

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.



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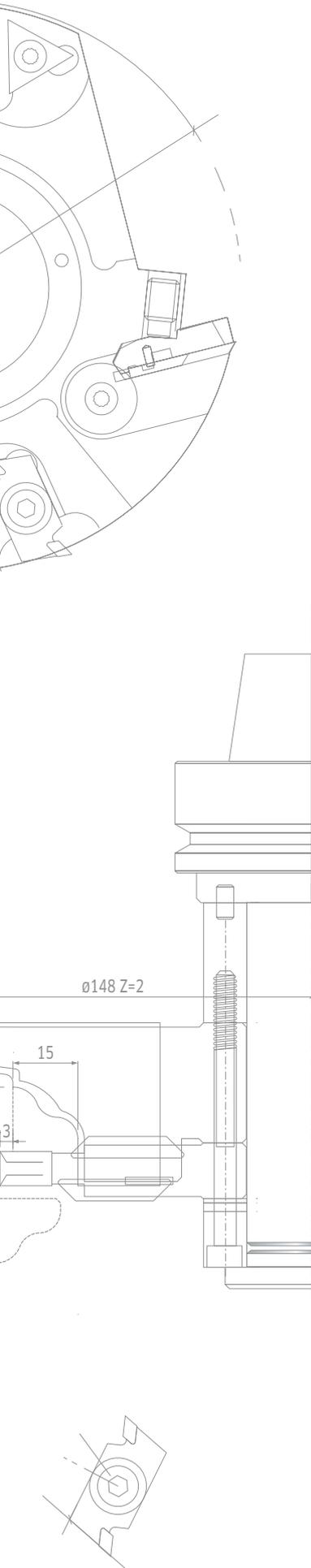
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LEADING TECHNOLOGY

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

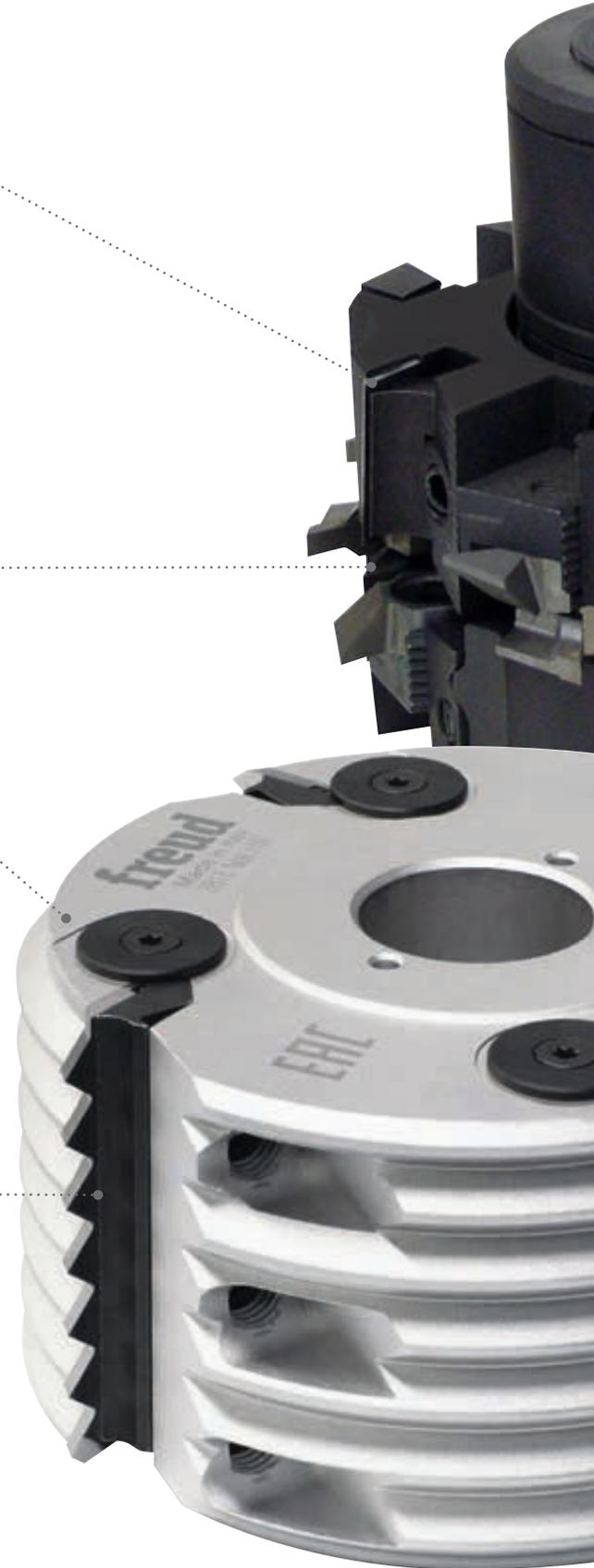
Freud's Performance System Technology knives are designed with extra thickness – 3mm – for up to 6 x resharpening cycles and a prolonged

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.





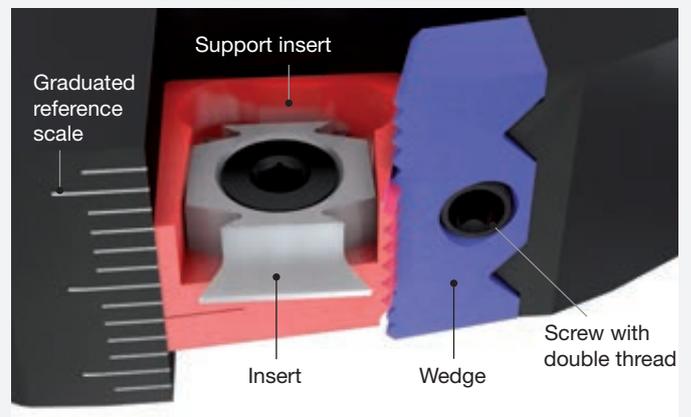
PIONEERING SOLUTIONS

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.

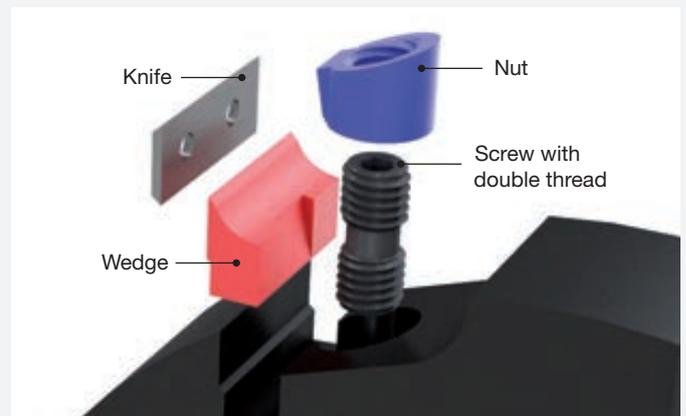
The NSR grants extraordinary precision – with no need for measuring instruments - leveraging Freud's specially grained set, for the perfect adjustment of the insert, with 1 mm steps and precision up to 1/100 of a mm.



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





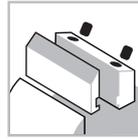
TM06M

Helical planer cutterheads with disposable knives

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 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



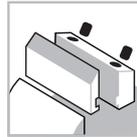
TM07M

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

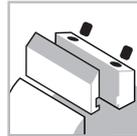


TM20M

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.

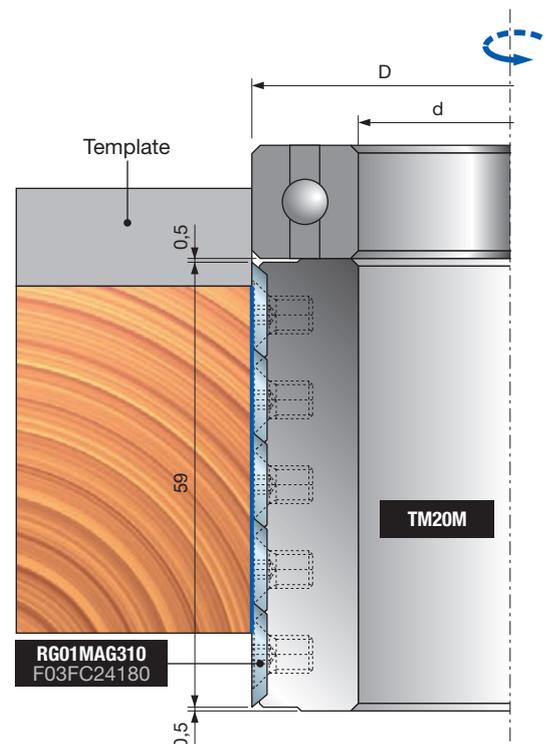
- Use in combination with ballbearing for round timbers.
- Aluminium light alloy body.
- Rebore not available.
- Equipped with 4 sides disposable spurs.

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

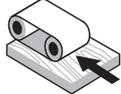




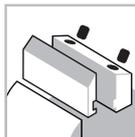
TM21M

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.

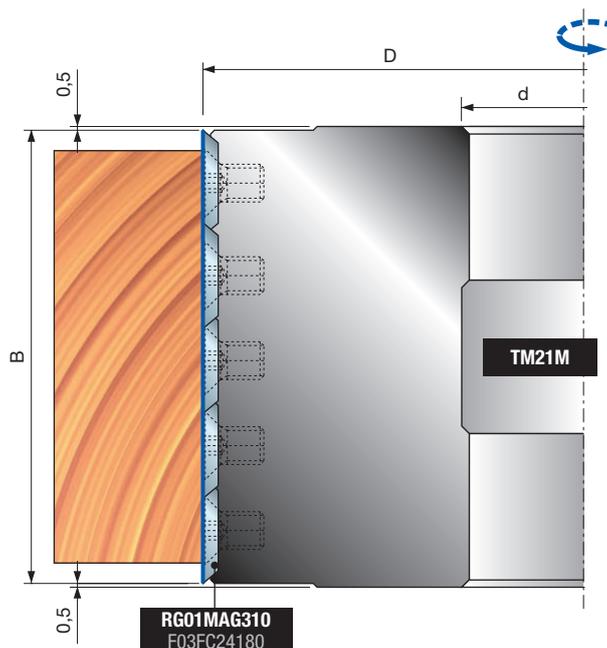
Technical information:

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

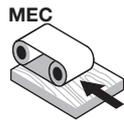
	Spare parts	Dimensions mm	Freud Code	Art. No.
	Spur	14 x 14 x 2	RG01MAG310	F03FC24180
	Screw	M5 x 8	VT05M AA9	F03FA04444
	Torx key	T20	CB03M CC9	F03FA00167



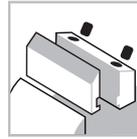


TP05M

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.

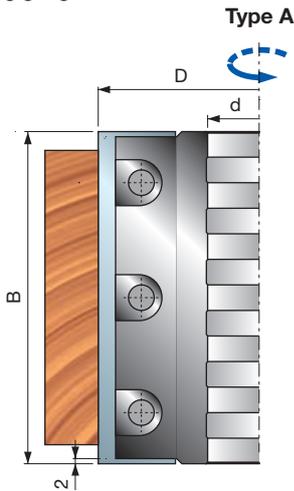
Technical information:

Planer cutterhead particularly indicated for softwood, maximum cutting depth 15 mm.

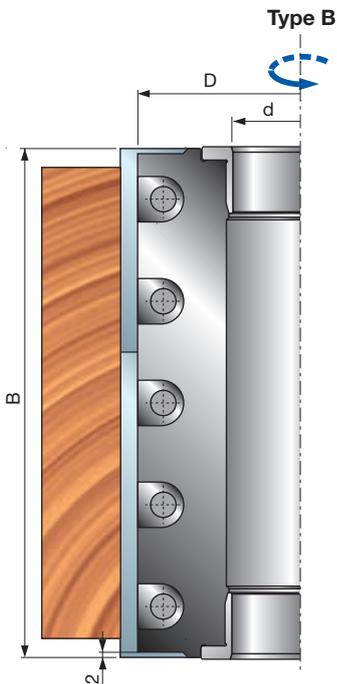
Type A: Cutterheads with traditional bore.

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 mm	B mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
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 mm	Freud Code	Art. No.
	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

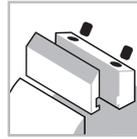


TPCZM

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.

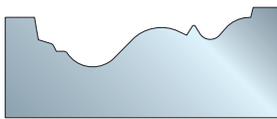
D mm	B mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
122	60	40	4	9.000	TPCZM CB9	F03FC22116
122	80	40	4	9.000	TPCZM CC9	F03FC22117
122	100	40	4	9.000	TPCZM CD9	F03FC22119
122	150	40	4	9.000	TPCZM CF9	F03FC22223

	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

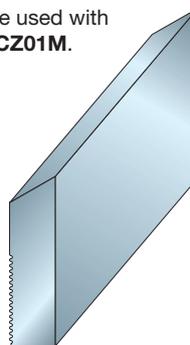
Raw knife



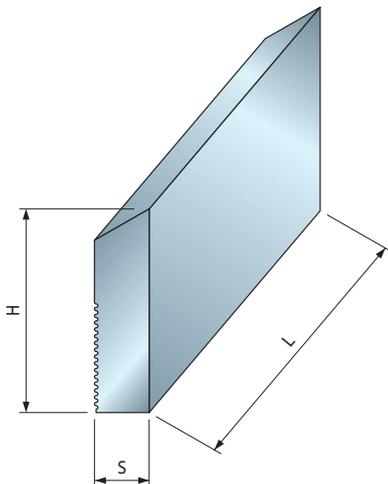
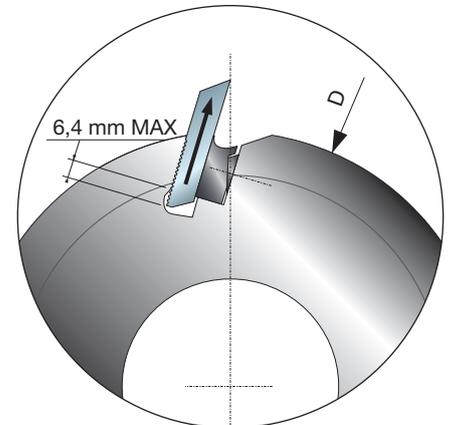
Profiled knife



It can be used with knives CZ01M.



Knife placement



Profiling HSS knives with serrated surface.

- Suitable for Freud TPCZM planners.
- Suitable for cutting all softwoods and hardwoods.

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

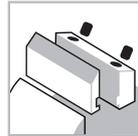


TM28M

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

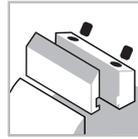
Aluminium light alloy body. For cleaning do not use products containing caustic soda. Can be used in combination with item T182M to cut guiding rebates.

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).

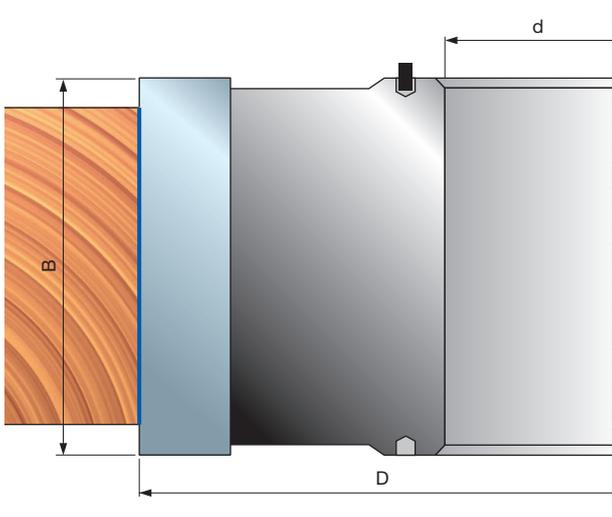
- Aluminium light alloy body.
- Rebore not available.
- Can be used in combination with item T182M to cut guiding rebates.

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

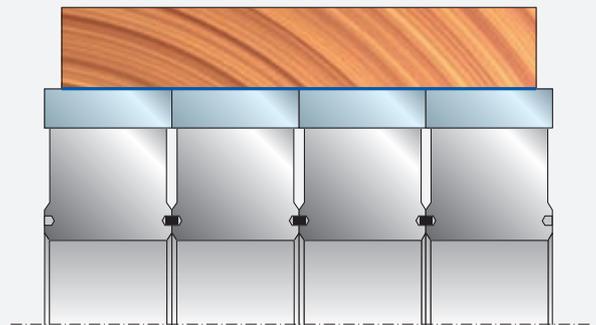
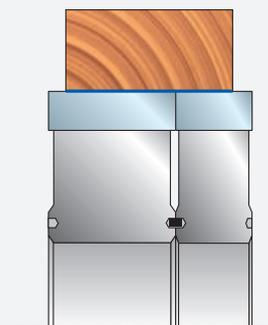


Fig. B

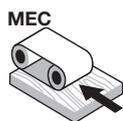


Rebating

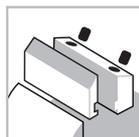


T182M

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:

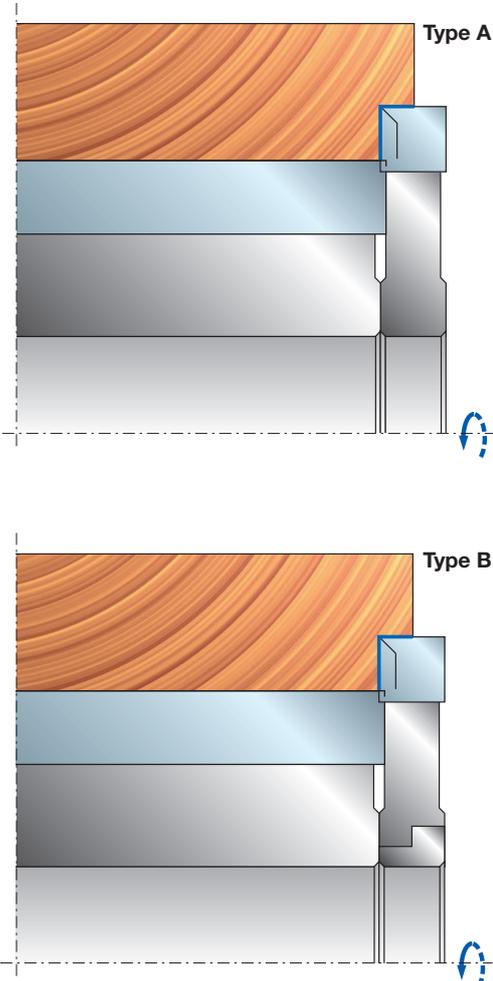
Tool to use in combination with **TM06M-TM07M** to cut guiding rebates.

- 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
CB3	Allen key	3	CB03M AA9	F03FA00162
	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
DB3	Allen key	3	CB03M AA9	F03FA00162
	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
EA3	Allen key	2,5	2619M CA9	F03FA07432
	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
EB3	Nut	10 x 11,5 x 6	VT20M AA9	F03FA04497
	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

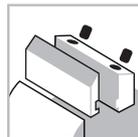


T111M - T112M

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.

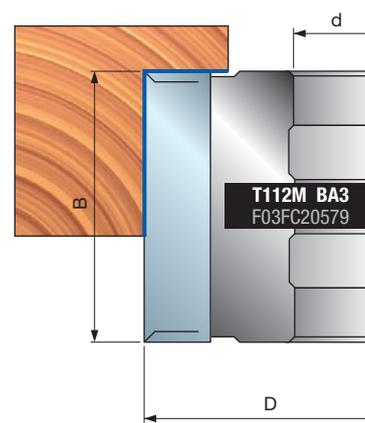
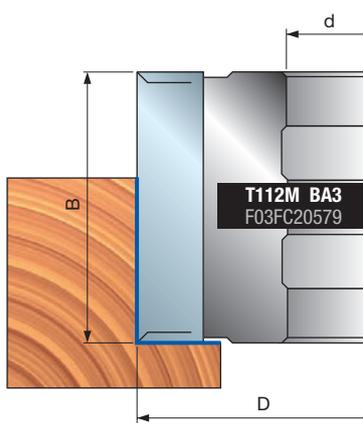
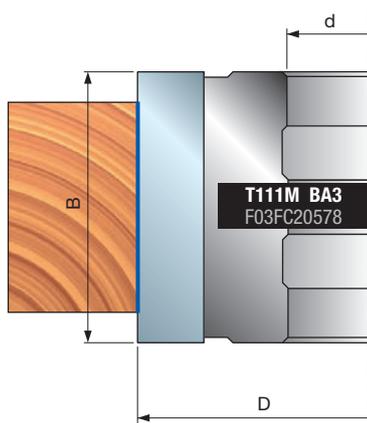
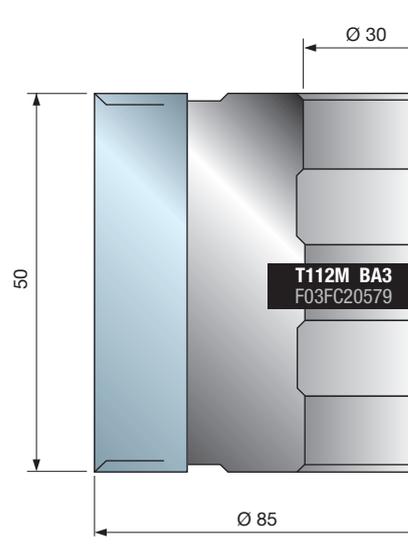
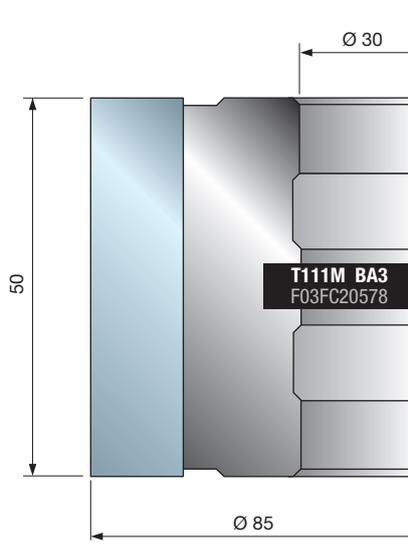
Technical information:

Disposable knives tool for planing and rebating.

- Aluminium light alloy body.
- Rebore not available.

D mm	B mm	d mm	Z	V	Max RPM 1/min.	Freud Code	Art. No.
85	50	30	4		12.000	T111M BA3	F03FC20578
85	50	30	4	4	12.000	T112M BA3	F03FC20579

Spare parts		Dimensions mm	Freud Code	Art. No.
	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



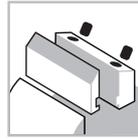


T191M - T192M

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.

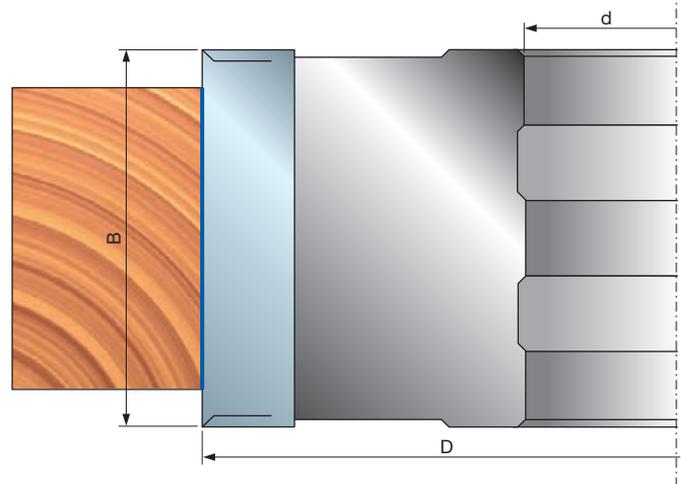
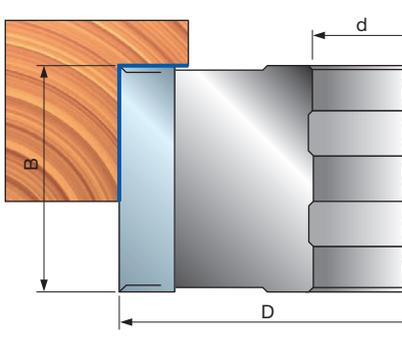
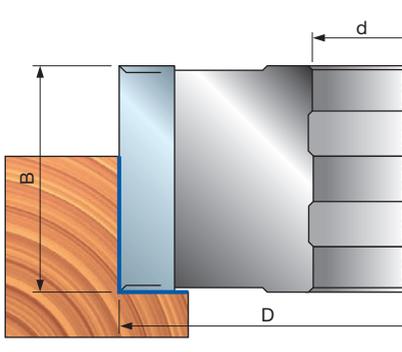
Technical information:

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



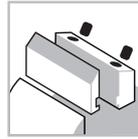


T194M - T195M

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.

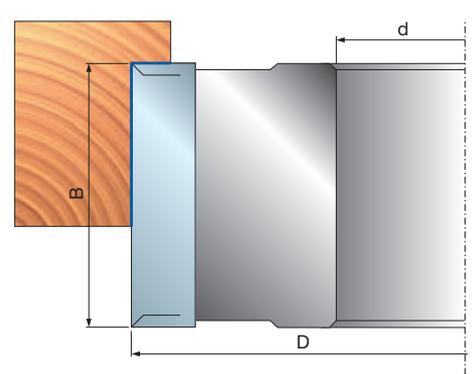
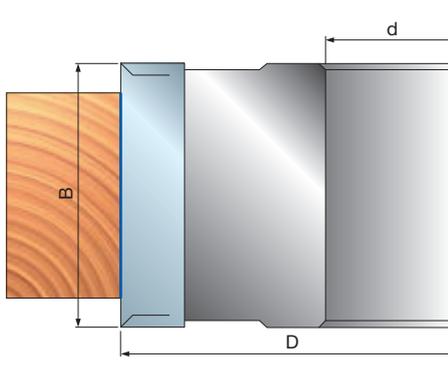
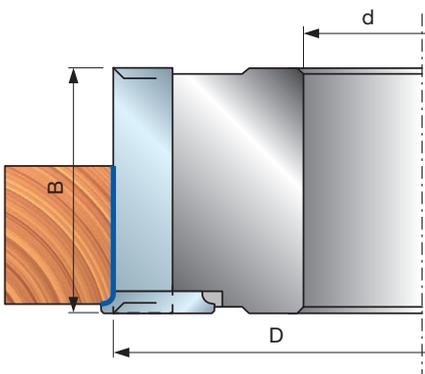
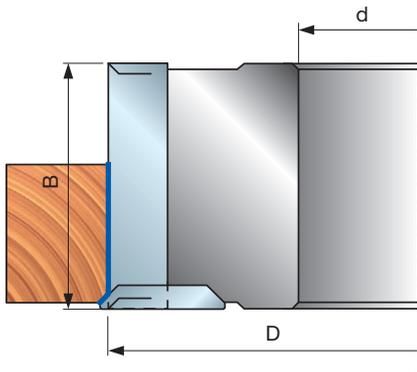
- Seat pockets for chamfering and rounding inserts (not included).
- Aluminium light alloy body.
- Rebore not available.

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	
BB3 AB3 BC3 AC3		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



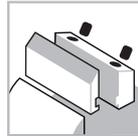


T193M

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.

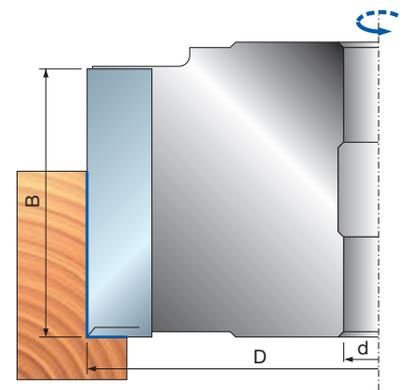
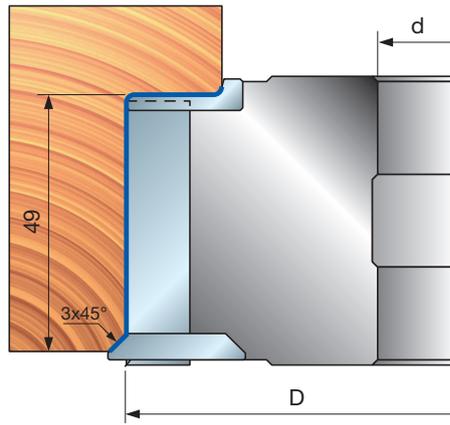
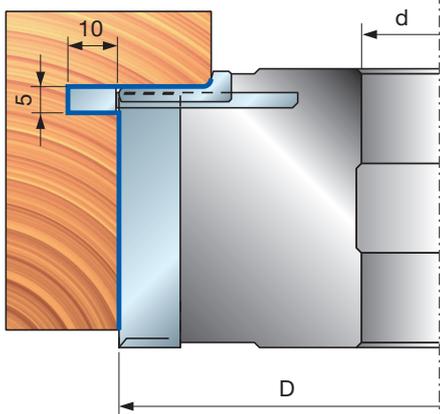
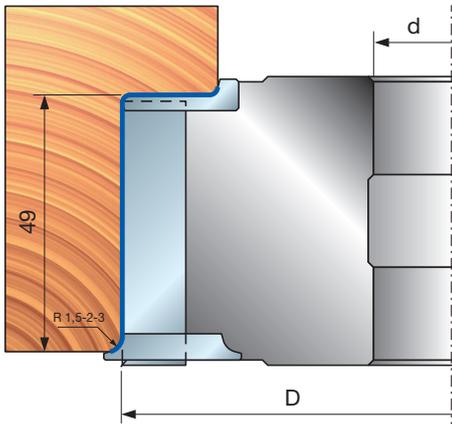
- Seat pockets for chamfering, rounding and grooving inserts (not included).
- Aluminium light alloy body.
- Rebore not available.

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

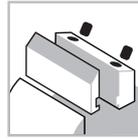


T198M

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.

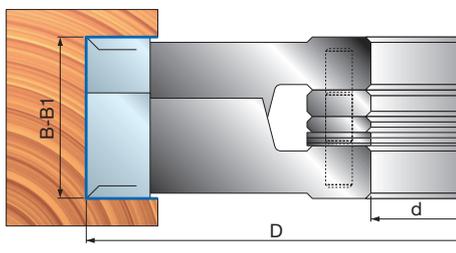
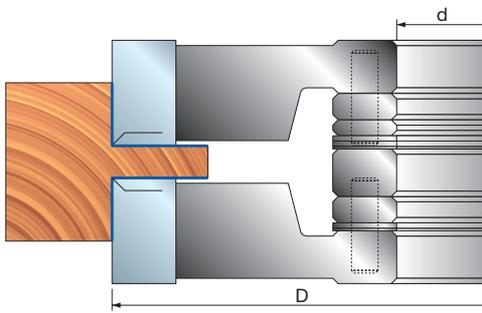
- Rebore not available.
- Seat pockets for chamfering, rounding and grooving inserts (not included).
- Steel body.
- Rebore not available.

D	B-B1	d	Z	V	Max RPM	Freud Code	Art. No.
mm	mm	mm			1/min.		
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	Freud Code	Art. No.
		mm		
	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

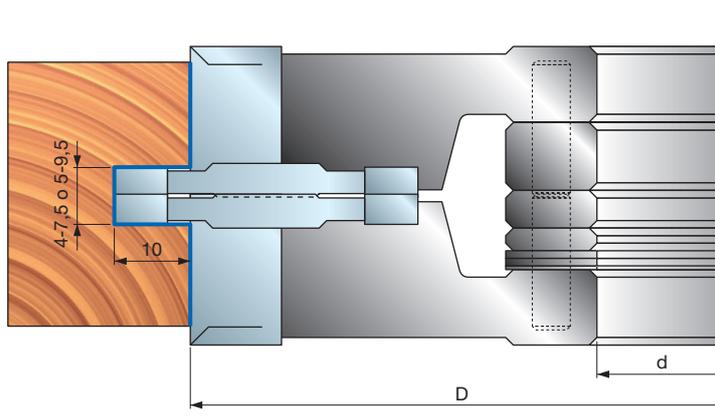
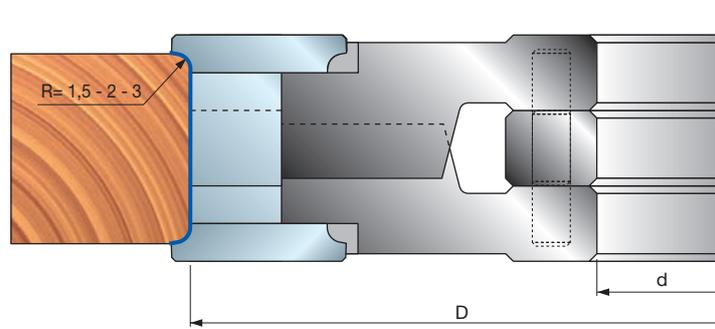
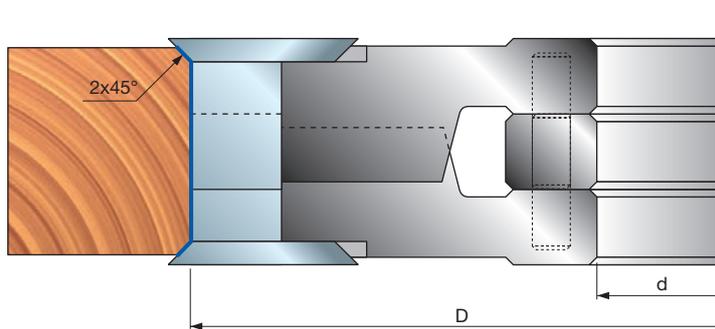
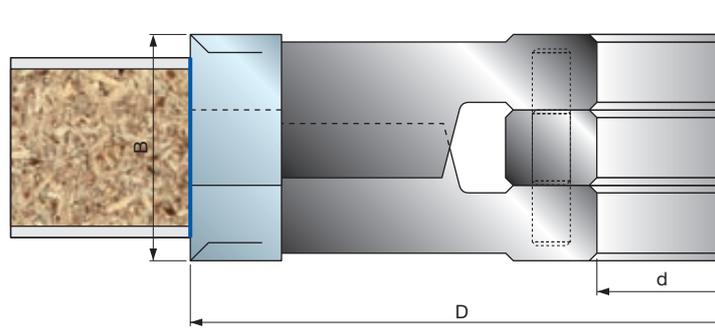
Tool with seat pockets for the following inserts (not included):

	Inserts	Dimensions	Freud Code	Art. No.
		mm		
	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



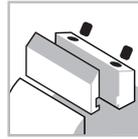


T199M

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:

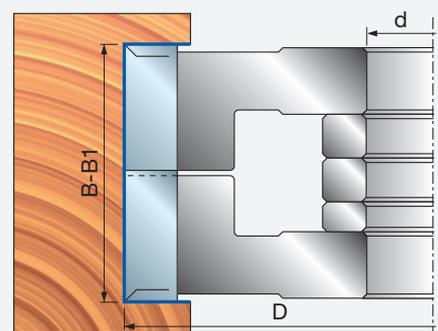
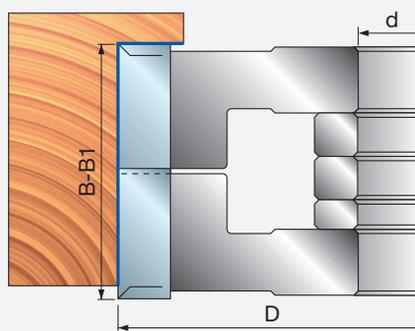
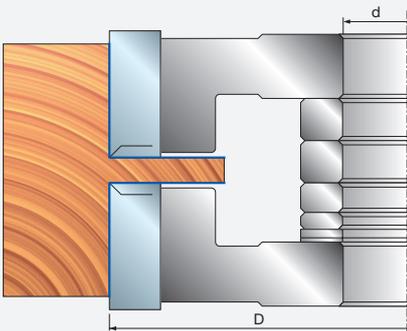
Disposable knives tool set with alternate shear angle.

- 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

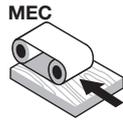
A 10 pieces set of spacers: Thickness: 0,1 - 0,2 - 0,3 - 0,5 - 1 - 2 - 3 - 6 - 8 - 10 mm



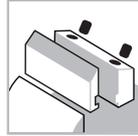


TP48M

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.

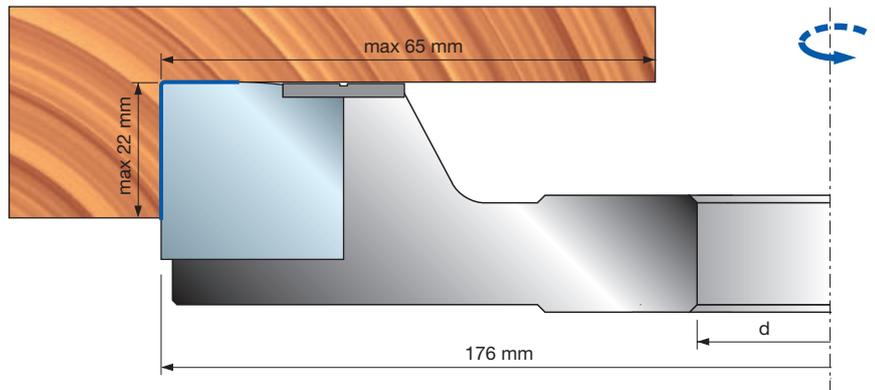
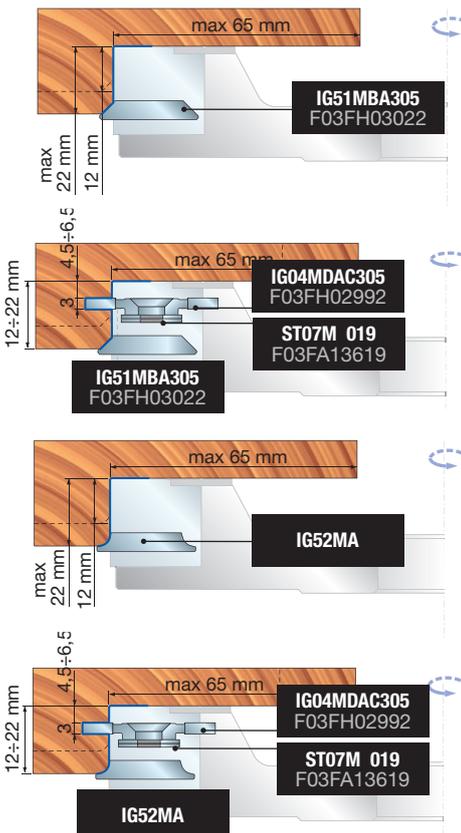
- Rounding and beveling insert to offer different solutions on step corners.
- Steel body.
- Rebore not available.
- Inserts to be ordered separately.

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

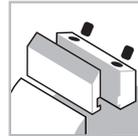




TW23M - TW20M Jointing cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Jointing



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Jointing.

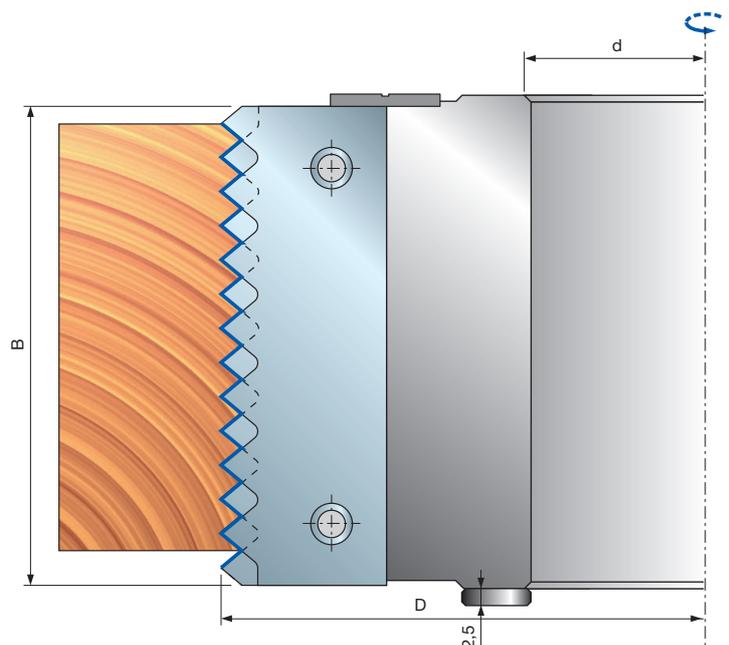
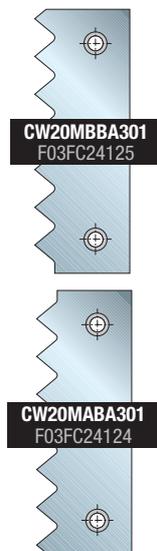
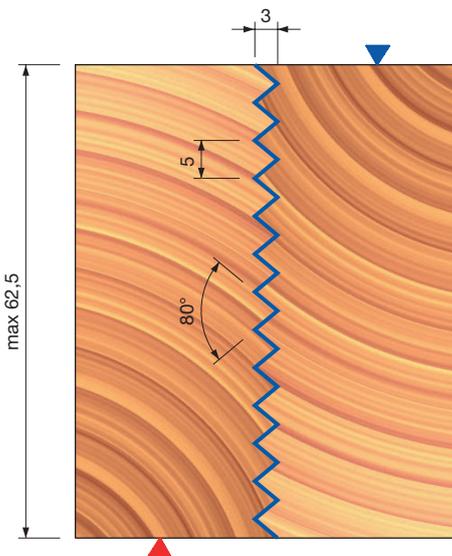
Technical information:

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



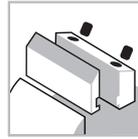


TW22M

Jointing cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Jointing



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Jointing.

