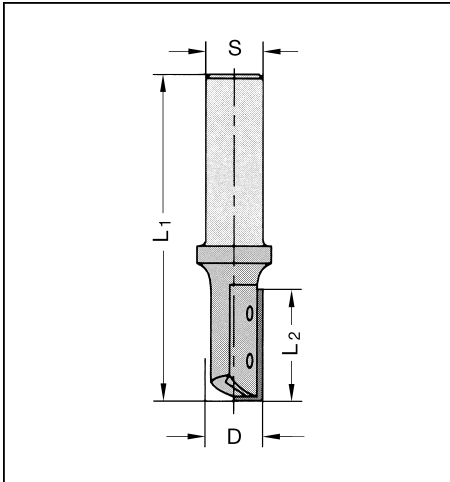


CNC Router Tooling



Grooving Cutter with reversible T.C. tip Z1

22340 - Series 6217



Technical details

Single edge design. Constant cutting circle. Mini reversible tip of excellent T.C. quality. With transverse groove to keep the tip in perfect position and to prevent it from slipping in axial direction. Clamp tip by clamping wedge with tempered TORX screws. Ø 8-12,7 mm on certain conditions also applicable for plunge cutting. Right-hand rotation. For manual feed.

Application

For general routing operations, e.g. grooving, jointing, etc. in hardwood, compressed wood and various kinds of wood composites. For use on portable and stationary routers.



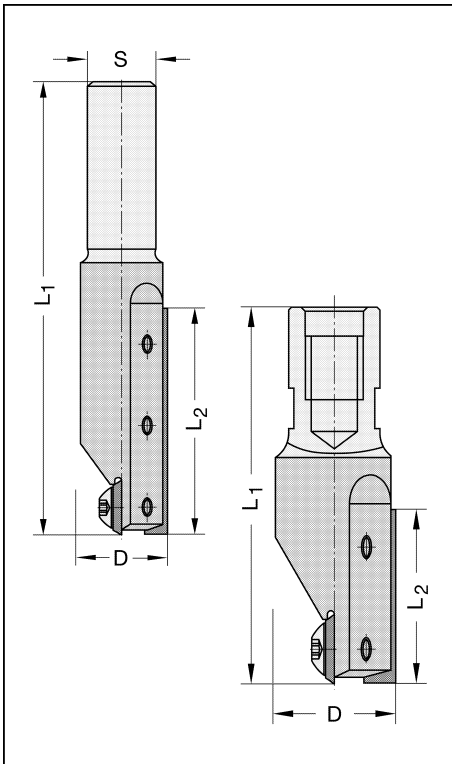
D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
8	20	60	8 x 30	22343-5-08020-R ●
10	20	60	8 x 30	22343-5-10020-R ●
12	20	60	8 x 30	22343-5-12020-R ●
14	30	70	8 x 30	22343-5-14030-R ●
8	20	70	10 x 40	22345-5-08020-R ●
9	20	70	10 x 40	22345-5-09020-R ●
10	25	75	10 x 40	22345-5-10025-R ●
12	30	80	10 x 40	22345-5-12030-R ●
14	30	80	10 x 40	22345-5-14030-R ○
8	20	70	12 x 40	22346-5-08020-R ●
10	25	75	12 x 40	22346-5-10025-R ●
12	30	80	12 x 40	22346-5-12030-R ●
14	30	80	12 x 40	22346-5-14030-R ●
16	50	100	12 x 40	22346-5-16050-R ●
½"	30	80	12,7 (½")	22349-5-12730-R ●

Spare parts / Accessories

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	20 x 4,1 x 1,1 mm, for D= 8/9/9,52 mm	72013-6-20041-0	10
Reversible T.C. tip	20 x 5,5 x 1,1 mm, for D=10/12 mm	72013-6-20055-0	10
Reversible T.C. tip	25 x 5,5 x 1,1 mm, for D=10/11 mm	72013-6-25055-0	10
Reversible T.C. tip	30 x 5,5 x 1,1 mm, for D=12-14 mm	72013-6-30055-0	10
Reversible T.C. tip	50 x 5,5 x 1,1 mm, for D=16 mm	72013-6-50055-0	10
Clamping wedge	8/9/9,52 x 20 mm R	39340-0-08020-R	1
Clamping wedge	10 x 20 mm R	39340-0-10020-R	1
Clamping wedge	10/11 x 25 mm R	39340-0-10025-R	1
Clamping wedge	12 x 20 mm R	39340-0-12020-R	1
Clamping wedge	12/12,7 x 30 mm R	39340-0-12030-R	1
Clamping wedge	14 x 30 mm R	39340-0-14030-R	1
Clamping wedge	16 x 50 mm R	39340-0-16050-R	1
Torx clamping screw	M 2,5 x 3,0, T 8, for D= 8 mm	39080-0-25301-R	10
Torx clamping screw	M 2,5 x 4,0 T 8, for D= 9-11 mm	39080-0-25401-R	10
Torx clamping screw	M 3 x 7,0 T 8, for D=12-14 mm	39080-0-30701-R	10
Torx clamping screw	M 3,5 x 5,5 T15, for D=16 mm	39080-0-35551-R	10
Torx key	T 8, with flag	39077-0-03008-1	5
Torx key	T15, with flag	39077-0-04015-1	5
Torx key	T15, with handle	39077-0-04015-2	1

Grooving Cutter with rev. T.C. tips Z1+1

22360- Series 6219 with rev. T.C. plunge tip



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.	
16	30	71	8 x 30	22363-5-16030-R	●
18	30	71	8 x 30	22363-5-18030-R	●
20	30	71	8 x 30	22363-5-20030-R	●
22	30	71	8 x 30	22363-5-22030-R	●
16	30	81	12 x 40	22366-5-16030-R	●
16	50*	101	12 x 40	22366-5-16050-R	●
18	30	81	12 x 40	22366-5-18030-R	●
18	50	101	12 x 40	22366-5-18050-R	●
20	30	81	12 x 40	22366-5-20030-R	●
20	50	101	12 x 40	22366-5-20050-R	●
22	30	81	12 x 40	22366-5-22030-R	●
18	30	65	M 10	22367-5-18030-R	●
16	30	65	M 12 x 1	22368-5-16030-R	●
16	50	85	M 12 x 1	22368-5-16050-R	●
18	30	65	M 12 x 1	22368-5-18030-R	●
20	30	65	M 12 x 1	22368-5-20030-R	●
20	50	85	M 12 x 1	22368-5-20050-R	●

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip		72013-6-20055-0	10
Reversible T.C. tip		72013-6-30055-0	10
Reversible T.C. tip		72013-6-50055-0	10
Reversible T.C. tip		12 x 12 x 1,5 mm, 4-sided	72014-6-01201-0 10
Torx clamping screw		M 3,5 x 5,5 T15, for D=14,5/16/18 mm	39080-0-35551-R 10
Torx clamping screw		M 3,5 x 6,5 T15, for D= 20/22 mm	39080-0-35651-R 10
Torx clamping screw		M 4 x 5,9, extra-large head, T15, f. D=14,5/16/18 mm plunge tips	39076-0-04000-R 10
Torx clamping screw		M 4 x 7, extra-large head, T15, for D= 20/22 mm plunge tips	39076-0-04070-R 10
Torx key		T15, with flag	39077-0-04015-1 5
Torx key		T15, with handle	39077-0-04015-2 1
Clamping wedge		for D = 14,5/16 x 20 mm	39360-0-16020-R 1
Clamping wedge		for D= 16 x 30 mm R	39360-0-16030-R 1
Clamping wedge		for D= 16 x 50 mm R	39360-0-16050-R 1
Clamping wedge		for D= 18 x 30 mm R	39360-0-18030-R 1
Clamping wedge		for D= 18 x 50 mm R	39360-0-18050-R 1
Clamping wedge		for D= 20 x 30 mm R	39360-0-20030-R 1
Clamping wedge		for D= 20 x 50 mm R	39360-0-20050-R 1
Clamping wedge		for D= 22 x 30 mm R	39360-0-22030-R 1

Technical details

Single edge design. Constant cutting circle. Mini reversible tips of excellent T.C. quality, with transverse groove to keep the tip in perfect position and to prevent it from slipping in axial direction. Clamp tips by clamping wedges with tempered TORX screws. Right-hand rotation. For manual feed.

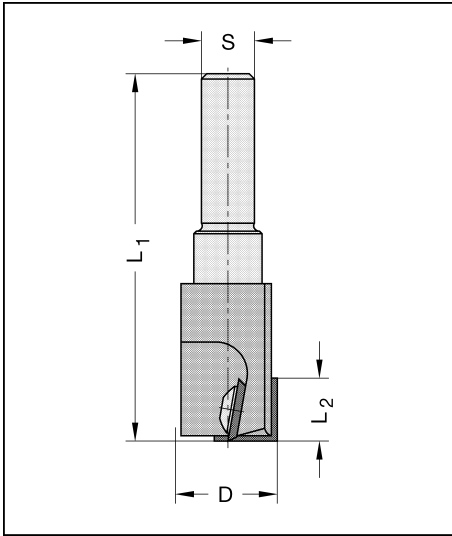
Application

For general routing operations, e.g. grooving, jointing, rebating, etc. in hardwood, compressed wood and various kinds of wood composites. For use on portable and stationary routers.

* see page 1.7

Grooving/Face Plate Cutter with rev. T.C. tips Z1+1

22320 - Series 6219 interchangeable shank design



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
16	12	70	8 x 30	22323-5-16000-R ●
16	12	70	10 x 30	22325-5-16000-R ●
16	12	70	12 x 30	22326-5-16000-R ●
16	12	60	M 12 x 1	22328-5-16000-R ●
18	12	70	8 x 30	22323-5-18000-R ●
18	12	70	10 x 30	22325-5-18000-R ●
18	12	70	12 x 30	22326-5-18000-R ●
18	12	60	M 12 x 1	22328-5-18000-R ●
20	12	70	8 x 30	22323-5-20000-R ●
20	12	70	10 x 30	22325-5-20000-R ●
20	12	70	12 x 30	22326-5-20000-R ●
20	12	60	M 12 x 1	22328-5-20000-R ●
24	12	70	8 x 30	22323-5-24000-R ●
24	12	70	10 x 30	22325-5-24000-R ●
24	12	70	12 x 30	22326-5-24000-R ●
24	12	60	M 12 x 1	22328-5-24000-R ●

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	7,5 x 12 x 1,5 mm, for D= 16/18 mm	72010-6-00751-0	10
Reversible T.C. tip	9 x 12 x 1,5 mm, for D= 20 mm	72010-6-00900-0	10
Reversible T.C. tip	12 x 12 x 1,5 mm, 4-sided, f. D= 24 mm periphery and plunge tip	72014-6-01201-0	10
Torx clamping screw	M 3,5 x 4 extra-large head, T15, f. D= 16/18 mm, periphery tip	39076-0-03500-R	10
Torx clamping screw	M 4 x 4 extra-large head, T15, f. D= 20 mm, periphery tip	39076-0-04040-R	10
Torx clamping screw	M 4 x 5,9, extra large head, T15, f. D= 24 mm, periphery and plunge tip	39076-0-04000-R	10
Torx clamping screw	M 4 x 5, T15, for D= 16/18/20 mm plunge tip	39081-0-04050-R	10
Torx key	T15, with flag	39077-0-04015-1	5

Technical details

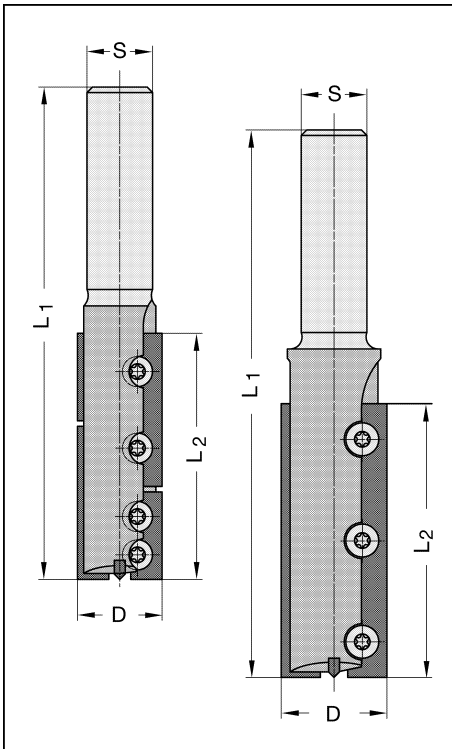
With 1 reversible T.C. tip, cutting on bottom and periphery, 4-sided, and 1 reversible T.C. tip for plunge cutting, with shear angle. Right-hand rotation. For manual feed.

Application

For grooving and rebating operations of little cutting depth in hardwood, glu-lam wood, various kinds of wood composites and panel materials on portable and stationary routers. Especially recommended for cutting grooves in door production, e.g. for face-plates, hinge grooves, fixing straps for floor sealings.

Grooving Cutter with reversible T.C. tips Z2

22033-38 with T.C. plunge tip



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
16	28	75	12 x 40	22036-5-16028-R ●
16	45	90	12 x 40	22036-5-16045-R ●
16	45	80	M 10	22037-5-16045-R ●

Technical details

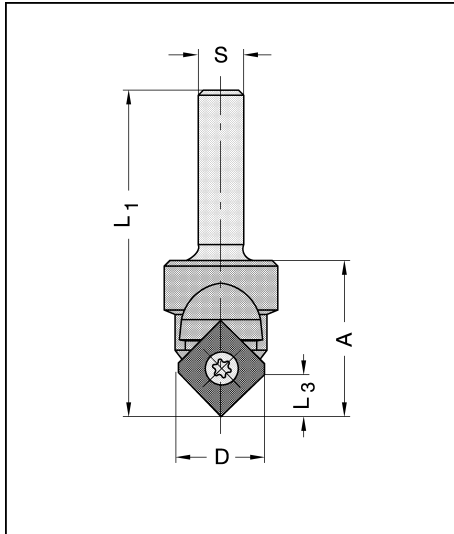
Tool body with 2 straight T.C. tips. Diameter 16 mm with single edge T.C. tips, for L₂ = 45 mm with 2 staggered tips 16 and 28 mm each. With T.C. tip for plunge cutting. Right-hand rotation. For manual feed.

Application

For general routing operations, e.g. grooving, jointing, severing of solid wood, as well as wood composites and panel materials. Most appropriate for axial plunge cutting.

Decorative Groove Cutter with reversible T.C. tip Z1

22193 - Series 4319



D mm	L ₃ mm	A mm	L ₁ mm	Shank mm	Part-No.
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Basic tool body with tip No. 1

15,9	7,5	27	57,5	8 x 30	22193-5-15900-R ●
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Set in wooden case, consisting of:

Tool body	with	altogether	7 tips*		22193-5-00000-R ●
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* **Set, consisting of:** 1 pc. Decorative groove cutter with tip No. 1 1 pc. Profile tip f. profiles Nos. 2/3/4 1 pc. Profile tip f. profile No. 5 1 pc. Profile tip f. profiles Nos. 6/7/8 1 pc. Profile tip f. profile No. 10 1 pc. Profile tip f. profile No. 11 1 pc. Profile tip f. profile No. 12 1 pc. TORX key with flag T15 1 pc. TORX clamping screw

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs:** up to 9 pcs. only. Repeat orders of same profile: no template costs.

