

Manual feed

Leitz Lexicon Edition 7

Version 2

03/2024



Explanation of abbreviations

A	= dimension A	LH	= left hand rotation
a_e	= cutting thickness (radial)	M	= metric thread
a_p	= cutting depth (axial)	MBM	= minimum order quantity
ABM	= dimension	MC	= multi-purpose steel, coated
APL	= panel raising length	MD	= thickness of knife
APT	= panel raising depth	min^{-1}	= revolutions per minute (RPM)
AL	= working length	MK	= morse taper
AM	= number of knives	m min^{-1}	= metres per minute
AS	= anti sound (low noise design)	m s^{-1}	= metres per second
b	= overhang	n	= RPM
B	= width	n_{max}	= maximum permissible RPM
BDD	= thickness of shoulder	NAL	= position of hub
BEM	= note	ND	= thickness of hub
BEZ	= description	NH	= zero height
BH	= tipping height	NL	= cutting length
BO	= bore diameter	NLA	= pinhole dimensions
CNC	= Computerized Numerical Control	NT	= grooving depth
d	= diameter	P	= profile
D	= cutting circle diameter	POS	= cutter position
D0	= zero diameter	PT	= profile depth
DA	= outside Diameter	PG	= profile group
DB	= diameter of shoulder	QAL	= cutting material quality
DFC	= Dust Flow Control (optimised chip clearance)	R	= radius
DGL	= number of links	RD	= right hand twist
DIK	= thickness	RH	= right hand rotation
DKN	= double keyway	RP	= radius of cutter
DP	= polycrystalline diamond	S	= shank dimension
DRI	= rotation	SB	= cutting width
FAB	= width of rebate	SET	= set
FAT	= depth of rebate	SLB	= slotting width
FAW	= bevel angle	SLL	= slotting length
FLD	= flange diameter	SLT	= slotting depth
f_z	= tooth feed	SP	= tool steel
$f_{z \text{ eff}}$	= effective tooth feed	ST	= Cobalt-basis cast alloys, e.g. Stellite™
GEW	= thread	STO	= shank tolerance
GL	= total length	SW	= cutting angle
GS	= Plunging edge	TD	= diameter of tool body
H	= height	TDI	= thickness of tool
HC	= tungsten carbide, coated	TG	= pitch
HD	= wood thickness (thickness of workpiece)	TK	= reference diameter
HL	= high-alloyed tool steel	UT	= cutting edges with irregular pitch
HS	= high-speed steel (HSS)	V	= number of spurs
HW	= tungsten carbide (TCT)	v_c	= cutting speed
ID	= ident number	v_f	= feed speed
IV	= insulation glazing	VE	= packing unit
KBZ	= abbreviation	VSB	= adjustment range
KLH	= clamping height	WSS	= workpiece material
KM	= edge breaker	Z	= number of teeth
KN	= single keyway	ZA	= number of fingers
KNL	= combination pinhole consists of 2/7/42 2/9/46,35 2/10/60	ZF	= tooth shape (cutting edge shape)
L	= length	ZL	= finger length
I	= clamping length		
LD	= left hand twist		
LEN	= Leitz standard profiles		

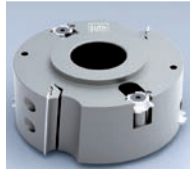
Notes to the Lexicon concerning the diagrams and tables

The statements made in the diagrams and tables relate to specific conditions and represent parameters from tests subjected to defined conditions. Variations when using tools in individual case due to special application conditions may be possible. Our support team will provide you with detailed information.

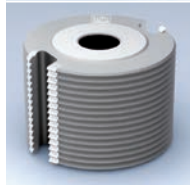
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4. Manual feed

4.1 Grooving

Application	To produce different groove widths, manual or mechanical feed, along or across the grain.
Workpiece material	Softwood and hardwood, glulam, chipboard and fibre materials, uncoated, veneered, plastic and paper coated. Plastics and foams.
Machines	Portable machines, spindle moulders, moulders, double-end tenoners, machining centres, edgebanding machines etc.
Type of feed	Manual feed: Application only against feed. Mechanical feed: Application with or against feed, for minimum tear out, use with feed necessary.

Tool design



Tipped tools:
With HW or DP. DP tips suitable for abrasive materials.

Replaceable tip tools:
Design with HW turnblade cutters for constant diameter and constant cutting widths.

Two and multiple part tools:
Designed so the cutting width can be adjusted either by spacers (adjustment steps of 0.10 mm) or by a continuously adjustable sleeve for HW or DP tipped tools.

Single tools:
Suitable for use as set.

Optimised gullet design DFC:
The DFC concept directs the chips away from the workpiece, so leaving the tool cutting area unhindered. DFC increases tool performance.

Benefits:

- Better product quality by eliminating chip marks or damage to the workpiece edges.
- Reduced tool cutting edge wear by eliminating multiple cutting.

Recommended value for tooth feed rate f_z (in mm)

Solid wood	
Along	0.60 – 0.80 mm
Across	0.30 – 0.40 mm
Glulam	0.40 – 0.50 mm
Chipboard and fibre material	
Without coating	0.50 – 0.70 mm
Coated	0.20 – 0.40 mm
Veneered	0.10 – 0.15 mm
Wood derived materials	
Middle layer	0.30 – 0.60 mm
Top layer	0.08 – 0.12 mm
Plastic	0.20 – 0.50 mm
Polymer compound	0.05 – 0.05 mm
Non-ferrous metals	0.03 – 0.05 mm

$$v_f = f_z \cdot n \cdot Z / 1000$$

4. Manual feed

4.1 Grooving

4.1.1 Grooving cutters



Grooving cutters for manual feed

Application:

For grooving with (MEC) or against feed (MAN).

Machine:

Spindle moulders, moulders and double-end tenoners.

Workpiece material:

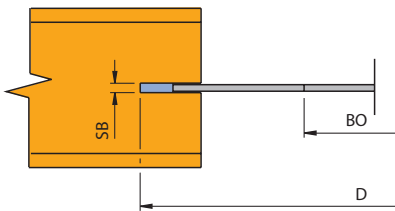
Solid wood; uncoated, coated and veneered wood derived materials.

Technical information:

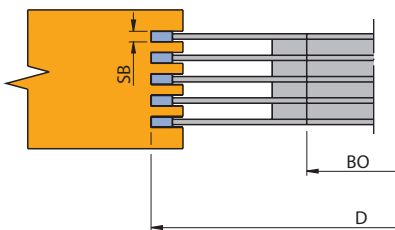
Tool body design with round, closed shape.

Z 12

WF 100 1 05



Scheme: Grooving in middle layer



Scheme: Set assembly for lock corner joint

D mm	SB mm	TDI mm	BO mm	BO _{max} mm	Z	n min ⁻¹	ID
125	1.5	0.8	30	50	12	6200 - 13700	020241 ●
125	2.0	1.2	30	50	12	6200 - 13700	020243 ●
125	2.5	1.4	30	50	12	6200 - 13700	020245 ●
125	3.0	2.0	30	50	12	6200 - 13700	020246 ●
125	3.5	2.2	30	50	12	6200 - 13700	020247 ●
125	4.0	2.5	30	50	12	6200 - 13700	020248 ●
125	4.5	3.0	30	50	12	6200 - 13700	020249 ●
150	1.5	0.8	30	60	12	5200 - 11400	020265 ●
150	2.0	1.2	30	60	12	5200 - 11400	020267 ●
150	2.5	1.4	30	60	12	5200 - 11400	020269 ●
150	3.0	2.0	30	60	12	5200 - 11400	020250 ●
150	3.5	2.2	30	60	12	5200 - 11400	020251 ●
150	4.0	2.5	30	60	12	5200 - 11400	020252 ●
150	4.5	3.0	30	60	12	5200 - 11400	020253 ●
150	5.0	3.5	30	60	12	5200 - 11400	020254 ●
150	6.0	4.5	30	60	12	5200 - 11400	020255 ●
150	7.0	5.0	30	60	12	5200 - 11400	020256 ●
150	8.0	6.0	30	60	12	5200 - 11400	020257 ●
150	9.0	7.0	30	60	12	5200 - 11400	160100 ●
150	10.0	8.0	30	60	12	5200 - 11400	160101 ●
180	4.0	2.5	30	70	12	4300 - 9500	020260 ●
180	5.0	3.5	30	70	12	4300 - 9500	020261 ●
180	6.0	4.5	30	70	12	4300 - 9500	020262 ●
180	8.0	6.0	30	70	12	4300 - 9500	020263 ●
180	10.0	8.0	30	70	12	4300 - 9500	160102 ●

Groove cutter for MEC, see section Panel Processing.

For spacers TR 100 0 used as a set, see section Knives and Spare Parts.

4. Manual feed

4.1 Grooving

4.1.1 Grooving cutters



Grooving cutter - lamello joints

Application:

For grooving lamello joints and for cutting grooves for corner joints and longitudinal joints (e.g. picture frames, furniture doors).

Machine:

Portable power tools - grooving cutters (e.g. Lamello etc.).

Workpiece material:

Solid wood; uncoated, coated and veneered wood derived materials.

Technical information:

Tool body design with round, closed shape.



HW tipped

WF 102 1 01

D	SB	BO	NLA	Z	V	QAL	n	ID
mm	mm	mm	mm				min ⁻¹	
100	4.0	22	4/4.5/36	2	4	HW	7800 - 13300	020124 ●

DP tipped

WF 100 1 DP

D	SB	BO	NLA	Z	QAL	n	ID
mm	mm	mm	mm			min ⁻¹	
100	4	22	4/4.5/36	4	DP	7800 - 13300	090017 ●



Grooving cutterhead

WW 102 1 01

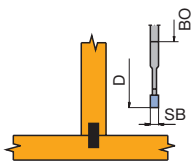
D	SB	BO	NLA	Z	V	QAL	n	ID
mm	mm	mm	mm				min ⁻¹	
100	4	22	4/4.5/36	2/2	2/2	HW	7800 - 13300	020131 ●

Spare knives:

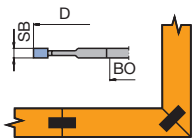
Part-no.	BEZ	QAL	VE	ID
			PCS	
1	Turnblade knife	HW	10	005114 ●
2	Turnblade spur VS4	HW	10	005130 ●

Spare parts:

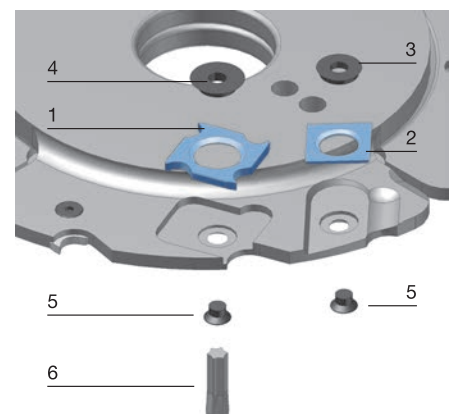
Part-no.	BEZ	ABM	ID
		mm	
3	Special nut for VS	M9.9/1.60	005654 ●
4	Special nut for WPL	M11.9/2.20	005653 ●
5	Countersink screw, Torx® 9	M4x0.5x3.2	006057 ●
6	Torx® key	Torx® 9	005463 ●



Lamello - T-joint



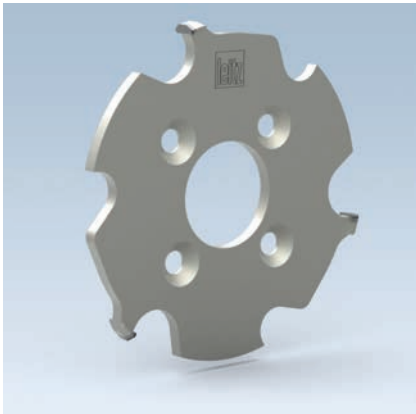
Lamello - Longitudinal/corner joint



4. Manual feed

4.1 Grooving

4.1.1 Grooving cutters



Grooving cutter Lamello® Clamex® P-System®

Application:

For grooving lamello joints and for cutting grooves for corner joints and longitudinal joints.

Machine:

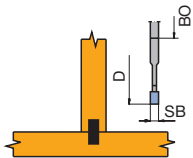
Portable power tools - grooving cutters (e.g. Lamello etc.) and for use on CNC machining centres.

Workpiece material:

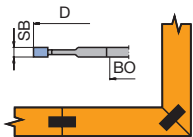
Solid wood; uncoated, coated and veneered wood derived materials.

Technical information:

Tool body design with round, closed shape.



Lamello - T-joint



Lamello - Longitudinal/corner joint

DP tipped for Clamex P - connector

WK 100 3 DP, WK 103 2 DP

D	SB	BO	NLA	Z	QAL	n	ZF	DRI	ID
mm	mm	mm	mm			min ⁻¹			
100.4	7	16	4/5,5/28	3	DP	7800 - 13300	TR	RH	192297 ●
100.4	7	22	4/4,3/36	3	DP	7800 - 13300	TR	RH	192294 ●
100.4	7	30	4/6,6/48	3	DP	7800 - 13300	TR	LH	192295 ●
100.4	7	30	4/6,6/48	3	DP	7800 - 13300	TR	RH	090018 ●
100.4	7	30	4/6,6/48	6	DP	7800 - 13300	TR	RH	192298 ●
100.4	7	30	4/6,9/52	6	DP	7800 - 13300	TR	LH,	192311 ●
			4/6,9/48					RH	
100.4	7	40	4/5,5/52	3	DP	7800 - 13300	TR	RH	192296 ●

Suitable arbors see section Clamping Systems. Drills for access bore see section Drilling.

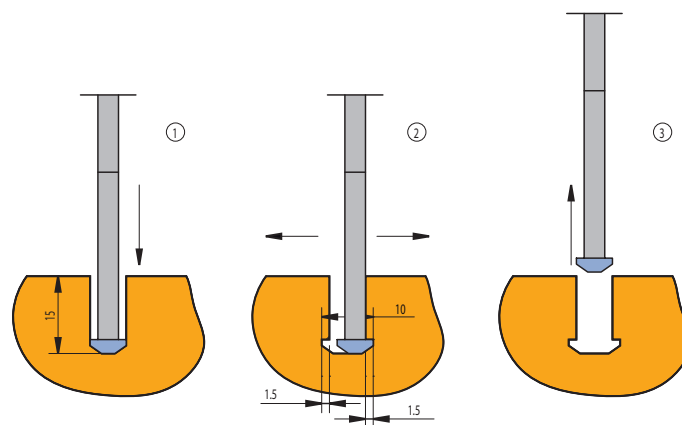
Arbors with shank to mount the grooving cutter

S16x50,d30,l4,L85	ID 041429
S25x60,d=30,l=4,L=102	ID 041367
S20x50,d=30,l=4,L=102	ID 041368
S25x60,d=30,l=4,L=127	ID 042980

Drill for access bore hole

D = 6 mm ID **034116**

Shank cutter for CNC: ID **039161**



1. 15 mm plunge.
2. 1.5 mm left and right side recesses.
3. Leaving from the middle position.

4. Manual feed

4.1 Grooving

4.1.1 Grooving cutters



Grooving cutterset, adjustable with spacers

Application:

For cutting different groove widths.

Machine:

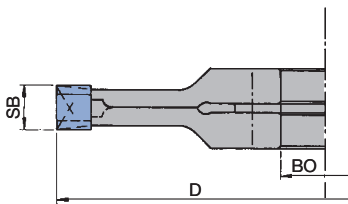
Spindle moulders, moulders, edgbanding machines and stationary routers with/without CNC control, double-end tenoners.

Workpiece material:

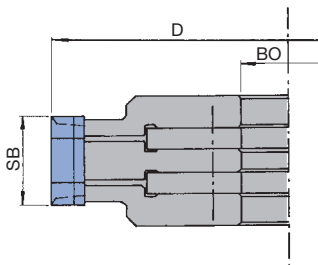
Solid wood along grain and across grain; uncoated, coated and veneered wood derived materials in top layer and middle layer.

Technical information:

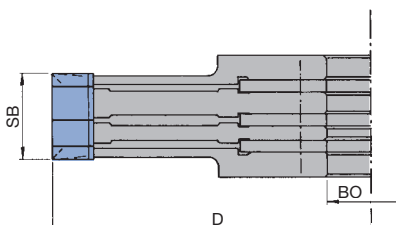
Adjustment of cutting widths with spacers (adjustment 0.10 mm).



Grooving cutterset, 2 part design



Grooving cutterset with 1 additional extension part



Grooving cutterset with 2 additional extension parts

2 part with spurs; SB 1.8 - 23.5 mm

SF 501 1 01

D	SB	BO	BO _{max}	Z	V	NT	n	ID
mm	mm	mm	mm			mm	min ⁻¹	
140	1.8 - 3.4	30	35	4	4	20	5500 - 9500	020545 ●
140	1.8 - 3.4	35	35	4	4	20	5500 - 9500	020546 □
140	1.8 - 3.4	40	45	4	4	20	5500 - 9500	020547 □
140	2.2 - 4.0	30	35	4	4	20	5500 - 9500	020549 ●
140	2.2 - 4.0	35	35	4	4	20	5500 - 9500	020550 □
140	2.2 - 4.0	40	40	4	4	20	5500 - 9500	020551 □
140	2.2 - 4.0	50	50	4	4	20	5500 - 9500	020552 □
150	4.0 - 7.5	30	35	4	4	37.5	5200 - 8900	020573 ●
150	4.0 - 7.5	40	45	4	4	30	5200 - 8900	020575 □
150	4.0 - 7.5	50	50	4	4	27.5	5200 - 8900	020576 □
150	7.5 - 14.5	30	35	4	4	37.5	5200 - 8900	020580 ●
150	7.5 - 14.5	35	45	4	4	30	5200 - 8900	020581 □
150	7.5 - 14.5	40	45	4	4	30	5200 - 8900	020582 □
150	7.5 - 14.5	50	50	4	4	27.5	5200 - 8900	020583 □
180	6.0 - 11.5	30	35	4	4	45	4300 - 7400	020584 ●
180	12.0 - 23.5	30	35	4	4	45	4300 - 7400	020585 ●
180	12.0 - 23.5	40	45	4	4	45	4300 - 7400	020586 □

2 part; SB 5.2 - 14 mm

SF 501 1 03

D	SB	BO	BO _{max}	NLA	Z	V	NT	n	ID
mm	mm	mm	mm	mm			mm	min ⁻¹	
250	5.2 - 10	30	35	2/10/60	8	8	40	3500 - 6000	020693 ●
250	5.2 - 10	35	60		8	8	40	3100 - 5300	020694 □
250	7.2 - 14	35	60		8	8	40	3100 - 5300	020697

3 / 4 part; SB 4.0 - 30 mm

SF 501 1, SF 501 1 02

D	SB	BO	BO _{max}	NLA	Z	V	NT	n	ID
mm	mm	mm	mm	mm			mm	min ⁻¹	
150	7.5 - 28	50	50		4+4	4	22	5200 - 8900	020661
160	4 - 13	30			4	4	35	5000 - 10700	020667 ●
220	5 - 30	30	35	2/10/60	4+4	4	55	3500 - 6000	020662 ●

4. Manual feed

4.1 Grooving

4.1.1 Grooving cutters



Grooving cutterset, adjustable with spacers

Application:

For cutting different groove widths. 2 part design.

Machine:

Spindle moulders, moulders, edgbanding machines and double-end tenoners.

Workpiece material:

Uncoated, coated and veneered wood derived materials.

Technical information:

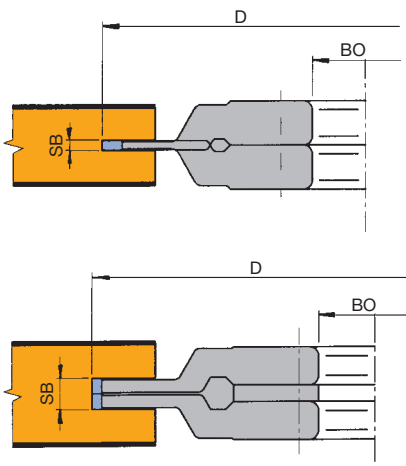
Adjustment of cutting width with spacers (adjustment 0.10 mm).

Diamaster PRO design. Tip height 3.0 mm.

2 part; Diamaster PRO; SB 5.0 - 9.5 mm

SF 501 1 DP

D	SB	BO	BO _{max}	NT	Z	n	ID
mm	mm	mm	mm	mm		min ⁻¹	
180	5.0 - 9.5	30	50	25	4/4	4300 - 7400	090301 ●



Application examples of grooving in the middle layer

4. Manual feed

4.1 Grooving

4.1.2 Grooving cutterheads



Grooving cutterhead set adjustable with spacers

Application:

For cutting different groove widths.

Machine:

Spindle moulders, moulders, edgbanding machines and stationary routers with/without CNC control, double-end tenoners.

Workpiece material:

Solid wood along grain and across grain; uncoated, coated and veneered wood derived materials in top layer and middle layer.

Technical information:

Adjustment of cutting widths with spacers (adjustment 0.10 mm).



2 part; SB 4.0 - 7.5 mm

SW 501 1 01

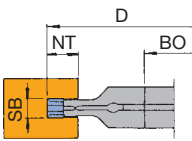
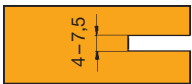
D	SB	BO	BO _{max}	NT	Z	n	ID
mm	mm	mm	mm	mm		min ⁻¹	
150	4.0 - 7.5	30	50	20	2/2	5200 - 10100	128100 ●
180	4.0 - 7.5	30	50	35	2/2	4300 - 8400	128101 ●

Extension parts SB 3.8 mm

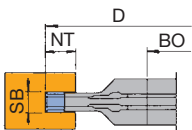
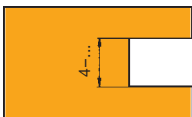
WW 200 1 NN

D	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm		min ⁻¹	
150	3.8	30	50	2	5200 - 10100	128130
180	3.8	30	50	2	4300 - 8400	128131

Each extension part increases the cutting widths by 3.6 mm.



Grooving cutterhead set, 2 part design



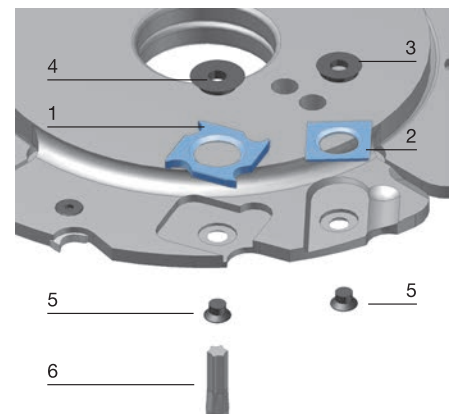
Grooving cutterhead set, multi part design

Spare knives:

Part-no.	BEZ	ABM	QAL	VE	ID
		mm		PCS	
1	Turnblade knife	18x18x1.95	HW	10	005114 ●
2	Turnblade spur VS4	14x14x1.2	HW	10	005130 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
3	Special nut for VS	M9.9/1.60	005654 ●
4	Special nut for WPL	M11.9/2.20	005653 ●
5	Countersink screw, Torx® 9	M4x0.5x3.2	006057 ●
6	Torx® key	Torx® 9	005463 ●
	Setting gauge for knives	0.3/0.8	005374 ●



4. Manual feed

4.1 Grooving

4.1.2 Grooving cutterheads



Grooving cutterhead set adjustable with spacers

Application:

For cutting different groove widths.

Machine:

Spindle moulders, moulders, edgbanding machines and stationary routers with/without CNC control, double-end tenoners.

Workpiece material:

Solid wood along grain and across grain; uncoated, coated and veneered wood derived materials.

Technical information:

Adjustment of cutting widths with spacers (adj. range 0.1 mm). Multi part design.



Multi part; SB 8.0 - 30.0 mm

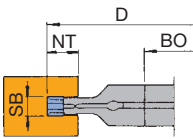
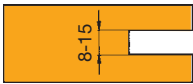
SW 501 1, SW 501 1 01

D	SB	BO	NT	Z	n	ID
mm	mm	mm	mm		min ⁻¹	
150	8.0 - 15.4	30	20	2/2	5200 - 10100	128104 ●
180	8.0 - 15.4	30	35	2/2	4300 - 8400	128105 ●
200	8.0 - 15.4	30	45	2/2	3900 - 7600	128106 ●
220	8.0 - 30.0	30	58	2/2	3500 - 6000	024663 ●

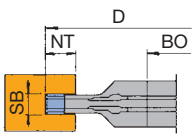
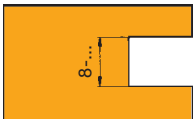
Extension part

SW 501 1, WW 200 1 NN

D	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm		min ⁻¹	
150	7.7	30	50	2	5200 - 10100	128134
180	7.7	30	50	2	4300 - 8400	128135 ●
200	7.7	30	50	2	3900 - 7600	128136 ●
220	15	30	45	2	3500 - 6000	024666 ●



Grooving cutterhead set, 2 part design



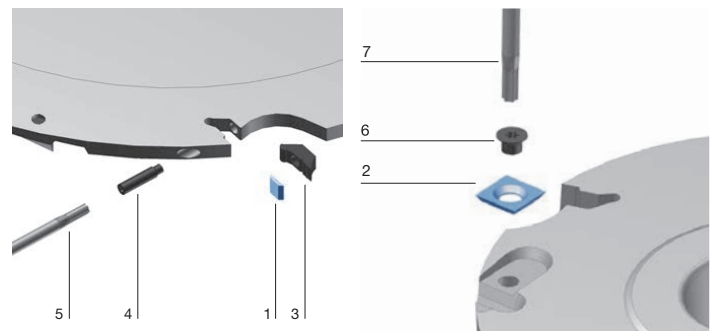
Grooving cutterhead set, multi part design

Spare knives:

Part-no.	BEZ	ABM	QAL	VE	ID
		mm		PCS	
1	Turnblade knife	7.7x8x1.5	HW-05	10	005053 ●
1	Turnblade knife	14.7x8x1.5	HW-05	10	005056 ●
2	Turnblade spur VS1	14x14x2	HW-F	10	005099 ●
2	Turnblade spur VS2	19x19x2	HW-F	10	005115 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
3	Clamping wedge	7x18.75x8.27	009763 ●
3	Clamping wedge	13x18.75x8.27	009670 ●
4	Allen screw with shank, Torx® 15	M5x20	007380 ●
4	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
5	Torx® key	Torx® 15	117507 ●
5	Torx® key	Torx® 25	117504 ●
6	Countersink screw, Torx® 20	M6x0.5x4.9	006243 ●
7	Torx® key	Torx® 20	117503 ●
	Setting gauge for knives	0.3/0.8	005374 ●



4. Manual feed

4.1 Grooving

4.1.2 Grooving cutterheads



Grooving cutterhead - steplessly adjustable

Application:

For cutting different groove widths.

