disposable knives with end bevels



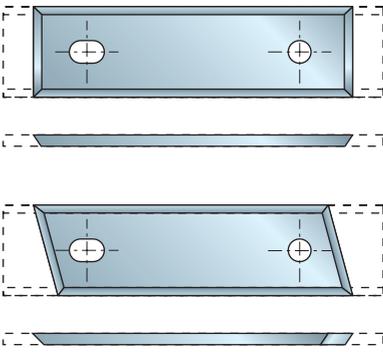
Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|--------------|------------|
| 30 | 12 | 1,5 | 14 | CG19M35EC310 | F03FH02922 |

CG400

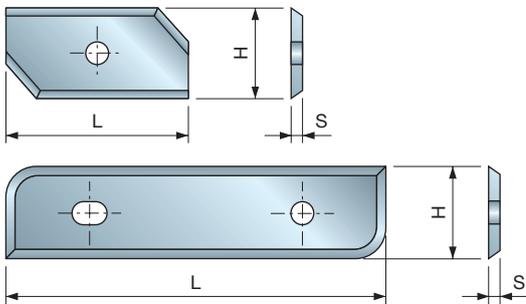
HW - Customised knives

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 12 | 12 | 1,5 | CG400 BA3 | |
| 15 | 12 | 1,5 | CG400 CA3 | |
| 20 | 12 | 1,5 | CG400 DA3 | |
| 30 | 12 | 1,5 | CG400 EA3 | |
| 50 | 12 | 1,5 | CG400 FA3 | |
| 60 | 12 | 1,5 | CG400 GA3 | |
| 80 | 13 | 2,2 | CG400 HA3 | |



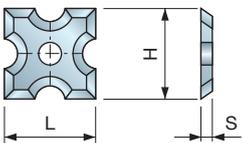
Disposable knives with 2 cutting edges with side clearance.

- Minimum order quantity: 1 set of 10 knives of the same type.
- The codes are just a guideline and should be used for ordering purposes only.
- In case of orders specify type of Carbide.



Shaped knives with 2 cutting edges.

- Minimum order quantity: 1 set of 10 knives of the same type.
- The codes are just a guideline and should be used for ordering purposes only.
- In case of orders specify type of Carbide.



Shaped knives with 4 cutting edges.

- Minimum order quantity: 1 set of 10 knives of the same type.
- The codes are just a guideline and should be used for ordering purposes only.

CG401

HW - Customised knives

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 12 | 12 | 1,5 | CG401 BA3 | |
| 15 | 12 | 1,5 | CG401 CA3 | |
| 20 | 12 | 1,5 | CG401 DA3 | |
| 30 | 12 | 1,5 | CG401 EA3 | |
| 50 | 12 | 1,5 | CG401 FA3 | |
| 60 | 12 | 1,5 | CG401 GA3 | |
| 80 | 13 | 2,2 | CG401 HA3 | |

CG402

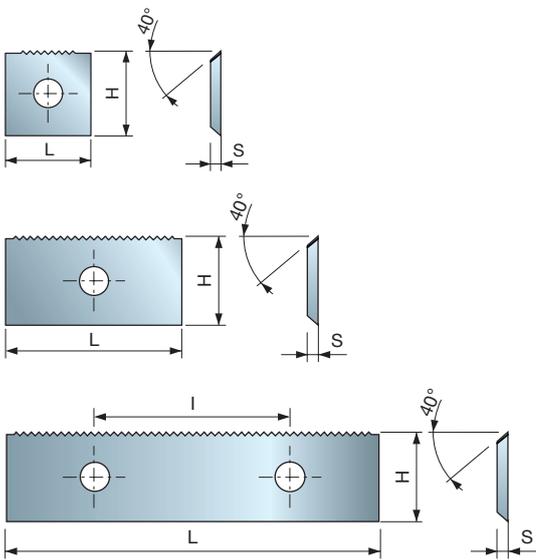
HW - Customised profiled knives

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 12 | 12 | 1,5 | CG402 BA3 | |
| 15 | 12 | 1,5 | CG402 CA3 | |
| 20 | 12 | 1,5 | CG402 DA3 | |
| 30 | 12 | 1,5 | CG402 EA3 | |
| 50 | 12 | 1,5 | CG402 FA3 | |
| 60 | 12 | 1,5 | CG402 GA3 | |

CG403

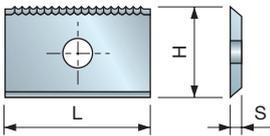
HW - Customised profiled knives

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 12 | 12 | 1,5 | CG403 BA3 | |



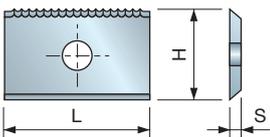
Disposable knives with Split Edge profile

- Suitable for cutterhead with dedicated knife seat.
- Particularly indicated for natural softwood, hardwood and plywood.
- The profiled knives have a Split-Edge profile only on one side (Z1 not reversible) and the height is 12 mm.



Customised knives with Split-Edge design.

- Suitable for original Split edge tools.
- Minimum order quantity: 1 set of 10 knives of the same type.
- The codes are just a guideline and should be used for ordering purpose only.



Knives with 1 cutting edge, Split-Edge design.

- Suitable for no-Split edge tools.
- Minimum order quantity: 1 set of 10 knives of the same type.
- The codes are just a guideline and should be used for ordering purpose only.

CGSEM

HW - Split-Edge knives



Softwood Hardwood

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 7,6 | 12 | 1,5 | CGSEMHA310 | F03FH03824 |
| 8,6 | 12 | 1,5 | CGSEMJA310 | F03FH03825 |
| 9,6 | 12 | 1,5 | CGSEMIA310 | F03FH03826 |
| 10,6 | 12 | 1,5 | CGSEMUE310 | F03FH03827 |
| 11,6 | 12 | 1,5 | CGSEMLA310 | F03FH03828 |
| 12 | 12 | 1,5 | CGSEMAA310 | F03FH03829 |
| 12,6 | 12 | 1,5 | CGSEMIB310 | F03FH03830 |
| 13,6 | 12 | 1,5 | CGSEM0Z310 | F03FH03831 |
| 14,6 | 12 | 1,5 | CGSEMBA310 | F03FH03832 |
| 15,6 | 12 | 1,5 | CGSEMGB310 | F03FH03833 |
| 16,3 | 12 | 1,5 | CGSEMJD310 | F03FH03834 |
| 16,6 | 12 | 1,5 | CGSEMJB310 | F03FH03835 |
| 17,6 | 12 | 1,5 | CGSEMJG310 | F03FH03836 |
| 17,8 | 12 | 1,5 | CGSEMUF310 | F03FH03837 |
| 18,6 | 12 | 1,5 | CGSEMJE310 | F03FH03838 |
| 20 | 12 | 1,5 | CGSEMCA310 | F03FH03839 |
| 20,6 | 12 | 1,5 | CGSEMJF310 | F03FH03840 |
| 21,6 | 12 | 1,5 | CGSEMTA310 | F03FH03841 |
| 24 | 12 | 1,5 | CGSEMKA310 | F03FH03842 |
| 26,6 | 12 | 1,5 | CGSEMKB310 | F03FH03844 |
| 30 | 12 | 1,5 | CGSEMDA310 | F03FH03845 |
| 40 | 12 | 1,5 | CGSEMEA310 | F03FH03846 |
| 50 | 12 | 1,5 | CGSEMFA310 | F03FH03847 |
| 60 | 12 | 1,5 | CGSEMGA310 | F03FH03848 |

CG501

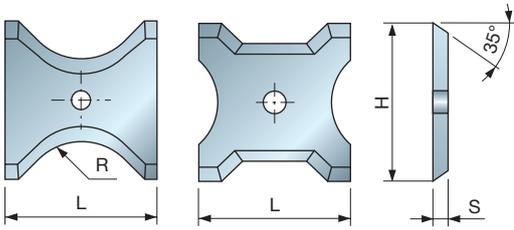
HW - Customised Split-Edge knives

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|----------|
| 12 | 12 | 1,5 | - | CG501 BA3 | |
| 15 | 12 | 1,5 | - | CG501 CA3 | |
| 20 | 12 | 1,5 | - | CG501 DA3 | |
| 30 | 12 | 1,5 | 14 | CG501 EA3 | |
| 50 | 12 | 1,5 | 26 | CG501 FA3 | |
| 60 | 12 | 1,5 | 26 | CG501 GA3 | |

CG502

HW - Customised Split-Edge knives

| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|----------|
| 12 | 12,33 | 1,5 | - | CG502 BA3 | |
| 15 | 12,33 | 1,5 | - | CG502 CA3 | |
| 20 | 12,33 | 1,5 | - | CG502 DA3 | |
| 30 | 12,33 | 1,5 | 14 | CG502 EA3 | |
| 50 | 12,33 | 1,5 | 26 | CG502 FA3 | |
| 60 | 12,33 | 1,5 | 26 | CG502 GA3 | |



CG50M

HW - 35° Disposable knives for TG35M



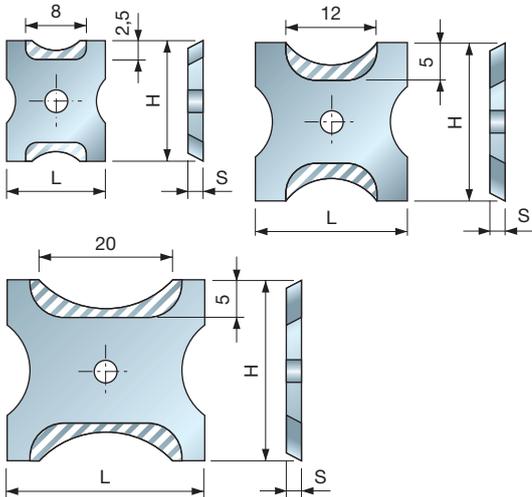
Softwood Hardwood Chipboard Laminated Chipboard MDF Laminated MDF Plywood

HW H00S

Disposable knives made of H00S Freud's Carbide with 35° relief angle.

- Suitable for TG35M tools set.
- Ideal for universal use.

| L mm | H mm | S mm | R mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 13 | 16 | 2 | 45° | CG50MCE305 | F03FC23920 |
| 13 | 16 | 2 | 1 | CG50MCD305 | F03FC23919 |
| 13 | 16 | 2 | 2 | CG50MCA305 | F03FC23916 |
| 13 | 16 | 2 | 3 | CG50MCB305 | F03FC23917 |
| 13 | 16 | 2 | 4 | CG50MCC305 | F03FC23918 |
| 20 | 21 | 2 | 45° | CG50MAE305 | F03FC23910 |
| 20 | 21 | 2 | 5 | CG50MAA305 | F03FC23906 |
| 20 | 21 | 2 | 6 | CG50MAB305 | F03FC23907 |
| 20 | 21 | 2 | 7 | CG50MAC305 | F03FC23908 |
| 20 | 21 | 2 | 8 | CG50MAD305 | F03FC23909 |
| 26 | 24 | 2 | 45° | CG50MBE305 | F03FC23915 |
| 26 | 24 | 2 | 9 | CG50MBA305 | F03FC23911 |
| 26 | 24 | 2 | 10 | CG50MBB305 | F03FC23912 |
| 26 | 24 | 2 | 11 | CG50MBC305 | F03FC23913 |
| 26 | 24 | 2 | 12 | CG50MBD305 | F03FC23914 |

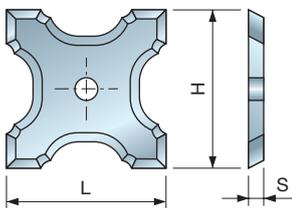


CG404 HW - Customised profiled knives

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 13 | 16 | 2 | CG404 ZA3 | |
| 20 | 21 | 2 | CG404 ZB3 | |
| 26 | 24 | 2 | CG404 ZC3 | |

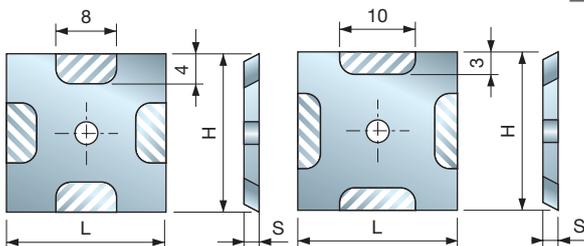
Shaped knives with 2 cutting edges.

- Minimum order quantity: 1 set of 10 knives of the same type.
- The codes are just a guideline and should be used for ordering purposes only.



CG405 HW - Customised profiled knives

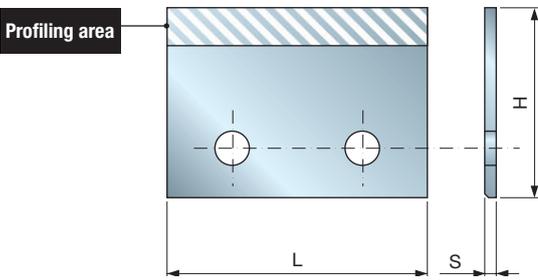
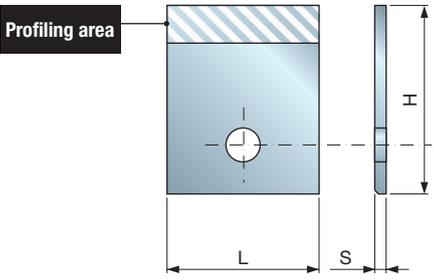
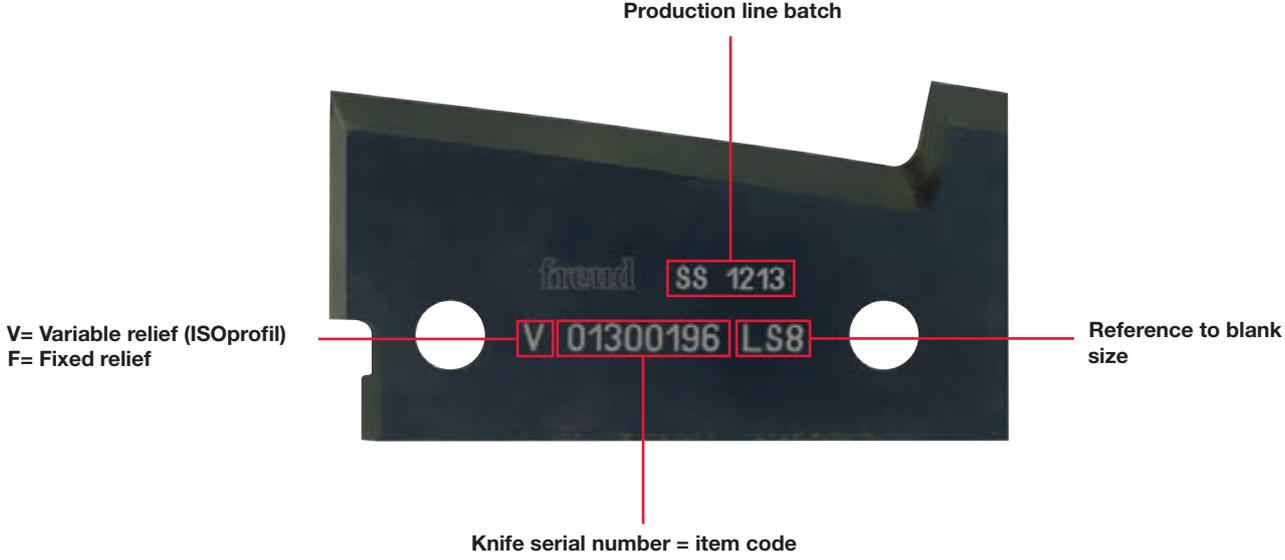
| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 21 | 21 | 2 | CG405 DA3 | |



Shaped knives with 4 cutting edges.

- Minimum order quantity: 1 set of 10 knives of the same type.
- The codes are just a guideline and should be used for ordering purposes only.

Meaning of the codes

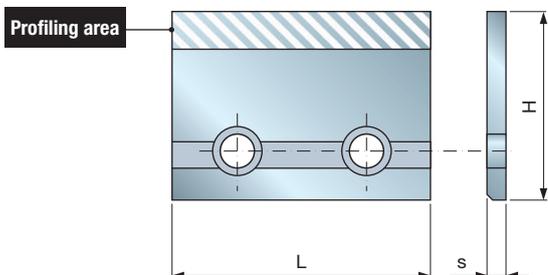
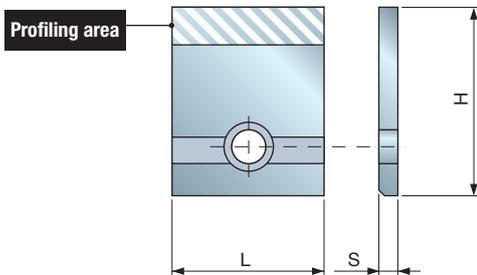


Profiled knives with 2 mm thickness.

The codes are just a guideline and should be used for ordering purpose only.

CK01 HW - Knives 2 mm thickness - special profiling

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 20 | 20 | 2 | CK01 AA3 | |
| 30 | 20 | 2 | CK01 CA3 | |
| 40 | 20 | 2 | CK01 EA3 | |
| 20 | 25 | 2 | CK01 AB3 | |
| 25 | 25 | 2 | CK01 BB3 | |
| 30 | 25 | 2 | CK01 CB3 | |
| 35 | 25 | 2 | CK01 DB3 | |
| 40 | 25 | 2 | CK01 EB3 | |
| 50 | 25 | 2 | CK01 GB3 | |
| 20 | 30 | 2 | CK01 AC3 | |
| 25 | 30 | 2 | CK01 BC3 | |
| 30 | 30 | 2 | CK01 CC3 | |
| 35 | 30 | 2 | CK01 DC3 | |
| 40 | 30 | 2 | CK01 EC3 | |
| 50 | 30 | 2 | CK01 GC3 | |
| 80 | 30 | 2 | CK01 OC3 | |
| 25 | 35 | 2 | CK01 BD3 | |
| 30 | 35 | 2 | CK01 CD3 | |
| 35 | 35 | 2 | CK01 DD3 | |
| 40 | 35 | 2 | CK01 ED3 | |
| 50 | 35 | 2 | CK01 GD3 | |
| 80 | 35 | 2 | CK01 OD3 | |
| 25 | 40 | 2 | CK01 BE3 | |
| 35 | 40 | 2 | CK01 DE3 | |
| 40 | 40 | 2 | CK01 EE3 | |
| 30 | 45 | 2 | CK01 CF3 | |
| 35 | 50 | 2 | CK01 HG3 | |



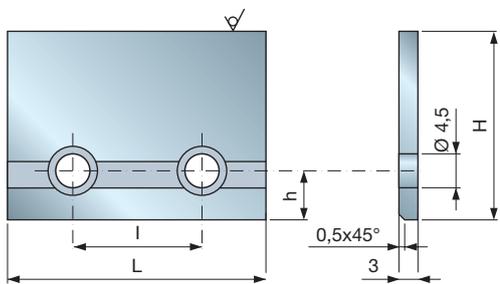
Performance System profiled knives with 3 mm thickness.

The codes are just a guideline and should be used for ordering purpose only.

CK02

HW - Performance knives 3 mm thickness - special profiling

| L mm | H mm | S mm | | Freud Code | Art. No. |
|---------|---------|---------|-----|------------|----------|
| 65 | 20 | 3 | HU7 | CK02 LA3 | |
| 65 | 20 | 3 | HU8 | CK02 LA3 | |
| 20 | 25 | 3 | LH7 | CK02 AB3 | |
| 20 | 25 | 3 | LH8 | CK02 AB3 | |
| 25 | 25 | 3 | LL7 | CK02 BB3 | |
| 25 | 25 | 3 | LL8 | CK02 BB3 | |
| 30 | 25 | 3 | LN7 | CK02 CB3 | |
| 30 | 25 | 3 | LN8 | CK02 CB3 | |
| 35 | 25 | 3 | LP7 | CK02 DB3 | |
| 35 | 25 | 3 | LP8 | CK02 DB3 | |
| 45 | 25 | 3 | LS7 | CK02 FB3 | |
| 45 | 25 | 3 | LS8 | CK02 FB3 | |
| 55 | 25 | 3 | LT7 | CK02 HB3 | |
| 55 | 25 | 3 | LT8 | CK02 HB3 | |
| 70 | 25 | 3 | LV7 | CK02 MB3 | |
| 70 | 25 | 3 | LV8 | CK02 MB3 | |
| 21 | 30 | 3 | NA7 | CK02 GC3 | |
| 21 | 30 | 3 | NA8 | CK02 GC3 | |
| 25 | 30 | 3 | NL7 | CK02 BC3 | |
| 25 | 30 | 3 | NL8 | CK02 BC3 | |
| 35 | 30 | 3 | NP7 | CK02 DC3 | |
| 35 | 30 | 3 | NP8 | CK02 DC3 | |
| 45 | 30 | 3 | NS7 | CK02 FC3 | |
| 45 | 30 | 3 | NS8 | CK02 FC3 | |
| 55 | 30 | 3 | NT7 | CK02 HC3 | |
| 55 | 30 | 3 | NT8 | CK02 HC3 | |
| 80 | 30 | 3 | NZ7 | CK02 OC3 | |
| 80 | 30 | 3 | NZ8 | CK02 OC3 | |
| 14,4 | 35 | 3 | PG8 | CK02 ID3 | |
| 21 | 35 | 3 | PA7 | CK02 GD3 | |
| 21 | 35 | 3 | PA8 | CK02 GD3 | |
| 25 | 35 | 3 | PL7 | CK02 BD3 | |
| 25 | 35 | 3 | PL8 | CK02 BD3 | |
| 30 | 35 | 3 | PN7 | CK02 CD3 | |
| 30 | 35 | 3 | PN8 | CK02 CD3 | |
| 35 | 35 | 3 | PP7 | CK02 DD3 | |
| 35 | 35 | 3 | PP8 | CK02 DD3 | |
| 45 | 35 | 3 | PS7 | CK02 FD3 | |
| 45 | 35 | 3 | PS8 | CK02 FD3 | |
| 55 | 35 | 3 | PT7 | CK02 HD3 | |
| 55 | 35 | 3 | PT8 | CK02 HD3 | |
| 80 | 35 | 3 | PZ7 | CK02 OD3 | |
| 80 | 35 | 3 | PZ8 | CK02 OD3 | |
| 25 | 40 | 3 | RL7 | CK02 BE3 | |
| 25 | 40 | 3 | RL8 | CK02 BE3 | |
| 30 | 40 | 3 | RN7 | CK02 CE3 | |
| 30 | 40 | 3 | RN8 | CK02 CE3 | |
| 40 | 40 | 3 | RR7 | CK02 EE3 | |
| 40 | 40 | 3 | RR8 | CK02 EE3 | |
| 55 | 40 | 3 | RT7 | CK02 HE3 | |
| 55 | 40 | 3 | RT8 | CK02 HE3 | |



0317M

HW - Blanks for profiling 3 mm thickness



Chipboard



Laminated
Chipboard



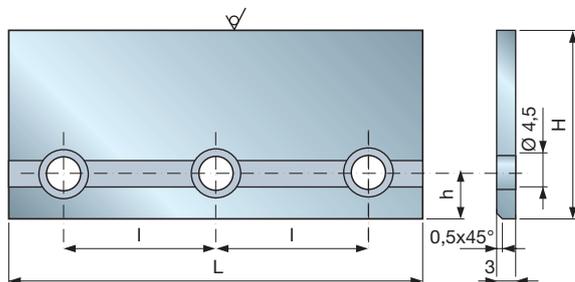
MDF



Laminated
MDF



Plywood

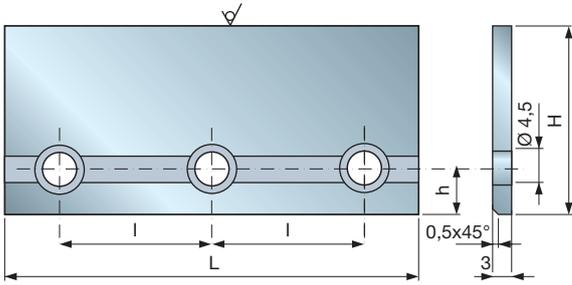
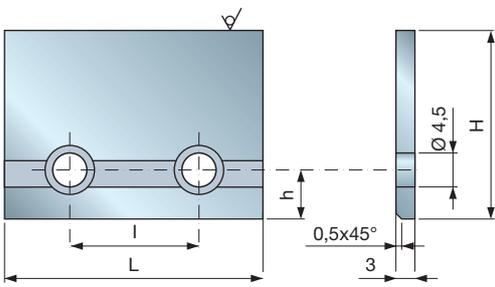


**HW
H00S**

Standard blanks made by H00S Freud's standard Carbide with 3 mm thickness.

- Suitable for hardwood and wood composites.

| L mm | H mm | S mm | NL | I mm | Freud Code | Art. No. |
|---------|---------|---------|----|---------|--------------------|------------|
| 65 | 20 | 3 | - | - | 0317M HU3 | F03FH00685 |
| 20 | 25 | 3 | 1 | - | 0317M LH3A | F03FH00686 |
| 25 | 25 | 3 | 1 | - | 0317M LL3A | F03FH00687 |
| 30 | 25 | 3 | 1 | - | 0317M LN3A | F03FH02515 |
| 35 | 25 | 3 | 1 | - | 0317M LP3A | F03FH00688 |
| 45 | 25 | 3 | 2 | 28 | 0317M LS3A | F03FH00689 |
| 55 | 25 | 3 | 3 | 20,5 | 0317M LT3A | F03FH00690 |
| 70 | 25 | 3 | 2 | 41 | 0317M LV3A | F03FH00691 |
| 21 | 30 | 3 | 1 | - | 0317M21030A | F03FH00708 |
| 25 | 30 | 3 | 1 | - | 0317M NL3A | F03FH00692 |
| 35 | 30 | 3 | 1 | - | 0317M NP3A | F03FH00693 |
| 45 | 30 | 3 | 2 | 28 | 0317M NS3A | F03FH00694 |
| 55 | 30 | 3 | 2 | 41 | 0317M NT3A | F03FH00695 |
| 80 | 30 | 3 | 3 | 33 | 0317M NZ3A | F03FH00696 |
| 21 | 35 | 3 | 1 | - | 0317M21035A | F03FH00709 |
| 25 | 35 | 3 | 1 | - | 0317M PL3A | F03FH00697 |
| 30 | 35 | 3 | 1 | - | 0317M PN3A | F03FH00698 |
| 35 | 35 | 3 | 1 | - | 0317M PP3A | F03FH00699 |
| 45 | 35 | 3 | 2 | 28 | 0317M PS3A | F03FH00700 |
| 55 | 35 | 3 | 3 | 20,5 | 0317M PT3A | F03FH00701 |
| 80 | 35 | 3 | 3 | 33 | 0317M PZ3A | F03FH00702 |
| 25 | 40 | 3 | 1 | - | 0317M RL3A | F03FH00703 |
| 30 | 40 | 3 | 1 | - | 0317M RN3A | F03FH00704 |
| 40 | 40 | 3 | - | - | 0317M RR3 | F03FH00705 |
| 40 | 40 | 3 | 1 | - | 0317M RR3A | F03FH00706 |
| 55 | 40 | 3 | 3 | 20,5 | 0317M RT3A | F03FH00707 |



HW
X10TS

Standard blanks made by X10TS Freud's standard Carbide with 3 mm thickness.

- Suitable for natural softwood and hardwood.

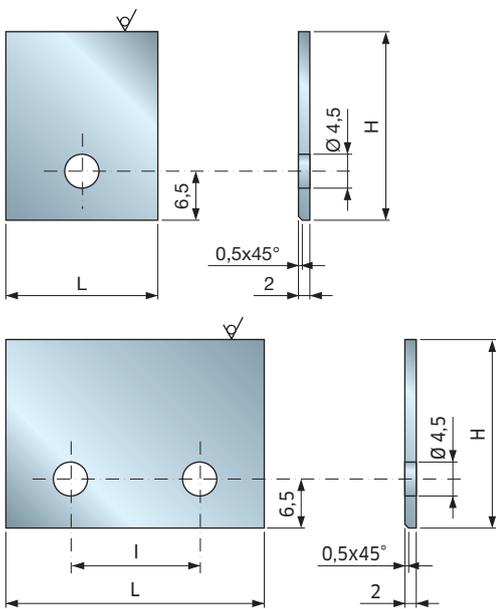
0318M

HW - Blanks for profiling 3 mm thickness



Softwood Hardwood

| L mm | H mm | S mm | NL | I mm | Freud Code | Art. No. |
|---------|---------|---------|----|---------|-------------|------------|
| 65 | 20 | 3 | 2 | 28 | 0318M HU3 | F03FH00710 |
| 20 | 25 | 3 | 1 | - | 0318M LH3A | F03FH00711 |
| 25 | 25 | 3 | 1 | - | 0318M LL3A | F03FH00712 |
| 30 | 25 | 3 | 1 | - | 0318M LN3A | F03FH02514 |
| 35 | 25 | 3 | 1 | - | 0318M LP3A | F03FH00713 |
| 45 | 25 | 3 | 2 | 28 | 0318M LS3A | F03FH00714 |
| 55 | 25 | 3 | 3 | 20,5 | 0318M LT3A | F03FH00715 |
| 70 | 25 | 3 | 2 | 41 | 0318M LV3A | F03FH00716 |
| 21 | 30 | 3 | 1 | - | 0318M21030A | F03FH00734 |
| 25 | 30 | 3 | 1 | - | 0318M NL3A | F03FH00717 |
| 35 | 30 | 3 | 1 | - | 0318M NP3A | F03FH00718 |
| 45 | 30 | 3 | 2 | 28 | 0318M NS3A | F03FH00719 |
| 55 | 30 | 3 | 3 | 20,5 | 0318M NT3A | F03FH00720 |
| 80 | 30 | 3 | 3 | 33 | 0318M NZ3A | F03FH00721 |
| 14,4 | 35 | 3 | 1 | - | 0318M PG3A | F03FH00722 |
| 21 | 35 | 3 | 1 | - | 0318M21035A | F03FH00735 |
| 25 | 35 | 3 | 1 | - | 0318M PL3A | F03FH00723 |
| 30 | 35 | 3 | 1 | - | 0318M PN3A | F03FH00724 |
| 35 | 35 | 3 | 1 | - | 0318M PP3A | F03FH00725 |
| 45 | 35 | 3 | 2 | 28 | 0318M PS3A | F03FH00726 |
| 55 | 35 | 3 | 3 | 20,5 | 0318M PT3A | F03FH00727 |
| 80 | 35 | 3 | 3 | 33 | 0318M PZ3A | F03FH00728 |
| 25 | 40 | 3 | 1 | - | 0318M RL3A | F03FH00729 |
| 30 | 40 | 3 | 1 | - | 0318M RN3A | F03FH00730 |
| 40 | 40 | 3 | 1 | - | 0318M RR3 | F03FH00731 |
| 40 | 40 | 3 | 1 | - | 0318M RR3A | F03FH00732 |
| 55 | 40 | 3 | 3 | 20,5 | 0318M RT3A | F03FH00733 |



HW
X10TS

Standard blanks made by X10TS Freud's standard Carbide with 2 mm thickness.

- Suitable for natural softwood and hardwood.