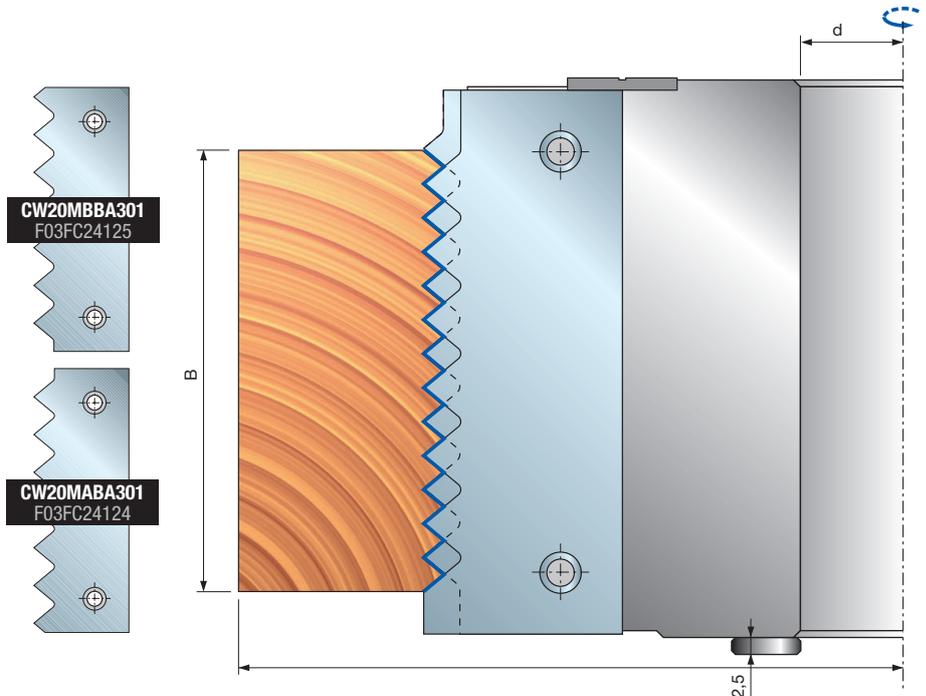
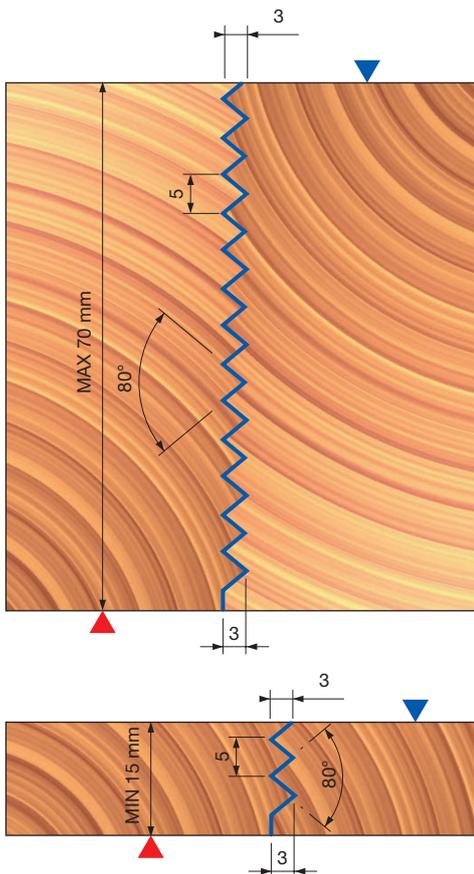
Technical information:

Performance knives tool to work long grain on short workpieces.

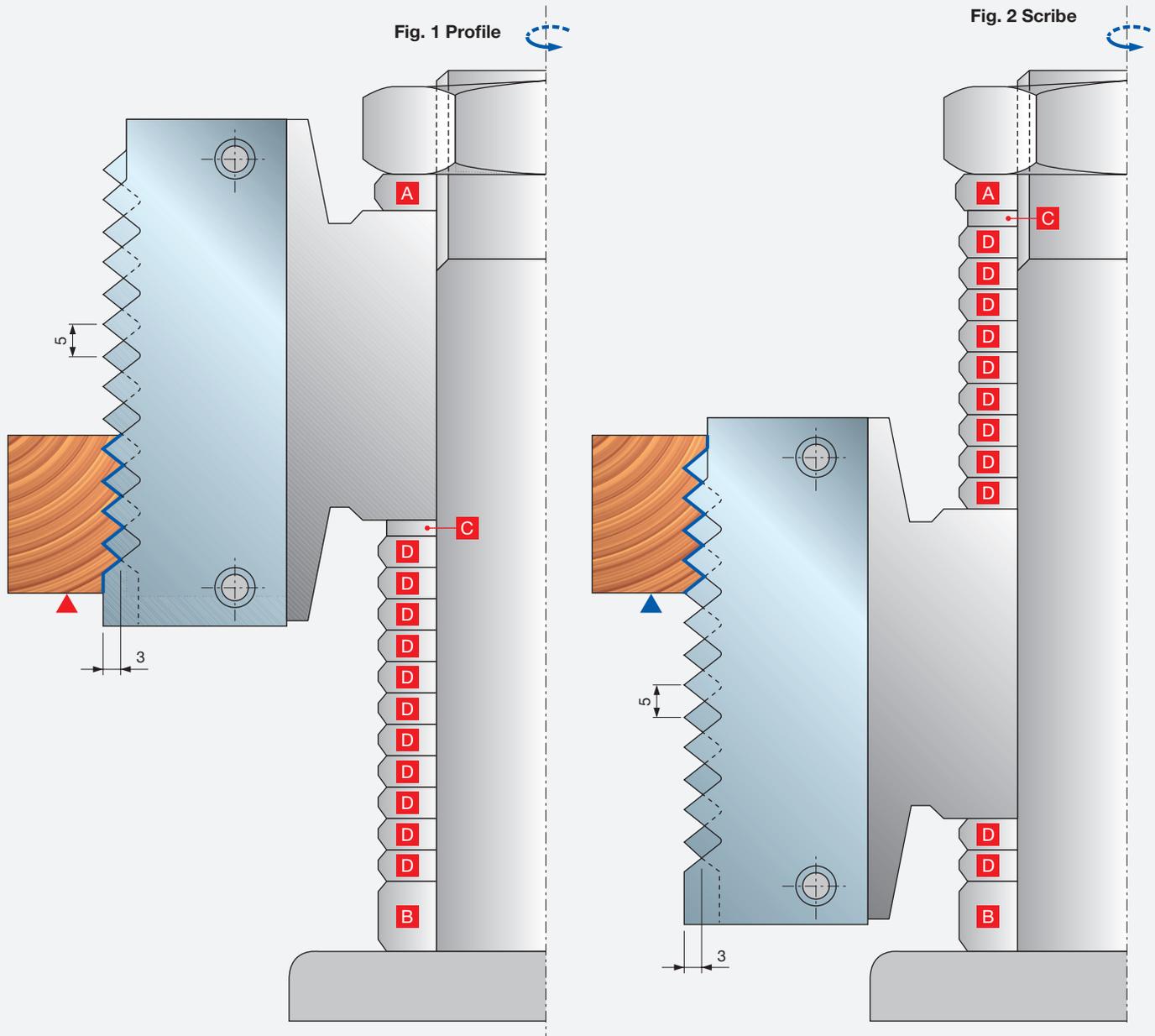
- Two different types of knives are fitted on the cutterhead to obtain a perfect joint with a 90° sharp edge.
- The max. timber thickness possible is 70 mm.
- Aluminium light alloy body.
- Rebore not available.

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



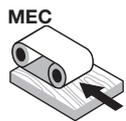
Application examples



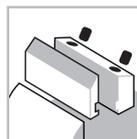
- 1: To obtain the profile, insert all spacers "C" and "D" below the tool as indicated in figure A.
 - 2: To achieve the counterprofile remove spacer "C" and as many spacers "D" as the number of teeth "C" and in use, placing them above the tool as indicated in figure B. In the example above there are 9 teeth "C" not used (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.

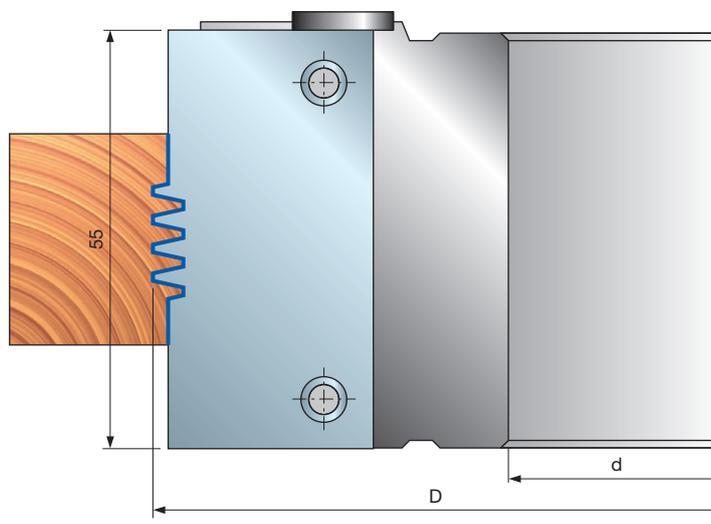
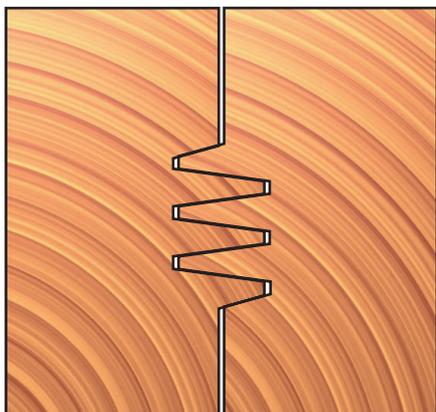
- Possible to adjust the type of joint (tight, regular, loose) by means of a thumb screw mechanism.
- Tool to work long and cross grain on short workpieces.
- The item does not include knives and support plates.
- Steel body.
- Rebore not available.

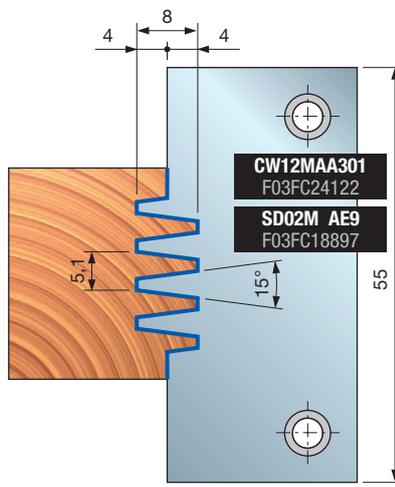
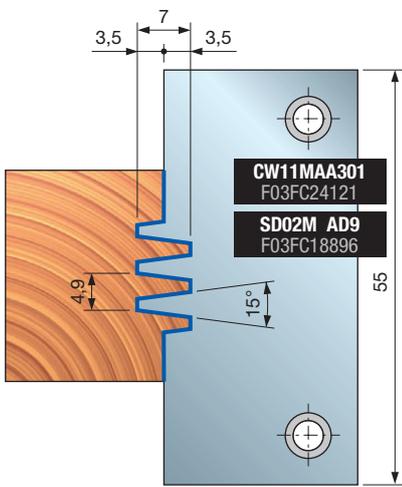
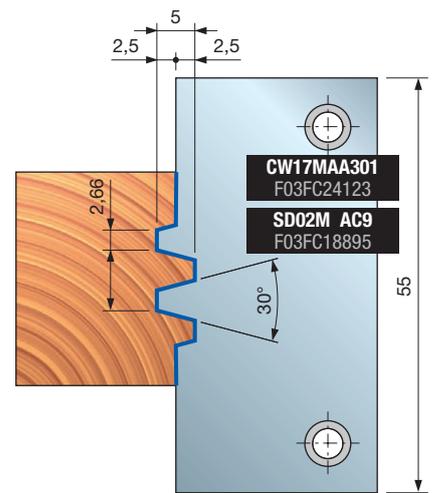
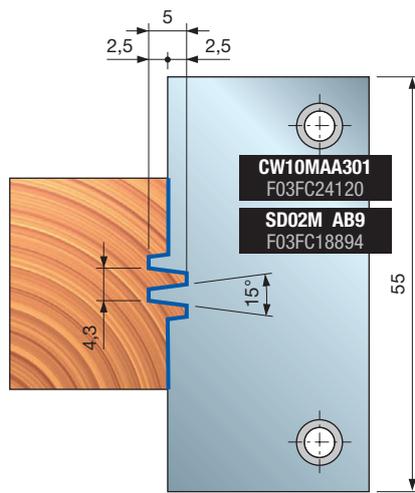
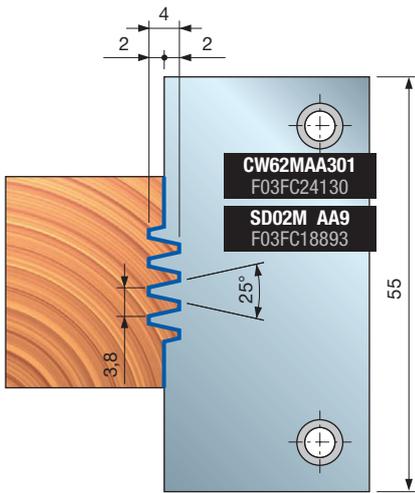
D	B	d	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm		1/min.		
150	55	35	4	9.600	TW01M AB3	F03FC20555

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

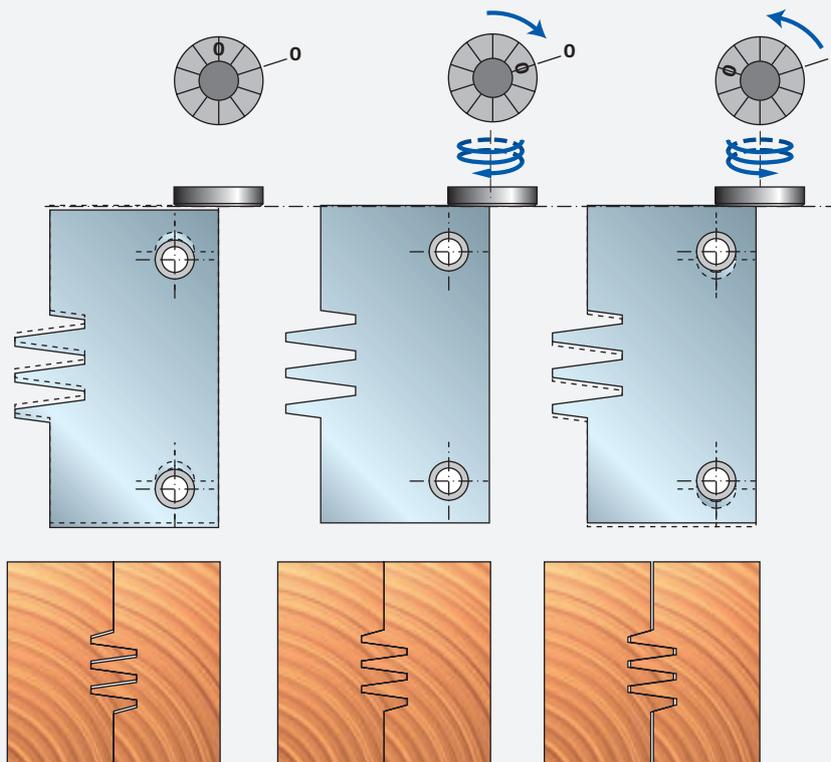




Dimensions	Spare knives	Art. No.
55 x 29 x 3	CW62MAA301	F03FC24130
55 x 29 x 3	CW10MAA301	F03FC24120
55 x 29 x 3	CW17MAA301	F03FC24123
55 x 29 x 3	CW11MAA301	F03FC24121
55 x 29 x 3	CW12MAA301	F03FC24122

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:



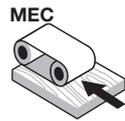
Regular joint

Tight joint

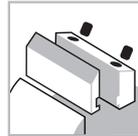
Loose joint

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.

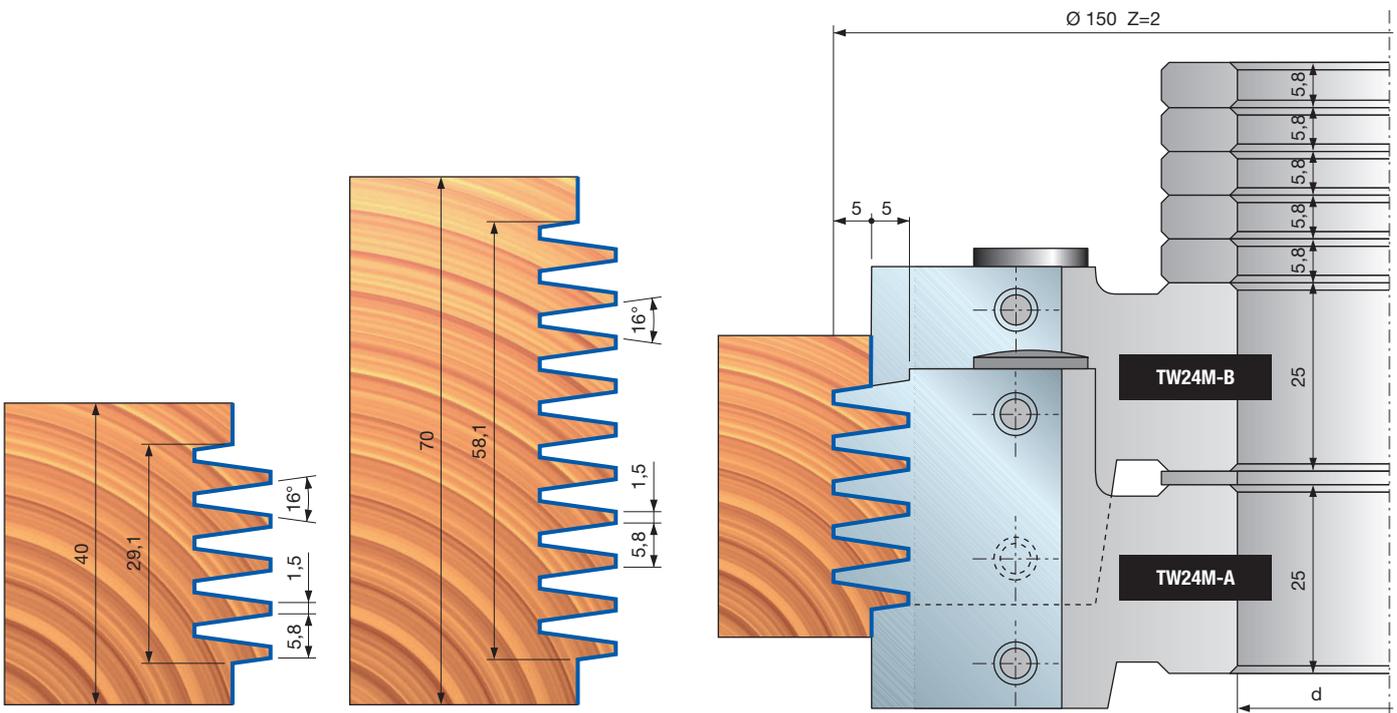
Technical information:

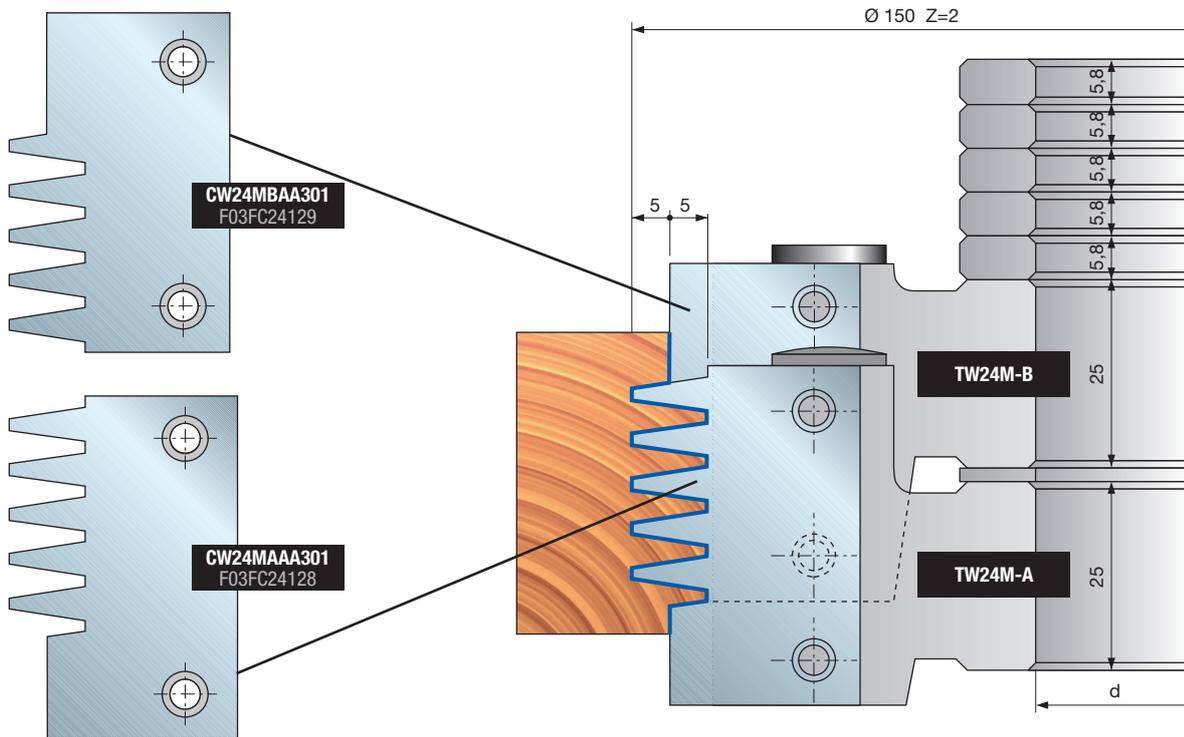
Adjustable tool to work long and cross grain on short workpieces.

- Adjustable for wood thicknesses between 40 and 70 mm.
- Cutterhead supplied with resharpenable HW knives and spacers.
- Steel body.
- Rebore not available.

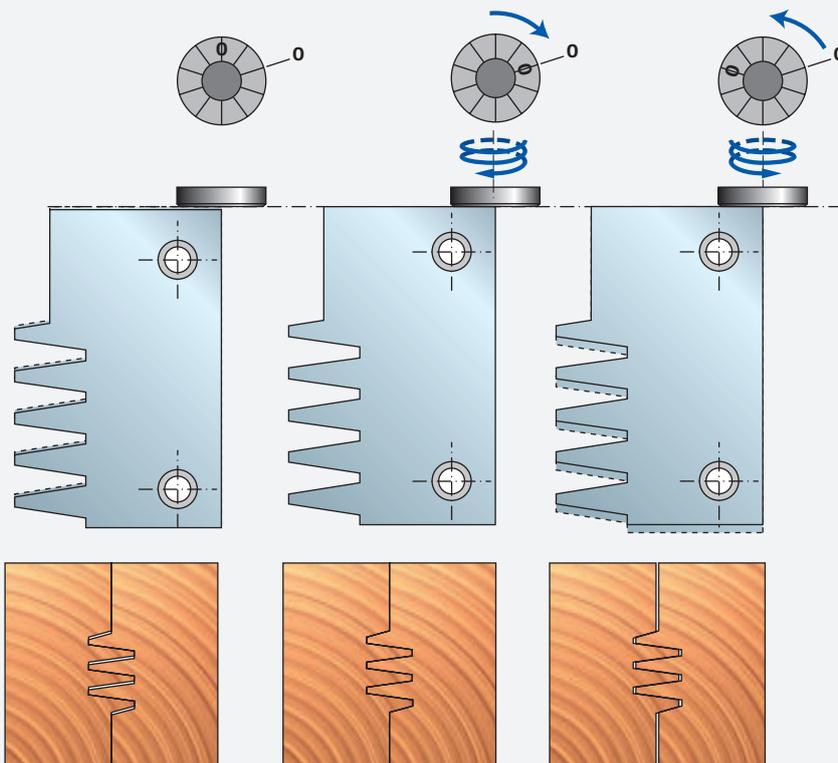
D mm	B mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
150	-	30	2	9.000	TW24M AA3	F03FC24412
150	-	32	2	9.000	TW24M AE3	F03FC24413
150	-	35	2	9.000	TW24M AB3	F03FC20568
150	-	40	2	9.000	TW24M AC3	F03FC20569

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:



Regular joint

Tight joint

Loose joint

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

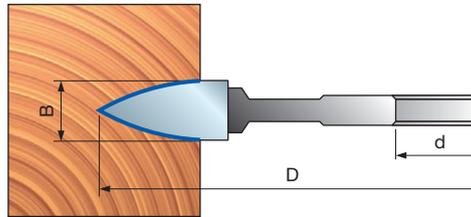
Machines:
Biscuit jointer.

Materials:
Softwood and hardwood.

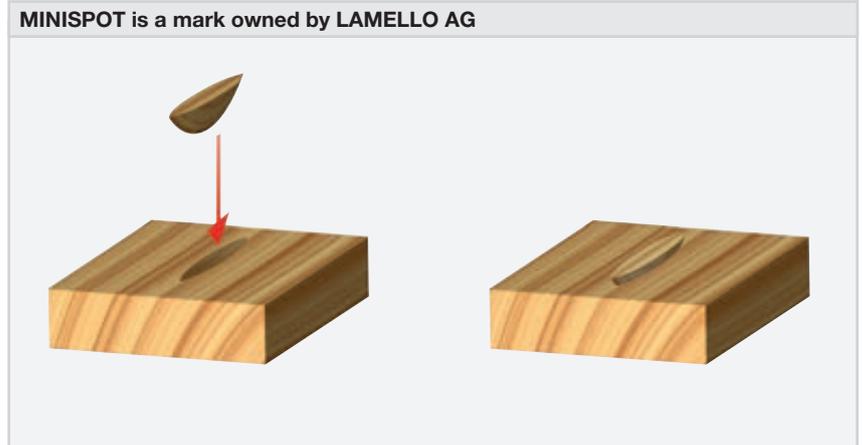
Applications:
Grooving.

- 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



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FI02M Brazed cutters for biscuit jointers



Manual Feed



Brazed Cutters



Steel Body



Softwood



Hardwood



Chipboard



Laminated
Chipboard



MDF

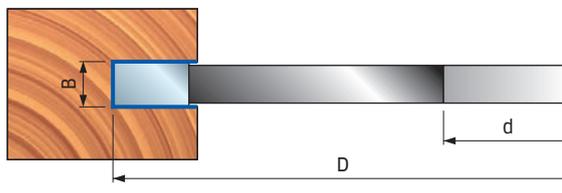


Laminated
MDF



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.

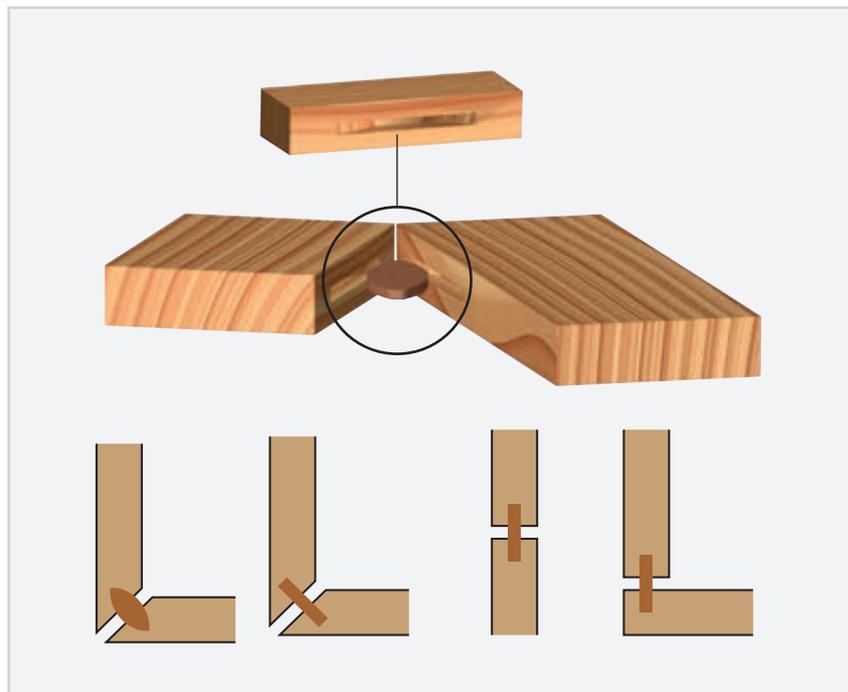
Applications:

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

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

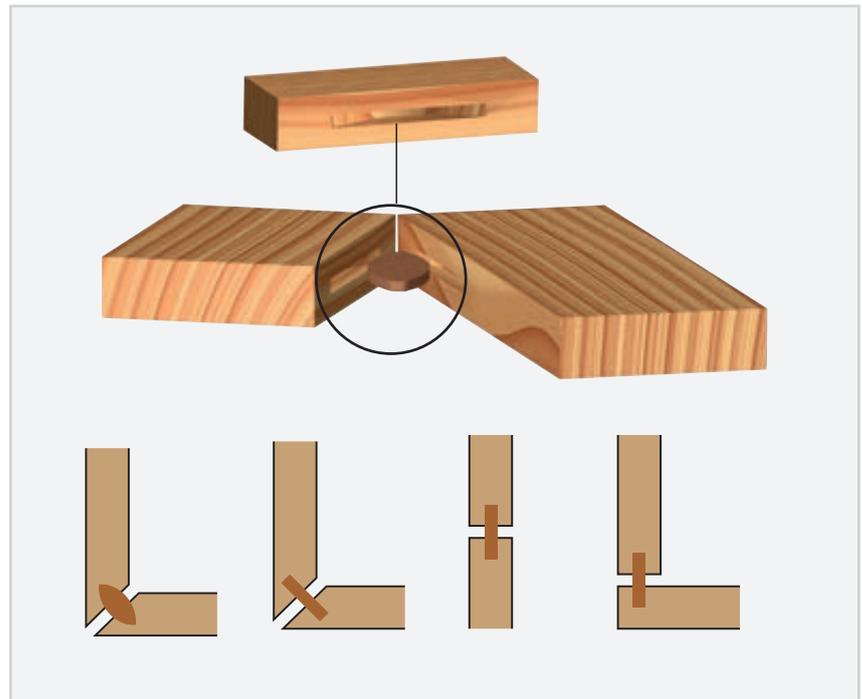
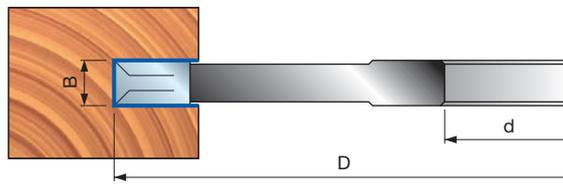


Machines:
Biscuit jointer.

Materials:
Softwood, hardwood and wood based panels.

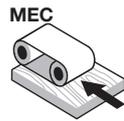
Applications:
Grooving.

- 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.

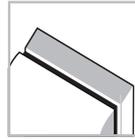


FI02M

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:

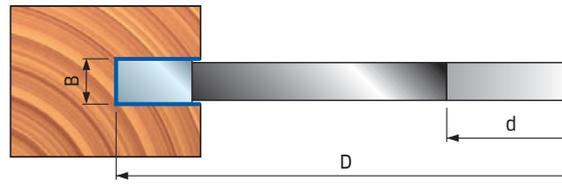
Grooving.

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

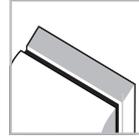


FI05M

Grooving brazed cutters



Automatic Feed



Brazed Cutter



Steel Body



Softwood



Hardwood



Chipboard



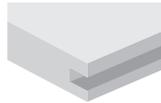
Laminated chipboard



MDF



Laminated MDF



Grooving

Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood, hardwood and wood based panels.

Applications:

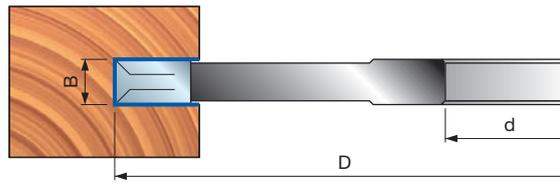
Grooving.

Technical information:

Brazed cutters for good quality grooving on softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.

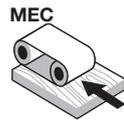
- Steel body.
- Rebore not available.

D mm	B mm	d mm	Z	V	Max RPM 1/min.	Freud Code	Art. No.
140	4	35	3	3 + 3	10.000	FI05M EB3	F03FC07525
140	6	35	3	3 + 3	10.000	FI05M EH3	F03FC07533
140	8	35	3	3 + 3	10.000	FI05M EN3	F03FC07539
140	10	35	3	3 + 3	10.000	FI05M ER3	F03FC07545

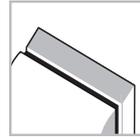


FI14M

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:

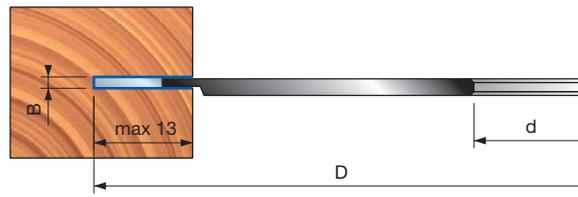
Grooving.

Technical information:

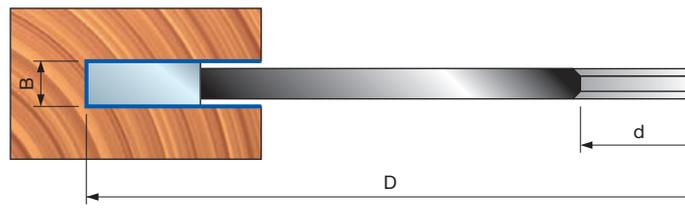
Brazed cutters for good quality grooving on softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.

- 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



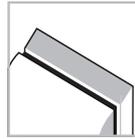


FI07M

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:

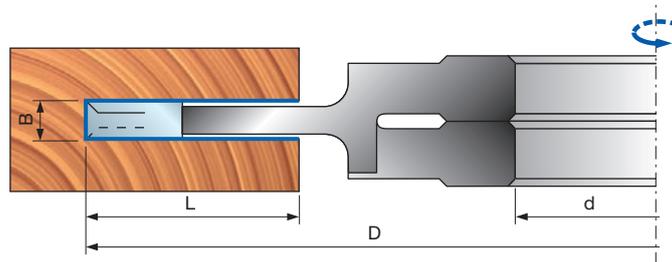
Brazed cutters for good quality adjustable grooving on softwood and hardwood, both cross cutting and ripping, on chipboard, compressed laminated woods and MDF.

- 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).

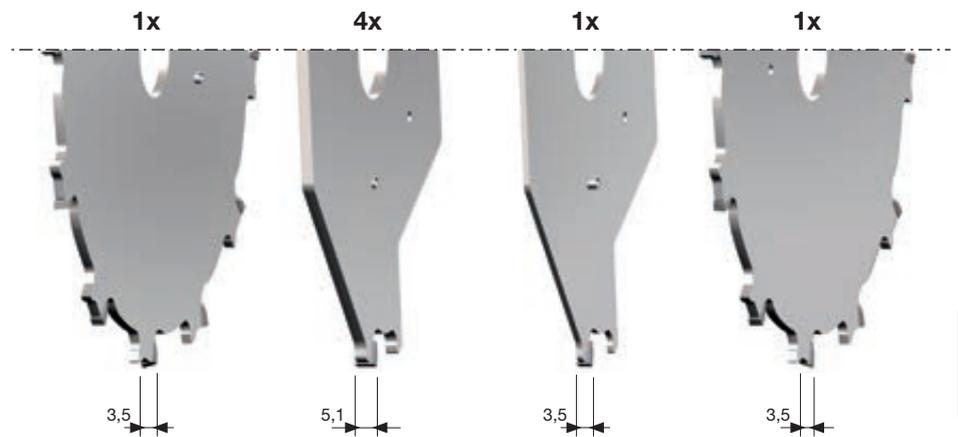
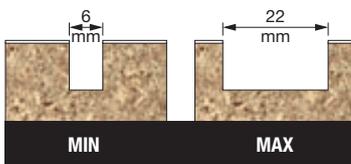
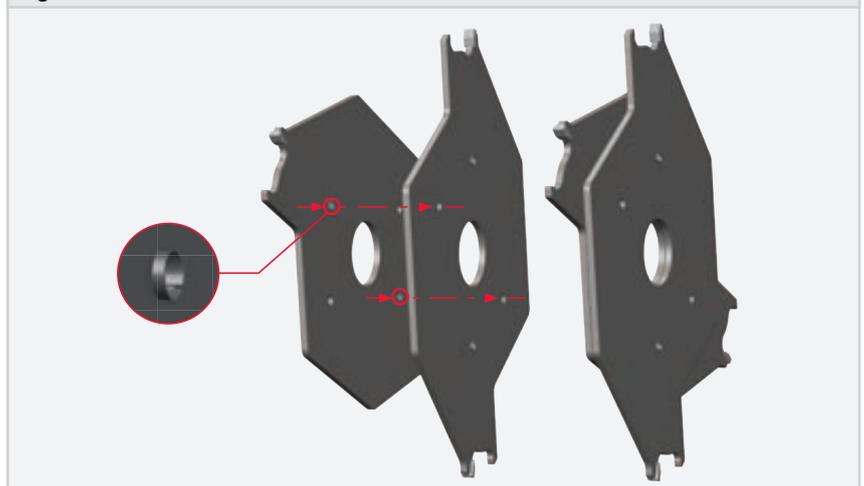


Fig. 1



Fig. 2



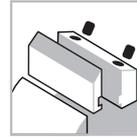


TG13M

Grooving cutterheads for biscuit jointers



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Chipboard



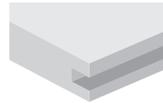
Laminated chipboard



MDF



Laminated MDF



Grooving

Machines:

Biscuit jointer.

Materials:

Softwood, hardwood and wood based panels.

Applications:

Grooving.

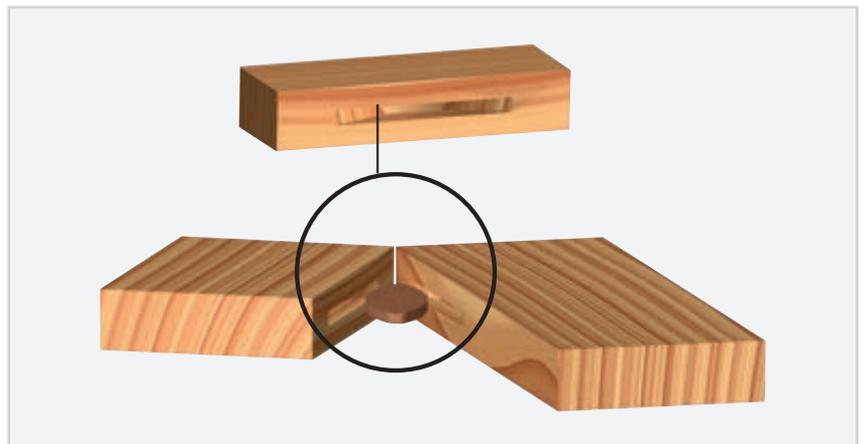
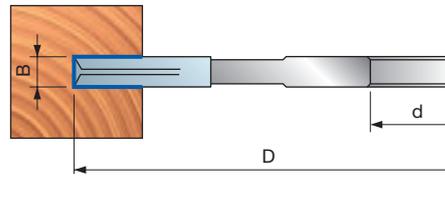
Technical information:

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	B	d	Z	V	Max RPM	Freud Code	Art. No.
mm	mm	mm			1/min.		
100	4	22	4	4	10.500	TG13M AA3	F03FC20271

Spare parts		Dimensions	Freud Code	Art. No.
		mm		
	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

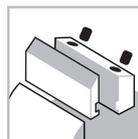


TG11M

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.

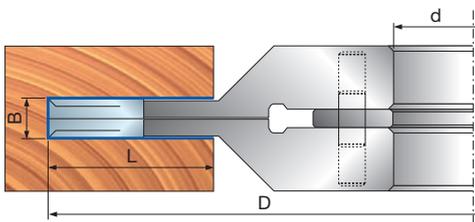
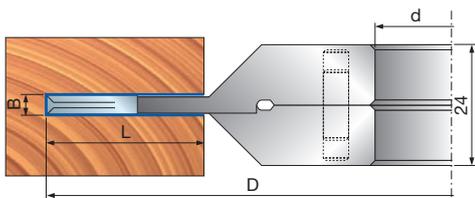
- Steel body.
- Rebore not available.