Machine:

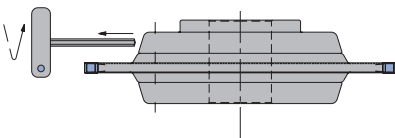
Spindle moulders, moulders, edgbanding machines and double-end tenoners.

Workpiece material:

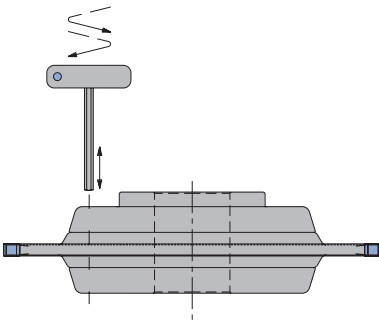
Solid wood; uncoated, coated and veneered wood derived materials.

Technical information:

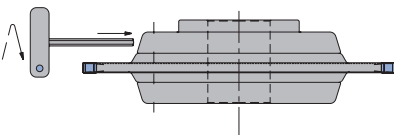
Stepless adjustment of cutting width possible when installed on machine.
2 part design.



Opening the clamping system



Adjustment: SB larger „+“,
SB smaller „-“



Closing the clamping system

After the tool is mounted on the spindle it can be adjusted and clamped using a hexagon key

Mounted on sleeve; SB 4.0 - 15.0 mm

SW 502 1 01

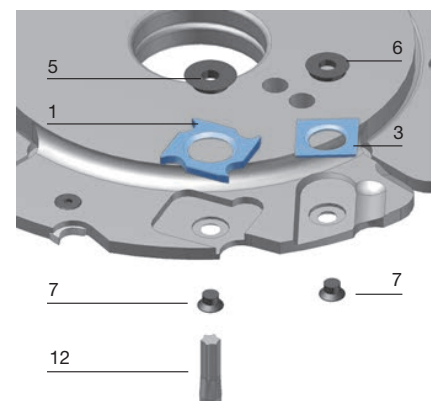
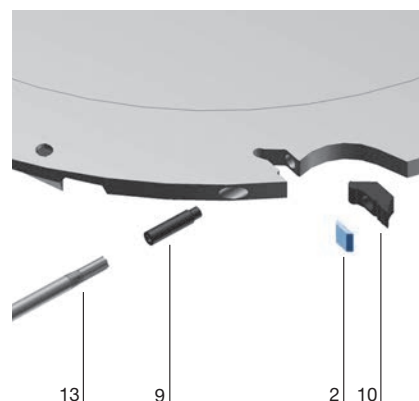
D	SB	BO	BO _{max}	NT	Z	n	ID
mm	mm	mm	mm	mm		min ⁻¹	
180	4.0 - 7.5	30	35	40	2/2	4300 - 8400	128154 ●
180	8.0 - 15.0	30	35	40	2/2	4300 - 8400	128155 ●
180	4.0 - 7.8	40	50	35	2/2	4300 - 8400	128156 ●
180	8.0 - 15.0	40	50	35	2/2	4300 - 8400	128157 ●

Spare knives:

Part-no.	BEZ	ABM	QAL	VE	ID
		mm		PCS	
1	Turnblade knife	18x18x1.95	HW	10	005114 ●
2	Turnblade knife	7.7x8x1.5	HW-05	10	005053 ●
3	Turnblade spur VS4	14x14x1.2	HW	10	005130 ●
4	Turnblade spur VS2	19x19x2	HW-F	10	005115 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
5	Special nut for WPL	M11.9/2.20	005653 ●
6	Special nut for VS	M9.9/1.60	005654 ●
7	Countersink screw, Torx® 9	M4x0.5x3.2	006057 ●
8	Countersink screw, Torx® 20	M6x0.5x4.9	006243 ●
9	Allen screw with shank, Torx® 15	M5x20	007380 ●
10	Clamping wedge	7x18.75x8.27	009763 ●
11	Torx® key	Torx® 20	117503 ●
12	Torx® key	Torx® 9	005463 ●
13	Torx® key	Torx® 15	117507 ●
	Setting gauge for knives	0.3/0.8	005374 ●



4. Manual feed

4.1 Grooving 4.1.3 Profile cutter



Profile cutter - pitch pockets

Application:

Optimized for milling pitch pockets.

Machine:

Portable machine Lamello Standard and Lamello Top.

Workpiece material:

Softwood and hardwood.

Technical information:

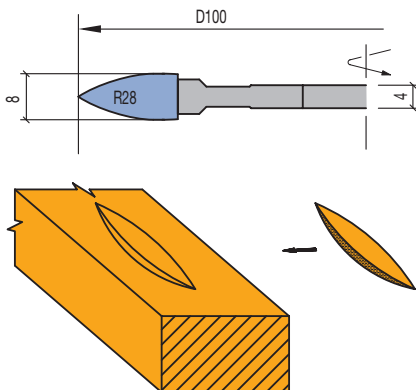
Two reciprocal cutting knives.

Radii profile

WF 502 1

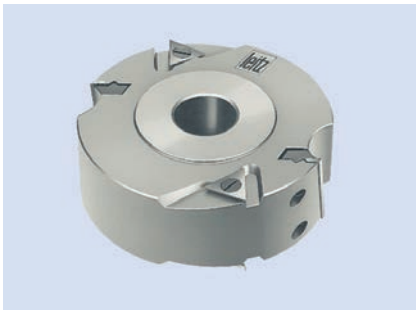
D	SB	BO	BEM	Z	ID
mm	mm	mm			
100	8	22	Size 1-3	1+1	020126 ●

RPM: n = 7700 - 13000 min⁻¹



Type of operation	Rebate tools cut on the periphery and the side. The rebated edge is produced by spurs.
Workpiece material	Softwood and hardwood, glulam, chipboard and fibre materials, uncoated, veneered, plastic and paper coated. Plastics and foams.
Machines	Spindle moulders. Edgebanding machines; double-end tenoners. Four-sided moulders.
Application	Jointing and rebating against feed: all panel materials with or without coating. Jointing and rebating with feed: machining solid wood with heavily twisted fibres and risk of tear outs. Only for machines with mechanical feed. Note: Difficult chip removal. Jump cutting: jointing with or against feed across grain to avoid tear outs at the front and rear workpiece edges after edgebanding or lipping.

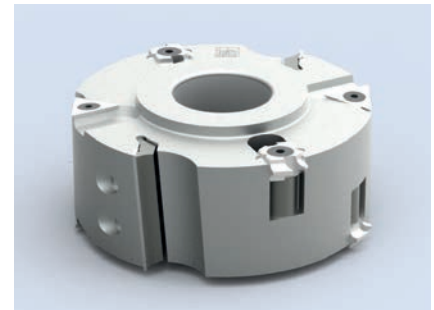
Tool design



Turnblade rebating cutterhead with alternate shear angle:
Reduced feed and cutting forces achieve clean and tear out free rebating edges. Suitable for all coated and uncoated panel materials as well as solid wood.

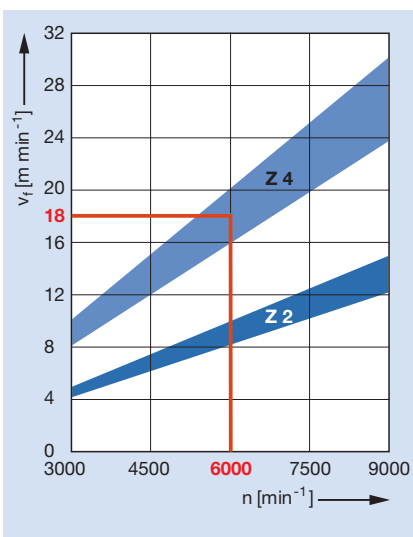


2 part tools with alternate shear angle:
Can also be used as adjustable grooving tools.

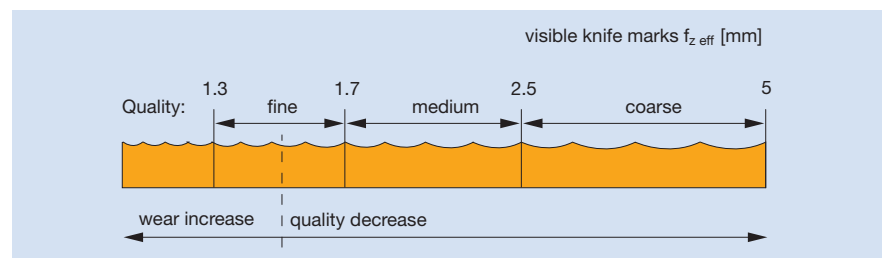


Turnblade rebating cutterhead with additional knives (edge knives):
Multi-purpose tool for jointing, rebating and rounding/bevelling.

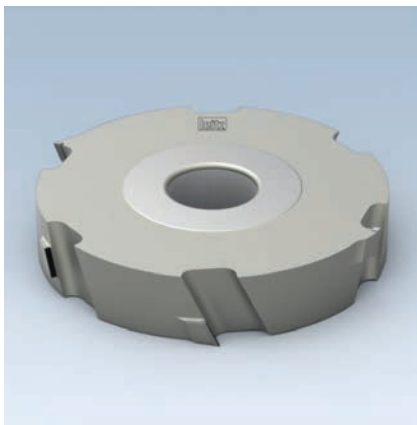
Feed speed depending on RPM and no. of teeth



Relation between surface quality and length of knife marks $f_{z \text{ eff}}$



With multi blade tools, only the marks of one knife show on the surface (one knife finish).
Z 2 and Z 4 tools produce the same surface quality with the same machine setting.
High numbers of teeth are required for a high hogging performance.



Jointing and rebating cutter Diamaster PRO

Application:

Optimized for rebating and jointing with and against feed (e.g. jump cutting). Manual feed only against feed.

Machine:

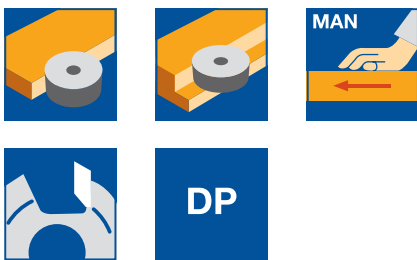
Spindle moulders and edgebanding machines, double-end tenoners.

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (MDF, HDF etc.) uncoated, laminated veneer lumber (plywood etc.), plastomers, solid surface material (Corian, Varicor etc.) fibre reinforced plastics (GFRP, CFRP etc.).

Technical information:

Composite tool with alternate shear angle and main blades with pre-cutting function. Long performance times through polished cutting area. Diamaster PRO design for two resharpening cycles with standard wear. Double sided rebating possible. For larger cutting widths a stacking of various tools is possible. 3.5 mm tipping height. 1.5 mm resharpening area.

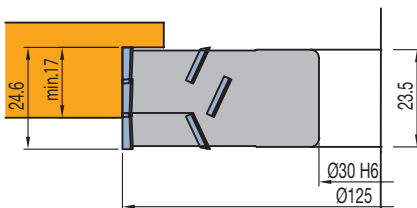


Diamaster PRO

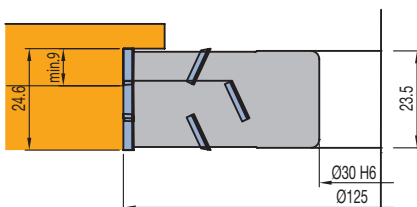
WF 400 1 DP

D	SB	BO	Z	ID
mm	mm	mm		
125	24.6	30	2/2/2	090853 ●
125	24.6	30	2/2/2	090872 ●

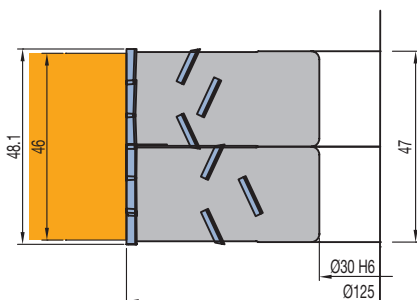
RPM: n = 6200 - 13600 min⁻¹



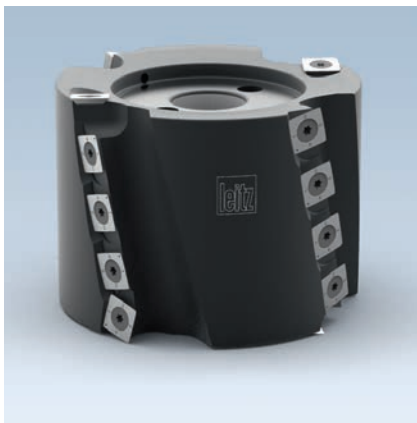
Jointing cutter ID **090853**
Rebate height min. 17 mm



Jointing cutter ID **090872**
Rebating height min. 9 mm



Set existing of ID **090853** and ID **090872**



Copy shaping cutterhead - HeliCut 15

Application:

For pre-cutting, jointing and copy shaping of large cutting depths. For copy shaping of curved workpieces with template, ball bearing and guide ring.

Machine:

Spindle moulders and profile milling machines, double-end tenoner, stationary routers with and without CNC control.

Workpiece material:

Softwood and hardwood, glulam, chipboard and fibre materials (MDF etc.) uncoated, plastic coated, veneered etc.

Technical information:

Noise reduced design with staggered edges and very deep gullets for improved chip removal. Tungsten carbide cutting edges with Microfinish for perfect surface quality. Rebate tools cut on the periphery and the side.



Cutterhead for copy shaping, grooving and rebating

WW 230 1 07

D	SB	BO	Z	V	QAL	AM	ID
mm	mm	mm				PCS	
60	81.5	20	2	2	HW-MF	16	132600 ●
80	81.5	30	2	2	HW-MF	16	132608 ●
125	93.7	30	2	2+2	HW-MF	20	132604 ●
125	116.6	30	2	2+2	HW-MF	24	132605 ●

RPM: D 60 mm: $n_{max} = 20000 \text{ min}^{-1}$

D 80 mm: $n_{max} = 18000 \text{ min}^{-1}$

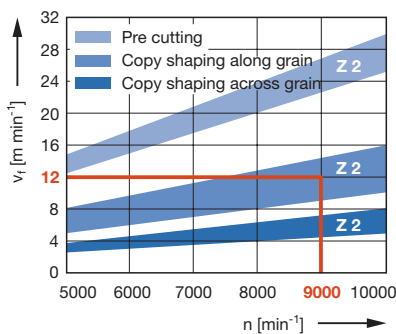
D 125 mm: $n_{max} = 12000 \text{ min}^{-1}$

Spare knives:

BEZ	ABM	QAL	BEM	VE	ID
	mm			PCS	
Turnblade knife	15x15x2,5	HW-MF	HeliCut 15	10	009543 ●
Turnblade knife	15x15x2,5	HW	HeliCut 15	10	009549 ●

Spare parts:

BEZ	ABM	for D	ID
	mm	mm	
Countersink screw, Torx® 20	M5x12	60	007898 ●
Countersink screw, Torx® 20	M5x14.2-8.8	80	007394 ●
Countersink screw, Torx® 20	M5x18	125	114030 ●
Torx® key	Torx® 20		006091 ●



Feed speed v_f depending on the number of teeth Z and speed n for solid wood (pre trimming and copy shaping)

Example for tool diameter 125 mm:

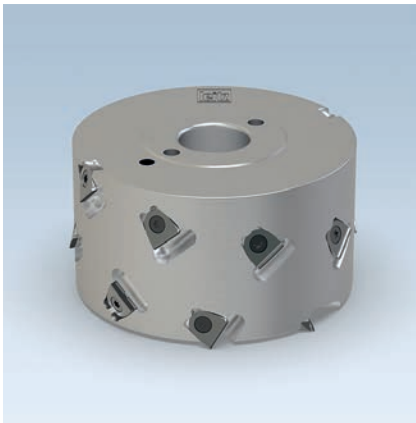
$n = 9000 \text{ min}^{-1}$

$Z = 2$

Application: copy shaping along the grain

$v_f = 12 \text{ m min}^{-1}$





Jointing and rebating cutterhead WhisperCut EdgeExpert

Application:

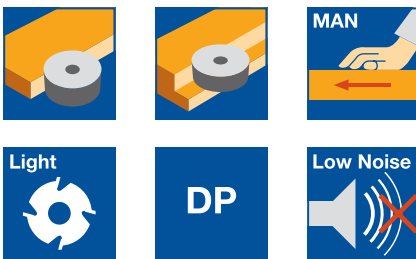
Optimized for noise reduced rebating and jointing particularly for sensitive decorative papers, foil coatings and veneers.

Machine:

Spindle moulders and edgebanding machines.

Workpiece material:

Chip and fibre boards (MDF etc.) raw, veneered, painted and coated; especially for plastic, paper, HPL and anti-fingerprint coatings. Also suitable for surfaces in mat, high gloss or with relief structures.



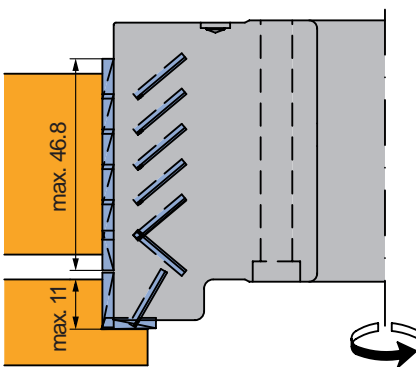
Technical information:

DP tipped cutterhead with alternate shear angle for tear-free jointing edges and cutting surface. With rebating knife for tear-free rebating edges (up to 11 mm rebating width). Increased shear angle for excellent edge quality on sensitive decorative papers, foil coatings and veneers. Noise reduced design with up to 5 dB(A) noise reduction. Significant weight reduction by using an aluminium alloy tool body. Carrier body for multiple use with exchangeable knives. 0.6 mm resharpening area.

Diamaster WhisperCut EdgeExpert - LowNoise, aluminium alloy tool body

WM 430 2 01

D	SB	BO	n_{max}	Z	DRI	ID
mm	mm	mm	min^{-1}			
125	59.8	30	13,700	2/2	RH	192309 ●



Diamaster WhisperCut EdgeExpert jointing and rebating cutterhead



Rebating cutterhead WhisperCut PRO

Application:

Optimized for noise reduced rebating of abrasive materials.

Machine:

Spindle moulders.

Workpiece material:

Abrasive materials, chip and fibre board (MDF etc.) uncoated, veneered, plastic and paper coated, fibre reinforced plastics (GFRP, CFRP etc.).

Technical information:

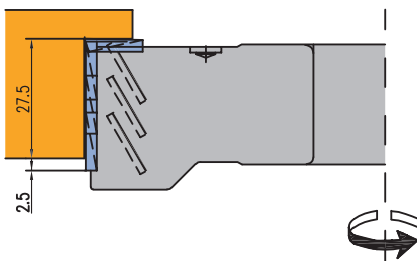
DP tipped rebating cutterhead for tear-free edges on sensitive decorative papers, foil coatings and veneers. Noise reduced design with up to 5 dB(A) noise reduction. Significant weight reduction by using an aluminium alloy tool body. Carrier body for multiple use with exchangeable knives. 0.6 mm sharpening area.



Diamaster WhisperCut PRO - LowNoise, aluminium alloy tool body

WM 430 1 01

D mm	SB mm	BO mm	n_{max} min^{-1}	Z	V	DRI	ID
125	27.5	30	13,700	2	2	RH	192355 ●



4. Manual feed

4.2 Jointing, rebating and bevelling

4.2.3 Rebating cutterheads



Rebating cutterhead

Application:

For jointing, rebating and grooving.

Machine:

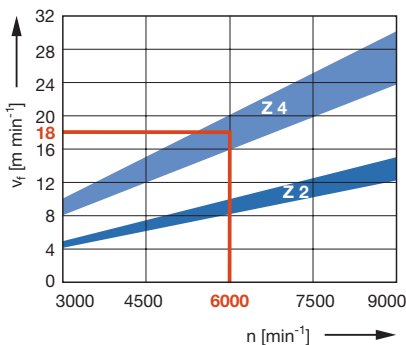
Spindle moulders (running against feed), double-end tenoners, edgebanding machines etc. (running with feed or against feed e.g. jump cutting). Stationary routers with/without CNC control.

Workpiece material:

Softwood and hardwood, glulam, plastics etc.

Technical information:

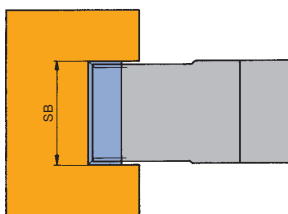
Cutterhead with alternate shear angle and triangular spurs.



Feed speed v_f depending on the number of teeth Z and speed n for solid wood along grain

Example:

$n = 6000 \text{ min}^{-1}$, $Z 4$: $v_f = 18 \text{ m min}^{-1}$



Tool set



Rebating from below

Rebating from above



Grooving

Turnblade rebating cutterhead

WW 420 1, WW 420 1 02

D	SB	BO	BO _{max}	Z	V	n _{max}	ID
mm	mm	mm	mm			min ⁻¹	
85	51	30	40	2	4	20200	024555
100	51	30	40	2	4	17100	024568
125	41	30	40	2	4	13700	024546 ●
125	51	30	50	2	4	13800	024569 ●
125	51	40	50	2	4	13800	024570 □
125	51	50	50	2	4	13800	024571 □
125	81	30	50	2	4	13700	024723 ●
150	51	30	40	2	4	11400	024548 ●
150	61	30	50	4	4	11400	024543 ●

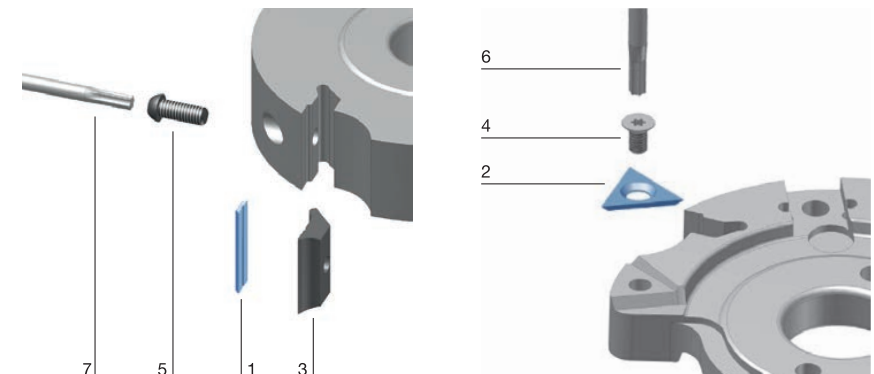
Spare knives:

Part-no.	BEZ	ABM	QAL	VE	ID
		mm		PCS	
1	Turnblade knife	40x8x1.5	HW-30F	10	005074 ●
1	Turnblade knife	50x8x1.5	HW-30F	10	005075 ●
1	Turnblade knife	60x8x1.5	HW-30F	10	005076 ●
1	Turnblade knife	80x8x1.5	HW-30F	10	601613 ●
2	Turnblade spur VS2	19x19x2	HW-F	10	005115 ●

Alternative turnblade knife qualities see section Knives and Spare Parts

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
3	Clamping wedge	38x18.75x8.27	009675 ●
3	Clamping wedge	48x18.75x8.27	009677 ●
3	Clamping wedge	58x18.75x8.27	009678 ●
3	Clamping wedge	78x18.75x8.27	009680 ●
4	Countersink screw, Torx® 20	M5x8.5	007808 ●
5	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
6	Torx® key	Torx® 20	117503 ●
7	Torx® key	Torx® 25	117504 ●
	Setting gauge for knives	0.3/0.8	005374 ●



● available ex stock

□ available at short notice

Instruction manual visit www.leitz.org



Rebating cutterset, 2 part design

Application:

For jointing, rebating and grooving.

Machine:

Spindle moulders (running against feed), double-end tenoners and edgbanding machines etc. (running with feed or against feed).

Workpiece material:

Softwood and hardwood, glulam, plastics etc.

Technical information:

2 part with spacers adjustable tool set with alternate shear angle and triangular spurs.



SB 26.4 - 98 mm

SW 531 1 01

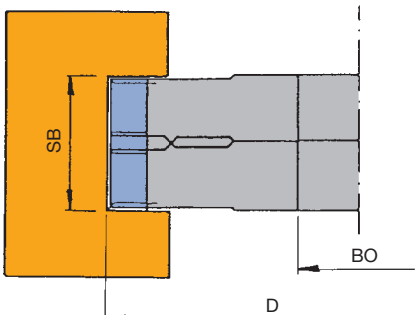
D	SB	VSB	BO	BO _{max}	Z	V	n	ID
mm	mm		mm	mm			min ⁻¹	
160	20	26.4 - 38	30	45	4	4	4900 - 9500	024456 ●
160	20	26.4 - 38	50	50	4	4	4900 - 9500	024458 □
160	50	56.4 - 98	40	45	4	4	4900 - 9500	024455

Spare knives:

Part-no.	BEZ	ABM	QAL	VE	ID
		mm		PCS	
1	Turnblade knife	19.7x8x1.5	HW-30F	10	005071 ●
1	Turnblade knife	50x8x1.5	HW-30F	10	005075 ●
1	Turnblade knife	30x8x1.5	HW-30F	10	005072 ●
2	Turnblade spur VS2	19x19x2	HW-F	10	005115 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
3	Clamping wedge	18x18.75x8.27	009671 ●
3	Clamping wedge	48x18.75x8.27	009677 ●
3	Clamping wedge	28x18.75x8.27	009673 ●
4	Countersink screw, Torx® 20	M6x0.5x4.9	006243 ●
5	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
6	Torx® key	Torx® 20	117503 ●
7	Torx® key	Torx® 25	117504 ●
	Setting gauge for knives	0.3/0.8	005374 ●



Tool set



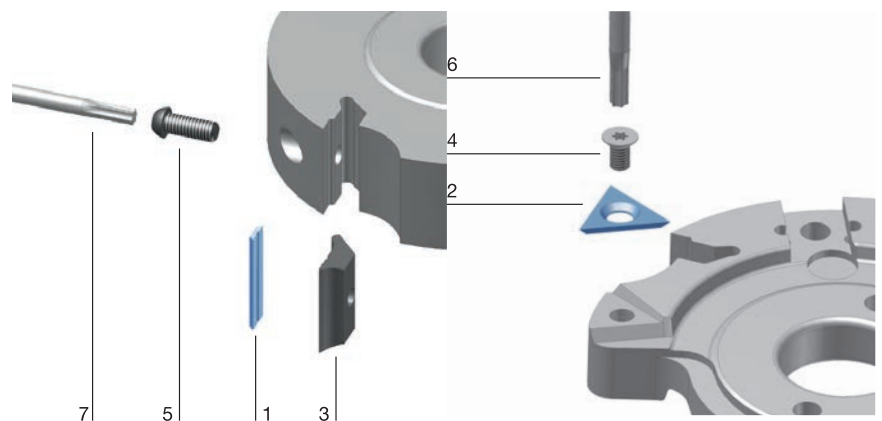
Rebating from below



Rebating from above



Grooving





Jointing and rebating cutterhead

Application:

For rebating and jointing, rounding and profiling at the same time.