Spare parts / Accessories		Part-No.	PU
Interch. T.C. tip	12 x 12 x 1,5 mm, for profile No. 1	72190-6-00001-R	1
Torx clamping screw		39081-0-04048-R	10
Torx key	T15, with flag	39077-0-04015-1	5

reversible T.C. tips

Dimensions B x H x S mm	For profile No.	Part-No.
12 x 12 x 1,5	2/3/4	72190-6-00004-R ●
12 x 12 x 1,5	5	72190-6-00005-R ●
12 x 12 x 1,5	6/7/8	72190-6-00008-R ●
12 x 12 x 1,5	9	72190-6-00009-R ●
12 x 12 x 1,5	10	72190-6-00010-R ●
12 x 12 x 1,5	11	72190-6-00011-R ●
12 x 12 x 1,5	12	72190-6-00012-R ●
Special profiles	up to D = 15,9 mm	72190-6-15900-R ●

Technical details

Tempered tool body, supplied with 1 reversible tip for profile No. 1 as basic equipment. T.C. tip with shear cut from top to bottom. The basic tip can be profiled **on one side**. Maximum depth of profile according to illustration below. For manual feed.

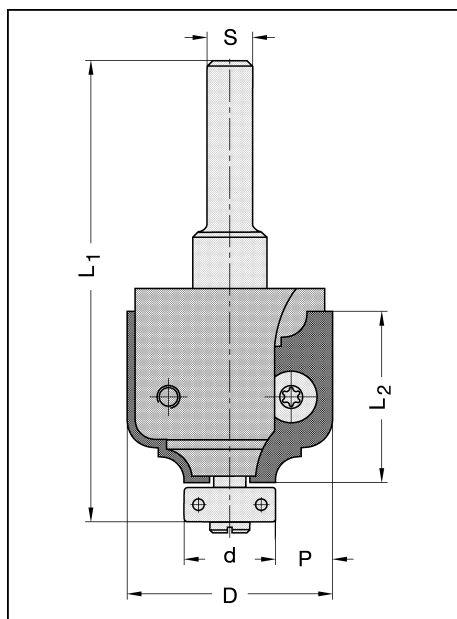
Application

For decorative grooving, lettering and engraving, etc.



UNITEC Profile Cutter T.C. Z2

22150 interchangeable shank design



D mm	L ₂ mm	P mm	Profile No.	d mm	L ₁ mm	Shank mm	Part-No.
36	30	10	1	16	82	8	22153-5-00001-R ●
36	30	10	1	16	82	12	22156-5-00001-R ●
36	30	10	2	12	82	8	22153-5-00002-R ●
36	30	10	2	12	82	12	22156-5-00002-R ●
36	30	10	3	12	82	8	22153-5-00003-R ●
36	30	10	3	12	82	12	22156-5-00003-R ●
36	30	10	4	12	82	8	22153-5-00004-R ●
36	30	10	4	12	82	12	22156-5-00004-R ●
36	30	10	5	16	82	8	22153-5-00005-R ●
36	30	10	5	16	82	12	22156-5-00005-R ●
36	30	10	11	12	82	8	22153-5-36011-R ●
36	30	10	11	12	82	12	22156-5-36011-R ●

Basic tool body (special profiles) without tips and without guide set

36	30	10			72	8	22153-0-30000-R ●
36	30	10			72	12	22156-0-30000-R ●

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Spare parts / Accessories

		Part-No.	PU
Guide set	12 mm ø, complete	39064-0-09012-R	1
Guide set	16 mm ø, complete	39064-0-09016-R	1
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Covering screw	M 3,5 x 6,0 mm, (special accessory)	39052-0-03500-R	10
Torx key	T15, with flag	39077-0-04015-1	5

Profile tips T.C.

Dimensions B x H x S mm	Profile No.	Part-No.
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Standard profiles

30 x 14,5 x 1,5	1	72149-6-00001-R ●
30 x 14,5 x 1,5	2	72149-6-00002-R ●
30 x 14,5 x 1,5	3	72149-6-00003-R ●
30 x 14,5 x 1,5	4	72149-6-00004-R ●
30 x 14,5 x 1,5	5	72149-6-00005-R ●
30 x 14,5 x 1,5	11	72149-6-30011-R ●

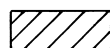
Special profile

30 x 14,5 x 1,5		72149-6-30001-R ●
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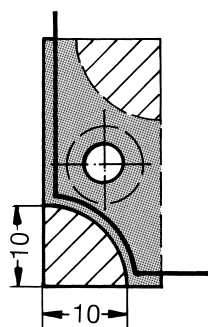
Technical details

With 2 reversible T.C. tips, profiled on both sides, with shear angle. Right-hand rotation. For manual feed. If required the ball bearing guide set can be removed and replaced by a covering screw.

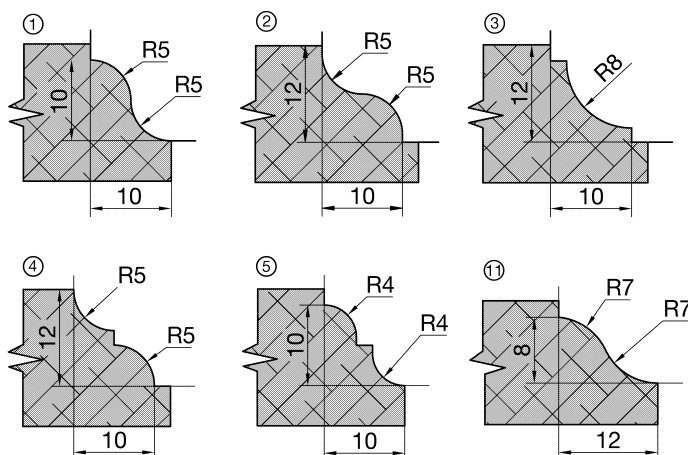
Special profiles (on inquiry)



Area available for profiling (1:1)

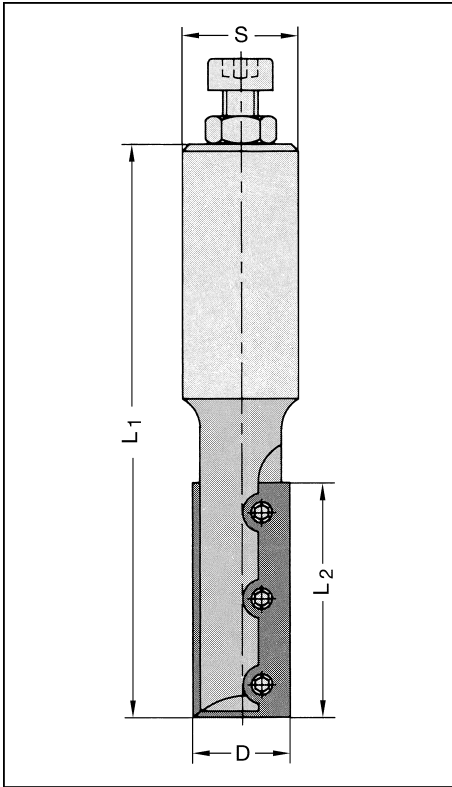


Standard profiles (1:1)



Router Cutter with reversible T.C. tips Z2

22035 - Series 6218 with T.C. plunge tip



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
25	50	119		22035-5-25506-R ●
30	50	118		22035-5-30506-R ●

Technical details

With 2 straight reversible T.C. tips, 50 mm, 3-hole-design, face screw fixing. With T.C. centre tip for plunge cutting. For mechanical feed. Right-hand rotation.

For spare tips in different T.C. grades see page .

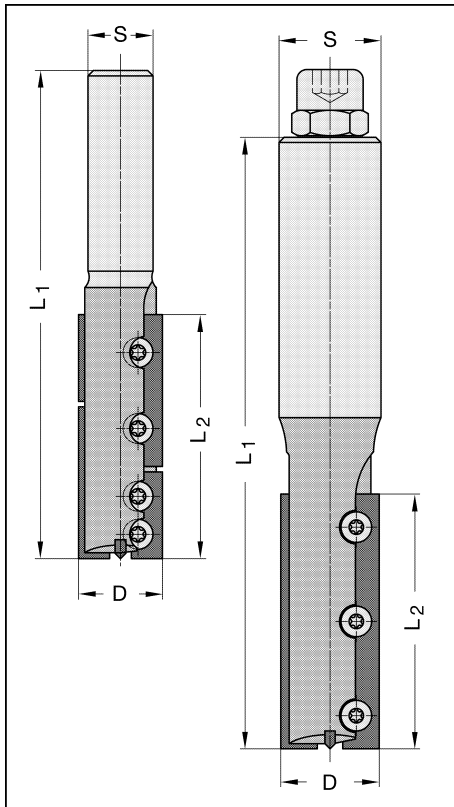
Application

For jointing, trimming, rebating in solid wood and various kinds of wood composites on stationary routers with or without CNC control.

Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip	50 x 12 x 1,7 mm, 4-sided, 3-hole des., HW 02	72016-6-05017-0 10
Torx clamping screw	M 4 x 6, T15, for D= 25 mm	39081-0-04060-R 10
Torx clamping screw	M 4 x 5,9, extra-large head, T15, f. D = 30 mm	39076-0-04000-R 10
Torx key	T15, with handle	39077-0-04015-2 1

Router Cutter with reversible T.C. tips Z2

22036 - Series 6220 with T.C. plunge tip



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
16	28	75	12 x 40	22036-5-16028-R ●
16	45	90	12 x 40	22036-5-16045-R ●

Technical details

Tool body with 2 straight interchangeable T.C. tips for diameter 16 mm, 2 staggered T.C. tips 16 and 28 mm for L₂ = 45 mm. Reversible tips for diameter 18 mm. Cutting on bottom and periphery. Face screw fixing. With T.C. centre tip for plunging cutting. Right-hand rotation. For manual and mechanical feed.

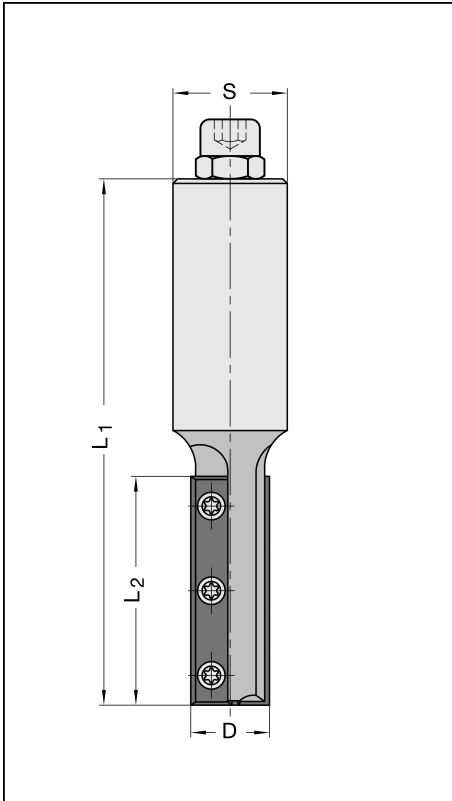
Application

For general routing operations, e.g. grooving, trimming, rebating in solid wood, various kinds of wood composites and boards, on stationary routers with or without CNC control. Well applicable for plunging with reduced feed speed.

Spare parts / Accessories		Part-No.	PU
Interch. T.C. tip		72120-6-01600-0	10
Interch. T.C. tip		72120-6-02800-0	10
Reversible T.C. tip	30 x 9 x 1,5 mm, 4-sided, HW03, f. D=18/20 mm	72005-6-03003-0	10
Reversible T.C. tip	50 x 9 x 1,5 mm, 4-sided, HW03, f. D=18/20 mm	72005-6-05003-0	10
Torx clamping screw	M 3 x 4 T 9 (for D= 16 mm)	39081-0-03040-R	10
Torx clamping screw	M 3,5 x 4, T15 (for D=18/20 mm)	39080-0-03540-R	10
Torx key	T 9, with handle	39077-0-03009-2	1
Torx key	T15, with handle	39077-0-04015-2	1

Router Cutter with reversible T.C. tips Z2

22005 - with T.C.plunge tip



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
16	30	100		22005-5-16306-R ●
16	50	120		22005-5-16506-R ●
18	50	115	20 x 55 m. E. M 8	22005-5-18505-R ●
18	50	115		22005-5-18506-R ●

Technical details

With 2 reversible T.C. tips, T.C. grade HW 03, cutting on bottom and periphery. Back screw fixing. Sturdy body. With T.C. centre tip for ramp plunge cutting. Right-hand rotation. For mechanical feed.

Application

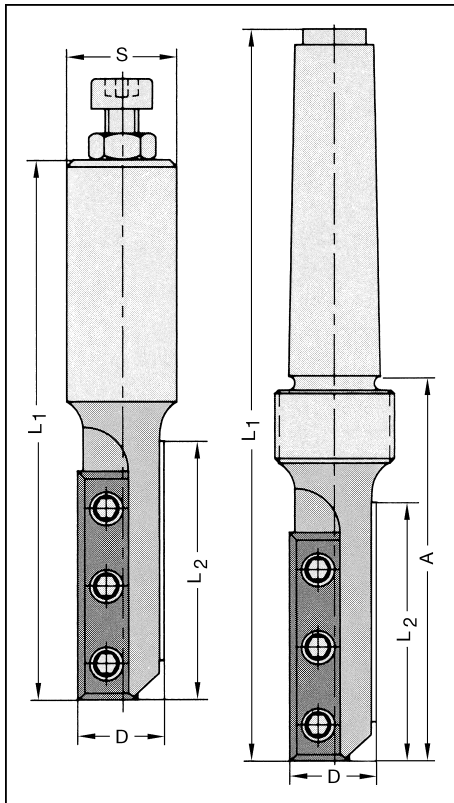
For general routing operations, e.g. grooving, jointing, panel-sizing, rebating, severing and apertures in solid wood as well as in wood composites and various panel materials (choose the appropriate T.C. grade). For use on stationary routers, with or without CNC control.

HW 03 = top standard grade HW 01 = for MDF and particularly abrasive materials

Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip	30 x 9 x 1,5 mm, 4-sided, HW 03	72005-6-03003-0 10
Reversible T.C. tip	30 x 9 x 1,5 mm, 4-sided, HW 01	72005-6-03001-0 10
Reversible T.C. tip	50 x 9 x 1,5 mm, 4-sided, HW 03, f. D=18/20mm	72005-6-05003-0 10
Reversible T.C. tip	50 x 9 x 1,5 mm, 4-sided, HW 01, 3-hole-design	72005-6-05001-0 10
Torx clamping screw	M 3,5 x 4,8, T15	39080-0-03548-R 10
Torx key	T15, with handle	39077-0-04015-2 1

Router Cutter with reversible T.C. tips Z2

22030 - Series 6225 with T.C. plunge tip



D mm	L ₂ mm	L ₁ mm	A mm	Shank mm	Part-No.
18	55	125	-	20 x 55 m. E. M 8	22030-5-18505-L ●
18	55	125	-	20 x 55 m. E. M 8	22030-5-18505-R ●
18	55	125	-		22030-5-18506-L ●
18	55	125	-	25 x 55 m. E M 8	22030-5-18506-R ●
20	55	125	-	20 x 55 m. E. M 8	22030-5-20505-R ●
20	55	125	-		22030-5-20506-L ●
20	55	125	-		22030-5-20506-R ●
22	55	125	-		22030-5-22506-R ●

Technical details

With 2 staggered reversible T.C. tips, 4-sided, back screw fixing. With T.C. centre tip for plunge cutting. For manual and mechanical feed.