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

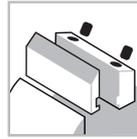
AA3 - AB3 - AC3
AD3 - AE3 - FB3 - FE3
DA3 - DB3 - DC3
DD3 - DE3 - HB3
TA3 - TB3 - TC3 - TD3 - TE3 -
VB3 - VD3

TG18MG

Adjustable grooving cutterhead sets



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Chipboard



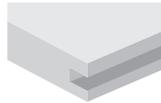
Laminated chipboard



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

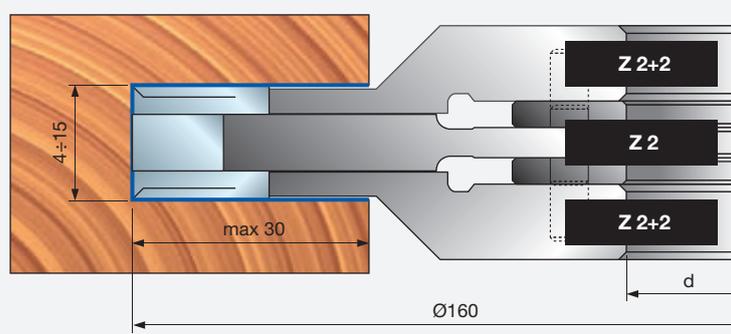
TG18MG

Adjustable grooving cutterheads sets

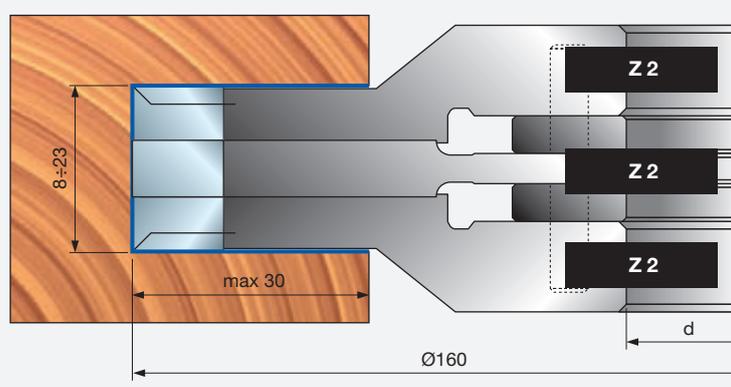
	Spare spacers set	Dimensions mm	Freud Code	Art. No.
⊙	Spacers set	50 x 7,6 x 30	AN03M AN9	F03FC24566
⊙	Spacers set	52 x 7,6 x 32	AN03M GH9	F03FC24569
⊙	Spacers set	55 x 7,6 x 35	AN03M BQ9	F03FC24567
⊙	Spacers set	55 x 7,6 x 40	AN11M CL9	F03FC24568
⊙	Spacers set	50 x 11,6 x 30	AN03M A09	F03FC24570
⊙	Spacers 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

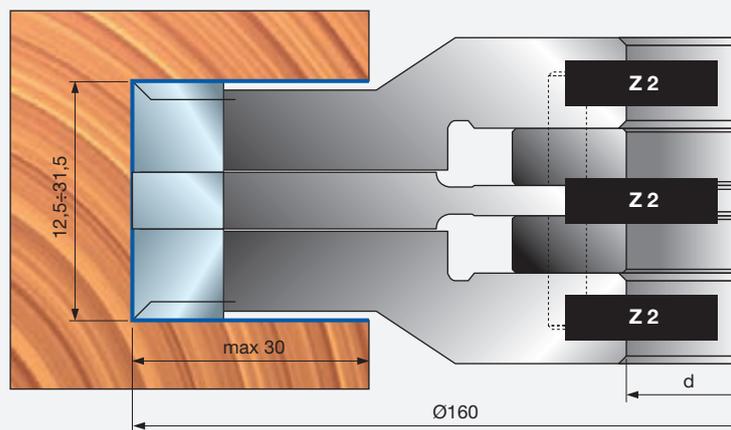
TG18MG
AA3 - AE3 - AB3 - AC3



TG18MG
DA3 - DE3 - DB3 - DC3



TG18MG
TA3 - TE3 - TB3 - TC3



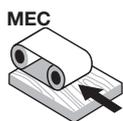
Profiling



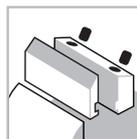


T135M - TG35M

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

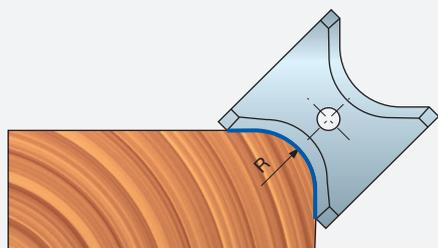
Spare parts		Dimensions mm	Freud Code	Art. No.
	Screw	M10 x 22	VT19M MA9	F03FA04496
	Nut	15 x 13,3 x M10	VT20M MA9	F03FC20670
	Allen key	5	CB03M EA9	F03FA00169
AC3		30 x 12 x 1,5	CG08MEA310	F03FH02906
		15 x 26 x 8	CN09M AD9	F03FC01283
BC3		50 x 12 x 1,5	CG08MFA310	F03FH02907
		15 x 46 x 8	CN09M AP9	F03FC01290

TG35MD - TG35MS for rounding

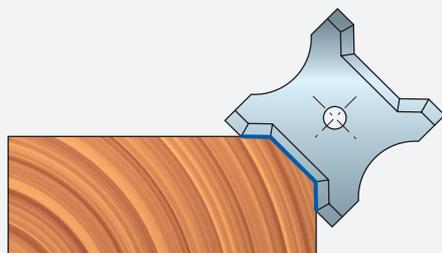
D mm	B mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
140	13	40	3	10.300	TG35MD EC3	F03FC20280
148,6	20	40	3	10.300	TG35MD CC3	F03FC20278
156,2	26	40	3	10.300	TG35MD DC3	F03FC20279
140	13	40	3	10.300	TG35MS EC3	F03FC20283
148,6	20	40	3	10.300	TG35MS CC3	F03FC20281
156,2	26	40	3	10.300	TG35MS DC3	F03FC20282

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

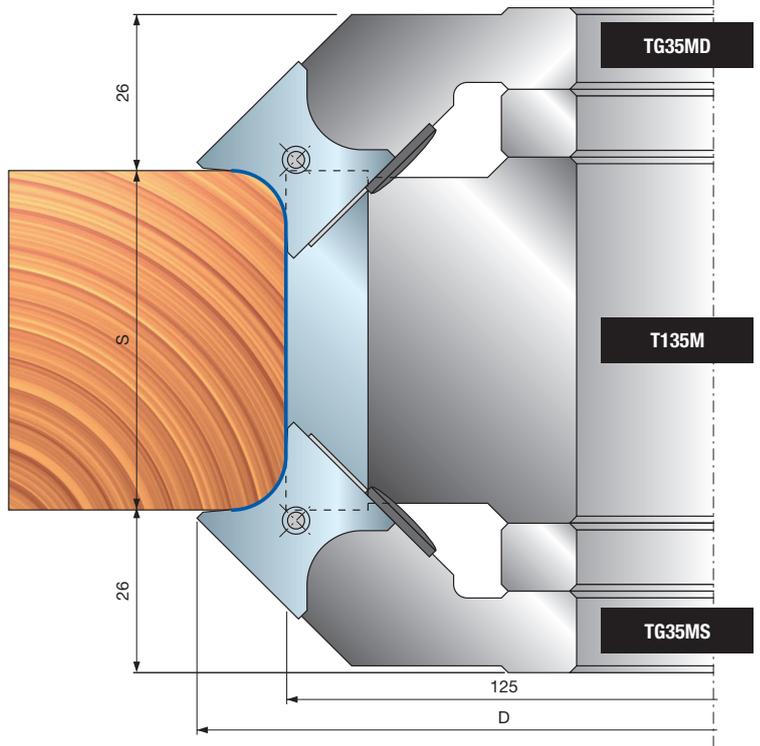
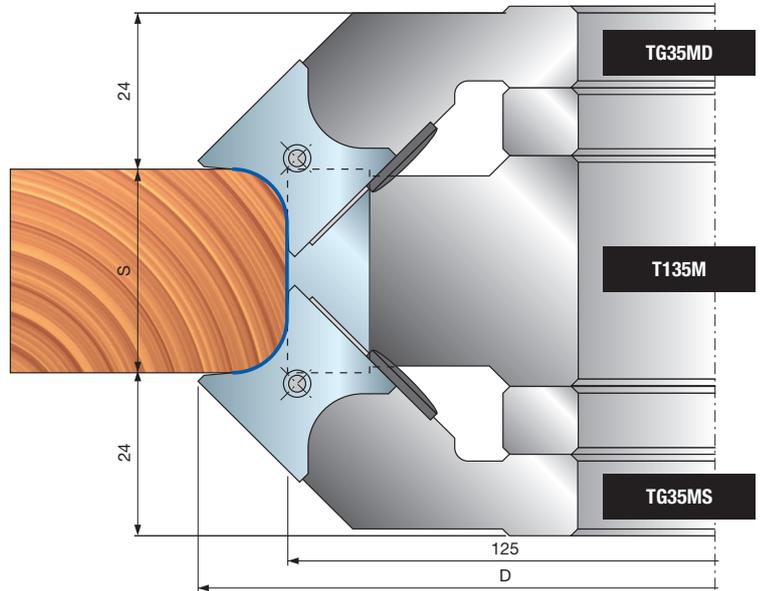
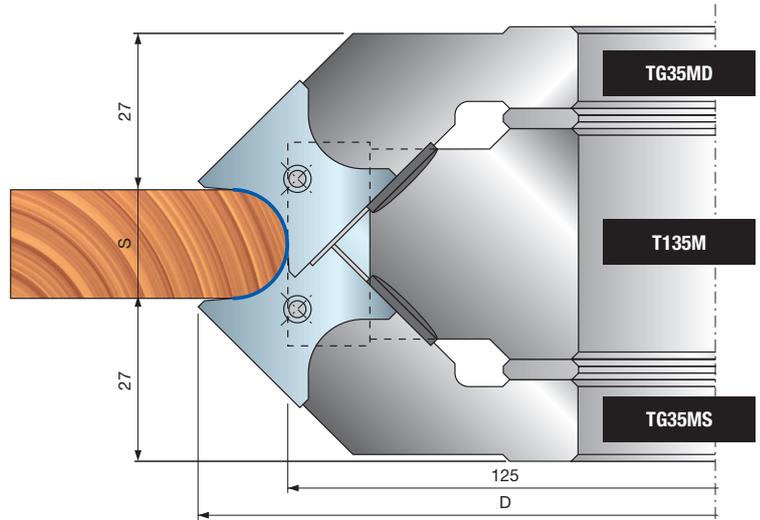
Dimensions mm	Radius mm	Freud Code	Art. No.
20 x 21 x 2	45°	CG50MAE305	F03FC23910
20 x 21 x 2	5	CG50MAA305	F03FC23906
20 x 21 x 2	6	CG50MAB305	F03FC23907
20 x 21 x 2	7	CG50MAC305	F03FC23908
20 x 21 x 2	8	CG50MAD305	F03FC23909

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



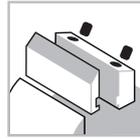


TP22M

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.

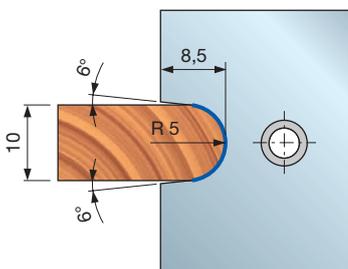
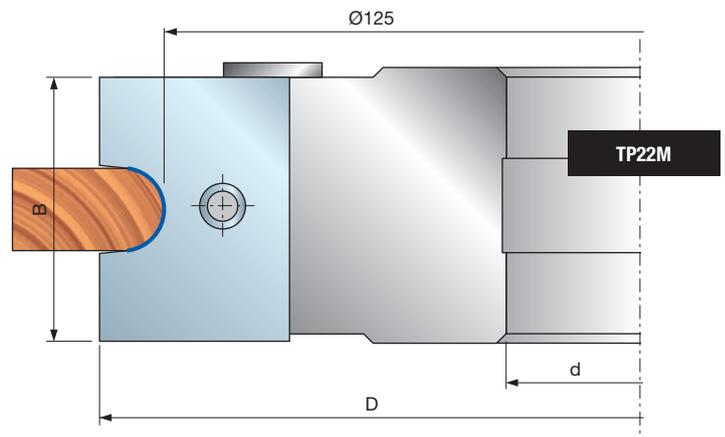
Technical information:

Performance knives tool for multiradius profiles.

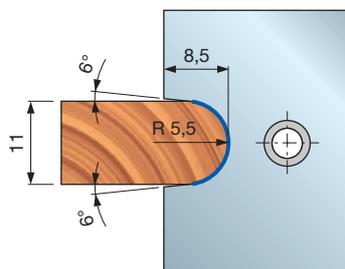
- Knives included.
- Aluminium light alloy body.
- Rebore not available.

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

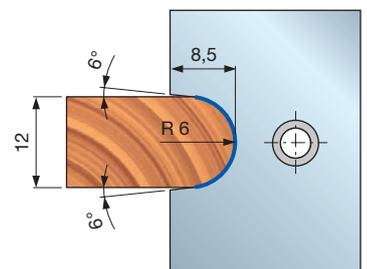
Spare parts		Dimensions mm	Freud Code	Art. No.
	Screw	M5 x 8	VT05M AA9	F03FA04444
	Positioning plate	22 x 1,7 x 6,5	VT18M GA9	F03FA04488
	Screw	M10 x 18	VT03M CC9	F03FA04438
	Allen key	5	CB03M EA9	F03FA00169
	Wedge	33 x 23 x 8,5	CN13M CI9A	F03FC23042
	Knife	35 x 24 x 3 R5	CP22MM05001	F03FC23952
	Knife	35 x 24 x 3 R5,5	CP22MM05501	F03FC23953
	Knife	35 x 24 x 3 R6	CP22MM06001	F03FC23954



CP22MM05001
F03FC23952



CP22MM05501
F03FC23953



CP22MM06001
F03FC23954

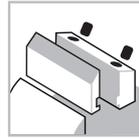


TP22M

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.

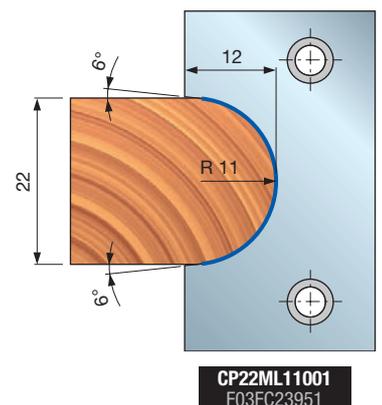
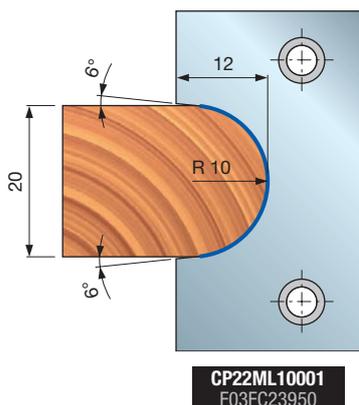
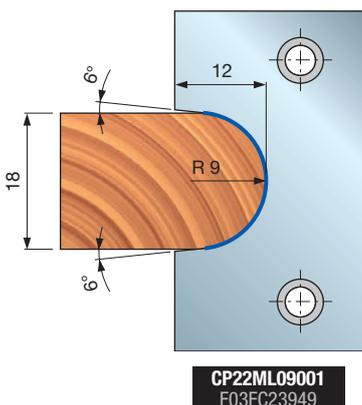
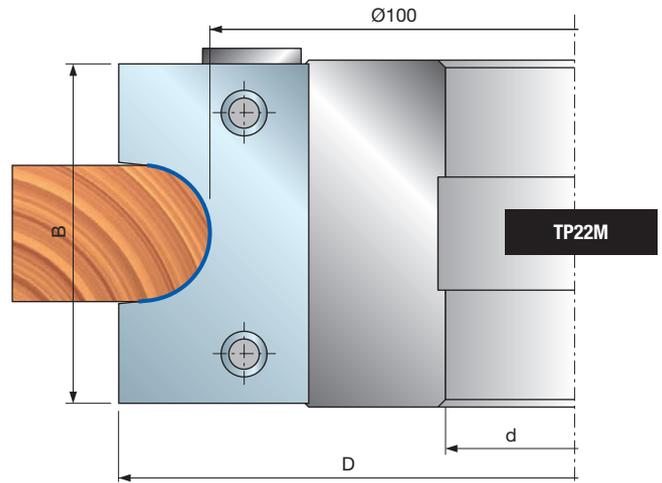
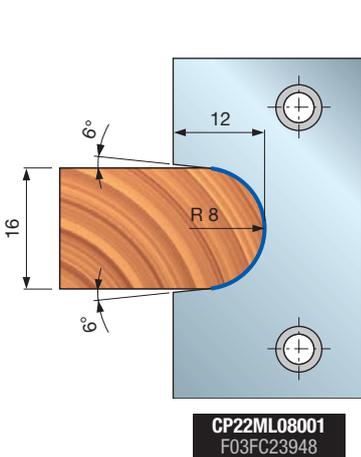
Technical information:

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

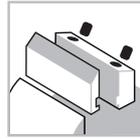


TP23M

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.

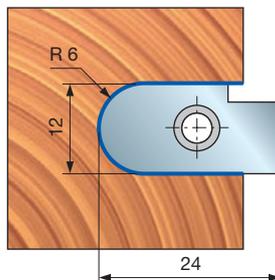
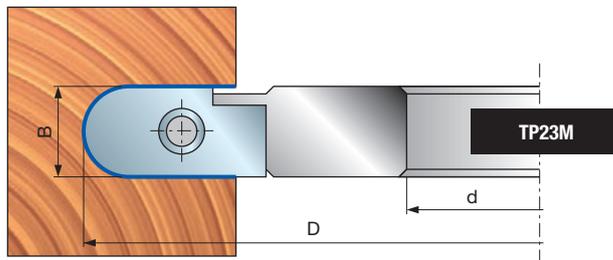
Technical information:

Performance knives tool for multiradius profiles.

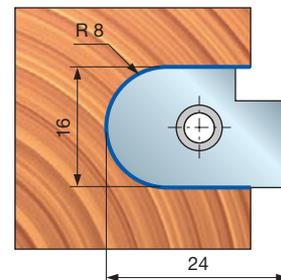
- Knives included.
- Aluminium light alloy body.
- Rebore not available.

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

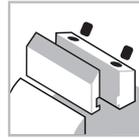


TP31M

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.

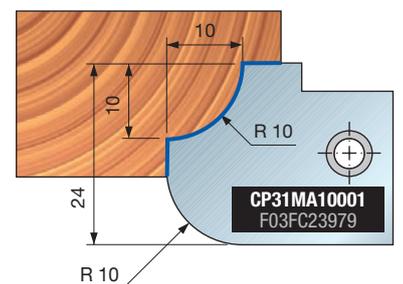
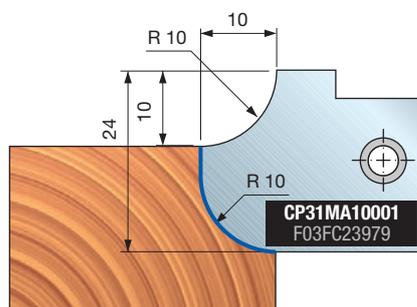
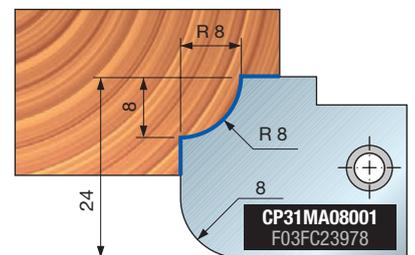
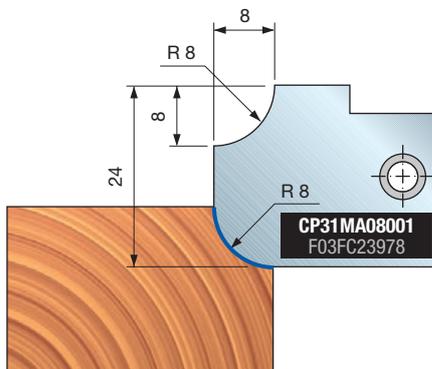
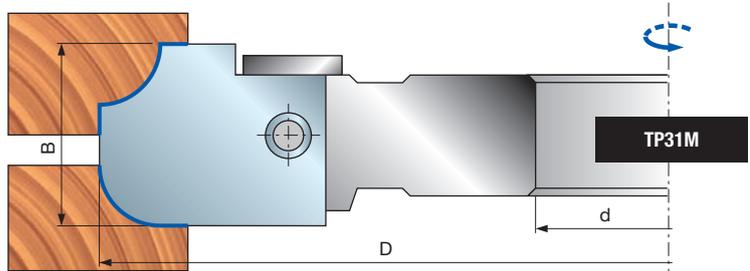
Applications:

Profiling.

Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.

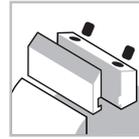


TP31M

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.

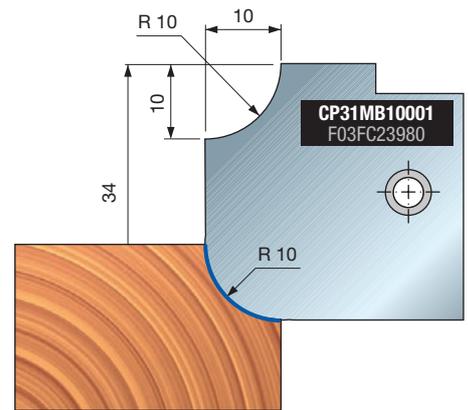
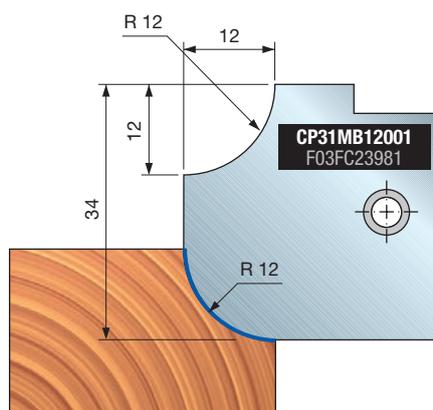
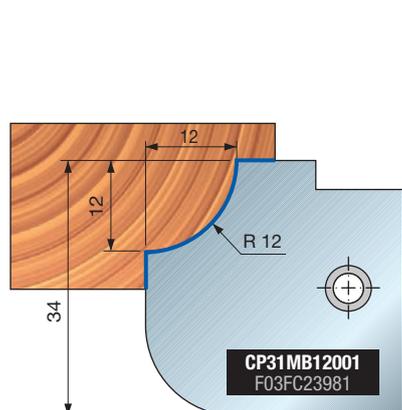
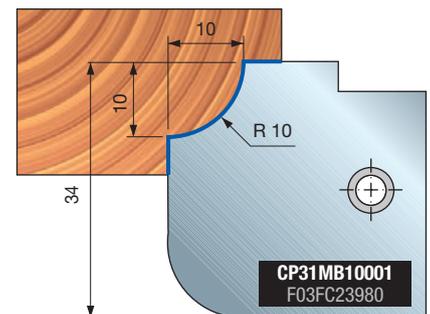
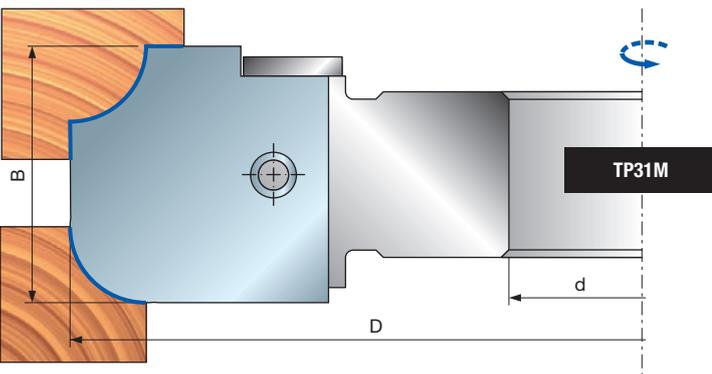
Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.

D	B	d	Z	Radius	Max RPM	Freud Code	Art. No.
mm	mm	mm		mm	1/min.		
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	Freud Code	Art. No.
		mm		
	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

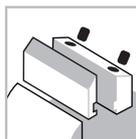


TP31M

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.

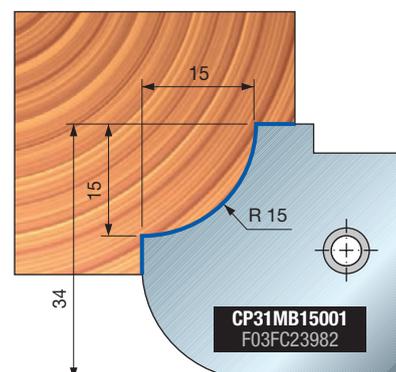
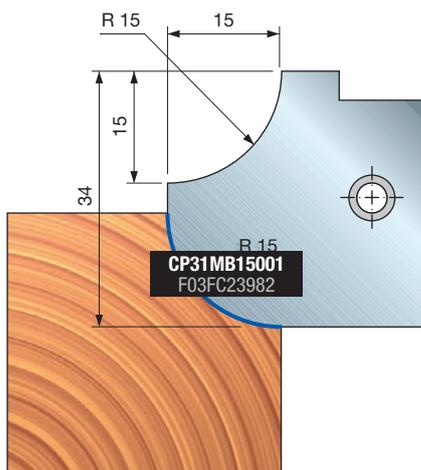
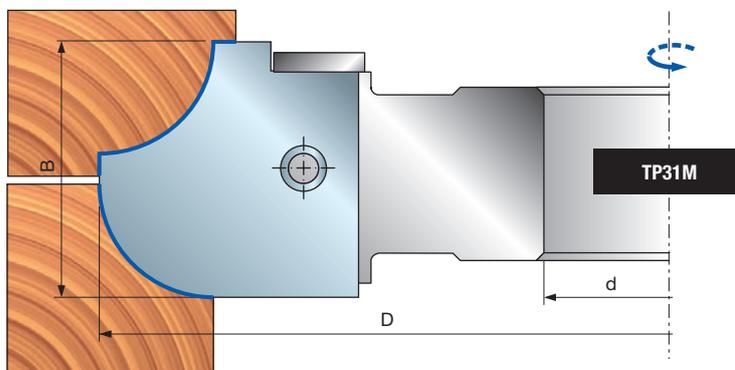
Technical information:

Performance knives tool for multiradius profiles.

- Knives included.
- Aluminium light alloy body.
- Rebore not available.

D	B	d	Z	Radius	Max RPM	Freud Code	Art. No.
mm	mm	mm		mm	1/min.		
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	Freud Code	Art. No.
		mm		
	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

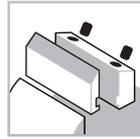


TP31M

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.

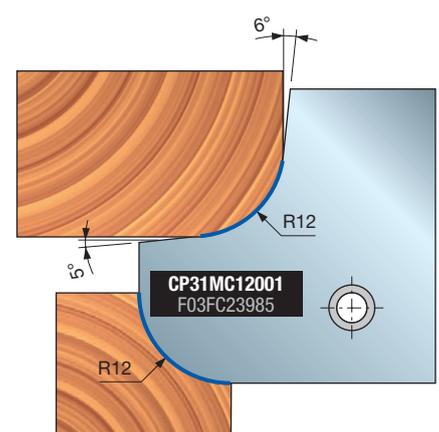
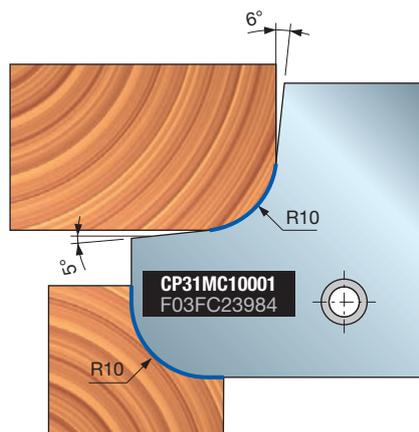
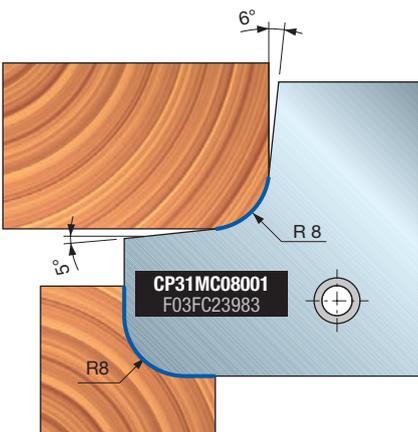
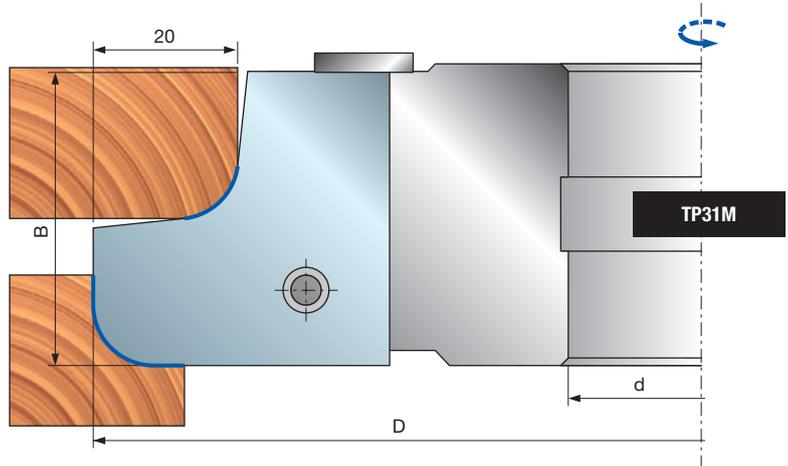
Technical information:

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



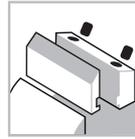


TP31M

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.

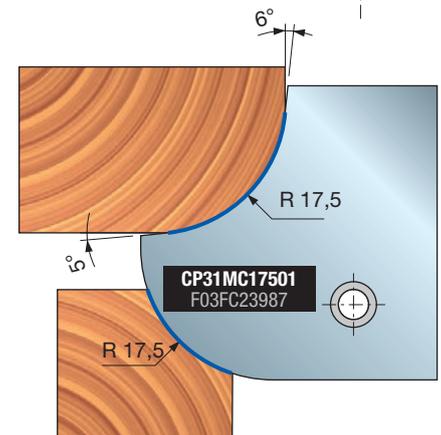
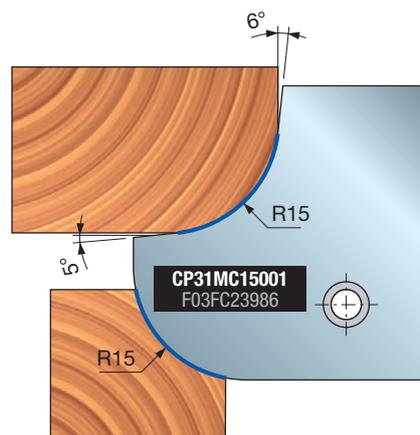
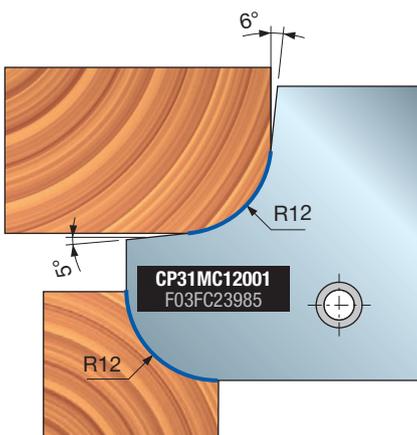
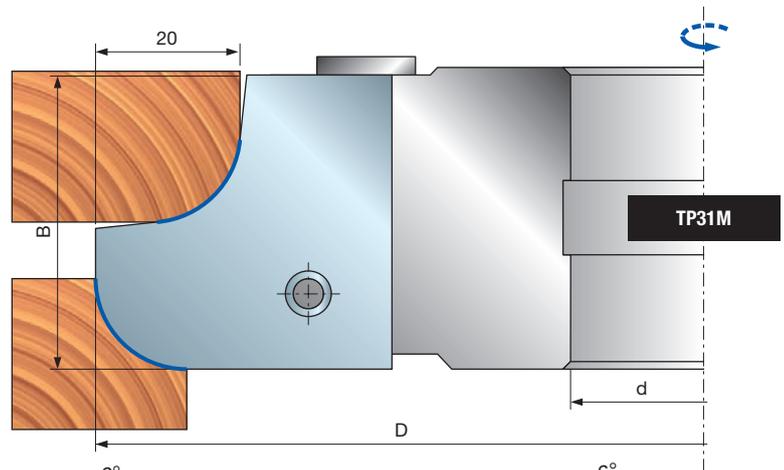
Technical information:

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

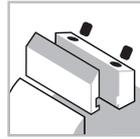


TP31M - TP31MS

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.

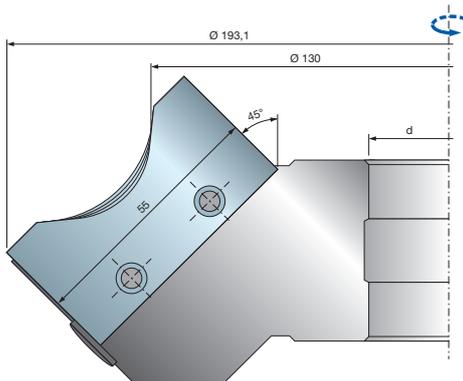
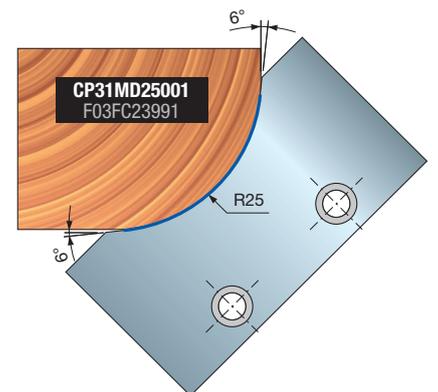
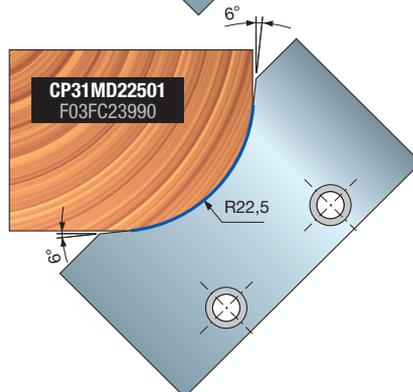
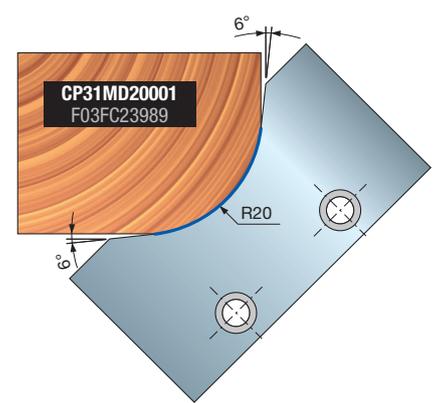
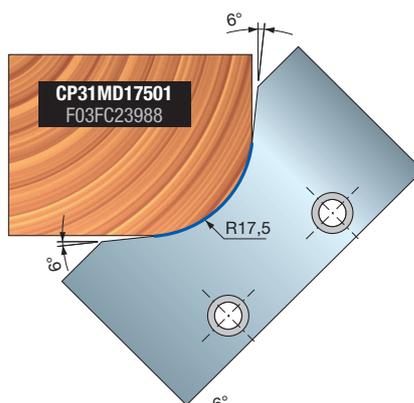
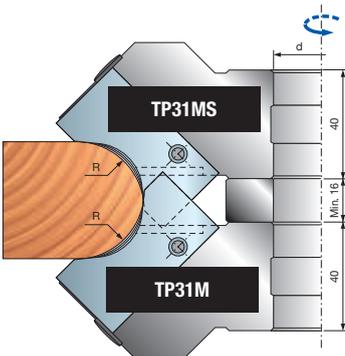
Technical information:

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

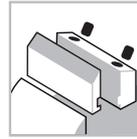


TP40M

Multiprofile cutterheads



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

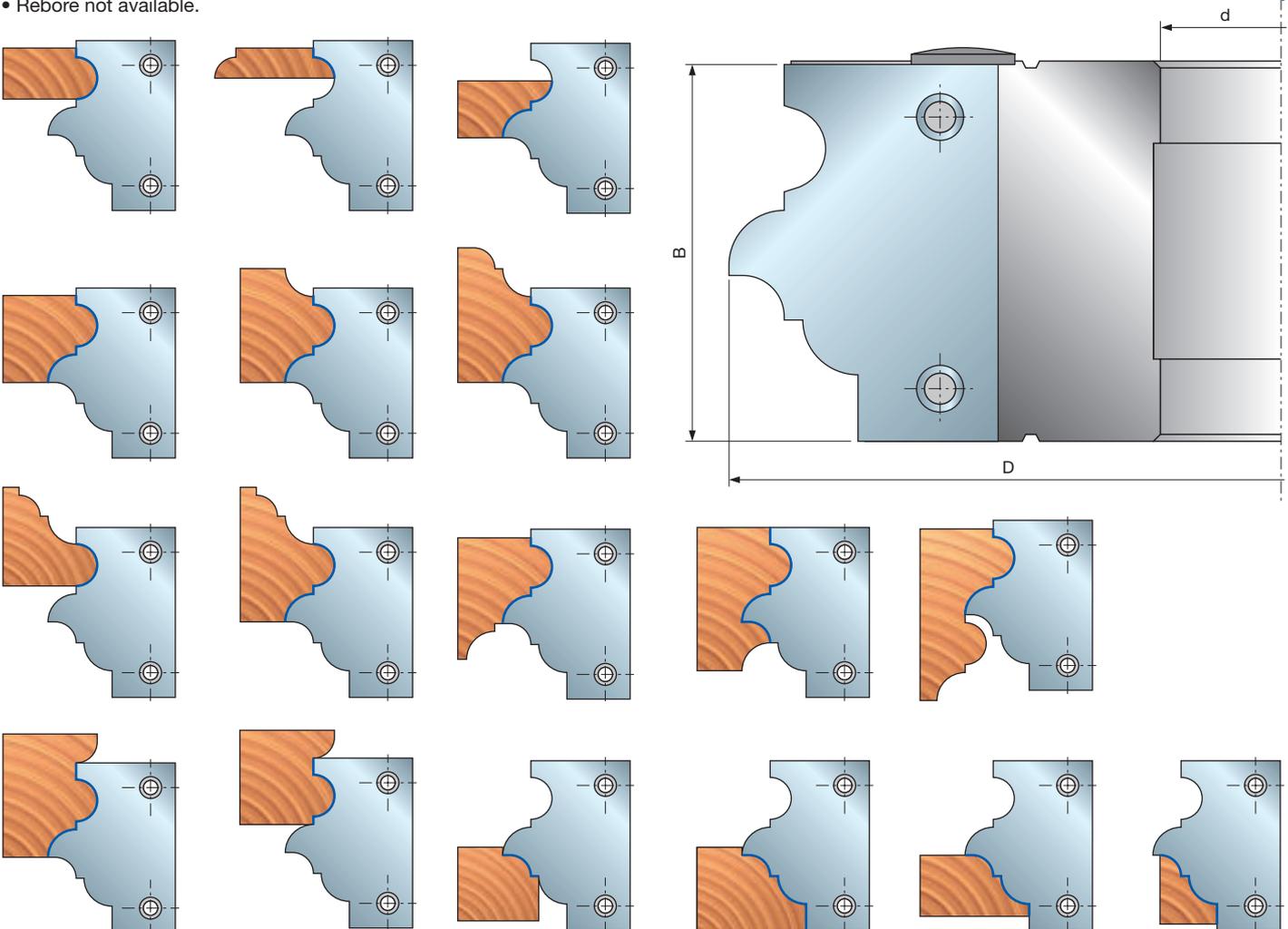
Technical information:

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



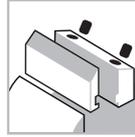


TP44M

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:

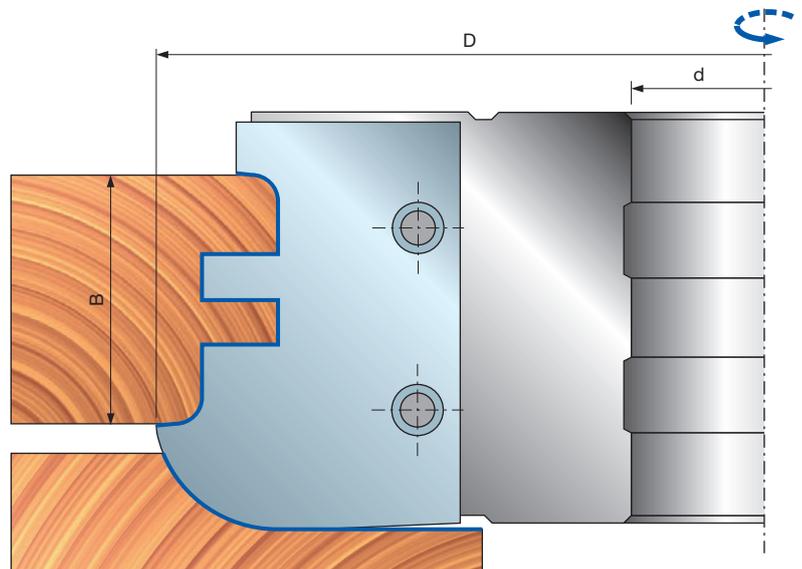
Multiprofile cutterhead with Performance knives for tongue, groove panels, flooring and cabinet doors.

- 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.