Machine:

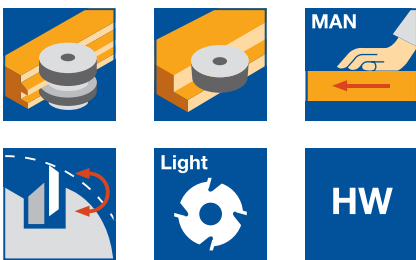
Spindle moulders and moulders, double-end tenoners. Stationary routers with/without CNC control.

Workpiece material:

Softwood and hardwood, glulam, plastics etc.

Technical information:

Cutterhead with turnblade knives. With alternate shear angle, triangle spurs and seating to adapt edging knives.



Cutterhead with seatings for edging knives

WW 420 1 01

D	SB	BO	Z	KM	n	QAL	ID
mm	mm	mm		PCS	min ⁻¹		
125	51	30	2	4	6200 - 10600	HW	029073 ●
125	101	30	2	4	6200 - 10600	HW	029074 ●
170	51	30	2	4	4500 - 7800	HW	029075 ●

Spare knives:

Part-no.	BEZ	ABM	R	FAW	QAL	VE	ID
		mm	mm	°		PCS	
1	Turnblade knife	50x8x1.5			HW-30F	10	005075 ●
2	Turnblade spur VS2	19x19x2			HW-F	10	005115 ●
3	Edging knife 45°	KM 21/0		45°	HW-F		008292 ●
3	Edging knife R1.5	KM 22/4	1.5		HW-F		008295 ●
3	Edging knife R2	KM 22/3	2		HW-F		008309 ●
3	Edging knife R3	KM 22/0	3		HW-F		008293 ●
3	Edging knife R5	KM 24/0	5		HW-F		008305 ●
3	Edging knife R5	KM 24/1	5		HW-F		008306 ●

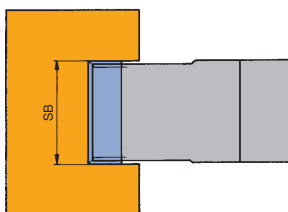
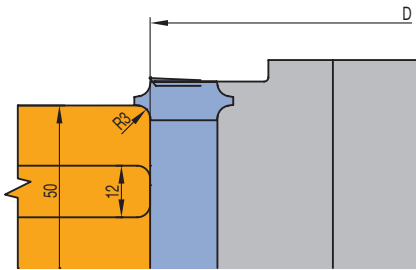
Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
5	Clamping wedge	48x18.75x8.27	009677 ●
6	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
9	Countersink screw, Torx® 20	M6x30	006089 ●
	Torx® key	Torx® 20	117503 ●
	Torx® key	Torx® 25	117504 ●
	Setting gauge for knives	1.0	005350 ●
	Spacer	13/6.1x0.1	028034 ●
	Spacer	13/6.1x0.3	028035 ●
	Spacer	13/6.1x0.5	028036 ●
	Spacer	13/6.1x1	028037 ●
	Spacer	13/6.1x3	028040 ●
	Spacer	13/6.1x5	028042 ●

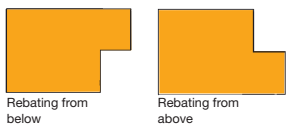
Edging knife set: 2 edging knives each + countersunk screw + set of spacers

TE 540 0

BEZ	FAW	R	QAL	ID
	°	mm		
Edge cutterset	45°		HW	009091 ●
Edge cutterset		1.5	HW	009092 ●
Edge cutterset		3	HW	009093 ●
Edge cutterset		5	HW	009097 ●
Edge cutterset		5	HW	009098 ●



Tool set

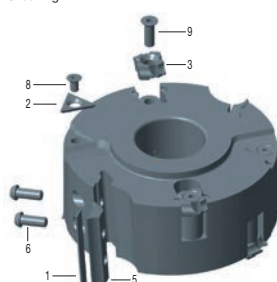


Rebating from below

Rebating from above



Grooving





Rebate cutterset UniCut

Application:

For rebating, jointing, grooving, bevelling and rounding.

Machine:

Spindle moulders, moulders etc.

Workpiece material:

Softwood and hardwood, glulam, plastics etc.

Technical information:

2 part with spacers adjustable tool set for multi-purpose application.

**With seatings for edging knives and turnblade grooving knives; SB 30 - 60 mm
AW 330 1 01**

Tool no.	D mm	SB mm	BO mm	BO _{max} mm	Z	V	n min ⁻¹	ID
1 + 2	160	30 - 60	30	50	2/2	2/2	4900 - 8300	024056 ●
1 + 2	160	30 - 60	40		2/2	2/2	4900 - 8300	024062 □



Tool complete with edge rounding knife R 2.

Additionally:

2 grooving knives SB 4 mm with countersunk screws

1 set of spacers D 70 mm for adjusting the tool parts

1 set of spacers D 13.70 mm to adjust the edging/grooving knives

1 setting gauge 0.3/0.8 mm

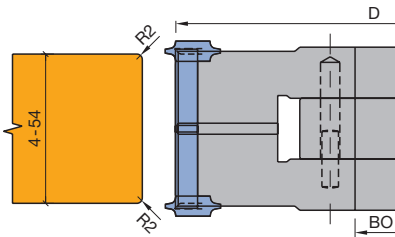
Tool set in wooden box, BO 30.

Spare knives:

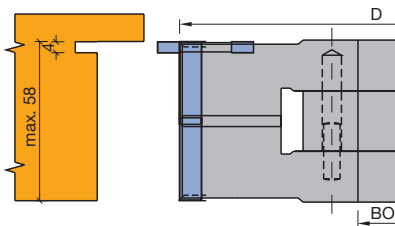
Part-no.	BEZ	ABM mm	QAL	VE PCS	ID
1	Turnblade knife	30x8x1.5	HW-30F	10	005072 ●
2	Turnblade spur VS2	19x19x2	HW-F	10	005115 ●
3	Edging knife 45°	KM 21/0	HW-F		008292 ●
3	Edging knife R2	KM 22/3	HW-F		008309 ●
4	Turnblade grooving knife NB4	36x20x4	HW-F		008323 ●

Spare parts:

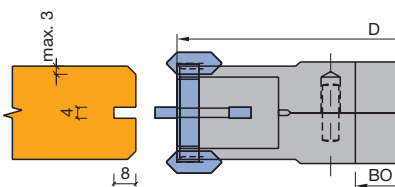
Part-no.	BEZ	ABM mm	ID
5	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
6	Countersink screw, Torx® 20	M6x30	006089 ●
7	Countersink screw, Torx® 20	M6x0.5x4.9	006243 ●
8	Clamping wedge	28x18.75x8.27	009673 ●
9	Torx® key	Torx® 20	117503 ●
10	Torx® key	Torx® 25	117504 ●
	Setting gauge for knives	0.3/0.8	005374 ●



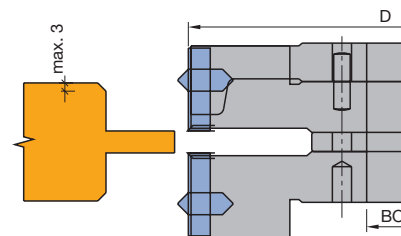
Jointing, rounding



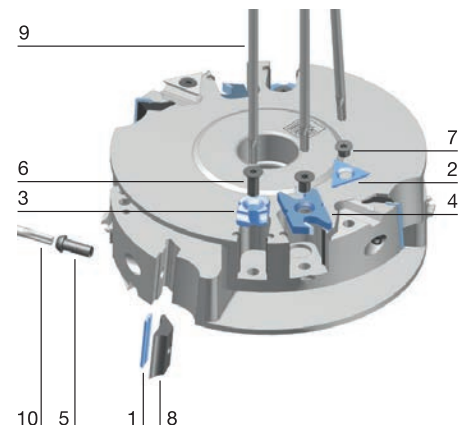
Rebating and seal groove



Groove and chamfers



Tongue profile





Bevel cutterhead turnblade, swivelling

Application:

For jointing and bevelling with adjustable bevel angle.

Machine:

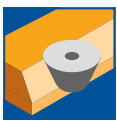
Spindle moulders, moulders, edgbanding machines, double-end tenoners and special machines.

Workpiece material:

Softwood and hardwood, laminated veneer lumber, plastomers, limited suitable for MDF and chipboard (uncoated or coated).

Technical information:

Knife holder swivelling adjustable from 0 - 90°. Quick and easy angle adjustment of common angles (15°, 30°, 45°, 60°) by additional locking positions in 15° steps. Free of marks cutting result due to 1-part, continuous cutting edge. Economical due to changeable tungsten carbide turnblades with two cutting edges. Optimized gullet design for improved chip removal.



Turnblade, adjustable bevel angle

WW 430 1 05

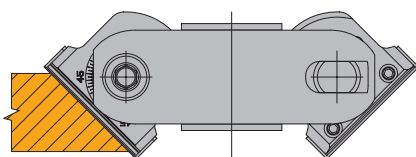
D	SB	BO	BO _{max}	Swivel range	n	Z	ID
mm	mm	mm	mm	°	min ⁻¹		
150	50	30	40	0 - 90	5000 - 9000	2	024169 ●
150	50	31.75	40	0 - 90	5000 - 9000	2	024170 □
150	50	40	40	0 - 90	5000 - 9000	2	024171 □
170	50	50	60	0 - 90	5000 - 9000	2	024172 □

Spare knives:

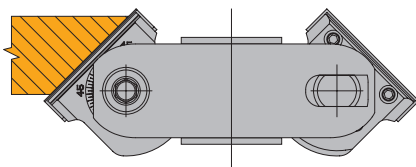
Part-no.	BEZ	ABM	QAL	VE	ID
		mm		PCS	
1	Turnblade knife	50x12x1,5	HW-05F	10	005086 ●

Spare parts:

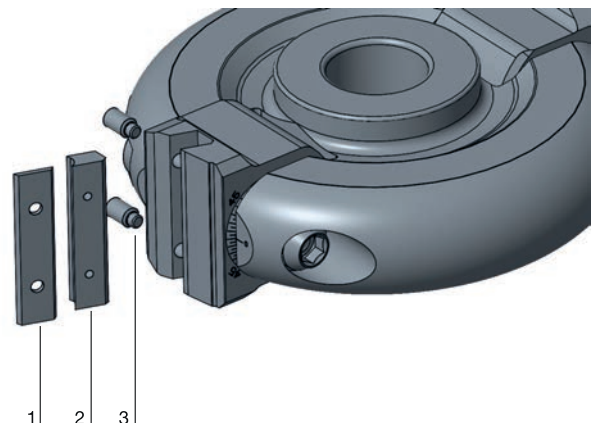
Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge with pin	48x10,88x6	009766 ●
3	Allen screw	M6x12	006035
	Allen key	SW 3	005433 ●
	Allen key	SW 8, L 100	005437 ●
	Setting gauge for knives	43x12x6	005350 ●



Bevelling from above



Bevelling from below





Bevel cutterhead HeliCut, swivelling

Application:

For jointing and bevelling with adjustable bevel angle.

Machine:

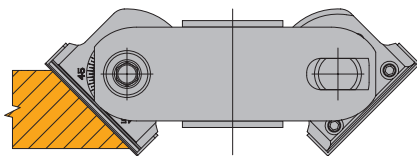
Spindle moulders, moulders, edgebanding machines and double-end tenoners.

Workpiece material:

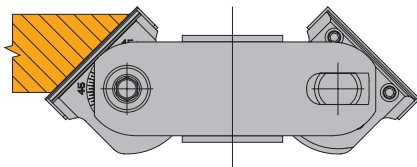
Softwood and hardwood, laminated veneer lumber, plastomers, technical foams (XPS, PU), limited suitable for MDF and chipboard (uncoated or coated).

Technical information:

Knife holder can be swivelled steplessly on both sides from 0 - 65°. Quick and easy adjustment of conventional angles (15°, 30°, 45°, 60°) due to additional locking positions in 15° steps. Design with divided cutting edges and optimized gullet areas for low-noise working with low cutting pressure even at high cutting performance. Workpiece edges free of tear-out on both sides even in critical materials due to alternating tool angle. Cutting edges with particularly precise geometry and polishing for long tool life and machining of „soft“ materials. Economical due to partially exchangeable solid carbide blades with 4 cutting chamfers.



Bevelling from above



Bevelling from below

HeliCut, adjustable bevel angle

WW 430 1 05

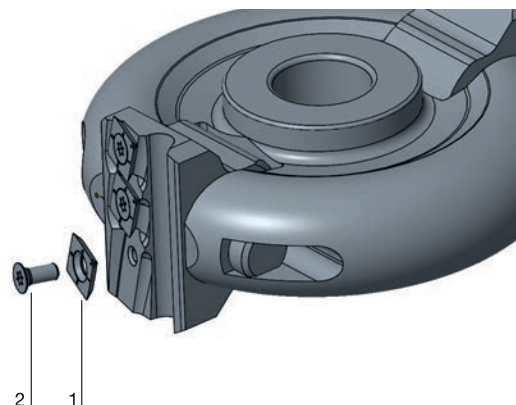
D	SB	BO	BO _{max}	Swivel range	n	Z	ID
mm	mm	mm	mm	°	min ⁻¹		
150	55	30	40	0 - 65	5000 - 9000	1/1	024290 ●
150	55	31.75	40	0 - 65	5000 - 9000	1/1	024262 □
150	55	40	40	0 - 65	5000 - 9000	1/1	024264 □
170	55	50	60	0 - 65	5000 - 9000	1/1	024273 □

Spare knives:

Part-no.	BEZ	ABM	ID
		mm	
1	Turnblade knife	15x15x2,5	009543 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Countersink screw, Torx® 20	M5x12	007898 ●
	Torx® key	Torx® 20	006091 ●
	Allen key	SW 8, L 100	005437 ●





Bevel cutterhead WhisperCut, swivelling

Application:

For jointing and bevelling with adjustable bevel angle.

Machine:

Spindle moulders, moulders, edgbanding machines and double-end tenoners.

Workpiece material:

Hardwood, chip and fibre board (chipboard, MDF, HDF etc.), plastic coated, veneered etc., laminated veneer lumber (plywood, multiplex plywood etc.), solid surface material (e.g. Corian®, Varicor® etc.), fibre reinforced plastics (e.g. GRP, CFRP).

Technical information:

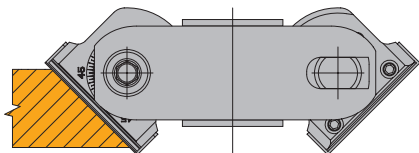
Knife holder swivelling adjustable from 0 - 65°. Quick and easy angle adjustment of common angles (15°, 30°, 45°, 60°) by additional locking positions in 15° steps. Workpiece edges tear-free on both sides due to alternatinv shear angles. Economical due to partial change of diamond cutting edges. Noice reduced design with optimized gullet design for improved chip removal.



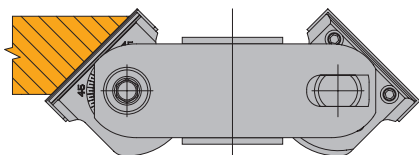
WhisperCut, adjustable bevel angle

WW 430 1 05

D	SB	BO	BO _{max}	Swivel range	n	Z	ID
mm	mm	mm	mm	°	min ⁻¹		
150	55	30	40	0 - 65	5000 - 9000	1/1	024291 ●
150	55	31.75	40	0 - 65	5000 - 9000	1/1	024263 □
150	55	40	40	0 - 65	5000 - 9000	1/1	024265 □
170	55	50	60	0 - 65	5000 - 9000	1/1	024274 □



Bevelling from above



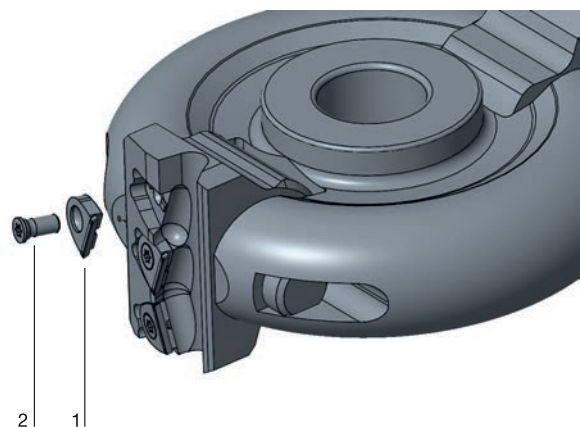
Bevelling from below

Spare knives:

Part-no.	BEZ	ABM	ID
1	WhisperCut-knife SB14	mm 14x14.2x4.3	091074 ●

Spare parts:

Part-no.	BEZ	ABM	ID
2	Countersink screw, Torx® 20/59°	mm M5x11.5	007899 ●
	Torx® key	Torx® 20	006091 ●
	Allen key	SW 8, L 100	005437 ●



Types of operation The tools in the following section are suitable for producing glue joints, divided into glue joints (along the grain) and mitre joints.

Glue joints along grain

Glue joint profiles for length grain glue joints have a low profile depth to minimise the material loss at each glue joint. Glue joint profiles do not increase the stability of the glue joint. The profile is used to position the wood precisely, so it does not slip during pressing. Length grain glue joint profiles are not self-locking. The workpieces must remain pressed together until the glue has hardened completely. Profile tools for glue joints along the grain are not suitable for mitre joints.

Workpiece material Softwood and hardwood.

Machine Spindle moulders with or without power feed.
Four-sided moulders.
Double-end tenoners.

Application Against the feed, always along the grain.

Mitre joint

Solid wood and wood-derived materials cannot be glued on the end faces side without glue joint profiles. Compared to glue joints along the grain, mitre glue joint profiles increase the stability of the joint. These profiles have a greater profile depth, generally 10 mm. Mitre joint profiles must have a straight edge area to create a defined straight joint in the visible area. The profiles are slightly self-locking. This means the workpieces need to be pressed together briefly and can only be machined after the glue has hardened. Mitre joints are typically used to produce segments for arched windows or profiled mouldings.

Workpiece material Softwood and hardwood.

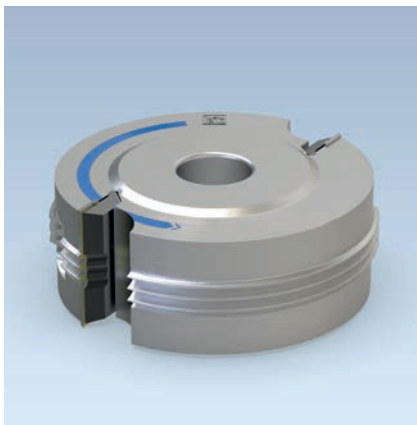
Machine Spindle moulders with clamping device and sliding table.
Double-end tenoners.
Window machines.
Stationary routers with or without CNC control.

Application Against feed, across or along the grain.

4. Manual feed

4.3 Longitudinal, width and mitre joints

4.3.1 Glue joint cutterheads



Profile cutterhead ProfilCut Q for glue joint profiles

Application:

To cut glue joint profiles with high fit accuracy. Profile P2-4 for processing with the grain for precise positioning of the wood to be glued. Profile 1 is especially suitable for mitre joint profile/longitudinal glue joint profile and for frames.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Finger profile in rounded design (softline). Effective wood use through small profile depth.

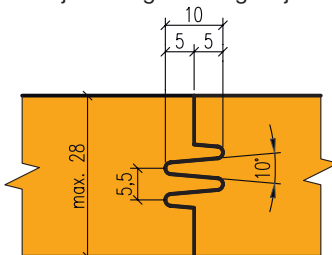


MAN feed

WE 600 1 53

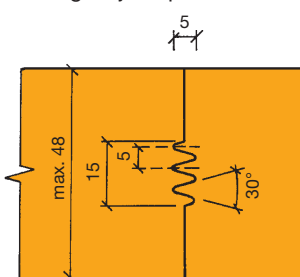
P	D	SB	BO	BO _{max}	Z	n	ID
	mm	mm	mm	mm		min ⁻¹	
1	135	30	30	50	2	5700 - 9900	125125 ●
2	135	50	30	50	2	5700 - 9900	125126 ●
3	135	60	30	50	2	5700 - 9900	125127 ●
3	135	60	50		2	5700 - 9900	125390 □
4	135	80	30	50	2	5700 - 9900	125128 ●

Mitre joint/longitudinal glue joint profile

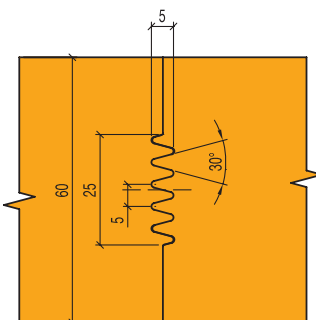


P1

Width glue joint profile



P2



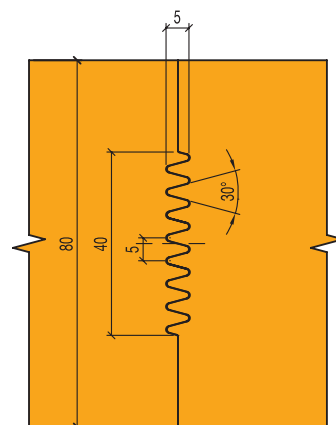
P3

Spare knives:

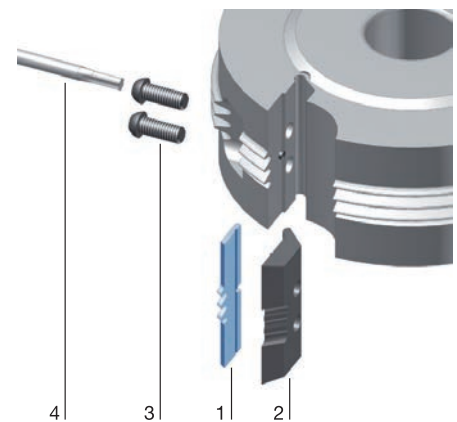
Part-no.	BEZ	ABM	QAL	ID
		mm		
1	ProfilCut Q knife	30x16x2	MC	619237 ●
1	ProfilCut Q knife	50x16x2	MC	619234 ●
1	ProfilCut Q knife	60x16x2	MC	619235 ●
1	ProfilCut Q knife	80x16x2	MC	619236 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	48x23.73x8.27	629219
2	Clamping wedge profiled	58x23.73x8.27	629220
2	Clamping wedge profiled	78x23.73x8.27	629221
2	Clamping wedge profiled	28x23.73x8.27	629222
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



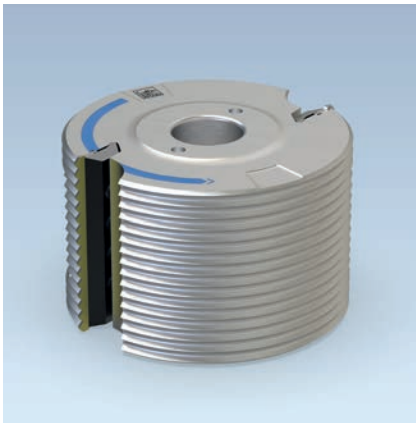
P4



4. Manual feed

4.3 Longitudinal, width and mitre joints

4.3.1 Glue joint cutterheads



Profile cutterhead ProfilCut Q for glue joint profiles

Application:

To cut glue joint profiles in fibre direction with high fit accuracy.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Finger profile in rounded design (softline). Effective wood use through small profile depth.



Profile cutterhead set

SE 600 1 53

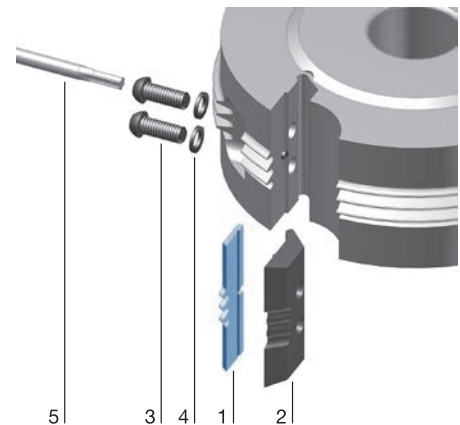
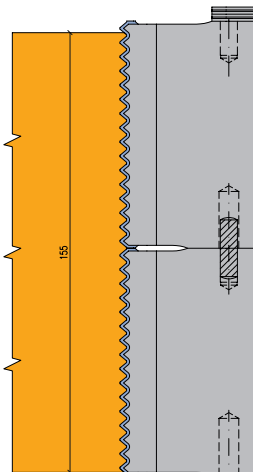
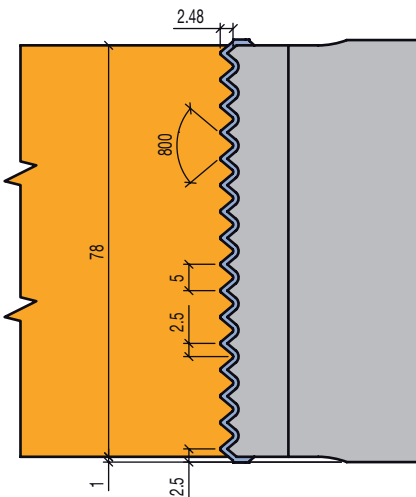
D	SB	BO	Z	ID
mm	mm	mm		
125	78	30	2	126097 ●
125	78	50	2	126098 ●

Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	ProfilCut Q knife	80.2x14x2.4	MC	619523

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	78x20x8.27	629214
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●

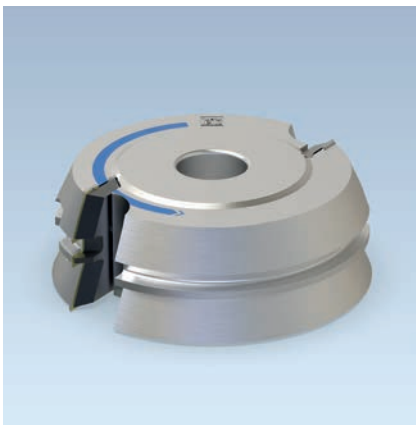


Tool stackable

4. Manual feed

4.3 Longitudinal, width and mitre joints

4.3.2 Mitre joint cutterheads



Profile cutterhead ProfilCut Q for glue joints along the grain and mitre joints

Application:

For glue joint profiles along grain with precise positioning. Exact positioning of the wood to be glued together and for producing corner joints.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood, veneered panel materials.

Technical information:

Wood thickness 15 to 48 mm; basic clearance 0.3 mm, side clearance 0.1 mm. Economic wood use due to small profile depth.