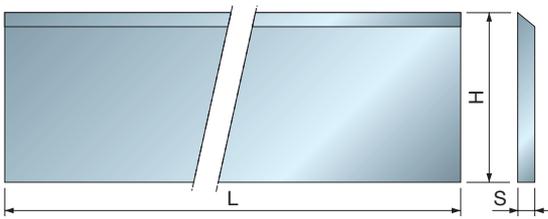
0339M

HW - Blanks for profiling
2 mm thickness - mirror finished



Softwood Hardwood

| L mm | H mm | S mm | NL | I mm | Freud Code | Art. No. |
|---------|---------|---------|----|---------|------------|------------|
| 15 | 15,3 | 2 | 1 | - | 0339M3WW2W | F03FH02551 |
| 16 | 15,3 | 2 | 1 | - | 0339M3XW2W | F03FH02537 |
| 15 | 20,3 | 2 | 1 | - | 0339M3WA2W | F03FH02548 |
| 16 | 20,3 | 2 | 1 | - | 0339M3XA2W | F03FH02552 |
| 20 | 20,3 | 2 | 1 | - | 0339M3AA2W | F03FH02560 |
| 25 | 20,3 | 2 | 1 | - | 0339M3BA2W | F03FH02557 |
| 30 | 20,3 | 2 | 1 | - | 0339M3DA2W | F03FH02538 |
| 30 | 20,3 | 2 | 2 | 14 | 0339M3DA2X | F03FH02587 |
| 35 | 20,3 | 2 | 1 | - | 0339M3FA2W | F03FH02559 |
| 35 | 20,3 | 2 | 2 | 14 | 0339M3FA2X | F03FH02585 |
| 40 | 20,3 | 2 | 2 | 26 | 0339M3GA2Y | F03FH02565 |
| 50 | 20,3 | 2 | 2 | 26 | 0339M3KA2Y | F03FH02563 |
| 60 | 20,3 | 2 | 2 | 26 | 0339M3LA2Y | F03FH02598 |
| 80 | 20,3 | 2 | 2 | 26 | 0339M3OA2Y | F03FH02602 |
| 15 | 25,3 | 2 | 1 | - | 0339M3WB2W | F03FH02549 |
| 16 | 25,3 | 2 | 1 | - | 0339M3XB2W | F03FH02536 |
| 20 | 25,3 | 2 | 1 | - | 0339M3AB2W | F03FH02571 |
| 25 | 25,3 | 2 | 1 | - | 0339M3BB2W | F03FH02572 |
| 30 | 25,3 | 2 | 1 | - | 0339M3DB2W | F03FH02573 |
| 30 | 25,3 | 2 | 2 | 14 | 0339M3DB2X | F03FH02574 |
| 35 | 25,3 | 2 | 1 | - | 0339M3FB2W | F03FH02541 |
| 35 | 25,3 | 2 | 2 | 14 | 0339M3FB2X | F03FH02590 |
| 40 | 25,3 | 2 | 2 | 26 | 0339M3GB2Y | F03FH02594 |
| 50 | 25,3 | 2 | 2 | 26 | 0339M3KB2Y | F03FH02597 |
| 60 | 25,3 | 2 | 2 | 26 | 0339M3LB2Y | F03FH02584 |
| 80 | 25,3 | 2 | 2 | 26 | 0339M3OB2Y | F03FH02544 |
| 15 | 30,3 | 2 | 1 | - | 0339M3WD2W | F03FH02550 |
| 16 | 30,3 | 2 | 1 | - | 0339M3XD2W | F03FH02553 |
| 20 | 30,3 | 2 | 1 | - | 0339M3AD2W | F03FH02579 |
| 25 | 30,3 | 2 | 1 | - | 0339M3BD2W | F03FH02580 |
| 30 | 30,3 | 2 | 1 | - | 0339M3DD2W | F03FH02539 |
| 30 | 30,3 | 2 | 2 | 14 | 0339M3DD2X | F03FH02581 |
| 35 | 30,3 | 2 | 1 | - | 0339M3FD2W | F03FH02591 |
| 35 | 30,3 | 2 | 2 | 14 | 0339M3FD2X | F03FH02575 |
| 40 | 30,3 | 2 | 2 | 26 | 0339M3GD2Y | F03FH02562 |
| 50 | 30,3 | 2 | 2 | 26 | 0339M3KD2Y | F03FH02564 |
| 60 | 30,3 | 2 | 2 | 26 | 0339M3LD2Y | F03FH02543 |
| 80 | 30,3 | 2 | 2 | 26 | 0339M3OD2Y | F03FH02569 |
| 20 | 35,3 | 2 | 1 | - | 0339M3AF2W | F03FH02554 |
| 25 | 35,3 | 2 | 1 | - | 0339M3BF2W | F03FH02561 |
| 30 | 35,3 | 2 | 1 | - | 0339M3DF2W | F03FH02540 |
| 30 | 35,3 | 2 | 2 | 14 | 0339M3DF2X | F03FH02582 |
| 35 | 35,3 | 2 | 1 | - | 0339M3FF2W | F03FH02583 |
| 35 | 35,3 | 2 | 2 | 14 | 0339M3FF2X | F03FH02576 |
| 40 | 35,3 | 2 | 2 | 26 | 0339M3GF2Y | F03FH02566 |
| 50 | 35,3 | 2 | 2 | 26 | 0339M3KF2Y | F03FH02577 |
| 60 | 35,3 | 2 | 2 | 26 | 0339M3LF2Y | F03FH02599 |
| 80 | 35,3 | 2 | 2 | 26 | 0339M3OF2Y | F03FH02601 |
| 20 | 40,3 | 2 | 1 | - | 0339M3AG2W | F03FH02555 |
| 25 | 40,3 | 2 | 1 | - | 0339M3BG2W | F03FH02586 |
| 30 | 40,3 | 2 | 1 | - | 0339M3DG2W | F03FH02588 |
| 30 | 40,3 | 2 | 2 | 14 | 0339M3DG2X | F03FH02558 |
| 35 | 40,3 | 2 | 1 | - | 0339M3FG2W | F03FH02592 |
| 35 | 40,3 | 2 | 2 | 14 | 0339M3FG2X | F03FH02593 |
| 40 | 40,3 | 2 | 2 | 26 | 0339M3GG2Y | F03FH02567 |
| 50 | 40,3 | 2 | 2 | 26 | 0339M3KG2Y | F03FH02542 |
| 60 | 40,3 | 2 | 2 | 26 | 0339M3LG2Y | F03FH02568 |
| 80 | 40,3 | 2 | 2 | 26 | 0339M3OG2Y | F03FH02545 |
| 30 | 45,3 | 2 | 1 | - | 0339M3DI2W | F03FH02589 |
| 40 | 45,3 | 2 | 2 | 26 | 0339M3GI2Y | F03FH02595 |
| 35 | 50,3 | 2 | 1 | - | 0339M3FK2W | F03FH02570 |
| 40 | 50,3 | 2 | 2 | 26 | 0339M3GK2Y | F03FH02596 |



CT01M

18%W HSS knives Standard dimensions

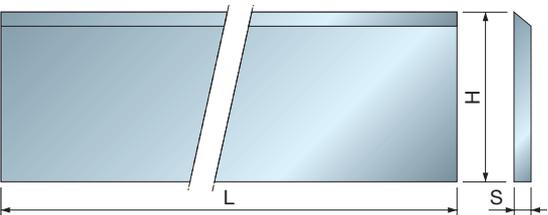


Softwood

Standard planerhead knives with 18% HSS.

- Box contains 2 pieces with same weight.
- Per balancing reasons fit same box knives in opposite tools seats.

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 60 | 30 | 3 | CT01MAA202 | |
| 80 | 30 | 3 | CT01MBA202 | |
| 100 | 30 | 3 | CT01MDA202 | |
| 120 | 30 | 3 | CT01MGA202 | |
| 130 | 30 | 3 | CT01MHA202 | |
| 140 | 30 | 3 | CT01MIA202 | |
| 150 | 30 | 3 | CT01MLA202 | |
| 160 | 30 | 3 | CT01MMA202 | |
| 180 | 30 | 3 | CT01MOA202 | |
| 200 | 30 | 3 | CT01MPA202 | |
| 230 | 30 | 3 | CT01MRA202 | |
| 410 | 30 | 3 | CT01MTB202 | |



CT010S

18%W HSS knives Special dimensions



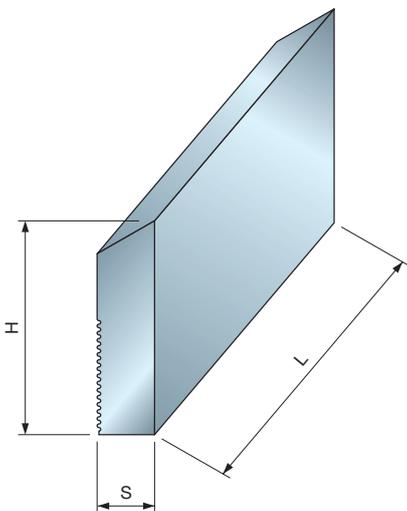
Softwood

Special planerhead knives with 18% HSS.

- Box contains 2 pieces with same weight.
- Per balancing reasons fit same box knives in opposite tools seats.

The codes are just a guideline and should be used for ordering purpose only.

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| <59 | 30 | 3 | CT010S AA2 | |
| 61-79 | 30 | 3 | CT010S BA2 | |
| 81-99 | 30 | 3 | CT010S CA2 | |
| 101-119 | 30 | 3 | CT010S DA2 | |
| 121-129 | 30 | 3 | CT010S EA2 | |
| 131-149 | 30 | 3 | CT010S FA2 | |
| 151-159 | 30 | 3 | CT010S GA2 | |
| 161-179 | 30 | 3 | CT010S HA2 | |
| 181-199 | 30 | 3 | CT010S IA2 | |
| 201-209 | 30 | 3 | CT010S LA2 | |
| 211-229 | 30 | 3 | CT010S MA2 | |



CZ01M

HSS serrated back knives

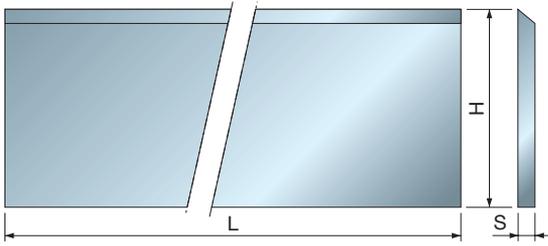
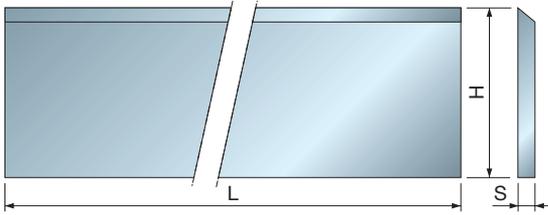


Softwood

Profiling HSS knives with serrated surface.

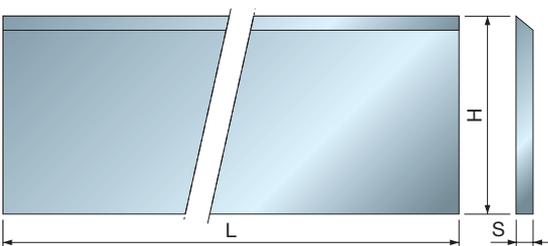
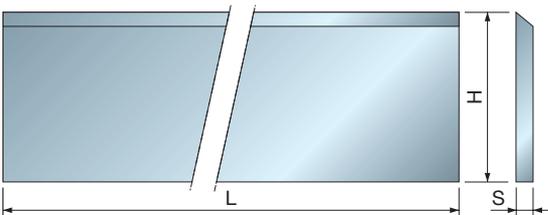
- Suitable for Freud **TPCZM** planners.
- Suitable for cutting all softwood and hardwood.

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 60 | 50 | 8 | CZ01MDB202 | F03FA21895 |
| 80 | 50 | 8 | CZ01MDC202 | F03FA21896 |
| 100 | 50 | 8 | CZ01MDD202 | F03FA21897 |
| 150 | 50 | 8 | CZ01MDF202 | F03FA21898 |
| 60 | 60 | 8 | CZ01MHB202 | F03FA21899 |
| 80 | 60 | 8 | CZ01MHC202 | F03FA21900 |
| 100 | 60 | 8 | CZ01MHD202 | F03FA21901 |
| 150 | 60 | 8 | CZ01MHF202 | F03FA21902 |
| 60 | 70 | 8 | CZ01MNB202 | F03FA21903 |
| 80 | 70 | 8 | CZ01MNC202 | F03FA21904 |
| 100 | 70 | 8 | CZ01MND202 | F03FA21905 |
| 150 | 70 | 8 | CZ01MNF202 | F03FA21906 |



Standard planerhead knives with 18% HSS.

- Box contains 2 pieces with same weight.
- Per balancing reasons fit same box knives in opposite tools seats.



Special planerhead knives with 18% HSS.

- Box contains 2 pieces with same weight.
- Per balancing reasons fit same box knives in opposite tools seats.

The codes are just a guideline and should be used for ordering purpose only.

CP01M

18%W HSS planing knives Standard dimensions



Softwood

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 250 | 30 | 3 | CP01MAB202 | F03FA18136 |
| 300 | 30 | 3 | CP01MCB202 | F03FA18139 |
| 350 | 30 | 3 | CP01MDB202 | F03FA18141 |
| 400 | 30 | 3 | CP01MEB202 | F03FA18143 |
| 500 | 30 | 3 | CP01MGB202 | F03FA18147 |
| 510 | 30 | 3 | CP01MHB202 | F03FA18149 |
| 530 | 30 | 3 | CP01MIB402 | F03FA18151 |
| 600 | 30 | 3 | CP01MKB202 | F03FA18154 |
| 610 | 30 | 3 | CP01MLB202 | F03FA18156 |
| 630 | 30 | 3 | CP01MMB202 | F03FA18158 |
| 640 | 30 | 3 | CP01MNB402 | F03FA18160 |
| 710 | 30 | 3 | CP01MOB202 | F03FA18162 |
| 1010 | 30 | 3 | CP01MTB202 | F03FA18164 |

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 280 | 35 | 3 | CP01MBA202 | F03FA18137 |
| 300 | 35 | 3 | CP01MCA202 | F03FA18138 |
| 350 | 35 | 3 | CP01MDA202 | F03FA18140 |
| 400 | 35 | 3 | CP01MEA202 | F03FA18142 |
| 410 | 35 | 3 | CP01MFA202 | F03FA18144 |
| 450 | 35 | 3 | CP01MFB202 | F03FA18145 |
| 500 | 35 | 3 | CP01MGA202 | F03FA18146 |
| 510 | 35 | 3 | CP01MHA202 | F03FA18148 |
| 520 | 35 | 3 | CP01MJA202 | F03FA18152 |
| 530 | 35 | 3 | CP01MIA202 | F03FA18150 |
| 600 | 35 | 3 | CP01MKA202 | F03FA18153 |
| 610 | 35 | 3 | CP01MLA202 | F03FA18155 |
| 630 | 35 | 3 | CP01MMA202 | F03FA18157 |
| 640 | 35 | 3 | CP01MNA202 | F03FA18159 |
| 710 | 35 | 3 | CP01MOA202 | F03FA18161 |
| 1010 | 35 | 3 | CP01MTA202 | F03FA18163 |

CP010S

18%W HSS planing knives Special dimensions

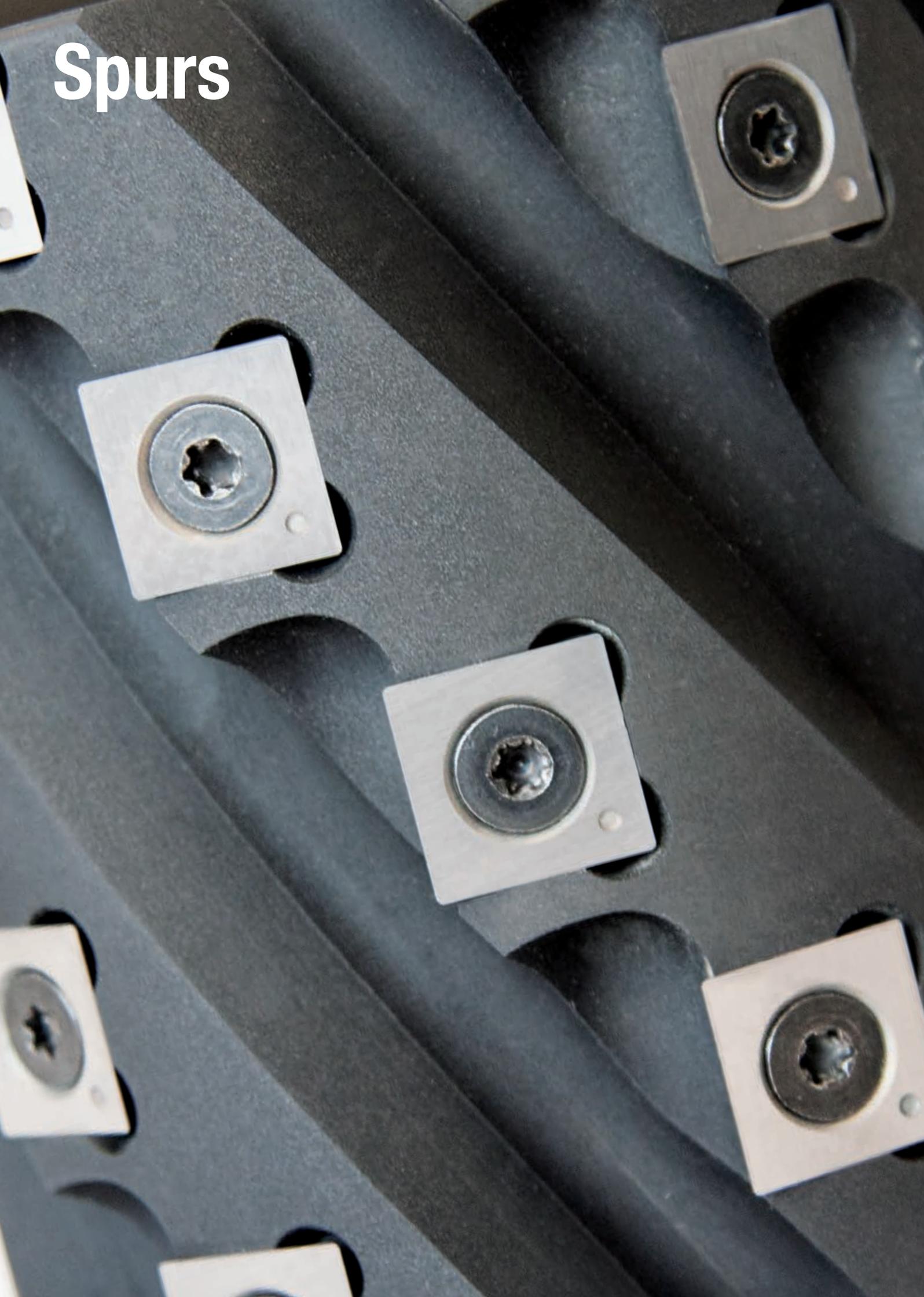


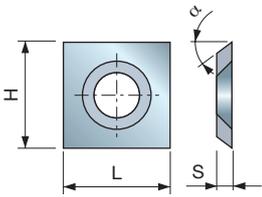
Softwood

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| 231-249 | 30 | 3 | CP010S AB2 | |
| 251-299 | 30 | 3 | CP010S BB2 | |
| 301-349 | 30 | 3 | CP010S CB2 | |
| 351-399 | 30 | 3 | CP010S DB2 | |
| 401-499 | 30 | 3 | CP010S EB2 | |
| 501-599 | 30 | 3 | CP010S FB2 | |
| 601-699 | 30 | 3 | CP010S GB2 | |
| 701-799 | 30 | 3 | CP010S HB2 | |

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| < 299 | 35 | 3 | CP010S AA2 | |
| 301-349 | 35 | 3 | CP010S BA2 | |
| 351-399 | 35 | 3 | CP010S CA2 | |
| 411-499 | 35 | 3 | CP010S DA2 | |
| 511-529 | 35 | 3 | CP010S EA2 | |
| 531-599 | 35 | 3 | CP010S FA2 | |
| 611-629 | 35 | 3 | CP010S GA2 | |
| 641-709 | 35 | 3 | CP010S HA2 | |

Spurs





Wide range of squared spurs with 4 cutting sides with variable Carbide types and relief angle to cover all available materials.

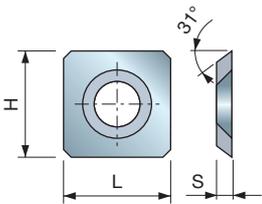
RG01M

HW - Square disposable spurs - Type A



Softwood Hardwood Chipboard MDF Plywood Plastics

| L mm | H mm | S mm | Quality of HW | α | Freud Code | Art. No. |
|---------|---------|---------|---------------|----------|------------|------------|
| 13,5 | 13,5 | 3 | H00S | 30° | RG01MDA310 | F03FH03582 |
| 14 | 14 | 1,2 | K20S | 31° | RG01MAB310 | F03FH03035 |
| 14 | 14 | 2 | K20S | 30° | RG01MAF310 | F03FH03285 |
| 14 | 14 | 2 | MG10 | 31° | RG01MAE310 | F03FH04113 |
| 14 | 14 | 2 | K01S | 30° | RG01MAL310 | F03FH03777 |
| 14 | 14 | 2 | K20S | 31° | RG01MAA310 | F03FH03034 |
| 14 | 14 | 2 | H00S | 31° | RG01MAI310 | F03FH03791 |
| 14 | 14 | 2 | H00XA | 31° | RG01MAH310 | F03FH03037 |
| 14 | 14 | 2 | MG10 | 37° | RG01MAD310 | F03FH03036 |
| 15 | 15 | 2,5 | K01S | 30° | RG01MBE310 | F03FH03723 |



Range of squared spurs with 4 cutting sides and 4 beveled corners.

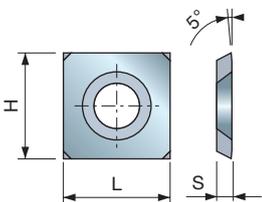
RG01M

HW - Square disposable spurs - Type B



Softwood Hardwood MDF

| L mm | H mm | S mm | Quality of HW | α | Freud Code | Art. No. |
|---------|---------|---------|---------------|----------|------------|------------|
| 15 | 15 | 2,5 | K20S | 31° | RG01MBA310 | F03FH03038 |
| 14,6 | 14,6 | 2,5 | MG10 | 31° | RG01MCA310 | F03FH03040 |
| 15 | 15 | 2,5 | MG10 | 37° | RG01MBD310 | F03FH03039 |



Range of squared spurs with 4 cutting sides and 4 beveled corners.

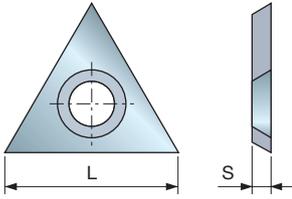
RG01M

HW - Square disposable spurs - Type C



Softwood Hardwood

| L mm | H mm | S mm | Quality of HW | α | Freud Code | Art. No. |
|---------|---------|---------|---------------|----------|------------|------------|
| 14 | 14 | 2 | K20S | 31° | RG01MAG310 | F03FC24180 |



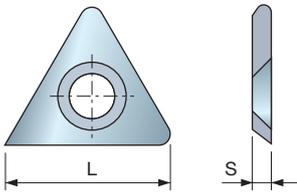
Triangular spurs with sharp edge.

RG02M HW - Triangular disposable spurs



Softwood Hardwood Laminated Chipboard

| L mm | H mm | S mm | Quality of HW | α | Freud Code | Art. No. |
|---------|---------|---------|---------------|----------|------------|------------|
| 22,86 | - | 2,5 | K20S | 31° | RG02MAA305 | F03FH03041 |
| 22,86 | - | 2,5 | K01S | 31° | RG02MBE305 | F03FH03725 |



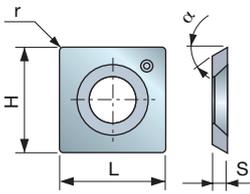
Triangular spurs with radius edge.

RG03M HW - Triangular disposable spurs with radius



Softwood Hardwood Laminated Chipboard

| L mm | H mm | S mm | Quality of HW | α | Freud Code | Art. No. |
|---------|---------|---------|---------------|----------|------------|------------|
| 21,9 | - | 2,5 | K20S | 31° | RG03MAA305 | F03FH03042 |
| 21,9 | - | 2,5 | K01S | 31° | RG03MBE305 | F03FH03727 |



**HW
K01S**

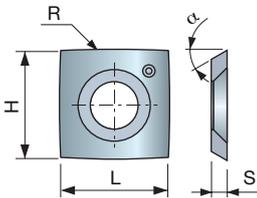
Razors made by K01S Freud's Carbide with rounded corners improve the quality of cut on spiral cutterheads, avoiding the lines left by the sharp edges of conventional square spurs.

RR01 HW - Razor with rounded corners



Softwood Hardwood Laminated Chipboard

| L mm | H mm | S mm | r mm | Quality of HW | α | Freud Code | Art. No. |
|---------|---------|---------|---------|---------------|----------|------------|------------|
| 14 | 14 | 2 | 0,5 | K01S | 30° | RR01MAA310 | F03FH04007 |
| 14 | 14 | 2 | 0,5 | K01S | 37° | RR01MAB310 | F03FH04008 |
| 14,6 | 14,6 | 2,5 | 0,5 | K01S | 30° | RR01MBA310 | F03FH04009 |
| 15 | 15 | 2,5 | 0,5 | K01S | 30° | RR01MCA310 | F03FH04010 |
| 15 | 15 | 2,5 | 0,5 | K01S | 37° | RR01MCB310 | F03FH04011 |



**HW
K01S**

Razors made by K01S Freud's Carbide with rounded edges greatly reduce tear-out on helical cutterheads and planers.

- Their design prevents from wave generation otherwise created by the shear angle positioning.

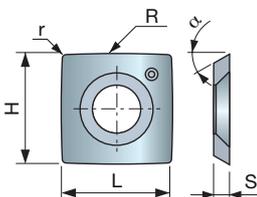
RR10

HW - 30° razor with rounded edges



Softwood Hardwood Laminated Chipboard

| L mm | H mm | S mm | R mm | Quality of HW | α | Freud Code | Art. No. |
|---------|---------|---------|---------|---------------|----------|------------|------------|
| 14 | 14 | 2 | 150 | K01S | 30° | RR10MAA310 | F03FH04012 |
| 14,6 | 14,6 | 2,5 | 150 | K01S | 30° | RR10MBA310 | F03FH04043 |
| 15 | 15 | 2,5 | 150 | K01S | 30° | RR10MCA310 | F03FH04014 |
| 15 | 15 | 2,5 | 50 | K01S | 30° | RR10MCB310 | F03FH04015 |



**HW
K01S**

Razors made by K01S Freud's Carbide with rounded edges and corners greatly reduce tear-out on helical cutterheads and planers.

- Their design prevents from wave generation otherwise created by the shear angle positioning.

RR11

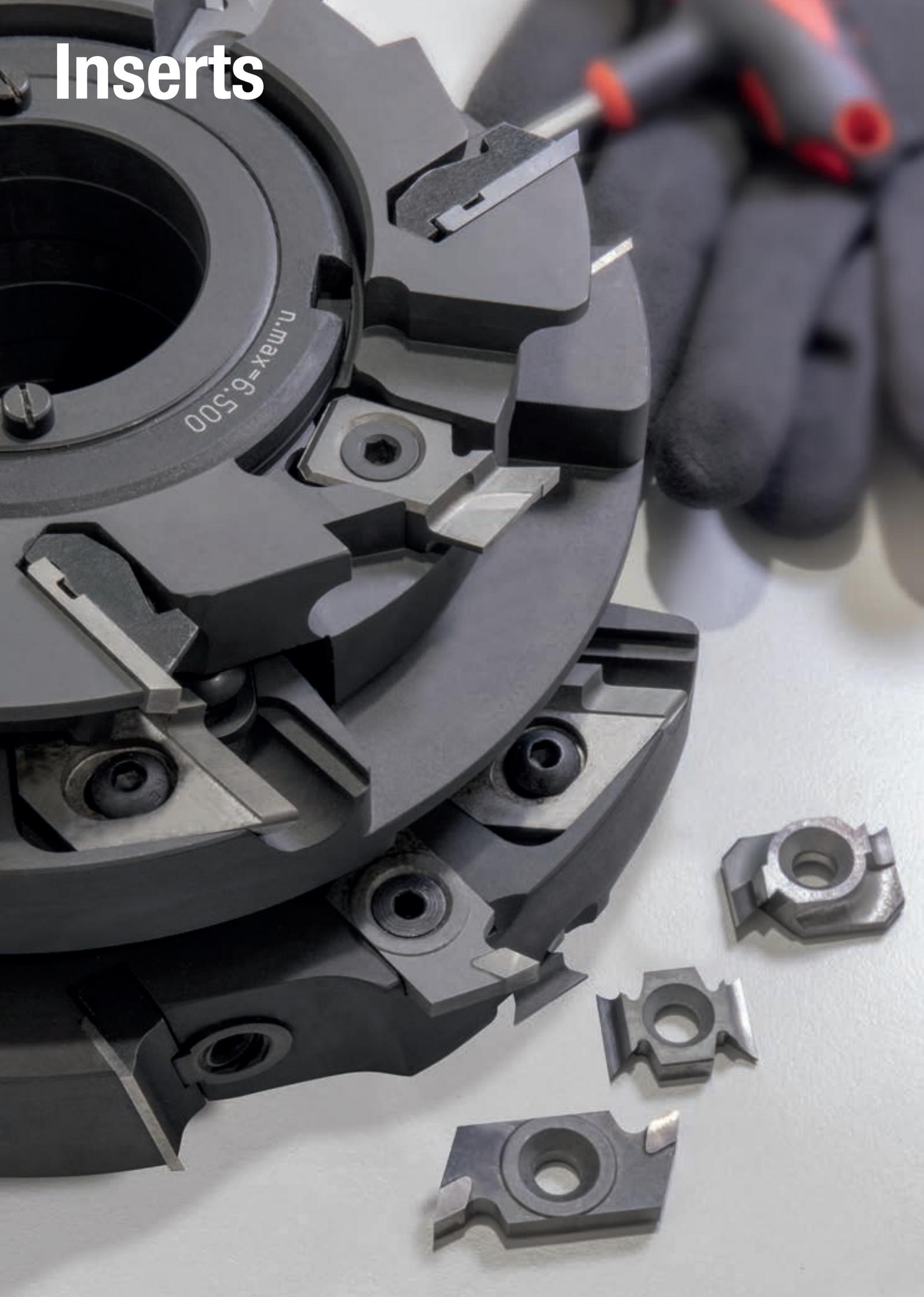
HW - 30° razor with both rounded corners and edges

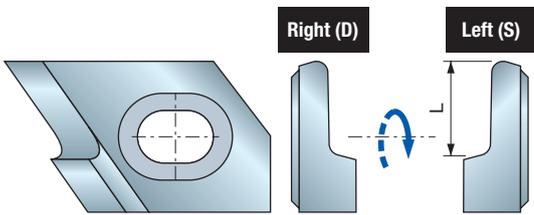


Softwood Hardwood Laminated Chipboard

| L mm | H mm | S mm | R mm | r mm | Quality of HW | α | Freud Code | Art. No. |
|---------|---------|---------|---------|---------|---------------|----------|------------|------------|
| 14 | 14 | 2 | 150 | 0,5 | K01S | 30° | RR11MAA310 | F03FH04016 |
| 14,6 | 14,6 | 2,5 | 150 | 0,5 | K01S | 30° | RR11MBA310 | F03FH04017 |
| 15 | 15 | 2,5 | 150 | 0,5 | K01S | 30° | RR11MCA310 | F03FH04018 |
| 15 | 15 | 2,5 | 50 | 0,5 | K01S | 30° | RR11MCB310 | F03FH04020 |
| 15 | 15 | 2,5 | 115 | 0,5 | K01S | 30° | RR11MCC310 | F03FH04019 |

Inserts





IG25MD IG25MS

HW - Multipurpose inserts



Softwood Hardwood

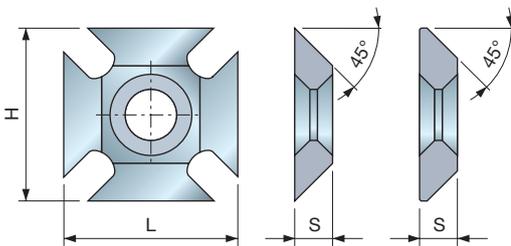
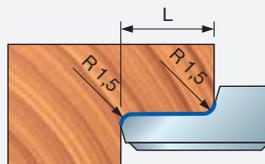
| L mm | H mm | S mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 10 | - | - | IG25MD10302 | F03FC24164 | IG25MS10302 | F03FC24172 |
| 11 | - | - | IG25MD11302 | F03FC24165 | IG25MS11302 | F03FC24173 |
| 12 | - | - | IG25MD12302 | F03FC24166 | IG25MS12302 | F03FC24174 |
| 13 | - | - | IG25MD13302 | F03FC24167 | IG25MS13302 | F03FC24175 |
| 14 | - | - | IG25MD14302 | F03FC24168 | IG25MS14302 | F03FC24176 |
| 15 | - | - | IG25MD15302 | F03FC24169 | IG25MS15302 | F03FC24177 |
| 16 | - | - | IG25MD16302 | F03FC24170 | IG25MS16302 | F03FC24178 |
| 18 | - | - | IG25MD18302 | F03FC24171 | IG25MS18302 | F03FC24179 |

HW
K20S

Resharpenable inserts made by K20S Freud's Carbide.

- Suitable for rounded rebates.
- Available in both left and right rotation.

Example of application of inserts IG25M



IG01MAA305
F03FH02983

IG01MBA305
F03FH02984

IG01M

HW - 45° Beveling inserts



Softwood Hardwood

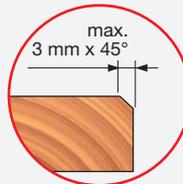
| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 23 | 23 | 5 | IG01MAA305 | F03FH02983 |
| 23 | 23 | 5 | IG01MBA305 | F03FH02984 |

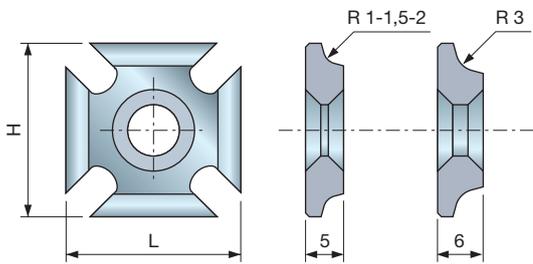
HW
K20S

Beveling inserts made by K20S Freud's Carbide and 8 cutting edges.

- It can be used reversibly and with rotation in both senses.
- Particularly indicated for natural softwood and hardwood.
- Perfectly interchangeable with the rounding inserts IG02M.