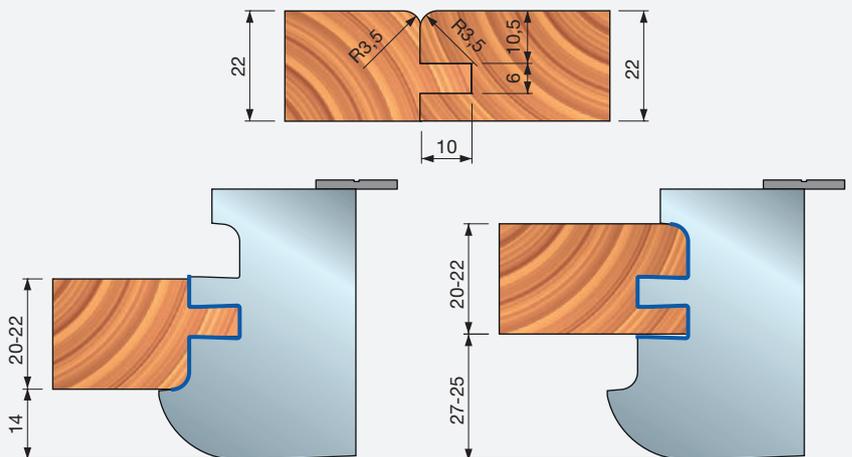
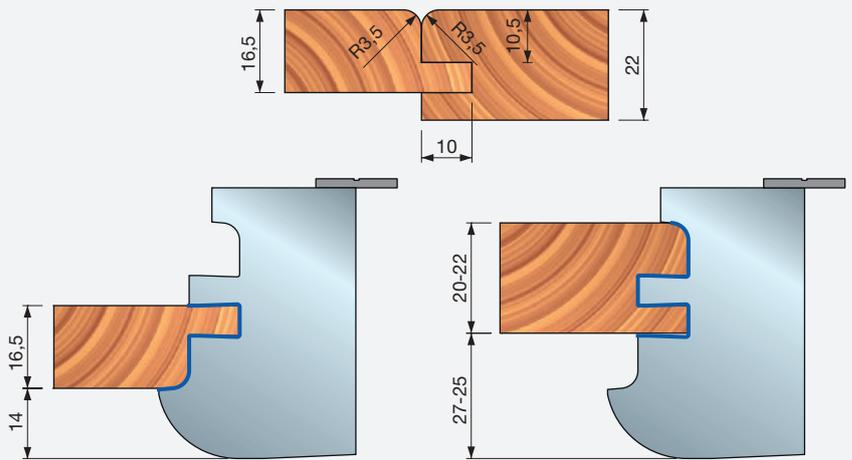
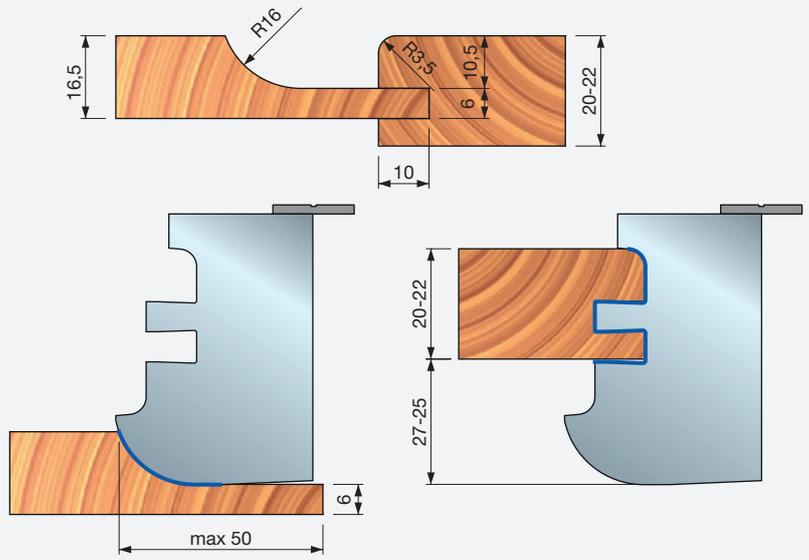
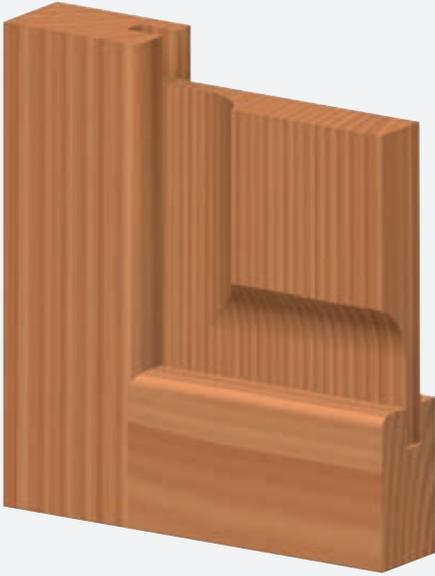
D mm	B mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
160	55	30	2	8.500	TP44M AA3	F03F668643
160	55	32	2	8.500	TP44M AC3	F03F668644
160	55	35	2	8.500	TP44M AB3	F03FC20502
160	55	50	2	8.500	TP44M AD3	F03FC25268

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

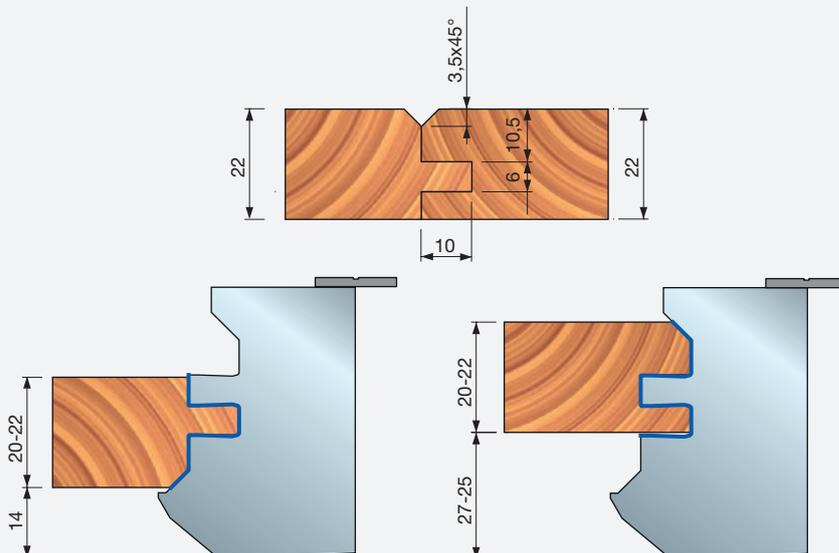
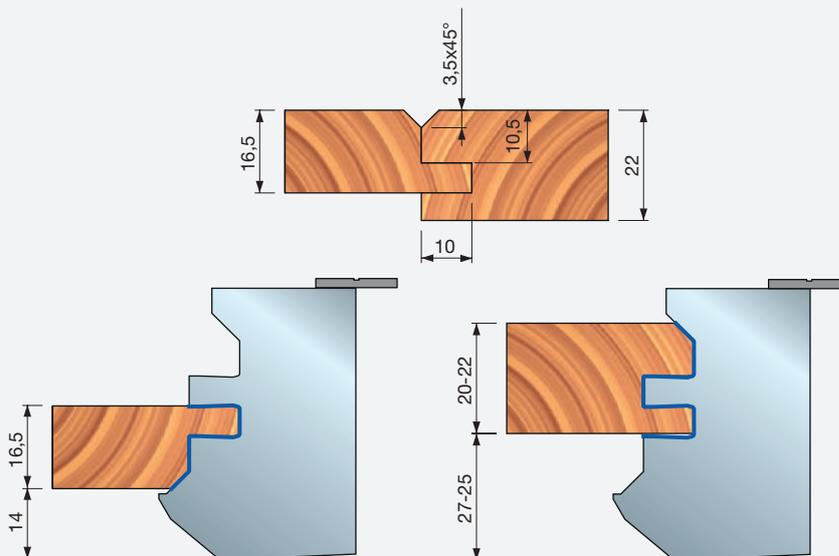
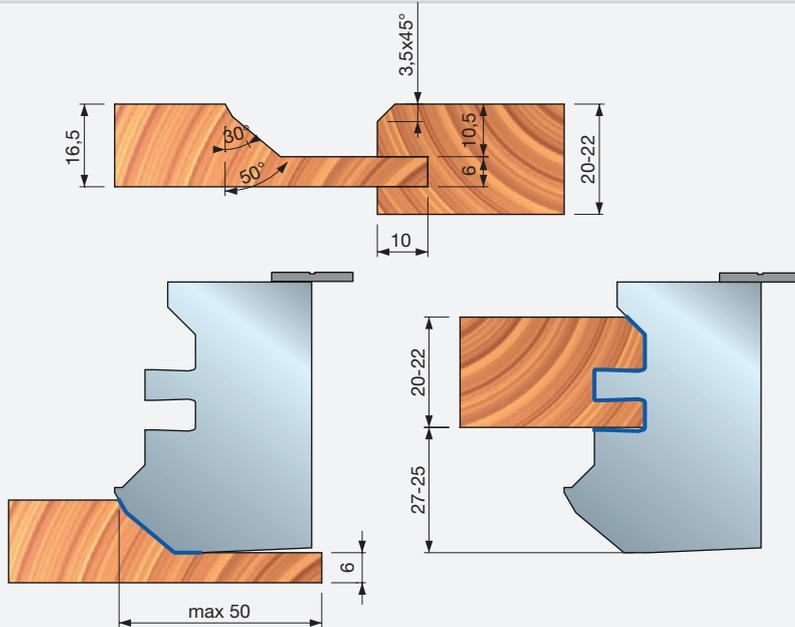
Profile	Spare knives	Dimensions mm	Freud Code	Art. No.
1	Knife	55 x 40 x 3	CP44MAA301	F03FC24012
2	Knife	55 x 40 x 3	CP44MBA301	F03FC24013



Profile 1



Profile 2

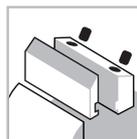




TP32M Cutterhead sets for cabinet doors



Manual Feed



Clamping System



Steel Body



Softwood



Hardwood



Profiling



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

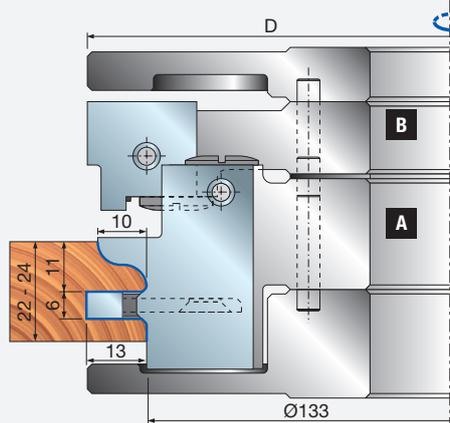
Performance knives tool set for cabinet doors. adjustable timber thickness 22-24 mm.

- 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.

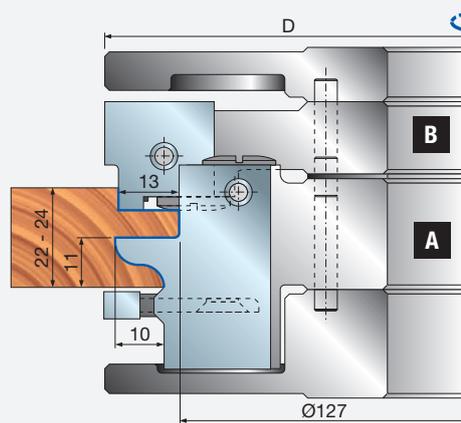
D mm	B mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
159	-	30	2+2	8.500	TP32M AA3	F03FC24452
159	-	35	2+2	8.500	TP32M AB3	F03FC20489

	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

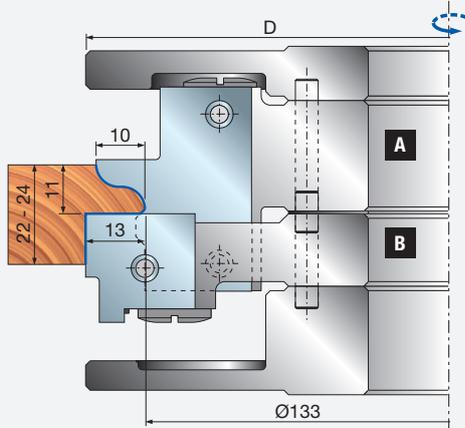


Carrying out a rebate

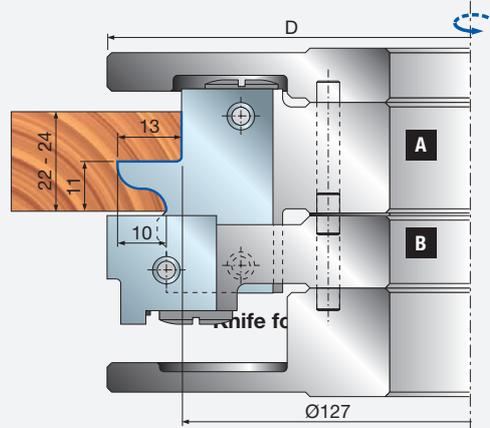


	Spare knives	Dimensions mm	Freud Code	Art. No.
	Knife	45 x 34 x 3	CP32MAA301	F03FC23992
	Knife	45 x 34 x 3	CP32MBA301	F03FC23993
	Knife	45 x 34 x 3	CP32MCA301	F03FC23994
	Knife	45 x 34 x 3	CP32MDA301	F03FC23995
	Knife	45 x 34 x 3	CP32MEA301	F03FC23996
	Knife	45 x 34 x 3	CP32MFA301	F03FC23997
	Knife	45 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

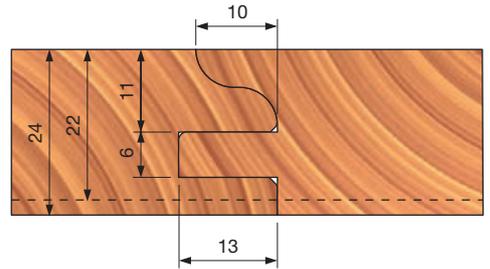
Pieces	Dimensions mm	Freud Code	Art. No.
1	159 x 30	TP32M AA3	F03FC24452
2	45 x 34 x 3	CP32MAA301	F03FC23992



Knives for
TP32M - A
Not included



Insert for
TP32M - B

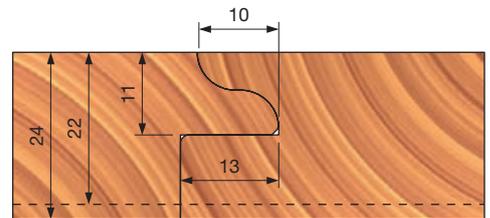


Order example for the profiles shown

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

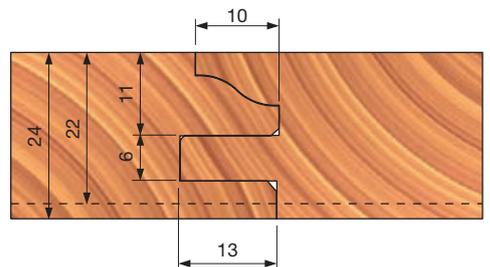
Pieces	Dimensions mm	Freud Code	Art. No.
1	159 x 30	TP32M AA3	F03FC24452
2	45 x 34 x 3	CP32MBA301	F03FC23993



Knives for
TP32M - A
Not included



Insert for
TP32M - B



CP32M

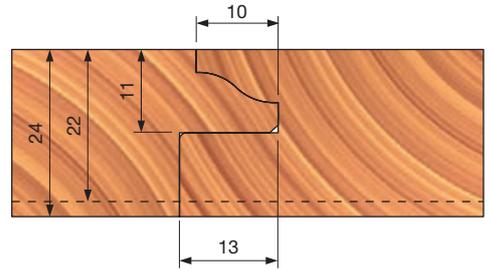
Knives for TP32M AA3 - TP32M AB3

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



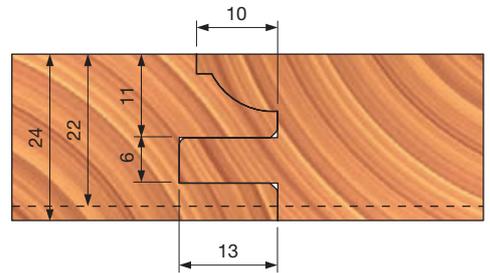
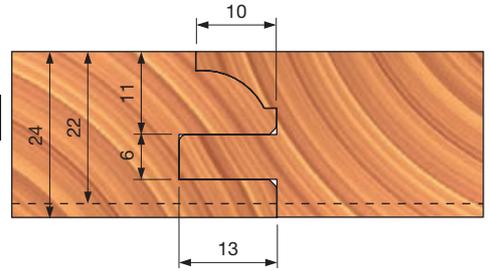
Knives for TP32M - A
Not included



Knives for TP32M - A
Not included



Insert for TP32M - B



Order example for the profiles shown

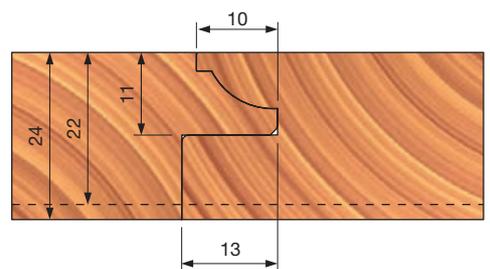
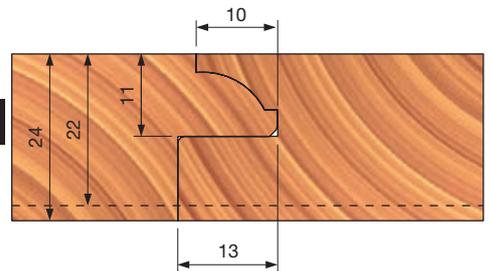
Pieces	Dimensions mm	Freud Code	Art. No.
1	159 x 30	TP32M AA3	F03FC24452
2	45 x 34 x 3	CP32MCA301	F03FC23994
2	45 x 34 x 3	CP32MDA301	F03FC23995



Knives for TP32M - A
Not included



Knives for TP32M - A
Not included



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	CP32MEA301	F03FC23996
2	45 x 34 x 3	CP32MFA301	F03FC23997



Knives for TP32M - A
Not included

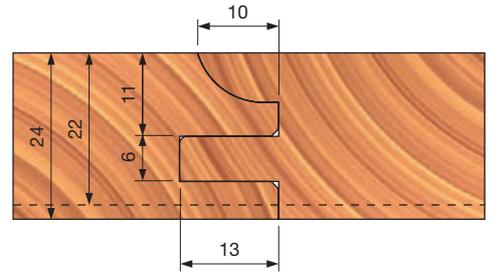
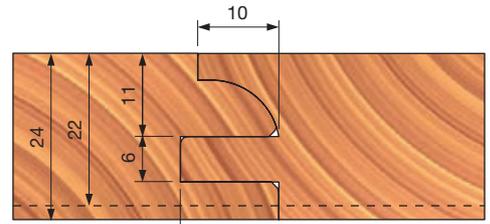


Knives for TP32M - A
Not included



SR06MAB302
F03FC24191

Insert for TP32M - B



Order example for the profiles shown

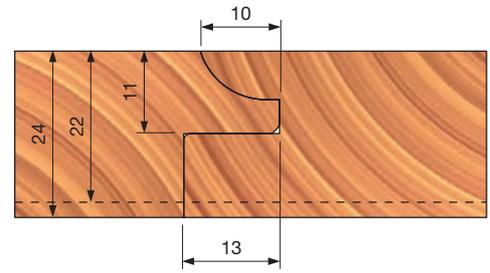
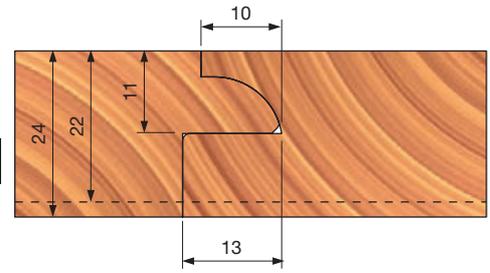
Pieces	Dimensions mm	Freud Code	Art. No.
1	159 x 30	TP32M AA3	F03FC24452
2	45 x 34 x 3	CP32MEA301	F03FC23996
2	45 x 34 x 3	CP32MFA301	F03FC23997



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

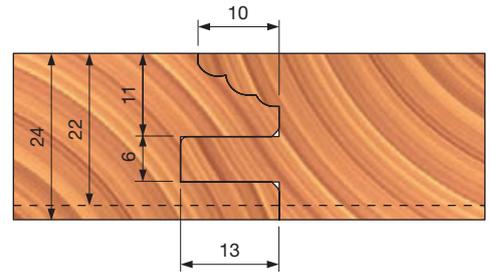
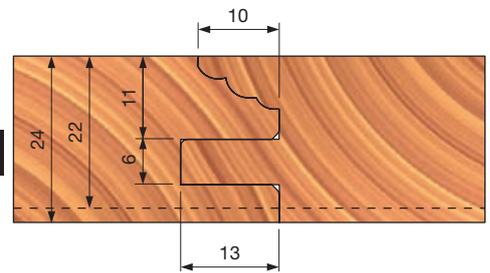


Knives for TP32M - A
Not included



SR06MAB302
F03FC24191

Insert for TP32M - B



Order example for the profiles shown

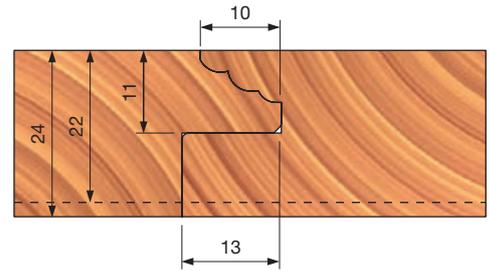
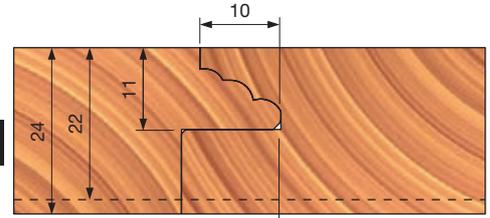
Pieces	Dimensions mm	Freud Code	Art. No.
1	159 x 30	TP32M AA3	F03FC24452
2	45 x 34 x 3	CP32MGA301	F03FC23998
2	45 x 34 x 3	CP32MHA301	F03FC23999



Knives for TP32M - A
Not included



Knives for TP32M - A
Not included



Order example for the profiles shown

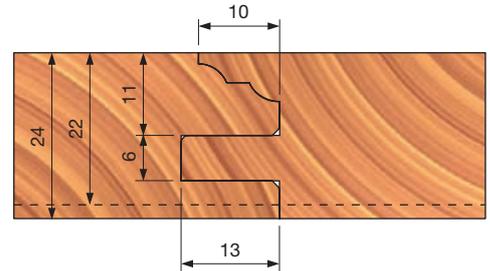
Pieces	Dimensions mm	Freud Code	Art. No.
1	159 x 30	TP32M AA3	F03FC24452
2	45 x 34 x 3	CP32MIA301	F03FC24000



Knives for TP32M - A
Not included



Insert for TP32M - B

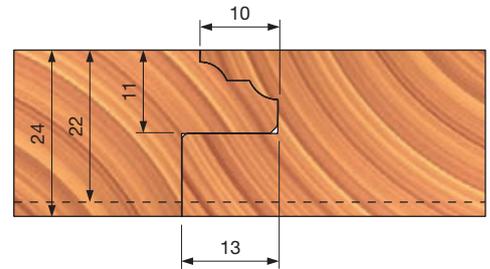


Order example for the profiles shown

Pieces	Dimensions mm	Freud Code	Art. No.
1	159 x 30	TP32M AA3	F03FC24452
2	45 x 34 x 3	CP32MIA301	F03FC24000



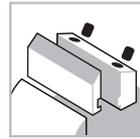
Knives for TP32M - A
Not included



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.

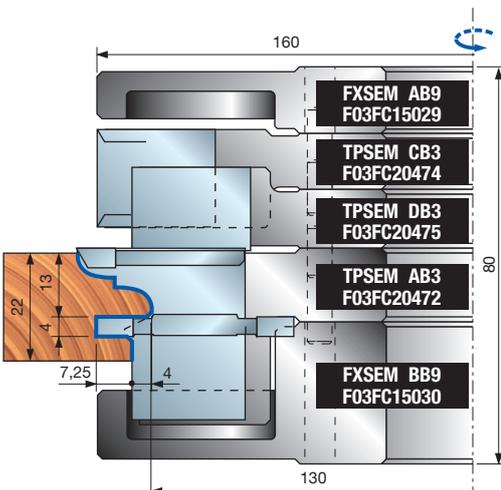
D mm	B mm	d mm	Max RPM 1/min.	Freud Code	Art. No.
160	-	30	8.500	TPSEM22GA3	F03FC23021
160	-	32	8.500	TPSEM22GC3	F03FC24432
160	-	35	8.500	TPSEM22GB3	F03FC20476
160	-	30	8.500	TPSEM30GA3	F03FC23024
160	-	32	8.500	TPSEM30GC3	F03FC24433
160	-	35	8.500	TPSEM30GB3	F03FC20477

Tools for TPSEM sets

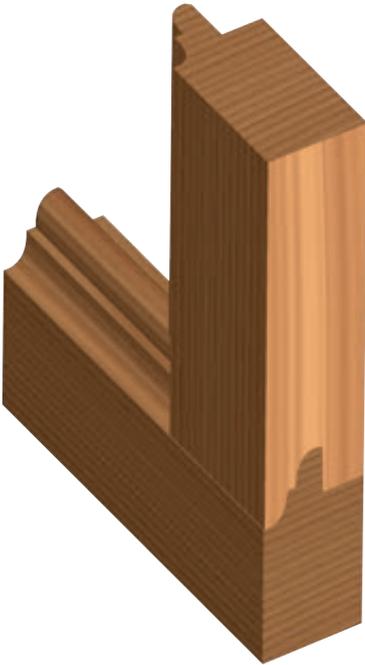
	D mm	B mm	d mm	Z	V	Freud Code	Art. No.
22GA3	135	-	30	2		TPSEM DA3	F03FC22726
	152	-	30	2	4	TPSEM CA3	F03FC22725
	160	-	30	2	4	TPSEM AA3*	F03FC22723
22GB3	138	-	35	2		TPSEM DB3	F03FC20475
	152	-	35	2	4	TPSEM CB3	F03FC20474
	160	-	35	2	4	TPSEM AB3*	F03FC20472
22GC3	138	-	32	2		TPSEM DC3	F03FC24431
	152	-	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

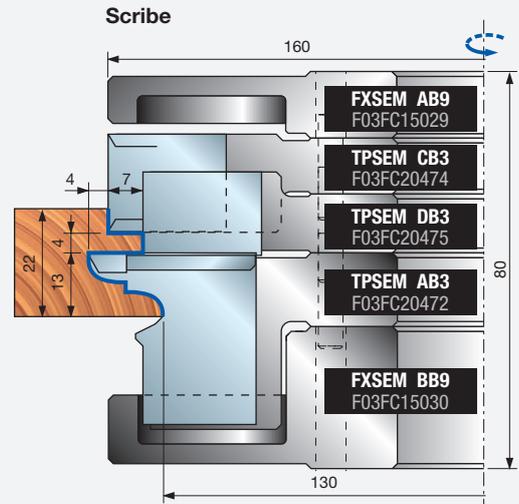
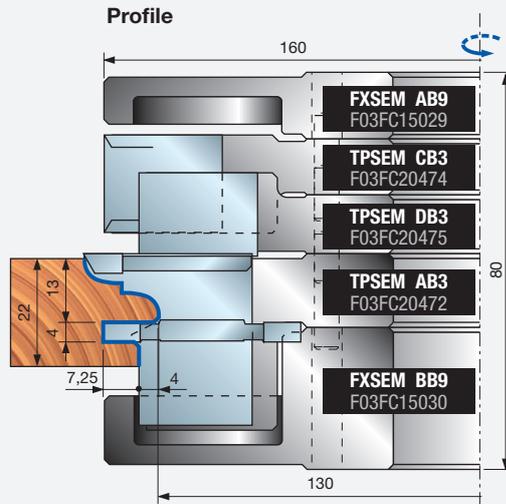
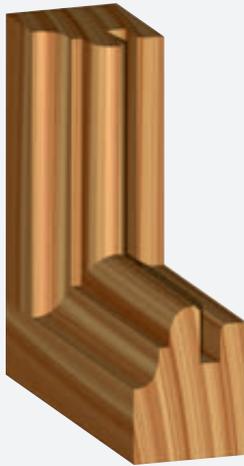
	Spare parts	Dimensions mm	Freud Code	Art. No.
AA3-AB3-AC3	Deflector	30,8 x 7 x 24,5	ID04MSAA901	F03FC24137
	Grooving insert	40 x 16 x 4	IG04MSAA305	F03FH02994
	Spur insert	34 x 4 x 16	SR06MDAL302	F03FC24196
	Screw	M10 x 18	VT03M CC9	F03FA04438
	Screw	M5 x 8	VT05M AA9	F03FA04444
	Screw for ID04M	M4 x 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



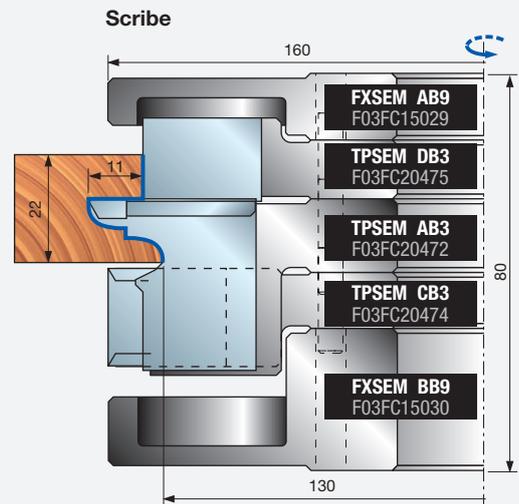
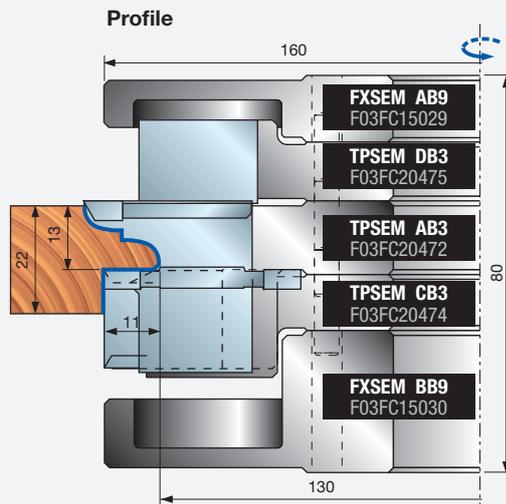
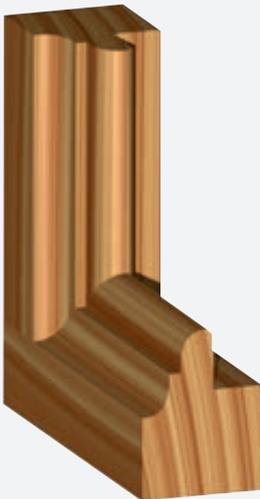
Spare parts for sets TPSEM22 - TPSEM30

	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

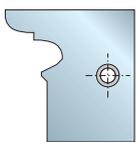


Carrying out a rebate



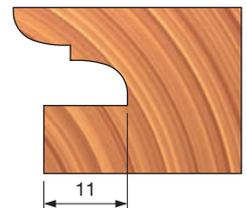
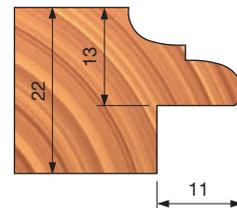
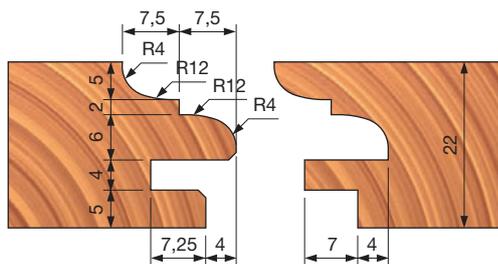
Order example for the profiles shown

Pieces	Dimensions mm	Freud Code	Art. No.
1	160 x 35	TPSEM22GB3	F03FC20476
2	35 x 34 x 3	CPSEMAB301	F03FC23924

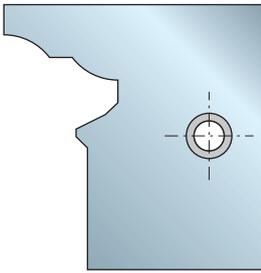


CPSEMAB301
F03FC23924

for TPSEM
AA3 - AB3 - AC3

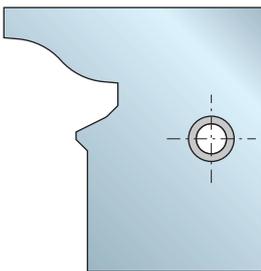
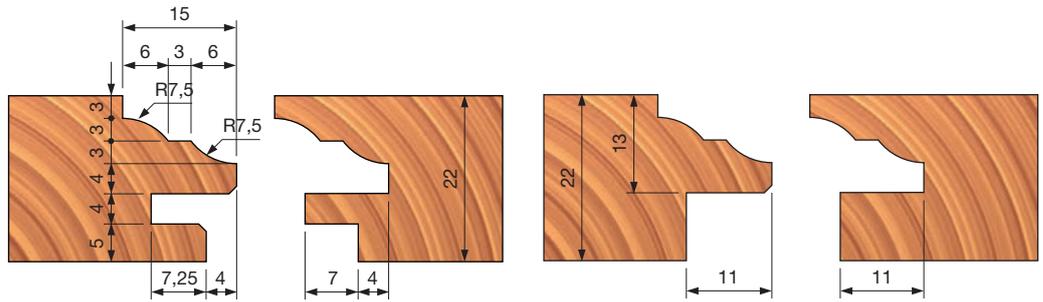


CPSEM Knives for TPSEM AA3 - AB3 - AC3 (Wood thickness: 22 mm)



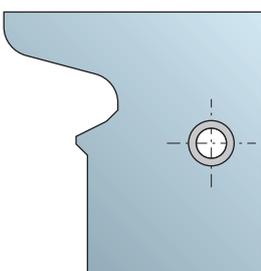
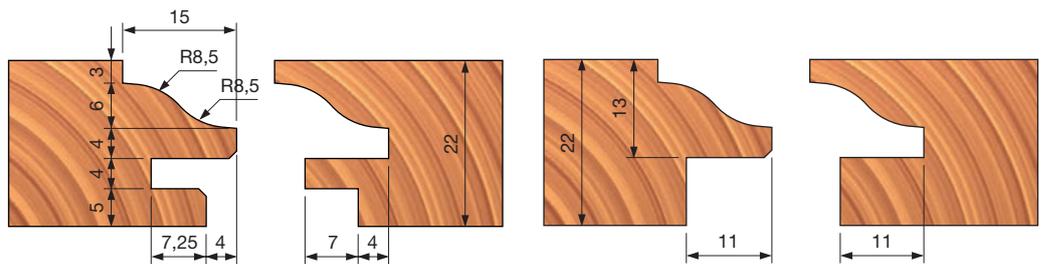
CPSEMAC301
F03FC23925

for TPSEM
AA3 - AB3 - AC3



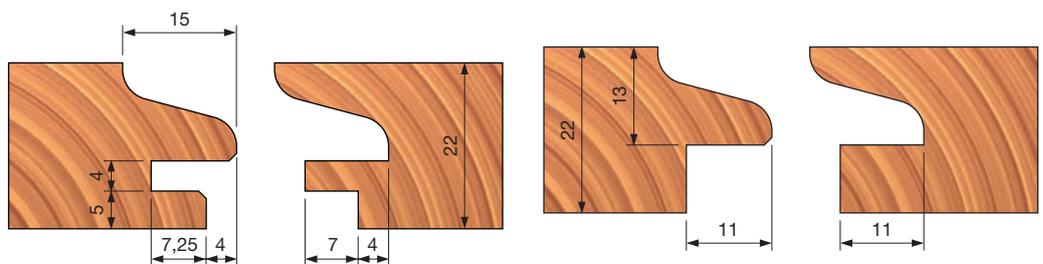
CPSEMAD301
F03FC23926

for TPSEM
AA3 - AB3 - AC3



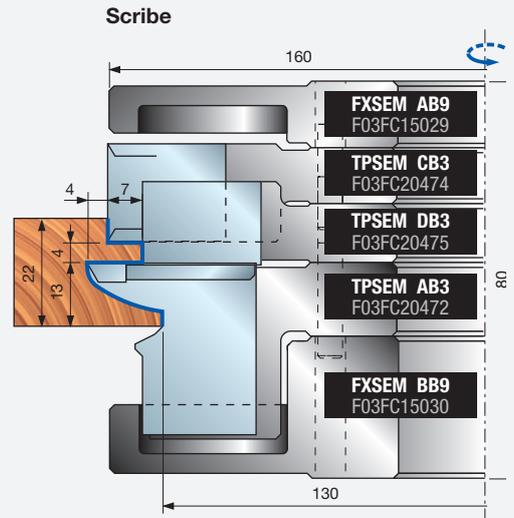
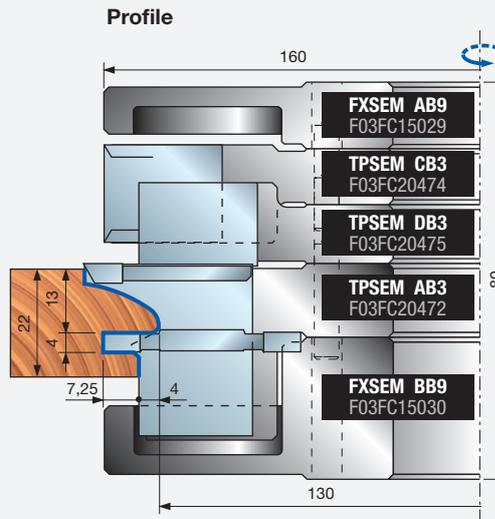
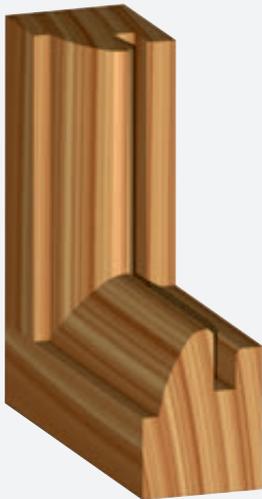
CPSEMAG301
F03FC23929

for TPSEM
AA3 - AB3 - AC3

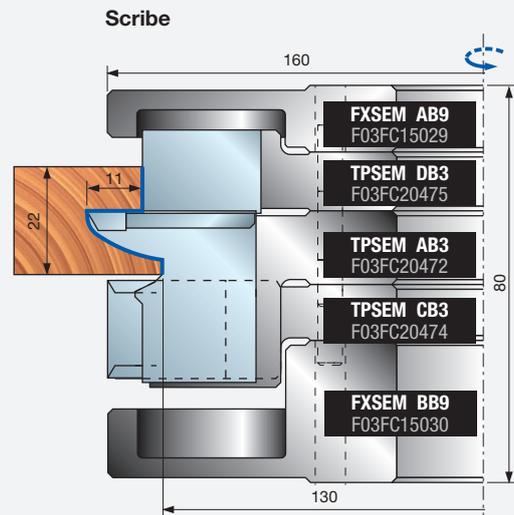
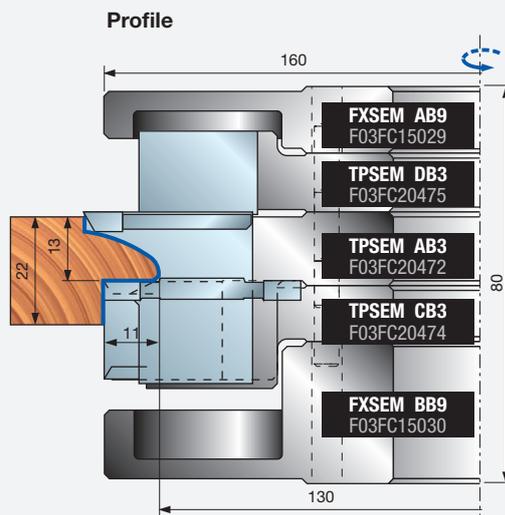


CPSEM Knives for TPSEM AA3 - AB3 - AC3 (Wood thickness: 22 mm)

Carrying out a groove

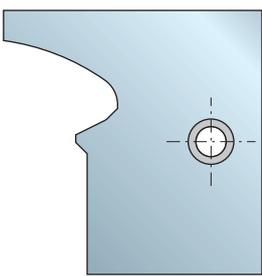


Carrying out a rebate



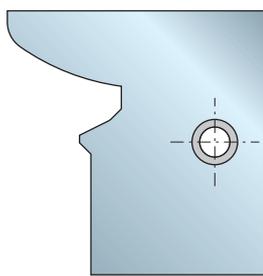
Order example for the profiles shown

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



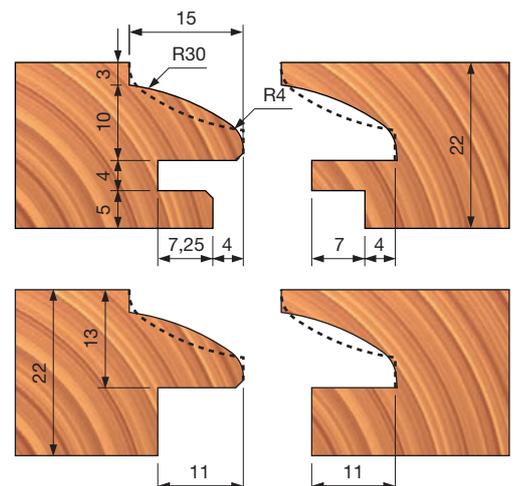
CPSEMAF301
F03FC23928

for TPSEM
AA3 - AB3 - AC3



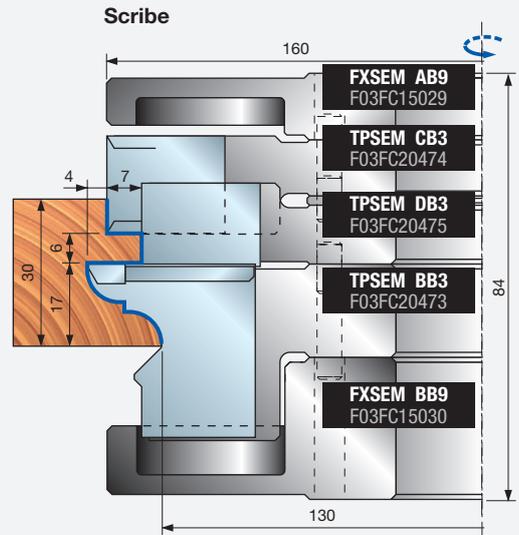
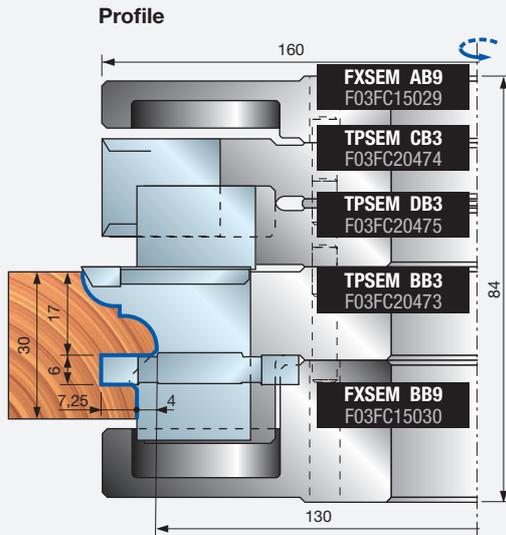
CPSEMAE301
F03FC23927

for TPSEM
AA3 - AB3 - AC3

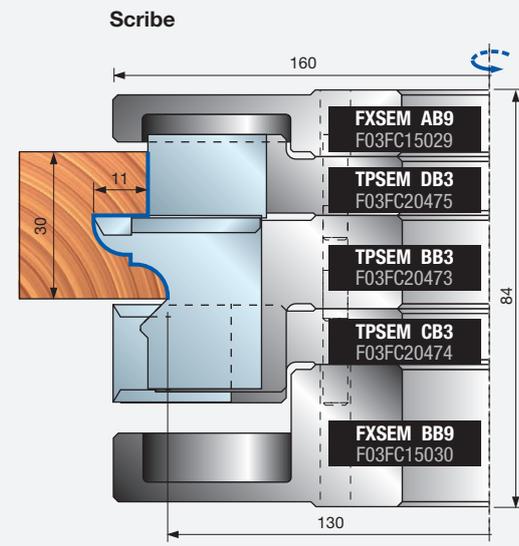
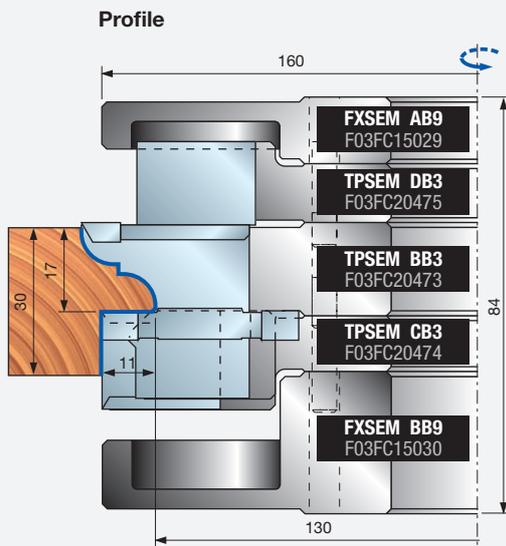


CPSEM Knives for TPSEM BA3 - BB3 - BC3 (Wood thickness: 30 mm)

Carrying out a groove

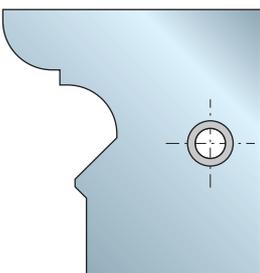


Carrying out a rebate



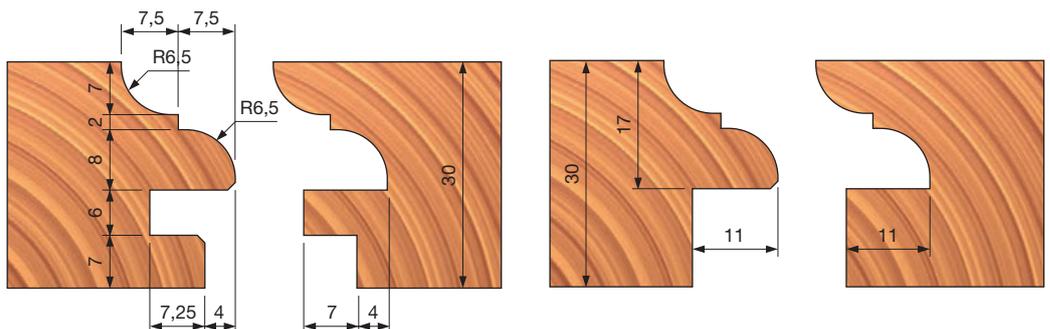
Order example for the profiles shown

Pieces	Dimensions mm	Freud Code	Art. No.
1	160 x 35	TPSEM30GB3	F03FC20477
2	35 x 34 x 3	CPSEMBB301	F03FC23930