Profile depth 6.4 mm

WE 600 1 53

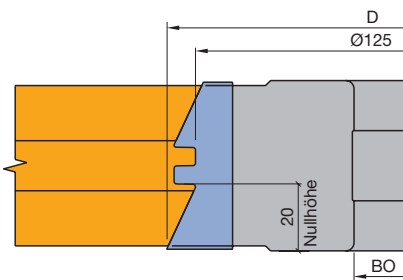
D	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm		min ⁻¹	
142	50	30	50	2	5500 - 9400	125129

Spare knives:

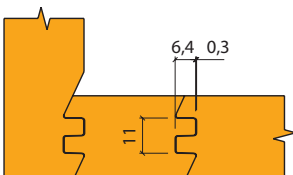
Part-no.	BEZ	ABM	QAL	ID
		mm		
1	ProfilCut Q knife	50x22x2	MC	619238

Spare parts:

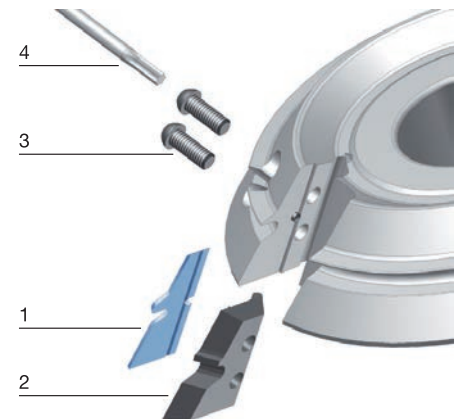
Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	48x31.93x8.27	629223
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



Adjustment scheme



Profile example





Profile cutterhead ProfilCut Q for glue joints along the grain and mitre joints

Application:

For 45° glue joint profiles along grain with precise positioning. Exact positioning of the wood to be glued together and for producing corner joints.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood, veneered panel materials.

Technical information:

Not suitable for melamine or paper coated panel materials.



Profile cutterhead ProfilCut Q 45°

WE 610 1 53

D	SB	HD	BO	Z	BO _{max}	n	ID
mm	mm	mm	mm		mm	min ⁻¹	
175	40	28	30	2	50	4400 - 7600	125130 ●
175	40	28	50	2	50	4400 - 7600	125131 □

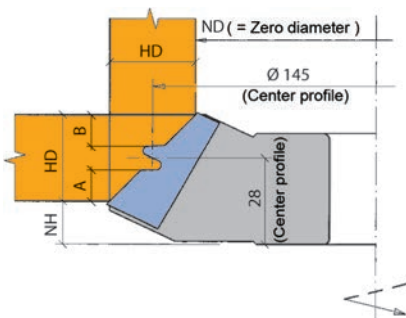
Profile adjustment

Height adjustment by profiling the workpiece flat on the table and vertical against the fence:

Profile height: PH 8.00 mm

Correct adjustment, if dimension A is the same as dimension B.

Formula: $A(B) = (HD - PH) / 2$



$$0\text{-height (NH)} = 28 - \frac{\text{wood thickness (HD)}}{2}$$

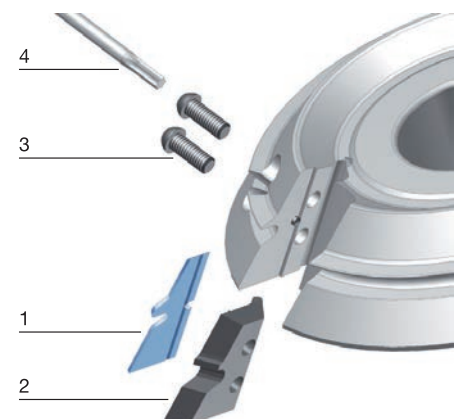
$$0\text{-diameter (ND)} = \text{Ø } 145 - \text{wood thickness (HD)}$$

Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	ProfilCut Q knife	40x22x2	MC	619239 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	38x32.11x8.27	629224
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



4. Manual feed

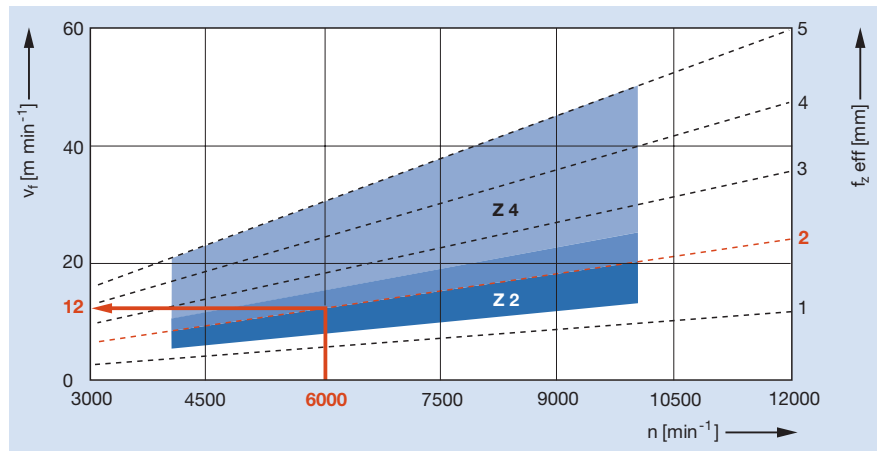
4.4 Profiling

4.4.1 – 4.4.6 Different profile cutterheads

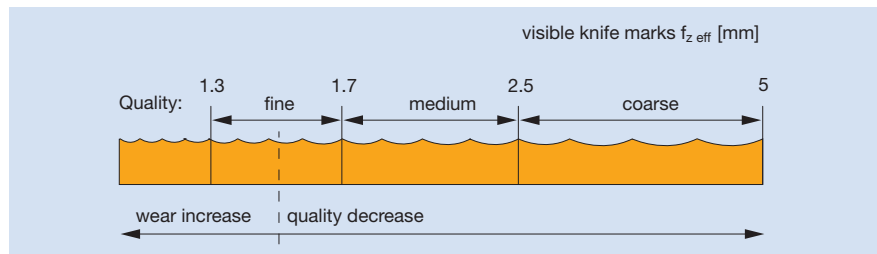
Type of operation

Profiling in craft and industry. As there are many different applications, the features of the tool and the wood types to be processed are described in the respective product pages.

Feed speeds depending on RPM, length of knife marks and number of teeth



Relation between surface quality and length of knife marks $f_{z\text{ eff}}$



With multi blade tools, only the marks of one knife show on the surface (one knife finish).

Z 2 and Z 4 tools produce the same surface quality with the same machine setting. High numbers of teeth are required for a high hogging performance.

Workpiece material Machines Application

Please refer to the relevant product pages, depending on the operation and profile.



Turnblade ProfilCut Q profile cutterhead set for internal door production

Application:

For external door profiles with single rebate, rebating depth 13/15/18 mm. Extendable for double rebate 12/15 and 15/15.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Combinable for front door, single and double rebate. Double rebate profiles by using additional tools. Tool body of aluminium. ProfilCut jointing cutterhead with chamfers to edges, rebate cutterhead with turnblade knives, spurs and seatings for edge knives and seal groove knives.

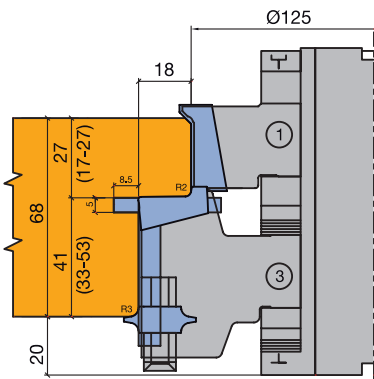
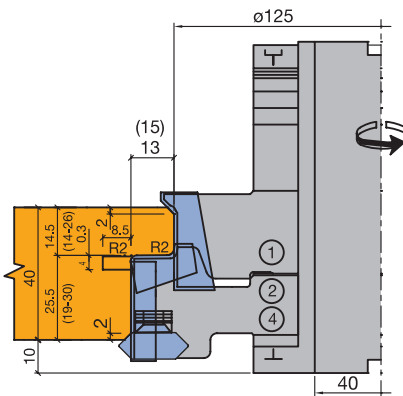


Turnblade / profile cutterhead set

SE 540 1 53

BEM	Tool no.	D ₀ mm	BO mm	Z	FAT mm	n _{max} min ⁻¹	ID
Single rebate	1/2	125	40	2	13	7200	126051
Single rebate	1/4	125	40	2	15	7200	126052
Single rebate	1/3	125	40	2	18	7200	126053
Double rebate	1/4/5	125	40	2	15/12	7200	126054
Double rebate	1/4/6	125	40	2	15/15	7200	126055

Set completely mounted on VDS-sleeve.



Single tools

TB 100 0 01, WE 500 1 53

BEZ	ABM mm	Tool no.	Z	ID
ProfilCut Q tool	133x30x50	1	2	125132
ProfilCut Q tool	151.2x35x50	2	2	125133
ProfilCut Q tool	161.2x54.5/58.5x50	3	2	125134
ProfilCut Q tool	155.2x35x50	4	2	125135
ProfilCut Q tool	179.2x35x50	5	2	125136
ProfilCut Q tool	185.2x35x50	6	2	125137
Reducing sleeve without collar	40x96x30			028302 ●

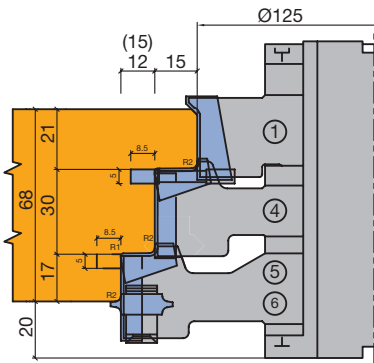
Spare knives:

BEZ	ABM mm	Tool no.	QAL	ID
ProfilCut Q knife	30.2x14.1x2	1	MC	619240
ProfilCut Q knife	20.1x12.62x2	2	MC	413043
ProfilCut Q knife	25x12.76x2	3	MC	413017
ProfilCut Q knife	20.1x12.61x2	4	MC	413045
ProfilCut Q knife	20.1x11.89x2	5	MC	413011
ProfilCut Q knife	20.1x12.9x2	6	MC	413015
Turnblade knife	30x8x1.5	2/4/5/6	HW-05	005059 ●
Edging knife 45°	KM 21/0	2/4	HW-F	008292 ●
Edging knife R2	KM 22/3	5/6	HW-F	008309 ●
Edging knife R3	KM 22/0	3	HW-F	008293 ●
Turnblade grooving knife NB4	36x20x4	2/4	HW-F	008323 ●
Turnblade grooving knife NB5	36x20x5	2 - 6	HW-F	008324 ●

4. Manual feed

4.4 Profiling

4.4.1 Door rebate - cutterhead sets



Spare parts:

BEZ	ABM	Tool no.	ID
	mm		
Clamping wedge ProfilCut Q	28x20x8.27	1	629208
Clamping wedge ProfilCut Q	17x21.22x7.25	2/4/6	629267
Clamping wedge	28x18.75x8.27	2/4/5/6	009673 ●
Clamping wedge ProfilCut Q	22x21.11x7.25	3	629227
Clamping wedge	48x18.75x8.27	3	009677 ●
Clamping wedge ProfilCut Q	17x20x7.25	5	629226
Clamping screw w. disc, Torx® 25	M6x18.5	1 - 6	007442 ●
Countersink screw, Torx® 20	M6x20	2/4	006087 ●
Countersink screw, Torx® 20	M6x40	3	006090 ●
Countersink screw, Torx® 20	M6x25	5/6	006088 ●
Countersink screw, Torx® 20	M6x12	2 - 6	006084 ●
Cylindrical screw with ISK	M6x93		007834 ●
Torx® key	Torx® 25	1 - 6	117504 ●
Torx® key	Torx® 20	1 - 6	117503 ●
Allen key	SW 5		005452 ●



R 1,5 = ID 619391
 R 2,0 = ID 619392
 R 3,0 = ID 619393
 R 4,0 = ID 619394
 R 5,0 = ID 619395



ID 619396



ID 619397



ID 184008678

Cut-out for DP edging knives on request



Profile cutterhead ProfilCut Q

Application:

For door casing and door linings with 5 mm rebate.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood, uncoated, plastic coated and veneered chipboard and fibre materials.

Technical information:

Material thickness: 24 to 27 mm (option up to 32 mm with jointing). Seal 14 and 12 mm possible by fitting spacers. Adjustable rebate of 5 mm or 4 mm by changeable profile knives. Rebate 7 mm, 8 mm and 11 mm on request.



Rebate 5 mm

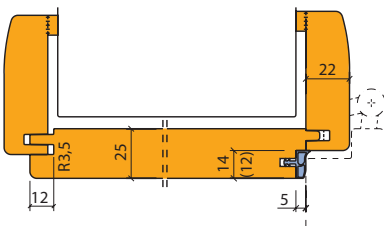
SE 640 1 53

Tool Type	D mm	BO mm	BO _{max} mm	Z	FAT mm	n min ⁻¹	ID
With jointing and rounding	125	30	50	2	5	5100 - 8800	126056 ●
Without jointing and rounding	125	30	50	2	5	5100 - 8800	126057

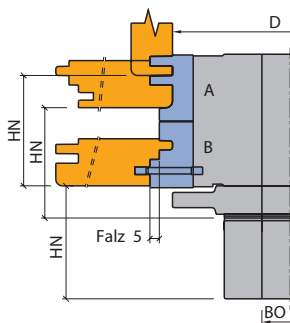
Rebate 4 mm

SE 640 1 53

Tool Type	D mm	BO mm	BO _{max} mm	Z	FAT mm	n min ⁻¹	ID
With jointing and rounding	125	30	50	2	4	5100 - 8800	126058
Without jointing and rounding	125	30	50	2	4	5100 - 8800	126059



Door lining profile



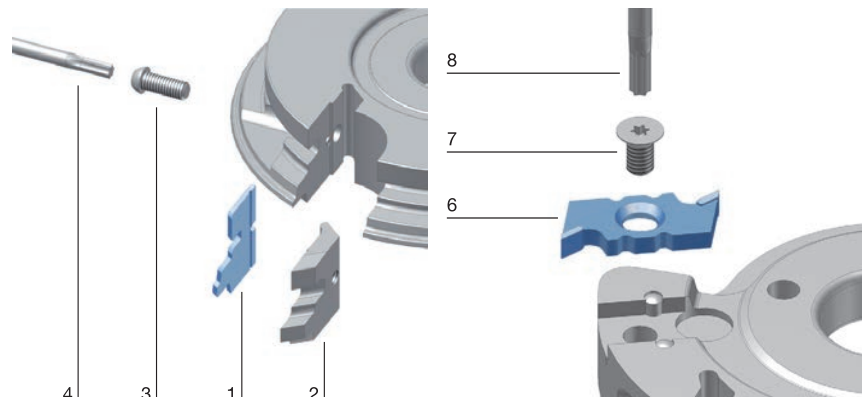
Lining/decorative panel and rebate lining

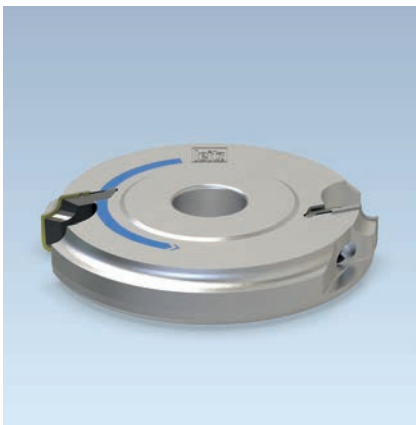
Spare knives:

Part-no.	BEZ	ABM mm	QAL	ID
1	ProfilCut Q knife A for jointing	35x22.75x2	MC	619241
1	ProfilCut Q knife B 5 mm rebate	35x23.82x2	MC	619242
1	ProfilCut Q knife A without jointing	35x22.75x2	MC	619243
1	ProfilCut Q knife B 4 mm rebate	35x23.29x2	MC	619244
6	Turnblade grooving knife NB4	36x20x4	HW-F	008323 ●

Spare parts:

Part-no.	BEZ	ABM mm	ID
2	Clamping wedge A	33x27.89x8.27	629229
2	Clamping wedge B	33x32.72x2	629230
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●
7	Countersink screw, Torx® 20	M6x12	006084 ●
8	Torx® key	Torx® 20	117503 ●





Profile cutterhead ProfilCut Q

Application:

For different radii profiles with different profile knives. Copy shaping of curved workpieces using template and ball bearing guide ring.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Production of counter profile possible by combining with the fluting profile. Tool can be used on both sides as panel raising cutter (straight panel raising).



Radii profile R 2; 3; 5; 7 mm

WE 500 1 53

R	D	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm	mm		min ⁻¹	
5	139	25	30	50	2	5500 - 9600	125387 •

Radii profile R 12; 15; 16; 18; 20 mm

WE 500 1 53

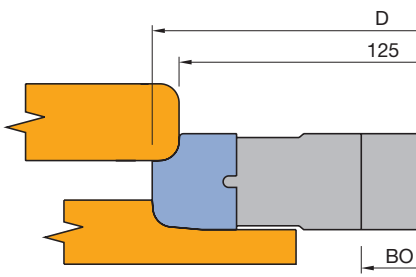
R	D	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm	mm		min ⁻¹	
12	167	40	30	50	2	4600 - 10200	125391 •

Spare knives:

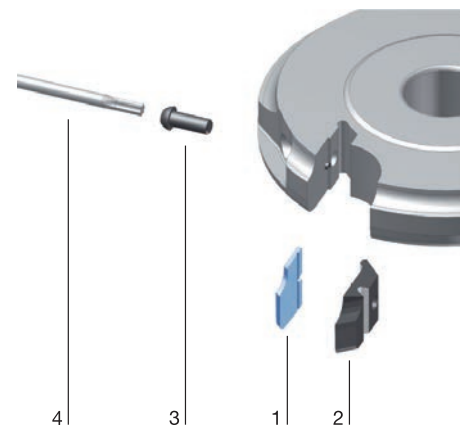
R	Part-no.	BEZ	ABM	QAL	ID
mm			mm		
2	1	ProfilCut Q knife	25x25x2.4	MC	619504
3	1	ProfilCut Q knife	25x25x2.4	MC	619505
5	1	ProfilCut Q knife	25x25x2.4	MC	619501
7	1	ProfilCut Q knife	25x25x2.4	MC	619502
12	1	ProfilCut Q knife	40x32.6x2.4	MC	619516
15	1	ProfilCut Q knife	40x32.6x2.4	MC	619517
16	1	ProfilCut Q knife	40x32.6x2.4	MC	619518
18	1	ProfilCut Q knife	40x32.6x2.4	MC	619519
20	1	ProfilCut Q knife	40x32.6x2.4	MC	619520

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	23x35.5x8.27	629458
2	Clamping wedge profiled	38x43x8.27	629460
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 •
4	Torx® key	Torx® 25	117504 •

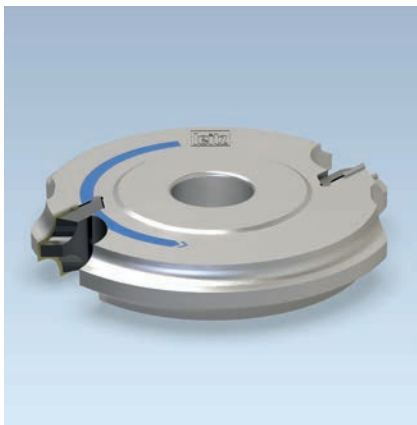


Radii profile cutterhead



4. Manual feed

4.4 Profiling 4.4.3 Radius profile cutterheads



Profile cutterhead set ProfilCut Q - radii profile

Application:

For different radii profiles with different profile knives. Copy shaping of curved workpieces using template and ball bearing guide ring.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutterhead with changing knives R 5/8, R 6/9, R 7/10, R 3/12, bevelling knives 30/45/60° and axially parallel knives. For cutting radii and dowel profiles as well as bevelling and copy-shaping of curved workpieces using templates.



Radii profile R 5 - 12 mm or 30/45/60° bevel

AE 540 1 53

exist. of	D	SB	BO	BO _{max}	R	Z	ID
	mm	mm	mm	mm	mm		
Profile cutterhead	140	25	30	50		2	126546 ●
Radius knife					5/8		
Radius knife					6/9		
Radius knife					7/10		
Radius knife					3/12		
Bevel knife					30/45/60°		

Set completely in wooden box including radii/bevel knives.

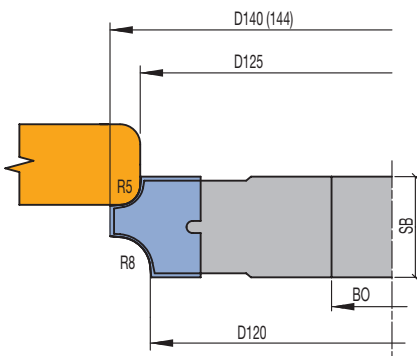
Standard values for feed speed v_f at speed $n = 6000 \text{ min}^{-1}$:

Machining along grain: 8 to 10 m min^{-1} .

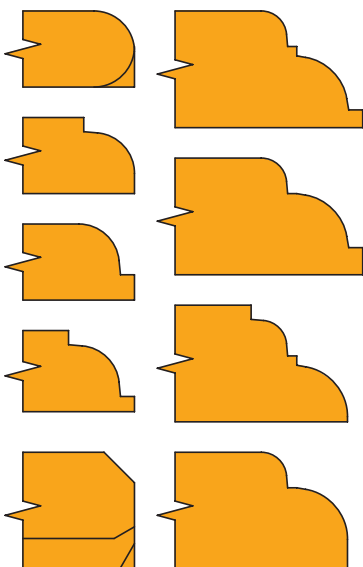
Machining across grain: 3 to 5 m min^{-1} .

RPM: $n = 5400 - 9200 \text{ min}^{-1}$

Zero diameter: 120/125 mm



Profile cutterhead D-140(144) mm



Left = 1 working step
Right = 2 working steps

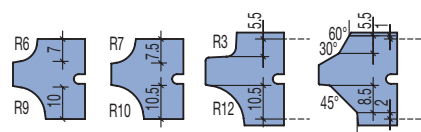
Spare knives:

Part-no.	BEZ	ABM	QAL	R	FAW	ID
		mm		mm	°	
1	ProfilCut Q knife	25x22x2	MC	5/8		619445
1	ProfilCut Q knife	25x22x2	MC	6/9		619446
1	ProfilCut Q knife	25x22x2	MC	7/10		619447
1	ProfilCut Q knife	29x24.17x2	MC	3/12		619448
1	ProfilCut Q knife	29x24.17x2	MC		30/45/60°	619449

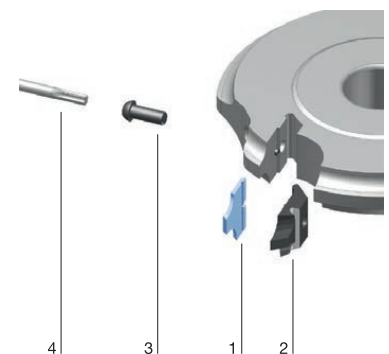
Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge	23x32.5x8.27	629286 ●
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●

Ball bearing and guide rings - see Lexicon section Knives and Spare Parts.

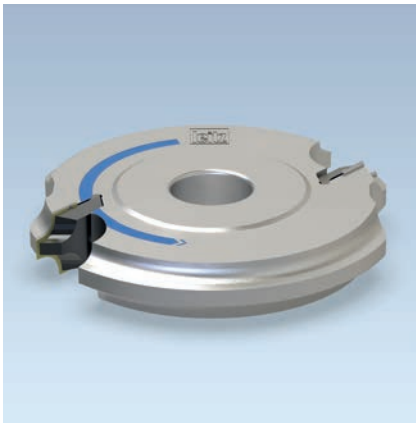


Profile knives radius / bevel



4. Manual feed

4.4 Profiling 4.4.3 Radius profile cutterheads



Profile cutterhead ProfilCut Q

Application:

For radii and bevel profiles with different profile knives. Copy shaping of curved workpieces using template and ball bearing guide ring.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutterhead with change knives and straight cut. Multi-purpose application for different profiles.



Radii profile R 12 - 20 mm or 45° bevel

WE 500 1 53

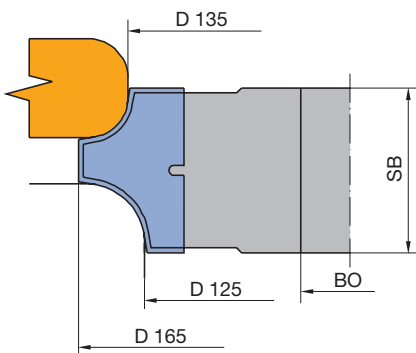
D	SB	BO	BO _{max}	Z	R	n	ID
mm	mm	mm	mm		mm	min ⁻¹	
165	50	30	50	2	12/18	5500 - 5900	125388 ●

Spare knives:

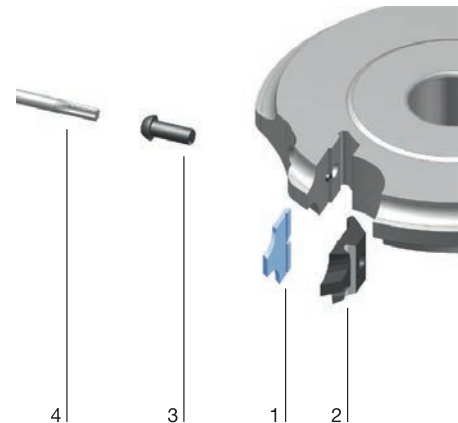
Part-no.	BEZ	ABM	QAL	R	FAW	ID
		mm		mm	°	
1	ProfilCut Q knife	50x33.8x2.4	MC	12/18		619512
1	ProfilCut Q knife	50x33.8x2.4	MC	14/20		619513
1	ProfilCut Q knife	50x33.8x2.4	MC		45	619514

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	48x43.5x8.27	629099
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●

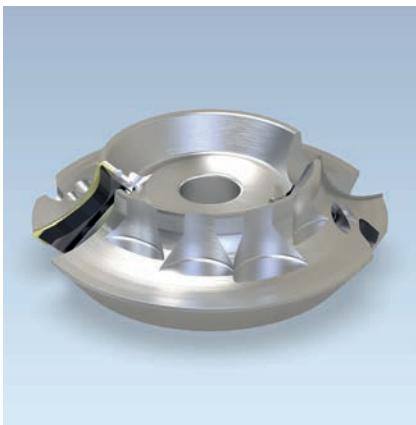


Profile cutterhead D-165 mm



4. Manual feed

4.4 Profiling 4.4.3 Radius profile cutterheads



Profile cutterhead ProfilCut Q

Application:

For different radii profiles with different profile knives. Copy shaping of curved workpieces using template and ball bearing guide ring.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Height and diameter adjustment through recess in the tool basic body per radius. Cutterhead extendable for radii R 12.5 - 30 mm. Replacement knives for dowel cuts on request.