Example of application of inserts IG01M





IG02M

HW - Rounding inserts



Softwood Hardwood

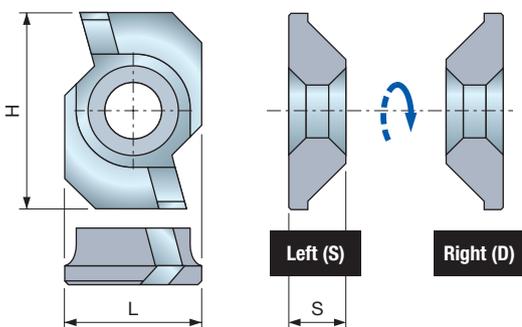
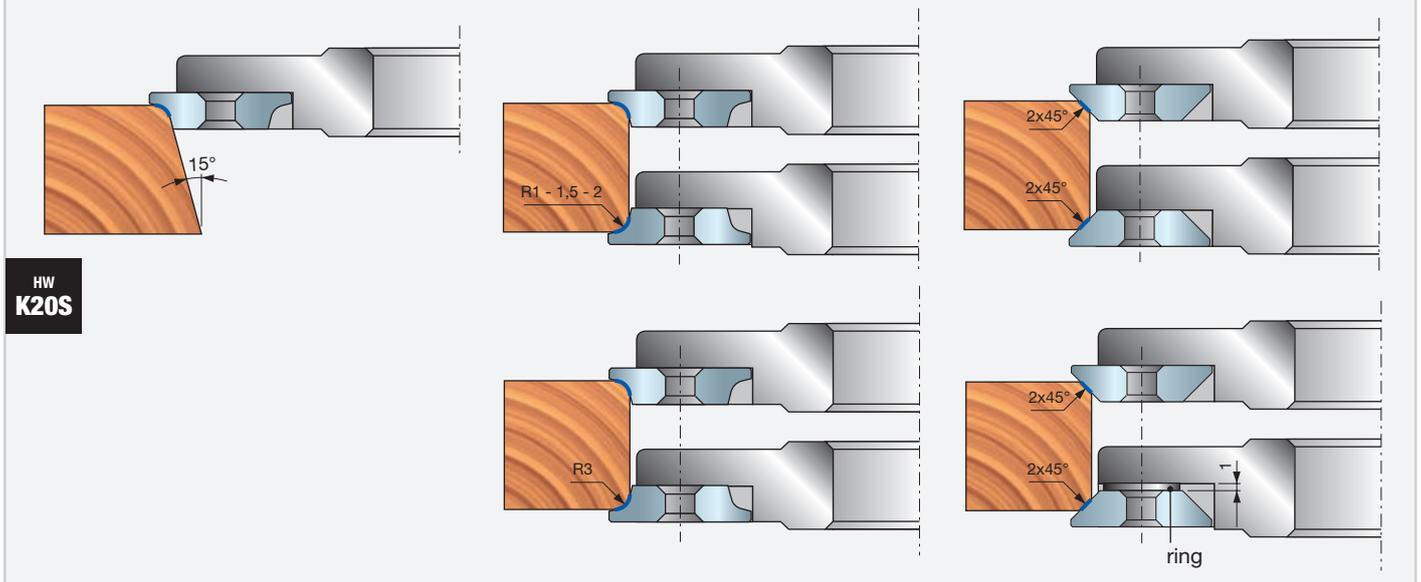
| L mm | H mm | S mm | I mm | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 23 | 23 | 5 | 1 | IG02MAA305 | F03FH02985 |
| 23 | 23 | 5 | 1,5 | IG02MAB305 | F03FH02986 |
| 23 | 23 | 5 | 2 | IG02MAC305 | F03FH02987 |
| 23 | 23 | 6 | 3 | IG02MAE305 | F03FH02988 |

Rounding inserts made by K20S Freud's Carbide and 8 cutting edges.

- It can be used reversibly and with rotation in both senses.
- Particularly indicated for natural softwood and hardwood.
- Perfectly interchangeable with the rounding inserts **IG01M**.

Note: Rounding insert **IG02MAE305** is interchangeable with insert **IG01MBA305**, for carrying out bevels with a 2 mm x 45°, only if a 1 mm ring is used (see example).

Example of application of inserts IG01M and IG02M



IG21MD IG21MS

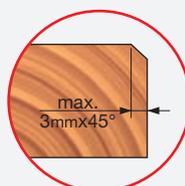
HW - 45° Beveling inserts with shear angle



Softwood Hardwood

| L mm | H mm | S mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 18 | 26 | 7,5 | IG21MDAA305 | F03FH03005 | IG21MSAA305 | F03FH03006 |

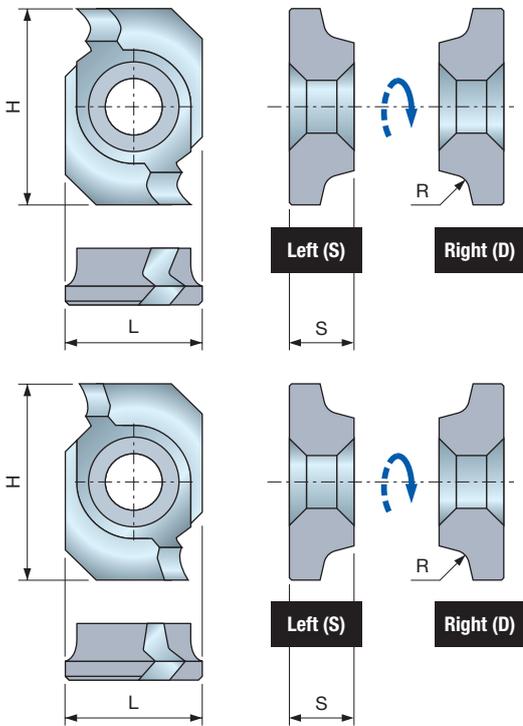
Example of application of inserts IG21MD/S



HW
K20S

Beveling inserts made by K20S Freud's Carbide and designed with a shear angle.

- Particularly indicated for natural softwood and hardwood.
- Perfectly interchangeable with rounding inserts **IG22M**.



IG22MD IG22MS

HW - Rounding inserts with shear angle



Softwood Hardwood

Inserts with positive shear angle

| L mm | H mm | S mm | R mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 18 | 26 | 8,5 | 1,5 | IG22MDAB305 | F03FH03007 | IG22MSAB305 | F03FH03013 |
| 18 | 26 | 8,5 | 2 | IG22MDAC305 | F03FH03008 | IG22MSAC305 | F03FH03014 |
| 18 | 26 | 8,5 | 3 | IG22MDAE305 | F03FH03009 | IG22MSAE305 | F03FH03015 |

Inserts with negative shear angle

| L mm | H mm | S mm | R mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 18 | 26 | 8,5 | 1,5 | IG22MDZB305 | F03FH03010 | IG22MSZB305 | F03FH03016 |
| 18 | 26 | 8,5 | 2 | IG22MDZC305 | F03FH03011 | IG22MSZC305 | F03FH03017 |
| 18 | 26 | 8,5 | 3 | IG22MDZE305 | F03FH03012 | IG22MSZE305 | F03FH03018 |

HW K20S

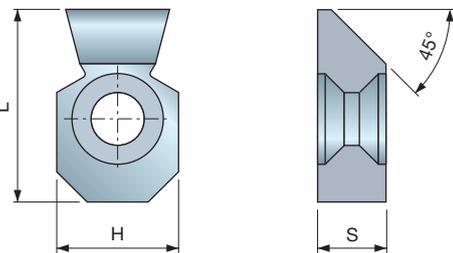
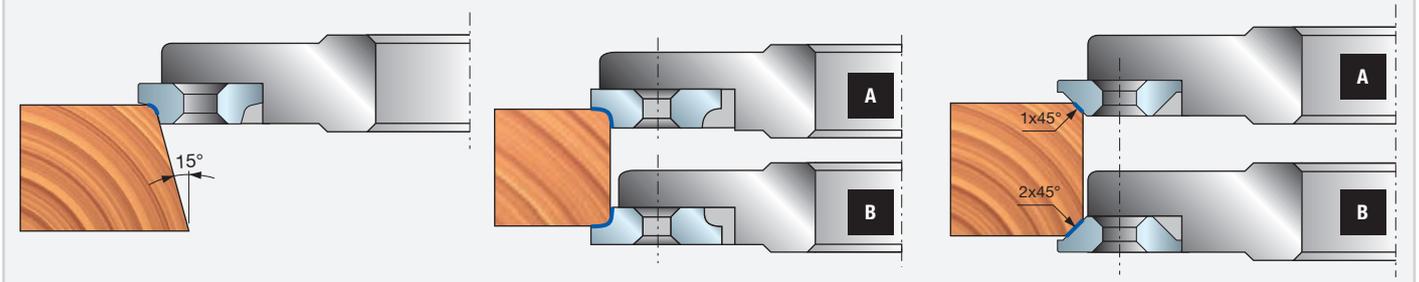
Rounding inserts made by K20S Freud's Carbide and designed with a shear angle.

- Particularly indicated for natural softwood and hardwood.
- Perfectly interchangeable with rounding inserts IG21M.

IG22MDA-MSA... Inserts with positive shear angle.

IG22MDZ-MSZ... Inserts with negative shear angle.

Example of application of inserts IG21MD/S and IG22MD/S



IG33M

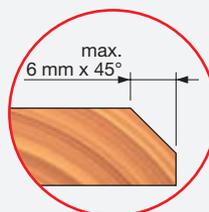
HW - 45° Beveling inserts with shear angle



Softwood Hardwood

| L mm | H mm | S mm | Chamfer | Freud Code | Art. No. |
|---------|---------|---------|---------|------------|------------|
| 25,5 | 16 | 9 | 45° | IG33MAD305 | F03FH03021 |

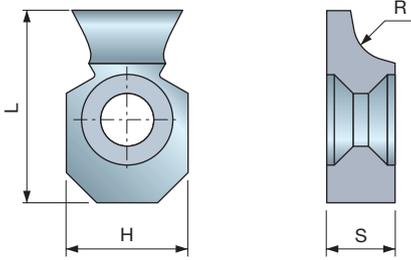
Example of application of inserts IG33M



HW K20S

Beveling inserts made by K20S Freud's Carbide suitable for both rotation sense and 2 cutting edges (1 for right hand rotation and 1 for left hand rotation).

- Indicated for natural softwood and hardwood.
- Perfectly interchangeable with rounding inserts IG33MAA305 and IG33MAB305.



IG33M

HW - Rounding inserts with shear angle



Softwood Hardwood

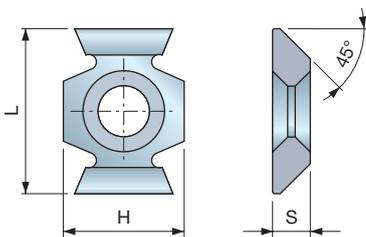
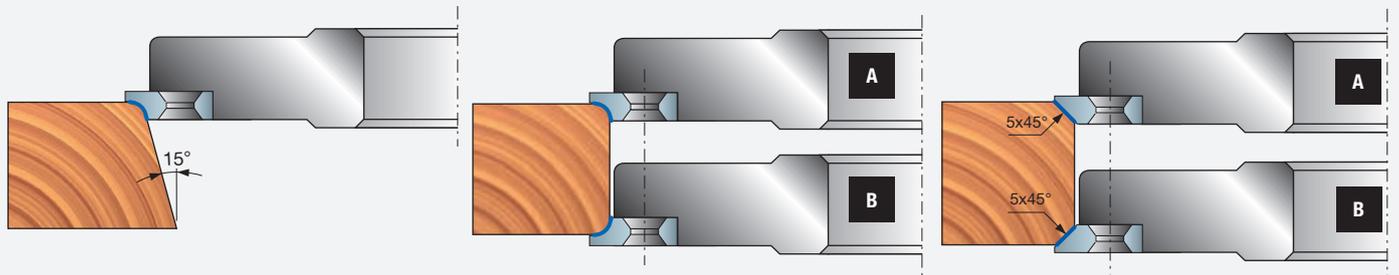
HW
K20S

Rounding inserts made by K20S Freud's Carbide suitable for both rotation sense and 2 cutting edges (1 for right hand rotation and 1 for left hand rotation).

- Indicated for natural softwood and hardwood.
- Perfectly interchangeable with beveling inserts **IG33MAD305**.

| L | H | S | R | Freud Code | Art. No. |
|------|----|----|----|-------------------|------------|
| mm | mm | mm | mm | | |
| 25,5 | 16 | 9 | 3 | IG33MAA305 | F03FH03019 |
| 25,5 | 16 | 9 | 5 | IG33MAB305 | F03FH03020 |

Example of application of inserts IG33M



IG51M

HW - 45° Beveling inserts with shear angle



Softwood Hardwood

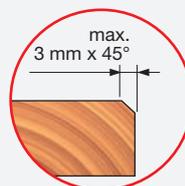
HW
K20S

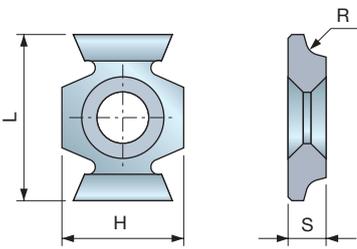
Beveling insert made by K20S Freud's Carbide suitable for both rotation sense and 4 cutting edges (2 for right hand rotation and 2 for left hand rotation).

- Indicated for natural softwood and hardwood.
- Perfectly interchangeable with rounding inserts **IG52M**.

| L | H | S | Freud Code | Art. No. |
|----|----|----|-------------------|------------|
| mm | mm | mm | | |
| 22 | 16 | 5 | IG51MBA305 | F03FH03022 |

Example of application of inserts IG51M





HW
K20S

Rounding inserts made by K20S Freud's Carbide suitable for both rotation sense and 4 cutting edges (2 for right hand rotation and 2 for left hand rotation).

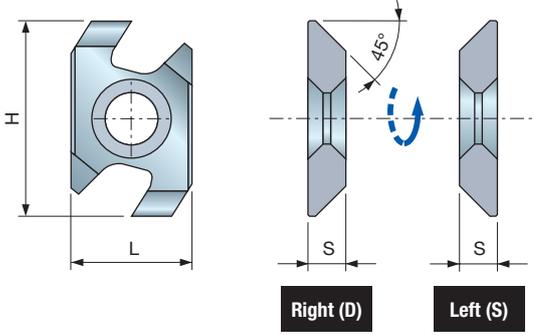
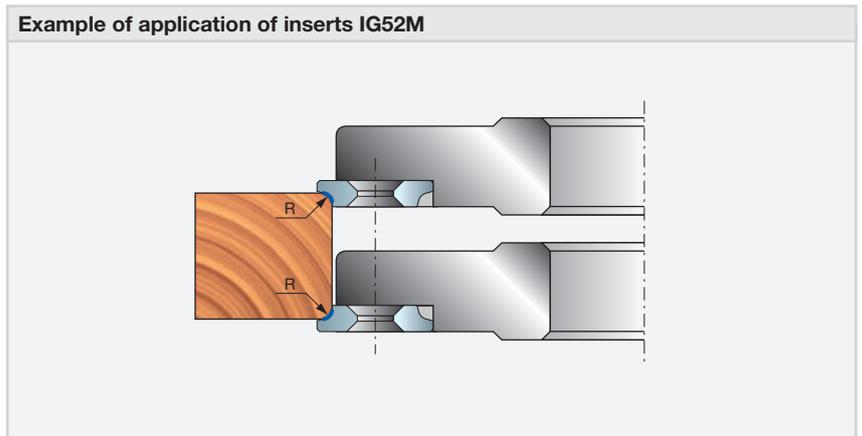
- Indicated for natural softwood and hardwood.
- Perfectly interchangeable with rounding inserts **IG52M**.

IG52M HW - Rounding inserts with shear angle



Softwood Hardwood

| L mm | H mm | S mm | R mm | Freud Code | Art. No. |
|---------|---------|---------|---------|-------------------|------------|
| 22 | 16 | 5 | 1,5 | IG52MAB305 | F03FH03023 |
| 22 | 16 | 5 | 2 | IG52MAC305 | F03FH03024 |
| 22 | 16 | 5 | 3 | IG52MAE305 | F03FH03025 |



IG61MD IG61MS HW - Beveling inserts with anti-kickback technology



Softwood Hardwood

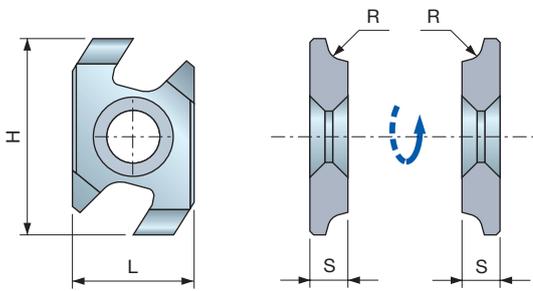
| L mm | H mm | S mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 26 | 16 | 5 | IG61MDBA305 | F03FH03026 | IG61MSBA305 | F03FH03027 |

HW
K20S

Beveling inserts in K20S Freud's Carbide with anti-kickback technology for MAN feed tools.

- Indicated for natural softwood and hardwood.
- Perfectly interchangeable with rounding inserts **IG62M**.





IG62MD IG62MS

HW - Rounding inserts with anti-kickback technology



Softwood Hardwood

HW
K20S

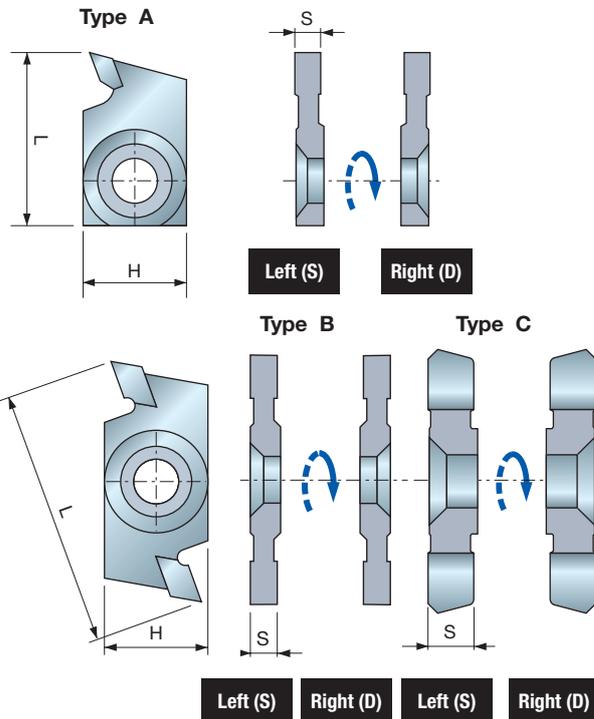
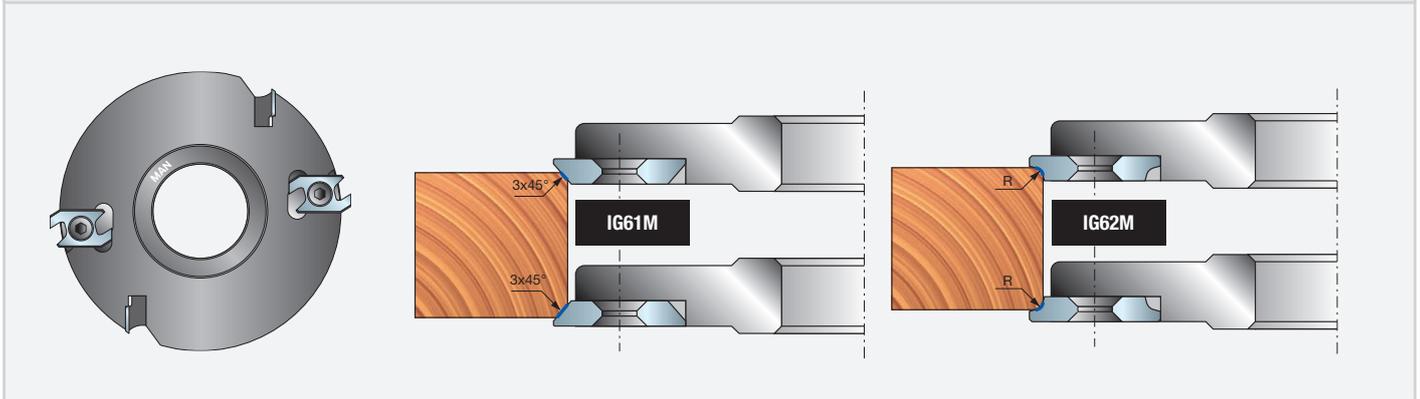
Right (D)

Left (S)

- Rounding inserts in K20S Freud's Carbide with anti-kickback technology for MAN feed tools.
- Indicated for natural softwood and hardwood.
 - Perfectly interchangeable with rounding inserts **IG61M**.

| L mm | H mm | S mm | R mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 26 | 16 | 5 | 1,5 | IG62MDAB305 | F03FH03028 | IG62MSAB305 | F03FH03031 |
| 26 | 16 | 5 | 2 | IG62MDAC305 | F03FH03029 | IG62MSAC305 | F03FH03032 |
| 26 | 16 | 5 | 3 | IG62MDAE305 | F03FH03030 | IG62MSAE305 | F03FH03033 |

Example of application of inserts IG61MD/S and IG62MD/S



IG04MD IG04MS

HW - Grooving inserts



Softwood Hardwood

| L mm | H mm | S mm | Type | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|------|-------------------------|------------|------------------------|------------|
| 27 | 16 | 3 | A | IG04MDAC3T05 | F03FC24153 | IG04MSAC3T05 | F03FC24153 |
| 27 | 16 | 4 | A | IG04MDAA3T05 | F03FC24151 | IG04MSAA3T05 | F03FC24151 |
| 27 | 16 | 5 | A | IG04MDAB3T05 | F03FC24152 | IG04MSAB3T05 | F03FC24152 |
| 27 | 16 | 6 | A | IG04MDAD3T05 | F03FC24154 | IG04MSAD3T05 | F03FC24154 |

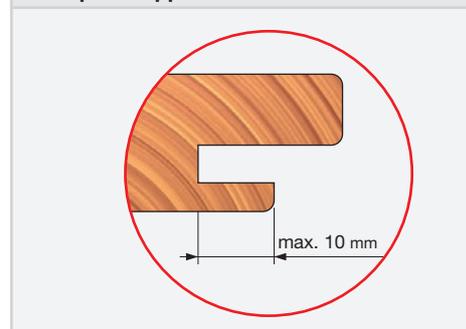
| L mm | H mm | S mm | Type | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|------|-------------------------|------------|------------------------|------------|
| 40 | 16 | 3 | B | IG04MDAC305 | F03FH02992 | IG04MSAC305 | F03FH02996 |
| 40 | 16 | 4 | B | IG04MDAA305 | F03FH03409 | IG04MSAA305 | F03FH02994 |
| 40 | 16 | 5 | B | IG04MDAB305 | F03FH02991 | IG04MSAB305 | F03FH02995 |
| 40 | 16 | 6 | B | IG04MDAD305 | F03FH02993 | IG04MSAD305 | F03FH02997 |

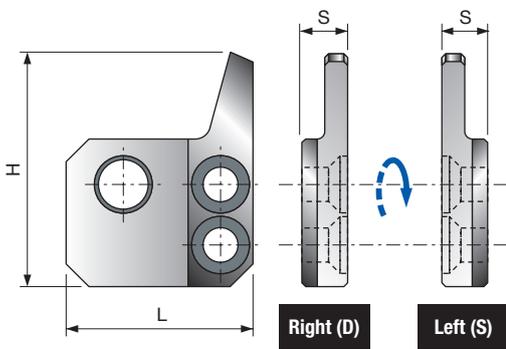
| L mm | H mm | S mm | Type | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|------|-------------------------|------------|------------------------|------------|
| 12 | 12 | 1,5 | C | IG04MDAL305 | F03FH03358 | IG04MSAL305 | F03FH03359 |

HW
K30S

- Grooving inserts made with K30S Freud's Carbide tips.
- Available in left and right rotation version.
 - Max groove depth 10 mm.
 - Indicated for natural softwood and hardwood.

Example of application of inserts IG04MD/S





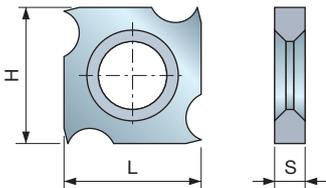
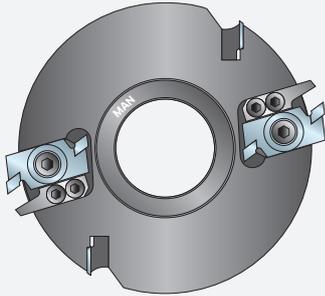
Deflectors suitable for standard **IG04M** grooving inserts as anti-kickback device.
 • Component for MAN feed tools.

ID04MD ID04MS

Deflectors for inserts IG04MD and IG04MS

| L mm | H mm | S mm | Use for | Freud Code | Art. No. |
|---------|---------|---------|-------------|-------------|------------|
| 24,5 | 30,8 | 6 | IG04MDAA305 | ID04MDAA901 | F03FC24133 |
| 24,5 | 30,8 | 7 | IG04MDAB305 | ID04MDAB901 | F03FC24134 |
| 24,5 | 30,8 | 6 | IG04MDAC305 | ID04MDAC901 | F03FC24135 |
| 24,5 | 30,8 | 8 | IG04MDAD305 | ID04MDAD901 | F03FC24136 |
| 24,5 | 30,8 | 6 | IG04MSAA305 | ID04MSAA901 | F03FC24137 |
| 24,5 | 30,8 | 7 | IG04MSAB305 | ID04MSAB901 | F03FC24138 |
| 24,5 | 30,8 | 6 | IG04MSAC305 | ID04MSAC901 | F03FC24139 |
| 24,5 | 30,8 | 8 | IG04MSAD305 | ID04MSAD901 | F03FC24140 |

Example of application of deflector ID04MD/S



CG03M

HW - Disposable four cutting edges knives

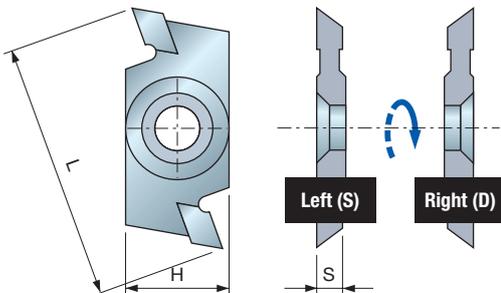


Softwood Hardwood

HW
K20S

Disposable knives in K20S Freud's Carbide with 4 cutting edges.
 • Indicated for softwood and hardwood.

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 18 | 18 | 1,9 | CG03MAA310 | F03FH02876 |
| 18 | 18 | 2,9 | CG03MAB310 | F03FH02877 |
| 18 | 18 | 4 | CG03MAC310 | F03FH02878 |
| 18 | 18 | 5,5 | CG03MAD310 | F03FH02879 |



HW
K30S

Spurs inserts made with K30S Freud's Carbide tips.
 • Available in left and right rotation version.
 • Indicated for natural softwood and hardwood.

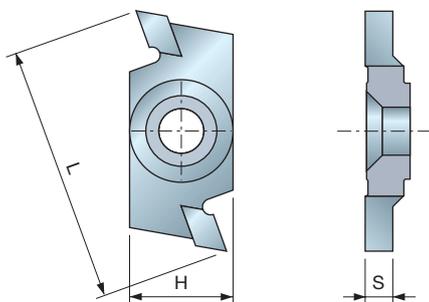
IG05MD IG05MS

HW - Spur inserts



Softwood Hardwood

| L mm | H mm | S mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 40 | 16 | 4 | IG05MDAA305 | F03FH02998 | IG05MSAA305 | F03FH02999 |



HW
K30S

Grooving insert made with K30S Freud's Carbide tips and designed for beveled grooves.

- Available in left and right rotation version.
- Max groove depth 6,5 mm.
- Indicated for natural softwood and hardwood.

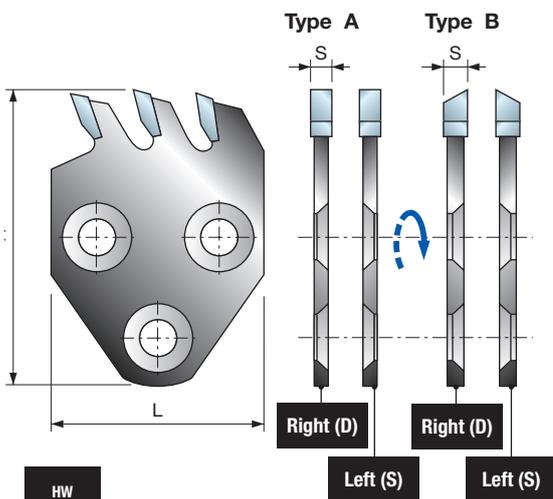
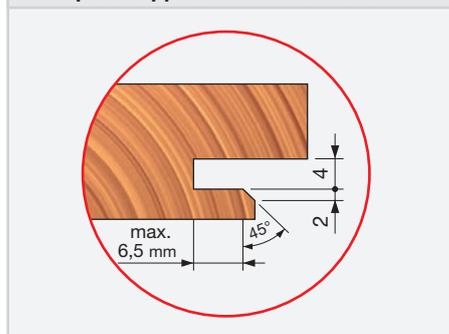
IG17MD HW - Insert for beveled grooves



Softwood Hardwood

| L | H | S | Freud Code | Art. No. |
|----|----|----|-------------|------------|
| mm | mm | mm | | |
| 40 | 16 | 3 | IG17MDAA305 | F03FC24162 |

Example of application of inserts IG17MD



HW
H00S

Grooving inserts made with H00S Freud's Carbide tips and 3 cutting edges.

- Max groove depth 25 mm.
- Available in left and right rotation version.
- Indicated for natural softwood and hardwood.

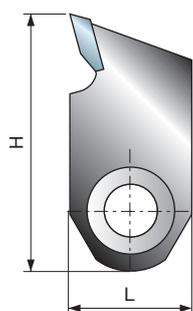
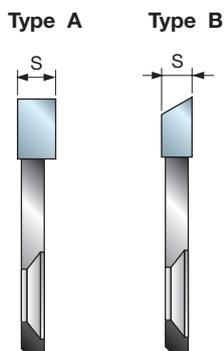
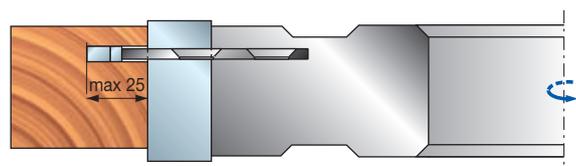
SR01MD SR01MS

HW - Grooving inserts



Softwood Hardwood

| L | H | S | Type | Freud Code | Art. No. | Freud Code | Art. No. |
|----|----|-----|------|-------------|------------|-------------|------------|
| mm | mm | mm | | | | | |
| | | | | Right (D) | | Left (S) | |
| 40 | 58 | 2,6 | A | SR01MDAE301 | F03FC24185 | SR01MSAE301 | F03FC24189 |
| 40 | 58 | 3 | A | SR01MDAB301 | F03FC24182 | SR01MSAB301 | F03FC24187 |
| 40 | 58 | 4 | A | SR01MDAC301 | F03FC24183 | SR01MSAC301 | F03FC24188 |
| 40 | 58 | 5 | A | SR01MDAA301 | F03FC24181 | SR01MSAA301 | F03FC24186 |
| 40 | 58 | 6 | B | SR01MDAD301 | F03FC24184 | SR01MSAF301 | F03FC24190 |



HW
H00S

Grooving and spurs inserts made with H00S Freud's Carbide tips.

- Max groove depth 17 mm.
- Available in left and right rotation version.
- Indicated for natural softwood and hardwood.

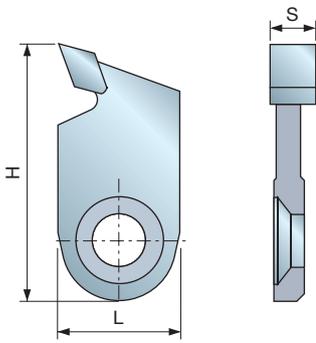
SR06MD

HW - Multipurpose inserts



Softwood Hardwood

| L | H | S | Type | Freud Code | Art. No. |
|----|----|----|------|-------------|------------|
| mm | mm | mm | | | |
| 16 | 34 | 4 | A | SR06MDAG302 | F03FC24193 |
| 16 | 34 | 7 | A | SR06MDAH302 | F03FC24194 |
| 16 | 34 | 5 | A | SR06MDAI302 | F03FC24195 |
| 16 | 34 | 4 | B | SR06MDAL302 | F03FC24196 |



**HW
K30S**

Grooving inserts made with K30S Freud's Carbide tips.

- Max groove depth 17 mm.
- Indicated for natural softwood and hardwood.

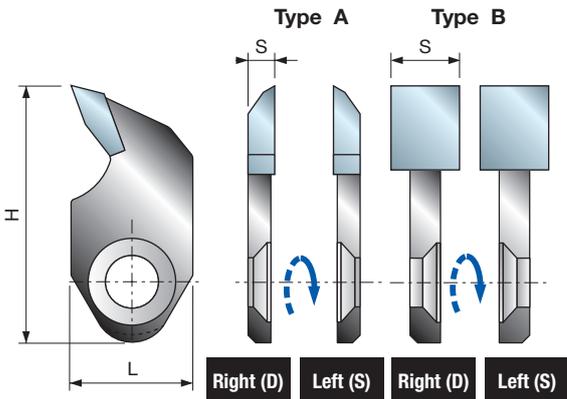
SR06M

HW - Grooving inserts



Softwood Hardwood

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 16 | 34 | 6 | SR06MAB302 | F03FC24191 |
| 16 | 34 | 6 | SR06MAM301 | F03FC24192 |



**HW
H00S**

Grooving inserts made with H00S Freud's Carbide tips.

- Max groove depth 17 mm.
- Indicated for natural softwood and hardwood.