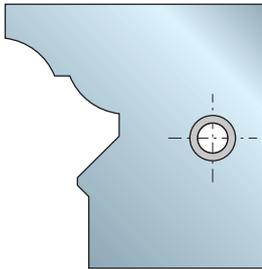


CPSEMBB301
F03FC23930

for TPSEM
BA3 - BB3 - BC3

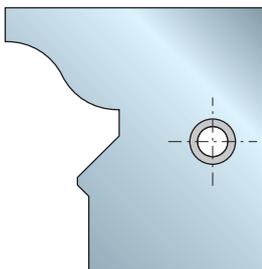
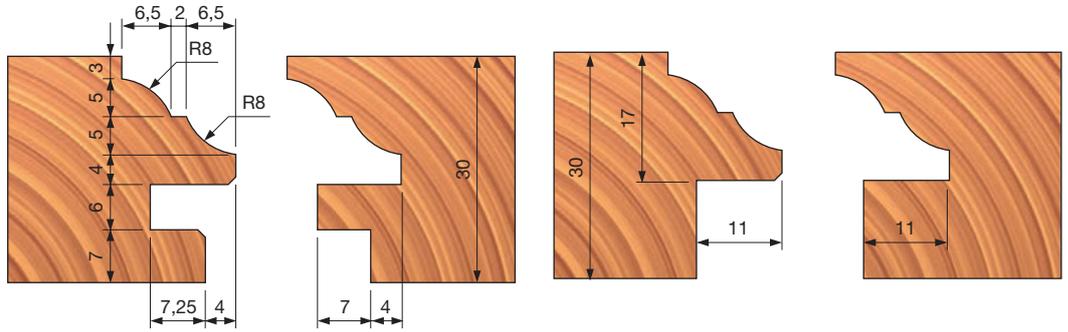


CPSEM Knives for TPSEM AA3 - AB3 - AC3 (Wood thickness: 30 mm)



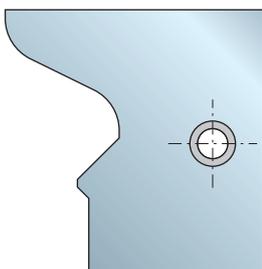
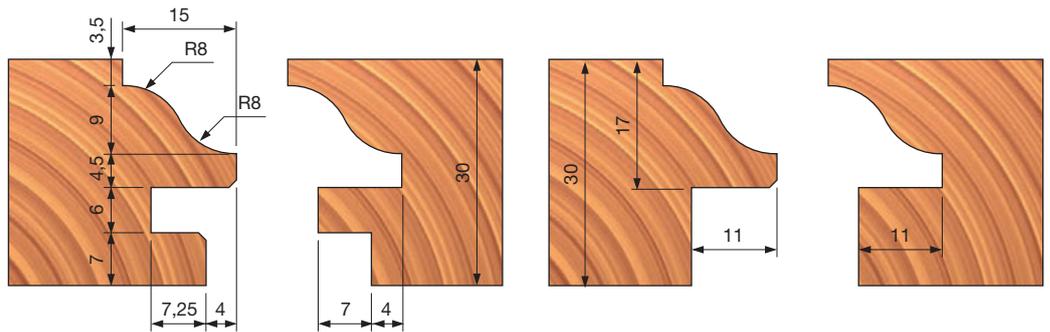
CPSEMBC301
F03FC23931

for TPSEM
BA3 - BB3 - BC3



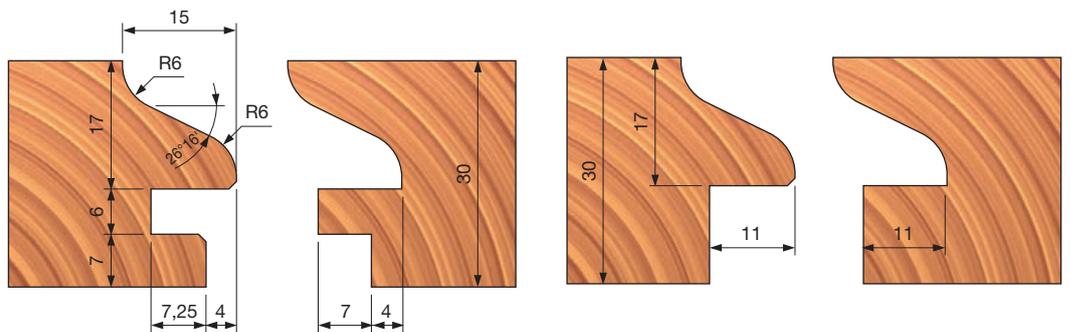
CPSEMBD301
F03FC23932

for TPSEM
BA3 - BB3 - BC3



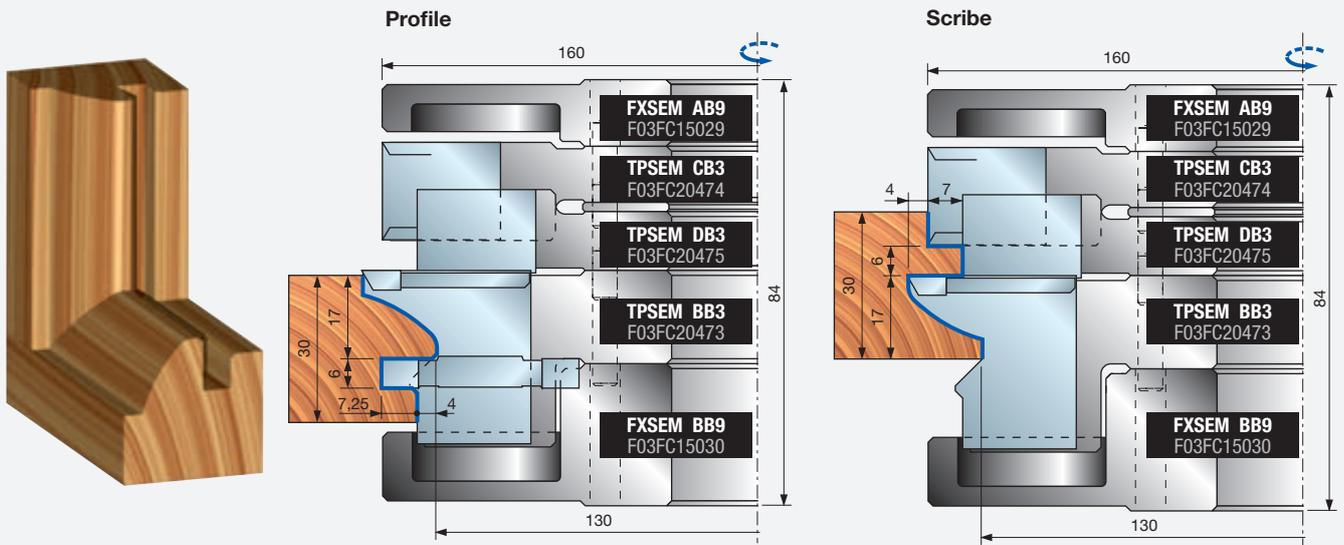
CPSEMBG301
F03FC23935

for TPSEM
BA3 - BB3 - BC3

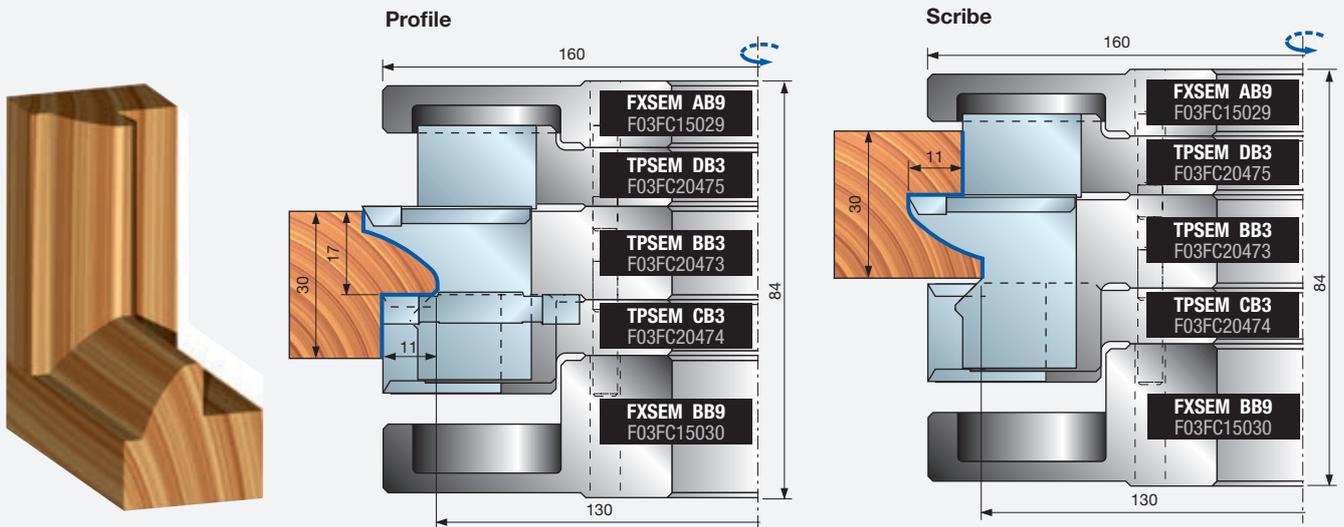


CPSEM Knives for TPSEM BA3 - BB3 - BC3 (Wood thickness: 30 mm)

Carrying out a groove

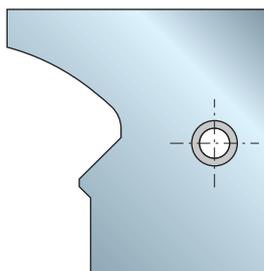


Carrying out a rebate



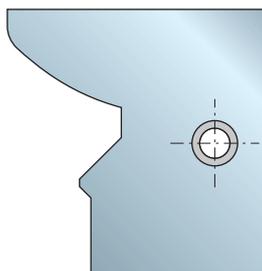
Order example for the profiles shown

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



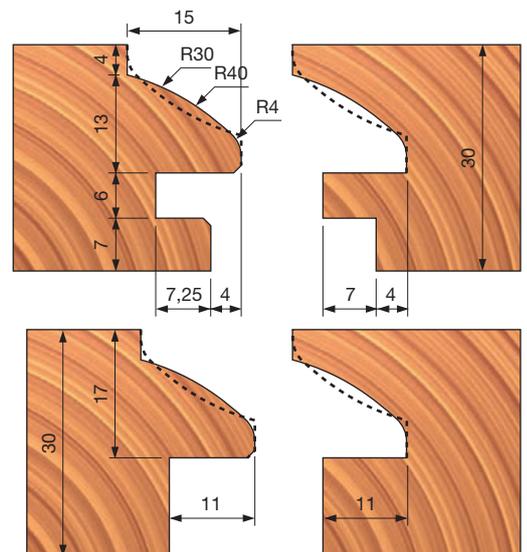
CPSEMBF301
F03FC23934

for TPSEM
BA3 - BB3 - BC3



CPSEMBE301
F03FC23933

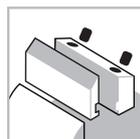
for TPSEM
BA3 - BB3 - BC3



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.

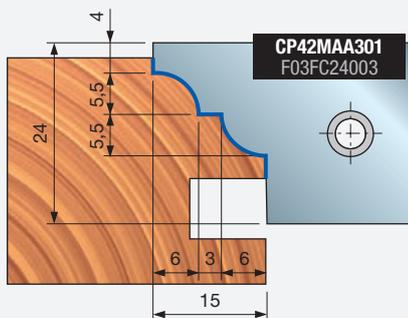
- Mostly suitable for profiling on softwood, hardwood and exotic wood, with a top quality finish.
- The tool versatility allows the production of 44-52 mm thick doors in 2 steps, taking care to adjust the tool programmed height accordingly.
- The variously profiled knives are perfectly interchangeable 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

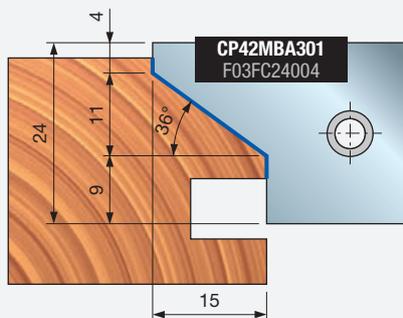
Spare parts		Dimensions mm	Freud Code	Art. No.
	Screw	M5 x 8	VT05M AA9	F03FA04444
	Positioning plate	22 x 1,7 x 6,5	VT18M GA9	F03FA04488
	Wedge	21 x 19 x 8	CN13M AS9A	F03FC24221
	Screw	M10 x 18	VT03M CC9	F03FA04438
	Spur insert	40 x 16 x 4	IG05MDAA305	F03FH02998
	Screw	M6 x 13	VT16M AE9	F03FC20658
	Grooving 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

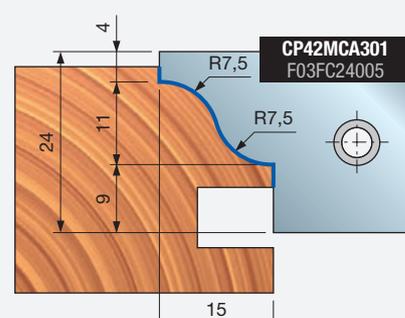
Profile 1



Profile 2

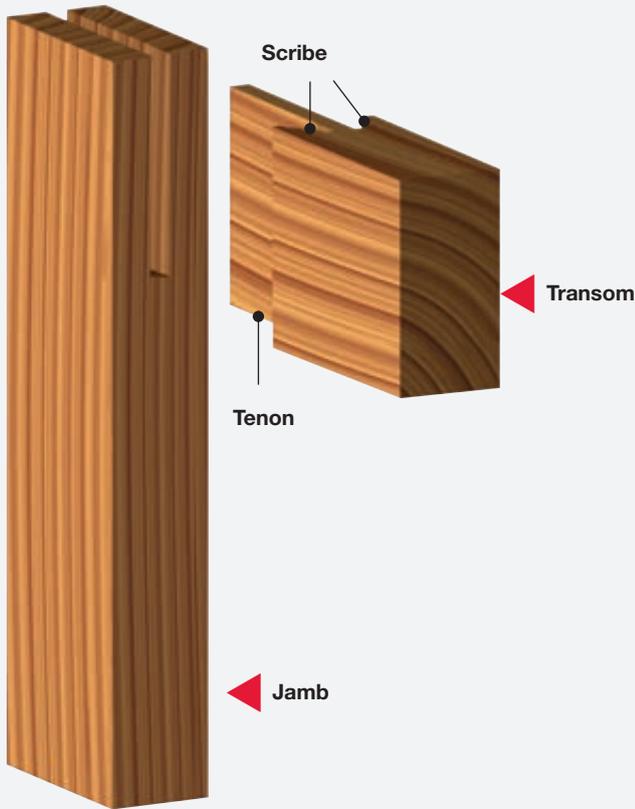


Profile 3

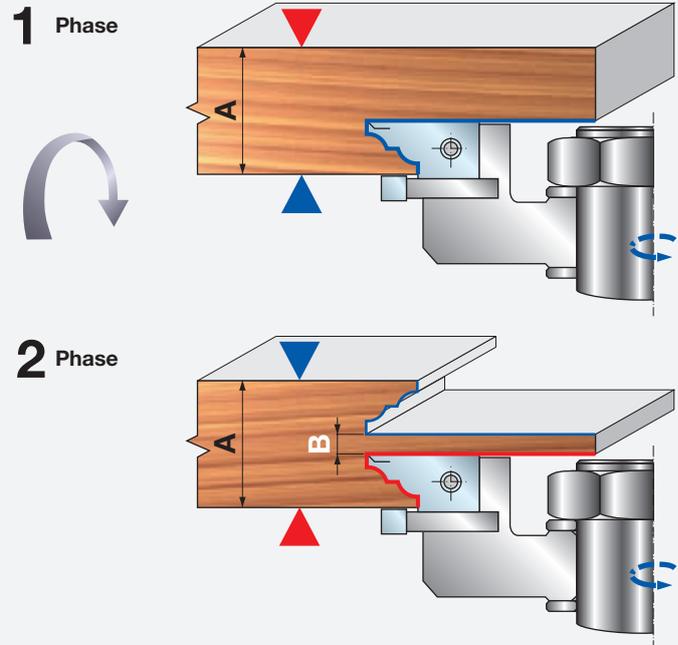


TP42M Multiprofile cutterheads for doors

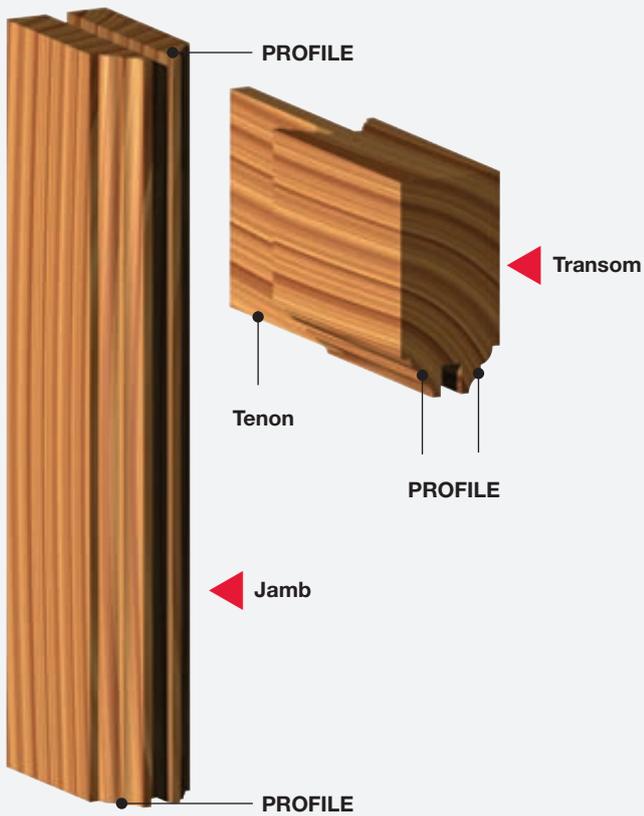
1 Door tenoning



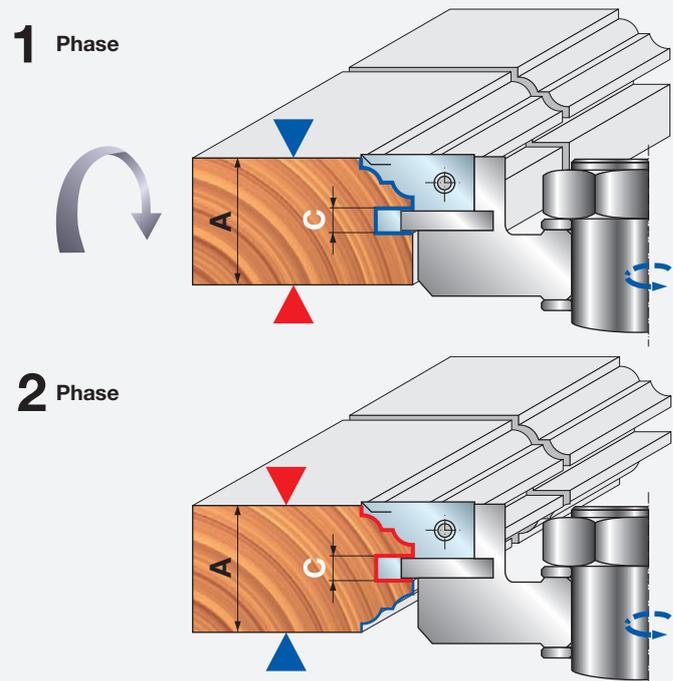
A	Door thickness mm	B	Tenon thickness mm
	44		8
	46		10
	50		14
	52		16



2 Door frame profiling



A	Door thickness mm	C	Groove thickness mm
	44		8
	46		10
	50		14
	52		16



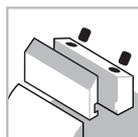


TP46MAN

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.

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

TP46MAN sets for manual feed

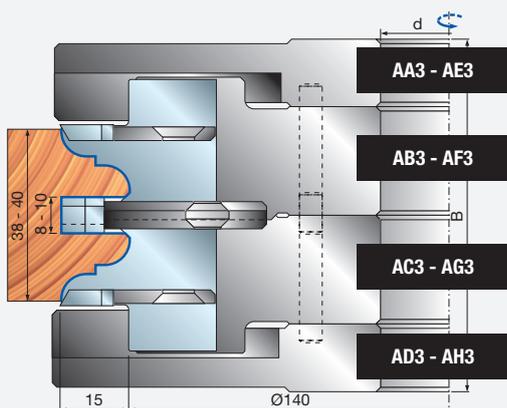
Profile	D mm	B mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
1	174	78	30	2	7.500	TP46MAN001	F03FC20510
2	174	78	30	2	7.500	TP46MAN002	F03FC20511
3	174	78	30	2	7.500	TP46MAN003	F03FC20512
4	174	78	30	2	7.500	TP46MAN004	F03FC20513
5	174	78	30	2	7.500	TP46MAN005	F03FC20514
6	174	78	30	2	7.500	TP46MAN006	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

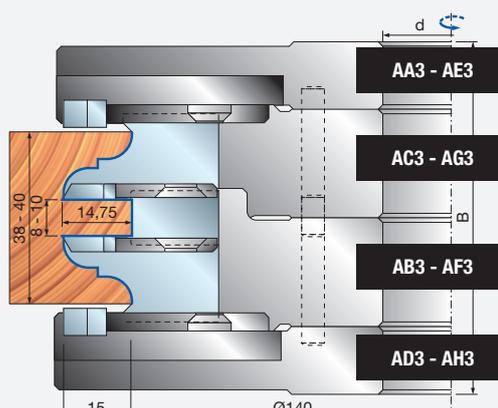
D mm	B mm	d mm	Z	Max RPM 1/min.	Freud Code	Art. No.
174	31,5	30	2	8.300	TP46M AB3	F03FC20507
174	31,5	30	2	8.300	TP46M AC3	F03FC20508
174	31,5	32	2	8.300	TP46M AF3	F03FC24455
174	31,5	32	2	8.300	TP46M AG3	F03FC24456

See page 408-409 for spare parts.

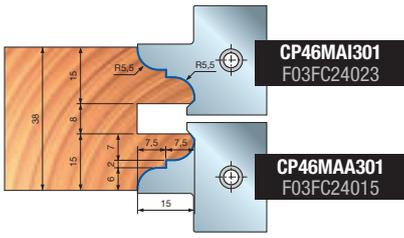
Example of profile



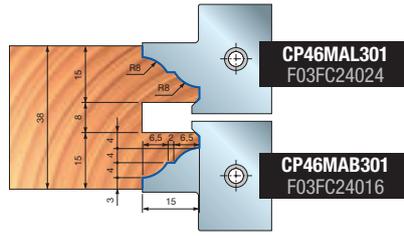
Example of scribe



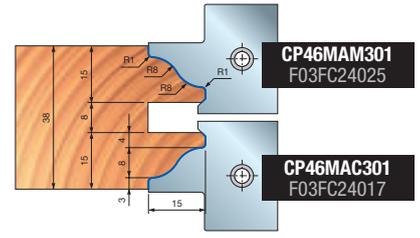
PROFILE 1



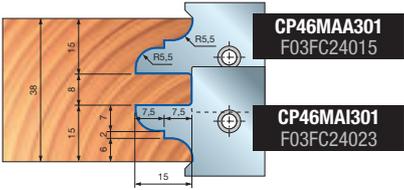
PROFILE 2



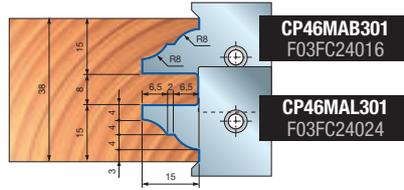
PROFILE 3



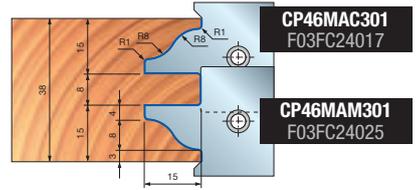
SCRIBE 1



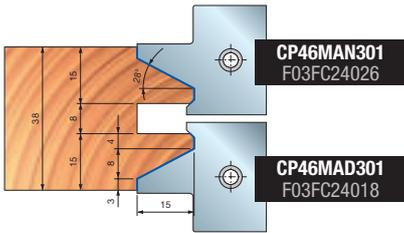
SCRIBE 2



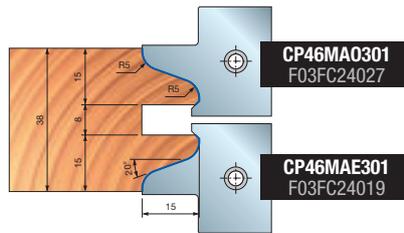
SCRIBE 3



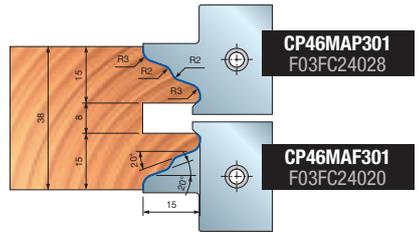
PROFILE 4



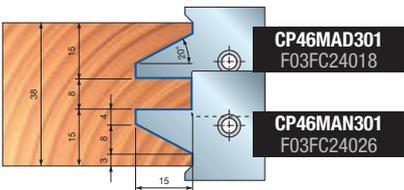
PROFILE 5



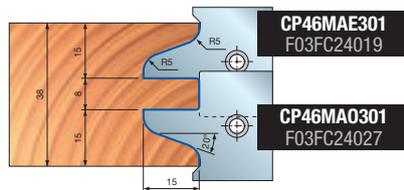
PROFILE 6



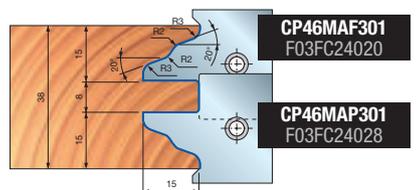
SCRIBE 4



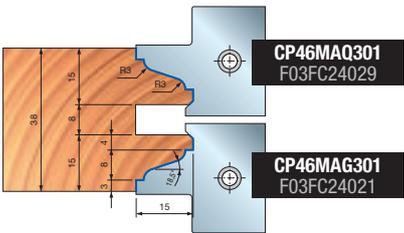
SCRIBE 5



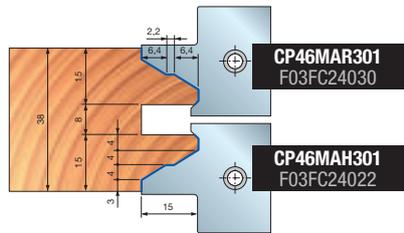
SCRIBE 6



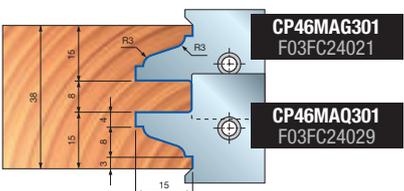
PROFILE 7



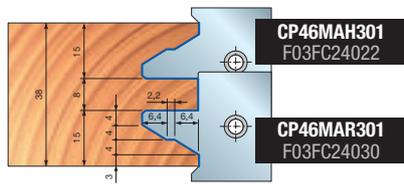
PROFILE 8



SCRIBE 7



SCRIBE 8





TP46MEC

Multiprofile cutterhead sets for doors (38-40 mm)



Profiling



Machines:

Moulders, automatic and throughfeed machines.

Materials:

Softwood and hardwood.

Applications:

Profiling.

Technical information:

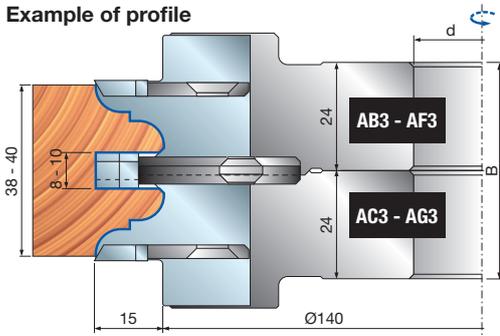
Performance knives tool set for doors.

Adjustable timber thickness 38-40 mm.

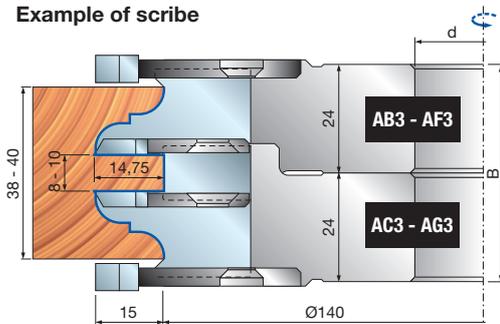
- Profile and counter profile are both available with the same set (and same 0-point).
- The cutterhead set includes knives.
- Aluminium light alloy body.
- Rebore not available.

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	

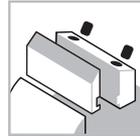


TD60M

Door frames profile cutterheads



Manual Feed



Clamping System



Aluminium Body



Softwood



Hardwood



Profiling

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



Machines:

Spindle moulders and manual feed machines.

Materials:

Softwood and hardwood.

Applications:

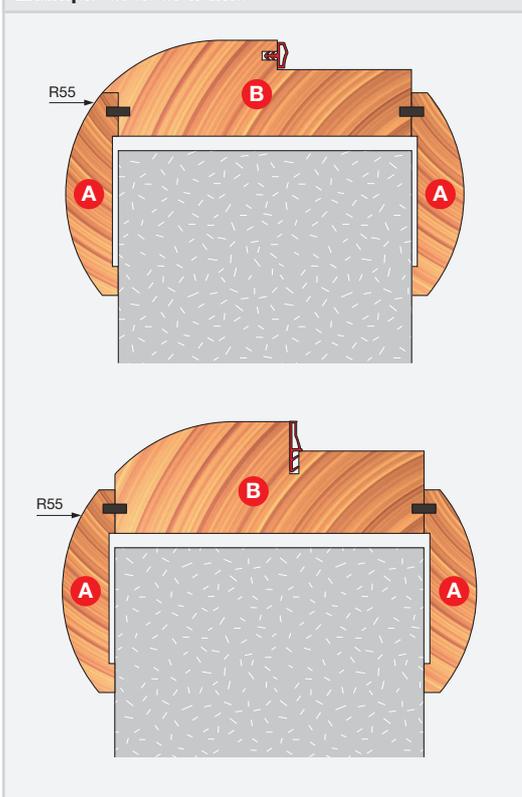
Profiling.

Technical information:

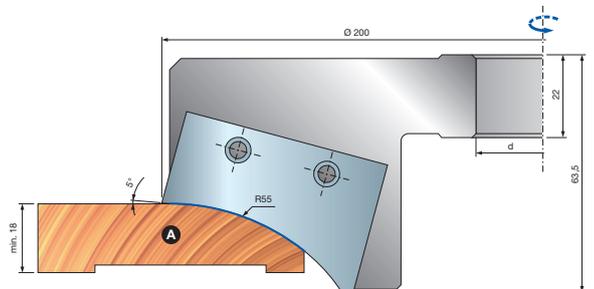
Panel sizing cutterhead with profiled knives suitable for door frames and door frame covers profiles.

- 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.

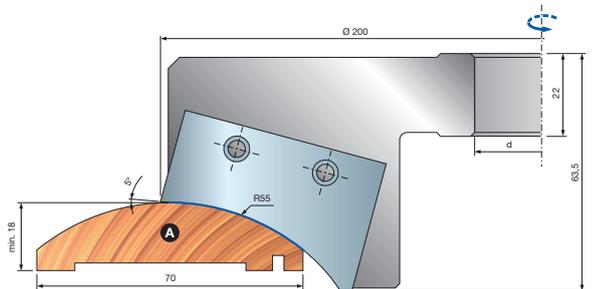
Example of door frame



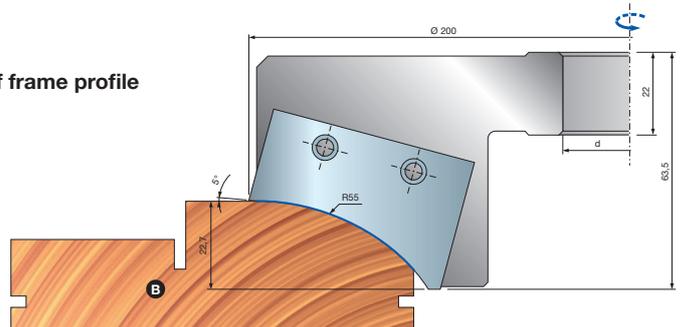
Step 1



Step 2



Example of frame profile



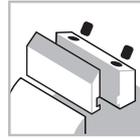


TD61M

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.

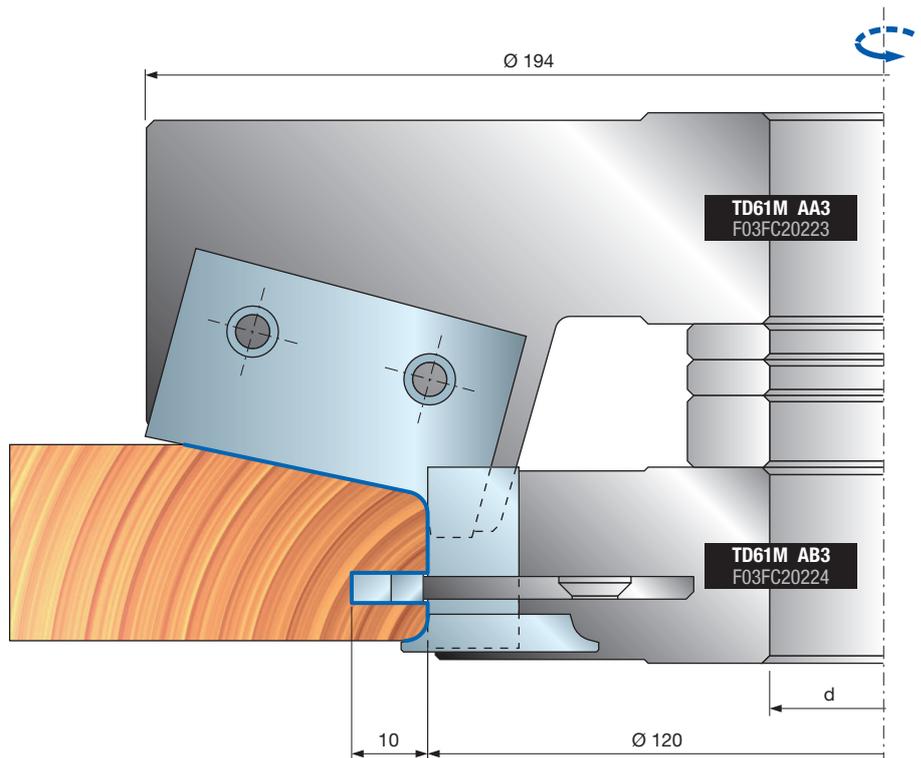
Technical information:

Multiple profile tools set for door frames.

- Aluminium light alloy body.
- Rebore not available.
- Performance knives to be ordered separately.

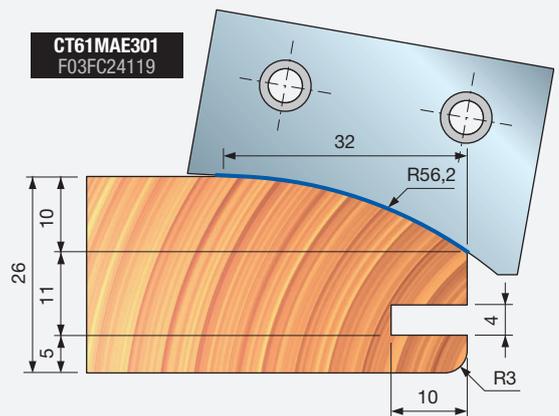
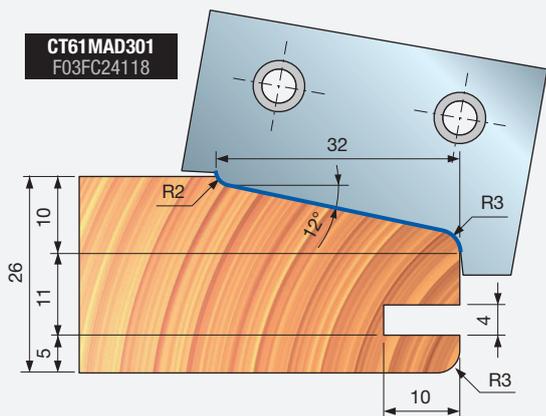
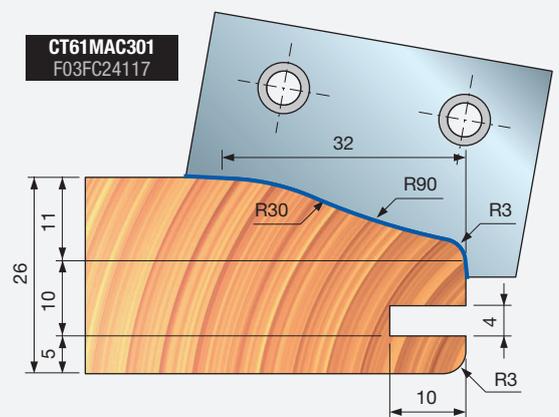
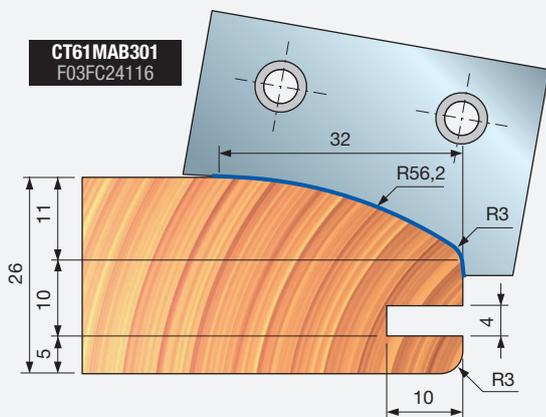
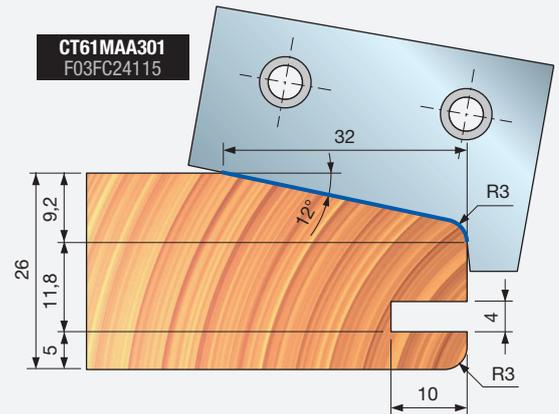
D	B	d	Z	Max RPM	Freud Code	Art. No.
mm	mm	mm		1/min.		
194	59	30	2	7.000	TD61M AA3	F03FC20223
140	25	30	2	8.800	TD61M AB3	F03FC20224

	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



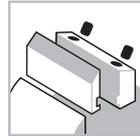


TD21M

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.

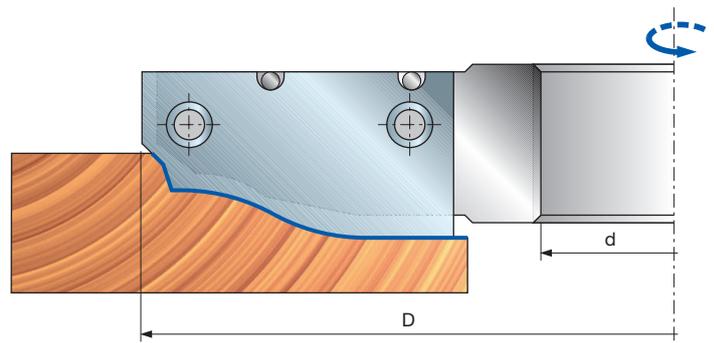
- Aluminium light alloy body.
- Rebore not available.
- Knives to be ordered separately.

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

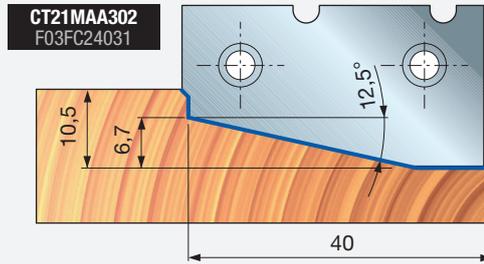
Profiled knives

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

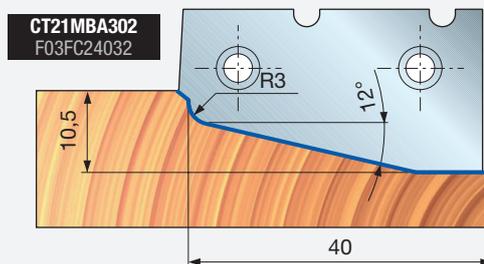


Example of profiles

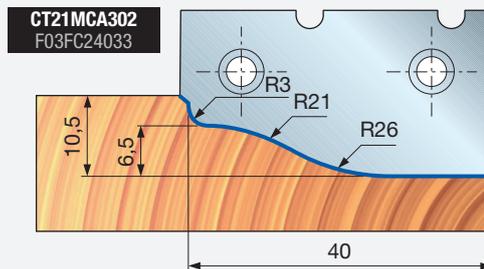
PROFILE 1



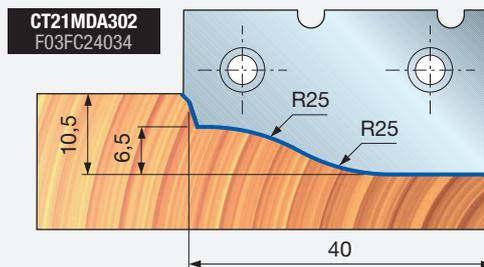
PROFILE 2



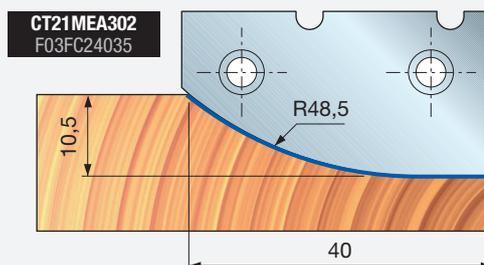
PROFILE 3



PROFILE 4



PROFILE 5



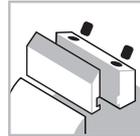


TD51M

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.

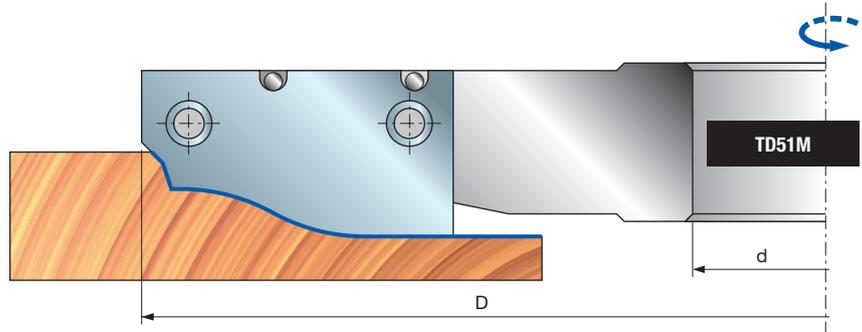
Technical information:

Performance knives raised panel with 5 different profiles available designed to fit knives for softwood and hardwood.