Application

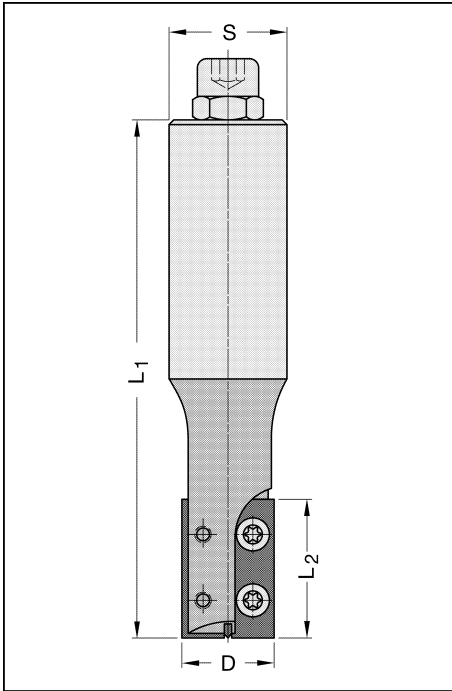
For grooving, jointing, trimming and rebating, for severing and apertures in solid wood, various kinds of wood composites and boards, on stationary routers with our without CNC control.

For spare tips in different T.C. grades see page .

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	30 x 12 x 1,5 mm, 4-sided, HW 02	72014-6-03000-0	10
Reversible T.C. tip	50 x 12 x 1,7 mm, 4-sided, 3-hole des., HW 02	72016-6-05017-0	10
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

Router Cutter with reversible T.C. tips Z2

22006 - Alternate Shear



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
20	30	110	20 x 55 m. E. M 8	22006-5-20305-R ●
20	30	110		22006-5-20306-R ●

Technical details

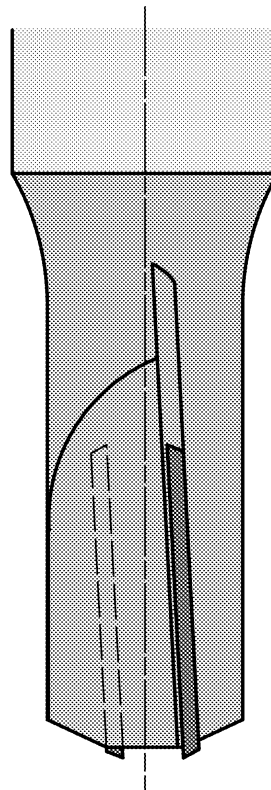
Tool body with 2 reversible T.C. tips HW 03 with alternate shear, cutting on bottom and periphery. Face screw fixing. With T.C. centre tip for plunge cutting. Right-hand rotation. For mechanical feed.

Application

For grooving, trimming and rebating of various kinds of wood and wood composites (please select applicable T.C. grade). T.C. grade HW01 especially applicable for composite and solid surface materials.

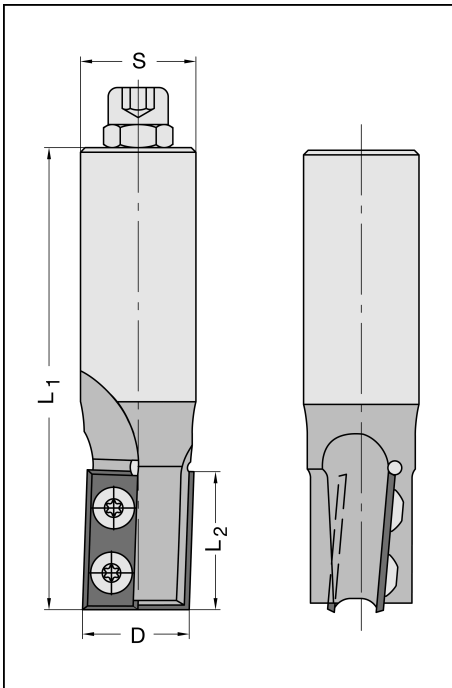
HW 03 = top standard grade HW 01 = for MDF and especially abrasive materials

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	30 x 9 x 1,5 mm, 4-sided, HW 03	72005-6-03003-0	10
Reversible T.C. tip	30 x 9 x 1,5 mm, 4-sided, HW 01	72005-6-03001-0	10
Torx clamping screw		39080-0-03540-R	10
Torx key	T15, with handle	39077-0-04015-2	1



Router Cutter with reversible T.C. tips Z2

22007



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
25	30	100	20 x 55 m. E. M 8	22007-5-25305-R ●
25	30	100		22007-5-25306-R ●

Technical details

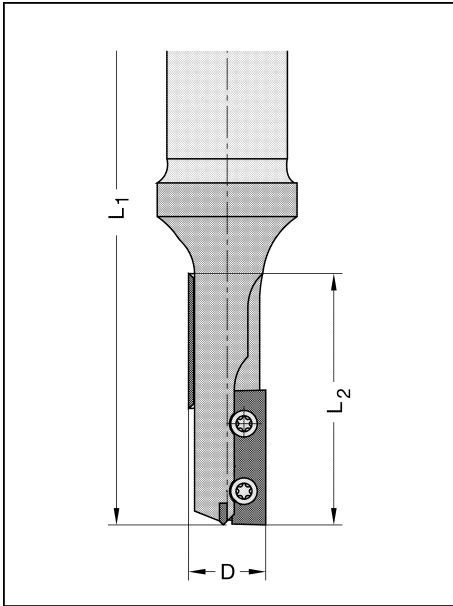
Tool body with 2 reversible T.C. tips HW 22 special grade, polished design, with alternate shear, cutting on bottom and periphery. Back screw fixing. Without plunge tip. Right-hand rotation. For mechanical feed.

Application

Especially applicable for grooving, jointing, trimming of acrylic glass (PMMA), thermoplastics, Makrolon, polycarbonate (PC), polyethylene (PE) and polypropylene (PP).

Router Cutter w. interch. T.C. tips Z1+1

22023 - Series 6243 with alternate shear angle



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
16	50	130		22023-5-16506-R ●
18	50	130		22023-5-18506-R ●

Technical details

With 1 staggered interchangeable T.C. tip each, with alternate shear angle, with T.C. centre tip for plunge cutting. Upper and lower tips can be interchanged with each other. For mechanical feed.

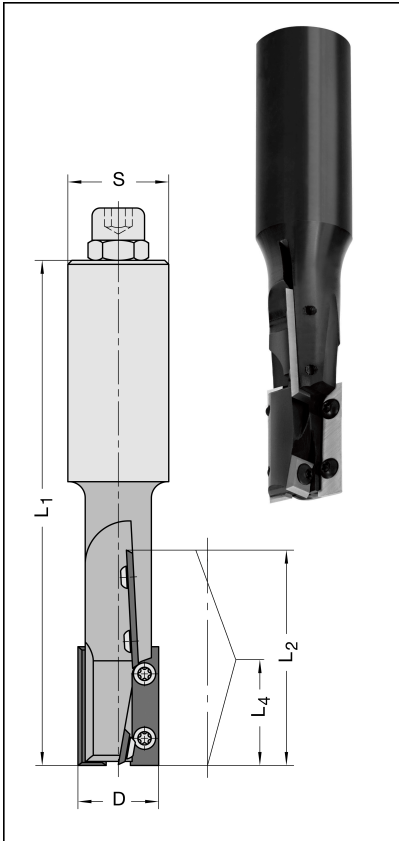
Application

For high quality finish on double-sided laminated panels.

Spare parts / Accessories		Part-No.	PU
Interch. T.C. tip		72120-6-01600-0	10
Interch. T.C. tip		72120-6-02800-0	10
Torx clamping screw		39081-0-03040-R	10
Torx key	T 9, with handle	39077-0-03009-2	1

Router Cutter with interch. T.C. tips Z2+2

22029 - Series 6243 with alternate shear angle



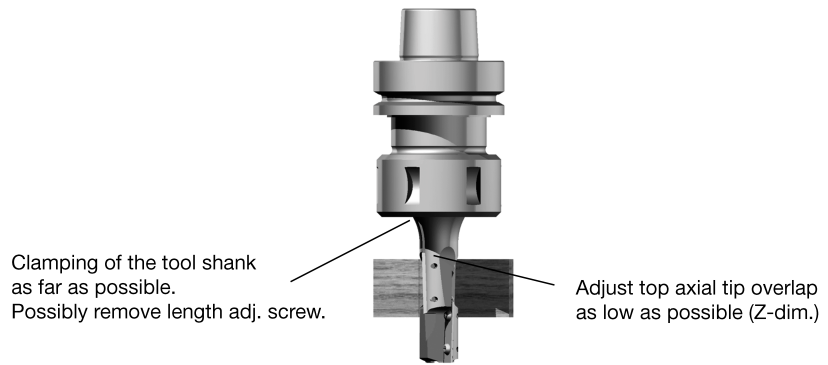
D mm	L ₂ mm	L ₄ mm	L ₁ mm	Shank mm	Part-No.
20	33	16,5	110	20 x 55 m. E. M 8	22029-5-20335-R ●
20	33	16,5	110		22029-5-20336-R ●
20	53	26,5	125	20 x 55 m. E. M 8	22029-5-20535-R ●
20	53	26,5	125		22029-5-20536-L ●
20	53	26,5	125		22029-5-20536-R ●
20	33	16,5	110	3/4" x 55 m. E. M 8	22029-5-20334-R ●
20	53	26,5	125	3/4" x 55 m. E. M 8	22029-5-20534-R ●

Technical details

With 2 staggered **reversible** T.C. tips each, with alternate shear angle and 1 reversible T.C. plunge tip, 4-sided. Upper and lower tips can be interchanged with each other. For mechanical feed.

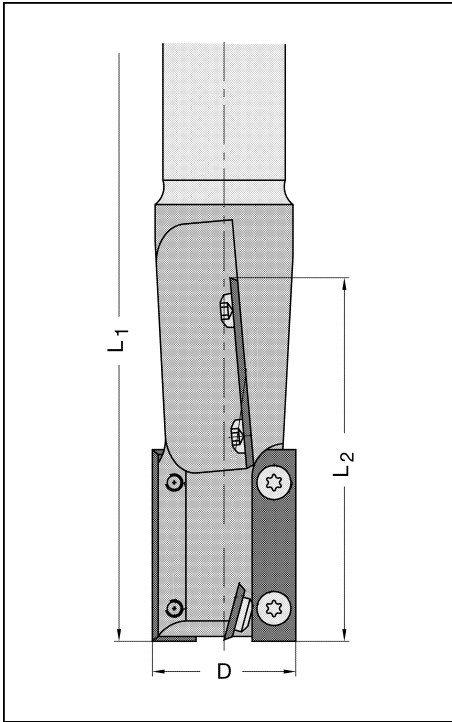
Application

For high quality finish on double-sided laminated panels and for machining solid wood.



Router Cutter with rev. T.C. tips Z2+2

22022 with rev. T.C. plunge tip



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
30	75	145		22022-5-30756-R ●

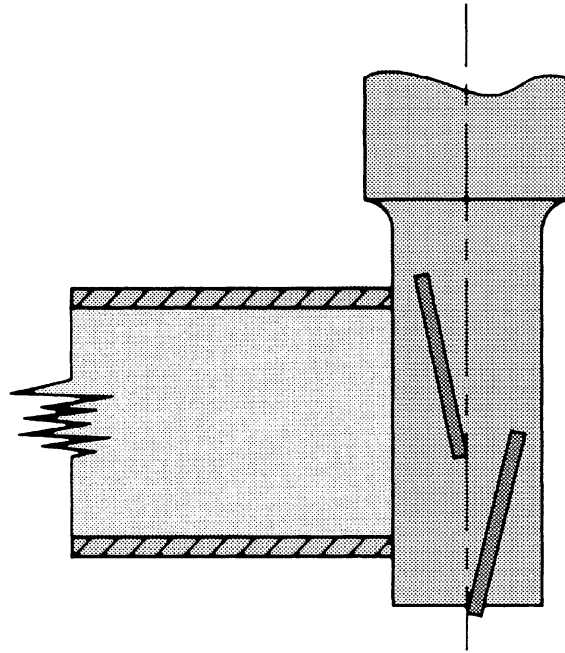
Technical details

With 2 staggered reversible T.C. tips each, with alternate shear angle and 2 reversible T.C. centre tips for plunge cutting. Upper and lower tips can be interchanged. Right-hand rotation. For mechanical feed.

Application

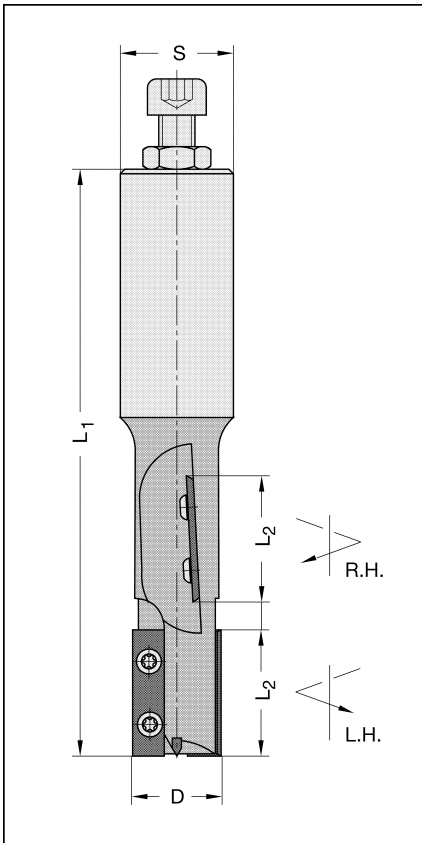
For high quality finish on solid wood or double-sided laminated panels. For use in concentric chucks on stationary routers and CNC machines.

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	40 x 9 x 1,5 mm, 4-sided, HW 02	72005-6-04002-0	10
Reversible T.C. tip		72010-6-00751-0	10
Torx clamping screw	M 3,5 x 4, T15, for periphery tips	39080-0-03540-R	10
Torx clamping screw	M 4 x 5, T15, for plunge tips	39081-0-04050-R	10
Torx key	T15, with handle	39077-0-04015-2	1



Router Cutter with interchangeable T.C. tips Z2+2

22024 - Series 6244 for right-hand and left-hand



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
20	28	130		22024-5-20286-R ●

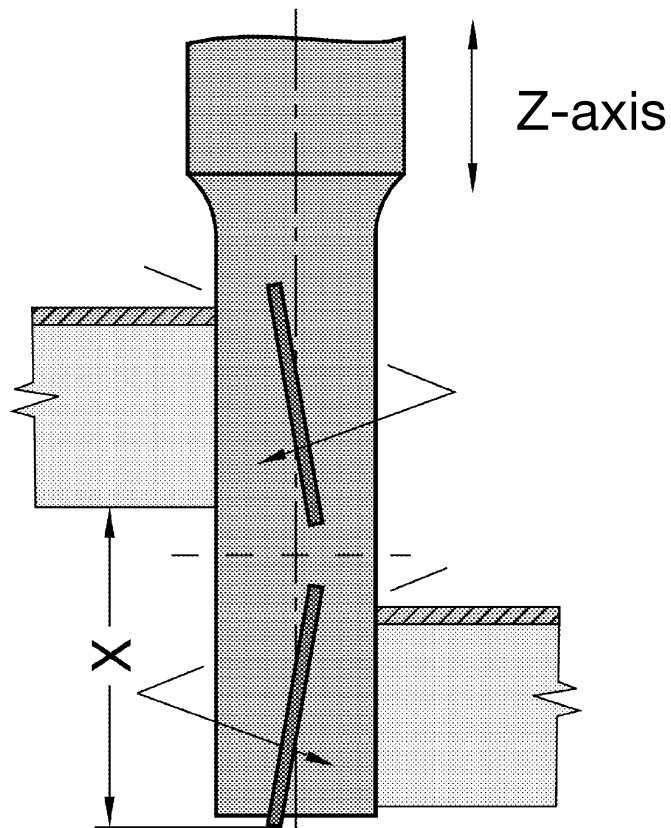
Technical details

With 2 staggered interchangeable T.C. tips each with shear angle, down-cut. **Upper portion (on shank-side) for right-hand rotation, lower portion for left-hand rotation.** Upper and lower tips can be interchanged. Cutting on bottom. For mechanical feed.