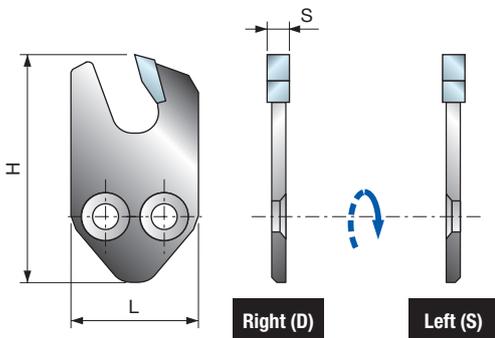
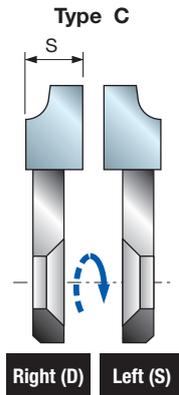
SR06MD SR06MS

HW - Multipurpose inserts



Softwood Hardwood

| L mm | H mm | S mm | Type | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|------|-------------------------|------------|------------------------|------------|
| 16 | 34 | 3,5 | A | SR06MDBA302 | F03FC24197 | SR06MSBA302 | F03FC24200 |
| 16 | 34 | 9 | B | SR06MDBB301 | F03FC24198 | SR06MSBB301 | F03FC24201 |
| 16 | 34 | 9 | C | SR06MDBG301 | F03FC24391 | SR06MSBG301 | F03FC24392 |
| 16 | 34 | 11 | B | SR06MDBC301 | F03FC24199 | SR06MSBC301 | F03FC24202 |



**HW
H00S**

Grooving inserts made with H00S Freud's Carbide tips and 3 cutting edges.

- Max groove depth 25 mm.
- With anti-kickback technology for MAN feed tools.
- Available in left and right rotation version.
- Indicated for natural softwood and hardwood.

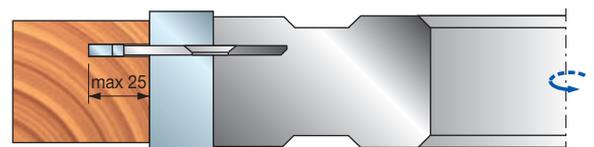
SR11MD SR11MS

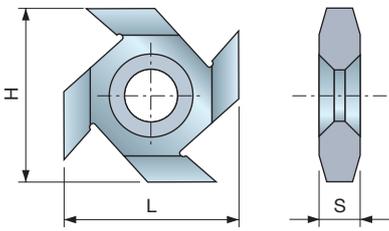
HW - Grooving inserts



Softwood Hardwood

| L mm | H mm | S mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 25 | 45 | 2 | SR11MDBA301 | F03FC24203 | SR11MSBA301 | F03FC24208 |
| 25 | 45 | 3 | SR11MDBB301 | F03FC24204 | SR11MSBB301 | F03FC24209 |
| 25 | 45 | 4 | SR11MDBC301 | F03FC24205 | SR11MSBC301 | F03FC24210 |
| 25 | 45 | 5 | SR11MDBD301 | F03FC24206 | SR11MSBD301 | F03FC24211 |
| 25 | 45 | 6 | SR11MDBE301 | F03FC24207 | SR11MSBE301 | F03FC24212 |





HW
K20S

Anti-capillary inserts made by K20S Freud's Carbide with 4 cutting edges.
 • Suitable for natural softwood and hardwood.

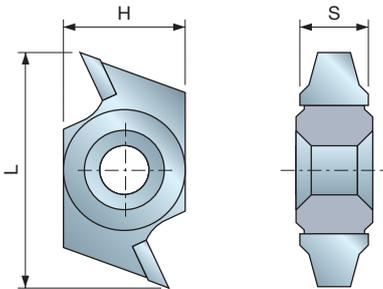
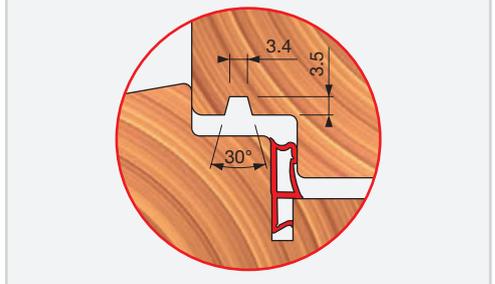
IG03M HW - Anti capillary groove inserts



Softwood Hardwood

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 23 | 23 | 5,4 | IG03MAA305 | F03FH02989 |

Example of application of inserts IG03M



HW
K20S

Anti-capillary inserts made by K20S Freud's Carbide with 2 cutting edges.
 • Suitable for natural softwood and hardwood.

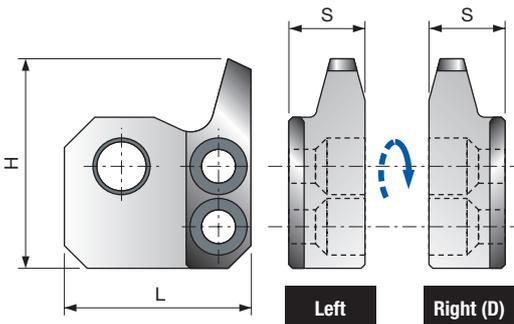
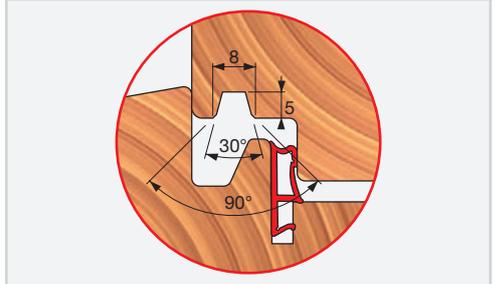
IG11M HW - Anti capillary groove inserts



Softwood Hardwood

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 33,2 | 16 | 10 | IG11MAA301 | F03FH03002 |

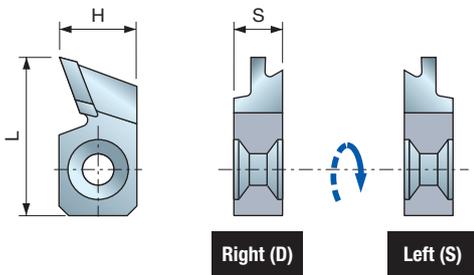
Example of application of inserts IG11M



ID11MD ID11MS Deflectors for inserts IG11M

| L mm | H mm | S mm | Use for | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|------------|-------------------------|------------|------------------------|------------|
| 25 | 45 | 6 | IG11MAA301 | ID11MDAA901 | F03FC24145 | ID11MSAA901 | F03FC24146 |

Deflectors suitable for standard **IG11M** anti-capillary inserts as anti-kickback device.
 • Component for MAN feed tools.



HW
K20S

Shaped inserts made by K20S Freud's Carbide for gasket seats, available in left and right rotation version.

- Suitable for natural softwood and hardwood.

IG10MD IG10MS

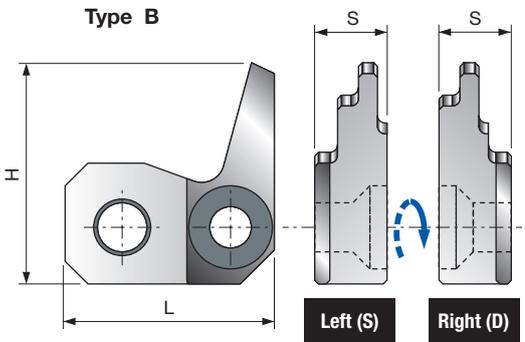
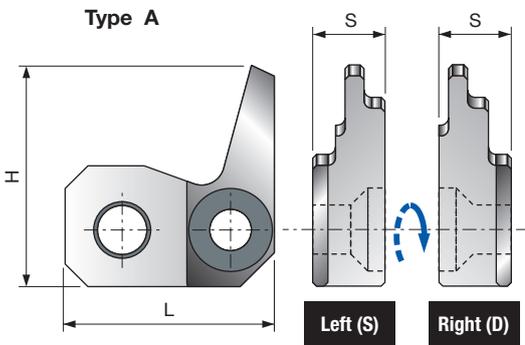
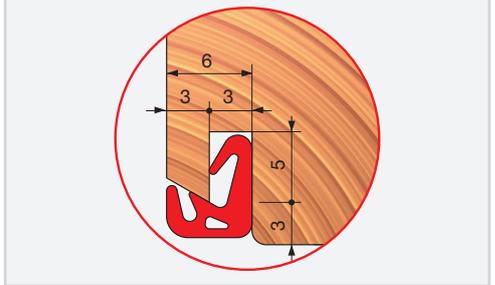
HW - Inserts for gasket seats



Softwood Hardwood

| L mm | H mm | S mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 32,7 | 16 | 10 | IG10MDGA301 | F03FH03000 | IG10MSGGA301 | F03FH03001 |

Example of application of inserts IG10MD/S



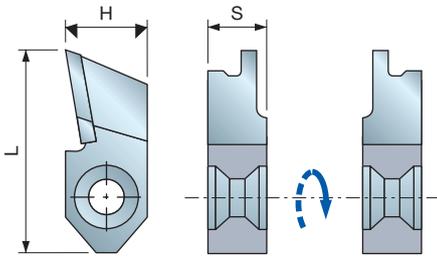
ID10MD ID10MS

Deflectors for inserts IG10MD and IG10MS

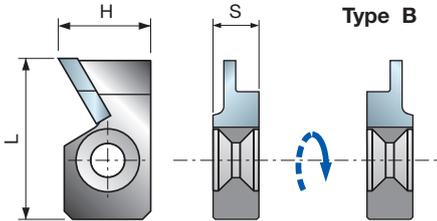
| L mm | H mm | S mm | Type | Use for | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|------|---------------------|-------------------------|------------|------------------------|------------|
| 27,5 | 29,3 | 11 | A | IG10MDGA301 | ID10MDDGA901 | F03FC24141 | ID10MDSGA901 | F03FC24142 |
| 27,5 | 29,3 | 11 | B | IG10MSGGA301 | ID10MSDGA901 | F03FC24143 | ID10MSSGA901 | F03FC24144 |

Deflectors suitable for standard **IG10M** sealing inserts as anti-kickback device.

- Component for MAN feed tools.



Right (D) Left (S)



Right (D) Left (S)

HW
K30S

Shaped inserts made by K30S Freud's Carbide for gasket seats.

- Available in left and right rotation version.
- Suitable for natural softwood and hardwood.

IG13MD IG13MS

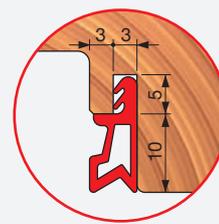
HW - Inserts for sealing strip seats



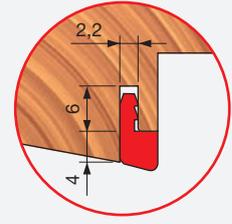
Softwood Hardwood

| L mm | H mm | S mm | Type | Freud Code | | Art. No. | |
|---------|---------|---------|------|-------------|------------|-------------|------------|
| | | | | Right (D) | Left (S) | Right (D) | Left (S) |
| 41,5 | 16 | 11,5 | A | IG13MDAA301 | F03FH03003 | IG13MSAA301 | F03FH03004 |
| 30 | 16 | 8,5 | B | IG13MDBA301 | F03FC24159 | IG13MSBA301 | F03FC24160 |

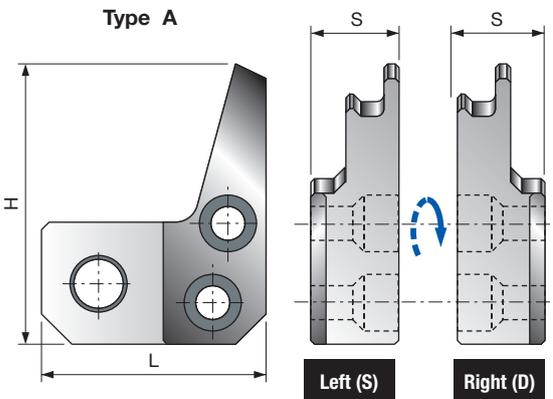
Examples of application of inserts IG13MD/S



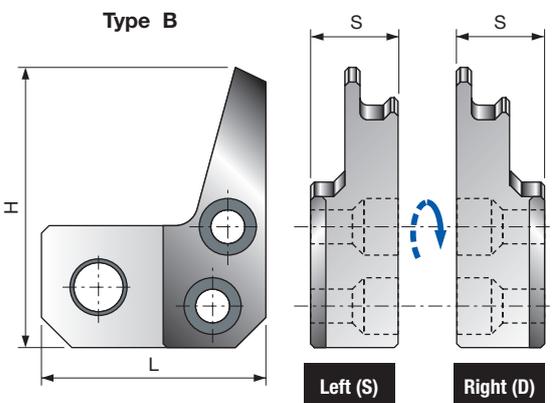
AA3



BA3



Left (S) Right (D)



Left (S) Right (D)

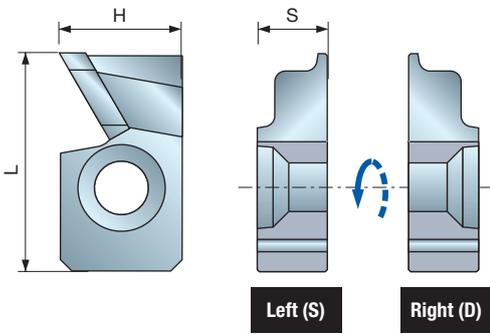
ID13MD ID13MS

Deflectors for inserts IG13MD and IG13MS

| L mm | H mm | S mm | Type | Use for | Freud Code | | Art. No. | |
|---------|---------|---------|------|-------------|--------------|------------|--------------|------------|
| | | | | | Right (D) | Left (S) | Right (D) | Left (S) |
| 29,9 | 37,1 | 12,5 | A | IG13MDAA301 | ID13MDDAA901 | F03FC24147 | ID13MDSAA901 | F03FC24148 |
| 29,9 | 37,1 | 12,5 | B | IG13MSAA301 | ID13MSDAA901 | F03FC24149 | ID13MSSAA901 | F03FC24150 |

Deflectors suitable for standard IG13M sealing inserts as anti-kickback device.

- Component for MAN feed tools.



HW
K20S

Shaped inserts made by K20S Freud's Carbide for frame rebates (Euronorm C13 Freud systems 78/80 mm).

- Available in left and right rotation version.
- Suitable for natural softwood and hardwood.

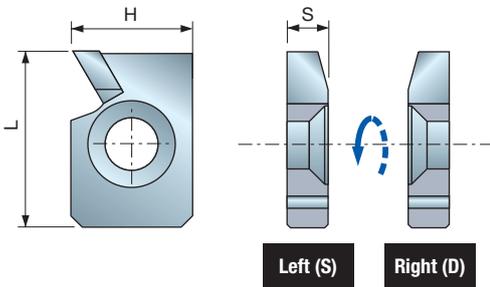
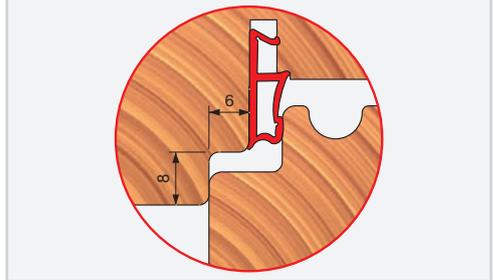
IG14MD IG14MS HW - Inserts for frame rebates



Softwood Hardwood

| L mm | H mm | S mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 28,9 | 16 | 10 | IG14MD AA3 | F03FC15370 | IG14MS AA3 | F03FC15371 |

Example of application of inserts IG14MD/S



HW
K20S

Shaped inserts made by K20S Freud's Carbide for glass sealing, available in left and right rotation version.

- Suitable for natural softwood and hardwood.

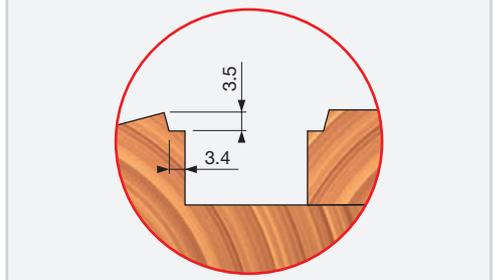
IG15MD IG15MS HW - Inserts for glass sealing

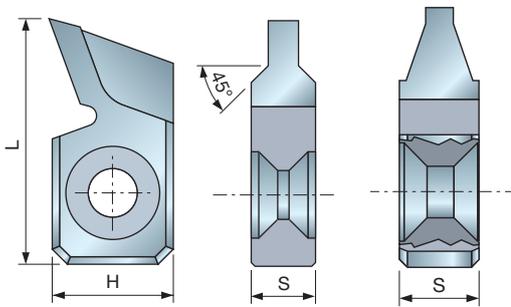


Softwood Hardwood

| L mm | H mm | S mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 23,3 | 16 | 6 | IG15MD AA3 | F03FC15372 | IG15MS AA3 | F03FC15373 |

Example of application of inserts IG15MD/S





IG16MAA301
F03FC24161

IG16MAB301
F03FC24381

HW
K20S

Shaped inserts made by K20S Freud's Carbide for glass sealing.

- Suitable for natural softwood and hardwood.

IG16M

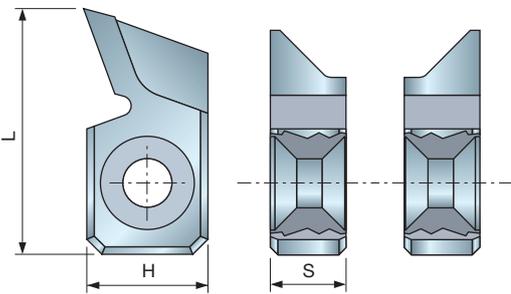
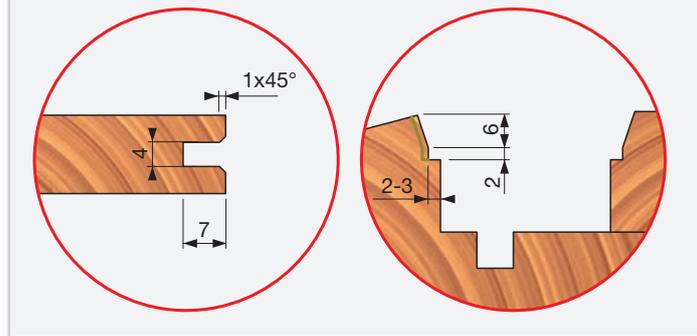
HW - Inserts for glass sealing



Softwood Hardwood

| L | H | S | Freud Code | Art. No. |
|------|----|-----|-------------------|------------|
| mm | mm | mm | | |
| 32,7 | 16 | 8,5 | IG16MAA301 | F03FC24161 |
| 32,7 | 16 | 10 | IG16MAB301 | F03FC24381 |

Examples of application of inserts IG16M



Right (D)

Left (S)

HW
K20S

Shaped inserts made by K20S Freud's Carbide for glass sealing.

- Suitable for natural softwood and hardwood.

IG16MD IG16MS

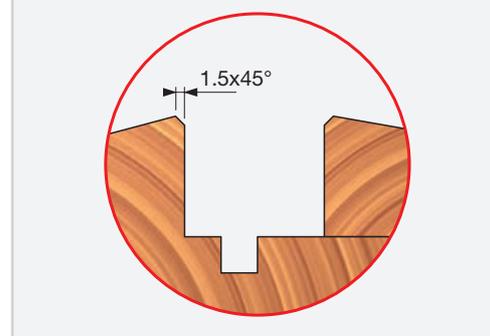
HW - Inserts for glass sealing



Softwood Hardwood

| L | H | S | Freud Code | Art. No. | Freud Code | Art. No. |
|------|----|----|--------------------|------------|--------------------|------------|
| mm | mm | mm | Right (D) | | Left (S) | |
| 32,7 | 16 | 6 | IG16MDAC301 | F03FC24382 | IG16MSAC301 | F03FC24383 |

Examples of application of inserts IG16MD/S



TOOLS

Tools shall be used only by persons of training and experience who have knowledge of how to use and handle tools.

The maximum rotational speed marked on the tool shall not be exceeded.

One piece tools with visible cracks shall not be used.

Clamping surfaces shall be cleaned to remove dirt, grease, oil and water.

Resin shall only be removed from light alloys with solvents that do not affect the mechanical characteristics of these materials.

Tools and tool bodies shall be clamped in such a way, that they shall not loosen during operation.

Tools with cylindrical shank must be clamped in a way that the mark of the maximum free shank length shall be covered, at least partially, by the clamping device or by the locking collet.

Care shall be taken of mounting tools to ensure that the clamping is by the hub respectively by the clamping surface of the tool and that the cutting edges are not in contact with each other or with the clamping elements.

Fastening screws and nuts shall be tightened using the appropriate spanners etc. and to the torque value provided by the manufacturer.

Extension of the spanner or tightening using hammer blows shall not be permitted.

Clamping screws shall be tightened according to instructions provided by the manufacturer. Where instructions are not provided clamping screws shall be tightened in sequence from the centre outwards.

Use of fixed rings, e. g. pressed or held by adhesive fixing, in flanged sleeves, shall be permitted if made to the manufacturers specifications.

Repair and regrinding of tools shall only be allowed according to the tool manufacturer's instructions.

After repair and regrinding of tools it shall be ensured that the tools observe balancing requirements.

The design of composite (tipped) tools shall not be changed in the process of repair.

Composite tools shall be repaired by a competent person, i.e. a person of training and experience, who has knowledge of the design requirements and understands the level of safety to be achieved.

Repair shall therefore include, e.g. use of spare parts which are in accordance with the specification of the original parts provided by the manufacturer.

Tolerances which ensure correct clamping shall be maintained.

For one piece tools care shall be taken that regrinding of the cutting edge will not cause weakening of the hub and the connection of the cutting edge to the hub.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer. Typically, safe handling involves the use of devices such as carrying hooks, proprietary handles, frames (e. g. for circular saw blades), boxes, trolleys etc.

The wearing of protective gloves improves the grip on the tool and further reduces the risk of injury.

Maintenance and modification of milling tools and related components and circular saw blades should always be in accordance with the design requirements/the manufacturer's instructions.

Maintenance and modification of milling tools and circular saw blades should only be carried out by a competent person, i. e. a person of training and experience, who has knowledge of the design requirements and understand levels of safety to be achieved.

When regrinding milling tools and circular saw blades, the minimum requirements of cutting blade thickness and cutting blade projection should be observed.

Composite tools should be repaired by persons experienced in and with understanding of design and use of milling tools for processing wood and similar materials, e.g. an expert with a relevant education and knowledge of the brazing process, including in particular the influence of the brazing process on tension in tool body and cutting material. When brazing off worn tips and subsequently

brazing on new tips it should be made sure that the tip is correctly mounted in the tool body and that the process does not result in critical tension in the tool body.

After any type of maintenance, milling tools marked with MAN should continue to observe the requirements of the standards related to tools for hand feed.

When modifying milling tools, e. g. modification of bore diameter, modification of shank, retipping of composite tools and similar, it should be ensured that the requirements of the standard relating to balancing are still observed.

After being modified and/or retipped, milling tools and circular saw blades should be marked according to the rules applying to new tools. However, the name/logo of the company making the modification/retipping should be added.

To avoid injuries, tools shall be handled in accordance with the guidance provided by the manufacturer.

Tools which weigh more than 15 kg may require the use of special handling devices or attachments, these will depend on the features that the manufacturer has designed into the tool to allow easy handling. The manufacturer can advise on the availability of necessary devices.

CLAMPING DEVICES

The speeds indicated on the clamping device and the tool to be clamped should be compared. For adjusting the speed on the machine the lower speed should be applied.

Screws and nuts should be tightened using the appropriate spanners; Clamping surfaces should be cleaned to remove dirt, grease, oil and water.

Clamping devices and tools should be mounted or clamped according to given torques, pressures and wrenches to be used; extension of spanners or tightening or loosening by means of hammer blows should not be permitted.

Maximum tool diameters and tool lengths should not be exceeded; Shank diameters must be in accordance with the clamping range of the clamping devices.

The minimum required clamping length must be kept;

Care should be taken that the data relevant to the safety of the clamped tool are always stored in the data medium.

Repairs should only be carried out by a competent person, i.e. a person with professional training and experience, who has knowledge of the design, construction and safety requirements; Repair should therefore include the use of spare parts which are in compliance with the specifications of the original parts.

1



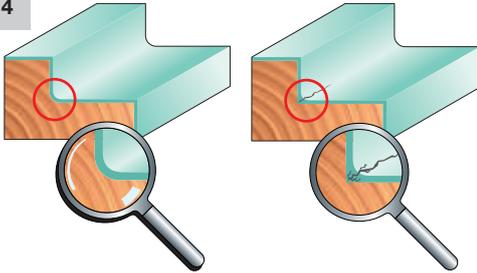
2



3



4



5



TECHNICAL FEATURES

Spurs are inserts laterally positioned on a cutterheads body. They give a better finish on the side rebates of a profile. For this aim, Freud uses a **triangular insert (RG02M - Fig. 1 and 2)**, constructed in Hard metal to obtain a longer duration of the cutting edge, mounted on cutterheads with disposable knives and Performance cutterheads. The 22 mm cutting edge allows the spur to work the rebate's whole depth, which generally and particularly in the case of windows, doesn't exceed 18 mm of depth. The triangular spur's particular conformation, allows a positioning on the tool so as to obtain a positive hook angle, which combined with the scale of work just described, guarantees an excellent finish on the work surface.

The front of the spur gives a uniform distribution of the shavings for a better finish. Competitors generally use a **square shaped spur** (dimensions: 14 x 14 x 2 mm), with naturally limited efficiency, caused by its geometry as well as by its reduced size. These characteristics and the negative hook angle conferred by the positioning of the spur on the tool, do not allow it to work the whole depth of the rebate.

The surface obtained, will therefore have a precarious finish with possible signs of marking. Freud occasionally uses this type of spur (**RG01M - Fig. 3**), for objective reasons such as insufficient space for the positioning of the spur.

Beveling and rounding inserts are used to eliminate hard edges from work pieces. Other than giving a better aesthetic finish, they also allow paint and varnish to be distributed in a more uniform way. Infact, paint and other coating substances, tend to accumulate and become clogged between the hard edges and once dry, tend to peel and lose their protective qualities, exposing the wood to all types of atmospheric conditions (Fig. 4).

TRIANGULAR ROUNDING SPUR (RG03M - Fig. 5): this spur carries out the same function as the triangular spur, but possesses a rounded side and carries out a rounding joint of the hard edge on the inside of the rebate. Suitable for carrying out casings or when the material has to be painted or varnished.

45° BEVELING INSERT (IG01M - Fig. 6): this insert in hard metal has, thanks to a particular geometry 8 cutting edges. Can be used reversibly and with a double rotation sense (right and left hand), it is particularly indicated for carrying out beveling with dimensions no greater than 3 mm at 45° and to be mounted on tools with a reduced body thickness, where it is not possible to carry out seats for the housing of inserts.

ROUNDING INSERT (IG02M - Fig. 7): is constructed with the same technology as the beveling insert (**IG01M**), therefore with 8 cutting edges with a double rotation sense (right and left hand), but also rounds hard edges.

6



7



8



IG21MD

IG22MD

TECHNICAL FEATURES

BEVELING INSERT WITH SHEAR ANGLE (IG21MD/S - Fig. 8): insert produced in hard metal with 2 cutting edges, constructed with a shear angle, obtained directly from the sintering process. This type of insert guarantees a better finish of the hard edge long grain but most of all cross grain, where working is more difficult.

ROUNDING INSERT WITH SHEAR ANGLE (IG22MD/S - Fig. 8): insert produced with the same technology, both in its construction as well as in its geometry, as beveling inserts (IG21MD/S). In more can carry out the rounding of hard edges. Beveling can be carried out by tilting the workpiece a maximum of 15° (corresponding to the grade of the exit angle of the insert); beyond this limit, the workpiece would become marked by the very same insert. The IG21MD/S beveling inserts and IG22MD/S rounding inserts have the advantage of being perfectly interchangeable between themselves.

45° BEVELING INSERT WITH SHEAR ANGLE (IG51M - Fig. 9 AND 10): insert produced in hard metal, in which characteristics have been improved from the previous inserts. Has 4 cutting edges whose geometrical configuration permits both right and left hand rotation. The shear angle consents a better finish in the various woodworking conditions, for both long grain and cross grain. The reduced dimensions with respect to the previous inserts allow the insert to be positioned more easily and efficiently.

ROUNDING INSERT WITH SHEAR ANGLE (IG52M - Fig. 9 and 10): produced with the same technology, both in its construction as well as in its geometry as the IG51M beveling

inserts, with the only variant of carrying out the rounding of the hard edges. Even these inserts are interchangeable with the IG52M beveling inserts, always keeping in consideration the operational combinations already valued for articles IG21MD/S and IG22MD/S (see example Fig. 6).

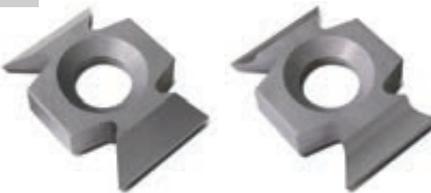
MULTIPURPOSE INSERT (IG25M - Fig. 11): produced in hard metal, carries out both the function of a rounding insert and rounding spur, obtaining both operational as well as economical advantages. With this spur and with a single pass, you obtain the finished rebate with the desired depth and the rounding of the hard edges internally as well as externally. These inserts are available with various rebate depths to satisfy all the working processess. Furthermore, being interchangeable between themselves it is possible to carry out rebates with various depths, using the same tool.

GROOVING INSERT (IG04MD/S - Fig. 12): produced in hard metal and particularly usefull for carrying out seats and canals for the application of rubber seals and aluminium profiles. The maximum groove depth obtainable is 11 mm. In certain situations it is possible to obtain a greater depth, but limited to only one side of the groove and only if the cutterhead has spurs that intervene on the part exceeding 11 mm, so as to insure a good finish on the work surface.

9



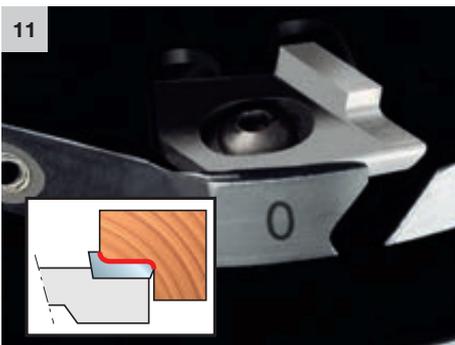
10



IG51MD

IG52MD

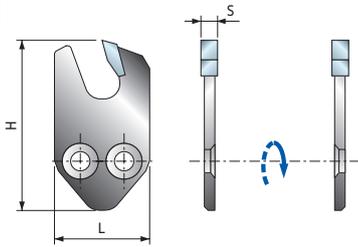
11



12



13



TECHNICAL FEATURES

GROOVING INSERTS (SR11MD/S - Fig. 13): are used for carrying out grooves with a depth of up to 25 mm. These grooving inserts are produced and cut with the same laser technology as that used for the circular saw blades.

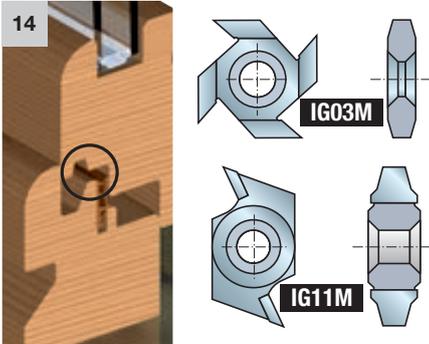
ANTI CAPILLARY GROOVE INSERTS (IG03M, IG11M - Fig. 14): produced integrally in hard metal for carrying out grooves for various applications. They possess technical characteristics and different dimensions to satisfy specific necessities for various sectors.

INSERTS FOR SEALING STRIP SEATS (IG10MD/S - IG13MD/S - Fig. 15): these articles are constructed in hard metal, used in the window production sector for carrying out grooves to house certain thermic and acoustic rubber seals (Fig. 16).

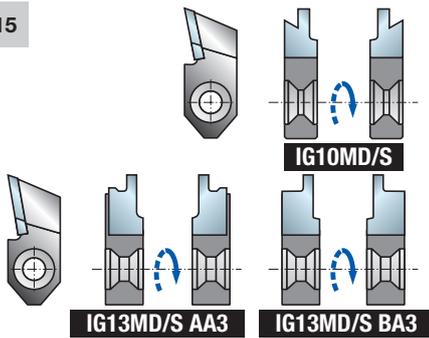
INSERTS ACCORDING TO THE NORM UNI EN 847-1 (IG61MD/S, IG62MD/S - Fig. 17 AN 18): the new European Norm UNI EN 847-1 states, that tools destined to be used with manual feed must adopt specific designs, to reduce to the minimum, dangers that may occur to the user. In particular, tools with a non circular form, deflectors must not exceed 1,1 mm in size with respect to the protrusion of the cutting edge. To conform to these new regulations we have produced new beveling inserts (**IG61MD/S**) and new rounding inserts (**IG62MD/S**) which act as deflectors to reduce anti-kickback as imposed by the current norms. Produced in hard metal with a constructive geometry that consents interchangeability between beveling and rounding inserts, using the very same tool's positioning seats. The maximum bevel obtainable is 3 mm x 45°.