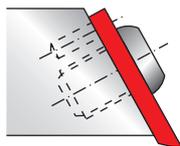
- Designed to perfectly cut softwood or hardwood with two knives, with both along the grain or end grain feeding.
- This result has been achieved by choosing different cutting angles according to the type of wood to be machined.
- Only two knives are to be fitted on the tool at one time, in opposite 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



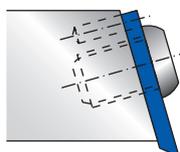
2 Knives for Softwood

Profile	Dimensions mm	Freud Code	Art. No.
1	41 x 28 x 3,5	CT51MAA302	F03FC24036
2	41 x 28 x 3,5	CT51MBA302	F03FC24037
3	41 x 28 x 3,5	CT51MCA302	F03FC24038
4	41 x 28 x 3,5	CT51MDA302	F03FC24039
5	41 x 28 x 3,5	CT51MEA302	F03FC24040

2 Knives for Hardwood

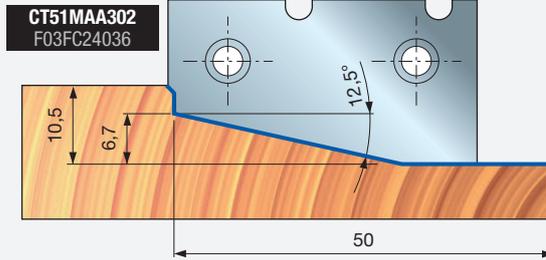
Profile	Dimensions mm	Freud Code	Art. No.
1	41 x 22 x 3,5	CT21MAA302	F03FC24031
2	41 x 22 x 3,5	CT21MBA302	F03FC24032
3	41 x 22 x 3,5	CT21MCA302	F03FC24033
4	41 x 22 x 3,5	CT21MDA302	F03FC24034
5	41 x 22 x 3,5	CT21MEA302	F03FC24035

2 Knife

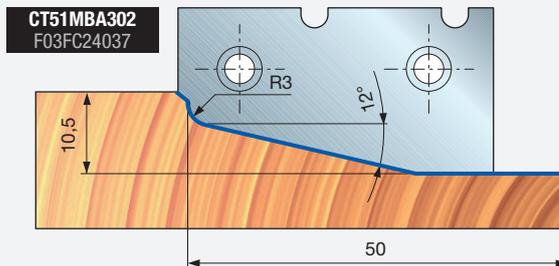


Example of profiles

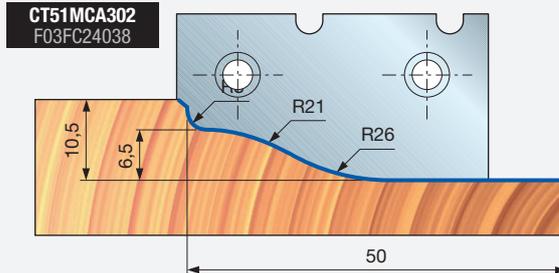
PROFILE 1



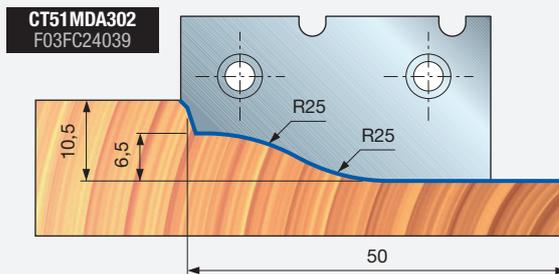
PROFILE 2



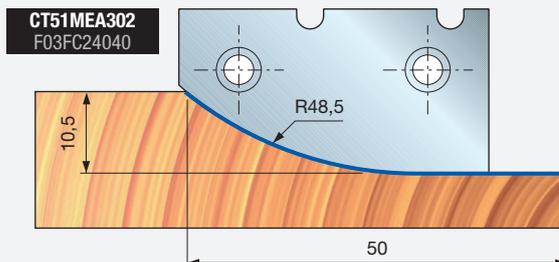
PROFILE 3



PROFILE 4



PROFILE 5



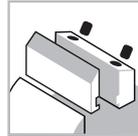


TD52M TD52MD

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

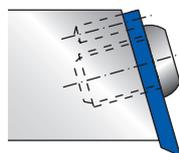
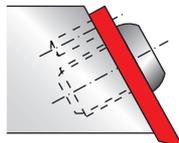
Spare parts		Dimensions mm	Freud Code	Art. No.
	Washer	14 x 2 x 6	VT18M AL9	F03FC20662
	Screw	M6 x 12	2607M 006	F03FA07456
	Torx key	4	CB03M BB9	F03FA00164

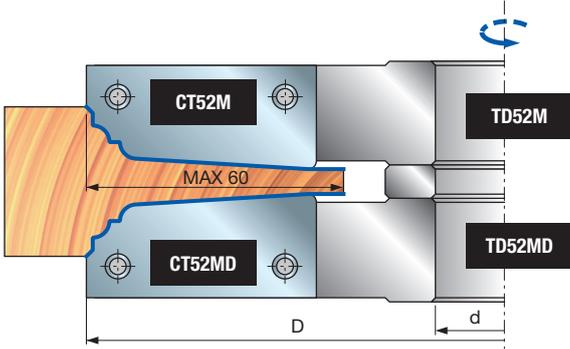
2 Knives for Softwood

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

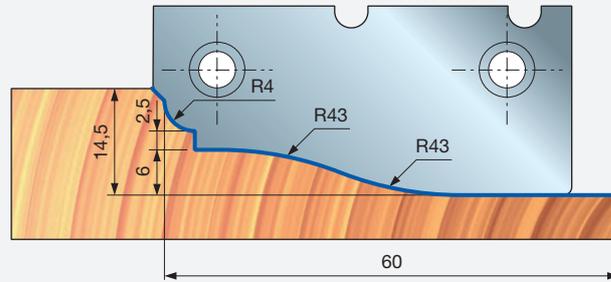
Profile	Dimensions mm	Freud Code	Art. No.
2	55 x 25 x 3,5	CT52MDB301	F03FC24042
		CT52MDD301	F03FC24045
3	55 x 25 x 3,5	CT52MDC301	F03FC24043
		CT52MDDC301	F03FC24046
4	55 x 25 x 3,5	CT52MDD301	F03FC24049
		CT52MDD301	F03FC24047
5	55 x 25 x 3,5	CT52MDE301	F03FC24050
		CT52MDDE301	F03FC24048



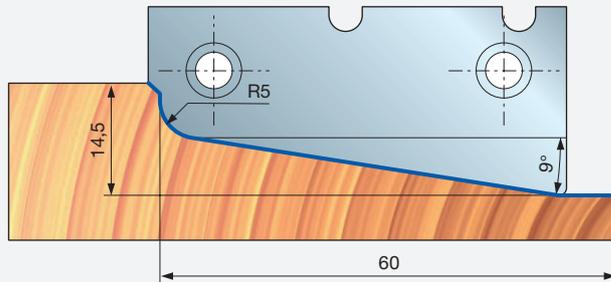


Example of profiles

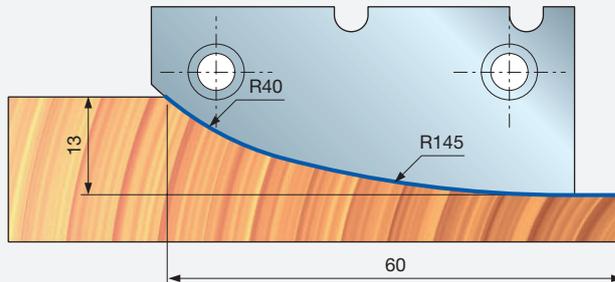
PROFILE 2



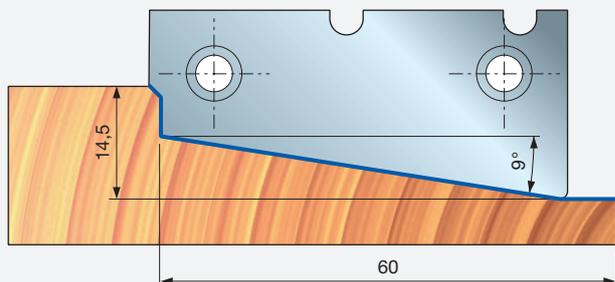
PROFILE 3

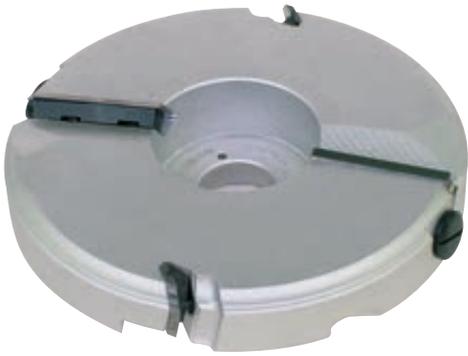


PROFILE 4



PROFILE 5



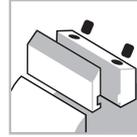


TD55MD TD55MS

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:

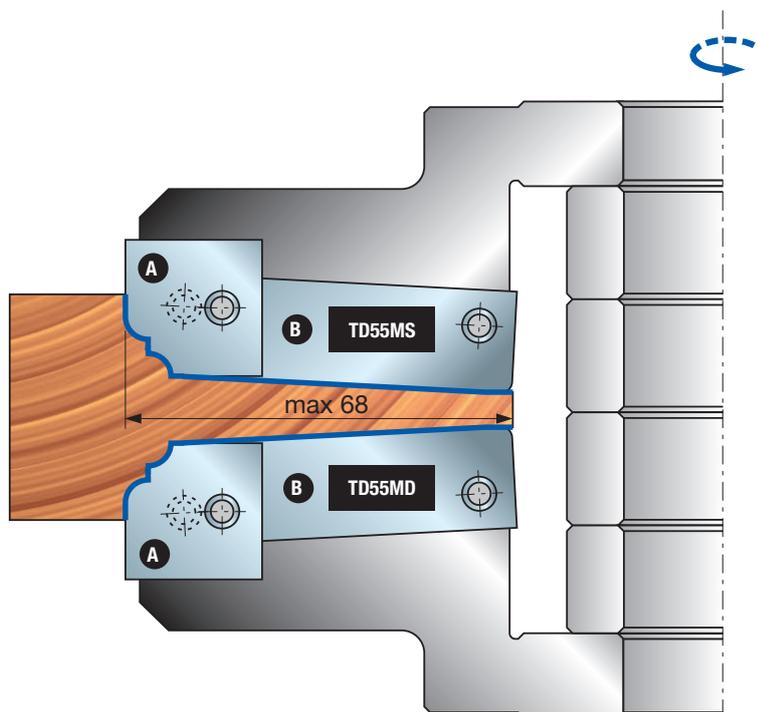
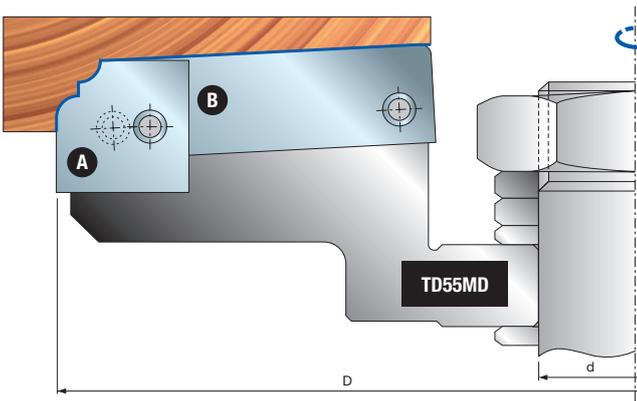
Performance knives raised panel with 4 different profiles available.

- 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

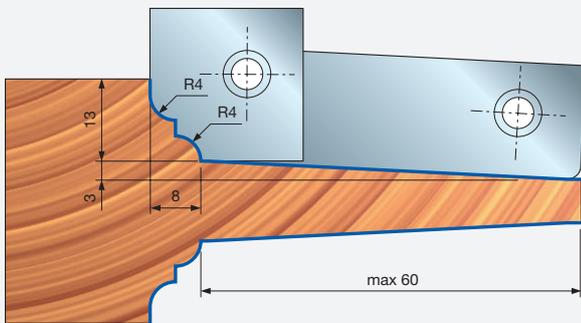
Profile	Spare knives	Dimensions mm	Freud Code	Art. No.
1	Knife A	23 x 24 x 3	CT55MDAA301	F03FC24078
	Knife B	65 x 20 x 3	CT55MDBA301	F03FC24087
2	Knife A	23 x 24 x 3	CT55MDAB301	F03FC24079
	Knife B	65 x 20 x 3	CT55MDBB301	F03FC24088
3	Knife A	23 x 24 x 3	CT55MDAC301	F03FC24080
	Knife B	65 x 20 x 3	CT55MDBC301	F03FC24089
4	Knife A	23 x 24 x 3	CT55MDAE301	F03FC24082
	Knife B	65 x 20 x 3	CT55MDBE301	F03FC24091

Knives for TD55MS

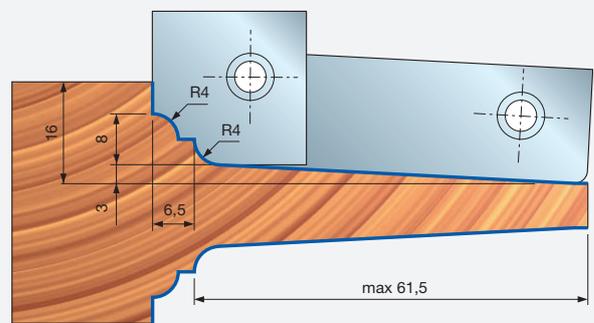
Profile	Spare knives	Dimensions mm	Freud Code	Art. No.
1	Knife A	23 x 24 x 3	CT55MSAA301	F03FC24096
	Knife B	65 x 20 x 3	CT55MSBA301	F03FC24105
2	Knife A	23 x 24 x 3	CT55MSAB301	F03FC24097
	Knife B	65 x 20 x 3	CT55MSBB301	F03FC24106
3	Knife A	23 x 24 x 3	CT55MSAC301	F03FC24098
	Knife B	65 x 20 x 3	CT55MSBC301	F03FC24107
4	Knife A	23 x 24 x 3	CT55MSAE301	F03FC24100
	Knife B	65 x 20 x 3	CT55MSBE301	F03FC24109

Example of profiles

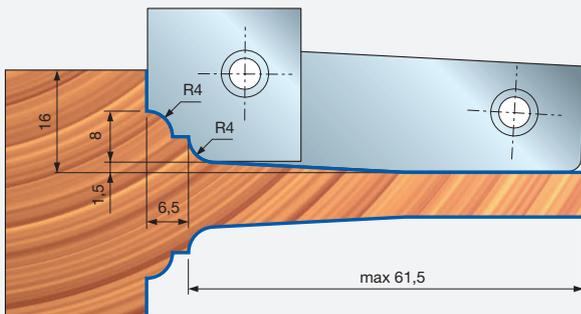
PROFILE 1



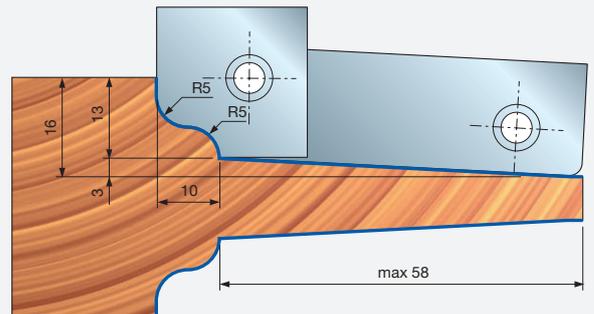
PROFILE 2



PROFILE 3



PROFILE 4



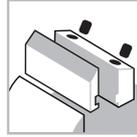


TD55MD TD55MS

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.

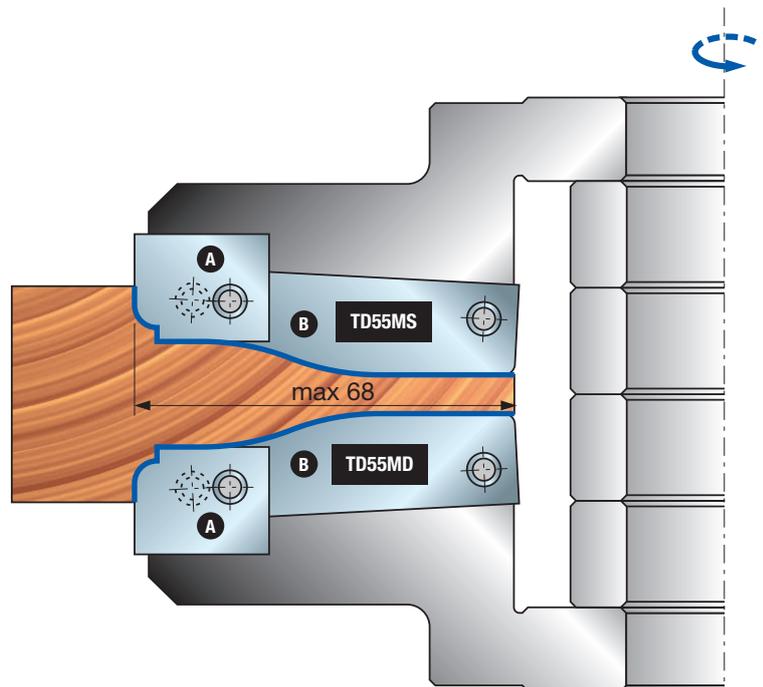
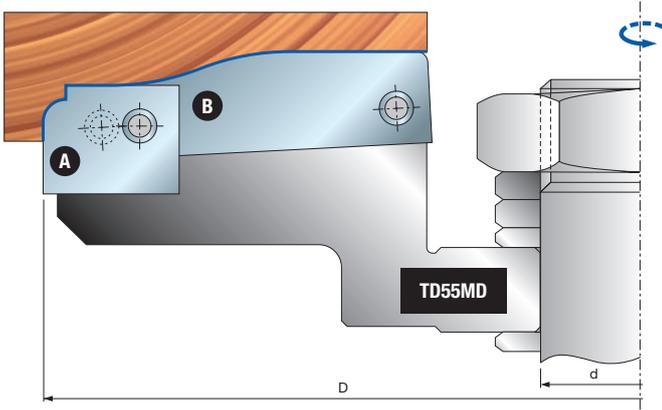
Technical information:

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

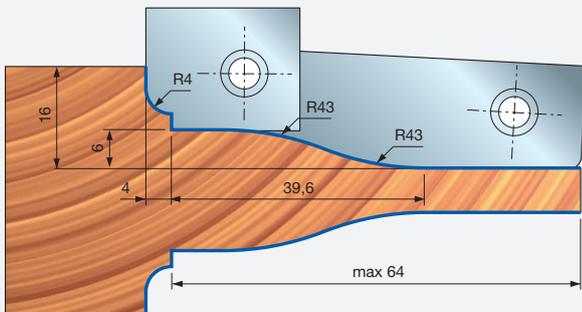
Profile	Spare knives	Dimensions mm	Freud Code	Art. No.
1	Knife A	20 x 24 x 3	CT55MDAD301	F03FC24081
	Knife B	65 x 20 x 3	CT55MDBD301	F03FC24090
2	Knife A	20 x 24 x 3	CT55MDAG301	F03FC24084
	Knife B	65 x 20 x 3	CT55MDBG301	F03FC24093
3	Knife A	20 x 24 x 3	CT55MDAH301	F03FC24085
	Knife B	65 x 20 x 3	CT55MDBH301	F03FC24094
4	Knife A	20 x 24 x 3	CT55MDAI301	F03FC24086
	Knife B	65 x 20 x 3	CT55MDBI301	F03FC24095

Knives for TD55MS

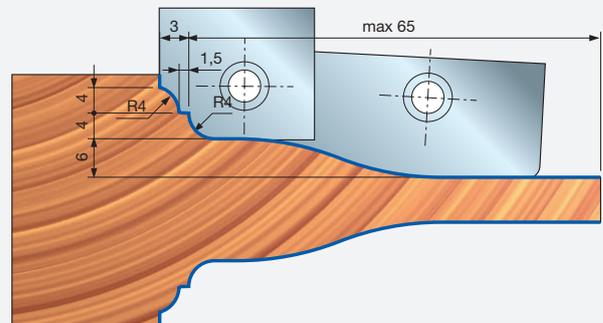
Profile	Spare knives	Dimensions mm	Freud Code	Art. No.
1	Knife A	20 x 24 x 3	CT55MSAD301	F03FC24099
	Knife B	65 x 20 x 3	CT55MSBD301	F03FC24108
2	Knife A	20 x 24 x 3	CT55MSAG301	F03FC24102
	Knife B	65 x 20 x 3	CT55MSBG301	F03FC24111
3	Knife A	20 x 24 x 3	CT55MSAH301	F03FC24103
	Knife B	65 x 20 x 3	CT55MSBH301	F03FC24112
4	Knife A	20 x 24 x 3	CT55MSAI301	F03FC24104
	Knife B	65 x 20 x 3	CT55MSBI301	F03FC24113

Example of profiles

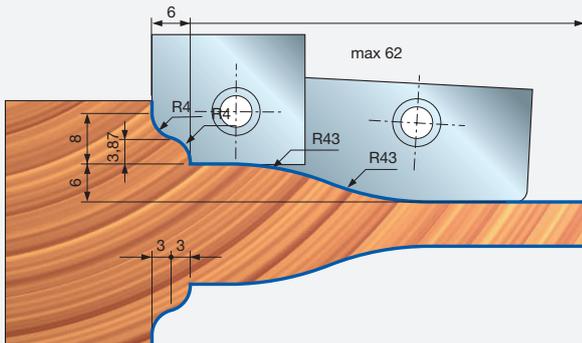
PROFILE 1



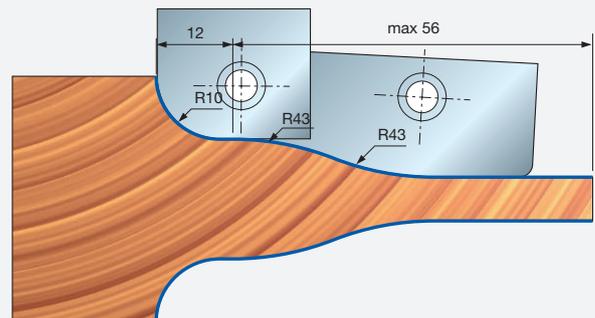
PROFILE 2



PROFILE 3



PROFILE 4



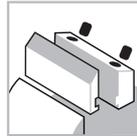


TG79MG

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

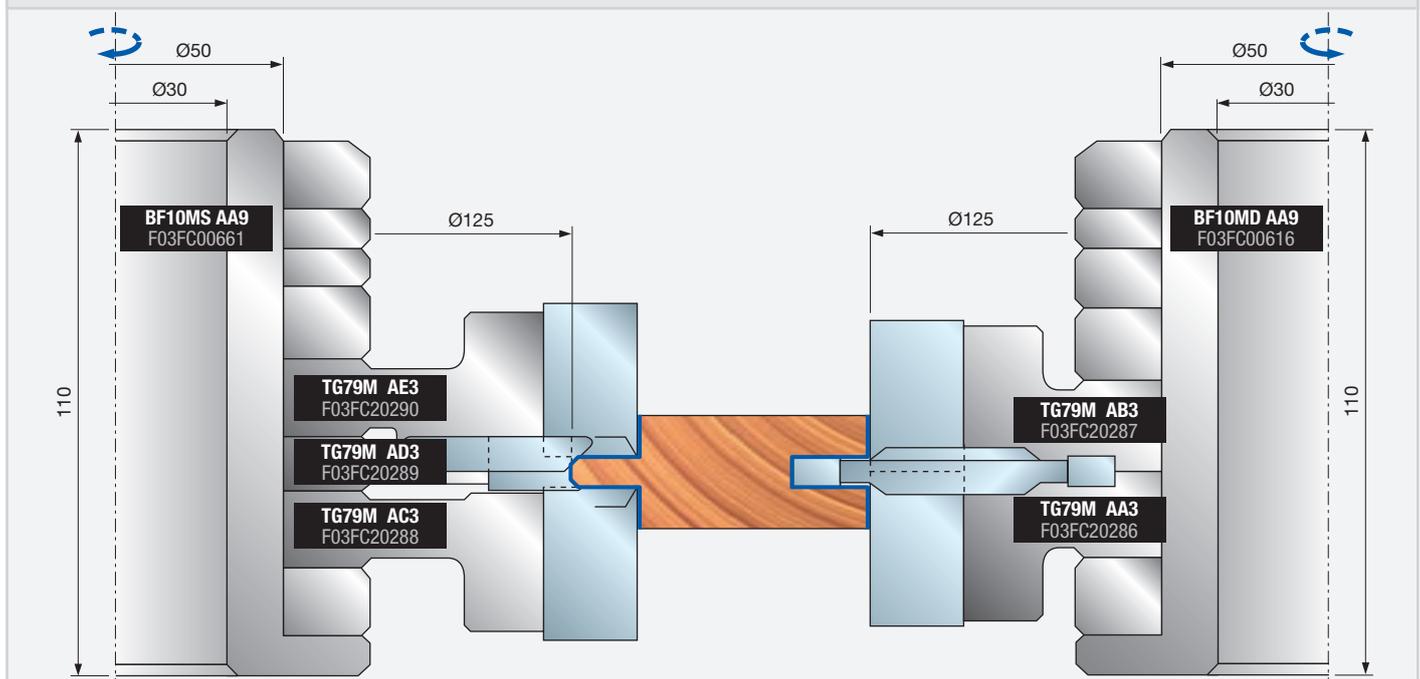


Profiling

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.

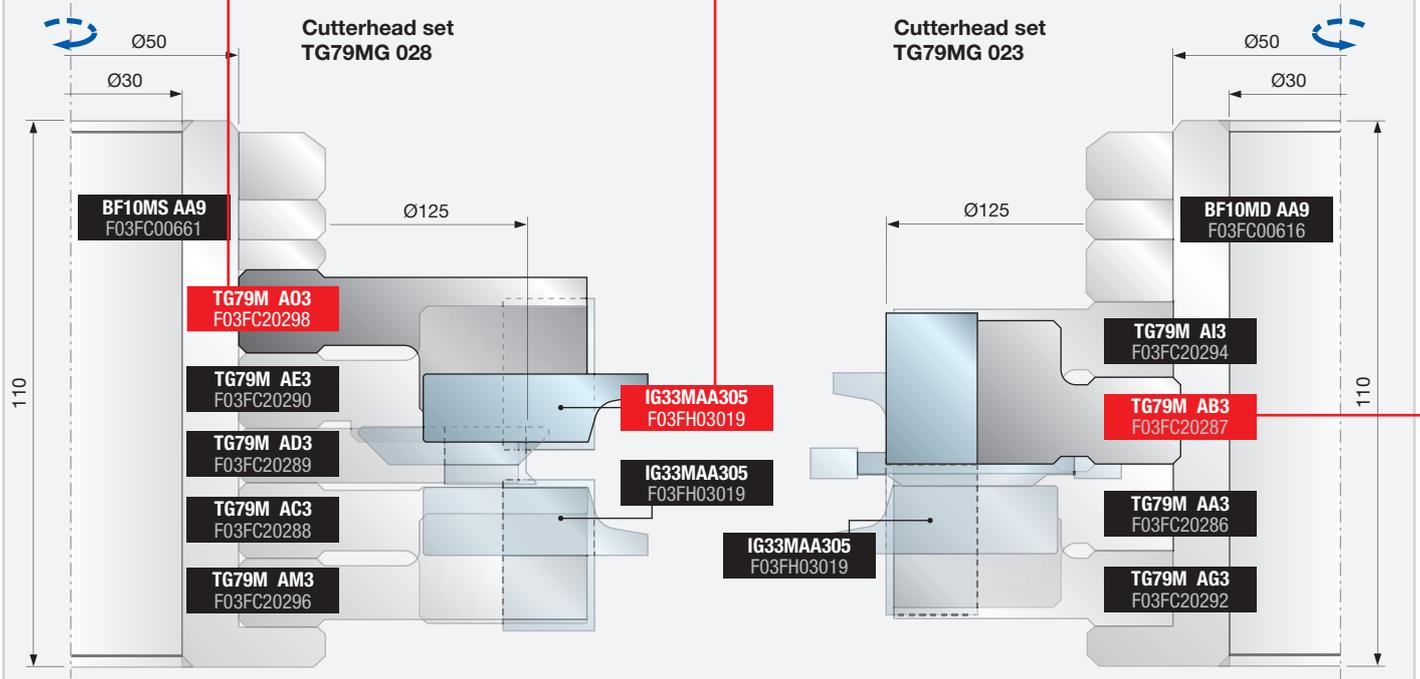
Spare parts for TG79MG tools

	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

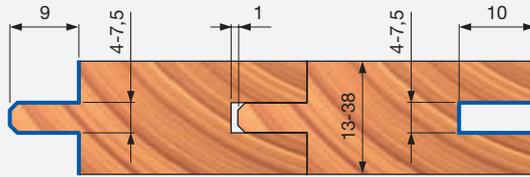
Example for choosing spare parts



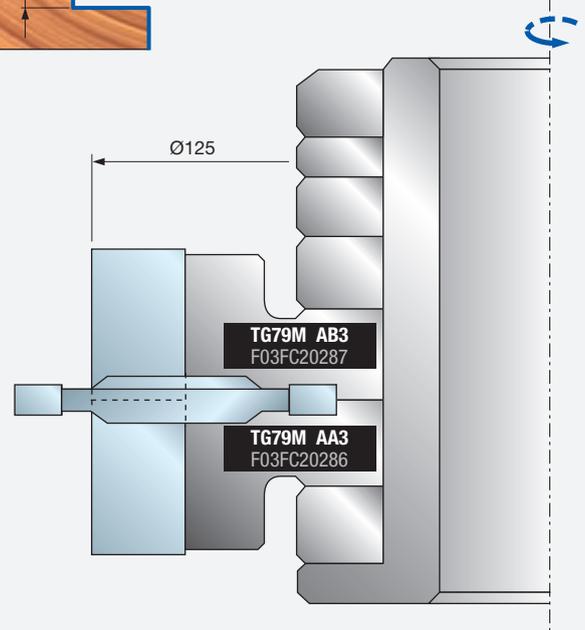
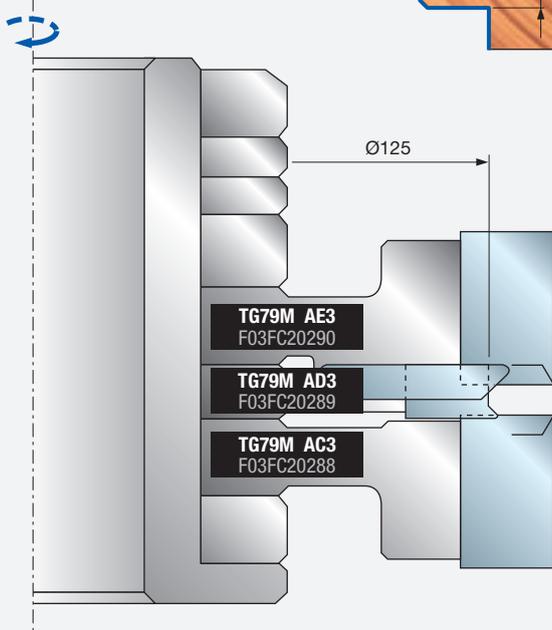
Examples of programming

PROFILE 1

Cutterhead set
TG79MG 002

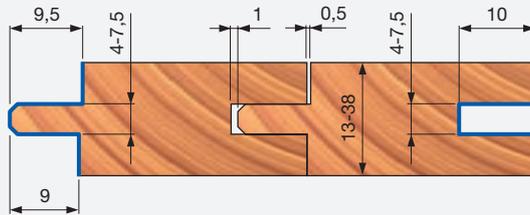


Cutterhead set
TG79MG 001

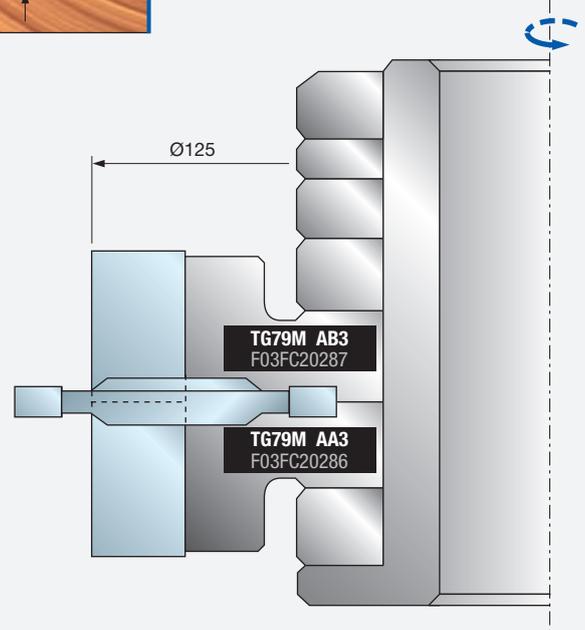
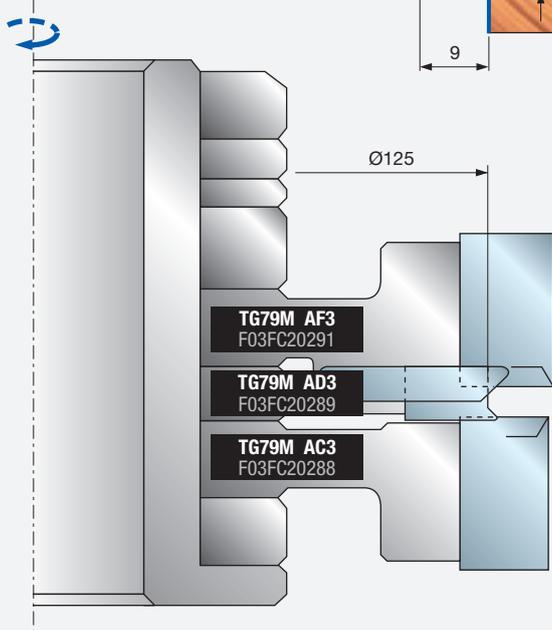