Application

For general routing operations, e.g. jointing, rebating, contour cutting, apertures in solid wood, various kinds of wood composites, etc. on stationary routers and CNC machines. By readjusting the Z-axis and changing the rotation, the lower portion of the cutter can be used for L.-H. rotation.

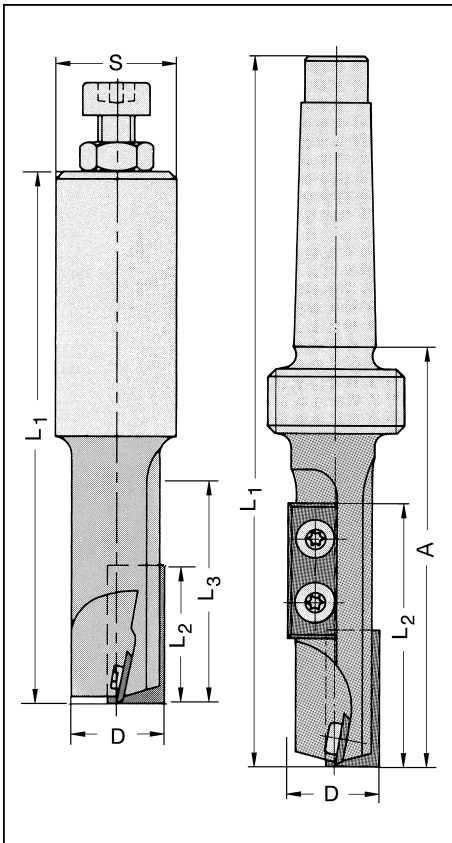
Spare parts / Accessories	Part-No.	PU
Interch. T.C. tip	72120-6-02800-0	10
Torx clamping screw	39081-0-03040-R	10
Torx key	T 9, with handle	1



$$x = 34 \text{ mm}$$

Router Cutter with rev. T.C. tips Z1+1

22008 with rev. T.C. plunge tip



D mm	L ₂ /L ₃ mm	A mm	L ₁ mm	Shank mm	Part-No.
18	50	-	115		22008-5-18506-R ●
20	58	-	120	20 x 55 m. E. M 8	22008-5-20585-R ●
20	58	-	120		22008-5-20586-R ●

Technical details

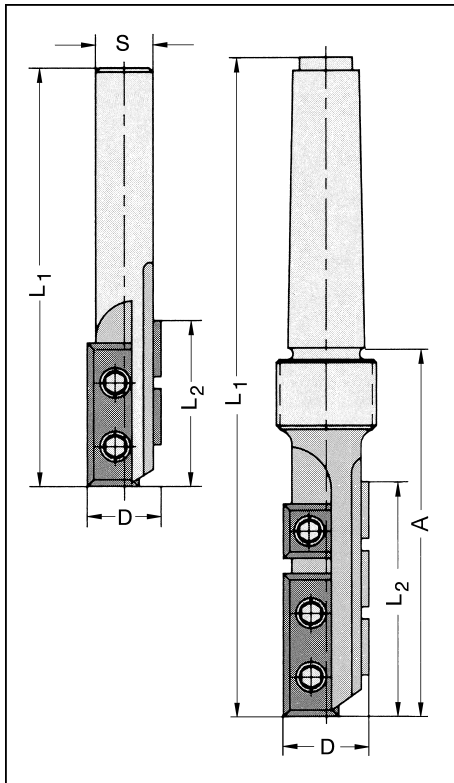
With 1 or 2 reversible T.C. tips, cutting on periphery, and 1 reversible T.C. centre tip for plunge cutting, with shear angle. For mechanical feed.

For spare tips in different T.C. grades see page .

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	7,5 x 12 x 1,5 mm, for D= 16/18 mm, HW 02 plunge tip	72010-6-00751-0	10
Reversible T.C. tip	9 x 12 x 1,5 mm, for D= 20 mm, HW 02, plunge tip	72010-6-00900-0	10
Reversible T.C. tip	30 x 12 x 1,5 mm, 4-sided, HW 02	72014-6-03000-0	10
Torx key	T15, with handle	39077-0-04015-2	1
Torx clamping screw	M 3,5 x 4 extra-large head, T15, f. D= 16/20 mm periphery tip and D= 20 mm plunge tip	39076-0-03500-R	10
Torx clamping screw	M 4 x 4 extra-large head, T15, f. D= 18 mm, periphery tip	39076-0-04040-R	10
Torx clamping screw	M 3,5 x 4, T15, for D= 16 mm plunge tip	39081-0-03540-R	10
Torx clamping screw	M 4 x 5, T15, for D = 18 mm plunge tip	39081-0-04050-R	10

Router Cutters with reversible T.C. tips Z2

22010/22020 Series 6222 with T.C. plunge tip



D mm	L ₂ mm	L ₁ mm	A mm	Shank mm	Part-No.
16	34	85	-	14 x 40	22010-5-16030-R ●
16	45	95	-	14 x 40	22010-5-16040-R ●
20	50	120	-	20 x 50 m. E. M 8	22020-5-20505-R ●

Technical details

With 1 reversible tip 30 mm and, depending on cutting length, 2, 3 or 4 staggered 12 mm reversible T.C.tips. With T.C. centre tip for plunge cutting. Right-hand rotation. For manual and mechanical feed.

Application

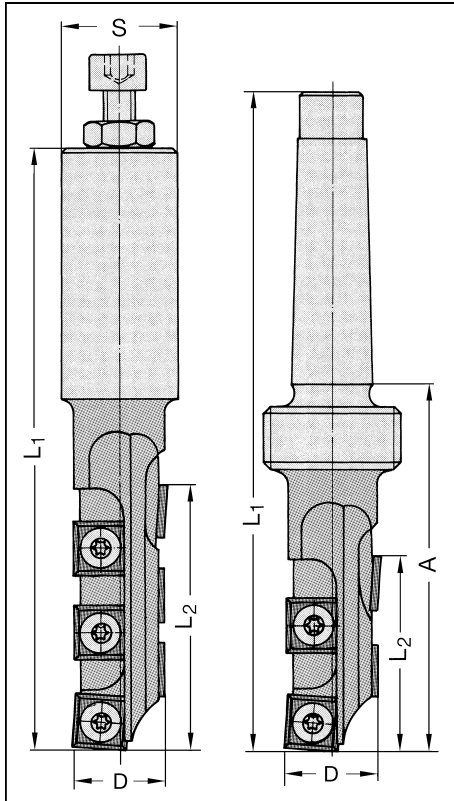
For pre-cutting and cut-out operations in solid wood, various kinds of wood composites and boards on stationary routers and CNC machines.

For spare tips in different T.C. grades see page .

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	30 x 12 x 1,5 mm, 4-sided, HW 02	72014-6-03000-0	10
Reversible T.C. tip	12 x 12 x 1,5 mm, 4-sided, HW 02	72014-6-01201-0	10
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

Roughing Cutter with reversible T.C. tips Z1+1

22026 - Series 6223



D mm	L ₂ mm	L ₁ mm	A mm	Shank mm	Part-No.
22	60	131	-		22026-5-22606-R ●

Technical details

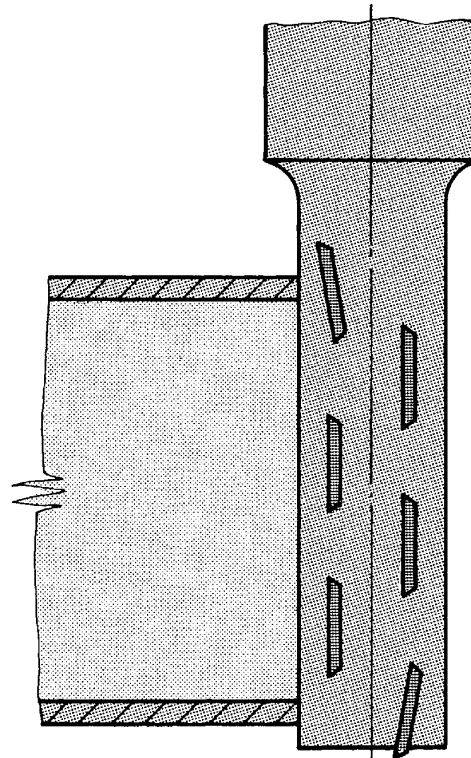
With 4 or 6 staggered reversible T.C. tips, T.C. grade HW 02. Upper and lower tips with shear angle each. Also applicable for plunge cutting. Right-hand rotation. For mechanical feed.

Application

For increased chip removal rates for pre-cutting and aperture operations in solid wood and all kinds of wood composites on stationary routers and CNC machines. For high quality finish, even on double-sided laminated materials.

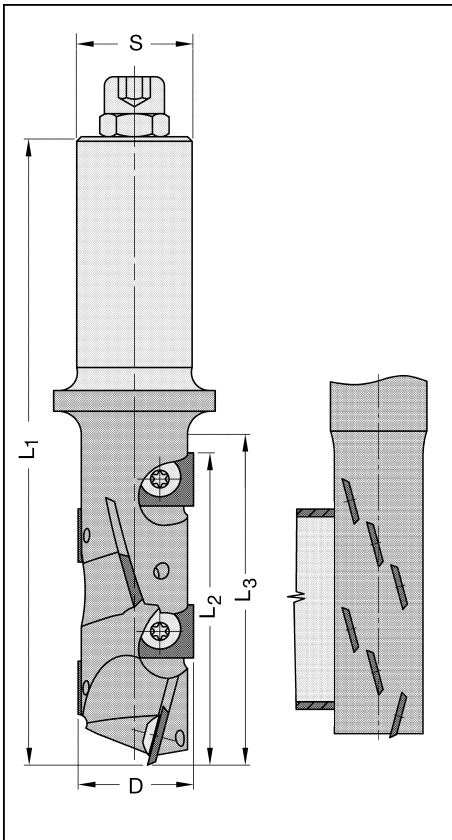
HW 02 = standard grade HW 01 = for MDF and high abrasive materials

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	12 x 12 x 1,5 mm, 4-sided, HW 02	72014-6-01201-0	10
Reversible T.C. tip	12 x 12 x 1,5 mm, 4-sided, HW 01	72014-6-01200-F	10
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1



Roughing Cutter with reversible T.C. tips Z1+1

22027 - Series 6226



D mm	L ₂ mm	L ₃ mm	L ₁ mm	Shank mm	Part-No.
25	66	78	138	20 x 55 m. E. M 8	22027-5-25665-R ●
25	66	73	138		22027-5-25666-R ●

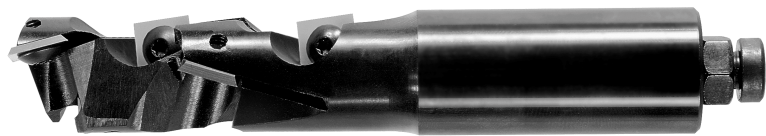
Technical details

With 4 or 6 helically positioned reversible T.C. tips, T.C. grade HW 02. All T.C. tips with shear angle. Not applicable for plunge cutting. Right-hand rotation. For mechanical feed.

Application

For increased chip removal rates for pre-cutting and aperture operations in solid wood and all kinds of wood composites on stationary routers and CNC machines. For high-quality finish, even on double-sided laminated materials.

Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip	12 x 12 x 1,5 mm, 4-sided, HW 02	72014-6-01201-0 10
Reversible T.C. tip	12 x 12 x 1,5 mm, 4-sided, HW 01	72014-6-01200-F 10
Torx clamping screw		39081-0-04050-R 10
Torx key	T15, with handle	39077-0-04015-2 1



20330 Z2

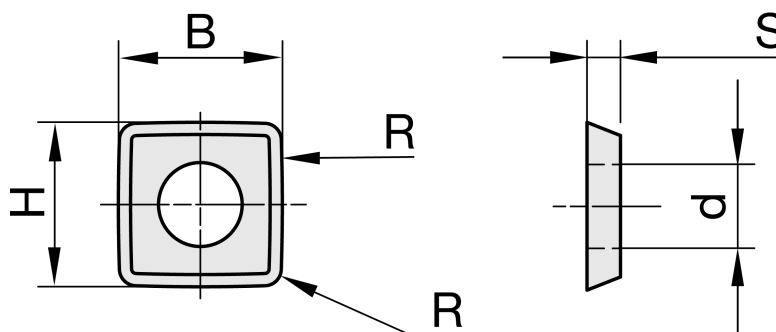
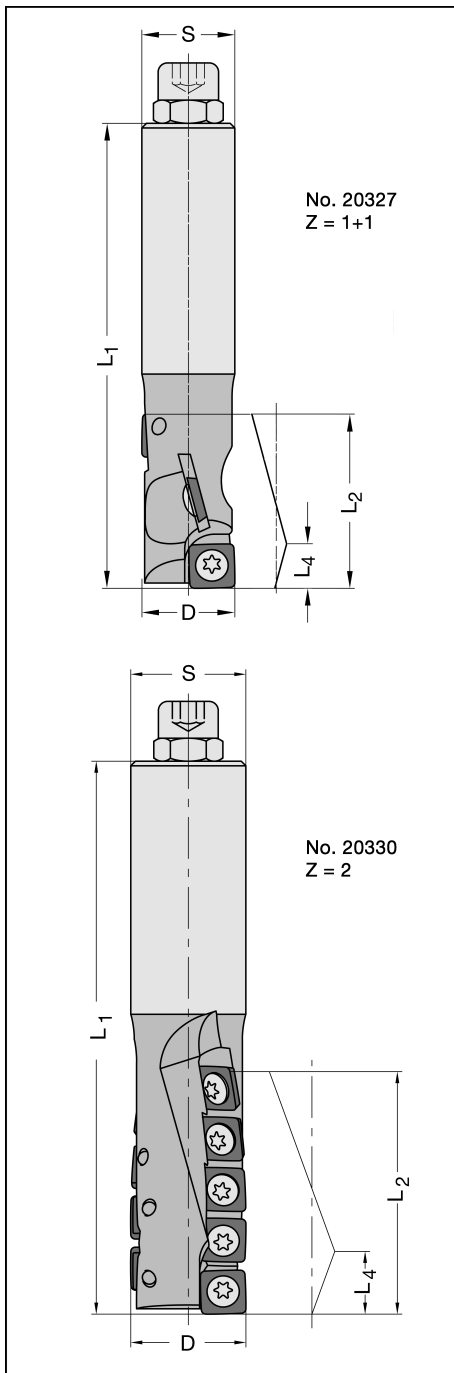
D mm	L ₂ mm	L ₄ mm	L ₁ mm	AS	Shank mm	Part-No.
25	54*	13,9	120	10	20 x 55 m. E. M 8	20330-5-25505-R ●
25	54*	13,9	120	10		20330-5-25506-R ●

Technical details

Studytool body with 4-sided rev. solid T.C. tips in special FourCut design, helically positioned. High precision and secure tip fixing by special screws with centering collar. Mechanical feed. Right-hand rotation.