SUPPORTS WITH DEFLECTORS (ID04MD/S - Fig. 19 AND 20): to adapt the other more common inserts to the new European Norm and render them ideal for working with manual feed, they have been adapted with deflectors which reduce the possibility of anti-kickback. The insert is housed on the very same deflector, made in various versions, so as to combine different inserts which trace the profile. The chosen solution is surely more advantageous for the client, who will be able to use the very same standard insert with both manual and mechanical feed, without having to acquire a double set of spares. The supports with deflector have been studied to be compatible with the following inserts: **IG04MD/S, IG10MD/S, IG11M, IG13MD/S.**

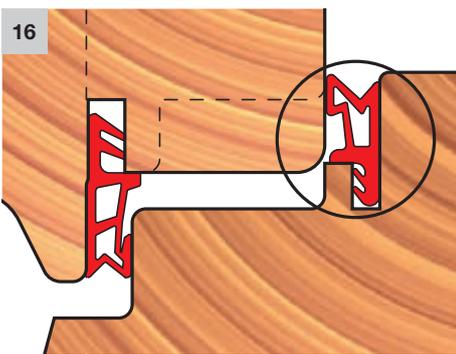
14



15



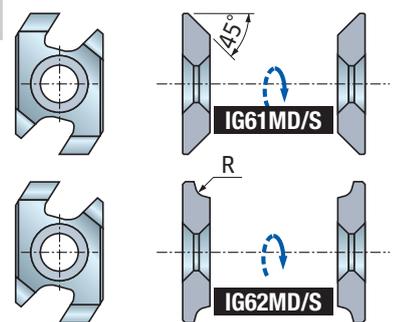
16



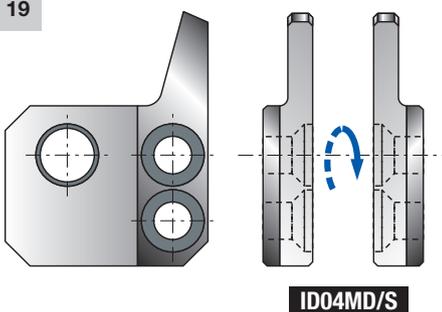
17



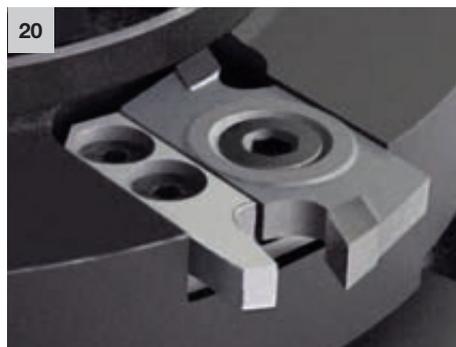
18



19



20

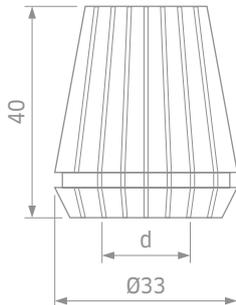
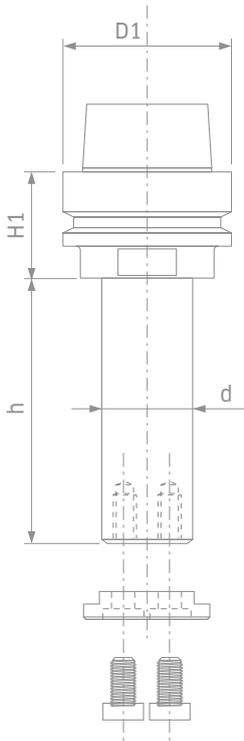


Accessories and Spare Parts

Freud offers the most complete range of industrial quality accessories and spare parts, suitable for all machine types, both stationary and portable. The portfolio includes an extensive selection of tool holders, spacers, screws and accessories designed to fulfill the demands of the industry.

Users benefit from a broad range of standard products, for cost effective solutions and custom accessories, for more specific needs. Standard or custom, Freud's solutions always grant the greatest precision and outstanding performance.





Leading technology for accessories and spare parts Page 532

COMPONENTS

Chucks for boring machines

MP01MD-MP01MS Chucks for bits for multiboring machines Page 535
 MP20M Spring adaptors for twist drills Page 535

Chucks and accessories for CNC routers

AP08M Spindle for overhead routers Page 536
 MP05M High precision spindles - ISO30 Page 537
 MP06MD High precision chucks - ISO30 Page 537
 MP07M High precision Nickel coated spindles - HSK 63 E Page 538
 MP08M High precision Nickel coated chucks - HSK 63 E Page 538
 MP09M High precision Nickel coated spindles - HSK 63 F Page 539
 MP10MD High precision Nickel coated chucks - HSK 63 F Page 539
 CD01M Pull studs for chucks ISO30 Page 540
 MP06M High precision collet for ER32 locking rings Page 540
 GH32M High precision locking ring Page 540
 MP16M High precision collet for ER40 locking rings Page 541
 GH40M High precision locking ring Page 541
 MC01M Encoding microchip for smart tool Page 541

Bushes and accessories

BF10MD-BF10MS Sleeves with locking nut Page 542
 BLA Standard reduction rings for saw blades Page 543
 BF01M Standard reduction rings for cutterhead Page 543
 3105M Reducing bushes Page 544
 FX01M Reducing bushes Page 544
 FX02M Reducing bushes Page 544
 FX03M Stiffening collars for saw blades Page 544
 AN01M Spacers Page 545
 AN01 Special spacers Page 548
 AN03M Standard spacer set Page 548
 CC01 Ball bearing guide for moulding Page 549
 3102M Ball bearing Page 549
 RB62M Ball bearing rub collars Page 549
 3103MC Sleeved speciality bearings Page 549

KEYS AND DEVICES

Spare screws, nuts, washers and keys Page 551
 OPT04 Standard keyway Page 557
 OPT09 Re-boring for cutterheads and brazed cutters Page 557

Maintenance tools

SAG1M Maintenance tool for cutterhead sets Page 557
 SAG2M Clamping device with rolling bearing Page 558
 TA01M Device for grinding Performance knives Page 558
 TA02M Device for grinding Performance knives Page 558
 TA03M Support for grinding Performance knives Page 558

Torque values for screws and grub screws used for tightening Freud's knives and inserts Page 559

Tips for the correct use Page 560

Technical features Page 561

LEADING TECHNOLOGY

EXTENSIVE RANGE

Freud provides a comprehensive range of premium accessories and spare parts, standard and custom. The wide range of bore sizes provides a suitable option for all machine types, both traditional and automated CNC machines.



MAINTENANCE KEYS & ACCESSORIES

Tool maintenance represents the best practice to maintain cutting edges sharp and ensure the proper tool alignment. Cutting tools for wood applications require special care, beyond regular cleaning. Clamping surfaces must be free of dirt, grease, oil and water to perform efficiently.

For this reason, Freud has specifically designed a range of accessories (including keys, wrenches and clamping devices) to perform the most accurate tool maintenance and provide the perfect solution to reach the highest results in the woodworking processes.





PIONEERING SOLUTIONS

Freud leverages its long-term expertise, engineering know-how and industrial competence to offer safer, faster and more efficient solutions to the most challenging market needs.

To achieve maximum results in all applications, Freud employs the most advanced technologies. For its new Nickel Coated Mandrel range - for example - cementing and hardening treatments are used to withstand higher temperatures and improve wear resistance, for an extended lifetime and improved performance.

In addition to achieve the highest rust protection, the tools undergo a series of acid baths and ultrasonic cleaning before receiving the final nickel-plating treatment (nickel depth 7 μm).

FINEST BALANCING - G2.5



ISO 1940-1 G2.5 grades at maximum RPM.

An accurate balancing at maximum speed (G2.5 ISO 1940-1), combined with the excellent rust protection, ensures an ideal and durable clamping of the tools, in the most demanding CNC routing applications.

All Freud's tool holders are designed to be equipped with a microchip, ready to be programmed for tool management systems.

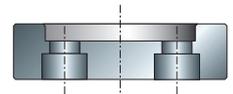
FLANGES

Freud provides different flange types.

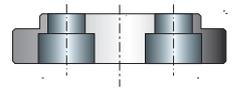
Flange **Type B** is the standard.

Flange **Type A** is the optional with no. 3 M6 fixing screws.

Available on request.



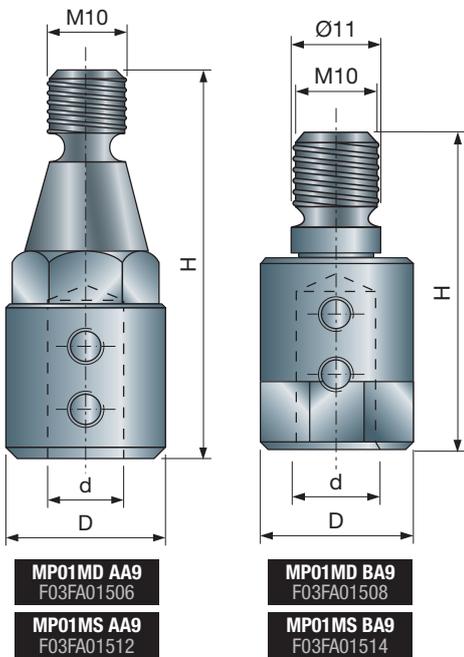
Flange Type A



Flange Type B

Components





MP01MD MP01MS

Chucks for bits for multiboring machines

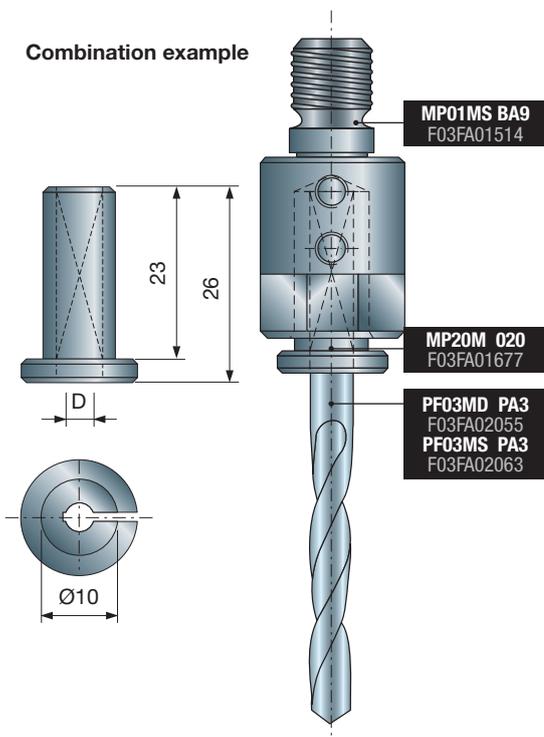
| D mm | H mm | d mm | Rotation | Freud Code | Art. No. | Freud Code | Art. No. |
|-------------|---------|---------|----------|------------|------------|------------|--------------------------|
| | | | | Right (D) | | Left (S) | |
| * | 19 | 47 | 10 | RH | MP01MD AA9 | F03FA01506 | MP01MS AA9 F03FA01512 |
| | | | | Right (D) | | Left (S) | |
| ** | 19 | 41 | 10 | LH | MP01MD BA9 | F03FA01508 | MP01MS BA9 F03FA01514 |
| Spare parts | | | | Dimensions | Freud Code | Art. No. | |
| Screw | | | | M6 x 6 | 2615M DD9 | F03FA07423 | |

Freud standard chucks for router bits.

* **MP...AA9:** Shanks for: Alberti, Balestrini, Bilek, Busellato, Ompec, Reimall, Schlicher, SCM, Tanzani, Viciani, Vitap, Weingärter.

** **MP...BA9:** Shanks for: Alberti, Balestrini, Biesse, Busellato, Gessner, Morbidelli, Torwegge, Weeke.

Combination example

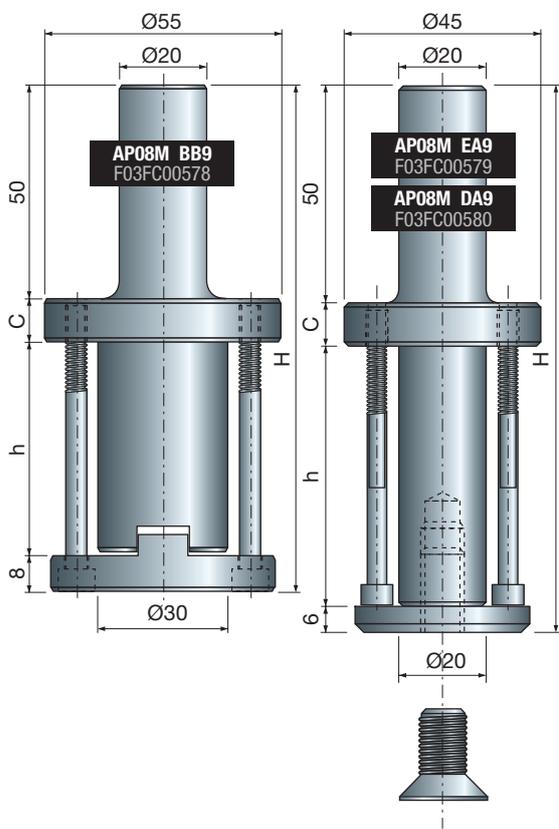


MP20M

Spring adaptors for twist drills

| D mm | Freud Code | Art. No. |
|---------|------------|------------|
| 2 | MP20M 020 | F03FA01677 |
| 2,5 | MP20M 025 | F03FA01678 |
| 3 | MP20M 030 | F03FA01679 |
| 3,2 | MP20M 032 | F03FA01680 |
| 3,5 | MP20M 035 | F03FA01681 |
| 4 | MP20M 040 | F03FA01682 |
| 4,5 | MP20M 045 | F03FA01683 |
| 5 | MP20M 050 | F03FA01684 |
| 6 | MP20M 060 | F03FA01686 |
| 8 | MP20M 080 | F03FA01690 |

Adaptors for drill bits (as PF03MD/S) suitable for **MP01MD/S** chucks.



AP08M

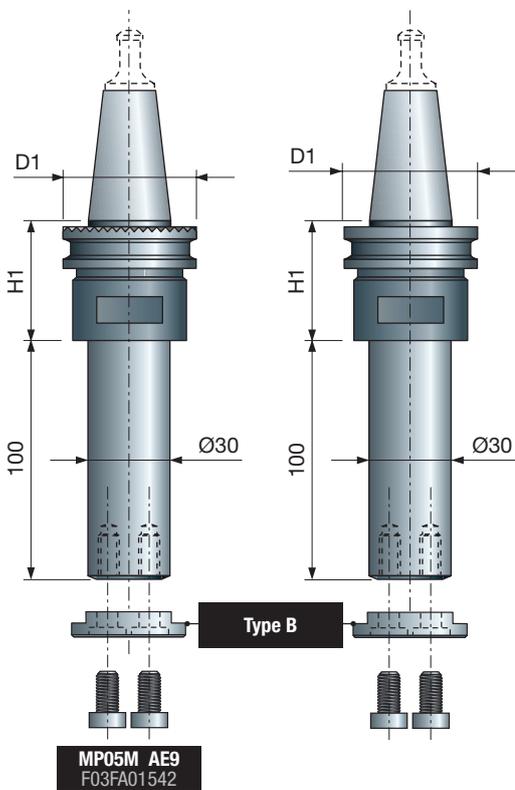
Spindle for overhead routers

| D | h | H | C | Freud Code | Art. No. |
|----|----|-----|----|------------|------------|
| mm | mm | mm | | | |
| 20 | 33 | 93 | 12 | AP08M DA9 | F03FC00579 |
| 20 | 60 | 120 | 10 | AP08M EA9 | F03FC00580 |
| 30 | 50 | 118 | 12 | AP08M BB9 | F03FC00578 |

Spindles for manual or overhead CNC router machines with 20x50 mm shank.

AP08M DA3 and **AP08M EA9** suitable for mounting tool with bore Ø20 mm, while the **AP08M BB9** is suitable for mounting tool with bore Ø30 mm.

- The **AP08M BB9** includes an anti-rotation ring nut and the housing for the screws that fasten the tool to the chuck.

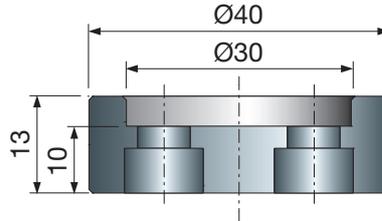


MP05M High precision spindles - ISO30

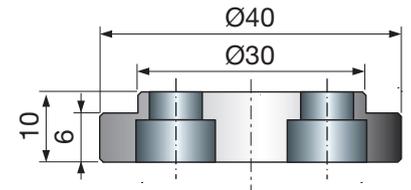
| D1 mm | H1 mm | Router | Freud Code | Art. No. |
|----------|----------|------------------|------------|------------|
| 50 | 35 | Universal | MP05M AA9 | F03FA01538 |
| 50 | 35 | Biesse | MP05M AB9 | F03FA01539 |
| 46 | 35 | CMS | MP05M AC9 | F03FA01540 |
| 49 | 41 | SCM - Morbidelli | MP05M AE9 | F03FA01542 |

Flange Type A

FX09M AA9
F03FA13481

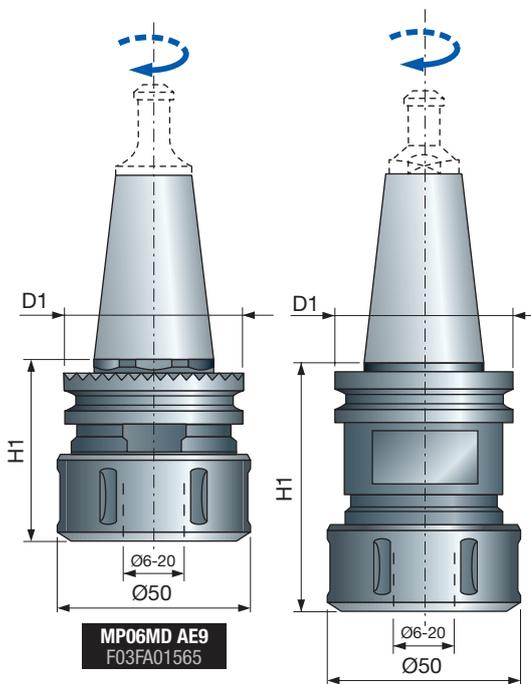


Flange Type B



Spindles for overhead CNC machines with **ISO30** shank for Ø30 mm tools bore.

- Standard chucks are provided with **Type B** flange **Type A** flange **Type A** is supplied on demand.
- Terminal pin **CD01M** is not included.

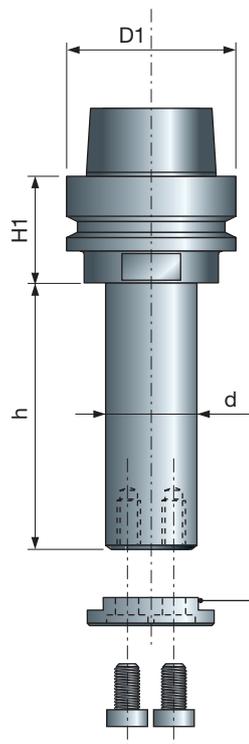


MP06MD High precision chucks - ISO30

| D mm | H mm | Router | Freud Code | Art. No. |
|---------|---------|------------------|------------|------------|
| 50 | 67 | Universal | MP06MD AA9 | F03FA01561 |
| 50 | 50 | Biesse | MP06MD AB9 | F03FA01562 |
| 46 | 60 | CMS | MP06MD AC9 | F03FA01563 |
| 58 | 50 | Esseteam | MP06MD AD9 | F03FA01564 |
| 49 | 55 | SCM - Morbidelli | MP06MD AE9 | F03FA01565 |

Chucks for overhead CNC machines with **ISO30** shank.

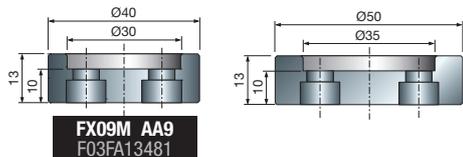
- Locking ring **ER32 RH**.
- Ideal for router bits with cylindrical shank.
- Terminal pin **CD01M** and **MP06M** collet not included.



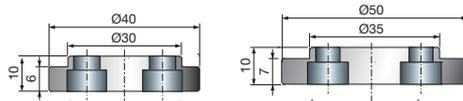
Spindles for CNC overhead CNC machines with **HSK 63 E** shank.

- Nickel coating treatment to prevent rust.
- G2,5 balancing for high speed applications.
- Standard spindles with **Type B** flange, **Type A** on demand.

Flange Type A



Flange Type B



MP07M

High precision Nickel coated spindles - HSK 63 E

| h mm | H1 mm | d mm | D1 mm | Freud Code | Art. No. |
|---------|----------|---------|----------|------------|------------|
| 50 | 33 | 30 | 63 | MP07M30050 | F03FB22386 |
| 60 | 33 | 30 | 63 | MP07M30060 | F03FB22387 |
| 70 | 33 | 30 | 63 | MP07M30070 | F03FB22388 |
| 80 | 33 | 30 | 63 | MP07M30080 | F03FB22389 |
| 90 | 33 | 30 | 63 | MP07M30090 | F03FB22390 |
| 100 | 33 | 30 | 63 | MP07M30100 | F03FB22391 |
| 110 | 33 | 30 | 63 | MP07M30110 | F03FB22392 |
| 120 | 33 | 30 | 63 | MP07M30120 | F03FB22393 |
| 130 | 33 | 30 | 63 | MP07M30130 | F03FB22394 |
| 140 | 33 | 30 | 63 | MP07M30140 | F03FB22395 |
| 150 | 33 | 30 | 63 | MP07M30150 | F03FB22396 |
| 160 | 33 | 30 | 63 | MP07M30160 | F03FB22397 |
| 170 | 33 | 30 | 63 | MP07M30170 | F03FB22398 |
| 180 | 33 | 30 | 63 | MP07M30180 | F03FB22399 |
| 190 | 33 | 30 | 63 | MP07M30190 | F03FB22400 |
| 200 | 33 | 30 | 63 | MP07M30200 | F03FB22401 |
| 210 | 33 | 30 | 63 | MP07M30210 | F03FB22402 |
| 220 | 33 | 30 | 63 | MP07M30220 | F03FB22403 |
| 230 | 33 | 30 | 63 | MP07M30230 | F03FB22404 |
| 50 | 33 | 35 | 63 | MP07M35050 | F03FB22405 |
| 60 | 33 | 35 | 63 | MP07M35060 | F03FB22406 |
| 70 | 33 | 35 | 63 | MP07M35070 | F03FB22407 |
| 80 | 33 | 35 | 63 | MP07M35080 | F03FB22408 |
| 90 | 33 | 35 | 63 | MP07M35090 | F03FB22409 |
| 100 | 33 | 35 | 63 | MP07M35100 | F03FB22410 |
| 110 | 33 | 35 | 63 | MP07M35110 | F03FB22411 |
| 120 | 33 | 35 | 63 | MP07M35120 | F03FB22412 |
| 130 | 33 | 35 | 63 | MP07M35130 | F03FB22413 |
| 140 | 33 | 35 | 63 | MP07M35140 | F03FB22414 |
| 150 | 33 | 35 | 63 | MP07M35150 | F03FB22415 |
| 160 | 33 | 35 | 63 | MP07M35160 | F03FB22416 |
| 170 | 33 | 35 | 63 | MP07M35170 | F03FB22417 |
| 180 | 33 | 35 | 63 | MP07M35180 | F03FB22418 |
| 190 | 33 | 35 | 63 | MP07M35190 | F03FB22419 |
| 200 | 33 | 35 | 63 | MP07M35200 | F03FB22420 |
| 210 | 33 | 35 | 63 | MP07M35210 | F03FB22421 |
| 220 | 33 | 35 | 63 | MP07M35220 | F03FB22422 |
| 230 | 33 | 35 | 63 | MP07M35230 | F03FB22423 |
| 245 | 33 | 35 | 63 | MP07M35245 | F03FB22424 |
| 245 | 33 | 40 | 63 | MP07M40245 | F03FB22425 |

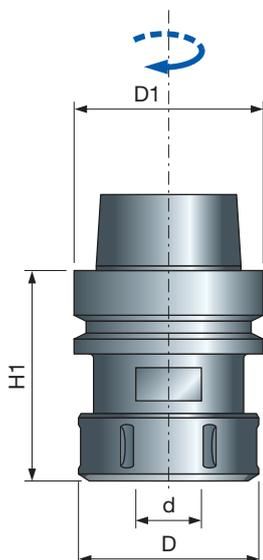
MP08M

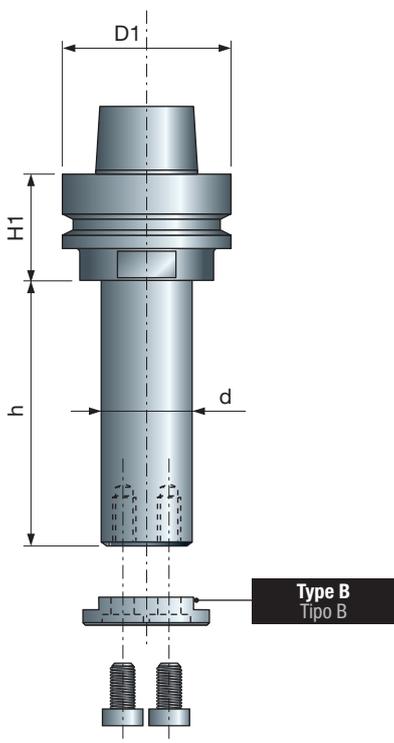
High precision Nickel coated chucks - HSK 63 E

| H1 mm | D mm | d mm | D1 mm | Freud Code | Art. No. |
|----------|---------|---------|----------|-------------|------------|
| 73 | 50 | 4-20 | 63 | MP08MDC AA9 | F03FA19217 |
| 78 | 63 | 6-25 | 63 | MP08MDC BA9 | F03FA19218 |

Chucks for CNC overhead CNC machines with **HSK 63 E** shank.

- Nickel coating treatment to prevent rust.
- G2,5 balancing for high speed applications.
- **ER32 RH** locking ring for item **MP08MDC AA9**.
- **ER40 RH** for **MP08MDC BA9**.
- Collet not included.

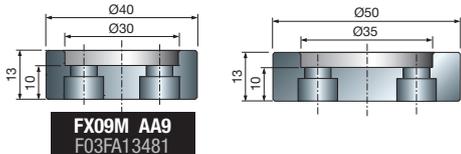




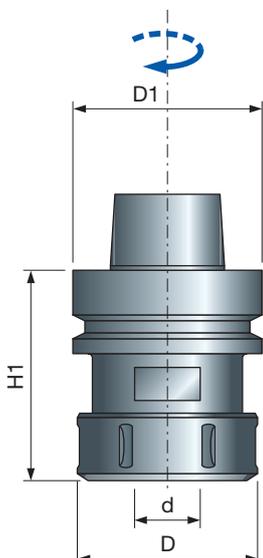
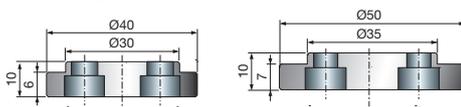
Spindles for CNC overhead CNC machines with **HSK 63 F** shank.

- Nickel coating treatment to prevent rust.
- G2,5 balancing for high speed applications.
- Standard spindles with **Type B** flange, **Type A** on demand.

Flange Type A



Flange Type B



MP09M

High precision Nickel coated spindles - HSK 63 F

| h mm | H1 mm | d mm | D1 mm | Freud Code | Art. No. |
|---------|----------|---------|----------|------------|------------|
| 50 | 33 | 30 | 63 | MP09M30050 | F03FB22426 |
| 60 | 33 | 30 | 63 | MP09M30060 | F03FB22427 |
| 70 | 33 | 30 | 63 | MP09M30070 | F03FB22428 |
| 80 | 33 | 30 | 63 | MP09M30080 | F03FB22429 |
| 90 | 33 | 30 | 63 | MP09M30090 | F03FB22430 |
| 100 | 33 | 30 | 63 | MP09M30100 | F03FB22431 |
| 110 | 33 | 30 | 63 | MP09M30110 | F03FB22432 |
| 120 | 33 | 30 | 63 | MP09M30120 | F03FB22433 |
| 130 | 33 | 30 | 63 | MP09M30130 | F03FB22434 |
| 140 | 33 | 30 | 63 | MP09M30140 | F03FB22435 |
| 150 | 33 | 30 | 63 | MP09M30150 | F03FB22436 |
| 160 | 33 | 30 | 63 | MP09M30160 | F03FB22437 |
| 170 | 33 | 30 | 63 | MP09M30170 | F03FB22438 |
| 180 | 33 | 30 | 63 | MP09M30180 | F03FB22439 |
| 190 | 33 | 30 | 63 | MP09M30190 | F03FB22440 |
| 200 | 33 | 30 | 63 | MP09M30200 | F03FB22441 |
| 50 | 33 | 35 | 63 | MP09M35050 | F03FB22442 |
| 60 | 33 | 35 | 63 | MP09M35060 | F03FB22443 |
| 70 | 33 | 35 | 63 | MP09M35070 | F03FB22444 |
| 80 | 33 | 35 | 63 | MP09M35080 | F03FB22445 |
| 90 | 33 | 35 | 63 | MP09M35090 | F03FB22446 |
| 100 | 33 | 35 | 63 | MP09M35100 | F03FB22447 |
| 110 | 33 | 35 | 63 | MP09M35110 | F03FB22448 |
| 120 | 33 | 35 | 63 | MP09M35120 | F03FB22449 |
| 130 | 33 | 35 | 63 | MP09M35130 | F03FB22450 |
| 140 | 33 | 35 | 63 | MP09M35140 | F03FB22451 |
| 150 | 33 | 35 | 63 | MP09M35150 | F03FB22452 |
| 160 | 33 | 35 | 63 | MP09M35160 | F03FB22453 |
| 170 | 33 | 35 | 63 | MP09M35170 | F03FB22454 |
| 180 | 33 | 35 | 63 | MP09M35180 | F03FB22455 |
| 190 | 33 | 35 | 63 | MP09M35190 | F03FB22456 |
| 200 | 33 | 35 | 63 | MP09M35200 | F03FB22457 |

MP10M

High precision Nickel coated chucks - HSK 63 F

| H1 mm | D mm | d mm | D1 mm | Freud Code | Art. No. |
|----------|---------|---------|----------|-------------|------------|
| 73 | 50 | 4-20 | 63 | MP10MDC AA9 | F03FA19227 |
| 78 | 63 | 6-25 | 63 | MP10MDC BA9 | F03FA19228 |

Chucks for CNC overhead CNC machines with **HSK 63 F** shank.

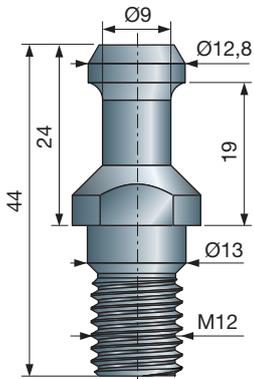
- Nickel coating treatment to prevent rust.
- G2,5 balancing for high speed applications.
- **ER32 RH** locking ring for item **MP10MDC AA9**.
- **ER40 RH** for **MP10MDC BA9**.
- Collet not included.

CD01M

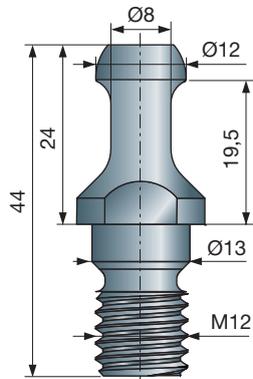
Pull studs for chucks ISO30

Terminal pins for ISO30 chucks and spindles.

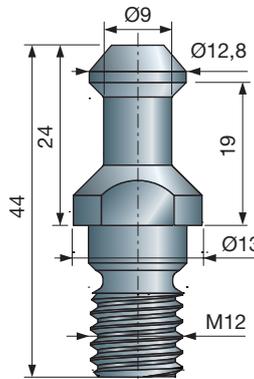
| For routers: | Freud Code | Art. No. |
|-----------------------------|------------|------------|
| CMS | CD01M AA9 | F03FA00537 |
| Biesse, Masterwood | CD01M BA9 | F03FA00538 |
| Alberti, Masterwood | CD01M CA9 | F03FA00539 |
| SCM, Morbidelli | CD01M DA9 | F03FA00540 |
| Busellato, IMA, Weeke, Maka | CD01M EA9 | F03FA00541 |



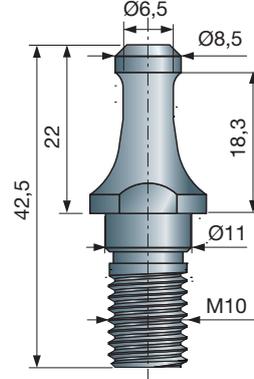
CD01M AA9
F03FA00537



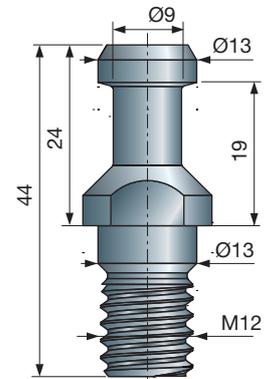
CD01M BA9
F03FA00538



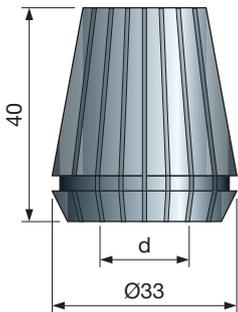
CD01M CA9
F03FA00539



CD01M DA9
F03FA00540



CD01M EA9
F03FA00541

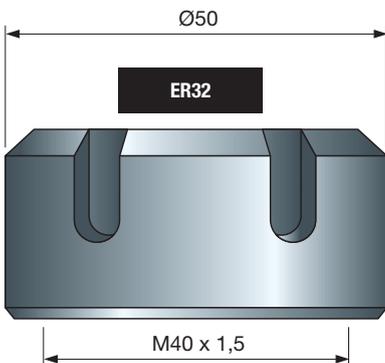


Collet for router bits with cylindrical shank.
Suitable for **MP06MD**, **MP08MDC AA9** and **MP10MDC AA9** chucks.