Radii profile R 12.5 - 30 mm

WE 500 1 53

D	SB	BO	BO _{max}	D ₀	Z	R	n	ID
mm	mm	mm	mm	mm		mm	min ⁻¹	
180	32	30	50	112	2	30	4300 - 7400	125359 ●

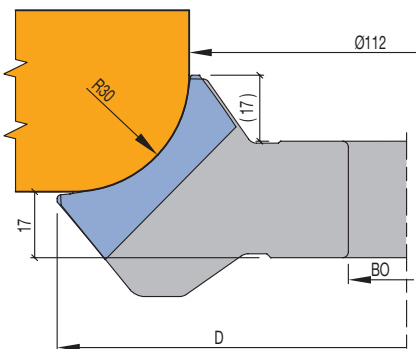
For ball bearings and guide rings see section Knives and Spare Parts.

Standard values for feed speed v_f :

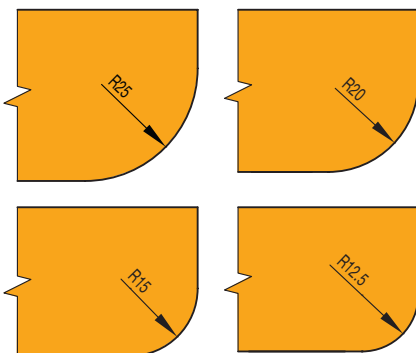
Machining along grain: 8 to 10 m min⁻¹

Machining across grain: 3 to 5 m min⁻¹

at speed $n = 6000$ min⁻¹.



Profile cutterhead D-180 mm



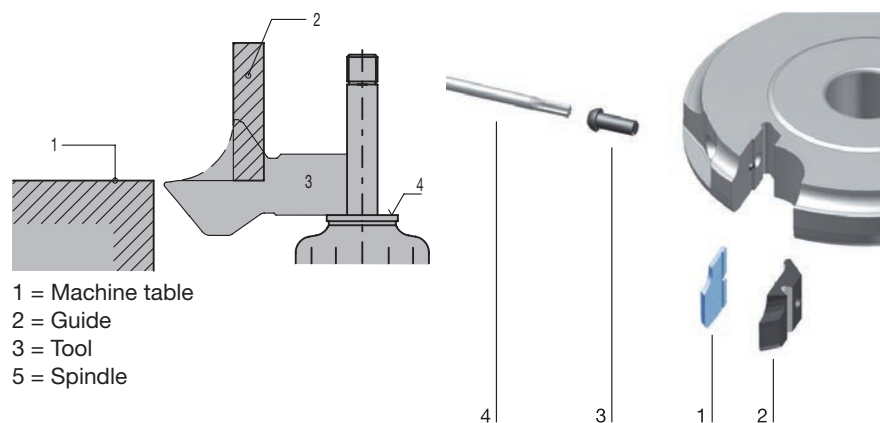
Spare knives:

Part-no.	BEZ	ABM	QAL	R	ID
		mm		mm	
1	ProfilCut Q knife	50x22x2	MC	12.5	619431
1	ProfilCut Q knife	50x22x2	MC	15	619432
1	ProfilCut Q knife	50x22x2	MC	20	619433
1	ProfilCut Q knife	50x22x2	MC	25	619434
1	ProfilCut Q knife	50x22x2	MC	30	619430

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	48x29x8.27	629284 □
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●

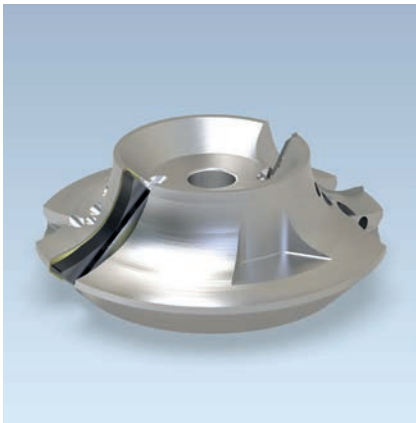
Machine adjustment by recessing the tool.



- 1 = Machine table
- 2 = Guide
- 3 = Tool
- 5 = Spindle

4. Manual feed

4.4 Profiling 4.4.3 Radius profile cutterheads



Profile cutterhead ProfilCut Q

Application:

For different radii profiles with 10 different profile knives. Copy shaping of curved workpieces using template and ball bearing guide ring.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Height and diameter adjustment through recess in the tool basic body. Cutterhead extendable for radii R 30 - 50 mm. Replacement knives for dowel cuts on request.



Radii profile R 30 - 50 mm

AE 540 1 53

D	SB	BO	BO _{max}	D ₀	Z	R	n	ID
mm	mm	mm	mm	mm		mm	min ⁻¹	
227	57	30	50	125	2	40	3400 - 7500	125360 ●

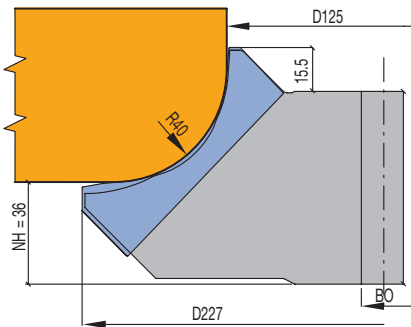
For ball bearings and guide rings see section Knives and Spare Parts.

Spare knives:

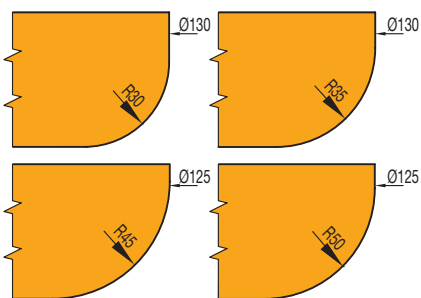
Part-no.	BEZ	ABM mm	QAL	R mm	ID with relief angle	ID without relief angle
1	ProfilCut Q knife	80.1x30.78x2	MC	30	619436	619440
1	ProfilCut Q knife	80.1x30.56x2	MC	35	619437	619441
1	ProfilCut Q knife	80.1x31.08x2	MC	40	619435	619442
1	ProfilCut Q knife	80.1x29.98x2	MC	45	619438	619443
1	ProfilCut Q knife	80.1x29.56x2	MC	50	619439	
1	ProfilCut Q knife	80.1x29.66x2	MC	50		619444

Spare parts:

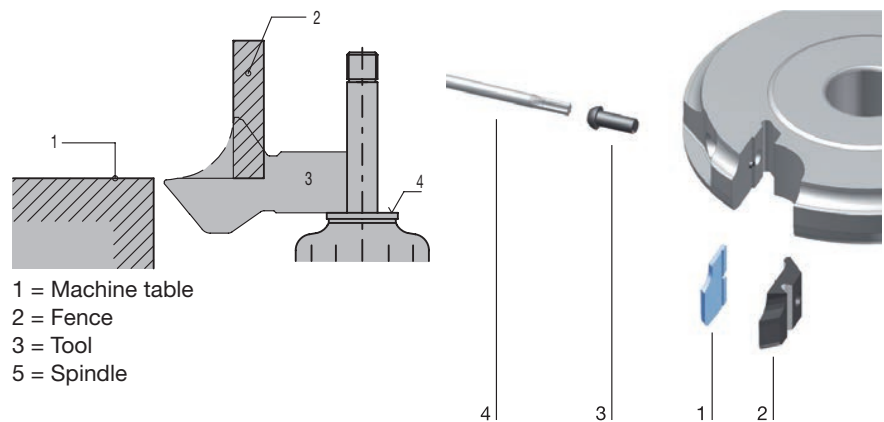
Part-no.	BEZ	ABM mm	ID
2	Clamping wedge ProfilCut	78x39x8.27	629285 □
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



Profile cutterhead D-227 mm



Machine adjustment by recessing the tool.



- 1 = Machine table
- 2 = Fence
- 3 = Tool
- 5 = Spindle



Profile cutterhead ProfilCut Q

Application:

For radii and counter profiles. Copy shaping of curved workpieces using template and ball bearing guide ring.

Machine:

Spindle moulders and moulders etc.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutterhead with change knives, straight cut. Multi-purpose use for different profiles in one or several working steps.



Radii profile R 3 - 10 mm

WE 500 1 53

D	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm		min ⁻¹	
132	40	30	40	2	5900 - 10100	125389 •

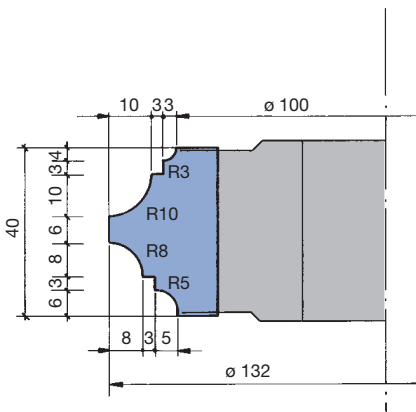
Standard values for feed speed v_f :

Machining along grain: 8 to 10 m min⁻¹

Machining across grain: 3 to 5 m min⁻¹

at speed $n = 6000 \text{ min}^{-1}$

For ball bearings and guide rings see section Knives and Spare Parts.

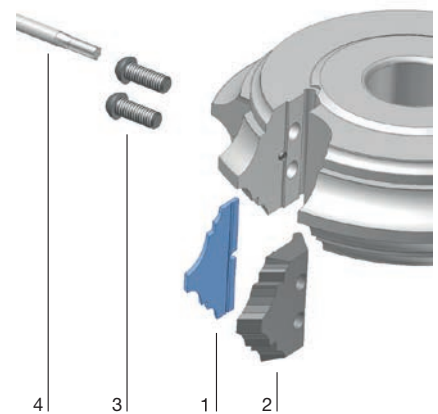


Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	ProfilCut Q knife	40.2x28.5x2.4	MC	619515

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	38x34.5x8.27	629459
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 •
4	Torx® key	Torx® 25	117504 •





Profile cutterhead set ProfilCut Q - bevelling / rounding

Application:

Multi-purpose tool set for bevelling, rounding and jointing the workpiece edges at the same time.

Machine:

Spindle moulders, copy shaping and profile moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

With a combination of jointing and bevelling/rounding cutterheads, different profiles and wood thicknesses can be machined. Profile knives with different radii/bevels can be mounted in one cutterhead.

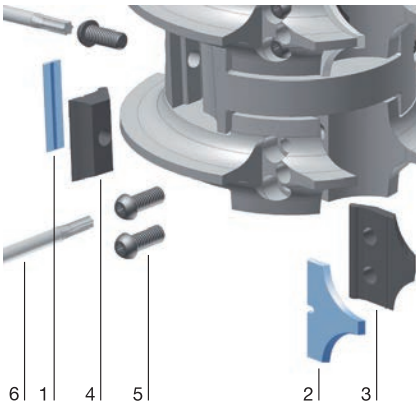


Manual feed

SE 541 1 53

Tool Type	D ₀ mm	AW PCS	n min ⁻¹	Z	ID
Jointing-rounding	125	2	4200 - 7100	2	126060
Rounding-jointing-rounding	125	3	4200 - 7100	2	126061
Rounding-rounding	125	2	4200 - 7100	2	126062

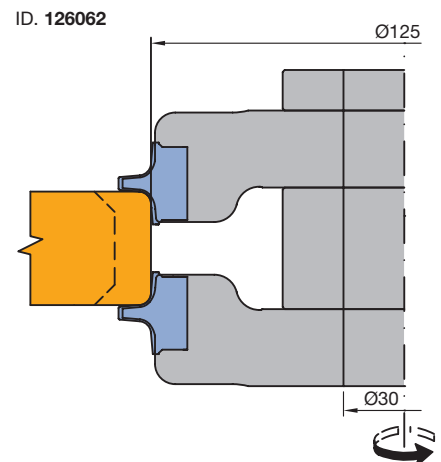
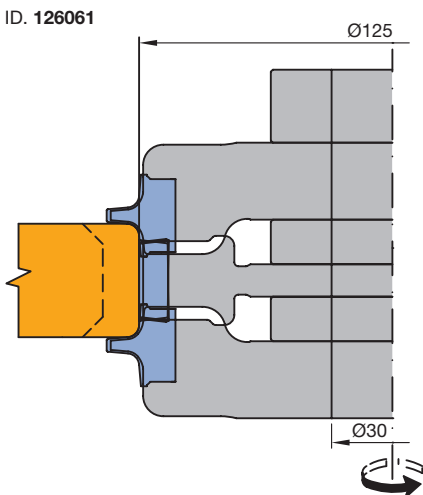
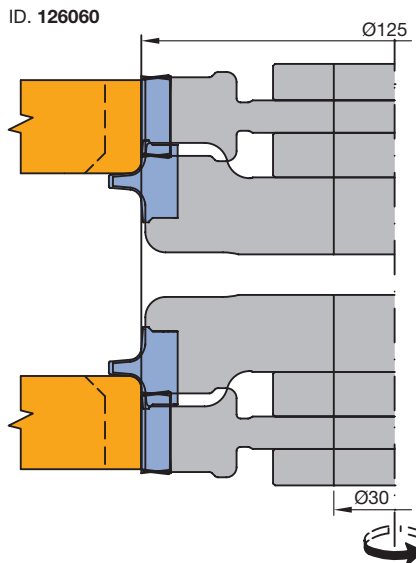
Further radii are available at short notice.



Spare parts:

Part-no.	BEZ	ABM mm	Tool no.	ID
3	Clamping wedge	18x22x8.27	1/2/11/12	629231
3	Clamping wedge	33x28x8.27	3/4/13/14	629232
3	Clamping wedge	38x29.71x8.27	5/15	629233
3	Clamping wedge	38x29.71x8.27	6/16	629234
3	Clamping wedge	48x31.73x8.27	7/17	629235
3	Clamping wedge	48x31.73x8.27	8/18	629236
4	Clamping wedge	18x18.75x8.27	20	009671 ●
4	Clamping wedge	33x18.75x8.27	35	009674 ●
4	Clamping wedge	48x18.75x8.27	50	009677 ●
5	Clamping screw w. disc, Torx® 25	M6x18.5		007442 ●
6	Torx® key	Torx® 25		117504 ●

Part nos. 1 and 2 - ProfilCut Q and turnblade knives - see detailed information on the following pages.

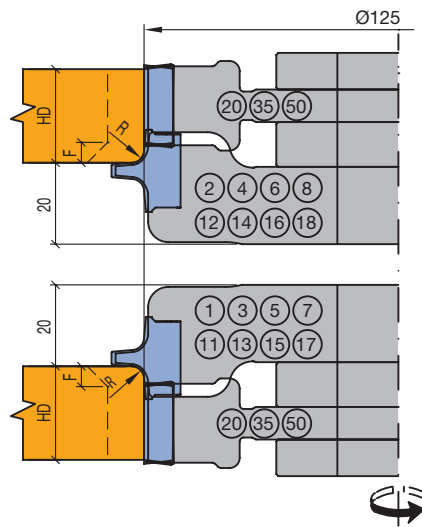


4. Manual feed

4.4 Profiling 4.4.3 Radius profile cutterheads

ID. 126060

Order example:
 -Combination ID 126060
 -Profile description top down RL
 jointingSB35/R5 or R5/jointingSB35
 -Bore diameter 30



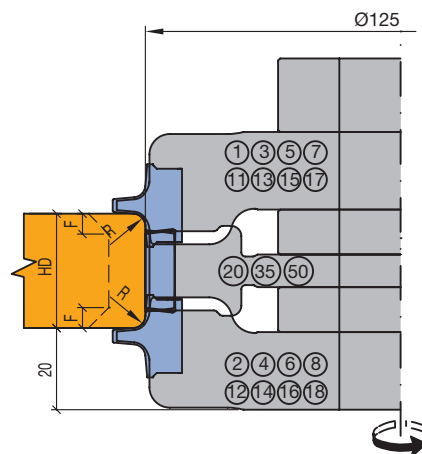
Wood thickness (HD):

Jointing tool	20	35	50
max. HD	18+R (F)	33+R (F)	48+R (F)

F (bevel) max. = 3, 5, 7x45° or 8x40°

ID. 126061

Order example:
 -Combination ID 126061
 -Profile description top down RL
 R5/jointingSB35/R5
 -Bore diameter 30



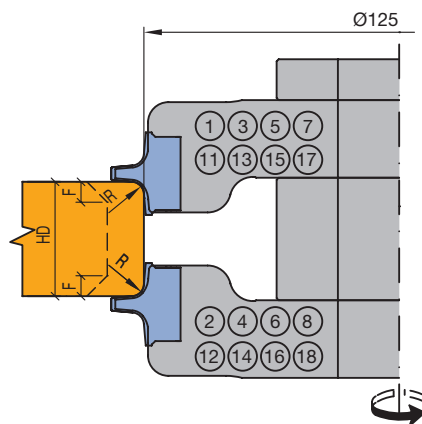
Radii tools	Jointing tool		
	20	35	50
No.1(11)+2(12)	6	12	24
No.1(11)+4(14)	13	19	31
No.1(11)+6(16)	18	24	36
No.1(11)+8(18)	28	34	46
No.3(13)+2(12)	13	19	31
No.3(13)+4(14)	20	26	38
No.3(13)+6(16)	25	31	43
No.3(13)+8(18)	35	41	53
No.5(15)+2(12)	18	24	36
No.5(15)+4(14)	25	31	43
No.5(15)+6(16)	30	36	48
No.5(15)+8(18)	40	46	58
No.7(17)+2(12)	28	34	46
No.7(17)+4(14)	35	41	53
No.7(17)+6(16)	40	46	58
No.7(17)+8(18)	50	56	68
max. HD	18+R+R (F+F)	33+R+R (F+F)	48+R+R (F+F)

Minimum wood thickness

F (bevel) max. = 3, 5, 7x45° or 8x40°
 Wood thicknesses are calculated with max. bevel

ID. 126062

Order example:
 -Combination ID 126062
 -Profile description top down RL
 R5/R5
 -Bore diameter 30

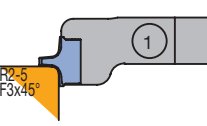
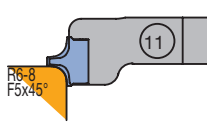
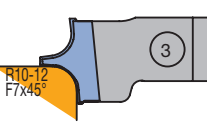
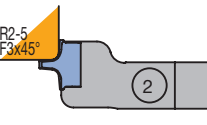
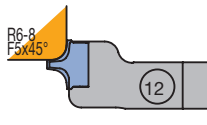
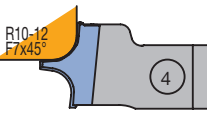
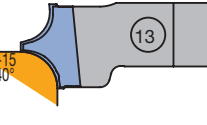
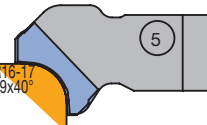
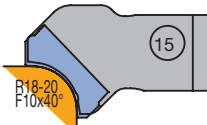
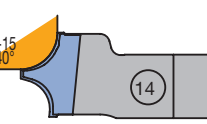
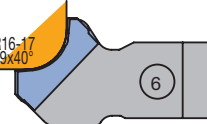
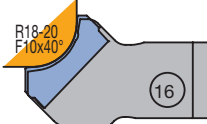
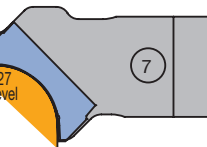
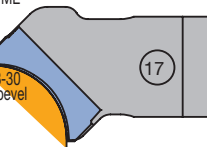
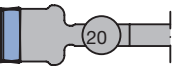
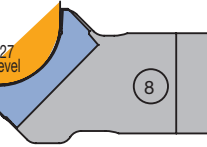
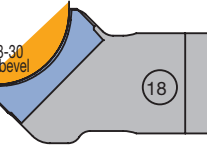
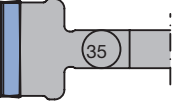
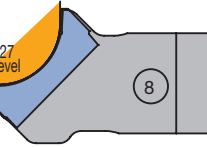
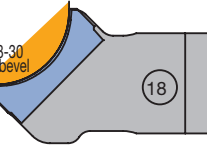
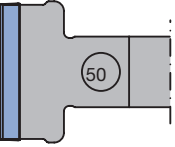



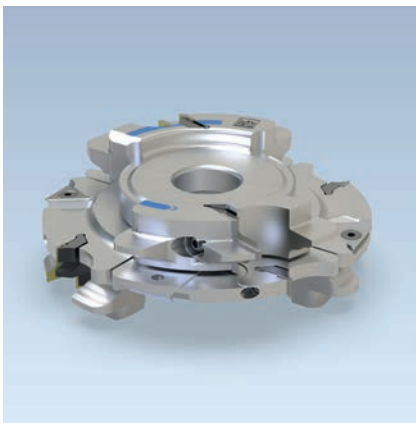
Radii tools	
No.1(11)+2(12)	-2
No.1(11)+4(14)	5
No.1(11)+6(16)	10
No.1(11)+8(18)	20
No.3(13)+2(12)	5
No.3(13)+4(14)	12
No.3(13)+6(16)	17
No.3(13)+8(18)	27
No.5(15)+2(12)	10
No.5(15)+4(14)	17
No.5(15)+6(16)	22
No.5(15)+8(18)	32
No.7(17)+2(12)	20
No.7(17)+4(14)	27
No.7(17)+6(16)	32
No.7(17)+8(18)	42

Minimum wood thickness

4. Manual feed

4.4 Profiling 4.4.3 Radius profile cutterheads

<p>Spare part: clamping wedge 629231</p>  <p>WZ 125138 ME 619246 R3</p> <p>WZ 125139 ME 619247 R4</p> <p>WZ 125140 ME 619248 R5</p> <p>WZ 125375 ME 619245 R2</p> <p>WZ 125141 ME 619252 F3x45°</p>	<p>Spare part: clamping wedge 629231</p>  <p>WZ 125146 ME 619249 R6</p> <p>WZ 125147 ME 619250 R7</p> <p>WZ 125148 ME 619251 R8</p> <p>WZ 125149 ME 619253 F5x45°</p>	<p>Spare part: clamping wedge 629232</p>  <p>WZ 125154 ME 619254 R10</p> <p>WZ 125155 ME 619255 R11</p> <p>WZ 125156 ME 619256 R12</p> <p>WZ 125157 ME 619261 F7x45°</p>
<p>Spare part: clamping wedge 629231</p>  <p>WZ 125142 ME 619246 R3</p> <p>WZ 125143 ME 619247 R4</p> <p>WZ 125144 ME 619248 R5</p> <p>WZ 125376 ME 619245 R2</p> <p>WZ 125145 ME 619252 F3x45°</p>	<p>Spare part: clamping wedge 629231</p>  <p>WZ 125150 ME 619249 R6</p> <p>WZ 125151 ME 619250 R7</p> <p>WZ 125152 ME 619251 R8</p> <p>WZ 125153 ME 619253 F5x45°</p>	<p>Spare part: clamping wedge 629232</p>  <p>WZ 125158 ME 619254 R10</p> <p>WZ 125159 ME 619255 R11</p> <p>WZ 125160 ME 619256 R12</p> <p>WZ 125161 ME 619261 F7x45°</p>
<p>Spare part: clamping wedge 629232</p>  <p>WZ 125162 ME 619257 R13</p> <p>WZ 125163 ME 619258 R14</p> <p>WZ 125164 ME 619259 R15</p> <p>WZ 125165 ME 619262 F8x40°</p>	<p>Spare part: clamping wedge 629233</p>  <p>WZ 125170 ME 619263 R16</p> <p>WZ 125171 ME 619264 R17</p> <p>WZ 125172 ME 619269 F9x40°</p>	<p>Spare part: clamping wedge 629233</p>  <p>WZ 125176 ME 619265 R18</p> <p>WZ 125177 ME 619266 R19</p> <p>WZ 125178 ME 619267 R20</p> <p>WZ 125179 ME 619270 F10x40°</p>
<p>Spare part: clamping wedge 629232</p>  <p>WZ 125166 ME 619257 R13</p> <p>WZ 125167 ME 619258 R14</p> <p>WZ 125168 ME 619259 R15</p> <p>WZ 125169 ME 619262 F8x40°</p>	<p>Spare part: clamping wedge 629234</p>  <p>WZ 125173 ME 619271 R16</p> <p>WZ 125174 ME 619272 R17</p> <p>WZ 125175 ME 619277 F9x40°</p>	<p>Spare part: clamping wedge 629234</p>  <p>WZ 125180 ME 619273 R18</p> <p>WZ 125181 ME 619274 R19</p> <p>WZ 125182 ME 619275 R20</p> <p>WZ 125183 ME 619278 F10x40°</p>
<p>Spare part: clamping wedge 629235</p>  <p>WZ 125184 ME 619279 R25</p> <p>WZ 125185 ME 619280 R26</p> <p>WZ 125186 ME 619281 R27</p>	<p>Spare part: clamping wedge 629235</p>  <p>WZ 125190 ME 619282 R28</p> <p>WZ 125191 ME 619283 R29</p> <p>WZ 125192 ME 619284 R30</p>	<p>SB 20</p>  <p>WZ 23015 ME 5071 VE 10 pcs.) Wedge 9671</p>
<p>Spare part: clamping wedge 629236</p>  <p>WZ 125187 ME 619285 R25</p> <p>WZ 125188 ME 619286 R26</p> <p>WZ 125189 ME 619287 R27</p>	<p>Spare part: clamping wedge 629236</p>  <p>WZ 125193 ME 619288 R28</p> <p>WZ 125194 ME 619289 R29</p> <p>WZ 125195 ME 619290 R30</p>	<p>SB 35</p>  <p>WZ 23016 ME 5073 VE 10 pcs.) Wedge 9674</p>
<p>Spare part: clamping wedge 629236</p>  <p>WZ 125187 ME 619285 R25</p> <p>WZ 125188 ME 619286 R26</p> <p>WZ 125189 ME 619287 R27</p>	<p>Spare part: clamping wedge 629236</p>  <p>WZ 125193 ME 619288 R28</p> <p>WZ 125194 ME 619289 R29</p> <p>WZ 125195 ME 619290 R30</p>	<p>SB 50</p>  <p>WZ 23017 ME 5075 VE 10 pcs.) Wedge 9677</p>
<p>Spacer set (one set per cutterhead necessary)</p>  <p>60x20x30</p>		



Profile cutterhead ProfilCut Q for internal doors

Application:

For internal door profiles and counter profiles.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutterhead with change knives, straight cut.

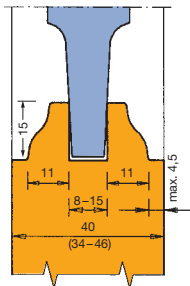
Tool combination DOUBLE profile with jointing

AE 341 1 53, AW 341 1

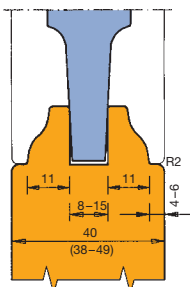


Tool Type	Tool no.	BO mm	BO _{max} mm	ID
Profile 1 (P2-P5 on request)	1/2/3	30	50	126532 ●
Profile 1.1 (P2.1-P5.1 on request)	1/2/3/4/5	30	50	126533
Profile 6/7	2/4/5/6/7	30	50	126534
Profile 6.1/7	2/4.1/5.1/6/7	30	50	126535
Profile 8	2/8/9/10	30	50	126536
Profile 8.1	2/8.1/9.1/10	30	50	126537
Addition for rebates and/or one side	15/16	30	50	126538

Combinations complete in wooden boxes.