For jointing and panel sizing of wood- and board materials with different configuration on CNC machines. Helically positioned tips for high chip removal and good chip flow. Applicable for ramp plunge cutting. **Combined use of solid T.C. and PCD tips possible (page).** Application data: R.P.M. = 18 000 - 24 000 v_t = 4 - 8 m/min. for Z1+1 (No. 20327) v_t = 8 - 15 m/min. for Z2 (No. 20330)

AS = number of cutting edges (tips) * The last 4 or 5 mm on shank side with single cutting edge (Z1).



20290

D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
30	119	195	30/29,4	20290-5-30000-R ●
40	160	235	30/29,4	20290-5-40160-R ●

For D = 30 mm and D = 40 mm up from Sept. 09, only tip W1 (No. 20290) or W6 (No. 20291) is required. (26 pcs for D = 40 mm and 19 pcs for D = 30 mm).

Technical details

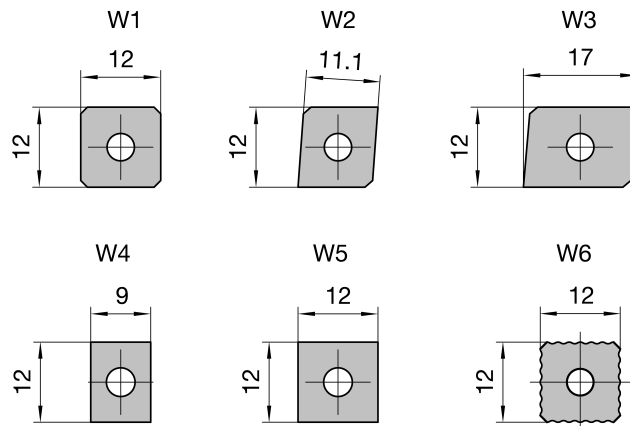
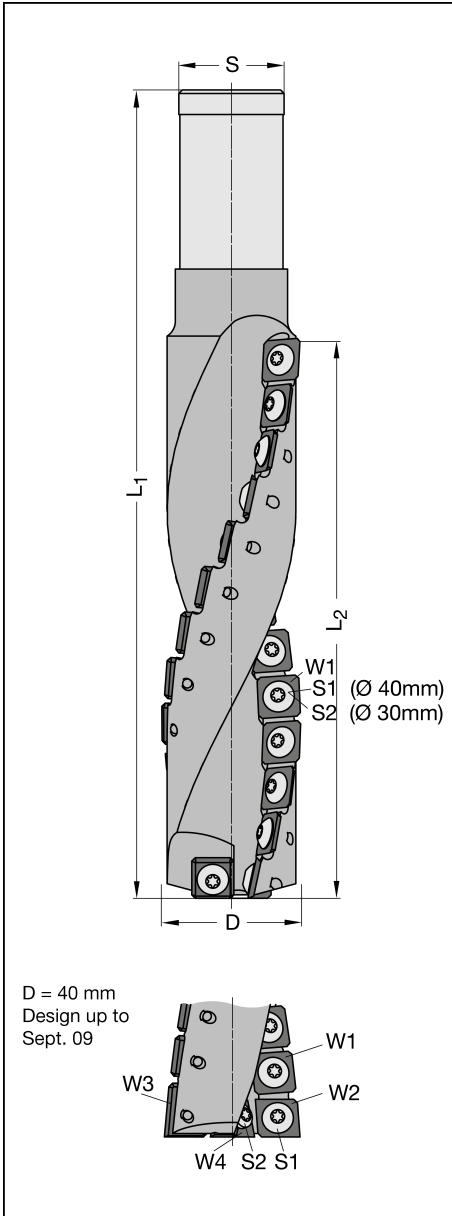
Helically positioned reversible T.C. tips for smooth running. All T.C. tips with shear angle. T.C. tips on No. 20291 in wave-ground design for surface with corrugated optic. Right-hand rotation. For mechanical feed.

Application

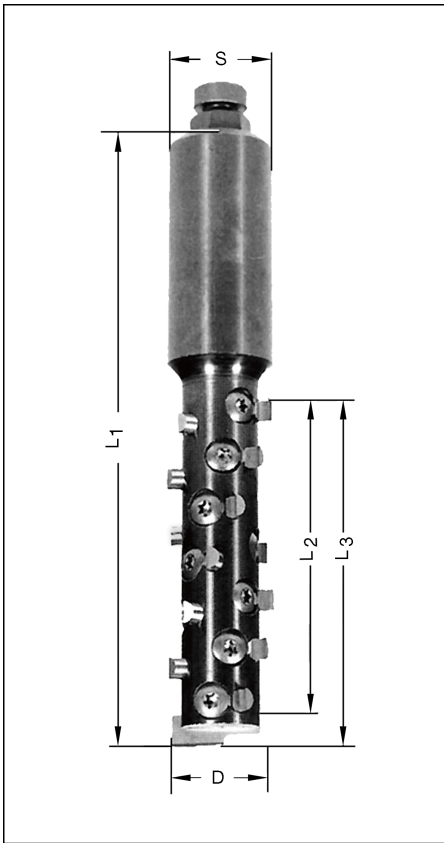
For milling of drill holes and profiled shapes, as well as for tenon- and special connections on automatic joinery machines in the timber-frame construction. Applicable for all kind of wood (soft- hard- and glued wood). Also usable on special machines for block house and prefabricated house industry. Further dimintions available on request. **R.P.M. max. = 9 000 (D = 30 mm) R.P.M. max. = 6 000 (D = 40 mm)**

Reversible T.C. tips

Type	Dimension	number of tips D= 30/40 mm	Part-No.
W 1	12 x 12 x 1,5 mm, bevel	19/26	72015-6-01245-R ●
W 2	12 (11,1) x 12 x 1,5 mm	-/1	72015-6-01145-R ●
W 3	17 x 12 x 1,5 mm	-/1	72015-6-01745-R ●
W 4	9 x 12 x 1,5 mm	-/2	72010-6-00900-0 ●
W 5	12 x 12 x 1,5 mm	2/-	72014-6-01201-0 ●



20300 - Series 6235 with interchangeable T.C.



D mm	L ₂ /L ₃ mm	L ₁ mm	Z/AS	Shank 25mm	Part-No.
18	56/62	132	3/12		6235.018.56 ○
20	42/48	118	3/9		6235.020.42 ●
24	42/48	118	3/9		6235.024.42 ●
24	56/62	126	3/12		6235.024.57 ●
24	56/62	154	3/12		6235.024.54 ○
24	83/90	153	3/18		6235.024.90 ●

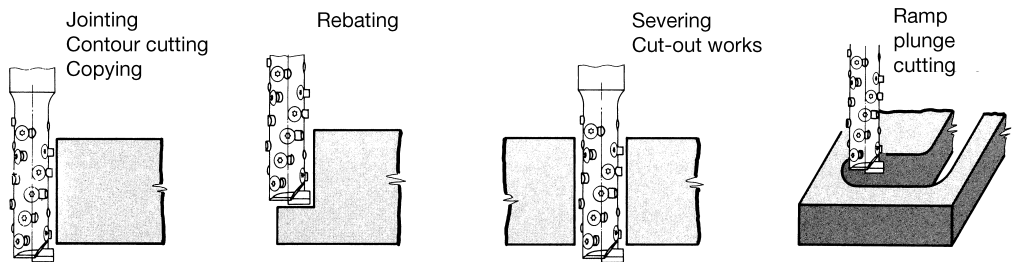
Z = series of cutting pins, AS = number of cutting pins

For cutting pins and plunge cutting knives see page .

- superior chip removal rates
- minimum cutting pressure
- reduced risk of breakage
- interchangeable T.C. cutting pins
- several times regrindable
- economical machining of thick materials

Spare parts / Accessories		Part-No.	PU
Torx countersunk screw	M 3 x 5,5, T 9, for D= 16 - 20 mm	39085-0-03055-R	10
Torx countersunk screw	M 4 x 6,7, T15 for D= from 21 mm	39085-0-04067-R	10
Torx countersunk screw	M 3 x 5,5, T 9, for plunge tip D = 16 mm	39084-0-03055-R	10
Torx countersunk screw	M 3 x 8, T 9, for plunge tips D= 18-20 mm	39084-0-03089-R	10
Torx countersunk screw	M 3 x 8, T15, for plunge tip D= from 21 mm	39084-0-03080-R	10
Torx key	T 9, with handle	39077-0-03009-2	1
Torx key	T15, with handle	39077-0-04015-2	1

Examples of application:



Helical Cutterhead with reversible T.C. tips Z2+2+V2

62300



D mm	L ₂ mm	d mm	KN mm	Z/AS	Part-No.
80	80	30	8 x 2	2/16	62300-5-80801-R ●

Technical details

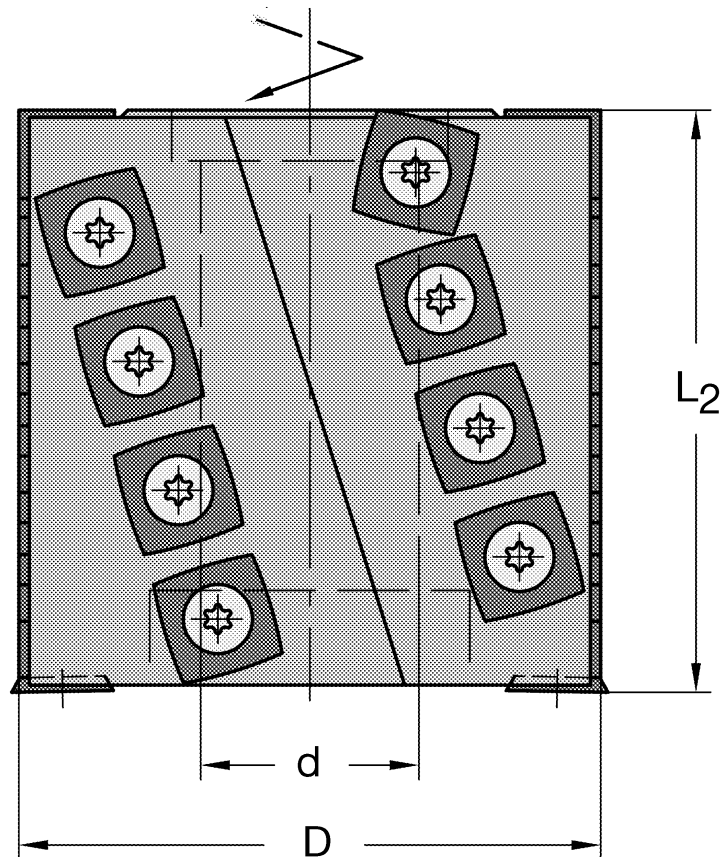
Tool body made of high-quality, light metal with hard-anodized surface and special convex ground reversible T.C. tips. Helically positioned tips, divided into cutting series of four. Thereby the tips intersect up to 75 %, which means that the effective number of teeth engaged is three. With 2 reversible T.C. spurs on bottom. Recessed on one side to take the end retaining screw. For mechanical feed. Right-hand rotation. Supplied with spacers (1). For appropriate arbors 30 x 80 mm see pages 6.22 - 6.24.

Application

Designed for trimming, jointing, rebating, hogging and copying operations of solid wood as well as of composite wood for use on CNC machines. Also applicable for high stock removal rates. **R.P.M. max. = 18000 Special advantages:**

- High chipping performance and better chip removal through helically positioned cutting edges.
- Optimum division of cut and shear angles for high feed rates.
- Perfect finish, without visible marks, through convex ground tips, precisely positioned on the tool body.
- Reduced noise level through compact tool body.
- Optimum utilization of the four cutting edges, i.e. high efficiency through specially marked tips.
- Especially applicable for pre-cutting of arches in window production or of string wreathes in stair production.

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	15 x 15 x 2,5 mm, convex design	72023-6-01500-0	10
Reversible T.C. spur	14 x 14 2,0 mm, (special design)	72020-6-01420-0	10
Spacer		39540-0-10000-1	1
Spacer		39540-0-05000-1	1
Torx countersunk screw	M 5 x 15,5 T20 (for reversible T.C. tip)	39086-0-05015-R	10
Torx countersunk screw		39085-0-05011-R	10
Torx key	T20, with handle	39077-0-00020-2	1



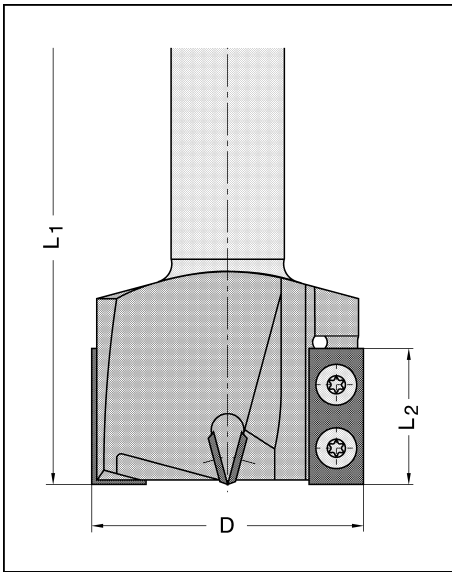
Also applicable for rebating:

PU = packing unit

- popular size, ex stock
- while stocks last

Grooving/Surfacing Cutter with rev. T.C. tips Z2+2

22045 - Series 6245



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
40	30	90	20 x 55 m. E. M 8	22045-5-40305-R ●
40	30	90		22045-5-40306-R ●
60	30	105	20 x 55 m. E. M 8	22045-5-60305-R ●
60	30	105		22045-5-60306-R ●
80	12	78		22045-5-80126-R ●

Technical details

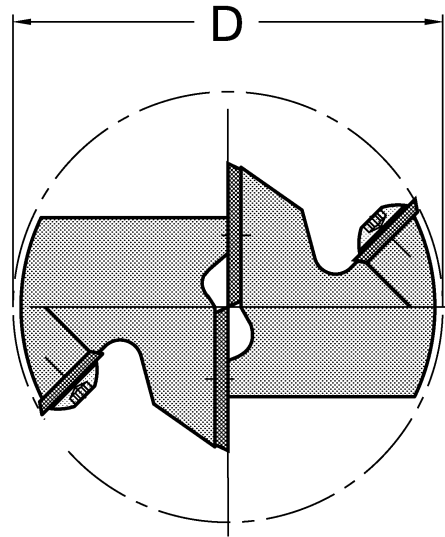
With 2 straight reversible T.C. tips, cutting on periphery and 2 reversible T.C. centre tips for plunge cutting, with shear angle. Large gullet area for optimum chip removal while plunging. Right-hand rotation. For mechanical feed.

Application

For axial plunging operations, grooving up from 35 mm grooving width, rebating, jointing and surfacing in solid wood and various kinds of wood composites on stationary routers or CNC machines. For **axial** plunge cutting operations exceeding a depth of 10 mm, spindle speed should be reduced to 12000 R.P.M.

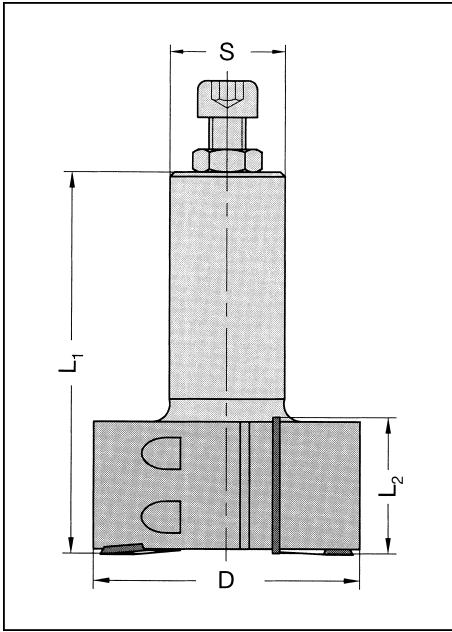
For spare tips in different T.C. grades see page .

Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip 12 x 12 x 1,5 mm, 4-sided, HW 02, f. D=80 mm periphery tip and 35/40 mm plunge tip	72014-6-01201-0	10
Reversible T.C. tip 20 x 12 x 1,5 mm, 2-sided, HW 02, f. D=60 mm plunge tip	72010-6-02001-0	10
Reversible T.C. tip 30 x 12 x 1,5 mm, 2-sided, HW 02, f. D=80 mm plunge tip	72010-6-03001-0	10
Reversible T.C. tip 30 x 12 x 1,5 mm, 4-sided, HW 02, for D = 35/40/60 mm periphery tip	72014-6-03000-0	10
Torx clamping screw M 4 x 5,9, T15	39076-0-04000-R	10
Torx key T15, with handle	39077-0-04015-2	1



Jointing and Rebating Cutter w. rev. T.C. tips Z2+V2

22060 - Series 6241



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
60	50	104		22060-5-60506-R ●

Technical details

With 2 straight reversible T.C. tips, tempered body with high resistance to wear. With 2 additional reversible T.C. spurs on bottom. Right-hand rotation. For mechanical and manual feed.

Application

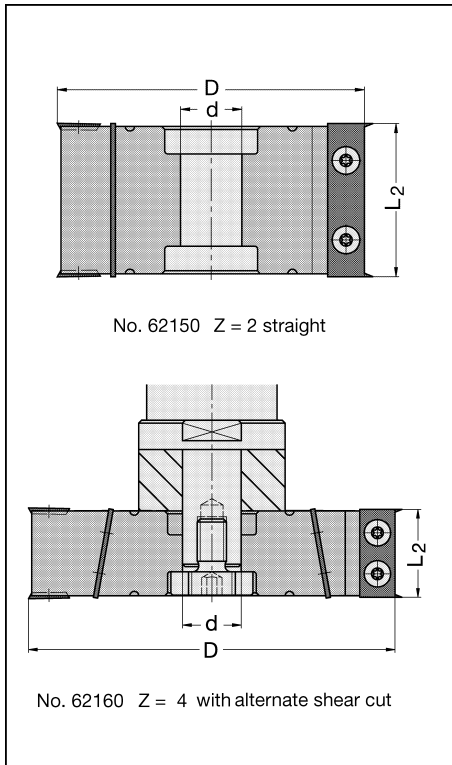
For jointing and rebating on stationary routers and CNC machines.

For spare tips in different T.C. grades see page .

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	30 x 12 x 1,5 mm, 2-sided, HW 02	72010-6-03001-0	10
Reversible T.C. tip	50 x 12 x 1,5 mm, 2-sided, HW 02	72010-6-05001-0	10
	Reversible spur	72020-6-01414-1	10
Clamping screw		39266-0-06012-R	10
Torx countersunk screw	M 5 x 7, for spur	39085-0-05007-R	10
Clamping wedge		39100-0-03001-0	2
Clamping wedge		39100-0-05001-0	2
Key with T-handle		39140-0-00302-0	1

Jointing and Rebating Cutterheads w. rev. T.C. tips

62150/62160 - Series 4130/4230



D mm	L ₂ mm	d mm	KN mm	Z/V	Part-No.
125	30	30	8 x 2	4/4 W	62160-5-12531-1 ●
125	50	30	8 x 2	4/4 W	62160-5-12551-1 ●
125	50	20	6 x 1,5	4/4 W	62160-5-12552-1 ●

For appropriate arbors see pages 6.22 - 6.24.

W = alternate shear angle

Technical details

Tool body made of high-quality, light metal. D = 100 mm (No. 62150) with 2 straight reversible T.C. tips, D = 125 mm (No. 62160) with 4 reversible T.C. tips with alternate shear angle, with 2 upper and lower reversible T.C. spurs each. Recessed either on one side (L₂ = 30 mm) or on both sides (L₂ = 50 mm) to take the double-threaded end retaining screw.

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	30 x 12 x 1,5 mm, 2-sided, HW 02	72010-6-03001-0	10
Reversible T.C. tip	50 x 12 x 1,5 mm, 2-sided, HW 02	72010-6-05001-0	10
	Reversible spur	72020-6-01414-1	10
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx countersunk screw	M 5 x 7, for spur	39085-0-05007-R	10
Torx key	T15, with handle	39077-0-04015-2	1

d mm	Cutter L ₂ mm	Arbor L ₂ mm	Minimum thickness of spacers mm
20 KN	30	40	22
	50	40	2
	50	55	17
30 KN	30	40	24
	50	40	4
	50	55	19

20525 Z3 positive

D_1/D_2 mm	L_2 mm	L_1 mm	Shank mm	Part-No.
82/80	8	80		20525-5-80006-R ●

20525 Z6 negative

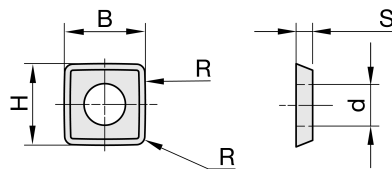
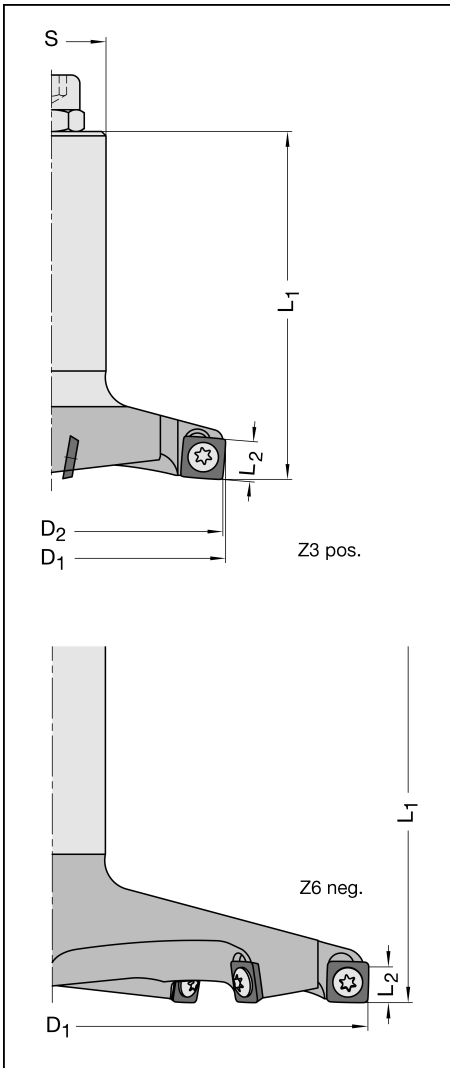
D_1 mm	L_2 mm	L_1 mm	Shank mm	Part-No.
150	8	90		20525-5-15000-R ●

Technical details

Tool body of high-quality steel with 3 or 6 rev. solid T.C. tips, each 4-sided in special FourCut design, with corner radius to reduce risk of breakage and to improve life time. With shear angle. Polished face. Right-hand rotation. For mechanical feed.

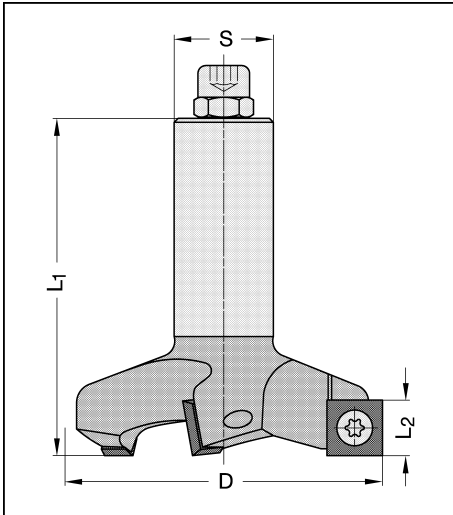
Application

Z3: Positive shear angle. For surfacing of working tables of all common board materials and solid wood on CNC machines. Also applicable for Plastomeres and Duromeres. **Application data:** R.P.M. = 14 000, $v_f = 10 - 20$ m/min. **Z6:** Negative shear angle. Especially for surfacing of spoil boards on Nesting CNC machine centres. **Application data:** R.P.M. = 9 000, $v_f = 12 - 30$ m/min. **Solid T.C. tips exchangeable against solid PCD tips (page 5.22).**



Surfacing Cutter with reversible T.C. tips Z3

22525 - Series 6246 Spoilboard Cutter



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
80	12	85	3/4" x 55 m. E. M	6246.800.34 ●
45	12	85	1/2" x 55 m. E. M	6246.400.12 ●

Technical details

Tool body with 3 reversible T.C. tips, 4-sided, **with shear cut**. Flush countersunk screw for improved chip flow. Inlaying and rebating work with perfect edge quality due to shear cut. Right-hand rotation.

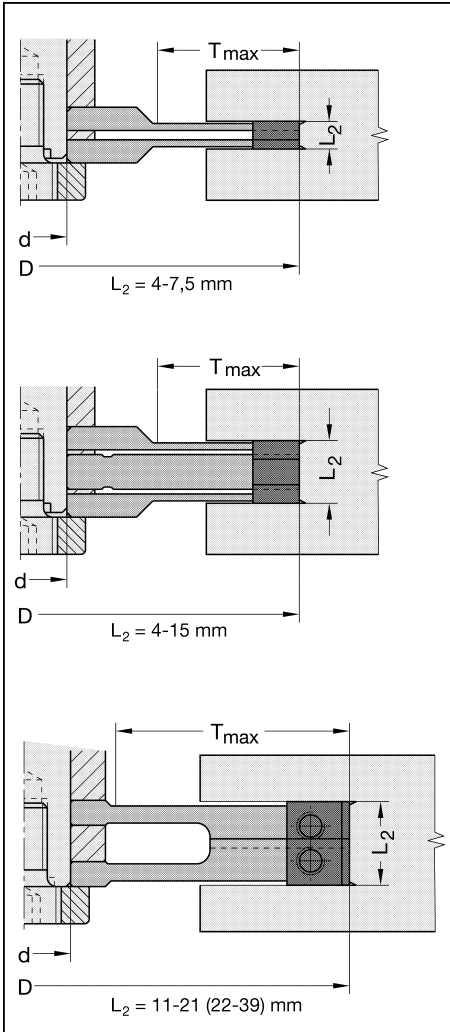
Application

For surfacing of spoilboards on CNC machines, square trimming of wide edge bands and for wide cut-outs of little cutting depth.

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	12x12 x 1.5 mm, 4-sided, HW 29	4200.012.00	10
Torx countersunk screw		39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

Adjustable Grooving Cutter w. reversible T.C. tips

60200 - Series 4050



D mm	L ₂ mm	d mm	d _{max} mm	KN mm	T _{max} mm	Part-No.
125	4-7,5	20	30	6 x 1,5	25	60200-5-12501-R ●
125	4-15	20	30	6 x 1,5	25	60200-5-12502-R ●
140	11-21	20	30	6 x 1,5	43	60200-5-14001-R ●
Intermediate cutter (for L₂ = 4 - 15 mm)						
125	7,5	20	30	6 x 1,5	-	60210-5-12575-R ●

Technical details

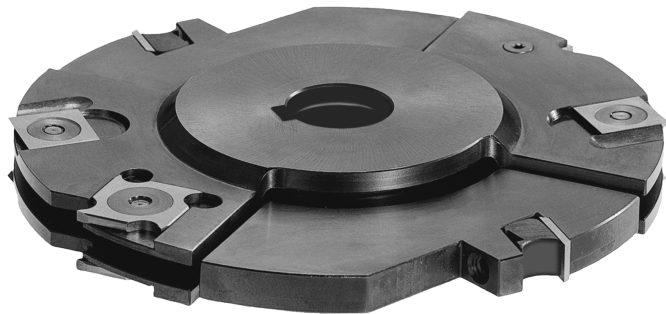
L₂ = 4 - 7,5 mm with reinforced steel tool body, with 2 upper and lower reversible T.C. tips each per cutter unit, 4-sided and with 2 reversible spurs. L₂ = 11 - 21 mm with steel tool body and with 2 reversible T.C. tips and 2 reversible T.C. spurs per cutter unit. L₂ = 22 - 39 mm same design as described before, however, with tool body made of high-quality, light metal. Adjustable by spacers, supplied with tool. For manual and mechanical feed.

Application

For all kinds of grooving and rebating operations on CNC machines. To be used with arbors d = 20 mm on pages 6.22 - 6.24. Spacer sets on page 7.18.

Extra costs for: - enlarging bore diameter to 30 mm - adapt keyway 8 x 2 mm (for d = 30 mm)

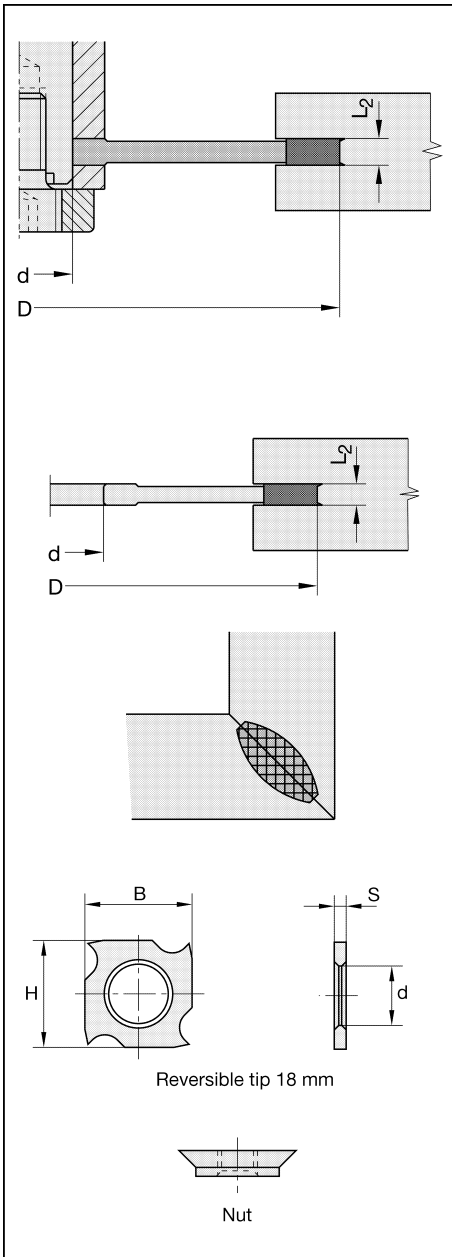
Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip	18 x 18 x 2,0 mm, HW 02, for L ₂ = 4 mm	72025-6-00010-0 10
Reversible T.C. tip	7,5 x 12 x 1,5 mm, HW 02, for L ₂ = 7,5 mm	72010-6-00751-0 10
	Reversible T.C. tip	72050-6-25000-0 10
Reversible T.C. tip	20 x 12 x 1,5mm, 2sided, HW02, for L ₂ = 22-39 mm	72010-6-02001-0 10
Reversible spur	14 x 14 x 1,2 mm, for L ₂ = 3,97 - 7,5 mm	72020-6-01412-0 10
	Reversible spur	72020-6-01414-1 10
Nut	M 4 x 0,5 x 1,6 mm, D=10, for spur 1,2 mm	39153-0-10016-0 10
Nut	M 4 x 0,5 x 1,6 mm, D=12, for knife 2,0 mm	39153-0-12016-0 10
Torx countersunk screw		39084-0-04032-R 10
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R 10
Allen screw	M 5 x 8, ISO 4028, for wedge 7,5 mm	39266-0-05008-R 10
	Allen screw	39266-0-06012-R 10
Torx countersunk screw	M 5 x 7, for spur 2,0 mm	39085-0-05007-R 10
Torx key	T 9, with handle	39077-0-03009-2 1
Torx key	T15, with handle	39077-0-04015-2 1
Allen key	SW 2,5 (for M 5) hexagon	39120-0-02500-0 5
Allen key	SW 3 (for M 6) hexagon	39120-0-03000-0 5
Clamping wedge	for tip 7,5 mm	39100-0-00750-0 1
Clamping wedge	for tip 10,5 mm	39100-0-01050-0 2



III. shows L₂ = 4 - 15 mm

Grooving Cutter with reversible T.C. tips

60250 - Series 3116/3020



D mm	L ₂ mm	d mm	Z/V	KN mm	Part-No.
125	10,0	30	Z4-V4	-	60250-5-12510-R ●

Technical details

60250/60255: Tool body with 2 upper and lower reversible T.C. tips each, 4-sided, on No. 60250 up from L₂ = 8 mm with 4 wedge clamped T.C. raker tips and 2 reversible T.C. spurs on top and bottom. 60255 type A: with 4 countersunk holes for Lamello Top 20 60255 type B: with 4 countersunk holes for arbor No. 21079 (page 6.19) **40145:** with 2 reversible T.C. raker tips and 2 reversible T.C. spurs on top and bottom. All types also applicable for manual feed.