MP06M

High precision collet for ER32 locking rings

| d | H | Clamping range | Freud Code | Art. No. |
|----|----|----------------|------------------|------------|
| 4 | 40 | 4÷3 | MP06M 049 | F03FA01550 |
| 6 | 40 | 6÷5 | MP06M 069 | F03FA01551 |
| 8 | 40 | 8÷7 | MP06M 089 | F03FA01553 |
| 10 | 40 | 10÷9 | MP06M 109 | F03FA01554 |
| 12 | 40 | 12÷11 | MP06M 129 | F03FA01555 |
| 14 | 40 | 14÷13 | MP06M 149 | F03FA01557 |
| 16 | 40 | 16÷15 | MP06M 169 | F03FA01558 |
| 18 | 40 | 18÷17 | MP06M 189 | F03FA01559 |
| 20 | 40 | 20÷19 | MP06M 209 | F03FA01560 |

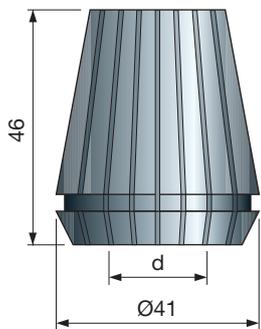


Locking rings suitable for universal high precision chucks with **MP06M** collet.

GH32M

High precision locking ring

| D | Locking ring | Freud Code | Art. No. |
|----|--------------|------------------|------------|
| 50 | ER32 | GH32M AA9 | F03FA01400 |

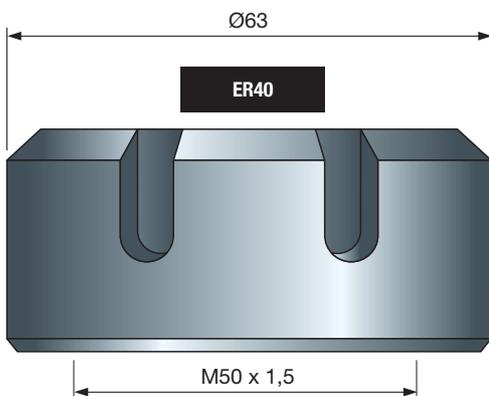


Collets for router bits with cylindrical shank.
Suitable for **MP08MDC BA9** and **MP10MDC BA9** chucks.

MP16M

High precision collet for ER40 locking rings

| d mm | H mm | Clamping range | Freud Code | Art. No. |
|---------|---------|----------------|------------------|------------|
| 6 | 46 | 6÷5 | MP16M 069 | F03FA01666 |
| 8 | 46 | 8÷7 | MP16M 089 | F03FA01667 |
| 10 | 46 | 10÷9 | MP16M 109 | F03FA01668 |
| 12 | 46 | 12÷11 | MP16M 129 | F03FA01669 |
| 14 | 46 | 14÷13 | MP16M 149 | F03FA01670 |
| 16 | 46 | 16÷15 | MP16M 169 | F03FA01671 |
| 18 | 46 | 18÷17 | MP16M 189 | F03FA01672 |
| 20 | 46 | 20÷19 | MP16M 209 | F03FA01673 |
| 25 | 46 | 25÷24 | MP16M 259 | F03FA01675 |

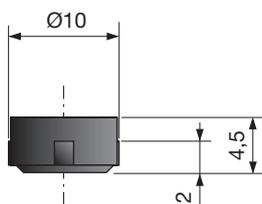


Locking rings suitable for universal high precision chucks with **MP16M** collet.

GH40M

High precision locking ring

| D mm | Locking ring | Freud Code | Art. No. |
|---------|--------------|------------------|------------|
| 63 | ER40 | GH40M AA9 | F03FA01401 |



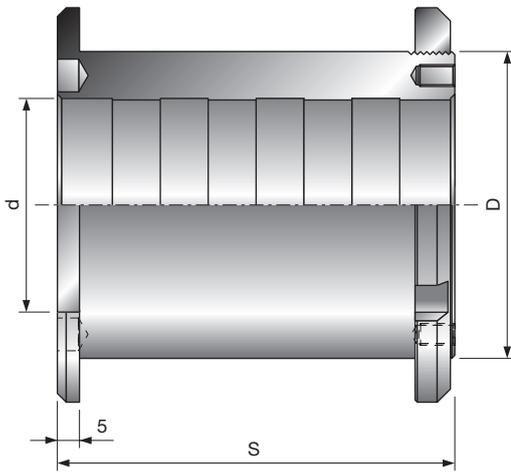
MC01M

Encoding microchip for smart tools

| D mm | H mm | h mm | Freud Code | Art. No. |
|---------|---------|---------|------------------|------------|
| 10 | 4,5 | 2 | MC01M 010 | F03FB01638 |

Microchip suitable for machines set up to read and write data for tool recognition.

- Circular in shape, it has storage capacity of 511 bytes.
- To be used at temperatures from 0° to + 70°.



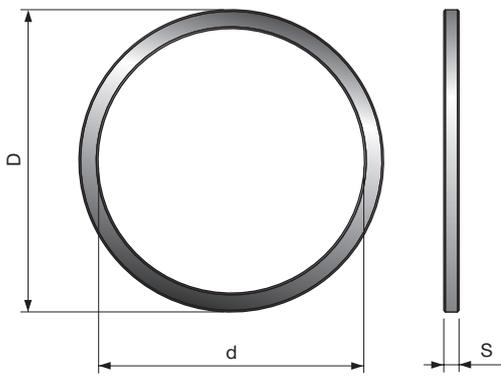
Standard Freud's sleeves for complex tools with threaded locking nut.

BF10MD BF10MS

Sleeves with locking nut

| D mm | S mm | d mm | Freud Code Right (D) | Art. No. | Freud Code Left (S) | Art. No. |
|---------|---------|---------|-------------------------|------------|------------------------|------------|
| 50 | 110 | 30 | BF10MD AA9 | F03FC00616 | BF10MS AA9 | F03FC00661 |
| 50 | 130 | 30 | BF10MD AD9 | F03FC00619 | BF10MS AD9 | F03FC00664 |
| 50 | 60 | 35 | BF10MD AG9 | F03FC00622 | - | - |
| 50 | 110 | 35 | BF10MD AB9 | F03FC00617 | BF10MS AB9 | F03FC00662 |
| 50 | 130 | 35 | BF10MD AE9 | F03FC00620 | - | - |
| 50 | 110 | 40 | BF10MD AC9 | F03FC00618 | BF10MS AC9 | F03FC00663 |
| 50 | 130 | 40 | BF10MD AF9 | F03FC00621 | BF10MS AF9 | F03FC00665 |
| 55 | 110 | 35 | BF10MD BA9 | F03FC00625 | BF10MS BA9 | F03FS07470 |
| 55 | 130 | 35 | BF10MD BC9 | F03FS07469 | BF10MS BC9 | F03FS07471 |
| 55 | 110 | 40 | BF10MD BB9 | F03FS07468 | - | - |
| 55 | 130 | 40 | BF10MD BD9 | F03FC00626 | BF10MS BD9 | F03FC00668 |
| 60 | 90 | 32 | BF10MD DL9 | F03FC24537 | - | - |
| 60 | 85 | 35 | BF10MD KB9 | F03FC00643 | - | - |
| 60 | 90 | 35 | BF10MD DB9 | F03FC00630 | - | - |
| 60 | 110 | 35 | BF10MD CB9 | F03FC00627 | - | - |
| 60 | 85 | 40 | BF10MD KC9 | F03FC00644 | - | - |
| 60 | 90 | 40 | BF10MD DC9 | F03FC00631 | BF10MS DC9 | F03FC00669 |
| 60 | 110 | 40 | BF10MD CC9 | F03FC00628 | - | - |
| 60 | 85 | 50 | BF10MD KD9 | F03FC00645 | - | - |
| 60 | 90 | 50 | BF10MD DD9 | F03FC00632 | - | - |
| 60 | 110 | 50 | BF10MD CD9 | F03FC00629 | - | - |
| 70 | 75 | 30 | BF10MD LA9 | F03FC00646 | - | - |
| 70 | 85 | 30 | - | - | BF10MS HA9 | F03FC00676 |
| 70 | 90 | 30 | BF10MD EA9 | F03FC24536 | - | - |
| 70 | 90 | 32 | BF10MD EL9 | F03FC24537 | BF10MS EL9 | - |
| 70 | 85 | 35 | BF10MD HB9 | F03FC00638 | - | - |
| 70 | 90 | 35 | BF10MD EB9 | F03FC00633 | BF10MS EB9 | F03FC00671 |
| 70 | 75 | 40 | BF10MD LC9 | F03FC00647 | - | - |
| 70 | 85 | 40 | BF10MD HC9 | F03FC00639 | - | - |
| 70 | 90 | 40 | BF10MD EC9 | F03FC00634 | BF10MS EC9 | F03FC00672 |
| * | 70 | 40 | BF10MD QD9 | F03FC00653 | BF10MS QD9 | F03FC00685 |
| * | 70 | 45 | BF10MD PD9 | F03FC00652 | BF10MS PD9 | F03FC00684 |
| * | 70 | 50 | BF10MD OD9 | F03FC00651 | BF10MS OD9 | F03FC00683 |
| * | 70 | 55 | BF10MD ND9 | F03FC00650 | BF10MS ND9 | F03FC00682 |
| * | 70 | 60 | BF10MD MD9 | F03FC00649 | BF10MS MD9 | F03FC00681 |
| * | 70 | 65 | BF10MD ID9 | F03FC00641 | BF10MS ID9 | F03FC00679 |
| * | 70 | 70 | BF10MD GD9 | F03FC00637 | BF10MS GD9 | F03FC00675 |
| * | 70 | 75 | BF10MD LD9 | F03FC00648 | BF10MS LD9 | F03FC00680 |
| * | 70 | 80 | BF10MD FD9 | F03FC00636 | BF10MS FD9 | F03FC00674 |
| * | 70 | 85 | BF10MD HD9 | F03FC00640 | BF10MS HD9 | F03FC00678 |
| * | 70 | 90 | BF10MD ED9 | F03FC00635 | BF10MS ED9 | F03FC00673 |

* Item already fitted with pin holes.

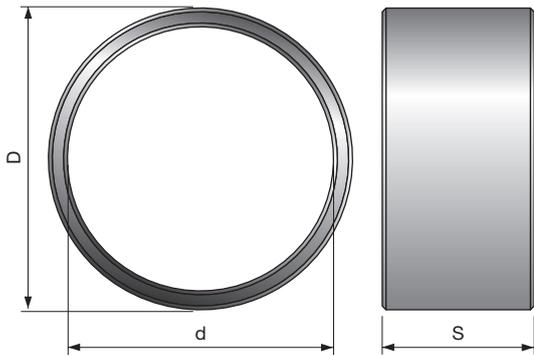


Standard reduction rings suitable for circular saw blades.

BLA

Standard reduction rings for saw blades

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|----------------|------------|
| 15.88 | 0.8 | 10 | BLA08158100 | F03FA23018 |
| 20 | 1.2 | 12.7 | BL15M20127 | F03FC00694 |
| 20 | 1.5 | 16 | BLA15200160V01 | F03FS11956 |
| 20 | 1.8 | 16 | BLA18200160V01 | F03FS11960 |
| 25.4 | 1.0 | 19.05 | BLA10254190V01 | F03FS11954 |
| 25.4 | 1.2 | 20 | BLA12254200V01 | F03FS11955 |
| 30 | 1.5 | 15.88 | BLA15300158 | F03FA23019 |
| 30 | 1.8 | 15.88 | BLA18300158 | F03FA23020 |
| 30 | 1.5 | 20 | BLA15300200V01 | F03FS11957 |
| 30 | 1.8 | 20 | BLA18300200 | F03FA23021 |
| 30 | 1.5 | 25 | BLA15300250V01 | F03FS11958 |
| 30 | 1.8 | 25 | BLA18300250 | F03FA23022 |
| 30 | 1.5 | 25.4 | BLA15300254V01 | F03FS11959 |
| 30 | 1.8 | 25.4 | BLA18300254V01 | F03FS11961 |
| 35 | 1.8 | 25.4 | BLA18350254 | F03FA22201 |
| 35 | 1.8 | 30 | BLA18350300 | F03FA23023 |

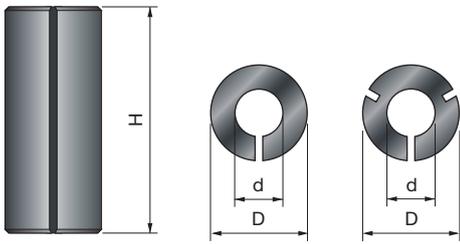


Standard reduction rings suitable for cutterheads.

BF01M

Standard reduction rings for cutterheads

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 35 | 5 | 30 | BF01M AA9 | F03FC00604 |
| 35 | 10 | 30 | BF01M AB9 | F03FC00605 |
| 35 | 15 | 30 | BF01M AC9 | F03FC00606 |
| 35 | 20 | 30 | BF01M AD9 | F03FC00607 |
| 35 | 25 | 30 | BF01M AE9 | F03FC00608 |
| 35 | 50 | 30 | BF01M AF9 | F03FC00609 |
| 40 | 5 | 35 | BF01M BA9 | F03FC00610 |
| 40 | 10 | 35 | BF01M BB9 | F03FC00611 |
| 40 | 15 | 35 | BF01M BC9 | F03FC00612 |
| 40 | 20 | 35 | BF01M BD9 | F03FC00613 |
| 40 | 25 | 35 | BF01M BE9 | F03FC00614 |
| 40 | 50 | 35 | BF01M BF9 | F03FC00615 |

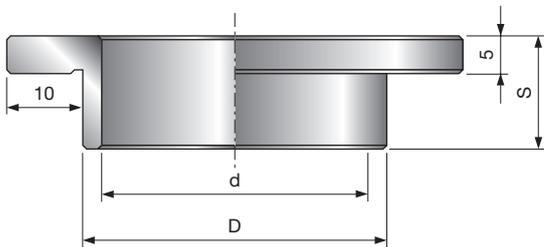


Reducing bushes for router bits.

3105M

Reducing bushes

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 8 | 25 | 6 | 3105MVY250 | F03FA10588 |
| 8 | 25 | 6,35 | 3105MVX250 | F03FA10587 |
| 9,5 | 25 | 6 | 3105MUY250 | F03FA10586 |
| 9,5 | 25 | 6,35 | 3105MUX250 | F03FA10585 |
| 9,5 | 25 | 8 | 3105MUV250 | F03FA10584 |
| 10 | 25 | 8 | 3105MTV250 | F03FA10582 |
| 12 | 25 | 6 | 3105MSY250 | F03FA10581 |
| 12 | 25 | 8 | 3105MSV250 | F03FA10580 |
| 12 | 25 | 10 | 3105MST250 | F03FA10579 |
| 12,7 | 25 | 6 | 3105MRY250 | F03FA10578 |
| 12,7 | 25 | 6,35 | 3105MRX250 | F03FA10577 |
| 12,7 | 25 | 8 | 3105MRV250 | F03FA10576 |
| 12,7 | 25 | 9,5 | 3105MRU250 | F03FA10575 |
| 16 | 25 | 13 | 3105MQQ250 | F03FA10574 |

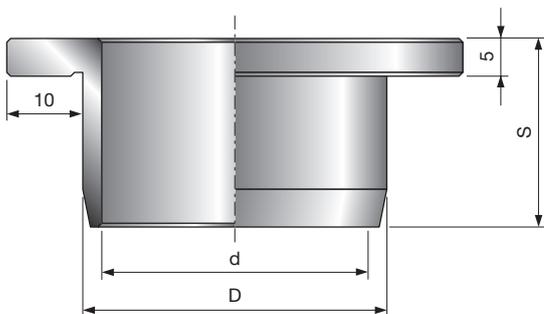


Reducing bushes for cutterheads with shoulder.

FX01M

Reducing bushes

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 30 | 15 | 25 | FX01M AA9 | F03FC15031 |
| 35 | 15 | 30 | FX01M BA9 | F03FC15033 |
| 40 | 15 | 30 | FX01M CA9 | F03FC15035 |
| 40 | 15 | 35 | FX01M CB9 | F03FC15036 |
| 50 | 15 | 30 | FX01M DA9 | F03FC15037 |
| 50 | 15 | 35 | FX01M DB9 | F03FC15038 |
| 50 | 15 | 40 | FX01M DC9 | F03FC15039 |
| 68 | 10 | 40 | FX01M HC9 | F03FC15041 |

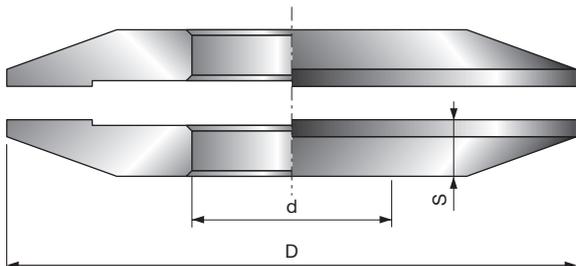


Reducing bushes for cutterheads with shoulder.
• Suitable for planer heads **TM06M** and **TM07M**.

FX02M

Reducing bushes

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 40 | 25 | 35 | FX02M CB9 | F03FC15043 |

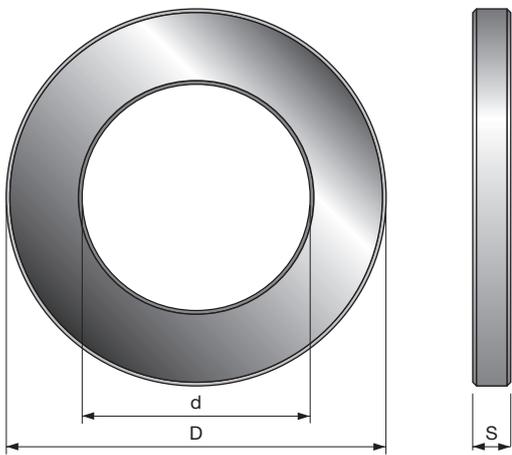


Stiffening collars suitable for circular saw blades.

FX03M

Stiffening collars for saw blades

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 80 | 10 | 30 | FX03M AA9 | F03FC15045 |
| 80 | 10 | 35 | FX03M AB9 | F03FC15047 |
| 100 | 10 | 30 | FX03M BA9 | F03FC15049 |
| 100 | 10 | 35 | FX03M BB9 | F03FC15051 |
| 100 | 10 | 40 | FX03M BC9 | F03FC15053 |
| 125 | 10 | 30 | FX03M CA9 | F03FC15055 |
| 125 | 10 | 35 | FX03M CB9 | F03FC15057 |



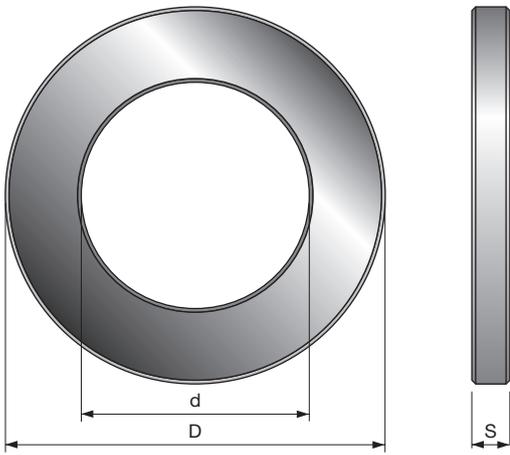
Standard spacers suitable for cutterheads.

AN01M

Spacers

| D mm | S mm | d mm | Freud Code | Art. No. |
|------|------|-------|------------|------------|
| 48 | 24,6 | 31,75 | AN01MM2469 | F03FC00385 |
| 48 | 99 | 31,75 | AN01MM9909 | F03FC00386 |
| 50 | 0,1 | 30 | AN01MA0019 | F03FC00030 |
| 50 | 0,2 | 30 | AN01MA0029 | F03FC00031 |
| 50 | 0,3 | 30 | AN01MA0039 | F03FC00032 |
| 50 | 0,5 | 30 | AN01MA0059 | F03FC00033 |
| 50 | 1 | 30 | AN01MA0109 | F03FC00034 |
| 50 | 2 | 30 | AN01MA0209 | F03FC00035 |
| 50 | 3 | 30 | AN01MA0309 | F03FC00036 |
| 50 | 4 | 30 | AN01MA0409 | F03FC00037 |
| 50 | 5 | 30 | AN01MA0509 | F03FC00038 |
| 50 | 6 | 30 | AN01MA0609 | F03FC00040 |
| 50 | 7 | 30 | AN01MA0709 | F03FC00041 |
| 50 | 8 | 30 | AN01MA0809 | F03FC00042 |
| 50 | 9 | 30 | AN01MA0909 | F03FC00043 |
| 50 | 10 | 30 | AN01MA1009 | F03FC00044 |
| 50 | 11 | 30 | AN01MA1109 | F03FC00045 |
| 50 | 12 | 30 | AN01MA1209 | F03FC00046 |
| 50 | 13 | 30 | AN01MA1309 | F03FC00047 |
| 50 | 14 | 30 | AN01MA1409 | F03FC00048 |
| 50 | 15 | 30 | AN01MA1509 | F03FC00049 |
| 50 | 16 | 30 | AN01MA1609 | F03FC00050 |
| 50 | 17 | 30 | AN01MA1709 | F03FC00051 |
| 50 | 18 | 30 | AN01MA1809 | F03FC00052 |
| 50 | 19 | 30 | AN01MA1909 | F03FC00053 |
| 50 | 20 | 30 | AN01MA2009 | F03FC00054 |
| 50 | 21 | 30 | AN01MA2109 | F03FC00055 |
| 50 | 22 | 30 | AN01MA2209 | F03FC00056 |
| 50 | 23 | 30 | AN01MA2309 | F03FC00057 |
| 50 | 24 | 30 | AN01MA2409 | F03FC00058 |
| 50 | 25 | 30 | AN01MA2509 | F03FC00059 |
| 50 | 26 | 30 | AN01MA2609 | F03FC00060 |
| 50 | 27 | 30 | AN01MA2709 | F03FC00061 |
| 50 | 28 | 30 | AN01MA2809 | F03FC00062 |
| 50 | 29 | 30 | AN01MA2909 | F03FC00063 |
| 50 | 30 | 30 | AN01MA3009 | F03FC00064 |
| 50 | 31 | 30 | AN01MA3109 | F03FC00065 |
| 50 | 32 | 30 | AN01MA3209 | F03FC00066 |
| 50 | 33 | 30 | AN01MA3309 | F03FC00067 |
| 50 | 34 | 30 | AN01MA3409 | F03FC00068 |
| 50 | 35 | 30 | AN01MA3509 | F03FC00069 |
| 50 | 36 | 30 | AN01MA3609 | F03FC00070 |
| 50 | 37 | 30 | AN01MA3709 | F03FC00071 |
| 50 | 38 | 30 | AN01MA3809 | F03FC00072 |
| 50 | 40 | 30 | AN01MA4009 | F03FC00073 |
| 50 | 41 | 30 | AN01MA4109 | F03FC00074 |
| 50 | 42 | 30 | AN01MA4209 | F03FC00075 |
| 50 | 53 | 30 | AN01MA5309 | F03FC00076 |
| 50 | 60 | 30 | AN01MA6009 | F03FC00077 |
| 50 | 93 | 30 | AN01MA9309 | F03FC00079 |
| 50 | 99 | 30 | AN01MA9909 | F03FC00080 |
| 55 | 0,1 | 35 | AN01MB0019 | F03FC00081 |
| 55 | 0,2 | 35 | AN01MB0029 | F03FC00082 |
| 55 | 0,3 | 35 | AN01MB0039 | F03FC00083 |
| 55 | 0,5 | 35 | AN01MB0059 | F03FC00084 |
| 55 | 1 | 35 | AN01MB0109 | F03FC00085 |
| 55 | 2 | 35 | AN01MB0209 | F03FC00086 |
| 55 | 3 | 35 | AN01MB0309 | F03FC00087 |
| 55 | 4 | 35 | AN01MB0409 | F03FC00088 |
| 55 | 5 | 35 | AN01MB0509 | F03FC00089 |
| 55 | 6 | 35 | AN01MB0609 | F03FC00091 |
| 55 | 7 | 35 | AN01MB0709 | F03FC00092 |
| 55 | 8 | 35 | AN01MB0809 | F03FC00093 |
| 55 | 9 | 35 | AN01MB0909 | F03FC00094 |
| 55 | 10 | 35 | AN01MB1009 | F03FC00095 |

| D mm | S mm | d mm | Freud Code | Art. No. |
|------|------|-------|------------|------------|
| 30 | 0,1 | 20 | AN01MG0019 | F03FC00247 |
| 30 | 0,2 | 20 | AN01MG0029 | F03FC00248 |
| 30 | 0,3 | 20 | AN01MG0039 | F03FC00249 |
| 30 | 0,5 | 20 | AN01MG0059 | F03FC00250 |
| 30 | 1 | 20 | AN01MG0109 | F03FC00251 |
| 30 | 3 | 20 | AN01MG0309 | F03FC00252 |
| 30 | 6 | 20 | AN01MG0609 | F03FC00253 |
| 30 | 10 | 20 | AN01MG1009 | F03FC00254 |
| 33 | 0,1 | 19,05 | AN01ML0019 | F03FC00358 |
| 33 | 0,2 | 19,05 | AN01ML0029 | F03FC00359 |
| 33 | 0,3 | 19,05 | AN01ML0039 | F03FC00360 |
| 33 | 0,5 | 19,05 | AN01ML0059 | F03FC00361 |
| 33 | 1 | 19,05 | AN01ML0109 | F03FC00362 |
| 33 | 3,6 | 19,05 | AN01ML0369 | F03FC00363 |
| 33 | 6,8 | 19,05 | AN01ML0689 | F03FC00365 |
| 33 | 7,3 | 19,05 | AN01ML0739 | F03FC00366 |
| 48 | 0,1 | 31,75 | AN01MM0019 | F03FC00371 |
| 48 | 0,2 | 31,75 | AN01MM0029 | F03FC00372 |
| 48 | 0,3 | 31,75 | AN01MM0039 | F03FC00373 |
| 48 | 0,5 | 31,75 | AN01MM0059 | F03FC00374 |
| 48 | 1 | 31,75 | AN01MM0109 | F03FC00375 |
| 48 | 3,2 | 31,75 | AN01MM0329 | F03FC00376 |
| 48 | 3,6 | 31,75 | AN01MM0369 | F03FC00377 |
| 48 | 4 | 31,75 | AN01MM0409 | F03FC00378 |
| 48 | 5,5 | 31,75 | AN01MM0559 | F03FC00379 |
| 48 | 6,8 | 31,75 | AN01MM0689 | F03FC00380 |
| 48 | 7,3 | 31,75 | AN01MM0739 | F03FC00381 |
| 48 | 8,05 | 31,75 | AN01MM0809 | F03FC00382 |
| 48 | 8,35 | 31,75 | AN01MM0839 | F03FC24743 |
| 48 | 8,35 | 31,75 | AN01MM0849 | F03FC00383 |
| 48 | 9,4 | 31,75 | AN01MM0949 | F03FC00384 |

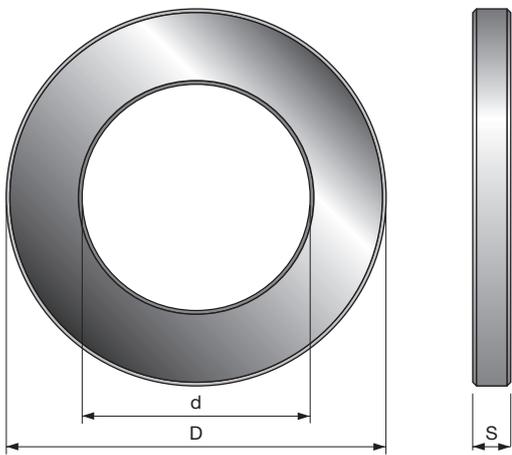


AN01M

Spacers

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 60 | 1 | 40 | AN01MC0109 | F03FC00127 |
| 60 | 2 | 40 | AN01MC0209 | F03FC00128 |
| 60 | 3 | 40 | AN01MC0309 | F03FC00129 |
| 60 | 4 | 40 | AN01MC0409 | F03FC00130 |
| 60 | 5 | 40 | AN01MC0509 | F03FC00131 |
| 60 | 6 | 40 | AN01MC0609 | F03FC00133 |
| 60 | 7 | 40 | AN01MC0709 | F03FC00134 |
| 60 | 8 | 40 | AN01MC0809 | F03FC00135 |
| 60 | 9 | 40 | AN01MC0909 | F03FC00136 |
| 60 | 10 | 40 | AN01MC1009 | F03FC00137 |
| 60 | 11 | 40 | AN01MC1109 | F03FC00138 |
| 60 | 12 | 40 | AN01MC1209 | F03FC00139 |
| 60 | 13 | 40 | AN01MC1309 | F03FC00140 |
| 60 | 14 | 40 | AN01MC1409 | F03FC00141 |
| 60 | 15 | 40 | AN01MC1509 | F03FC00142 |
| 60 | 16 | 40 | AN01MC1609 | F03FC00143 |
| 60 | 17 | 40 | AN01MC1709 | F03FC00144 |
| 60 | 18 | 40 | AN01MC1809 | F03FC00145 |
| 60 | 19 | 40 | AN01MC1909 | F03FC00146 |
| 60 | 20 | 40 | AN01MC2009 | F03FC00147 |
| 60 | 21 | 40 | AN01MC2109 | F03FC00148 |
| 60 | 22 | 40 | AN01MC2209 | F03FC00149 |
| 60 | 23 | 40 | AN01MC2309 | F03FC00150 |
| 60 | 24 | 40 | AN01MC2409 | F03FC00151 |
| 60 | 25 | 40 | AN01MC2509 | F03FC00152 |
| 60 | 26 | 40 | AN01MC2609 | F03FC00153 |
| 60 | 27 | 40 | AN01MC2709 | F03FC00154 |
| 60 | 28 | 40 | AN01MC2809 | F03FC00155 |
| 60 | 29 | 40 | AN01MC2909 | F03FC00156 |
| 60 | 30 | 40 | AN01MC3009 | F03FC00157 |
| 60 | 31 | 40 | AN01MC3109 | F03FC00158 |
| 60 | 32 | 40 | AN01MC3209 | F03FC00159 |
| 60 | 33 | 40 | AN01MC3309 | F03FC00160 |
| 60 | 34 | 40 | AN01MC3409 | F03FC00161 |
| 60 | 35 | 40 | AN01MC3509 | F03FC00162 |
| 60 | 40 | 40 | AN01MC4009 | F03FC00163 |
| 60 | 42 | 40 | AN01MC4209 | F03FC00164 |
| 60 | 99 | 40 | AN01MC9909 | F03FC00165 |
| 70 | 0,1 | 50 | AN01MD0019 | F03FC00166 |
| 70 | 0,2 | 50 | AN01MD0029 | F03FC00167 |
| 70 | 0,3 | 50 | AN01MD0039 | F03FC00168 |
| 70 | 0,5 | 50 | AN01MD0059 | F03FC00169 |
| 70 | 1 | 50 | AN01MD0109 | F03FC00170 |
| 70 | 2 | 50 | AN01MD0209 | F03FC00171 |
| 70 | 3 | 50 | AN01MD0309 | F03FC00173 |
| 70 | 4 | 50 | AN01MD0409 | F03FC00174 |
| 70 | 5 | 50 | AN01MD0509 | F03FC00175 |
| 70 | 6 | 50 | AN01MD0609 | F03FC00178 |
| 70 | 7 | 50 | AN01MD0709 | F03FC00179 |
| 70 | 8 | 50 | AN01MD0809 | F03FC00180 |
| 70 | 9 | 50 | AN01MD0909 | F03FC00181 |
| 70 | 10 | 50 | AN01MD1009 | F03FC00182 |
| 70 | 11 | 50 | AN01MD1109 | F03FC00183 |
| 70 | 12 | 50 | AN01MD1209 | F03FC00184 |
| 70 | 13 | 50 | AN01MD1309 | F03FC00185 |
| 70 | 14 | 50 | AN01MD1409 | F03FC00186 |
| 70 | 15 | 50 | AN01MD1509 | F03FC00187 |
| 70 | 16 | 50 | AN01MD1609 | F03FC00188 |
| 70 | 17 | 50 | AN01MD1709 | F03FC00189 |
| 70 | 18 | 50 | AN01MD1809 | F03FC00190 |
| 70 | 19 | 50 | AN01MD1909 | F03FC00191 |
| 70 | 20 | 50 | AN01MD2009 | F03FC00192 |
| 70 | 21 | 50 | AN01MD2109 | F03FC00193 |
| 70 | 22 | 50 | AN01MD2209 | F03FC00194 |
| 70 | 23 | 50 | AN01MD2309 | F03FC00195 |