Profile P 1 closed joint



Profile P 1.1 with open joint

Single tools

SW 501 1, WE 500 1 53, WW 200 1 NN, WW 210 1 NN, WW 410 1 NN

Tool Type	Tool no.	D mm	SB mm	BO mm	ID
Profile cutterhead *	1	155	25	30	125250 ●
Grooving cutterhead	2	155.2	8 - 15	30	125089 ●
Profile cutterhead	3	155	25	30	125251 ●
Profile cutterhead	4	161	30	30	125252
Profile cutterhead	5	161	30	30	125253
Profile cutterhead	6	155.1	25	30	125254
Profile cutterhead	7	155.1	25	30	125255
Profile cutterhead	8	165	25	30	125256
Profile cutterhead bevel	8.1	165	25	30	125257
Profile cutterhead	9	165	25	30	125258
Profile cutterhead bevel	9.1	165	25	30	125259
Jointing cutterhead	10	125	15	30	125013
Rebating cutterhead	15	155	35	30	125018
Jointing cutterhead	16	125	30	30	125019

* = Profile cutterheads supplied with profile P1.

Spare knives:

Part-no.	BEZ	ABM mm	P	Tool no.	QAL	VE PCS	ID
1	ProfilCut Q knife	25x27x2	1	1	MC		619291
1	ProfilCut Q knife	25x27x2	2	1	MC		619292
1	ProfilCut Q knife	25x27x2	3	1	MC		619293
1	ProfilCut Q knife	25x27x2	4	1	MC		619294
1	ProfilCut Q knife	25x27x2	5	1	MC		619295
1	ProfilCut Q knife	25x27x2	1	1	MC		619296
1	ProfilCut Q knife	25x27x2	2	3	MC		619297
1	ProfilCut Q knife	25x27x2	3	3	MC		619298
1	ProfilCut Q knife	25x27x2	4	3	MC		619299
1	ProfilCut Q knife	25x27x2	5	3	MC		619300
1	ProfilCut Q knife	30x31x2	6/7	3	MC		619301
1	ProfilCut Q knife	30x31x2	6/7	5	MC		619302
1	ProfilCut Q knife	25x27x2	6/6.1/7	6	MC		619303
1	ProfilCut Q knife	25x27x2	6/6.1/7	7	MC		619304
1	ProfilCut Q knife	25x32x2	8	8	MC		619305
1	ProfilCut Q knife	25x32x2	8.1	8.1	MC		619306

4. Manual feed

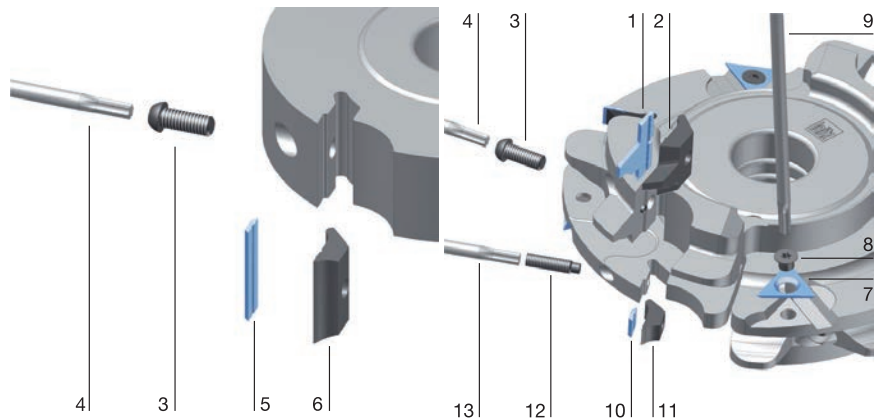
4.4 Profiling

4.4.4 Profile and counter profile cutterheads

Part-no.	BEZ	ABM mm	P	Tool no.	QAL	VE PCS	ID
1	ProfilCut Q knife	25x32x2	8	9	MC		619307
1	ProfilCut Q knife	25x32x2	8.1	9.1	MC		619308
5	Turnblade knife	14.7x8x1.5		10	HW-30F	10	005070 ●
5	Turnblade knife	30x8x1.5		16	HW-30F	10	005072 ●
5	Turnblade knife	35x8x1.5		15	HW-30F	10	005073 ●
7	Turnblade spur VS2	19x19x2		2/5	HW-F	10	005115 ●
10	Turnblade knife	7.7x8x1.5		2	HW-30F	10	005068 ●

Spare parts:

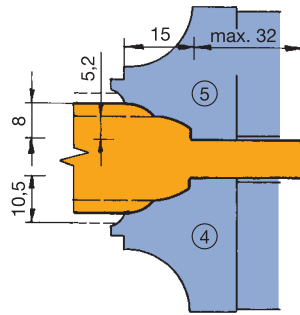
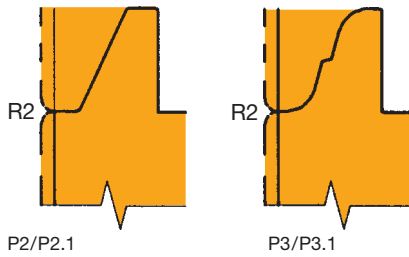
Part-no.	BEZ	ABM mm	P	Tool no.	ID
2	Clamping wedge profiled	23x30x8.27		3	629237
2	Clamping wedge profiled	23x30x8.27		1	629238
2	Clamping wedge profiled	28x38x8.27	6/6.1/7	4/4.1	629239
2	Clamping wedge profiled	28x38x8.27	6/6.1/7	5/5.1	629240
2	Clamping wedge profiled	23x37.32x8.27	6/6.1/7	6	629241
2	Clamping wedge profiled	23x37.32x8.27	6/6.1/7	7	629242
2	Clamping wedge profiled	23x37.2x8.27	8/8.1	8/8.1	629243
2	Clamping wedge profiled	23x37.2x8.27	8/8.1	9/9.1	629244
3	Clamping screw w. disc, Torx® 25	M6x18.5			007442 ●
4	Torx® key	Torx® 25			117504 ●
6	Clamping wedge	13x18.75x8.27		6	009670 ●
6	Clamping wedge	28x18.75x8.27	1/2/16	4	009673 ●
6	Clamping wedge	33x18.75x8.27	15	5	009674 ●
8	Countersink screw, Torx® 20	M6x0.5x4.9			006243 ●
9	Torx® key	Torx® 20			117503 ●
11	Clamping wedge	7x18.75x8.27	2	2	009763 ●
12	Allen screw with shank, Torx® 15	M5x20			007380 ●
13	Torx® key	Torx® 15			117507 ●
	Magnetic setting gauge	0.3/0.8			005376 ●



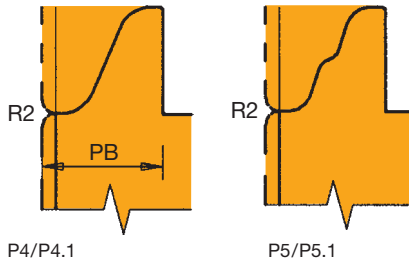
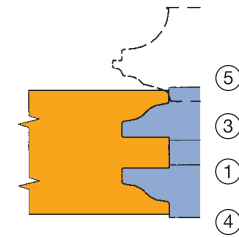
4. Manual feed

4.4 Profiling

4.4.4 Profile and counter profile cutterheads



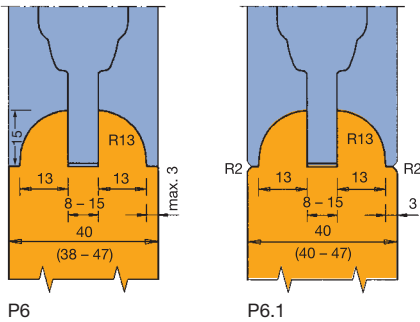
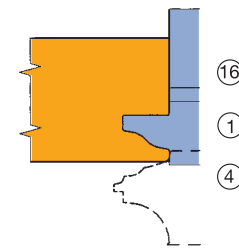
Double profile



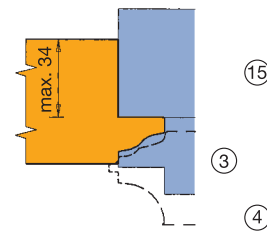
These profile cutterheads can be used for panel raising.

Fig.: Combination options of single tools
Double profile

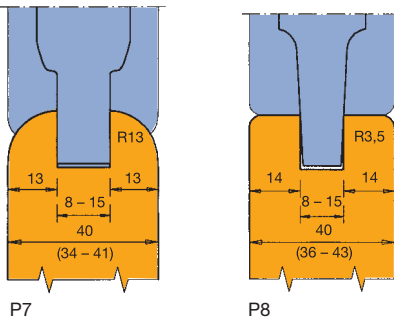
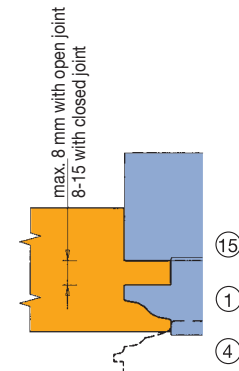
Profiles P1 - P5.1 counter profile



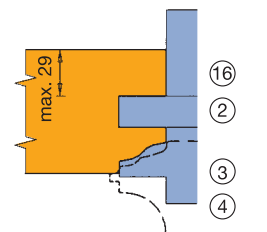
For profiles P1 - P5.1 along grain



Rebate*

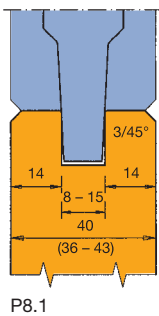
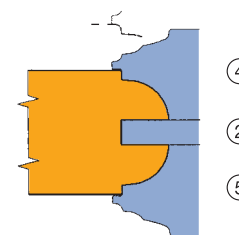


Rebate*



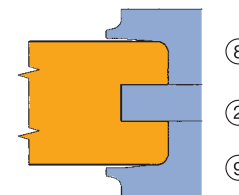
On one side*

* Profiles P1 - P8 (rebate possible and on one side)



On one side*

Profiles P6 - P7 along grain

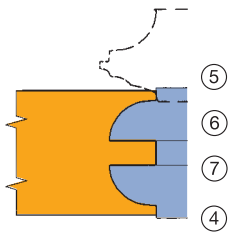


Profile P8 along grain

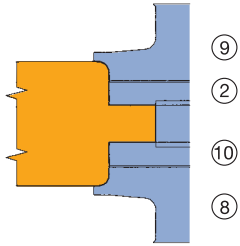
4. Manual feed

4.4 Profiling

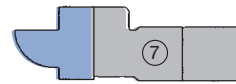
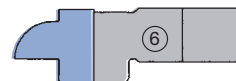
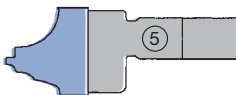
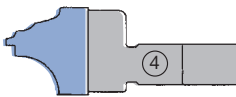
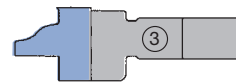
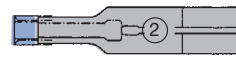
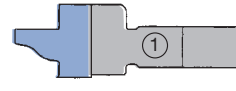
4.4.4 Profile and counter profile cutterheads



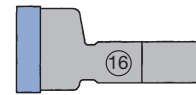
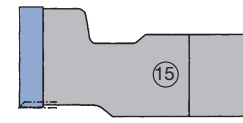
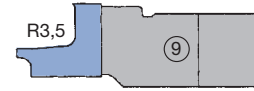
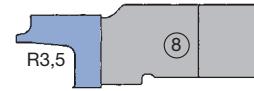
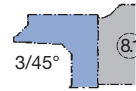
Profiles P6 - P7 counter profile



Profile P8 counter profile



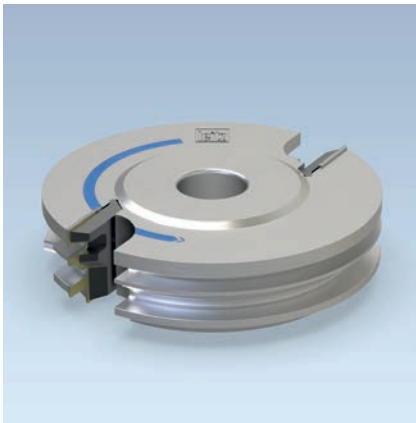
Single tools



4. Manual feed

4.4 Profiling

4.4.4 Profile and counter profile cutterheads



Profile cutterhead ProfilCut Q for furniture doors

Application:

For profiles and counter profiles for furniture doors.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

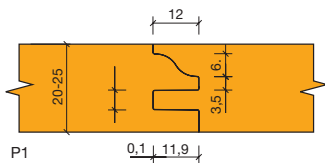
Technical information:

Cutterhead with change knives, straight cut.

SB 20 - 25 mm; with closed joint

WE 640 1 53

P	D mm	SB mm	BO mm	BO _{max} mm	Z	n min ⁻¹	ID
1	150	40	30	50	2	5200 - 8900	125262 ●
1	150	40	50		2	5200 - 8900	125392 □



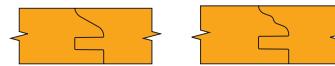
P1



P2



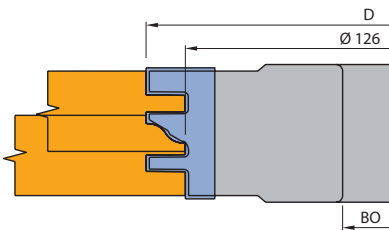
P3



P4



P5



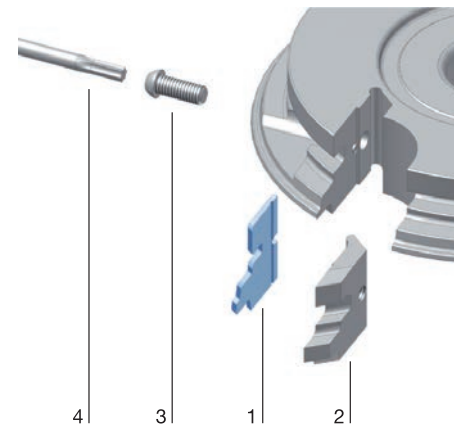
Profile cutterhead

Spare knives:

P	Part-no.	BEZ	ABM mm	QAL	ID
1	1	ProfilCut Q knife	40x26x2	MC	619311
2	1	ProfilCut Q knife	40x26x2	MC	619312
3	1	ProfilCut Q knife	40x26x2	MC	619313
4	1	ProfilCut Q knife	40x26x2	MC	619314
5	1	ProfilCut Q knife	40x26x2	MC	619315

Spare parts:

Part-no.	BEZ	ABM mm	ID
2	Clamping wedge profiled	38x36,5x8,27	629245
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



4. Manual feed

4.4 Profiling

4.4.5 Panel raising profile cutterheads



Profile cutterhead ProfilCut Q - panel raising

Application:

For profiling and panel raising 5 different profiles by knife change.

Machine:

Spindle moulders and moulders, double-end tenoners.

Workpiece material:

Softwood and hardwood (along and across grain).

Technical information:

Cutterhead with change knives, shear angle.

Profiling and panel raising, panel raising profile curved

AE 342 1 53

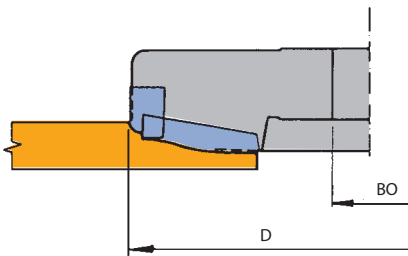
P	D	SB	BO	BO _{max}	Z	n	DRI	ID
	mm	mm	mm	mm		min ⁻¹		
1	190	40	30	50	2/2	4100 - 7000	RH	125265 ●

Spare knives:

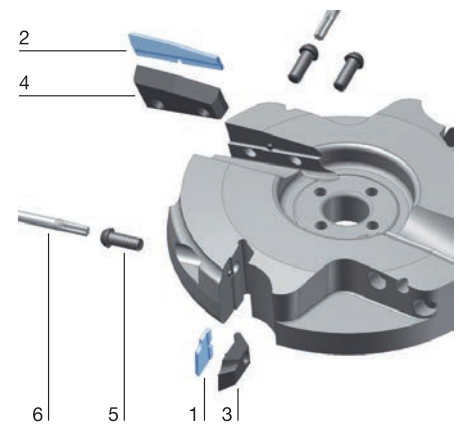
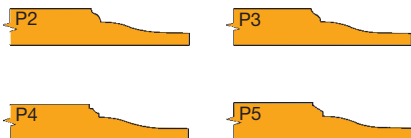
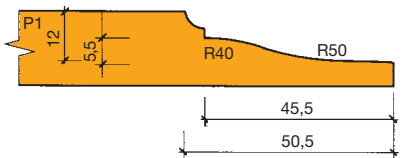
P	Part-no.	BEZ	ABM	ID
			mm	
1	1	ProfilCut Q knife	20x16x2	619321 ●
2	1	ProfilCut Q knife	20x16x2	619322 ●
3	1	ProfilCut Q knife	20x16x2	619323 ●
4	1	ProfilCut Q knife	20x16x2	619324
5	1	ProfilCut Q knife	20x16x2	619325
2	2	ProfilCut Q knife (pan.rais.)	50x11,68x2	619326 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
3	Clamping wedge profiled	18x26,46x8,27 (P1-5)	629248
4	Clamping wedge profiled	47x20.18x7.25 (raised panel)	629249
5	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
6	Torx® key	Torx® 25	117504 ●



Single side panel raising





Profile cutterhead ProfilCut Q - panel raising

Application:

For profiling and panel raising 5 different profiles by knife change.

Machine:

Spindle moulders and moulders, double-end tenoners.

Workpiece material:

Softwood and hardwood (along and across grain).

Technical information:

Cutterhead with change knives, shear angle.

Profiling and panel raising, panel raising profile straight

AE 342 1 53

P	D mm	SB mm	BO mm	BO _{max} mm	Z	n min ⁻¹	DRI	ID
1	204	33	30	50	2/2	3800 - 6500	RH	125266
1	220	33	30	50	2/2	3500 - 6000	RH	125267
1	220	33	50	50	2/2	3500 - 6000	RH	125268

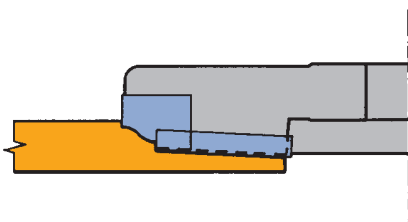
P1 = Profile cutterhead P1.

Spare knives:

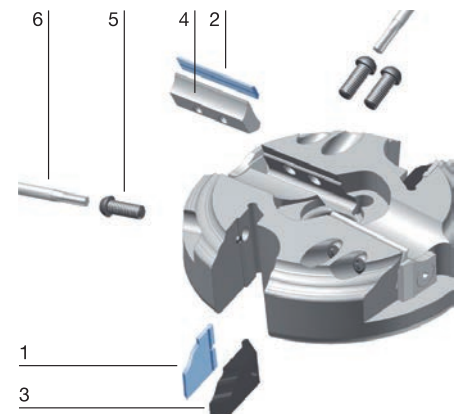
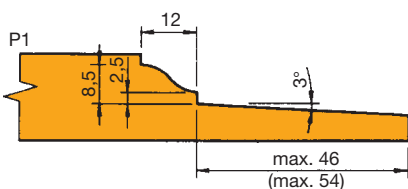
P	Part-no.	BEZ	ABM mm	VE PCS	ID
1	1	ProfilCut Q knife	20x27x2		619327
2	1	ProfilCut Q knife	20x27x2		619328
3	1	ProfilCut Q knife	20x27x2		619329
4	1	ProfilCut Q knife	20x27x2		619330
5	1	ProfilCut Q knife	20x27x2		619331
	2	Turnblade knife	50x8x1,5	10	005075 ●
	2	Turnblade knife	60x8x1,5	10	005076 ●

Spare parts:

P	Part-no.	BEZ	ABM mm	ID
1-5	3	Clamping wedge profiled	18x37,46x8,27	629250
	4	Clamping wedge panel raising cutter	47x16,8x7,25	009578 ●
	4	Clamping wedge panel raising cutter	57x16,8x7,25	009579 ●
	5	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
	6	Torx® key	Torx® 25	117504 ●



Single side panel raising



4. Manual feed

4.4 Profiling

4.4.5 Panel raising profile cutterheads



Profile cutterhead ProfilCut Q - panel raising

Application:

For profiling and panel raising 4 different profiles by knife change.

Machine:

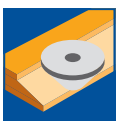
Spindle moulders and moulders, double-end tenoners.

Workpiece material:

Softwood and hardwood, three layer laminate.

Technical information:

Cutterhead with change knives and shear angle. Tool with 4 profile variants (bevel and quarter round).



Profiling and panel raising using one knife, panel raising profile straight

WE 550 1 53

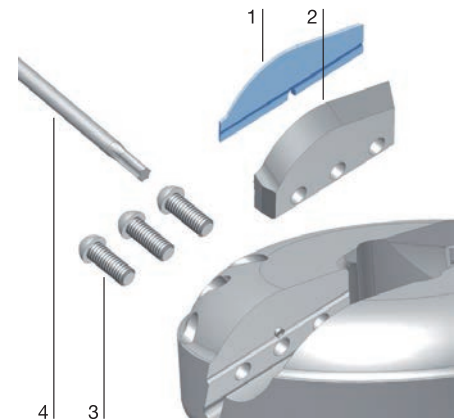
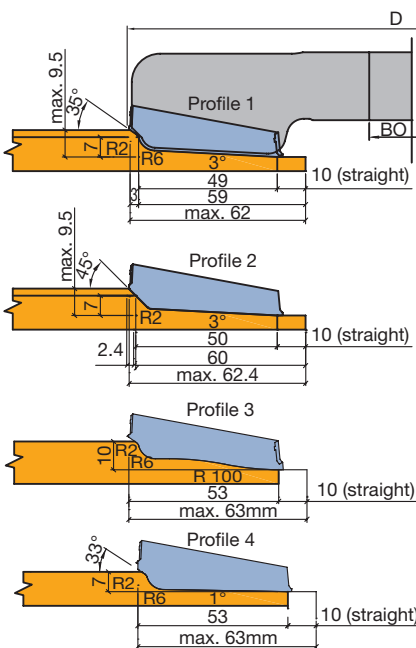
P	D	SB	BO	BO _{max}	Z	n	ID
	mm	mm	mm	mm		min ⁻¹	
1	200	10 - 37	30	50	2	3900 - 6600	125269 ●

Spare knives:

P	Part-no.	BEZ	ABM	QAL	ID
			mm		
1	1	ProfilCut Q knife	60x14,5x2	MC	619332 ●
2	1	ProfilCut Q knife	60x14,56x2	MC	619333 ●
3	1	ProfilCut Q knife	60x14,5x2	MC	619489
4	1	ProfilCut Q knife	60x14,5x2	MC	619490

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	57x23x7,25	629251
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



4. Manual feed

4.4 Profiling

4.4.5 Panel raising profile cutterheads



Profile cutterhead set ProfilCut Q

Application:

For panel raising of cabinet doors, table tops and worktops.

Machine:

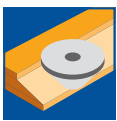
Spindle moulders and moulders, double-end tenoners.

Workpiece material:

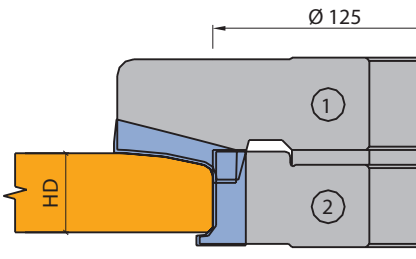
Softwood and hardwood, wood derived materials.

Technical information:

Cutterhead with throwaway knives and shear angle. Can be used either as single tool without jointing or as set with jointing cutterhead.



Profile 1.1



P1.1



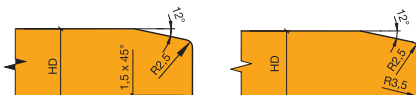
P1.2



P1.3



P2.2



P2.1



P2.3

Profile cutterhead set with jointing

SE 500 1 53

P	Tool no.	D mm	SB mm	BO mm	BO _{max} mm	Z	n min ⁻¹	ID
1.1	1 / 2	185	29 - 29,5	30	50	2	4200 - 7200	126066 ●

Single tools

WE 500 1 53, WE 550 1 53

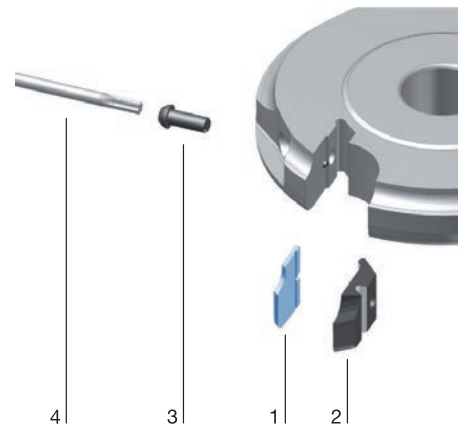
Tool no.	D mm	SB mm	BO mm	BO _{max} mm	Z	n min ⁻¹	ID
1	185	10 - 38	30	50	2	4200 - 7200	125263
2	135	29 - 29,5	30	50	2	5700 - 9800	125264

Spare knives:

P	Part-no.	BEZ	ABM mm	Tool no.	QAL	ID
1	1	ProfilCut Q knife	40x13,21x2	1	MC	619316
2	1	ProfilCut Q knife	40x13,21x2	1	MC	619317
1	1	ProfilCut Q knife	30x15,9x2	2	MC	619318
2	1	ProfilCut Q knife	30x15,9x2	2	MC	619319
3	1	ProfilCut Q knife	30x15,9x2	2	MC	619320

Spare parts:

Part-no.	BEZ	ABM mm	Tool no.	ID
2	Clamping wedge profiled	37x21,38x8,27	1	629246 ●
2	Clamping wedge profiled	28x24x8,27	2	629247 ●
3	Clamping screw w. disc, Torx® 25	M6x18.5		007442 ●
4	Torx® key	Torx® 25		117504 ●





Profile cutterhead ProfilCut Q for handrail profile

Application:

For handrails. Copy shaping of curved workpieces using template and ball bearing guide ring.

Machine:

Spindle moulders and moulders, machines with/without CNC control.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutterhead with change knives and straight cut.