PROFILE 2

Cutterhead set
TG79MG 003



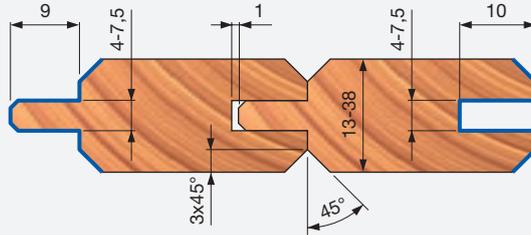
Cutterhead set
TG79MG 001



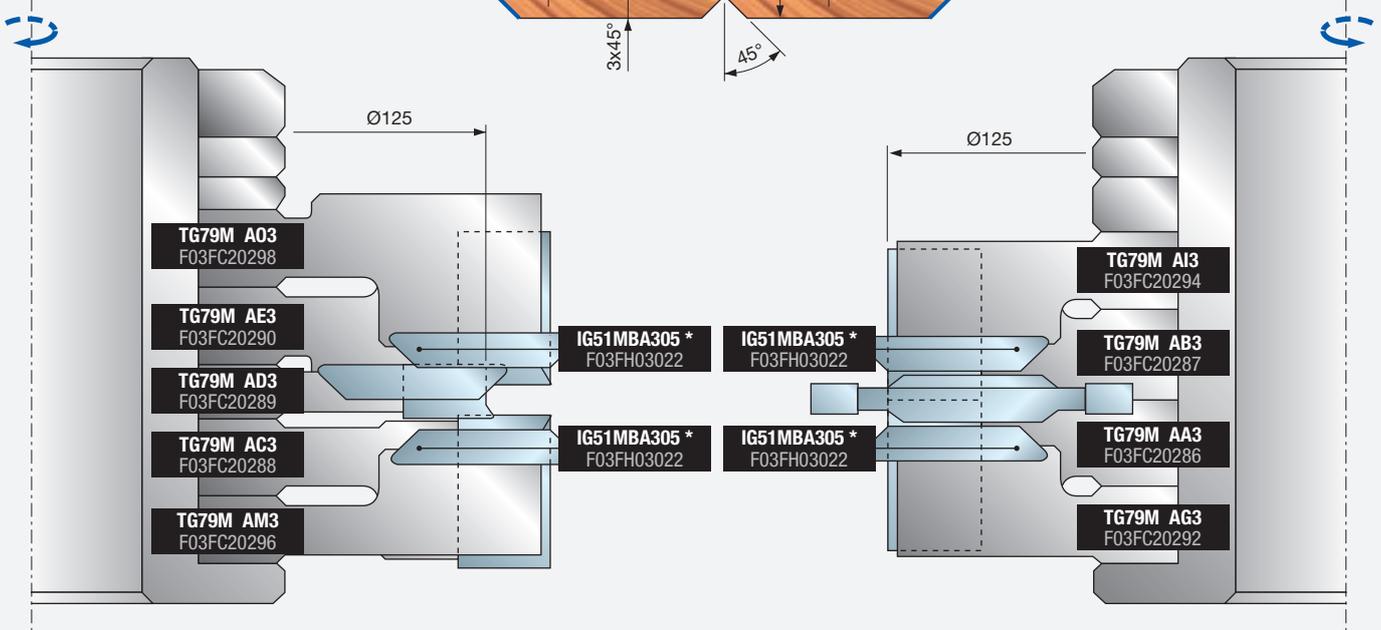
Examples of programming

PROFILE 3

Cutterhead set
TG79MG 006

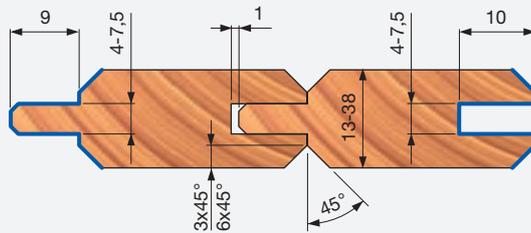


Cutterhead set
TG79MG 004

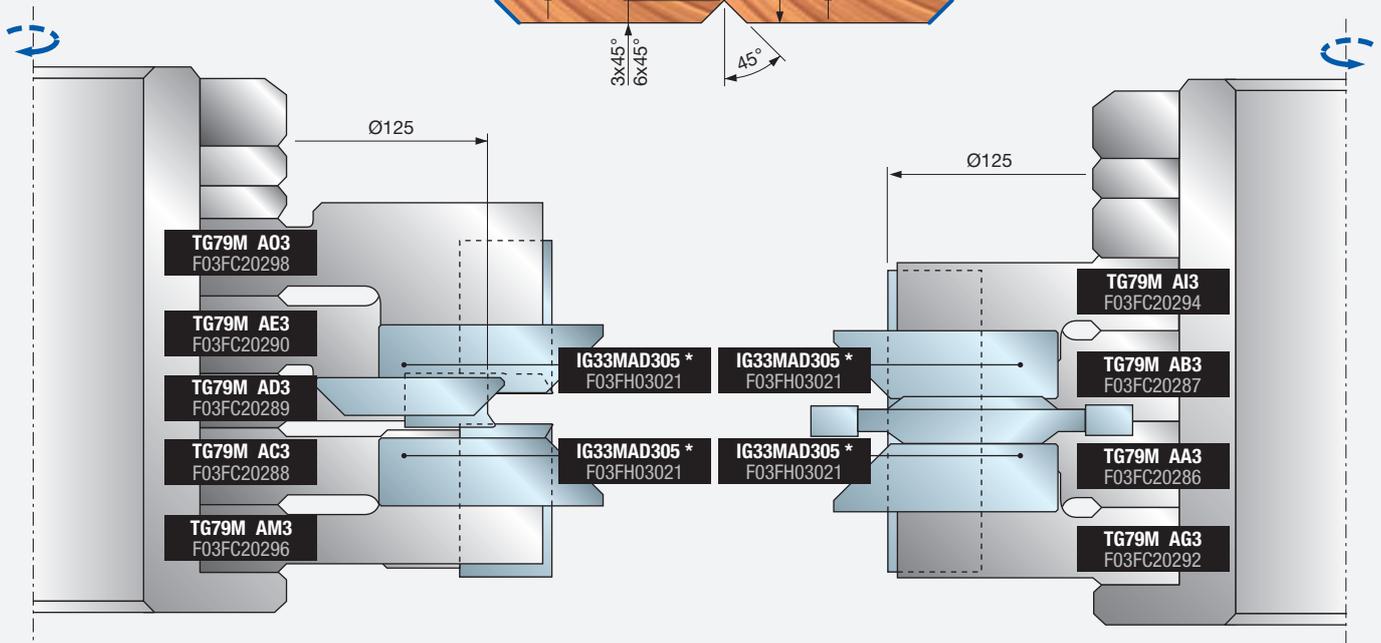


PROFILE 4

Cutterhead set
TG79MG 025



Cutterhead set
TG79MG 020

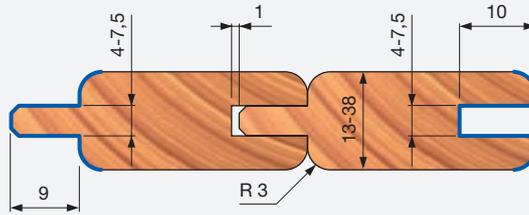


* Inserts are not included

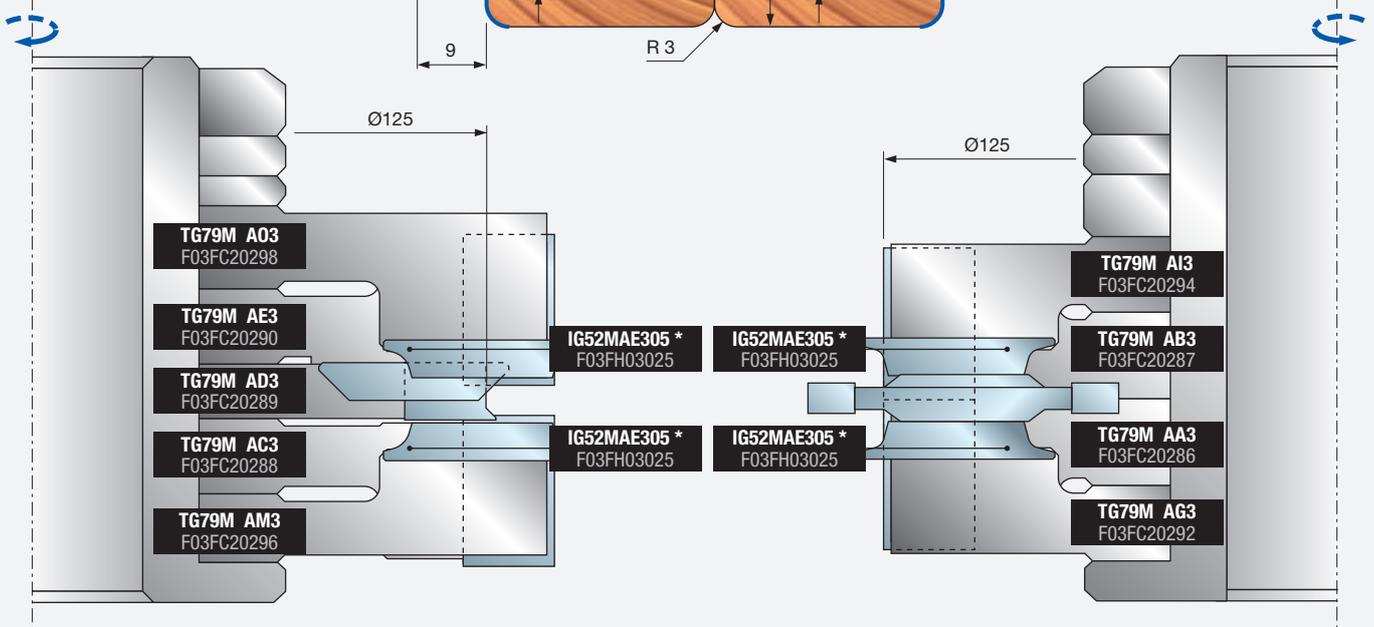
Examples of programming

PROFILE 5

Cutterhead set
TG79MG 007

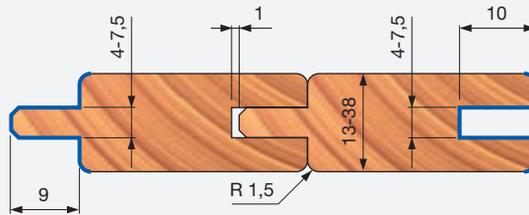


Cutterhead set
TG79MG 005

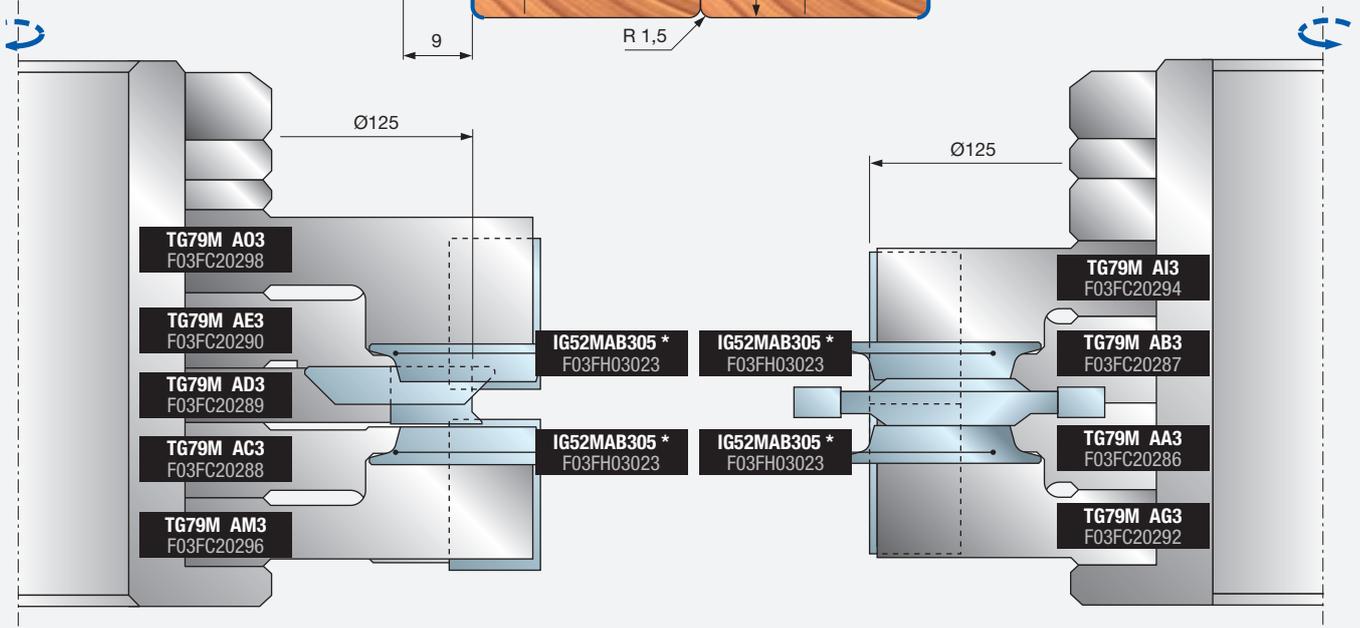


PROFILE 6

Cutterhead set
TG79MG 026



Cutterhead set
TG79MG 021

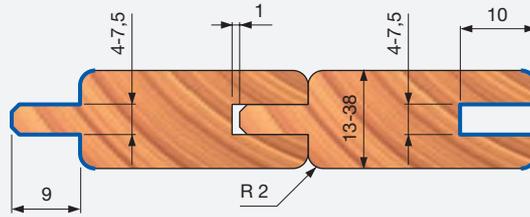


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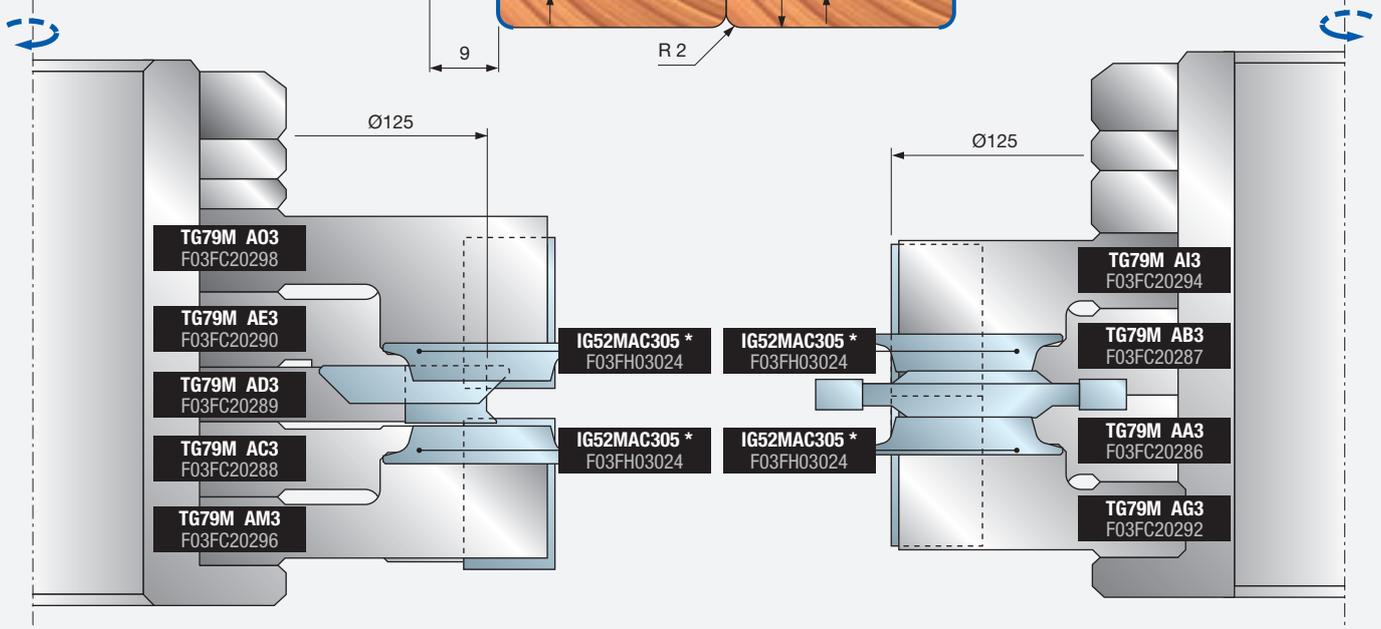
Examples of programming

PROFILE 7

Cutterhead set
TG79MG 027

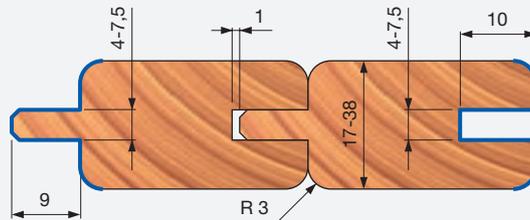


Cutterhead set
TG79MG 022

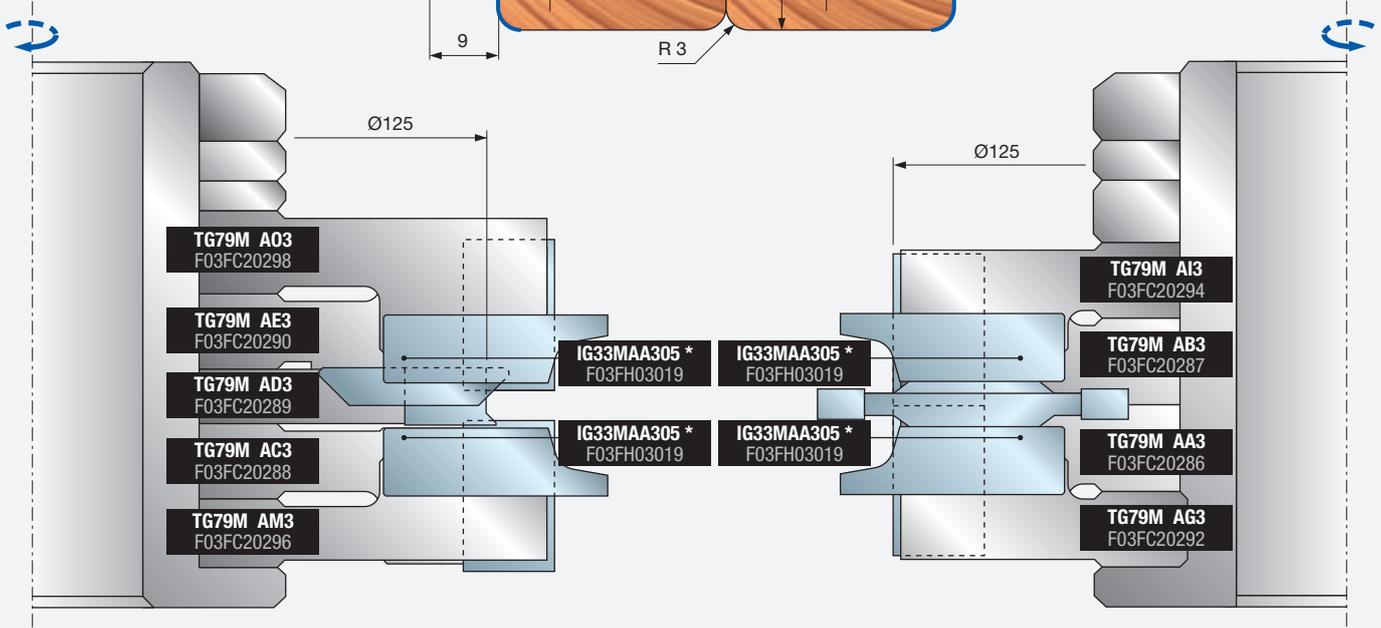


PROFILE 8

Cutterhead set
TG79MG 028



Cutterhead set
TG79MG 023

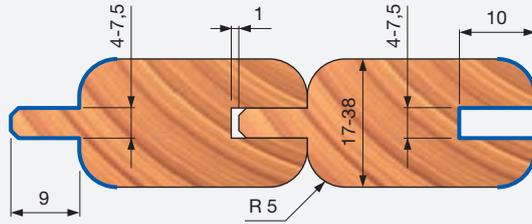


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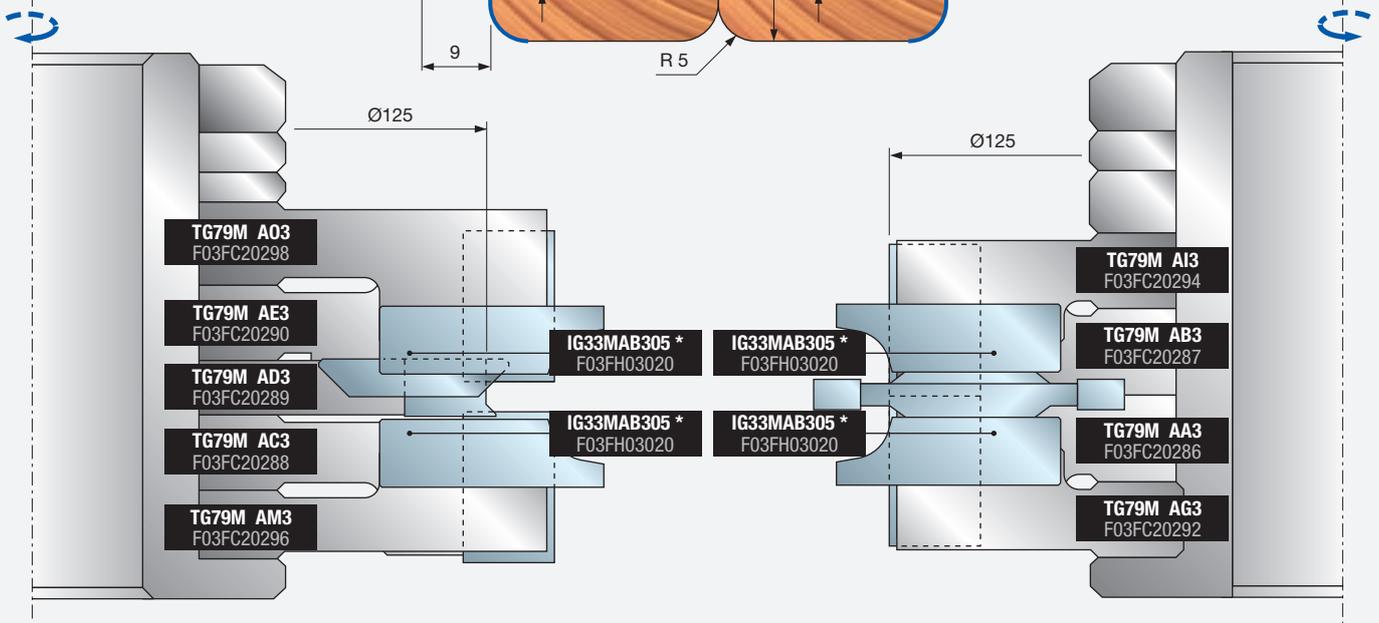
Examples of programming

PROFILE 9

Cutterhead set
TG79MG 029

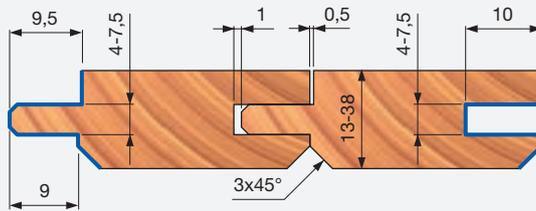


Cutterhead set
TG79MG 024

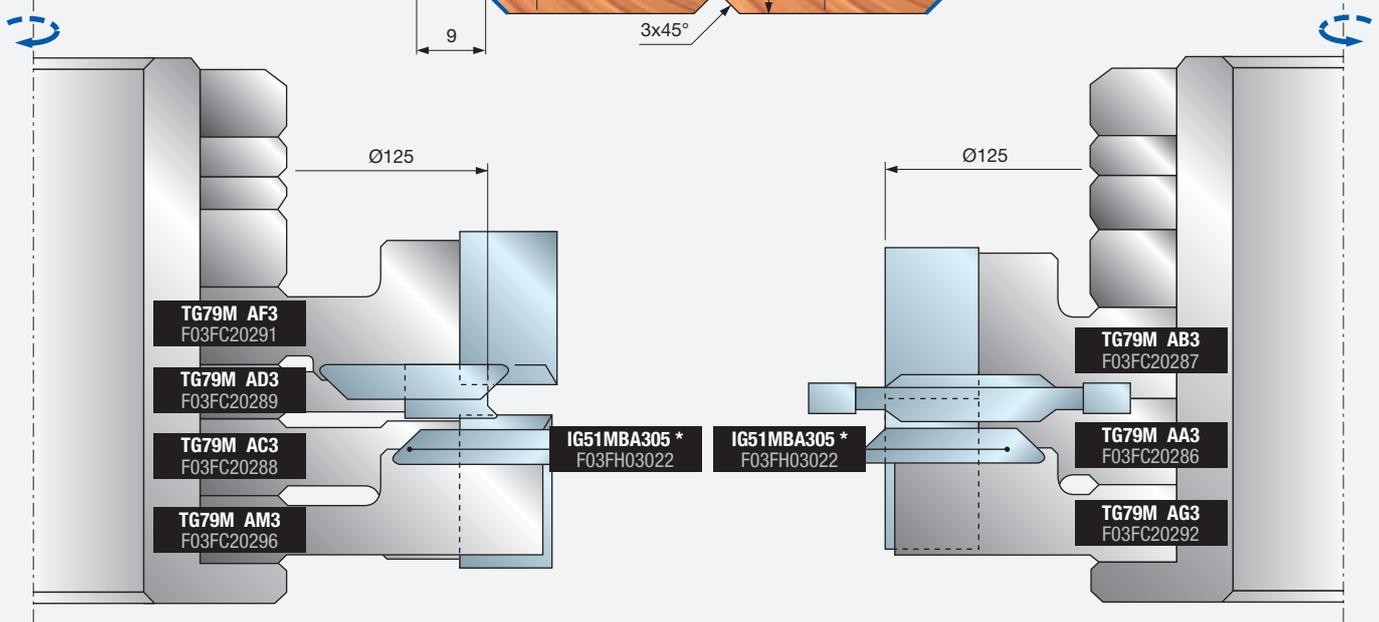


PROFILE 10

Cutterhead set
TG79MG 010



Cutterhead set
TG79MG 008

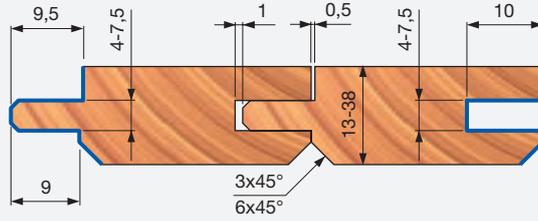


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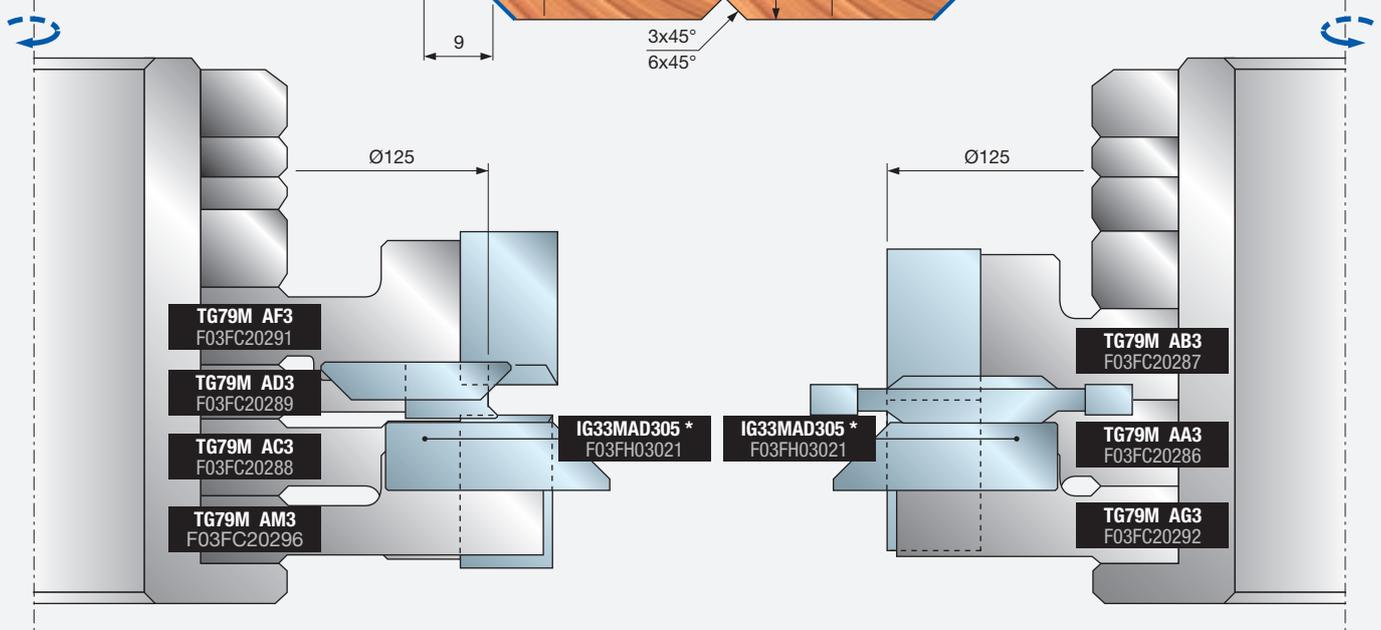
Examples of programming

PROFILE 11

Cutterhead set
TG79MG 035

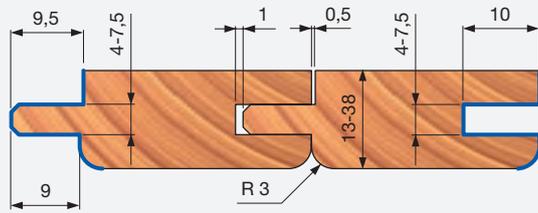


Cutterhead set
TG79MG 030

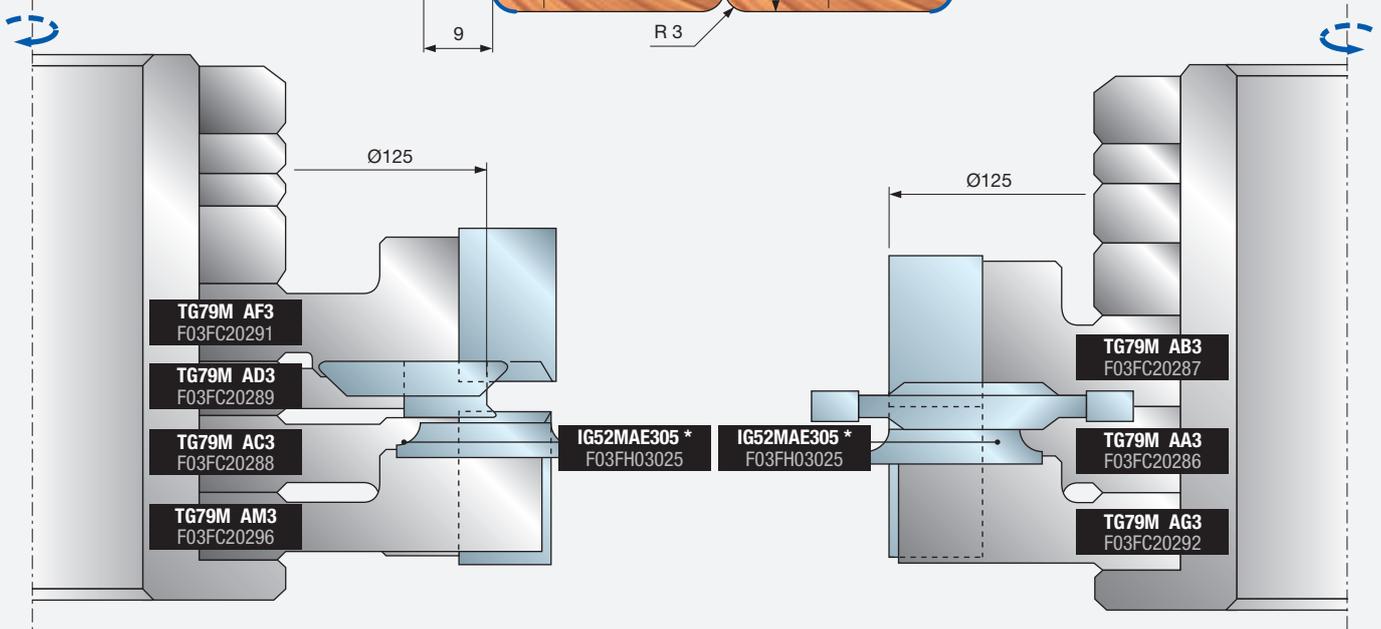


PROFILE 12

Cutterhead set
TG79MG 011



Cutterhead set
TG79MG 009



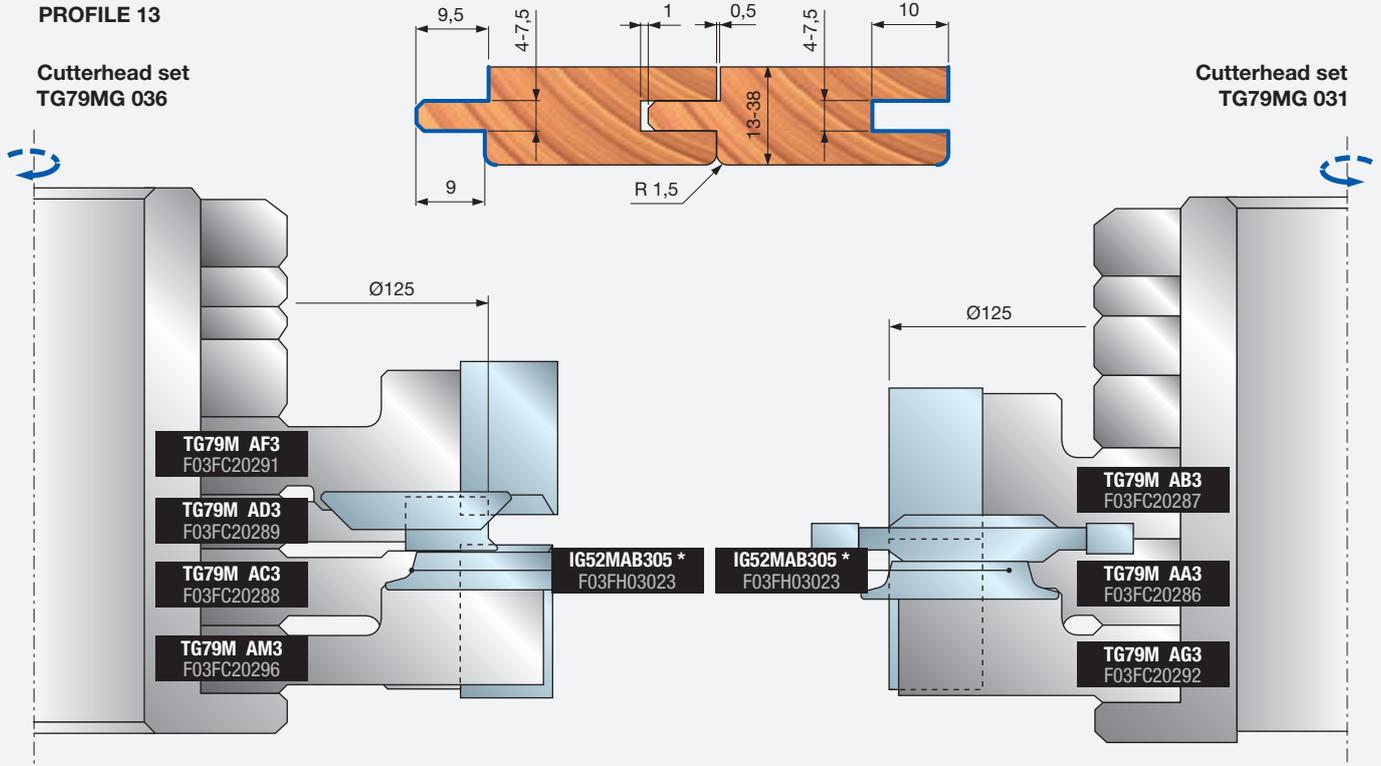
* Inserts are not included

Examples of programming

PROFILE 13

Cutterhead set
TG79MG 036

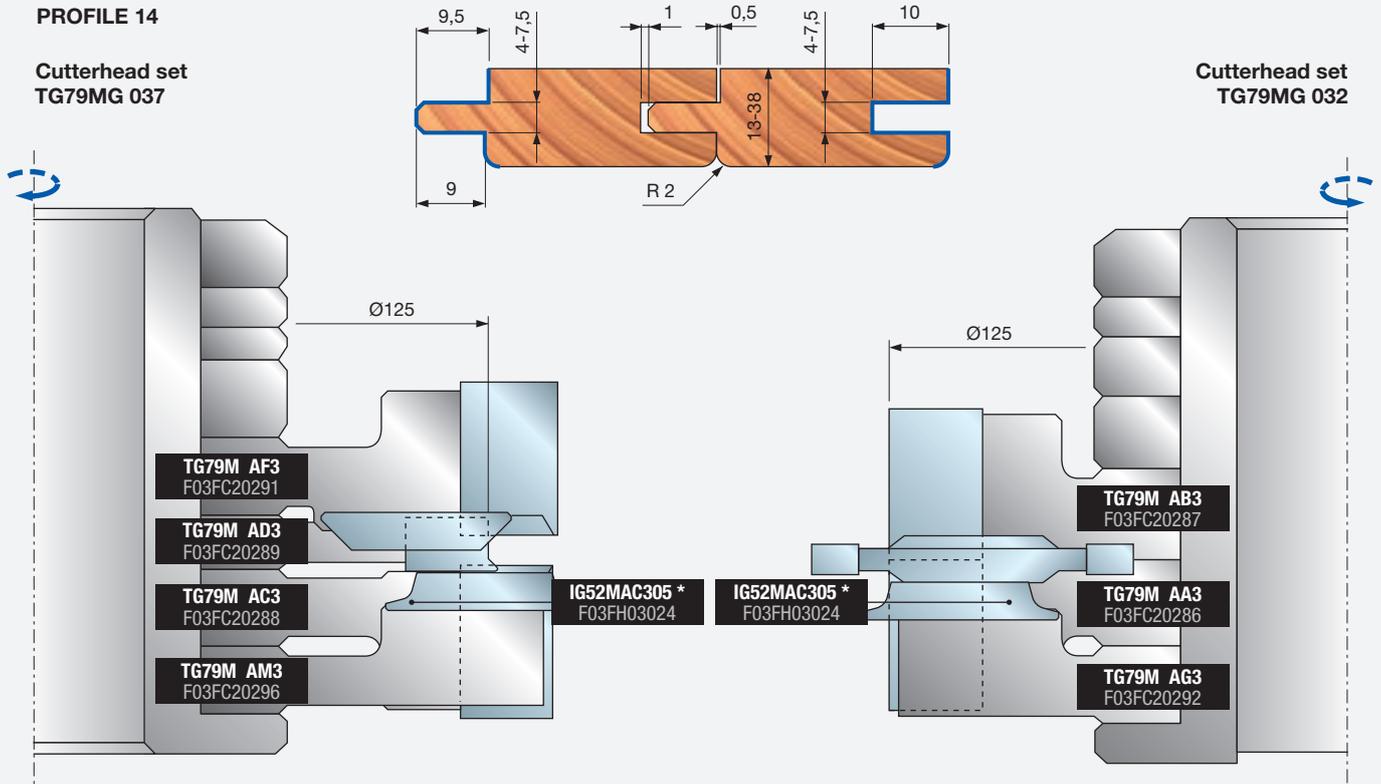
Cutterhead set
TG79MG 031



PROFILE 14

Cutterhead set
TG79MG 037

Cutterhead set
TG79MG 032

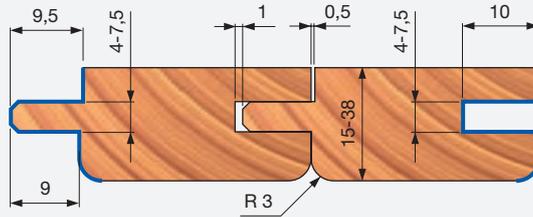


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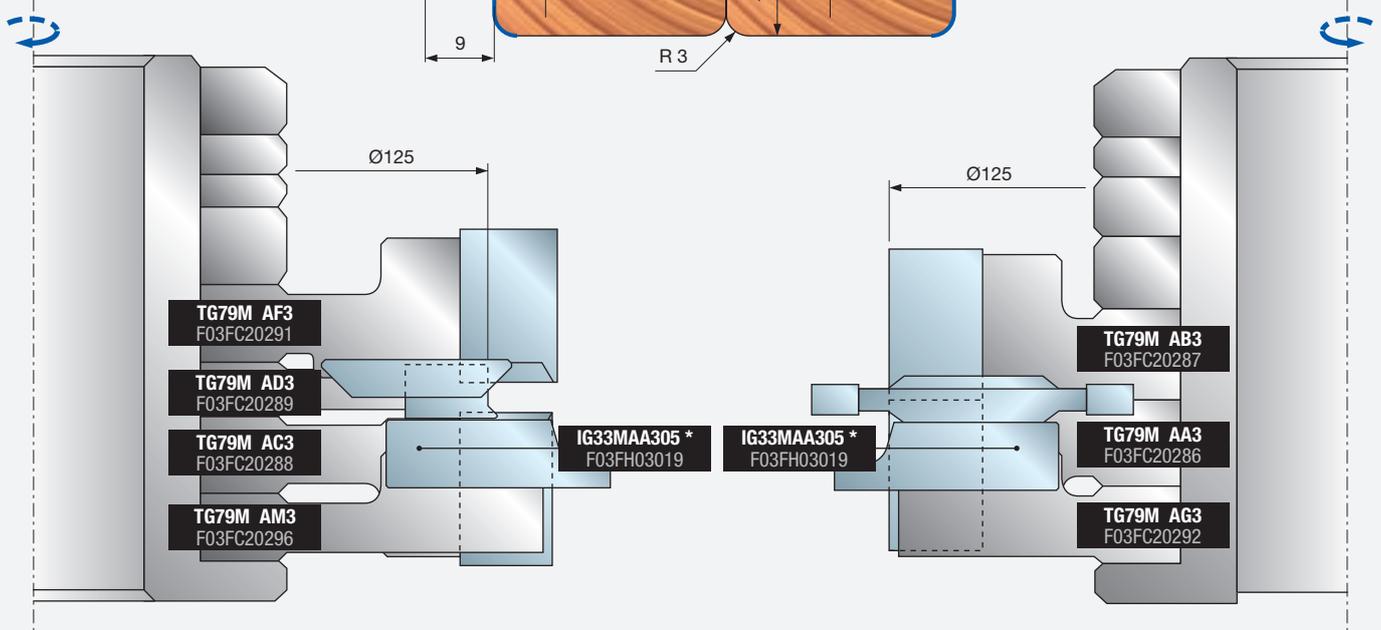
Examples of programming

PROFILE 15

Cutterhead set
TG79MG 038

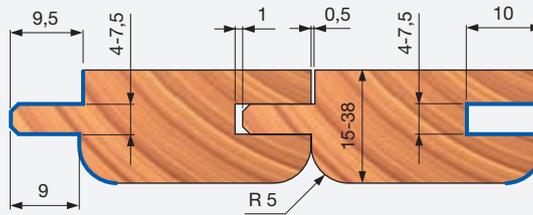


Cutterhead set
TG79MG 033

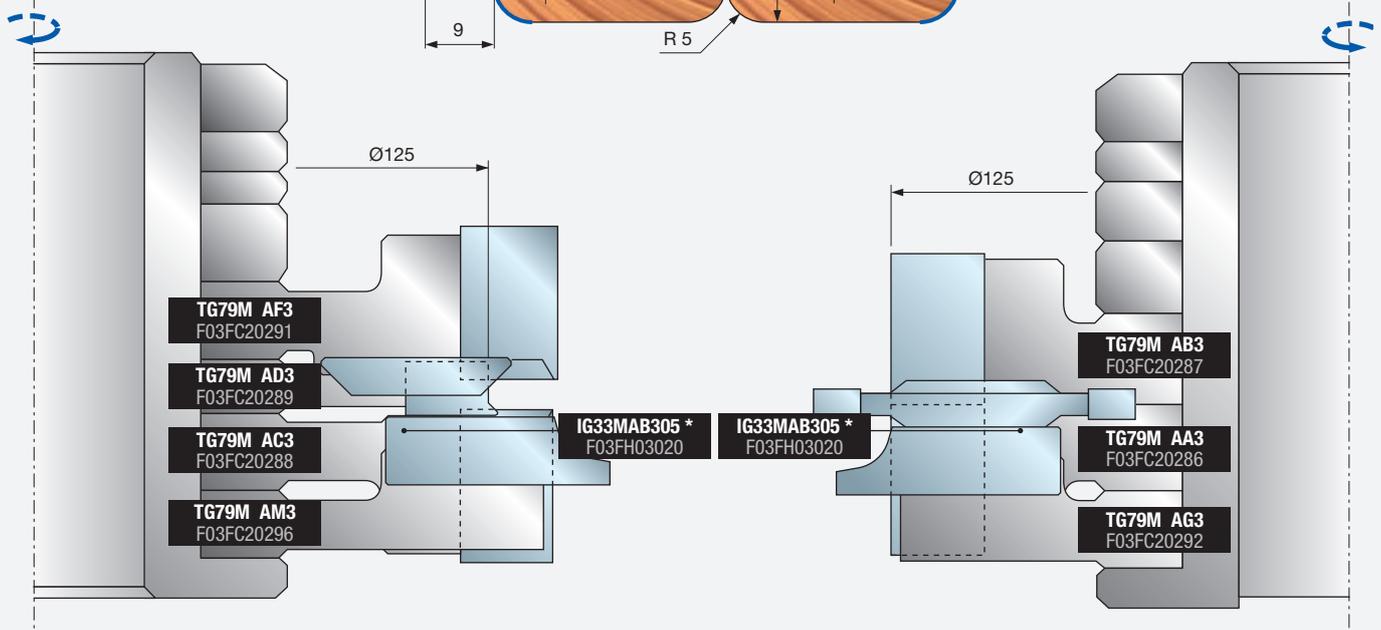


PROFILE 16

Cutterhead set
TG79MG 039



Cutterhead set
TG79MG 034



* Inserts are not included

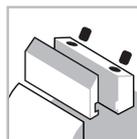


TG99MG

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

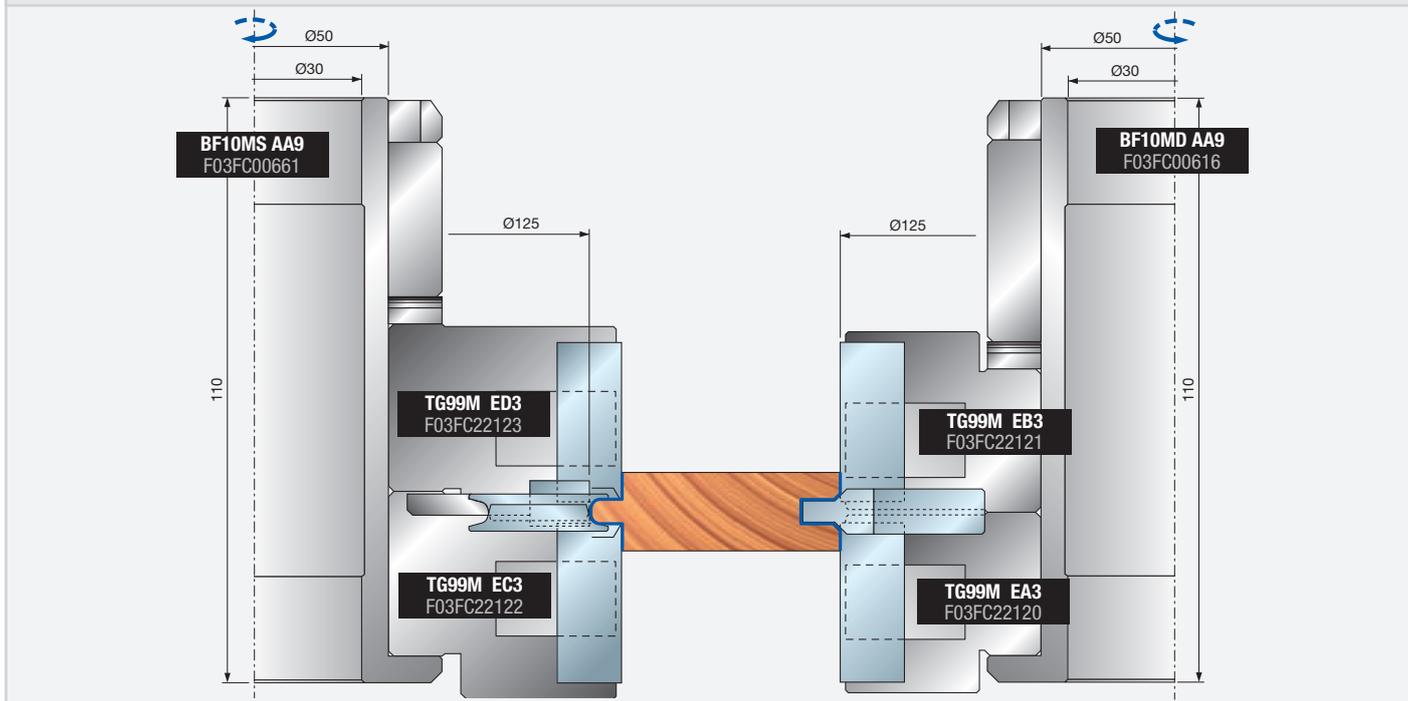
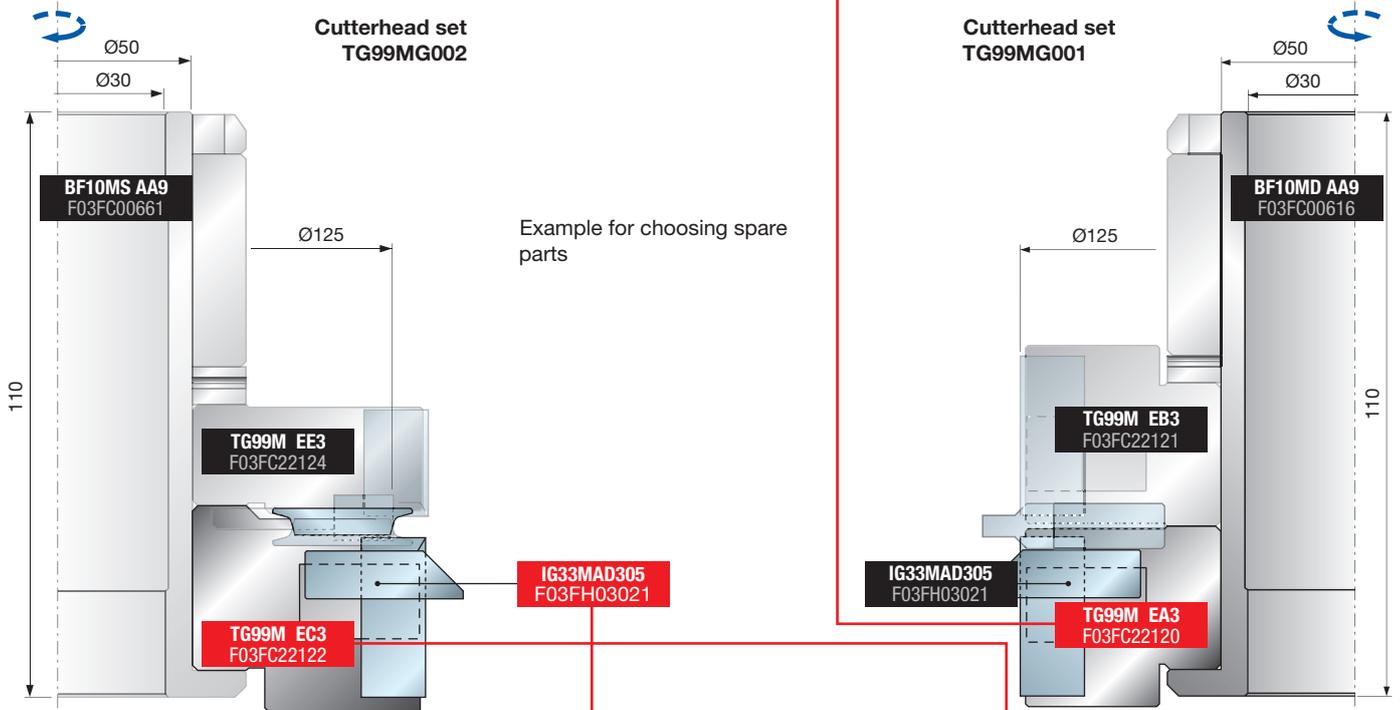