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 55 | 11 | 35 | AN01MB1109 | F03FC00096 |
| 55 | 12 | 35 | AN01MB1209 | F03FC00097 |
| 55 | 13 | 35 | AN01MB1309 | F03FC00098 |
| 55 | 14 | 35 | AN01MB1409 | F03FC00099 |
| 55 | 15 | 35 | AN01MB1509 | F03FC00100 |
| 55 | 16 | 35 | AN01MB1609 | F03FC00101 |
| 55 | 17 | 35 | AN01MB1709 | F03FC00102 |
| 55 | 18 | 35 | AN01MB1809 | F03FC00103 |
| 55 | 19 | 35 | AN01MB1909 | F03FC00104 |
| 55 | 20 | 35 | AN01MB2009 | F03FC00105 |
| 55 | 21 | 35 | AN01MB2109 | F03FC00106 |
| 55 | 22 | 35 | AN01MB2209 | F03FC00107 |
| 55 | 23 | 35 | AN01MB2309 | F03FC00108 |
| 55 | 24 | 35 | AN01MB2409 | F03FC00109 |
| 55 | 25 | 35 | AN01MB2509 | F03FC00110 |
| 55 | 26 | 35 | AN01MB2609 | F03FC00111 |
| 55 | 27 | 35 | AN01MB2709 | F03FC00112 |
| 55 | 28 | 35 | AN01MB2809 | F03FC00113 |
| 55 | 29 | 35 | AN01MB2909 | F03FC00114 |
| 55 | 30 | 35 | AN01MB3009 | F03FC00115 |
| 55 | 31 | 35 | AN01MB3109 | F03FC00116 |
| 55 | 32 | 35 | AN01MB3209 | F03FC00117 |
| 55 | 33 | 35 | AN01MB3309 | F03FC00118 |
| 55 | 34 | 35 | AN01MB3409 | F03FC00119 |
| 55 | 35 | 35 | AN01MB3509 | F03FC00120 |
| 55 | 40 | 35 | AN01MB4009 | F03FC00121 |
| 55 | 99 | 35 | AN01MB9909 | F03FC00122 |
| 60 | 0,1 | 40 | AN01MC0019 | F03FC00123 |
| 60 | 0,2 | 40 | AN01MC0029 | F03FC00124 |
| 60 | 0,3 | 40 | AN01MC0039 | F03FC00125 |
| 60 | 0,5 | 40 | AN01MC0059 | F03FC00126 |

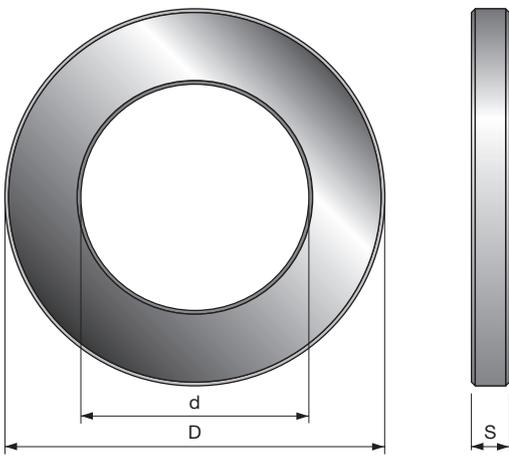


AN01M

Spacers

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 70 | 24 | 50 | AN01MD2409 | F03FC00196 |
| 70 | 25 | 50 | AN01MD2509 | F03FC00197 |
| 70 | 26 | 50 | AN01MD2609 | F03FC00198 |
| 70 | 27 | 50 | AN01MD2709 | F03FC00199 |
| 70 | 28 | 50 | AN01MD2809 | F03FC00200 |
| 70 | 29 | 50 | AN01MD2909 | F03FC00201 |
| 70 | 30 | 50 | AN01MD3009 | F03FC00202 |
| 70 | 31 | 50 | AN01MD3109 | F03FC00203 |
| 70 | 32 | 50 | AN01MD3209 | F03FC00204 |
| 70 | 33 | 50 | AN01MD3309 | F03FC00205 |
| 70 | 34 | 50 | AN01MD3409 | F03FC00206 |
| 70 | 35 | 50 | AN01MD3509 | F03FC00207 |
| 70 | 38 | 50 | AN01MD3809 | F03FC00208 |
| 70 | 40 | 50 | AN01MD4009 | F03FC00209 |
| 70 | 99 | 50 | AN01MD9909 | F03FC00210 |
| 80 | 0,1 | 60 | AN01MK0019 | F03FC00311 |
| 80 | 0,2 | 60 | AN01MK0029 | F03FC00312 |
| 80 | 0,3 | 60 | AN01MK0039 | F03FC00313 |
| 80 | 0,5 | 60 | AN01MK0059 | F03FC00314 |
| 80 | 1 | 60 | AN01MK0109 | F03FC00315 |
| 80 | 2 | 60 | AN01MK0209 | F03FC00316 |
| 80 | 3 | 60 | AN01MK0309 | F03FC00318 |
| 80 | 4 | 60 | AN01MK0409 | F03FC00319 |
| 80 | 5 | 60 | AN01MK0509 | F03FC00321 |
| 80 | 6 | 60 | AN01MK0609 | F03FC00322 |
| 80 | 7 | 60 | AN01MK0709 | F03FC00324 |
| 80 | 8 | 60 | AN01MK0809 | F03FC00325 |
| 80 | 9 | 60 | AN01MK0909 | F03FC00326 |
| 80 | 10 | 60 | AN01MK1009 | F03FC00327 |
| 80 | 11 | 60 | AN01MK1109 | F03FC00328 |
| 80 | 12 | 60 | AN01MK1209 | F03FC00329 |
| 80 | 13 | 60 | AN01MK1309 | F03FC00330 |
| 80 | 14 | 60 | AN01MK1409 | F03FC00331 |

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 80 | 15 | 60 | AN01MK1509 | F03FC00333 |
| 80 | 16 | 60 | AN01MK1609 | F03FC00334 |
| 80 | 17 | 60 | AN01MK1709 | F03FC00335 |
| 80 | 18 | 60 | AN01MK1809 | F03FC00336 |
| 80 | 19 | 60 | AN01MK1909 | F03FC00338 |
| 80 | 20 | 60 | AN01MK2009 | F03FC00339 |
| 80 | 21 | 60 | AN01MK2109 | F03FC00340 |
| 80 | 22 | 60 | AN01MK2209 | F03FC00341 |
| 80 | 23 | 60 | AN01MK2309 | F03FC00342 |
| 80 | 24 | 60 | AN01MK2409 | F03FC00343 |
| 80 | 25 | 60 | AN01MK2509 | F03FC00344 |
| 80 | 26 | 60 | AN01MK2609 | F03FC00345 |
| 80 | 27 | 60 | AN01MK2709 | F03FC00346 |
| 80 | 28 | 60 | AN01MK2809 | F03FC00347 |
| 80 | 29 | 60 | AN01MK2909 | F03FC00348 |
| 80 | 30 | 60 | AN01MK3009 | F03FC00349 |
| 80 | 31 | 60 | AN01MK3109 | F03FC00350 |
| 80 | 32 | 60 | AN01MK3209 | F03FC00351 |
| 80 | 33 | 60 | AN01MK3309 | F03FC00352 |
| 80 | 34 | 60 | AN01MK3409 | F03FC00353 |
| 80 | 35 | 60 | AN01MK3509 | F03FC00354 |
| 80 | 39,7 | 60 | AN01MK3979 | F03FC00355 |
| 80 | 40 | 60 | AN01MK4009 | F03FC00356 |
| 80 | 99 | 60 | AN01MK9909 | F03FC00357 |
| 90 | 0,1 | 70 | AN01MH0019 | F03FC00255 |
| 90 | 0,2 | 70 | AN01MH0029 | F03FC00256 |
| 90 | 0,3 | 70 | AN01MH0039 | F03FC00257 |
| 90 | 0,5 | 70 | AN01MH0059 | F03FC00258 |
| 90 | 1 | 70 | AN01MH0109 | F03FC00259 |
| 90 | 2 | 70 | AN01MH0209 | F03FC00260 |
| 90 | 3 | 70 | AN01MH0309 | F03FC00261 |
| 90 | 4 | 70 | AN01MH0409 | F03FC00262 |
| 90 | 5 | 70 | AN01MH0509 | F03FC00263 |
| 90 | 6 | 70 | AN01MH0609 | F03FC00264 |
| 90 | 7 | 70 | AN01MH0709 | F03FC00265 |
| 90 | 8 | 70 | AN01MH0809 | F03FC00267 |
| 90 | 9 | 70 | AN01MH0909 | F03FC00270 |
| 90 | 10 | 70 | AN01MH1009 | F03FC00272 |
| 90 | 11 | 70 | AN01MH1109 | F03FC00276 |
| 90 | 12 | 70 | AN01MH1209 | F03FC00278 |
| 90 | 13 | 70 | AN01MH1309 | F03FC00279 |
| 90 | 14 | 70 | AN01MH1409 | F03FC00280 |
| 90 | 15 | 70 | AN01MH1509 | F03FC00282 |
| 90 | 16 | 70 | AN01MH1609 | F03FC00284 |
| 90 | 17 | 70 | AN01MH1709 | F03FC00285 |
| 90 | 18 | 70 | AN01MH1809 | F03FC00286 |
| 90 | 19 | 70 | AN01MH1909 | F03FC00287 |
| 90 | 20 | 70 | AN01MH2009 | F03FC00288 |
| 90 | 21 | 70 | AN01MH2109 | F03FC00289 |
| 90 | 22 | 70 | AN01MH2209 | F03FC00291 |
| 90 | 23 | 70 | AN01MH2309 | F03FC00294 |
| 90 | 24 | 70 | AN01MH2409 | F03FC00295 |
| 90 | 25 | 70 | AN01MH2509 | F03FC00296 |
| 90 | 26 | 70 | AN01MH2609 | F03FC00297 |
| 90 | 27 | 70 | AN01MH2709 | F03FC00298 |
| 90 | 28 | 70 | AN01MH2809 | F03FC00299 |
| 90 | 29 | 70 | AN01MH2909 | F03FC00300 |
| 90 | 30 | 70 | AN01MH3009 | F03FC00301 |
| 90 | 31 | 70 | AN01MH3109 | F03FC00302 |
| 90 | 32 | 70 | AN01MH3209 | F03FC00303 |
| 90 | 33 | 70 | AN01MH3309 | F03FC00304 |
| 90 | 34 | 70 | AN01MH3409 | F03FC00305 |
| 90 | 35 | 70 | AN01MH3509 | F03FC00306 |
| 90 | 40 | 70 | AN01MH4009 | F03FC00307 |
| 90 | 99 | 70 | AN01MH9909 | F03FC00308 |



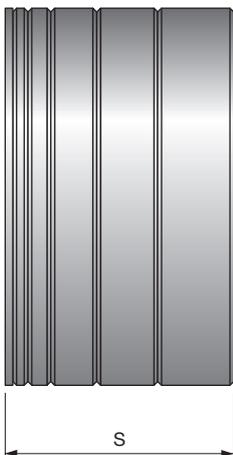
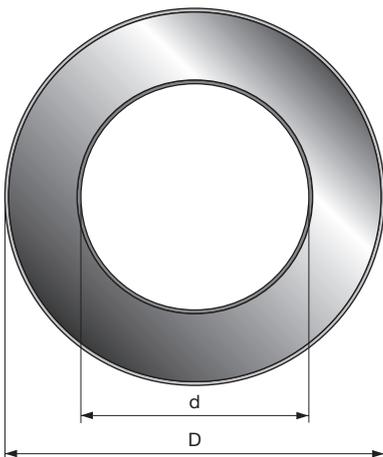
Special spacers suitable for cutterheads; minimum thickness 1mm.

- Please refer to the code as a guideline, applicable only while the order is processed.

AN01

Special spacers

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| - | 5 | 30 ÷ 40 | AN01 | |
| - | 10 | 30 ÷ 40 | AN01 | |
| - | 20 | 30 ÷ 40 | AN01 | |
| - | 40 | 30 ÷ 40 | AN01 | |
| - | 99 | 30 ÷ 40 | AN01 | |
| - | 5 | 50 ÷ 70 | AN01 | |
| - | 10 | 50 ÷ 70 | AN01 | |
| - | 20 | 50 ÷ 70 | AN01 | |
| - | 40 | 50 ÷ 70 | AN01 | |
| - | 99 | 50 ÷ 70 | AN01 | |

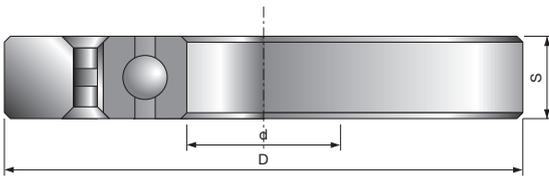


AN03M

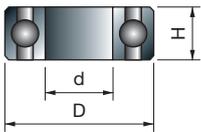
Standard spacer set

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 50 | 10 | 30 | AN03M AA9 | F03FC00444 |
| 50 | 20 | 30 | AN03M AB9 | F03FC00445 |
| 50 | 30 | 30 | AN03M AC9 | F03FC00446 |
| 50 | 40 | 30 | AN03M AD9 | F03FC00447 |
| 50 | 50 | 30 | AN03M AE9 | F03FC00448 |
| 55 | 10 | 35 | AN03M BA9 | F03FC00454 |
| 55 | 20 | 35 | AN03M BB9 | F03FC00455 |
| 55 | 30 | 35 | AN03M BC9 | F03FC00456 |
| 55 | 40 | 35 | AN03M BD9 | F03FC00457 |
| 55 | 50 | 35 | AN03M BE9 | F03FC00458 |
| 60 | 10 | 40 | AN03M CA9 | F03FC00465 |
| 60 | 20 | 40 | AN03M CB9 | F03FC00466 |
| 60 | 30 | 40 | AN03M CC9 | F03FC00467 |
| 60 | 40 | 40 | AN03M CD9 | F03FC00468 |
| 60 | 50 | 40 | AN03M CE9 | F03FC00469 |
| 70 | 10 | 50 | AN03M DA9 | F03FC00473 |
| 70 | 20 | 50 | AN03M DB9 | F03FC00474 |
| 70 | 30 | 50 | AN03M DC9 | F03FC00475 |
| 70 | 40 | 50 | AN03M DD9 | F03FC00476 |
| 70 | 50 | 50 | AN03M DE9 | F03FC00477 |
| 80 | 10 | 60 | AN03M EA9 | F03FC00484 |
| 80 | 20 | 60 | AN03M EB9 | F03FC00485 |
| 80 | 30 | 60 | AN03M EC9 | F03FC00486 |
| 80 | 40 | 60 | AN03M ED9 | F03FC00487 |
| 80 | 50 | 60 | AN03M EE9 | F03FC00488 |
| 90 | 10 | 70 | AN03M FA9 | F03FC00490 |
| 90 | 20 | 70 | AN03M FB9 | F03FC00491 |
| 90 | 30 | 70 | AN03M FC9 | F03FC00492 |
| 90 | 40 | 70 | AN03M FD9 | F03FC00493 |
| 90 | 50 | 70 | AN03M FE9 | F03FC00494 |

Standard spacers sets suitable for cutterheads.



Ball bearing guide for cutterheads: please refer to the code as a guideline, applicable only while the order is processed.



Ball bearing for router bits.



CC01

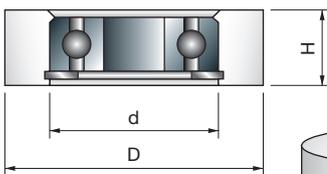
Ball bearing guide for moulding

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|----------|
| - | 12 | 20 | CC01 AA9 | |
| - | 12 | 25 | CC01 BA9 | |
| - | 13 | 30 | CC01 CA9 | |
| - | 14 | 35 | CC01 DA9 | |
| - | 15 | 40 | CC01 EA9 | |
| - | 16 | 45 | CC01 FA9 | |
| - | 16 | 50 | CC01 GA9 | |
| - | 18 | 55 | CC01 HA9 | |
| - | 18 | 60 | CC01 IA9 | |
| - | 20 | 70 | CC01 LA9 | |

3102M

Ball bearing

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 9,53 | 3,2 | 4,76 | 3102M AA9 | F03F010006 |
| 12,7 | 4,98 | 4,76 | 3102M AB9 | F03F010007 |
| 13 | 5 | 4 | 3102M CD9 | F03FA14096 |
| 13 | 5 | 6 | 3102M AP9 | F03FA10558 |
| 15 | 5 | 6 | 3102M AQ9 | F03FA10559 |
| 15,88 | 4,97 | 4,76 | 3102M AJ9 | F03F010014 |
| 16 | 5 | 5 | 3102M CC9 | F03FA14095 |
| 16 | 5 | 8 | 3102M AS9 | F03FA10561 |
| 19 | 6 | 6 | 3102M CA9 | F03FA14097 |
| 19 | 7 | 10 | 3102M AG9 | F03F010012 |
| 19,05 | 3,97 | 12,7 | 3102M CB9 | F03FA14098 |
| 19,05 | 6,35 | 12,7 | 3102M AV9 | F03F012286 |
| 22 | 7 | 8 | 3102M AC9 | F03F010008 |
| 28 | 8 | 12 | 3102M AH9 | F03F010013 |
| 32 | 9 | 15 | 3102M AN9 | F03F010016 |
| 35 | 11 | 15 | 3102M AI9 | F03F012285 |



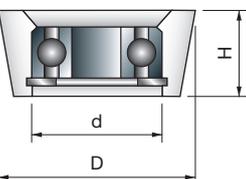
Cylindrical rub collars for ball bearing.



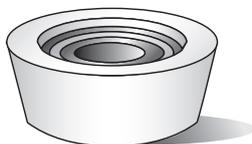
RB62M

Ball bearing rub collars

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 19,05 | 8 | 4,76 | RB62M 1509 | F03F011422 |
| 22,22 | 8 | 4,76 | RB62M 1529 | F03F011423 |
| 26 | 10 | 8 | RB62M 1249 | F03F011417 |
| 28,58 | 8 | 4,76 | RB62M 1549 | F03F011424 |
| 30 | 10 | 8 | RB62M 1289 | F03F011418 |
| 34 | 10 | 8 | RB62ME DA9 | F03FR01146 |
| 34,92 | 8 | 4,76 | RB62M 1569 | F03F011425 |
| 39,6 | 11,2 | 12 | RB62ME FB9 | F03FR01147 |



Conical rub collars for ball bearing.



3103MC

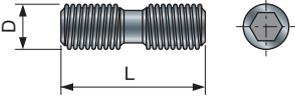
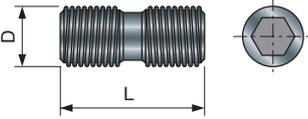
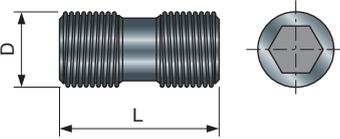
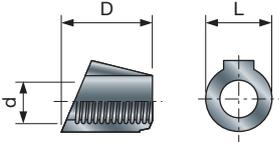
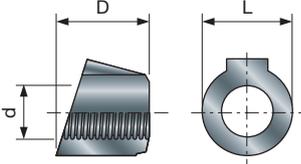
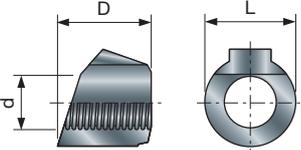
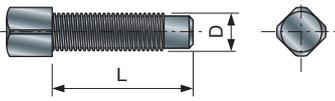
Sleeved speciality bearings

| D mm | S mm | d mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 19,05 | 6,35 | 4,76 | 3103MC HB9 | F03F010019 |
| 22,2 | 9 | 12,7 | 3103MC HC9 | F03FR01724 |

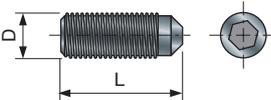
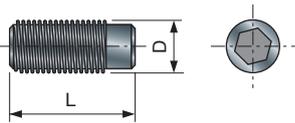
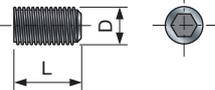
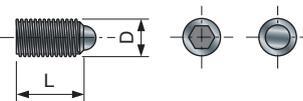
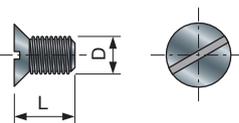
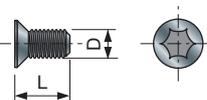
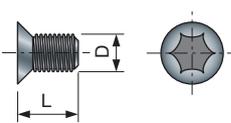
Keys and devices



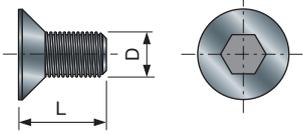
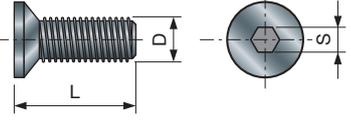
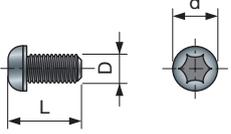
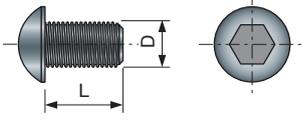
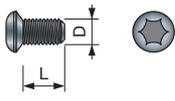
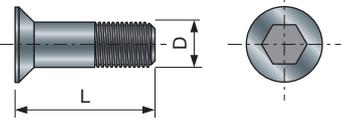
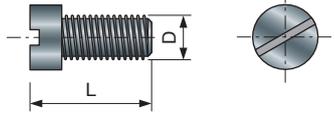
Spare screws, nuts, washers and keys

| Spare parts | Description | Dimensions D/L x L/H x d/S (mm) | Freud Code | Art. No. |
|---|--|------------------------------------|--------------------------------------|--------------------------|
|  | RH-LH Hex print screws for disposable knives | M6 x 22 | VT19M AB9 | F03FA04491 |
|  | RH-LH Hex print screws for H.S.I. knives | M8 x 22 | VT19M BB9 | F03FA04493 |
|  | RH-LH Hex print screws for disposable knives | M10 x 22 | VT19M MA9 | F03FA04496 |
|  | Nuts for VT19M AB9 screws | 10 x 11,5 x M6 9 x 10,5 x M6 | VT20M AA9 VT20M GA9 | F03FA04497 F03FC20669 |
|  | Nuts for VT19M MA9-MB9 screws | 15 x 13,3 x M10 | VT20M MA9 | F03FC20670 |
|  | Nuts for VT19M MA9-MB9 screws | 15 x 13,3 x M10 | VT20M NA9 | F03FC20671 |
|  | Squared head screws for disposable knives | M5 x 19 | VT11M AA9 | F03FA04468 |

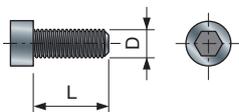
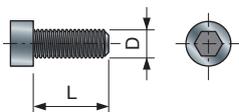
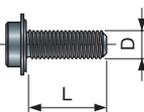
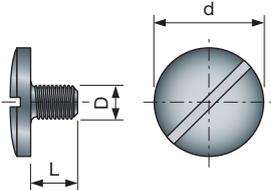
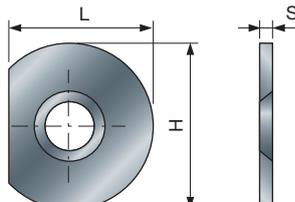
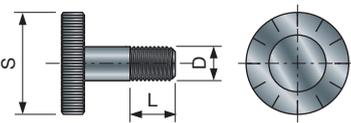
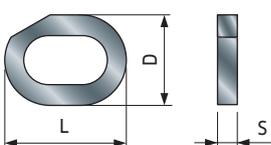
Spare screws, nuts, washers and keys

| Spare parts | Description | Dimensions D/L x L/H x d/S (mm) | Freud Code | Art. No. |
|---|--|------------------------------------|------------------|------------|
|  | Hex print screws for disposable knives | M6 x 8 | VT03M DE9 | F03FA04439 |
| | | M6 x 12 | VT03M DL9 | F03FA04441 |
| | | M6 x 16 | VT03M DI9 | F03FA04440 |
| | | M8 x 16 | VT03M AA9 | F03FA04435 |
|  | Hex print screws for disposable knives | M4 x 10 | 2602M CB9 | F03FA07346 |
| | | M5 x 12 | VT03M BA9 | F03FA04436 |
| | | M5 x 16 | VT03M BB9 | F03FA04437 |
| | | M8 x 16 | 2602M BB9 | F03FA07344 |
| | | M8 x 25 | 2602M EI9 | F03FA07352 |
| | | M10 x 18 | VT03M CC9 | F03FA04438 |
|  | Hex print screws | M3 x 3 | 2615M AA9 | F03FA07418 |
| | | M4 x 6 | 2602M CE9 | F03FA07349 |
| | | M5 x 5 | 2615M CC9 | F03FA07420 |
| | | M5 x 10 | 2602M DC9 | F03FA07350 |
| | | M6 x 6 | 2615M DD9 | F03FA07423 |
| | | M8 x 8 | 2615M EE9 | F03FA07424 |
| | | M8 x 10 | 2602M CC9 | F03FA07347 |
|  | Hex print screws with semi-sphere for ISOprofil Technology | M8 x 16 | 2616M DE9 | F03FA07425 |
| | | M10 x 16 | 2616M EE9 | F03FA07426 |
|  | Countersink screws for TA01-02 grinding devices | M4 x 6 | VT05M AB9 | F03FA04445 |
|  | Countersink Torx screws for IG03 inserts | M4 x 3,2 | VT05M BB9 | F03FA04447 |
| | | M4 x 4,2 | VT05M BC9 | F03FA04448 |
| | | M4 x 6,5 | VT05M BD9 | F03FA04449 |
|  | Countersink Torx screws for RG and RR spurs | M4 x 12 | VT71M AC9 | F03FA14740 |
| | | M5 x 6 | VT05M AC9 | F03FA04446 |
| | | M5 x 8 | VT05M AA9 | F03FA04444 |

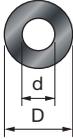
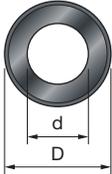
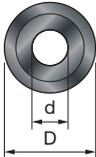
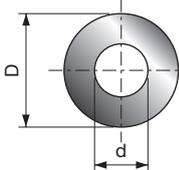
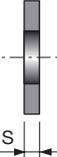
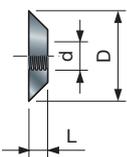
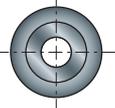
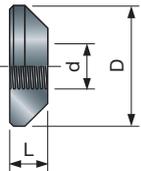
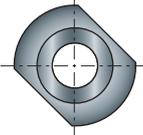
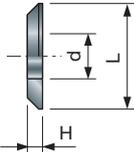
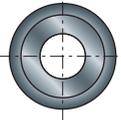
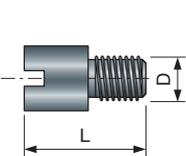
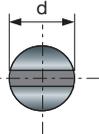
Spare screws, nuts, washers and keys

| Spare parts | Description | Dimensions D/L x L/H x d/S (mm) | Freud Code | Art. No. |
|---|--|------------------------------------|------------------|------------|
|  | Countersink Hex print screws | M5 x 8 | VT05M CA9 | F03FA04451 |
| | | M6 x 8 | VT01M AB9 | F03FA04430 |
| | | M6 x 10 | VT01M AA9 | F03FA04429 |
|  | Countersink Hex print screws for ID deflectors | M4 x 12 | VT05M DA9 | F03FC20647 |
| | | M4 x 14 | VT05M DB9 | F03FC20648 |
| | | M4 x 16 | 2609M BD9 | F03FA07379 |
| | | M6 x 16 | VT05M DC9 | F03FC20649 |
| | | M6 x 16 | 2609M DD9 | F03FA07381 |
| | | M8 x 40 | 2609M EK9 | F03FB04618 |
| | | M10 x 20 | 2609M FF9 | F03FA07382 |
|  | Round head Torx screw for disposable knives router cutters | M3 x 6 x 5 | VT72M AA9 | F03FA04506 |
| | | M4 x 8 x 6 | VT70M AA9 | F03FA04504 |
| | | M4 x 10 x 9 | VT71M AA9 | F03FA04505 |
|  | Round head Hex print screw | M4 x 10 | 2622M AB9 | F03FA07453 |
| | | M6 x 8 | 2622M CA9 | F03FA07454 |
| | | M6 x 10 | 2622M CB9 | F03FA07455 |
| | | M6 x 12 | 2622M CC9 | F03FA07456 |
| | | M8 x 18 | 2622M DF9 | F03FA07457 |
| | | M8 x 30 | 2622M DI9 | F03FA07458 |
|  | Round head Torx screw for scorers | M4 x 6 | VT71M AB9 | F03FA14739 |
|  | Countersink Hex print screws for IG inserts | M6 x 11,5 | VT16M AB9 | F03FA04477 |
| | | M6 x 13 | VT16M AE9 | F03FC20658 |
| | | M6 x 14,5 | VT16M AA9 | F03FA04476 |
| | | M6 x 15,5 | VT16M AD9 | F03FC20657 |
| | | M6 x 18,5 | VT16M AC9 | F03FC20656 |
| | | M6 x 20 | VT16M AF9 | F03FC20659 |
|  | Slotted screws | M4 x 10 | 2611M DB9 | F03FA07386 |
| | | M5 x 10 | 2606M DE9 | F03FA07361 |

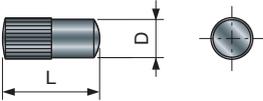
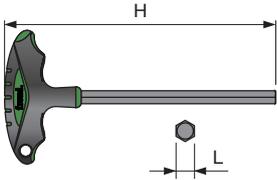
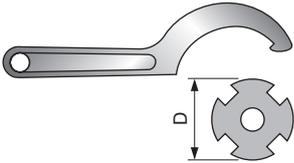
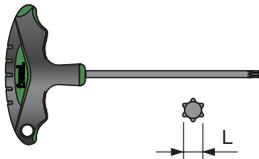
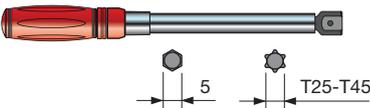
Spare screws, nuts, washers and keys

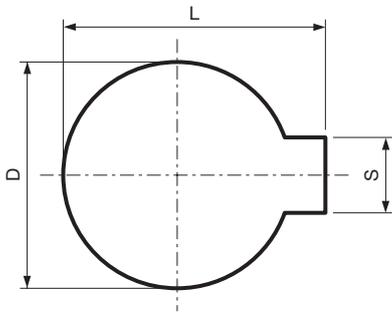
| Spare parts | Description | Dimensions D/L x L/H x d/S (mm) | Freud Code | Art. No. |
|---|--|------------------------------------|------------------|------------|
|  | Hex print allen screws | M3 x 6 | 2607M AA9 | F03FA07362 |
| | | M3 x 8 | 2607M AB9 | F03F010001 |
| | | M3 x 10 | 2607M AC9 | F03FA07363 |
| | | M4 x 8 | 2607M BB9 | F03FA07365 |
| | | M5 x 16 | 2607M CF9 | F03FA07367 |
| | | M5 x 20 | 2607M CH9 | F03FA17148 |
| | | M5 x 40 | 2607M CL9 | F03FA07368 |
| | | M5 x 60 | 2607M CP9 | F03FA07369 |
| | | M5 x 90 | 2607M CS9 | F03FA18898 |
|  | Hex print allen screws | M6 x 16 | 2607M AF9 | F03FB04614 |
| | | M8 x 16 | VT02M AA9 | F03FA04432 |
| | | M8 x 35 | 2607M EK9 | F03FB04615 |
| | | M10 x 20 | 2607M FH9 | F03FB04616 |
| | | M10 x 30 | 2607M FJ9 | F03FB04617 |
|  | Flanged screws for router bits | M3 x 7,6 | 2607M 001 | F03F010000 |
|  | Reference screws for cutterheads | M5 x 7 x 18 | VT08M AE9 | F03FA04457 |
| | | M5 x 8,8 x 18 | VT08M AM9 | F03FA04462 |
| | | M8 x 10 x 22 | VT08M AD9 | F03FA04456 |
|  | Reference plates for cutterheads | 22 x 1,7 x 6,5 | VT18M GB9 | F03FA04489 |
|  | Adjustment screws for jointing cutterheads | M5 x 8 x 25 | VT08M AC9 | F03FC20652 |
| | | M6 x 7 x 18 | VT08M AG9 | F03FC20653 |
| | | M6 x 8 x 25 | VT08M AB9 | F03FC20651 |
|  | Adjustment shaped rings for IG25 inserts | 16 x 11,9 x 2,6 | VT18M AG9 | F03FC20660 |

Spare screws, nuts, washers and keys

| Spare parts | Description | Dimensions D/L x L/H x d/S (mm) | Freud Code | Art. No. |
|---|---|------------------------------------|------------------|------------|
|   | Washer | 14 x 1,6 x 8,4 | 2617M BG9 | F03FR01668 |
| | | 16 x 1,6 x 8,4 | 2617M AG9 | F03F010005 |
| | | 6 x 2 x 4 | VT18M AB9 | F03FA04480 |
|   | Stop collars for drill bits | 12 x 4 x 6,05 | 3102M BB9 | F03FA10568 |
| | | 14 x 4 x 8,05 | 3102M BC9 | F03FA10569 |
|   | Step washers | 9 x 2 x 4,76 | FX07M AA9 | F03F010158 |
| | | 12 x 1,1 x 4,76 | FX07M AB9 | F03F010159 |
|   | Spacers for inserts | 13,6 x 0,1 x 7 | ST07M 019 | F03FA13619 |
| | | 13,6 x 0,2 x 7 | ST07M 029 | F03FA13620 |
| | | 13,6 x 0,5 x 7 | ST07M 059 | F03FA13621 |
| | | 15 x 1 x 7 | ST07M 109 | F03FA03865 |
| | | 15 x 2 x 7 | ST07M 209 | F03FA03867 |
|   | Threaded rings for locking screws | 10,2 x 1 x M4 | VT18M AA9 | F03FA04479 |
| | | 11,6 x 1,5 x M4 | VT18M BA9 | F03FA04483 |
| | | 11,6 x 2,5 x M4 | VT18M BB9 | F03FA04484 |
| | | 9,4 x 1,7 x M4 | VT18M DA9 | F03FA04487 |
| | | 8 x 5 x M4 | VT18M CB9 | F03FA04486 |
|   | Threaded nuts for RH and LH VT19M AB9-IA9 screws | 16 x 4 x M6 | VT18M CC9 | F03FC20666 |
| | | 16 x 5 x M6 | VT18M CA9 | F03FA04485 |
|   | Washers for knives | 14 x 2 x 6 | VT18M AL9 | F03FC20662 |
| | | 9 x 1,5 x 4 | VT18M AH9 | F03FA04481 |
|   | Threaded pins for sleeves | M5 x 9,5 x 7 | VT08M AH9 | F03FC20654 |
| | | M6 x 15,5 x 8 | VT08M AI9 | F03FA04461 |

Spare screws, nuts, washers and keys

| Spare parts | Description | Dimensions D/L x L/H x d/S (mm) | Freud Code | Art. No. |
|--|--|--|--|--|
|  | Steel pins for tools | 4 x 10 | 2601M AB9 | F03FA07326 |
|  | L-shape Hex allen key | 2 2,5 3 4 5 6 8 | 2619M BA9 2619M CA9 2619M DA9 2619M EA9 2619M FA9 2619M GA9 2619M HA9 | F03FA07431 F03FA07432 F03FA07433 F03FA07434 F03FA07435 F03FA07436 F03FA07437 |
|  | T-shape Hex allen key with handle | 3 x 110 4 x 110 5 x 110 | CB03M AA9 CB03M BA9 CB03M EA9 | F03FA00162 F03FA00163 F03FA00169 |
|  | C-spanners for shanks and sleeves locking rings | 45 - 50 (ER32) 58 - 62 (ER40) 68 - 75 80 - 90 | CB07M 4550 CB07M 5862 CB02M BA9 CB02M CA9 | F03FB00145 F03FB00146 F03FA00160 F03FA00161 |
|  | Socket wrench for sleeves locking rings - Ø40/50 | 70 x 95 x 50 | CB02M 6070 | F03FC00720 |
|  | Socket wrench for sleeves locking rings Ø60/70 | 88,9 x 95 x 68,9 | CB02M 8090 | F03FC00721 |
|  | T-shape Torx allen key with handle | T9 x 100 T15 x 100 T20 x 100 T25 x 100 | CB03M CA9 CB03M DA9 CB03M CC9 CB03M BB9 | F03FA00165 F03FA00168 F03FA00167 F03FA00164 |
|  | Fork wrench | 5 | CB04M 059 | F03FA00172 |
|  | Torque wrench | 10-60 Nm | CB06M106001 | F03FC25296 |
| <ul style="list-style-type: none"> • 1/4 L-Lock-ratchet insert • Exagon insert 5mm • Torx insert T25 (long and short version) • Torx insert T45 (long and short version) | Inserts set fo torque wrench | | CB0BITSIMB01 | F03FC25602 |



Standard keyway for existing cutterheads.