Handrail profile

WE 500 1 53

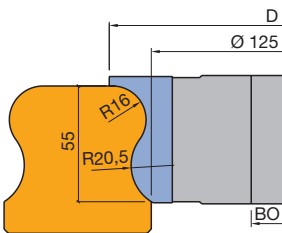
D	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm		min ⁻¹	
165	60 - 61	30	50	2	4700 - 8100	125386 ●

Spare knives:

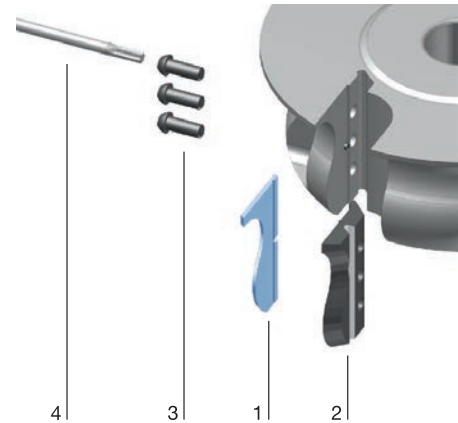
Part-no.	BEZ	ABM	QAL	ID
		mm		
1	ProfilCut Q knife	60x32.7x2.4	MC	619500

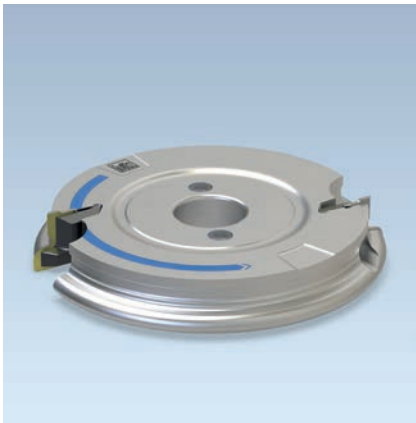
Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	58x35x8.27	629463
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



Handrail profile





Profile Cutterhead ProfilCut Q for grip rails

Application:
For cutting recessed grips.

Machine:
Spindle moulders and moulders.

Workpiece material:
Softwood and hardwood, chip and fibre board, raw or plastic coated, glulam etc.

Technical information:
Maximum operating comfort due to lightweight construction of the tool body. Longer lasting consistent finish cutting quality due to Marathon high performance coating.



MAN feed
WE 500 1 53

D	SB	BO	BO _{max}	Z	ID
mm	mm	mm	mm		
150	25	30	50	2	125380 ●

RPM: $n_{\max} = 12500 \text{ min}^{-1}$

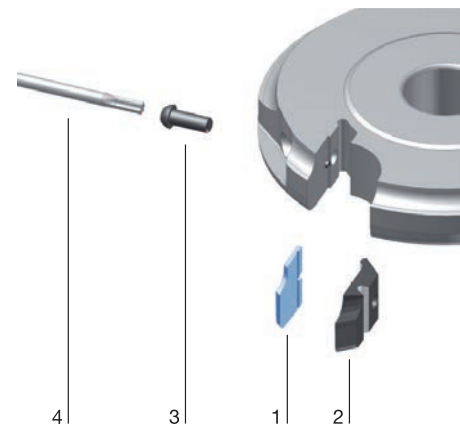
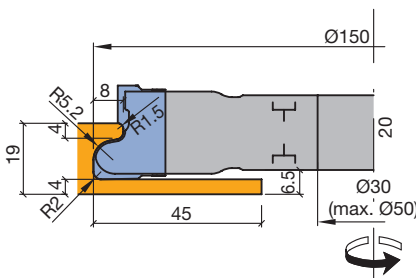
Throwaway knives for other profile variants available on request.

Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	ProfilCut Q knife	25.1x21x2.4	MC	619475

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge profiled	21x29.5x8.27	629464
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



4. Manual feed

4.4 Profiling 4.4.6 Common profiles



Profile cutterhead ProfilCut Q for gear grooves

Application:
For gear grooves.

Machine:
Spindle moulders and moulders.

Workpiece material:
Softwood and hardwood.

Technical information:
Cutterhead with change knives. User friendliness by lightweight construction of the tool body. Longer performance and cut quality due to Marathon high performance coating.



Gear groove
WE 500 1 53

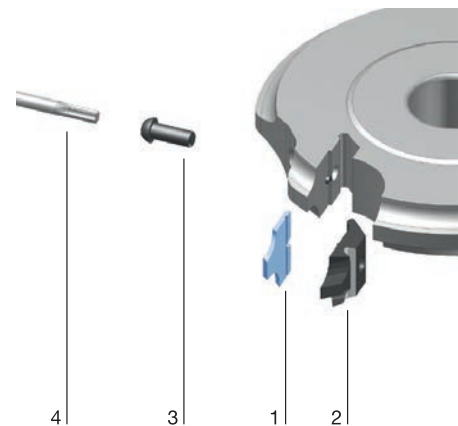
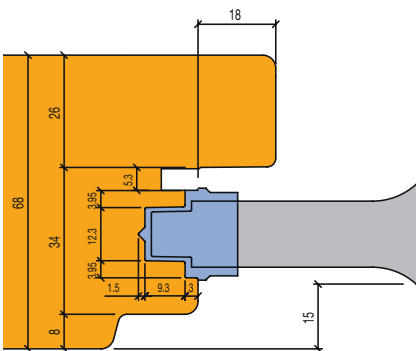
D	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm		min ⁻¹	
188.6	21.3/23.1	30	50	2	4100 - 9100	125393 ●

Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	ProfilCut Q knife	21.3x25x2.4	MC	619521

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
2	Clamping wedge	15.7x33x8.27	629461
3	Clamping screw w. disc, Torx® 25	M6x18.5	007442 ●
4	Torx® key	Torx® 25	117504 ●



4. Manual feed

4.4 Profiling

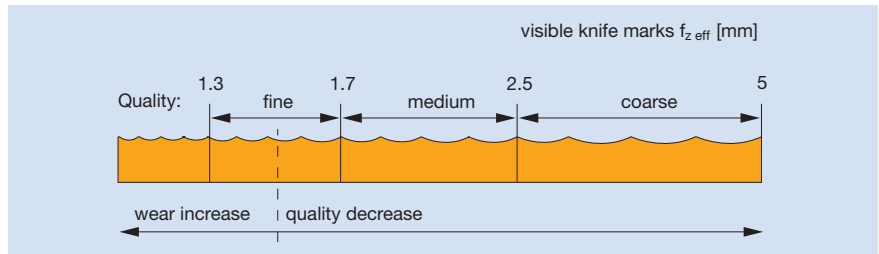
4.4.7 Multi-purpose profile cutterheads

Type of operation

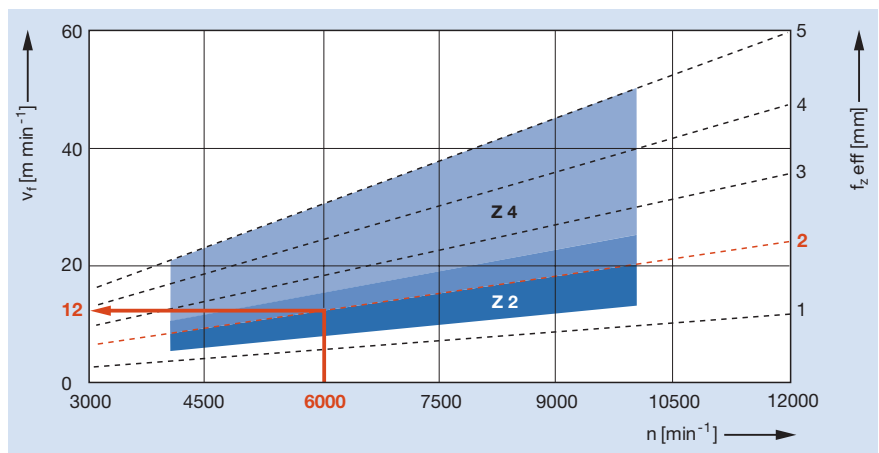
The tools described in the following section are suitable for making many different profiles. This includes profiling in craft or industry, the relevant product descriptions provide a reference when using a specific tool, and the type of woods processed.

The introduction to each section gives general notes and application regulations.

Relation between surface quality and length of knife marks $f_{z\text{ eff}}$



Feed speeds depending on RPM, length of knife marks and number of teeth



With multi blade tools, only the marks of one knife show on the surface (one knife finish). Z 2 and Z 4 tools produce the same surface quality with same machine setting. High numbers of teeth are required for a high hogging performance.

Workpiece materials, machines, application

Please refer to the relevant product pages depending on the operation and profile.

Tool system



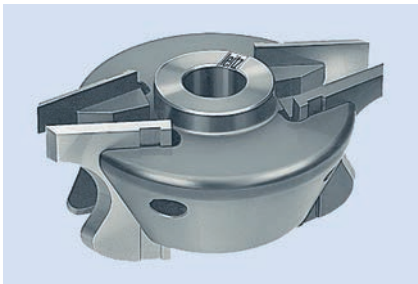
WM 500 1 04 Profile cutterhead with limiter, tool body in aluminium.

For profile depths up to maximum 15 mm and cutting widths of 50 mm. (WM 510 1 03)
 For profile depths up to maximum 15 mm and cutting widths of 40 mm. (WM 500 1 04)
 For small companies or craft. For spindle moulders or combination machines. More than 127 standard profile cutters and limitors available. If required Leitz can supply profile knives and limitors in HS quality to a special shape. Only a drawing or wood sample of the required profile is necessary to produce the special knives.

4. Manual feed

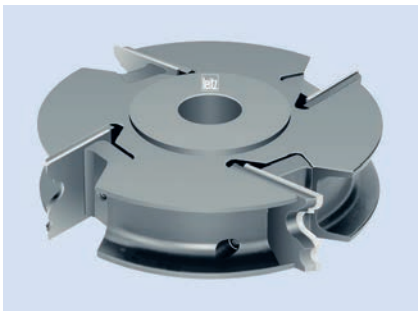
4.4 Profiling

4.4.7 Multi-purpose profile cutterheads



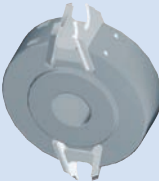
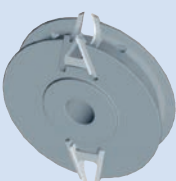

WM 530 1 01 Profile cutterhead.
 WM 530 1 02 Profile cutterhead.
 WM 520 1 Profile cutterhead.
 WM 540 1 Profile cutterhead.

For big profile depths up to maximum 45 mm and cutting widths up to 80 mm. Suitable for small and medium sized companies to produce special profiles. For machines with manual feed. Special profile knives in HS quality can be produced by the Leitz service stations on request. Only a sketch or wood sample of the required profile is necessary to produce special profile knives.



Profile cutterhead VariForm.

VariForm cutterheads are available in different designs and dimensions. The tool body is designed for mech. feed without limiter or for manual feed with limiter depending on the application. Please select the correct type of cutterhead for each application from the diagram below.

Design variation	Profile depth up to 15/19 mm	Profile depth up to 20 mm	Profile depth up to 35 mm
MAN-feed For spindle moulders	 Multi-purpose tool body	 Part profiled tool body, U-profile	 Profiled tool body, cranked right/left
Cutting width	40/45 mm a. 50/60 mm	45/45 mm a. 50/60 mm	40 mm to 60 mm

4. Manual feed

4.4 Profiling

4.4.7 Multi-purpose profile cutterheads



Profile cutterhead, aluminium tool body

Application:

For profiling, jointing and rebating.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood.

Technical information:

Profile cutterhead with aluminium tool body for standard and special profile knives up to 50 mm cutting width and maximum profile depth 15 mm. Constant diameter by using changeable profile knives. Knife thickness 4 mm.



D 108 mm - 148 mm

WM 500 1 04, WM 500 1 06

D	SB	BO	BO _{max}	Z	n	QAL	ID
mm	mm	mm	mm		min ⁻¹		
108	40	30	30	2	6000 - 10000	SP	025685 ●
128	40 - 50	30	40	2	6000 - 9000	SP	025815 ●
128	80	30	40	2	6000 - 8000	SP	025816 ●
148	40 - 50	30	50	2	5500 - 7000	SP	025691 ●

See section Knives and Spare Parts.

Table for diameters when using rebating and profile knives:

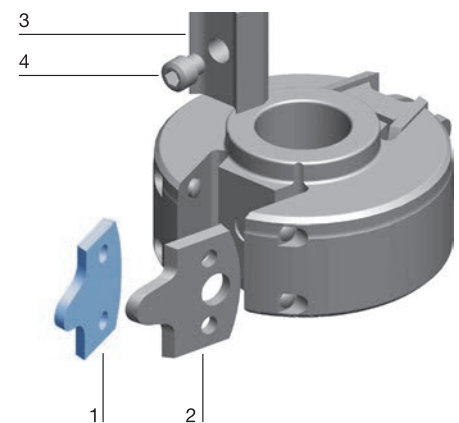
D-mm Tool body	D-mm with rebating knife	D-mm with profile knife
93	108	130
114	128	150

Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	Rebate knife	40x32,8x4	SP	007104 ●
2	Limiter	38,4x32,8x4	ST	005586 ●

Spare parts:

Part-no.	BEZ	ABM	ID
		mm	
3	Clamping wedge	36x13,21x26	009756 ●
3	Clamping wedge	56x13,21x26	009757 ●
4	Allen screw with ISK 5	M10x12	006044 ●
	Allen key	SW 5	005446 ●





Profile cutterhead

Application:

For deep one-sided profiles, maximum 45 mm depth.

Machine:

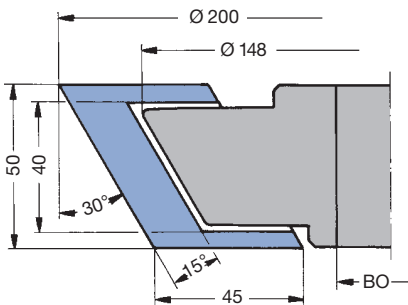
Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutting width up to 50 mm. See illustration for usable profile area. Knife thickness 4.0 mm.



MAN feed, for one sided profiles with SB 50 mm

WM 530 1 01

D	TD	SB	BO	BO _{max}	Z	n	ID
mm	mm	mm	mm	mm		min ⁻¹	
200	148	50	30	40	2	4500 - 7000	029636 ●

Sales unit without knives and limitors.

Note: State direction of rotation when ordering knives.

Spare knives:

BEZ	BEM	ABM	QAL	ID
		mm		
Blank Knife	R/T	50.4x45x4	HS	007297 ●
Blank Knife	R/B	50.4x45x4	HS	007298 ●
Limiter blank	R/T	48.8x45x4	SP	005603 ●
Limiter blank	R/B	48.8x45x4	SP	005604 ●

Spare parts:

BEZ	ABM	ID
		mm
Allen screw	M10x16	006046
Allen key	SW 5	005446 ●
Double wedge	49.2x13.2x26	009927 ●

HS-special profiles and SP-profile limitors

Profile knives set inc. limitor	PG I	SB = 50 mm
Profile knives set inc. limitor	PG II	SB = 50 mm
Set consists of:	2 HS-Profile knives; 2 SP-Limitors	

Profile knives and limitors produced to customer's profile.

Only use this cutterhead with original Leitz profile knives and limitors!



Profile cutterhead

Application:

For deep one-sided profiles with large profile depth, maximum 45 mm depth. Easy to use, no setting gauge required.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutting width up to 80 mm. See illustration for usable profile area. Knife thickness 4.0 mm.



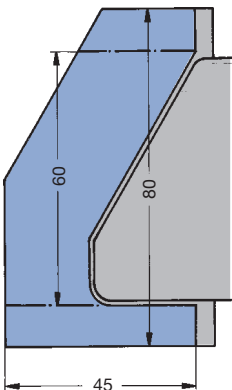
MAN feed, for one sided profiles with SB 60 - 80 mm

WM 530 1 02

D	SB	BO	BO _{max}	HD	PT _{max}	Z	n	ID
mm	mm	mm	mm	mm	mm		min ⁻¹	
180	60 - 80	30	40	80	45	2	4500 - 6000	026768 ●
180	60 - 80	40	40	80	45	2	4500 - 6000	026769 □

Sales unit without knives and limitors.

Note: State direction of rotation when ordering knives.



Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	Blank Knife R/B	60x60x6	HS	007280 ●
1	Blank Knife R/B	80x60x6	HS	007281 ●
1	Blank Knife R/T	60x60x6	HS	007282 ●
1	Blank Knife R/T	80x60x6	HS	007283 ●
2	Limiter blank R/B (60)	58x59.2x6	SP	005596 ●
2	Limiter blank R/B (80)	78x59.2x6	SP	005597 ●
2	Limiter blank R/T (60)	58x59.2x6	SP	005598 ●
2	Limiter blank R/T (80)	78x59.2x6	SP	005599 ●

Spare parts:

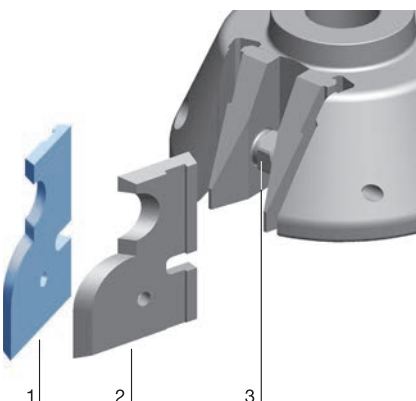
Part-no.	BEZ	ABM	ID
		mm	
3	Clamping screw	M16x1.5x36 LH/RH	005958 ●
	Key	SW 17	005456 ●

HS-special profiles and SP-profile limitors

PG I	Set of profile knives	SB = 60 mm
PG II	Set of profile knives	SB = 60 mm
PG I	Set of profile knives	SB = 80 mm
PG II	Set of profile knives	SB = 80 mm
Set consists of:		2 HS-Profile knives
		2 SP-Limitors

Profile knives and limitors are produced to customer's profile.

Only use this cutterhead with original Leitz profile knives and limitors!





Profile cutterhead

Application:

For deep profiles with large profile depth, maximum 45 mm depth, with resharpenable profile knives and limitors. Easy to use, no setting gauge required.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutting width up to 80.0 mm. Symmetrical tool body for right hand or left hand rotation as required.



MAN feed for symmetric profiles SB 60 - 80 mm

WM 520 1

D	SB	BO	BO _{max}	HD	PT _{max}	Z	n	ID
mm	mm	mm	mm	mm	mm		min ⁻¹	
180	60 - 80	30	40	80	45	2	4500 - 6000	026651 ●
180	60 - 80	40	40	80	45	2	4500 - 6000	026652 □

Sales unit without knives and limitors.

Note: State direction of rotation when ordering knives.

Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	Blank Knife	60x60x6	HS	007278 ●
1	Blank Knife	80x60x6	HS	007279 ●
2	Limiter blank	58x59.2x6	SP	005594 ●
2	Limiter blank	78x59.2x6	SP	005595 ●

Spare parts:

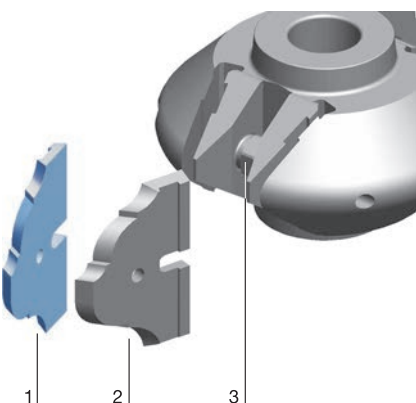
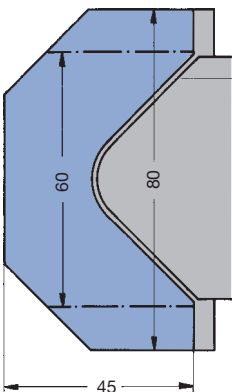
Part-no.	BEZ	ABM	ID
		mm	
3	Clamping screw	M16x1.5x36 LH/RH	005958 ●
	Key	SW 17	005456 ●

HS-special profiles and SP-profile limitors

PG I	Set of profile knives	SB = 60 mm
PG II	Set of profile knives	SB = 60 mm
PG I	Set of profile knives	SB = 80 mm
PG II	Set of profile knives	SB = 80 mm
Set consists of:		2 HS-Profile knives
		2 SP-Limitors

Profile knives and limitors are produced to customer's profile.

Only use this cutterhead with original Leitz profile knives and limitors!





Profile cutterhead

Application:

For deep profiles with large profile depth, maximum 45 mm depth, with resharpenable profile knives and limitors. Easy to use, no setting gauge required.

Machine:

Spindle moulders and moulders.

Workpiece material:

Softwood and hardwood.

Technical information:

Cutting width up to 80.0 mm. Symmetrical tool body for right hand or left hand rotation as required.



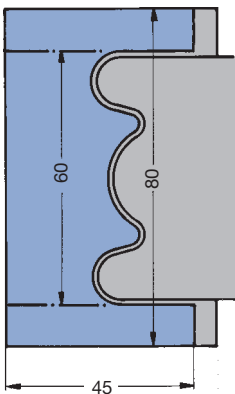
MAN feed for symmetric closed profiles SB 60 - 80 mm

WM 540 1

D	SB	BO	BO _{max}	HD	PT _{max}	Z	n	ID
mm	mm	mm	mm	mm	mm		min ⁻¹	
180	60 - 80	30	40	80	45	2	4500 - 6000	026865 ●
180	60 - 80	40	40	80	45	2	4500 - 6000	026866 □

Sales unit without knives and limitors.

Note: State direction of rotation when ordering knives.



Spare knives:

Part-no.	BEZ	ABM	QAL	ID
		mm		
1	Blank Knife	60x60x6	HS	007276 ●
1	Blank Knife	80x60x6	HS	007277 ●
2	Limiter blank	58x59.2x6	SP	005600 ●
2	Limiter blank	78x59.2x6	SP	005601 ●

Spare parts:

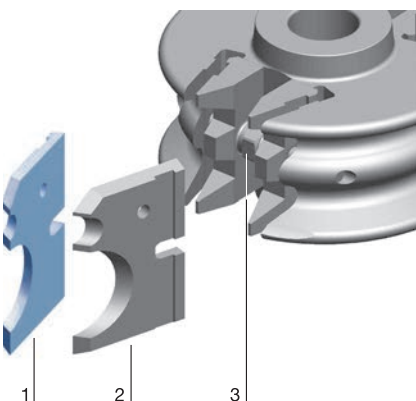
Part-no.	BEZ	ABM	ID
		mm	
3	Clamping screw	M16x1.5x36 LH/RH	005958 ●
	Key	SW 17	005456 ●

HS-special profiles and SP-profile limitors

PG I	Set of profile knives	SB = 60 mm
PG II	Set of profile knives	SB = 60 mm
PG I	Set of profile knives	SB = 80 mm
PG II	Set of profile knives	SB = 80 mm
Set consists of:		2 HS-Profile knives
		2 SP-Limitors

Profile knives and limitors are produced to customer's profile.

Only use this cutterhead with original Leitz profile knives and limitors!





Profile cutterhead VariForm

Application:

For cutting profiles. Different knives with maximum 15 mm profile depth can be mounted.

Machine:

Spindle moulders and moulders, double-end tenoners, edgbanding machines etc.

Workpiece material:

Softwood and hardwood (HW-30F), panel materials or glued wood (HW-10F).

Technical information:

Multi-purpose profile cutterhead for MAN feed with tungsten carbide special profile knives and backing plates and limitors. Resharpenable 3 to 4 times.



Tool body, MAN feed, Z 2

TT 531 1

D	TD	SB	BO	BO _{max}	PT _{max}	Z	n _{max}	ID
mm	mm	mm	mm	mm	mm		min ⁻¹	
150	116	40 - 45	30	50	15	2	8000	135100 ●
150	116	50 - 60	30	50	15	2	8000	135101 ●

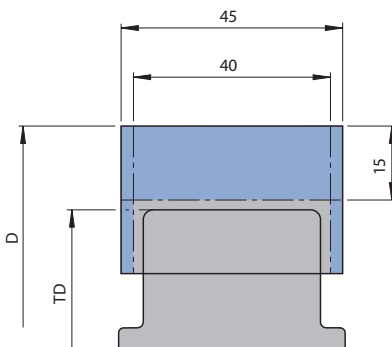
Supplied with clamping wedges, but without backing plates, limitors and knives.

Spare knives:

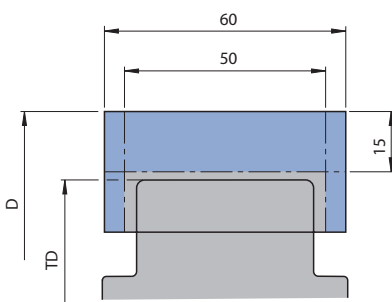
Part-no.	SB	H	PT _{max}	ID	ID
	mm	mm	mm	HW-10F	HW-30F
1	40	40	15	636227 ●	636240 ●
1	45	40	15	636231 ●	636244 ●
1	50	40	15	636284 ●	636272 ●
1	60	40	15	636288 ●	636276 ●

Spare parts:

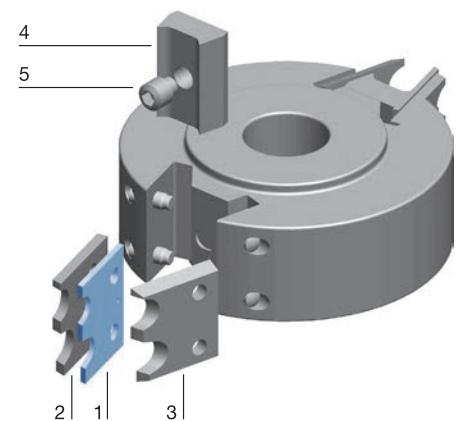
Part-no.	BEZ	ABM	for SB	ID
		mm	mm	
2	Backing plate VariForm	for knives 40x40x2.1	40	645000 ●
2	Backing plate VariForm	for knives 45x40x2.1	45	645001 ●
2	Backing plate VariForm	for knives 50x40x2.1	50	645002 ●
2	Backing plate VariForm	for knives 60x40x2.1	60	645003 ●
3	Limiter VariForm	for knives 40x40x2.1		640000 ●
3	Limiter VariForm	for knives 45x40x2.1		640001 ●
3	Limiter VariForm	for knives 50x40x2.1		640002 ●
3	Limiter VariForm	for knives 60x40x2.1		640003 ●
4	Clamping wedge	36x13.21x26	40/45	009756 ●
4	Clamping wedge VariForm	44x13.21x24.25	50/60	009760 ●
5	Allen screw with ISK 5	M10x12		006044 ●
	Allen key	SW 5, L100		117506 ●



Tool body, SB 40/45 mm



Tool body, SB 50/60 mm





Profile cutterhead VariForm

Application:

For cutting profiles. Different knives with maximum 20 mm profile depth can be mounted.

Machine:

Spindle moulders and moulders, double-end tenoners, edgbanding machines etc.

Workpiece material:

Softwood and hardwood (HW-30F), panel materials or glued wood (HW-10F).