Chart for choosing spare parts

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	•	•	•	•	•	•	•	•	•	•	•	•

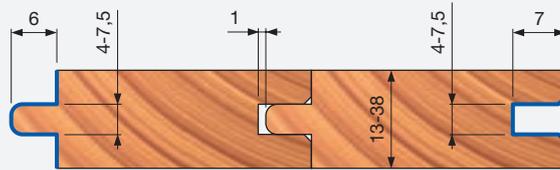


Optional spare parts	Dimensions mm	Freud Code	Art. No.	For cutterheads TG99M			
				EA3	EB3	EC3	ED3
Beveling insert	25,5 x 16 x 9 45°	IG33MAD305	F03FH03021	•	•	•	•
Rounding insert	25,5 x 16 x 9 R3	IG33MAA305	F03FH03019	•	•	•	•
Rounding insert	25,5 x 16 x 9 R5	IG33MAB305	F03FH03020	•	•	•	•
Screw	M6x15,5	VT16M AD9	F03FC20657	•	•	•	•

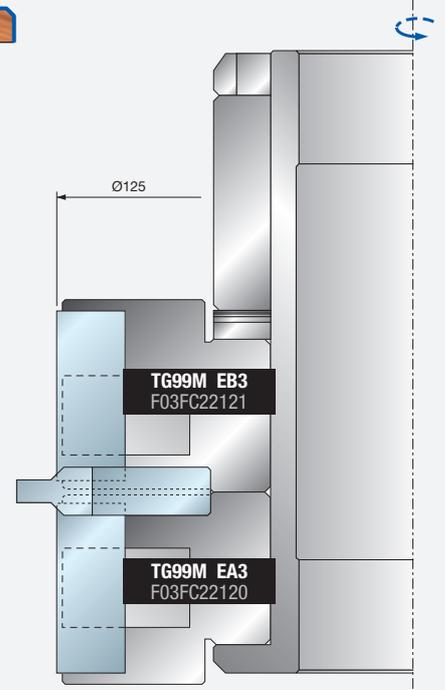
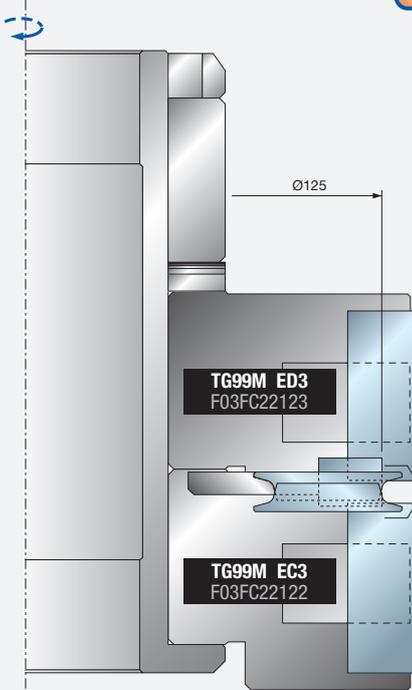
Examples of programming

PROFILE A

Cutterhead set
TG99MG002

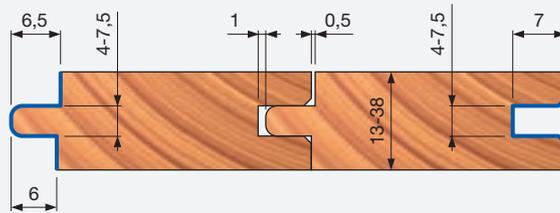


Cutterhead set
TG99MG001

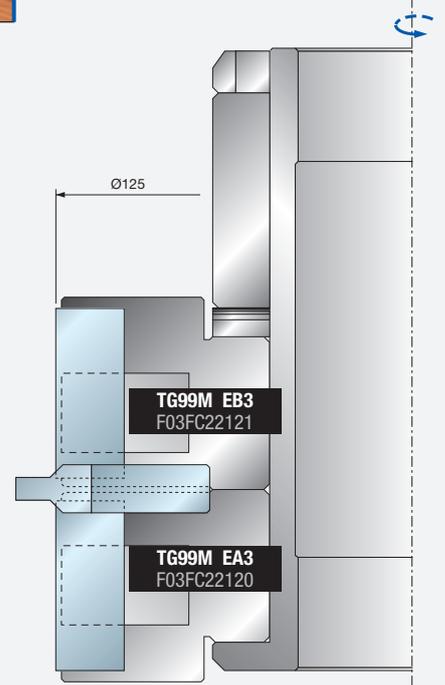
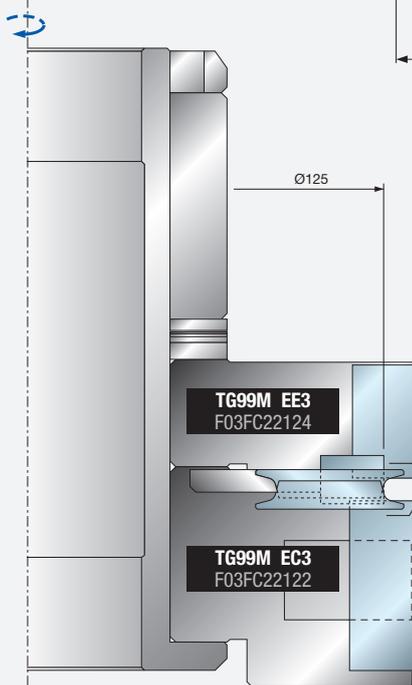


PROFILE B

Cutterhead set
TG99MG003



Cutterhead set
TG99MG001

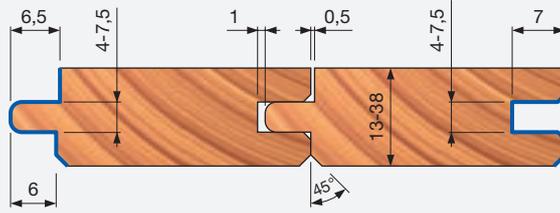
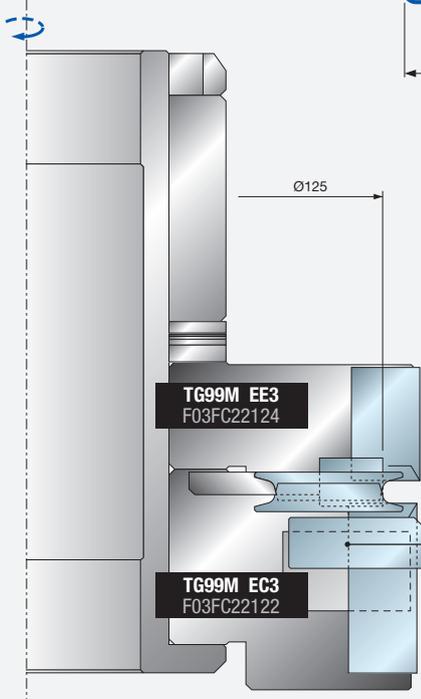


* Inserts are not included

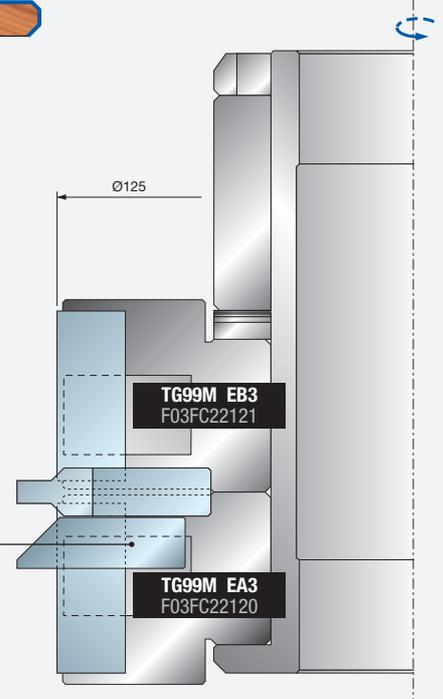
Examples of programming

PROFILE C

Cutterhead set
TG99MG009



Cutterhead set
TG99MG008

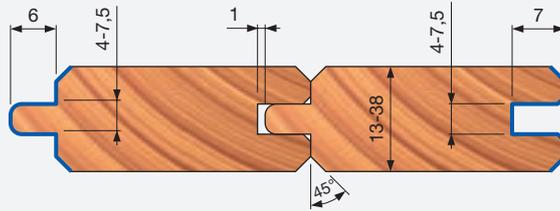
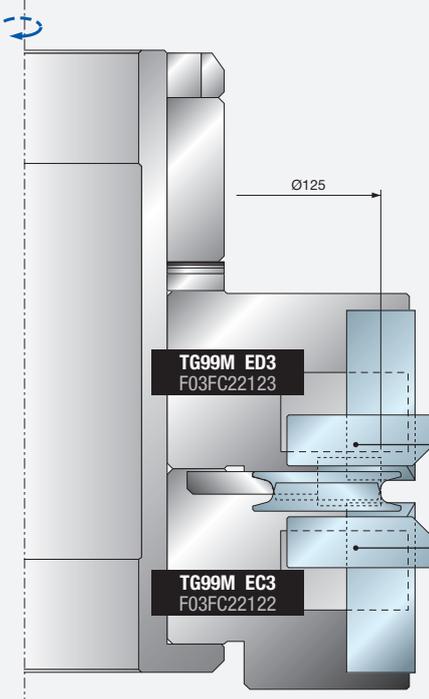


IG33MAD305 *
F03FH03021

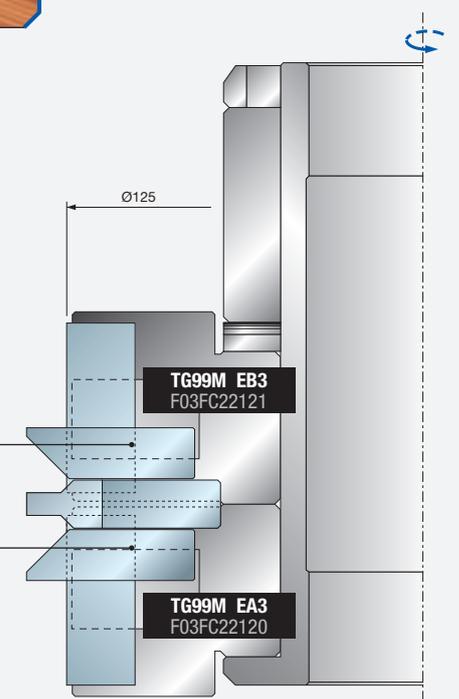
IG33MAD305 *
F03FH03021

PROFILE D

Cutterhead set
TG99MG011



Cutterhead set
TG99MG010



IG33MAD305 *
F03FH03021

IG33MAD305 *
F03FH03021

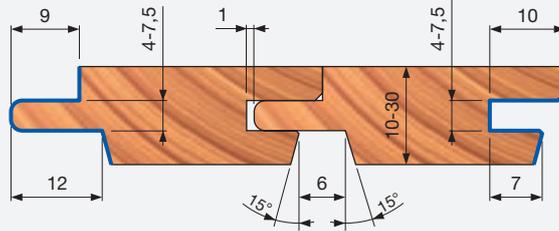
IG33MAD305 *
F03FH03021

IG33MAD305 *
F03FH03021

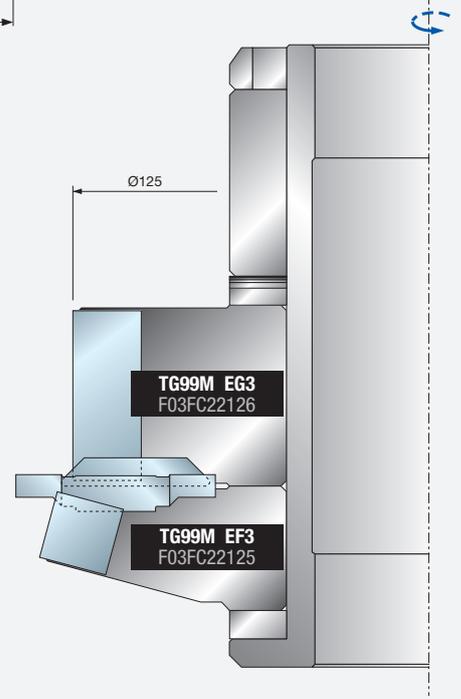
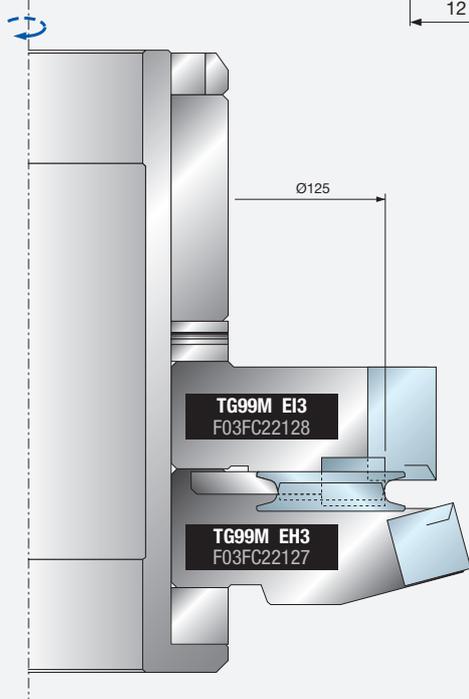
Examples of programming

PROFILE E

Cutterhead set
TG99MG005

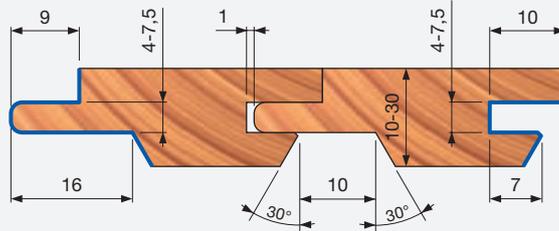


Cutterhead set
TG99MG004

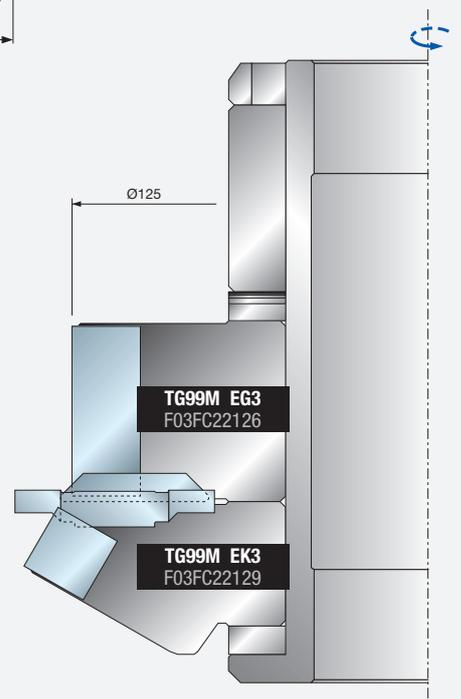
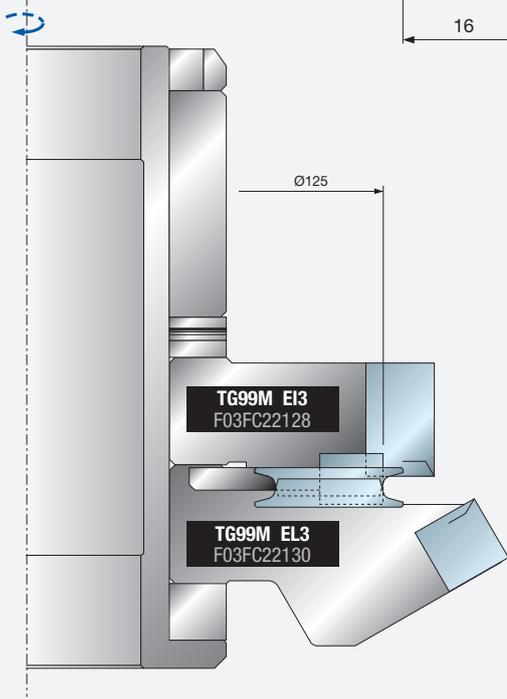


PROFILE F

Cutterhead set
TG99MG007



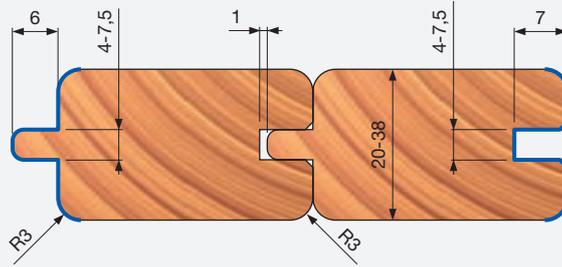
Cutterhead set
TG99MG006



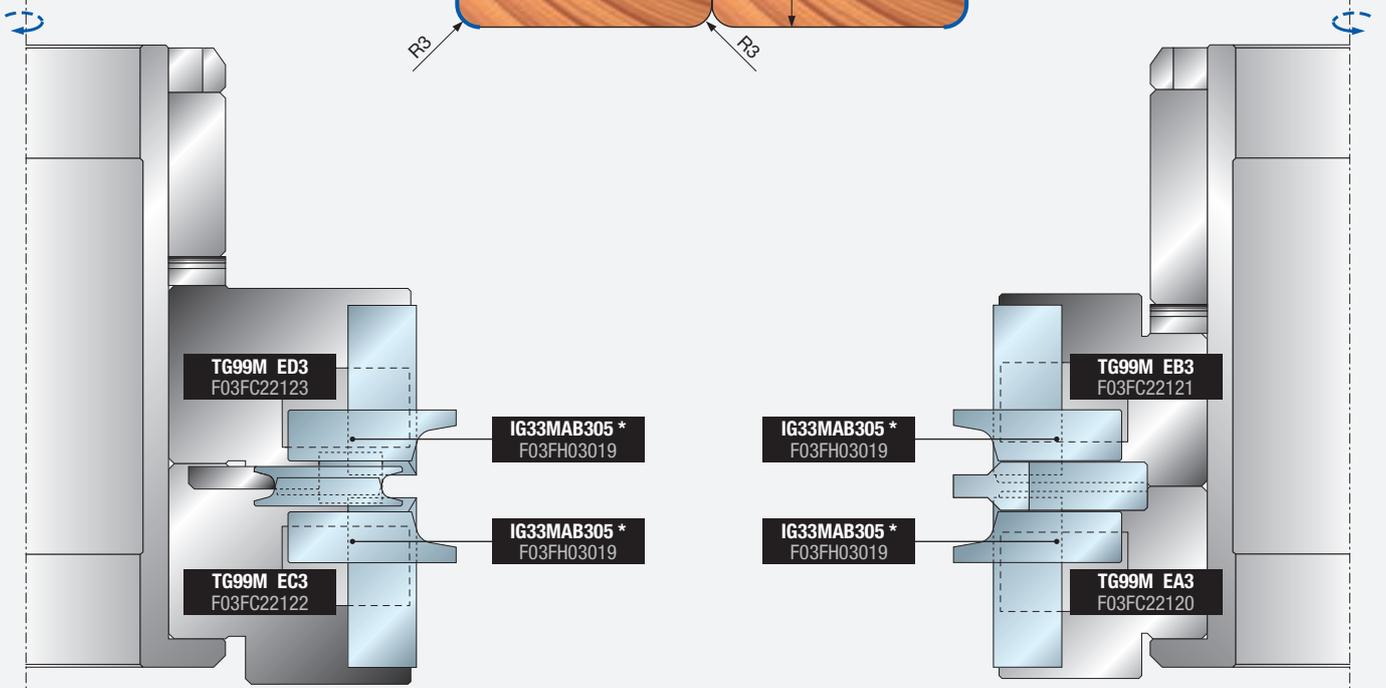
Examples of programming

PROFILE G

Cutterhead set
TG99MG013

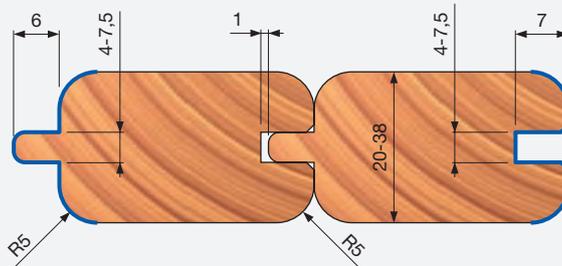


Cutterhead set
TG99MG012

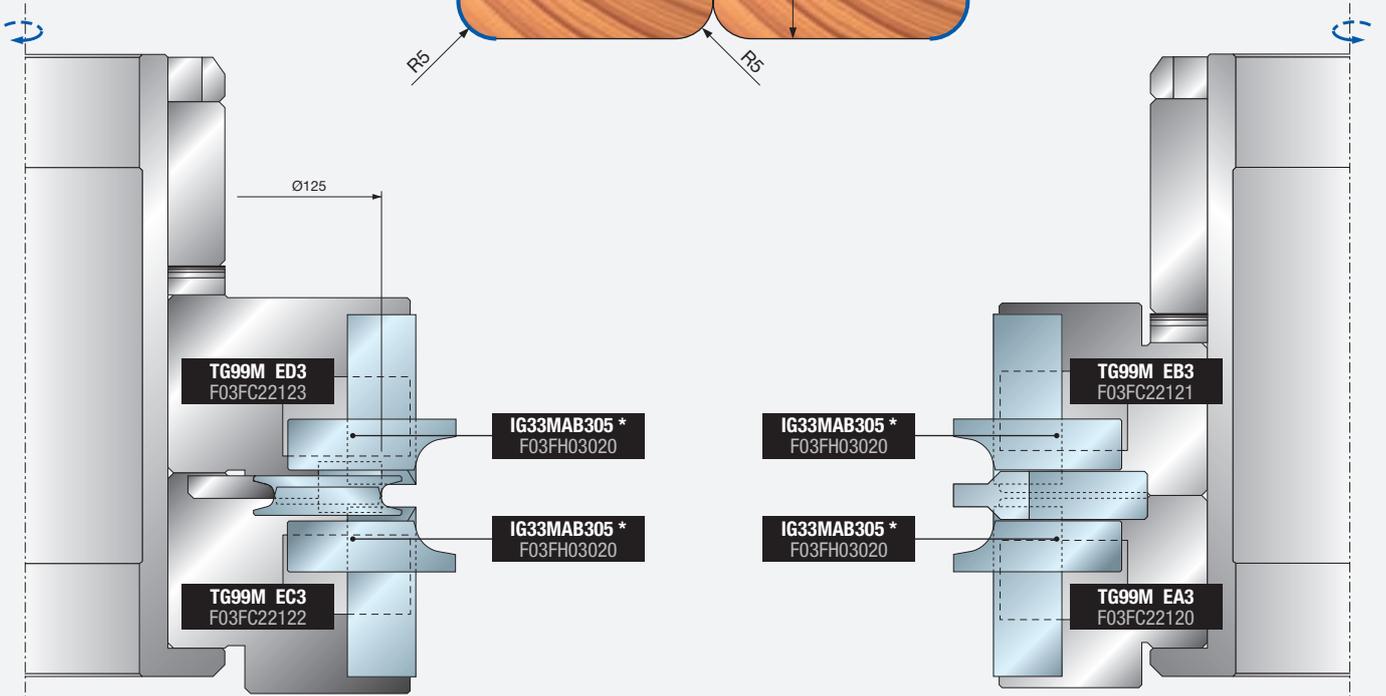


PROFILE H

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.

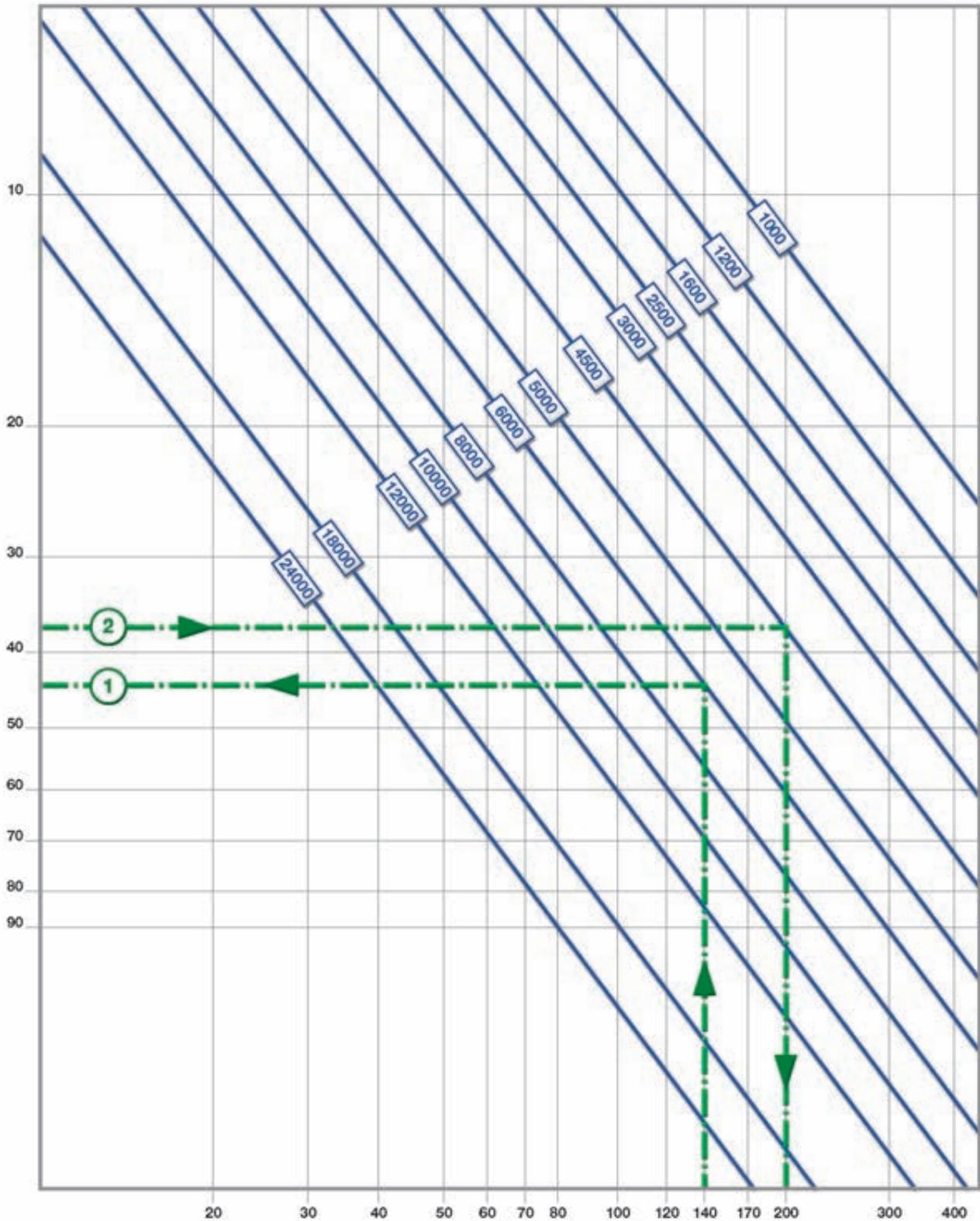
Care should be taken that the data relevant to the safety of the clamped tool are always stored in the data medium.

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.

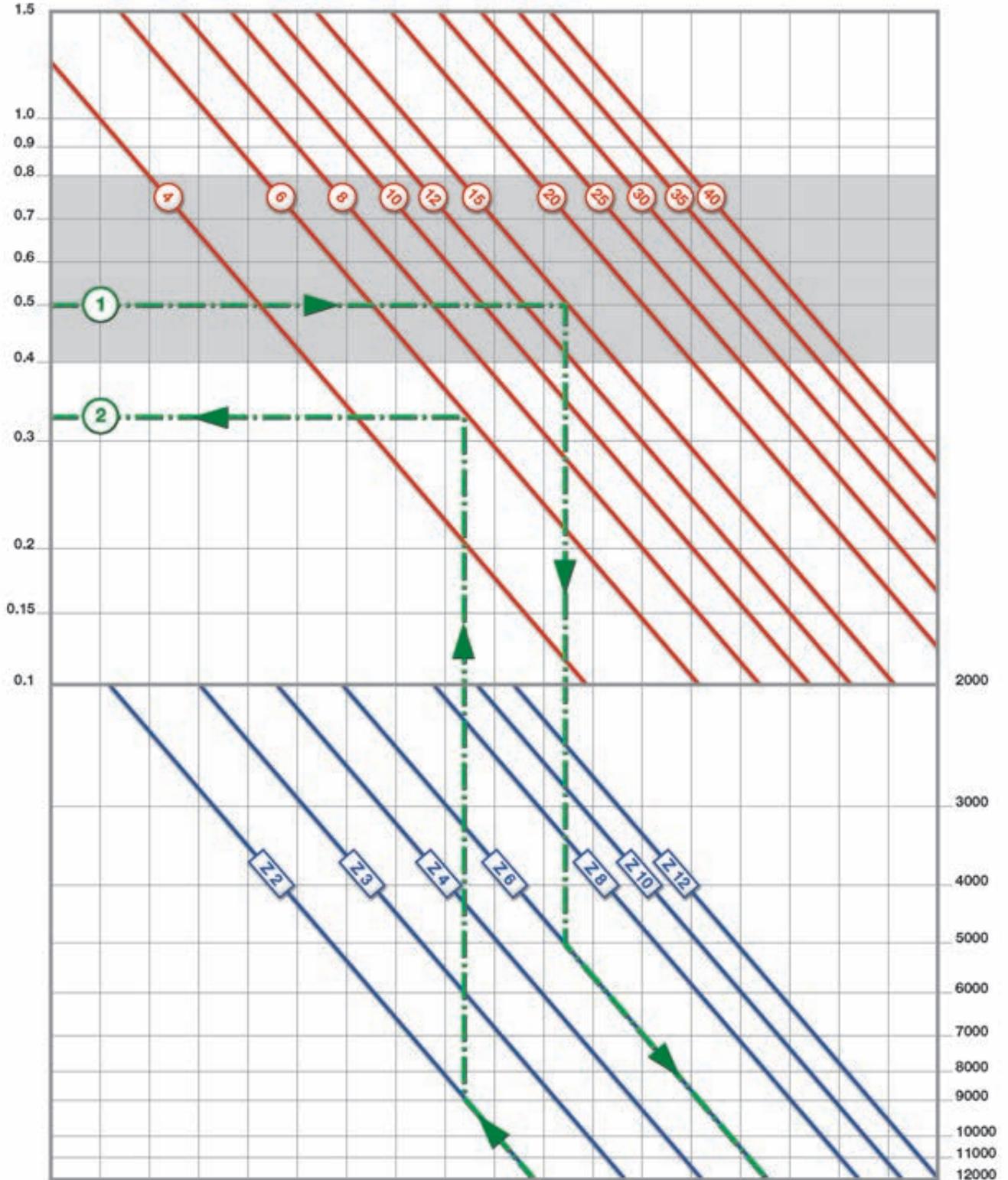
TECHNOLOGICAL FEATURES

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

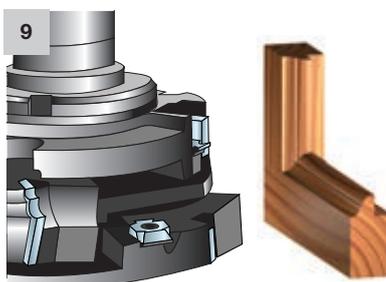
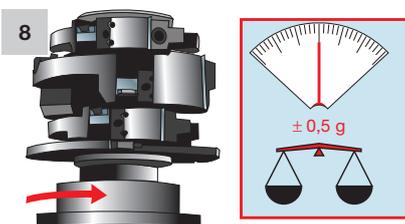
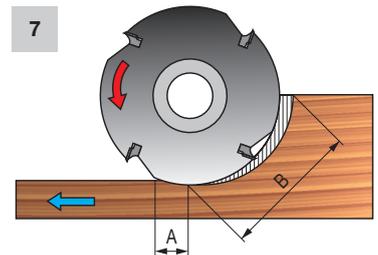
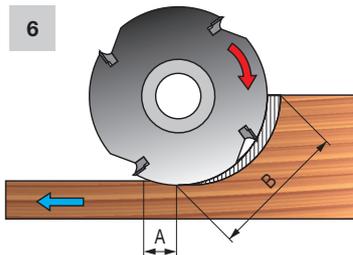
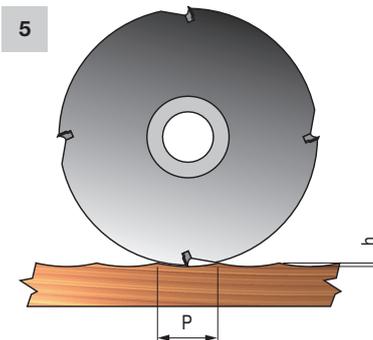
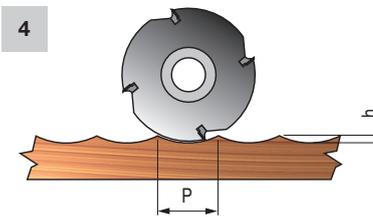
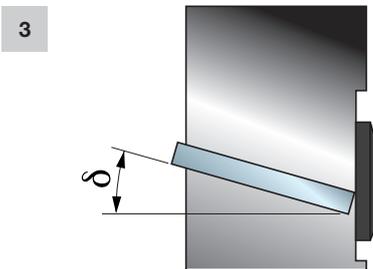
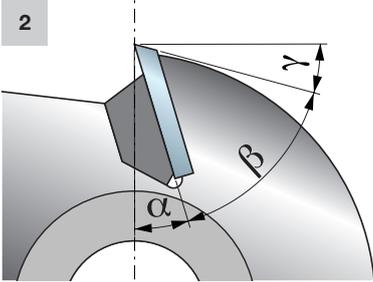


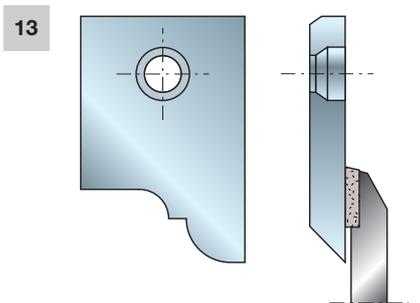
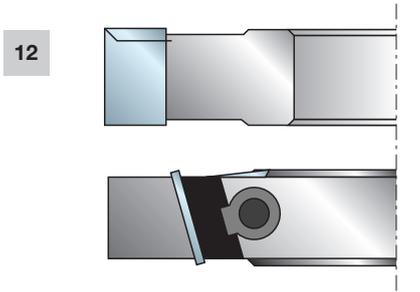
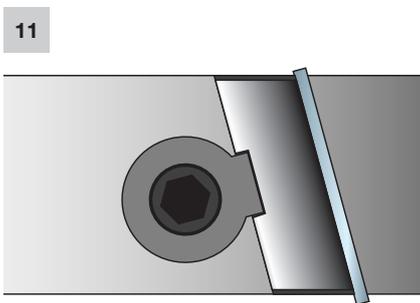
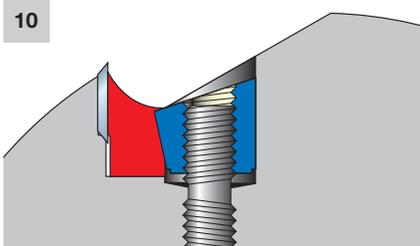


TECHNOLOGICAL FEATURES

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).

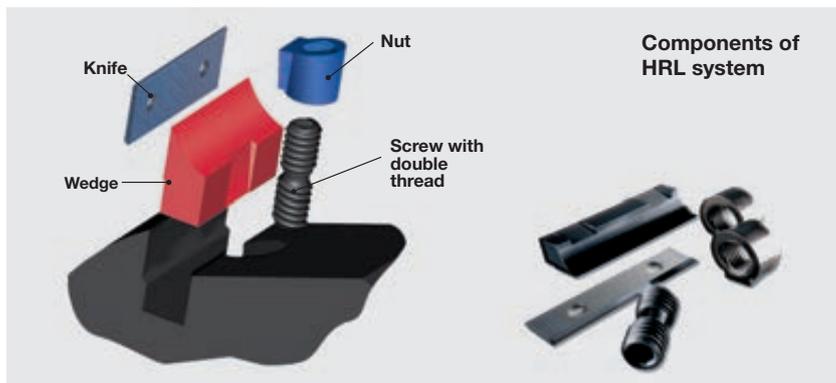




TECHNOLOGICAL FEATURES

ADVANTAGES OF TRADITIONAL CUTTERHEADS

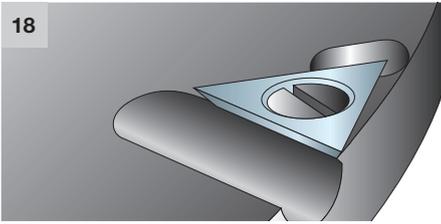
- A cutterhead is a rotating tool consisting of various cutting edges, geometrically fitted on its circumference. The cutting edges are 1,5 mm thick disposable knives, mechanically locked to the tool's body (Fig. 12). With respect to brazed cutters, cutterheads with disposable knives have numerous advantages, 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).



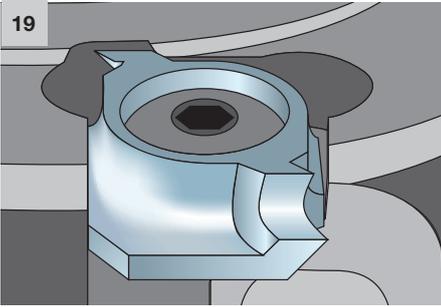
- Performance System knives are constructed in hard metal, which Freud produces in 6 grades of hardness, second to the material to be worked: softwoods and hardwoods, heavy, abrasive, chipboard, melamine, laminated, MDF etc. It is possible to use HW with a high grade of hardness, so as to permit a superior 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.



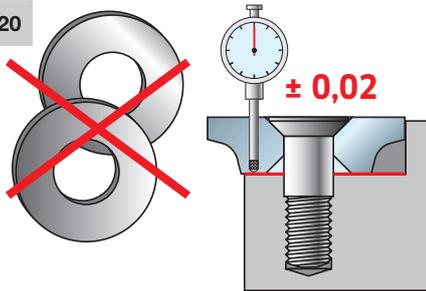
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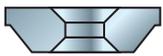
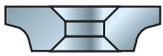


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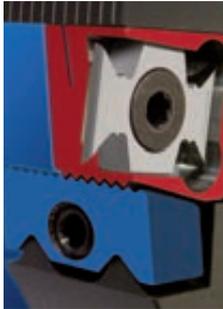


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R = 1,5 - 2 - 3



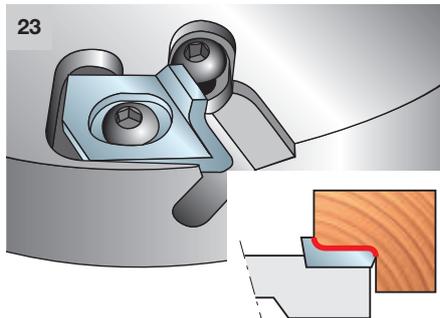
3 x 45°



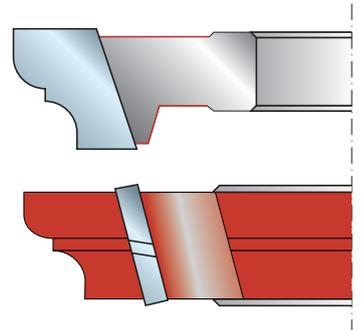
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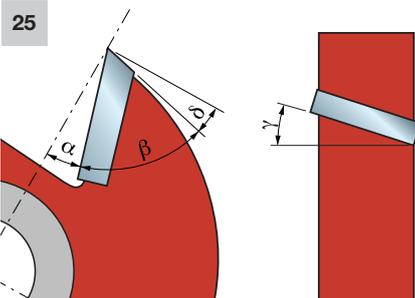
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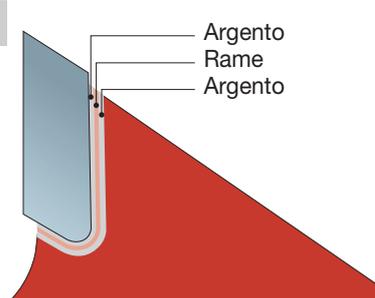
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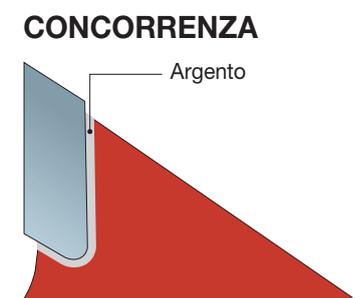
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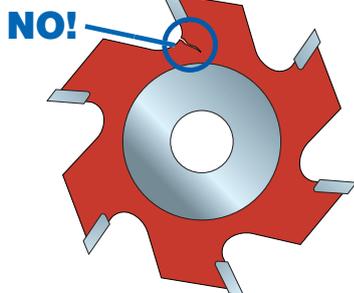


TECHNOLOGICAL FEATURES

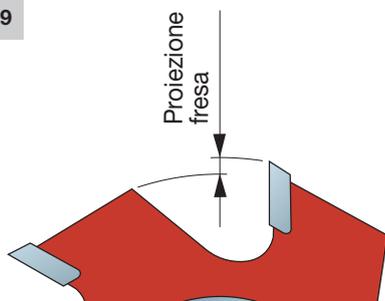
INSERTS AND SPURS

- 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 tn-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.

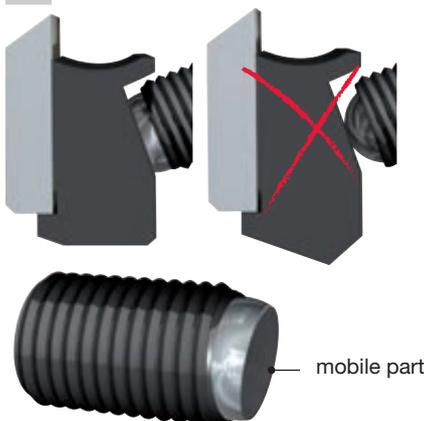
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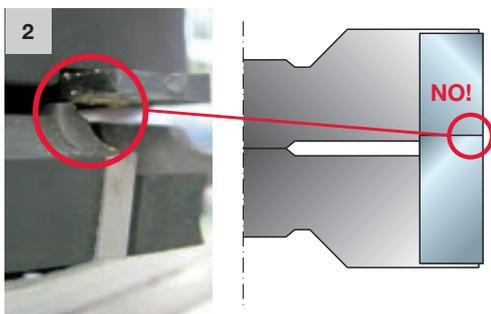


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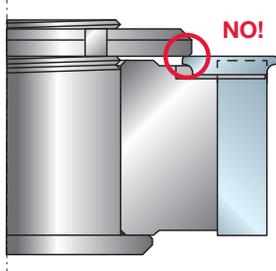


Screws with spherical insert, for ISOprofil System

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