- For other keyway sizes, use code **OPT05 AA9** and specify the necessary dimensions.
- Please refer to the code as a guideline, only applicable while order is processed.

OPT04

Standard keyway

| D mm | S mm | L mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 12 | 5 | 13,8 | OPT04 AA9 | F03FC16203 |
| 14 | 5 | 16,3 | OPT04 BA9 | F03FC16204 |
| 16 | 5 | 18,3 | OPT04 CA9 | F03FC16205 |
| 18 | 6 | 20,8 | OPT04 DA9 | F03FC16206 |
| 20 | 6 | 22,8 | OPT04 EA9 | F03FC16207 |
| 25 | 8 | 28,3 | OPT04 FA9 | F03FC16208 |
| 30 | 8 | 33,3 | OPT04 GA9 | F03FC16209 |
| 35 | 10 | 38,3 | OPT04 HA9 | F03FC16210 |
| 40 | 10 | 43,3 | OPT04 IA9 | F03FC16211 |

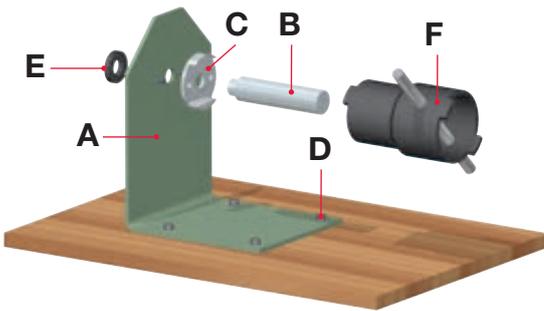
OPT09

Re-boring for cutterheads and brazed cutters

Re-boring for existing cutterheads and brazed cutters.

- Please refer to the code as a guideline, only applicable while the order is processed.

| Freud Code | Art. No. |
|------------|------------|
| OPT09 AA9 | F03FC16223 |



The maintenance tool consists of:

- A:** Steel support plate.
- B:** Replaceable arbor (diameter 35/40/50 mm based on sets bore diameter).
- C:** Replaceable coupling disk for jamming the base of the toolsets' sleeve (65/75/85 mm).
- D:** Screws for mounting support plate "A" to the workbench.
- E:** Locking ring pin "B" to support plate "A".
- F:** Coupling key for the sleeves threaded ring available in the following sizes:
 - $\varnothing 60/70$ mm for sleeves with external diameter 40/50 mm.
 - $\varnothing 80/90$ mm for sleeves with external diameter 60/70 mm.

SAG1M

Maintenance tool for cutterhead sets

| Freud Code | Art. No. |
|------------|------------|
| SAG1M AA9 | F03FC18870 |
| SAG1M AB9 | F03FC18871 |

Item code SAG1M AA9 components

| | Spare parts | | Dimensions mm | Freud Code | Art. No. |
|----------|-------------------------|--|-------------------------------|------------|------------|
| A | Support plate | | 150 x 230 x 250 | SAG1M BA9 | F03FA03851 |
| E | Self-locking nut | | 50 x 8 x 30 | SAG1M DA9 | F03FA03852 |
| C | Coupling disk | | 65 x 20 x 30 $\varnothing 50$ | SAG1M F65 | F03FC18872 |
| C | Coupling disk | | 75 x 20 x 30 $\varnothing 60$ | SAG1M F75 | F03FC18873 |
| C | Coupling disk | | 85 x 20 x 30 $\varnothing 70$ | SAG1M F85 | F03FC18874 |
| B | Arbor | | $\varnothing 35$ x 122 | SAG1M 035 | F03FC18875 |
| B | Arbor | | $\varnothing 40$ x 122 | SAG1M 040 | F03FC18876 |
| B | Arbor | | $\varnothing 50$ x 122 | SAG1M 050 | F03FC18877 |
| F | Key $\varnothing 40/50$ | | 70 x 95 x 50 | CB02M 6070 | F03FC00720 |
| F | Key $\varnothing 60/70$ | | 88,9 x 95 x 68,9 | CB02M 8090 | F03FC00721 |

Item code SAG1M AB9 components

| | Spare parts | | Dimensions mm | Freud Code | Art. No. |
|----------|------------------|--|-------------------------------|------------|------------|
| A | Support plate | | 150 x 230 x 250 | SAG1M BA9 | F03FA03851 |
| E | Self-locking nut | | 50 x 8 x 30 | SAG1M DA9 | F03FA03852 |
| C | Coupling disk | | 65 x 20 x 30 $\varnothing 50$ | SAG1M F65 | F03FC18872 |
| C | Coupling disk | | 75 x 20 x 30 $\varnothing 60$ | SAG1M F75 | F03FC18873 |
| C | Coupling disk | | 85 x 20 x 30 $\varnothing 70$ | SAG1M F85 | F03FC18874 |

Optional items

| | Spare parts | | Dimensions mm | Freud Code | Art. No. |
|----------|-------------------------|--|------------------------|------------|------------|
| B | Arbor | | $\varnothing 35$ x 122 | SAG1M 035 | F03FC18875 |
| B | Arbor | | $\varnothing 40$ x 122 | SAG1M 040 | F03FC18876 |
| B | Arbor | | $\varnothing 50$ x 122 | SAG1M 050 | F03FC18877 |
| F | Key $\varnothing 40/50$ | | 70 x 95 x 50 | CB02M 6070 | F03FC00720 |
| F | Key $\varnothing 60/70$ | | 88,9 x 95 x 68,9 | CB02M 8090 | F03FC00721 |



SAG2M

Clamping device with rolling bearing

Freud Code

Art. No.

SAG2M AA9

F03FB22530



TA01M

Device for grinding Performance knives

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 260 | 60 | 15 | TA01M AA9 | F03FC20198 |

Freud's standard device for knives to fit on horizontal grinding machines. This device must be fitted on the **TA03M** support to work on grinding machines.

| Spare parts | Dimensions mm | Freud Code | Art. No. |
|-------------|------------------|------------|------------|
| Screw | M4 x 6,5 | VT05M BD9 | F03FA04449 |
| Screw | M4 x 6 | VT05M AB9 | F03FA04445 |
| Torx key | T9 | CB03M CA9 | F03FA00165 |



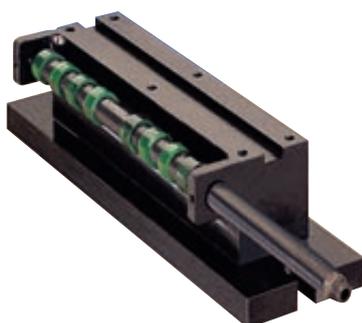
TA02M

Device for grinding Performance knives

| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 220 | 100 | 100 | TA02M AA9 | F03FC20199 |

Freud standard device for knives to fit on vertical grinding machines.

| Spare parts | Dimensions | Freud Code | Art. No. |
|-------------|------------|------------|------------|
| Screw | M4 x 6,5 | VT05M BD9 | F03FA04449 |
| Screw | M4 x 6 | VT05M AB9 | F03FA04445 |
| Torx key | T9 | CB03M CA9 | F03FA00165 |
| Allen key | 4 x 110 | CB03M BA9 | F03FA00163 |



TA03M

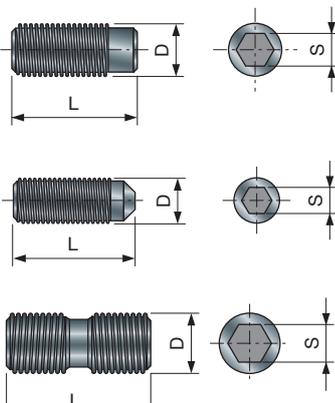
Support for grinding Performance knives

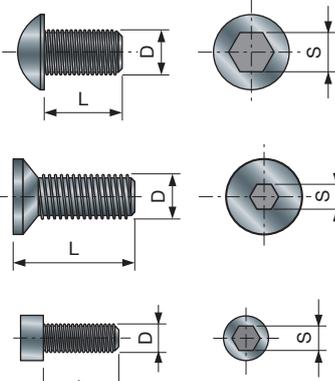
| L mm | H mm | S mm | Freud Code | Art. No. |
|---------|---------|---------|------------|------------|
| 340 | 98 | 90 | TA03M AA9 | F03FC20202 |

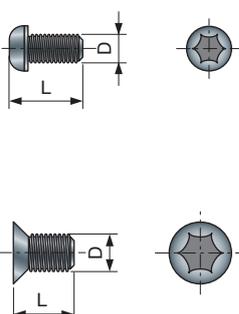
Support for **TA01M** device

Torque values for screws and grub screws used for tightening Freud knives and inserts

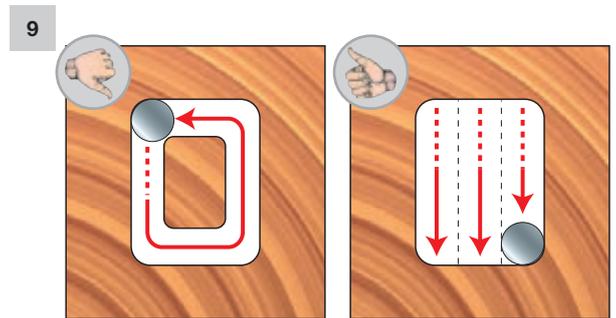
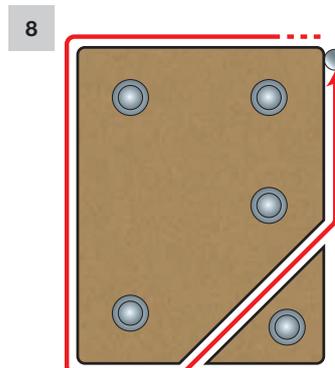
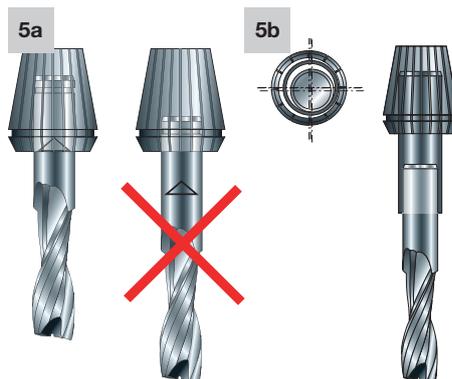
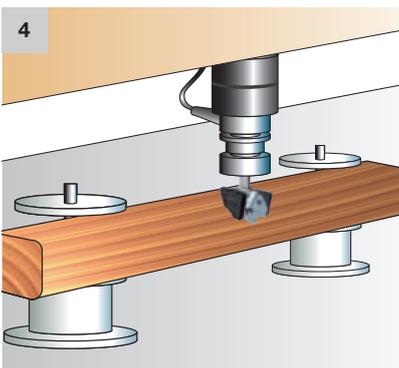
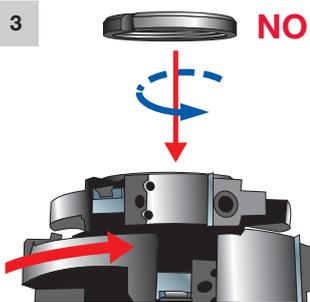
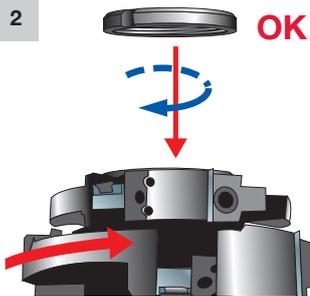
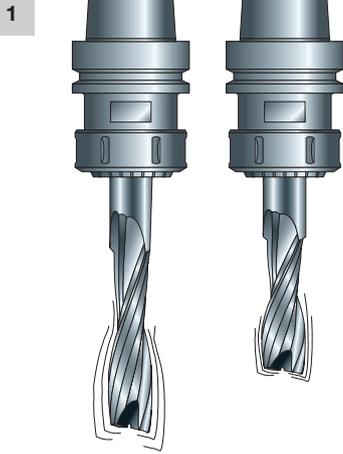
To avoid insufficient clamping forces or screw rupture due to overload, all the screws must be tightened with the required torque. If not differently stated on the instruction manual or marked on the tools, use the following torque values.

| Spare parts | Description | Screw thread mm | Key (S) mm | Tightening torques 45H (Nm) |
|---|---------------------|--------------------|---------------|--------------------------------|
|  | Hexagon grub screws | M4 | 2 | 1,9 |
| | | M5 | 2,5 | 3,5 |
| | | M6 | 3 | 5,5 |
| | | M8 | 4 | 9,5 |
| | | M10 | 5 | 18 |
| | | M12 | 6 | 30 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Spare parts | Description | Screw thread mm | Key (S) mm | Tightening torques 8,8 (Nm) |
|--|------------------|--------------------|---------------|--------------------------------|
|  | Hex print screws | M3 | 2,5 | 1 |
| | | M4 | 3 | 2 |
| | | M5 | 4 | 5 |
| | | M6 | 5 | 8 |
| | | M8 | 6 | 12 |
| | | M10 | 8 | 30 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Spare parts | Description | Screw thread mm | Key  mm | Tightening torques (Nm) |
|---|-------------|--------------------|---|----------------------------|
|  | Torx screws | M4 x 0,5 | T9 | 2 |
| | | M4 | T15 | 5,2 |
| | | M5 | T20 | 8,6 |
| | | M6 | T25 | 15 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

TIPS FOR THE CORRECT USE



Tools must be used and handled by experienced and trained personnel, in possession of the necessary understanding.

A router bit with a shorter cutting height vibrates less than a router bit with the same diameter but with a longer cutting height (Fig. 1).

Control your machine regularly (especially guides and ball bearings), making sure that there are no eccentricity problems, so as to avoid the arbor from vibrating hazardously, particularly dangerous for router bits with tips in Polycrystalline Diamond.

Tools and tool bodies must be locked correctly, so they do not loosen during operation (Fig. 2 - 3).

Accurately block the workpiece to the work table surface (Fig. 4).

Respect the minimum fixing length of the shank with a preference to short chucks, with the aim of reducing eccentricity errors (Fig. 5a). For the same reason the use of extensions are generally avoided (Fig. 5b).

To identify eccentricity defects in a router bit or a chuck: rotate the router bit by 90° in the chuck, carry out a moulding and observe the marks left on the workpiece. If they are invaried with respect to the previous moulding, then the tool is defective, if instead the marks vary, then it is possible that the error lies in the chuck.

Screws and nuts shall be tightened using the appropriate spanners etc. and to the torque value provided by the manufacturer.

Spanner extensions or tightening using hammer blows is strictly forbidden (see Fig. 6).

Do not use reduction rings with a bore different to those specified by the constructor. Clamping surfaces must be free of dirt, grease, oil and water. Resins must be removed from tools with light alloy bodies using cleaners that do not damage the aluminium and compromise the materials mechanical features. Accurately clean the tool after every knife change.

Tools compiling a set, must be repaired by experienced and fully trained personnel, with the knowledge of the design requirements and security levels to be reached Repairing tools is allowed only in accordance to the tool manufacturer's instructions.

Particular attention is drawn to the following:

- Repair shall therefore include e. g. use of parts which are in accordance with the specification of the original parts provided by the manufacturer.
- Tolerances which ensure correct locking shall be maintained.

Do not exceed the maximum RPM limit marked on the tool. With too high an advancement rate, or an excessive cutting depth, there is the possibility that the tool may break.

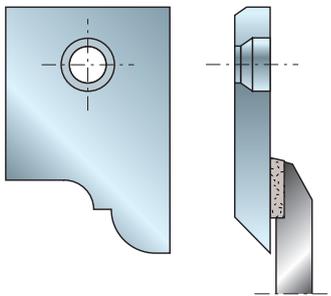
To avoid damaging router bits, we suggest controlling if the fixing surface of the chuck and the router bit are clean and that there are no imperfections (Fig. 7).

To avoid dangerous kick backs, we suggest fixing a spare piece of material and moulding small parts of waste which have accumulated during the working process, by carrying out more passes (Fig. 8 - 9).

Wearing gloves increases grip and reduces the risk of injury.

To avoid injury, tools must be handled with care using special appliances so as to transport them without incurring injury to the user.

10



TECHNOLOGICAL FEATURES

- Performance system knives are constructed in hard metal, which Freud produces in 6 grades of hardness, second to the material to be worked: softwood and hardwood, heavy, abrasive, chipboard, melamine, laminated, M.D.F. etc. It is possible to use NW with a high grade of hardness, so as to permit a superior hold of 30% more with respect to the NW used for brazed cutting edges destined to work very abrasive materials.
- Other than being a solution that practically substitutes brazed cutters, thanks to the interchangeability of the profiles on the same tool and the duration of the tool itself, there is a notable advantage and convenience when working on overhead CNC router machines, where machine stoppages can result costly: in fact the changing of a used or damaged knife does not require the dismounting of the cutterhead from the machine, since it is sufficient to loosen the screw that holds it in place. Instead a brazed cutter must be completely changed and a substitute available to avoid time wastage.
- Freud has an entire range of tools with performance, standard or personalised knives for manual or overhead CNC router machines (Fig. 11).
- The performance system results advantageous, even when confronted to traditional cutterheads, thanks to the easiness of sharpening, low operational cost and the need of no particular machinery (the use of a flat grinding wheel or surface grinding machine is sufficient - see Fig. 12) or specialised personnel.
- Even after sharpening, performance knives maintain their original profile (Fig.13) and the tool's cutting diameter, considering maximum loses of 0,15~0,20 mm.
- Suggestions for correct sharpening on surface grinding machine or flat grinding machine:
 - 1) Fix support TA01M or TAO2M (Fig. 13) onto the surface grinding machine or flat grinding machine.
 - 2) Fix the knives with the screws that are supplied.
 - 3) Proceed with the sharpening of the entire set of knives. Use of abundant cooling liquid during sharpening is recommended. Use diamond grinding wheels (Fig. 14) with the following characteristics: D6A2-C100-054.
- On request, sharpening can be carried out at our premises by simply sending us the complete set of knives and indicating on the order the code OPTAFF AA9.

11



12



13



14



EXPLANATION OF SYMBOLS AND ABBREVIATIONS

| PERFORMANCE | | |
|-------------|------|----------|
| Ultimate | High | Standard |
| ● | | |

CHART ABOUT THE SAW BLADE'S PERFORMANCE

SYMBOLS TO READ THE PRODUCT TABLES

| | | | | | | | |
|-------------|------------------|----------------|------------------------------|-----------|---|------------|--------------------------|
| h1 | Actual height | B-B1 | Adjustable cutting thickness | γ | ATB angle | β | Back relief angle |
| C | Bearing diameter | d | Bore | h | Cutting height | B | Cutting thickness |
| D | Diameter | α | Hook angle | l | Interaxial distance (Inserts in RB section) | KN | Keyways |
| L | Length | Max RPM | Max RPM | Z | Number of teeth | H | Overall height |
| NL | Pin holes | R | Radius (Spurs in RB section) | R1 | Radius | b | Saw blade body thickness |
| A | Shank | V | Spurs | S | Thickness | hUP | UP cut length |
| L.U. | Working length | | | | | | |

FEATURE ICONS

| | | | | | | | |
|---|---------------------------|---|-------------------------------|---|-------------------------|---|------------------------------------|
|  | Anti-kickback Technology |  | Anti-vibration Technology |  | Cascading System |  | EXrim Coating |
|  | ISOprofil Technology |  | Performance System Technology |  | Perma-SHIELD Coating |  | Polycrystalline Diamond Technology |
|  | Radial Access Design |  | Shear Angle Technology |  | Silver I.C.E. Coating |  | Split Edge Design |
|  | Super Square Tooth Design |  | Tensioning Technology |  | TiCo Carbide Technology |  | Tri-metal Brazing Technology |

MATERIALS

| | | | | | | | |
|---|---------------------|---|----------------|---|--------------------------------|---|----------------|
|  | ACM |  | Aluminium |  | Chipboard |  | Construct Wood |
|  | Copper and Brass |  | Fibre Cement |  | Hardwood |  | HPL |
|  | Laminated Chipboard |  | Laminated MDF |  | Laminates (scoring saw blades) |  | MDF |
|  | Plasterboard |  | Plastics |  | Plexiglas |  | Plywood |
|  | PVC |  | Sandwich Panel |  | Shuttering Board |  | Softwood |
|  | Solid Surfaces |  | Steel |  | Thermoplastic Composites | | |

EXPLANATION OF SYMBOLS AND ABBREVIATIONS

MACHINES

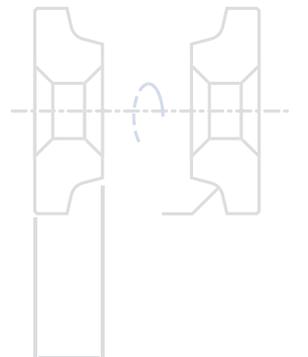
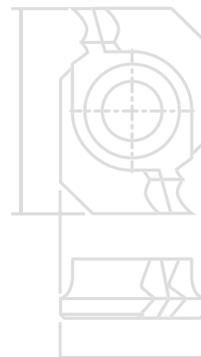
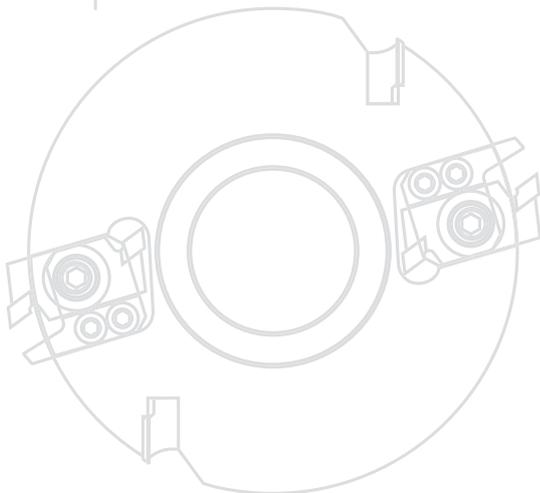
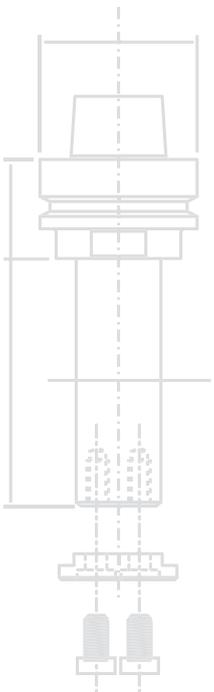
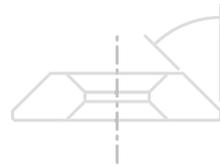
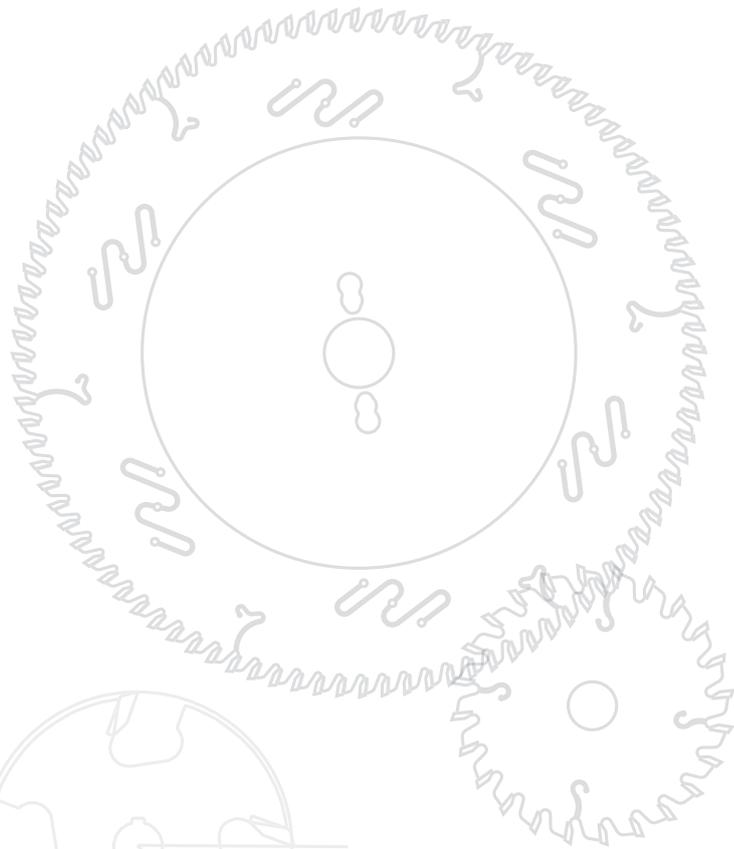
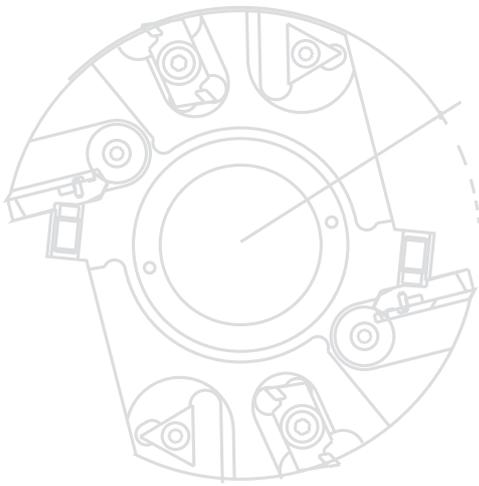
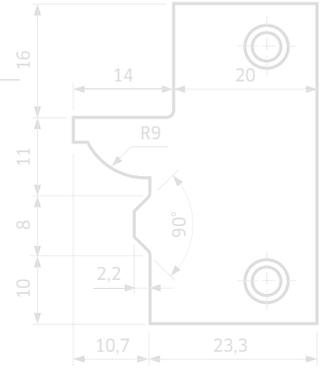
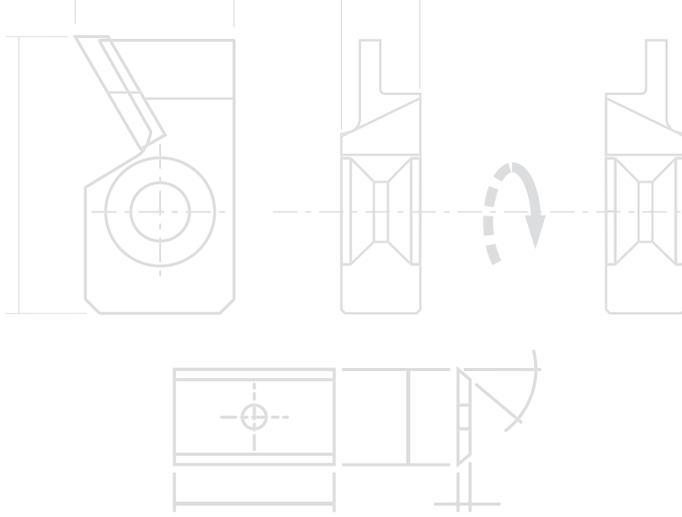
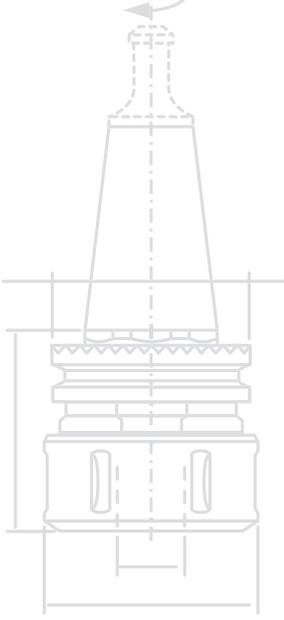
| | | | | | | | |
|---|----------------------------------|---|------------------------|---|------------------------------|---|--------------------------------|
|  | Boring Machines |  | Cleaving Machines |  | CNC Cutting Units |  | CNC Machines |
|  | CNC Machines |  | CNC Router |  | Corded |  | Cordless |
|  | Cordless |  | Double End Tenoners |  | Double Head Cutting Machines |  | Dry-Cut Mitre Saw |
|  | Edge Banders |  | For Table Mounted Only |  | Hand-Held Circular Saws |  | Hand-Held Routers |
|  | Horizontal Panel Sizing Machines |  | Mitre Saws |  | Moulders |  | Multiripping Machines |
|  | Optimising Machines |  | Palm Routers |  | Plunge Saws |  | Radial Arm Saws |
|  | Squaring Saws |  | Table Routers |  | Table Saws |  | Vertical Panel Sizing Machines |

MECHANICAL FEATURES

| | | | | | | | |
|---|--------------------|---|----------------|---|-----------------|---|-----------------|
|  | Aluminium Body |  | Automatic Feed |  | Brazed Cutters |  | Clamping System |
|  | Down Spiral |  | Manual Feed |  | Boring Machines |  | Steel Body |
|  | Up and Down Spiral |  | Up Spiral | | | | |

APPLICATIONS

| | | | | | | | |
|---|-----------------------------|---|-------------------------|---|------------------------------------|---|-------------------------------|
|  | Better Finishing on Bottom |  | Better Finishing on Top |  | Better Finishing on Top and Bottom |  | Blind Hole |
|  | Blind Hole with Countersink |  | Crosscutting |  | Frames Cutting |  | Grooving |
|  | Hinge Pockets |  | Jointing |  | Multiripping |  | Planing |
|  | Plunging |  | Profiling |  | Ramp Plunging |  | Rebating |
|  | Ripping |  | Sizing |  | Through Hole |  | Through Hole with Countersink |



**CIRCULAR SAW BLADES FOR
STATIONARY MACHINES**

**CIRCULAR SAW BLADES FOR
PORTABLE MACHINES**

**ROUTING TOOLS FOR
CNC MACHINES**

**ROUTING TOOLS FOR
PORTABLE MACHINES**

CUTTERHEADS AND BRAZED CUTTERS

WINDOW TOOLING

KNIVES AND INSERTS IN HW AND HSS

ACCESSORIES AND SPARE PARTS



LEARN MORE

freud

freud S.p.A. - Società Unipersonale
Via Remigio Solari, 7 - 33050 Pavia di Udine (UD), IT

www.freudtools.com