Technical information:

Multi-purpose profile cutterhead for MAN feed with tungsten carbide special profile knives and backing plates and limitors. Resharpenable 3 to 4 times.



Part profiled tool body, MAN feed, Z 2 (U-profile).

TT 531 1

D	TD	SB	BO	BO _{max}	PT _{max}	Z	n _{max}	ID
mm	mm	mm	mm	mm	mm		min ⁻¹	
180	165	40	30	50	20	2	7200	135120 ●
180	165	60	30	50	20	2	7200	135122 ●

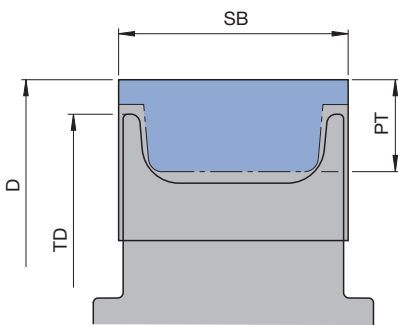
Supplied with clamping wedges, but without backing plates, limitors and knives.

Spare knives:

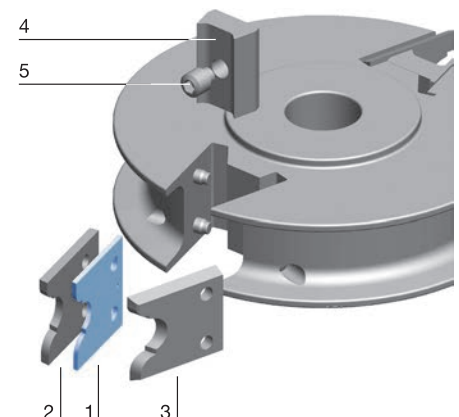
Part-no.	SB	H	PT	ID	ID
	mm	mm	mm	HW-10F	HW-30F
1	40	45	20	636226 ●	636239 ●
1	60	45	20	636287 ●	636275 ●

Spare parts:

Part-no.	BEZ	ABM	for SB	ID
		mm	mm	
2	Backing plate VariForm	for knives 40x45x2.1		645004 ●
2	Backing plate VariForm	for knives 60x45x2.1		645006 ●
3	Limiter VariForm	for knives 40x45x2.1		640004 ●
3	Limiter VariForm	for knives 60x45x2.1		640006 ●
4	Clamping wedge	36x13.21x26	40/45	009756 ●
4	Clamping wedge	56x13.21x26	60	009757 ●
5	Allen screw with ISK 5	M10x12		006044 ●
	Allen key	SW 5, L100		117506 ●



Tool body, U profile



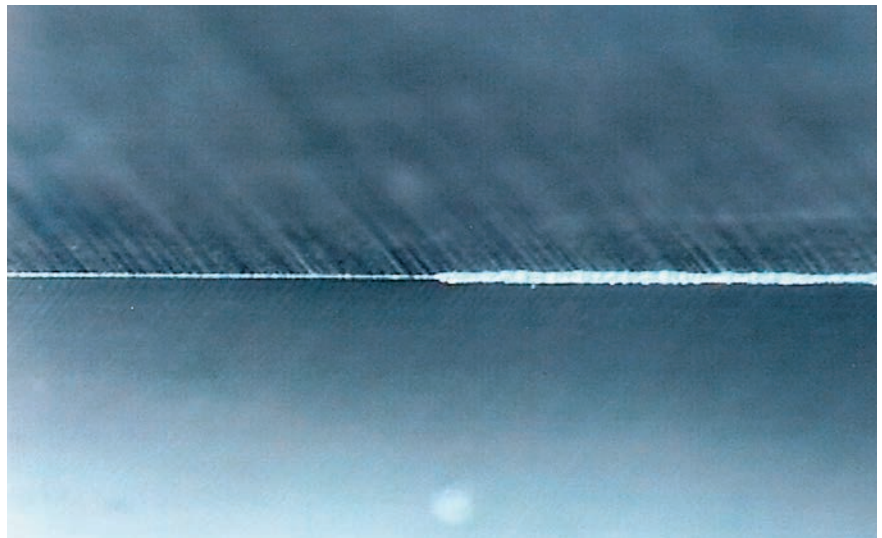
Problem	Possible cause	Action
Surface errors Cutting quality	- RPM too low	Increase RPM and cutting speed, increase tool diameter
	- Wrong cutting geometry (shear angle too small for solid wood)	Measure, change tool
	- Spindle and tool tolerances too big	Check motor bearings and tolerances
	- Unbalanced tool	Check and balance
	- Cutting speed too high (tool rubs), number of teeth: feed speed ratio incorrect	Increase feed speed, reduce no. of teeth and RPM
	- Too few teeth, too high feed speed	Adjust number of teeth and feed speed accordingly
Wavy, rough surface	- Irregular workpiece feed	Check feed or conveyor unit
	- Low feed roller pressure, worn feed rollers	Increase feed roller pressure and re-machine grooves in rollers
	- Workpieces too narrow or too short	Pay attention to machine manufacturer's guidelines
	- Chip removal too high	Pre-relieve or machine in several passes
	- Resin built up, or blunt tool	Clean and sharpen tool regularly
Surface errors Burn marks	- Cutting speed too high	Reduce RPM
	- Feed speed: number of teeth ratio wrong	Adjust number of teeth and feed speed accordingly
	- Tool rotates on stationary workpiece	Ensure constant feed through the machine
Surface errors Tear outs	- Wood moisture content too low	Check drying process
	- Knotty wood	Optimise with crosscut saw and longitudinal joints
Surface errors Chip marks	- Incorrect cutting geometry for workpiece material	Check, adjust or use new tool
	- Gap between knife and wedges	Clean and carefully mount knife and wedge
	- Gullet too small	Check and enlarge
	- Extraction hood and chip removal unit insufficient	Contact machine manufacturer
	- Weak dust extraction	Guideline: 30 m s ⁻¹ air speed
Profile error in workpiece – angle error – uneven	- Tool profile sets not identical, e.g. with sets for cutting with/against feed	Check and adjust tool set
	- Spindle not exactly vertical in feed direction or table plane	Check spindle is vertical with dial gauge at two positions with moving spindle (top and bottom of spindle)
	- Worn table and fence	Rework or replace table and fence
	- Angle tolerance between table and fence too large or incorrect adjustment of fence and zero line	Check and adjust angles, adjust fence to tool zero diameter
Power consumption of motor Feeding force	- Resin built up on tool, blunt tool	Clean and sharpen tool regularly
	- Tool gullet too small	Check and correct
	- Shear angle too small	Correct or use new tool
	- Cutting section too large	Relieve profile or machine in several passes

Rounding of cutting edges

Mechanical abrasion causes continuous rounding to the cutting edge when machining uniform materials.

The machined surface quality determines the size of the cutting edge wear. As a standard the width of wear VB of 0.2 to maximum 0.3 mm should not be exceeded.

Tipped tools must be resharpened regularly to ensure the economic efficiency of the tool.

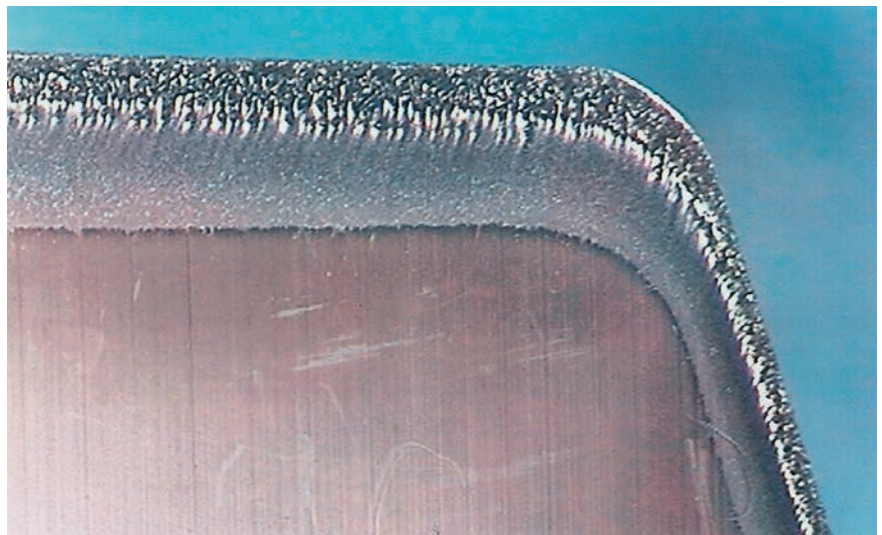


Typical cutting edge wear after machining spruce.

Chemical wear to cutting edges

When machining workpiece materials with a high tannic acid content (e.g. oak), the wear to the cutting edges is a combination of mechanical and chemical wear.

The cobalt binder material in the tungsten carbide is etched away by a chemical action prematurely damaging the cutting material.



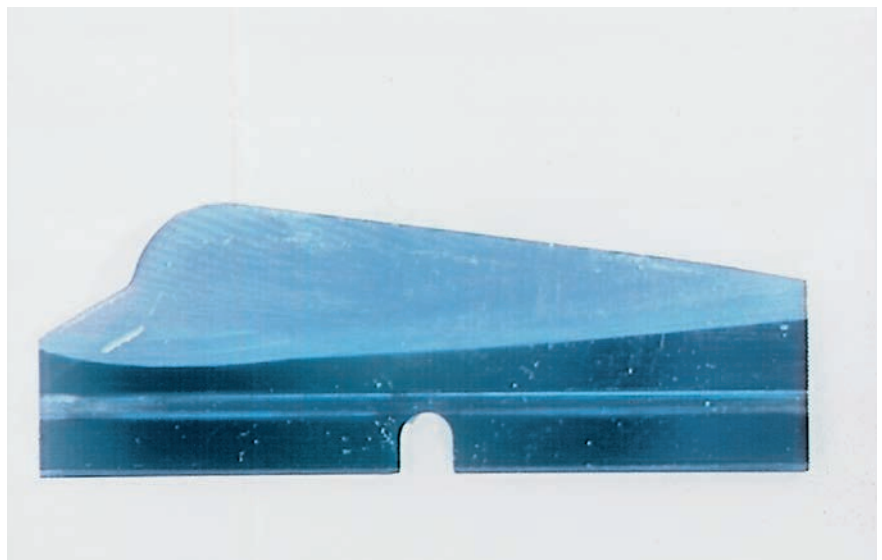
Chemical influence – cutting edge wear – after machining of oak.

Cutting edge damage through incorrect repair

With cutterhead/cutter set tools with HW cutting edges, the knives must be turned or replaced at the end of their performance time.

Resharpener on the face is not possible for safety reasons as it leads to a loss of clamping force and gaps between the knife and the clamping wedge, affect the surface quality.

Tools with turnblade/replaceable knives must be thoroughly cleaned and carefully mounted when changing knives.



Damaged cutting edges due to incorrect repair.

4. Manual feed

Signs of wear to DP cutting edges

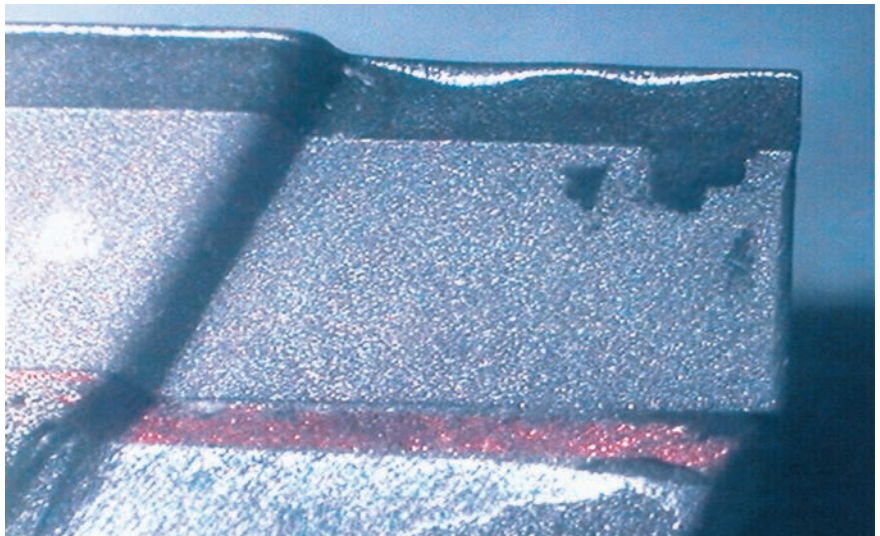
Rounding of cutting edges

Mechanical abrasion causes continuous rounding to the cutting edge when machining uniform materials.

Resin build up can develop on the cutting edges because of the long performance time.

The machined surface quality determines the size of the cutting edge wear. As a standard the width of wear VB of 0.2 to maximum 0.3 mm should not be exceeded.

Run time performance can be increased by removing the resin build-up.



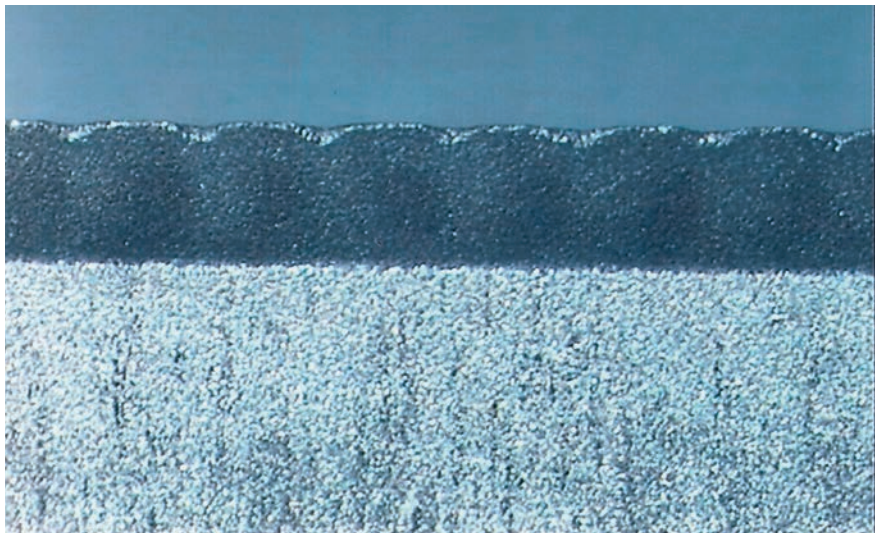
Cutting edge wear after machining GFK.

Rounding cutting edges and small chips

The cutting edge is damaged by small chips not caused by the usual wear when machining some wood-derived materials.

This is usually caused by foreign objects such as mineral particles in the work-piece material.

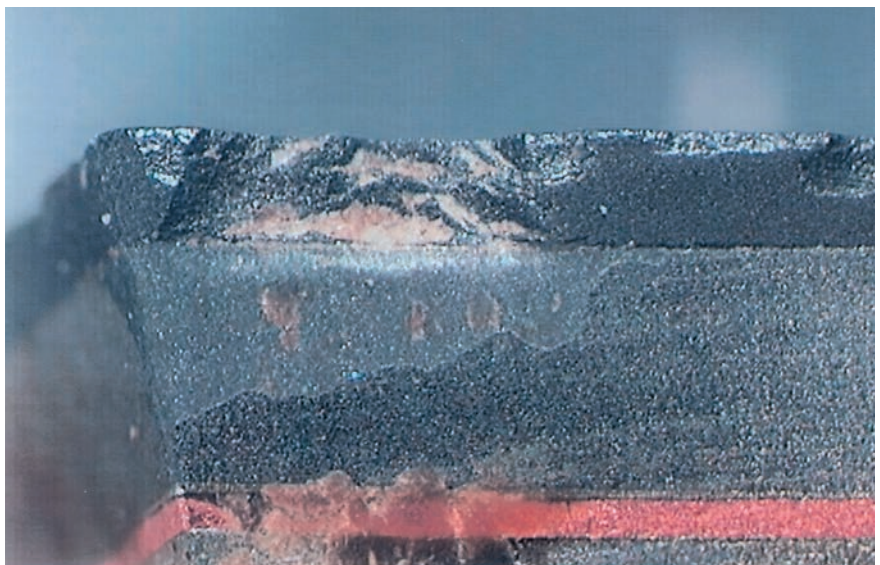
The wear to the cutting edges and the size of the chips to the cutting edge are important factors for economically efficient repair. Increasing cutting forces can totally destroy the cutting edges.



Cutting edge wear and cracks after machining HPL/CPL.

Cutting edge destruction

The cutting edge can be destroyed when machining non-uniform materials containing mineral or metallic particles. These particles cannot be detected prior to machining and limit the use of DP (DIA) tools for machining such materials.



Cutting edge destruction by metallic particles.

Enquiry/order form special tools – manual feed

Customer details: Customer number:
(if known)

Enquiry
 Order

Delivery date: (not binding) CW

Company: _____
Street: _____
Town/Postcode: _____
Country: _____
Phone/fax: _____
Contact person: _____
Signature: _____

Date: _____
Enquiry/order no.: _____
Tool ID: (if known) _____
No. of pieces: _____

Work piece material:

Solid wood Type: _____
 Wood-derived mat. Type: _____
 Coating Type: _____
 Other Type: _____
 Finish hogging

Moisture content: _____ %
Density: _____ g/cm³
Additional information: _____

Machine:

(Spindle moulder, moulder, double-end tenoner edgebanding machines, window machines etc.)

Manufacturer: _____
Year: _____
Type: _____

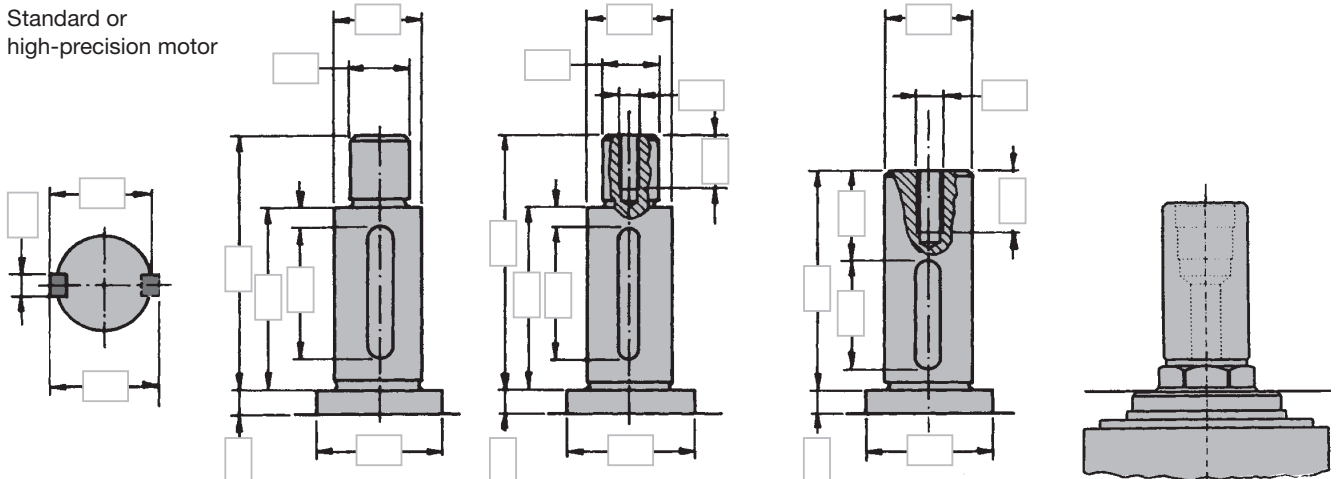
Spindle sequence in feed direction:

e.g.: 1 bottom, 2 right hand, 3 left hand, 4 top, 5 multi-purpose
or: 1 scoring, 2 hogging, 3 cutting, 4 square cutting, 5 finish cutting
or: 1 sawing, 2 slotting/tenoning, 3 cutting with feed, 4 cutting against feed

Motor no.:	Power:	RPM:	Spindle dimension:	add. Information:
1	_____ kW	_____ min ⁻¹	_____ mm	_____
2	_____ kW	_____ min ⁻¹	_____ mm	_____
3	_____ kW	_____ min ⁻¹	_____ mm	_____
4	_____ kW	_____ min ⁻¹	_____ mm	_____
5	_____ kW	_____ min ⁻¹	_____ mm	_____

Please state direction of rotation (LH/RH) or cutting direction (GGL/GLL) for each spindle.

Standard or high-precision motor



Enquiry/order form special tools – manual feed

Tool:

Tool type (see product information): (e.g. single part/tipped-/tool combination)

Dimension:

Diameter _____ mm

Cutting width: _____ mm

Bore: _____ mm

No. of teeth: _____

Cutt. mat:

- HL
- HS
- ST
- HW
- DP

Adapter:

- No adaptor required
- Sleeve with anti-twist device
- Sleeve without anti-twist device
- Quick clamping element
- Hydro clamping element

Direction of rotation:

- Right hand rotation
- Left hand rotation

Cutting direction:

- Against feed
- With feed

Type of feed:

- Manual feed (MAN)
- Mechanical feed (MEC)

Feed speed: _____ min⁻¹

Cutting width (SB): _____ mm

Cutting depth: _____ mm

Notes:

Zero-diameter: _____ mm

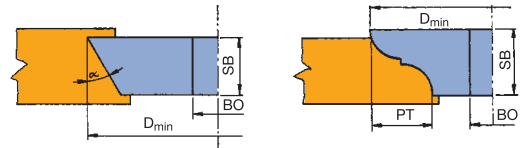
Max. diameter.: _____ mm

Zero-height: _____ mm

Clamping length: _____ mm

Application:

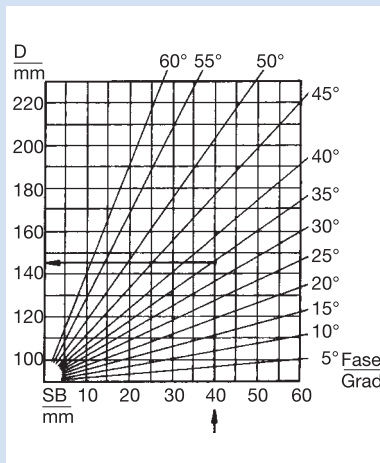
- | | | | |
|--------------|--------------------------------------|---------------------------------------|---|
| Solid wood | <input type="checkbox"/> along grain | <input type="checkbox"/> across grain | <input type="checkbox"/> end grain |
| Wood-derived | <input type="checkbox"/> top layer | <input type="checkbox"/> middle layer | <input type="checkbox"/> top layer and middle layer |



Technical information:

Tipped tool (bevel-/profile router):
Design: BG-Test, Z 2, round design
mech. feed, Z 3, Z 4, round design,
tooth shape: with/without spurs

Chart to determine min. tool diameter:
Valid for bevel cutterblock BO – 30 mm:
For bore 40 mm: D + 10 mm
For bore 50 mm: D + 20 mm



Formula to determine tool diameter:

Valid for profile cutterblock BO – 30 mm:

For bore 40 mm: D + 10 mm

For bore 50 mm: D + 10 mm

Formula: $D_{min} = 100 + 2 \times PT$ (mm)

Note:

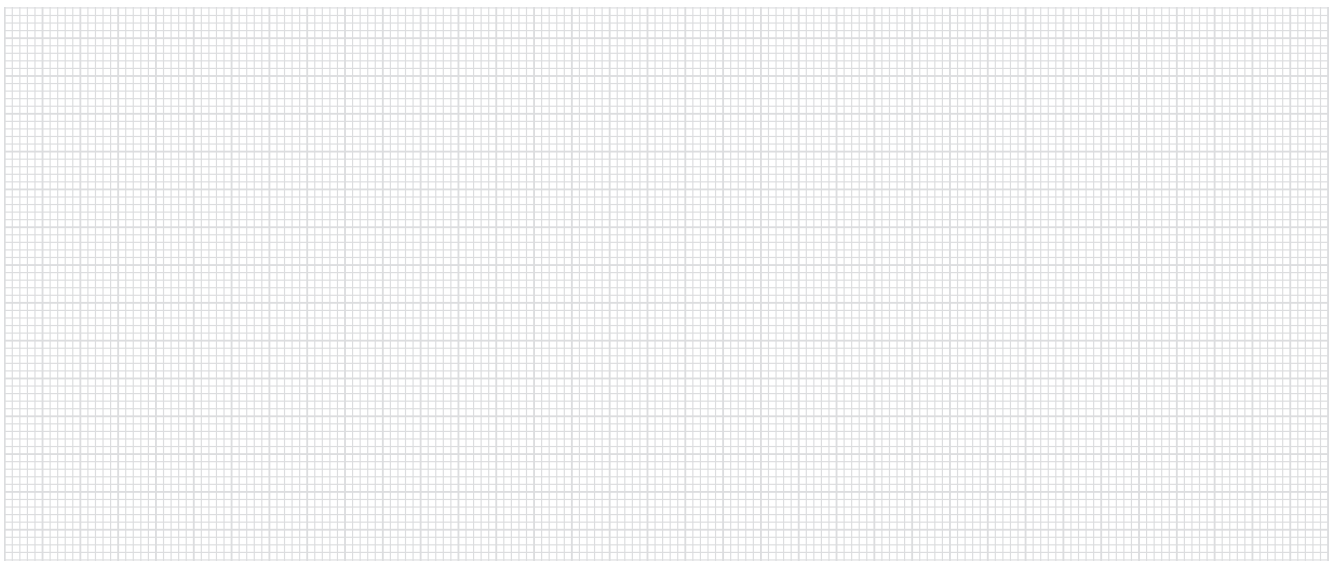
Angles exceeding 45° and large profile depths require large diameters. The maximum possible RPM for the cutterblock diameter must not be exceeded. Profile sketches or profile drawings must show clearly if the workpiece material (wood) or cutterblock is shown. Please state side to table, direction of rotation, dimensions and conditions of application on all workpiece samples or drawings.

Tool combination with turnblade-/exchangeable knives:







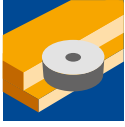

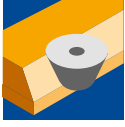

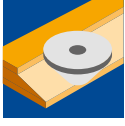










Formula: $D_{min} = 80 \times 2 \times PT$ (mm) – Valid for BO – 30 mm

Sketch for application plan, profile drawing, special motor spindle, etc.

Please specify workpiece support and fence side and/or workpiece face side top/bottom.



Key to pictograms

	Grooving, horizontal and vertical		Interchangeable knives
	Jointing		Mechanical knife clamping, reversible
	Copy shaping		Mechanical knife clamping, non-adjustable
	Rebating		Resharpenable cutting face
	Bevelling		Resharpenable clearance face
	Panel raising		Alloyed tool steel
	Profiling		High-speed steel
	Profiling joints		Tungsten carbide
	MAN Manual feed		Polycrystalline diamond (PCD)
	Tipped tool		Carbide metal coating
	Light Light alloy body		