Application

40145/60255: For cutting of grooves for biscuit dowel joint. Assembled on arbor No. 21079 (page 6.19) for use on CNC machines. **60250:** For all kinds of grooving operations on table moulders (without keyway) or on CNC machines. To be used with arbors d = 30 mm shown on page 6.22 - 6.24.

Extra costs for: - enlarging bore diameter to 30 mm - adapt keyway 8 x 2 mm (for d = 30 mm)

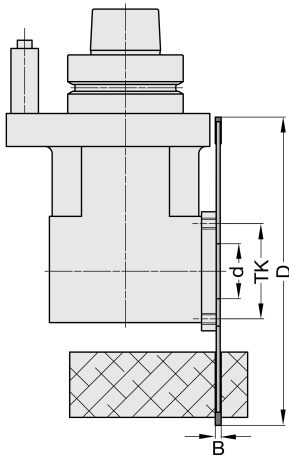
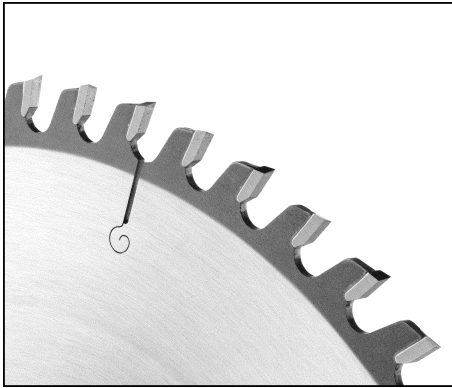
60255 for biscuit slotting cutters

D mm	B mm	d mm	Z/V	Type	Part-No.
100	3,97	22	Z2+2-V4	A	60255-5-00002-0 ●
100	3,97	22	Z2+2-V4	B	60255-5-00002-V ●
100	3,97	30	Z2+2-V4	B	60255-5-00003-V ●

40145 TC-tipped for biscuit slotting cutters

D mm	B mm	d mm	Z/V	Type	Part-No.
100	3,97	22	Z2-V4	B	40145-5-00001-V ●

81000/85000 - Series 2062J



D x B x d mm	Z	NL pcs./ø/TK	Machine	Part-No.
Without pin holes				
100 x 3,2 x 30	20 F	-	-	82030-5-10020-0 ●
150 x 3,2 x 30	36 W	-	-	81030-5-15036-0 ●
180 x 3,2 x 30	42 W	-	-	81030-5-18042-0 ●
180 x 3,2 x 30	58 W	-	-	81030-5-18058-0 ●
200 x 3,2 x 30	48 W	-	-	81030-5-20048-0 ●
200 x 3,2 x 30	64 W	-	-	81030-5-20064-0 ●
220 x 3,2 x 30	64 W	-	-	81030-5-22064-0 ●
For JSO arbor No. 21079				
150 x 3,2 x 30	36 W	4/6/48 w.c.	-	81030-5-15036-2 ●
180 x 3,2 x 30	42 W	4/6/48 w.c.	-	81030-5-18042-2 ●
200 x 3,2 x 30	48 W	4/6/48 w.c.	-	81030-5-20048-2 ●
200 x 3,2 x 30	64 W	4/6/48 w.c.	-	81030-5-20064-2 ●
For JSO saw blade flange No. 39495				
200 x 3,2 x 60	48 W	6/6/80 w.c.	-	81030-5-20048-3 ●
200 x 3,2 x 60	64 W	6/6/80 w.c.	-	81030-5-20064-3 ●
250 x 3,2 x 60	60 W	6/6/80 w.c.	-	81030-5-25060-3 ●
300 x 3,2 x 60	72 W	6/6/80 w.c.	-	81060-5-30072-3 ●
For saw blade flange No.39498 (Homag)				
250 x 3,2 x 30	60 W	8/5,5/90 w.c.	-	81030-5-25060-9 ●
300 x 3,2 x 30	72 W	8/5,5/90 w.c.	-	81030-5-30072-9 ●
350 x 3,6 x 30	84 TR/F	8/5,5/90 w.c.	-	85030-5-35084-9 ●
For saw blade aggregates on CNC machines				
120 x 3,2 x 30	24 W	-	SCM	81030-5-12024-0 ●
120 x 3,2 x 20	24 W	3/4,5/35	SCM, (up from 12/11)	81020-5-12024-R ●
120 x 3,2 x 20	24 W	3/4,5/35 w.c.	SCM	81020-5-12024-8 ●
125 x 3,2 x 30	36 W	4/4,5/48 w.c.	Weeke	81030-5-12536-W ●
160 x 3,2 x 30	48 W	4/5,5/52 w.c.	Homag	81030-5-16048-4 ●
180 x 3,2 x 30	42 W	4/5,5/52 w.c.	Homag, Weeke	81030-5-18042-4 ●
180 x 3,2 x 30	58 W	4/5,5/52 w.c.	Homag, Weeke	81030-5-18058-4 ●
200 x 3,2 x 30	48 W	4/5,5/52 w.c.	Homag, Weeke	81030-5-20048-4 ●
200 x 3,2 x 30	64 W	4/5,5/52 w.c.	Homag, Weeke	81030-5-20064-4 ●
250 x 3,2 x 30	60 W	2/7/42+2/10/60	Homag	81030-5-25060-6 ●

Technical details:

Alternate top bevel teeth (W) or trapezoidal-square teeth (TR/F) with different ranges of teeth. T.C.T.-tipped, with positive hook. Drive holes with or without countersunk depending on application.

Application:

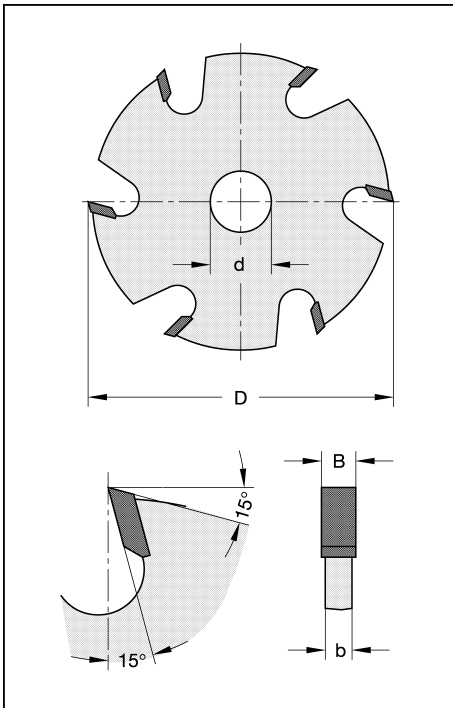
Mounted on arbor No. 21079, saw blade flange No. 39495, 39498 or directly on saw aggregates to be used on CNC working centres. The right selection of the number of teeth and the teeth shape depends on workpiece material, material thickness, feed rate and cutting quality.

w. c. = with countersink

F = square teeth W = alternate top bevel teeth TR/F = trapezoidal - square teeth

Grooving Saw Blades T.C. Z6/Z12

40150/40160 - Series 3008



D mm	B mm	b mm	d mm	Z	Part-No.
100	2,0	1,4	20	6	40150-5-10020-0 ●
100	3,0	2,0	20	6	40150-5-10030-0 ●
100	4,0	3,0	20	6	40150-5-10040-0 ●
100	5,0	3,5	20	6	40150-5-10050-0 ●
100	6,0	4,0	20	6	40150-5-10060-0 ○
100	7,0	5,0	20	6	40150-5-10070-0 ○
100	8,0	5,9	20	6	40150-5-10080-0 ○
100	10,0	7,0	20	6	40150-5-10100-0 ○
125	2,0	1,4	30	12	40160-5-12520-0 ○
125	2,5	1,4	30	12	40160-5-12525-0 ●
125	3,0	2,0	30	12	40160-5-12530-0 ●
125	4,0	3,0	30	12	40160-5-12540-0 ●
125	5,0	4,0	30	12	40160-5-12550-0 ●
125	6,0	4,0	30	12	40160-5-12560-0 ●
125	7,0	6,0	30	12	40160-5-12570-0 ○
125	8,0	6,0	30	12	40160-5-12580-0 ●
125	10,0	6,0	30	12	40160-5-12510-0 ●
150	3,0	2,0	30	12	40160-5-15030-0 ○
150	4,0	3,0	30	12	40160-5-15040-0 ○
150	5,0	4,0	30	12	40160-5-15050-0 ○
150	6,0	5,0	30	12	40160-5-15060-0 ○

Technical details

Tool body as saw blade design, square teeth. Ø 100 mm Z = 6 for manual and mechanical feed Ø 125/150 mm Z = 12 for mechanical feed

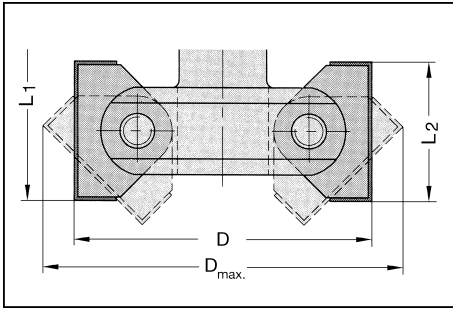
Application

For grooving in solid wood or in panel materials in conjunction with arbors on pages 6.19 - 6.24. For use on CNC machines. R.P.M. max. = 12 000 (ø 100 mm) R.P.M. max. = 10 000 (ø 125 mm) R.P.M. max. = 8 000 (ø 150 mm)

Extra costs for: - enlarging bore diameter - adaption of keyway - drilling countersunk holes for arbor No. 21079

Vari-Angle Cutterhead with reversible T.C. tips Z2

22095 - Series 4098 continuously adjustable



D mm	D _{max} mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
85	102	40	95	20 x 55 m. E. M 8	22095-5-00005-R ●
85	102	40	95		22095-5-00006-R ●
110	134	50	114		22095-5-00506-R ●

Technical details

With 2 reversible T.C. tips in swivelling tip retainers. Cutting on periphery and on both sides. Swivelling range towards the top 0-45°, towards the bottom 0-90°, **continuously** variable adjustment according to precise scale. Grid step 7,5°. No displacement of the adjusted bevelling angle when fixing the tip retainers. For manual and mechanical feed.

Application

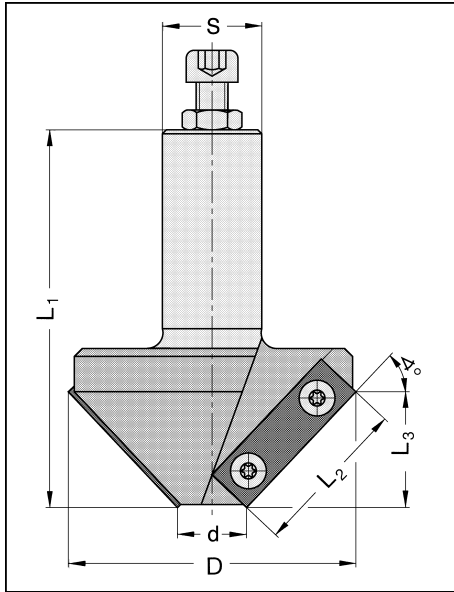
For jointing, rebating and bevelling of wood and various kinds of wood composites and boards on CNC-machines and stationary routers.

Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip	40 x 12 x 1,5 mm, 4-sided, HW 02	72014-6-04000-0 10
Clamping screw		39165-0-05016-R 10
Allen screw		39266-0-06008-R 10
Key with T-handle		39140-0-00401-0 1
Allen key		39120-0-03000-0 5
Key with T-handle		39140-0-00302-0 1



Bevel Cutter with reversible T.C. tips Z2

22170 - Series 4322



D/d mm	Angle	L ₂ mm	L ₃ mm	L ₁ mm	Shank mm	Part-No.
74/18	45°	40	28	95	20 x 55 m. E. M 8	22170-5-45005-R ●
74/18	45°	40	28	95		22170-5-45006-R ●

Spare tips in different T.C. grades on page .

Technical details

Tool body with 2 reversible T.C. tips. Cutting on periphery only. Right-hand rotation. For mechanical feed.

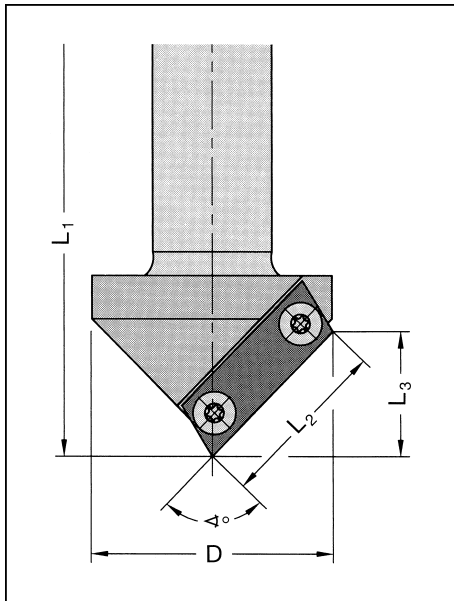
Application

For bevelling in various kinds of wood composites and panel materials on CNC machines and stationary routers.

Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip	40 x 12 x 1,5 mm, 2-sided, HW 02	72010-6-04001-0 10
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R 10
Torx key	T15, with handle	39077-0-04015-2 1

Bevel/Folding Cutter with reversible T.C. tip Z1

22180 - Series 4320



D mm	Angle	L ₂ mm	L ₃ mm	L ₁ mm	Shank mm	Part-No.
43	45°	46,4	43	115	20 x 55 m. E.M 8	22180-5-00455-R ●
43	45°	46,4	43	115		22180-5-00456-R ●
41,5	60°	41,5	35	118		22180-5-00606-R ●
50	90°	36,4	25	93	¾" x 55 m. E. M 8	4320.050.34S ●
50	90°	36,4	25	93	20 x 55 m. E. M 8	22180-5-50905-R ●
50	90°	36,4	25	93		22180-5-50906-R ●
50	91°	36,4	25	93	¾" x 55 m. E. M 8	4320.050.34 ●
50	91°	36,4	25	93	20 x 55 m. E. M 8	22180-5-50005-R ●
50	91°	36,4	25	93		22180-5-50006-R ●

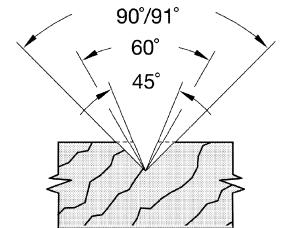
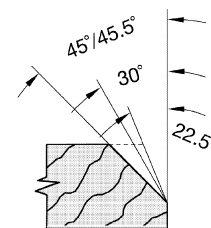
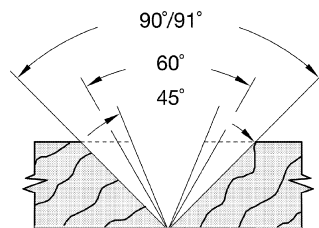
Technical details

Tool body with 1 reversible T.C. tip, HW 02, bevelled on both sides. Precise centre point on bottom. Stop pin for easy adjustment when turning or exchanging the tips. Right-hand rotation. For mechanical feed.

Application

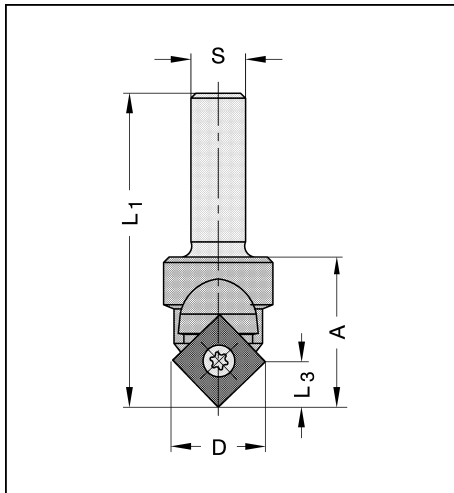
For bevelling, decorative grooving and mitre folding in various kinds of wood composites and panel materials on CNC machines.

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip	40 x 12 x 1,5 mm, HW 02, for ANGLE = 90°+91°	72015-6-04015-R	10
Reversible T.C. tip	40 x 12 x 1,5 mm, HW 01, for ANGLE = 90°+91°	72015-6-04001-R	10
Reversible T.C. tip	50 x 12 x 1,5 mm, HW 02, for ANGLE = 60°	72015-6-05060-R	10
Reversible T.C. tip	50 x 12 x 1,5 mm, HW 01, for ANGLE = 60°	72015-6-05001-R	10
Reversible T.C. tip	60 x 12 x 1,5 mm, HW 02, for ANGLE = 45°	72015-6-06045-R	10
Torx clamping screw	M 4 x 4 extra-large head, T15	39076-0-04040-R	10
Torx key	T15, with handle	39077-0-04015-2	1



Decorative Groove Cutter with reversible T.C. tip Z1

22195 - Series 4319



D mm	L ₃ mm	A mm	L ₁ mm	Shank mm	Part-No.
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Basic tool body with tip No. 1

17	8,3	27	67	10 x 40	22195-5-17000-R ●
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Set in wooden case, consisting of:

Tool body	with	altogether	7 tips*		22195-5-00000-R ●
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The profile tips Nos. 10/11/12 can only be mounted in basic tool bodies supplied since December 1998.

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Technical details

Tempered tool body, supplied with one reversible T.C. tip for profile No. 1 as basic equipment. T.C. tip with shear cut from top. The basic tip can be profiled **on one side**. Maximum depth of profile according to illustration below. Right-hand rotation. For mechanical feed.

Spare parts / Accessories		Part-No.	PU
Torx clamping screw		39081-0-04048-R	10
Torx key		T15, with flag	5

Reversible T.C. tips

Dimensions B x H x S mm	For profile No.	Part-No.
----------------------------	-----------------	----------

Standard tips

12 x 12 x 1,5	1 (basic equipment)	72014-6-01201-0 ●
12 x 12 x 1,5	2/3/4	72190-6-00004-R ●
12 x 12 x 1,5	5	72190-6-00005-R ●
12 x 12 x 1,5	6/7/8	72190-6-00008-R ●
12 x 12 x 1,5	9	72190-6-00009-R ●
12 x 12 x 1,5	10	72190-6-00010-R ●
12 x 12 x 1,5	11	72190-6-00011-R ●
12 x 12 x 1,5	12	72190-6-00012-R ●

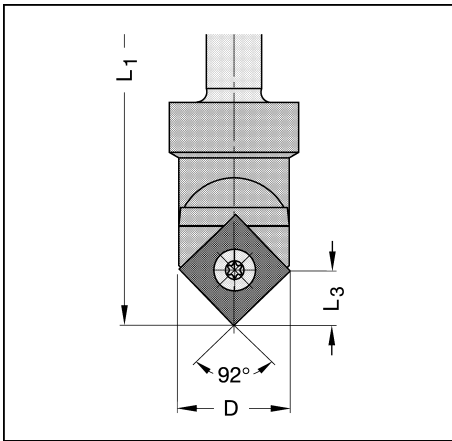
Special profiles

Special profile tip	up to D = 17 mm	72190-6-00000-R ●
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Decorative Groove Cutter with reversible T.C. tip Z1

22196 - Series 4322



D mm	L_3 mm	L_1 mm	Shank mm	Part-No.
24	11,8	88	12 x 40	22196-5-00024-R ●

Technical details

Tool body supplied with 1 reversible T.C. tip for 92° decorative grooves or 46° bevels. Can be profiled on one side within the area available for profiling.

Application

For decorative grooving, lettering, etc., as well for bevelling or rounding over of edges.

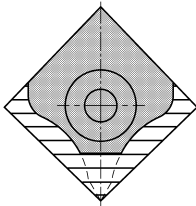
Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip	72018-6-01700-0	10
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R 10
Torx key	T15, with handle	39077-0-04015-2 1
Special profile tip	72196-6-00000-R	2



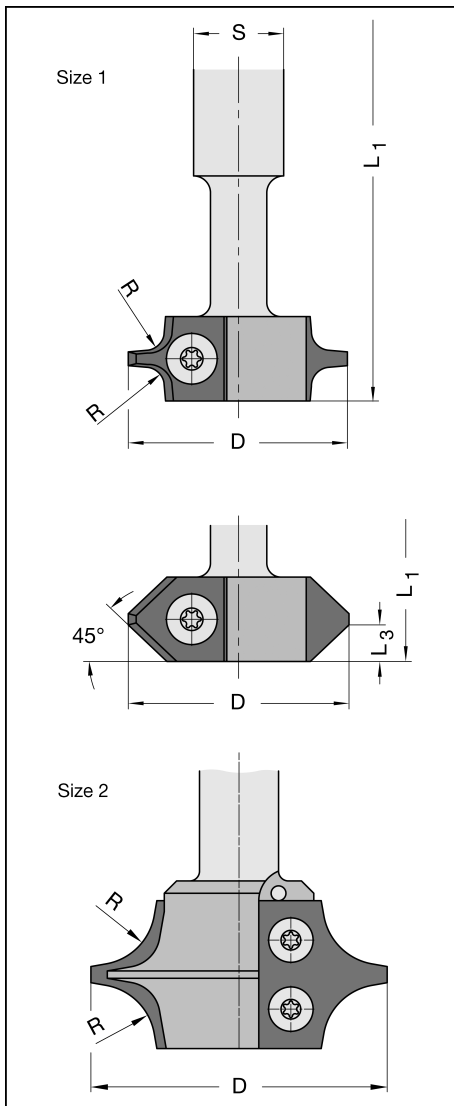
Area available for profiling (1:1)

Foil No. 42
on page 6.35



Rounding Over and Bevel Cutter T.C. Z2

22160 - Series 6976



D mm	Size	R/Angle mm/°	L ₁ mm	L ₃ mm	Shank mm	Part-No.
40	1	2	100	-	16 x 60 m. E. M 6	22160-5-00020-R ●
40	1	3	100	-	16 x 60 m. E. M 6	22160-5-00030-R ●
40	1	4	100	-	16 x 60 m. E. M 6	22160-5-00040-R ●
40	1	5	100	-	16 x 60 m. E. M 6	22160-5-00050-R ●
40	1	45°	100	6	16 x 60 m. E. M 6	22160-5-00045-R ●
60	2	6	120	-	20 x 55 m. E. M 8	22160-5-20060-R ●
60	2	8	120	-	20 x 55 m. E. M 8	22160-5-20080-R ●
60	2	10	120	-	20 x 55 m. E. M 8	22160-5-20100-R ●
60	2	12	120	-	20 x 55 m. E. M 8	22160-5-20120-R ●
60	2	45°	120	9	20 x 55 m. E. M 8	22160-5-20045-R ●

Set in wooden case consisting of:

Tool body	Size 1	w.a total of	10 tips	*	22160-5-00000-R ●
Tool body	Size 2	w.a total of	10 tips	*	22160-5-20000-R ●

* Set consisting of: Size 1: Basic tool body and 2 tips each R 2/3/4/5 mm and 45°, TORX screws and TORX-key. Size 2: Basic tool body and 2 tips each R 6/8/10/12 mm and 45°, TORX screws and TORX-key.

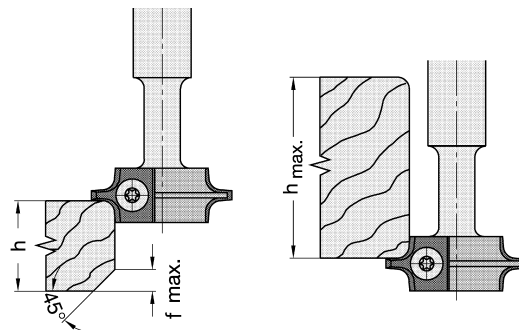
Technical details

Tool body with 2 interchangeable T.C. tips. In the same body either rounding over tips of different radii or 45° bevelling tips can be used. Right-hand rotation. For mechanical feed.

Application

For one- or both-side rounding over or bevelling in solid wood or various kinds of panel materials on stationary routers or CNC machines. R = 15 to 30 mm see page 4.62.

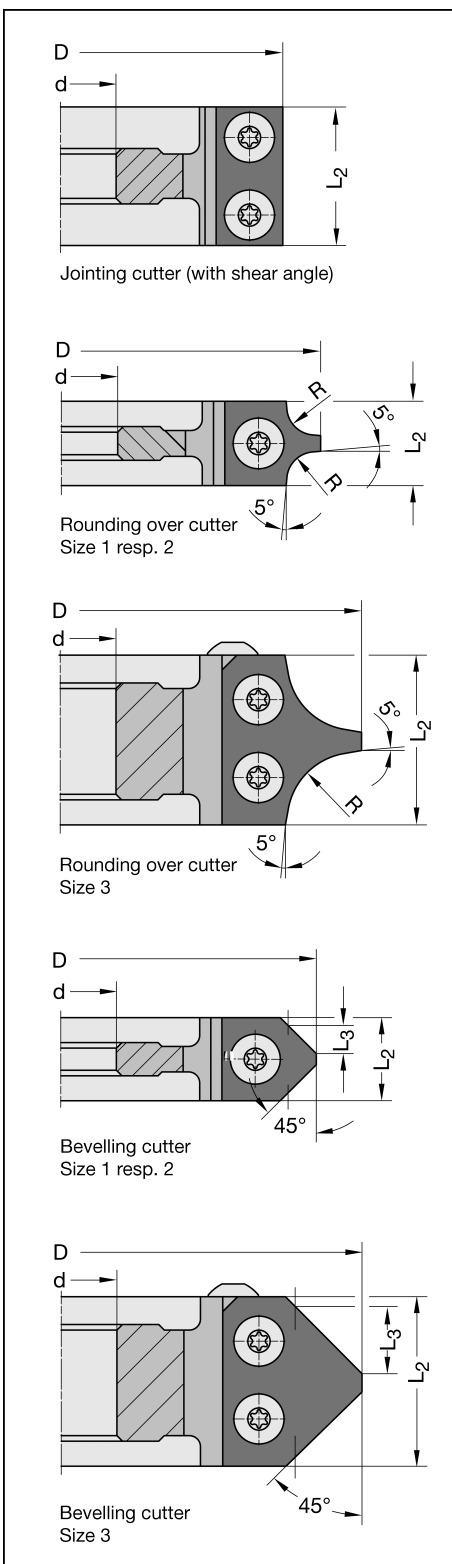
Spare parts / Accessories		Part-No.	PU
Basic tool body size 1	without tips	22160-0-00000-R	1
Rounding over tip	15 x 18 x 2 mm, R = 2 mm	72432-6-00020-0	2
Rounding over tip	15 x 18 x 2 mm, R = 3 mm	72432-6-00030-0	2
Rounding over tip	15 x 18 x 2 mm, R = 4 mm	72432-6-00040-0	2
Rounding over tip	15 x 18 x 2 mm, R = 5 mm	72432-6-00050-0	2
Bevelling tip	15 x 18 x 2 mm, 45°	72434-6-10045-0	2
Torx clamping screw	M 4 x 5, T15 (f. size 1)	39081-0-04050-R	10
Torx key	T15, with handle	39077-0-04015-2	1



Size	h max. mm	f max. mm
1	50	6
2	55	12

Rounding Over/Bevelling Set Z2 with reversible/interchangeable tips

64412-418 - Series 4330 Radius/bevel/jointing cutter



D x L ₂ x d mm	R/Angle mm/°	for size/ L ₃ mm	Part-No.
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Jointing cutter

80 x 25 x 20	-	-	64418-5-00025-0 ●
80 x 40 x 20	-	-	64418-5-00040-0 ●
80 x 50 x 20	-	-	64418-5-00050-0 ●

Rounding over cutter

92 x 15 x 20	2	1 / -	64412-5-00020-0 ●
92 x 15 x 20	3	1 / -	64412-5-00030-0 ●
92 x 15 x 20	4	1 / -	64412-5-00040-0 ●
92 x 15 x 20	5	1 / -	64412-5-00050-0 ●
98 x 22 x 20	6	2 / -	64412-5-00060-0 ●
98 x 22 x 20	8	2 / -	64412-5-00080-0 ●
106 x 30,5 x 20	10	3 / -	64412-5-00100-0 ●
106 x 30,5 x 20	12	3 / -	64412-5-00120-0 ●

Bevelling cutter

92 x 15 x 20	45°	1 / 6	64414-5-10045-0 ●
98 x 22 x 20	45°	2 / 9	64414-5-20045-0 ●
106 x 30,5 x 20	45°	3 / 12	64414-5-30045-0 ●

Spare parts / Accessories

		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

Interchangeable T.C. tips

Dimensions B x H x S mm	For size	R/Angle mm/°	L ₃ max mm	Part-No.
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Rounding over tips T.C.

15 x 18 x 2	1	2	-	72432-6-00020-0 ●
15 x 18 x 2	1	3	-	72432-6-00030-0 ●
15 x 18 x 2	1	4	-	72432-6-00040-0 ●
15 x 18 x 2	1	5	-	72432-6-00050-0 ●
22 x 21 x 2	2	6	-	72432-6-00060-0 ●
22 x 21 x 2	2	8	-	72432-6-00080-0 ●
30 x 25 x 2	3	10	-	72432-6-20100-0 ●
30 x 25 x 2	3	12	-	72432-6-20120-0 ●
17,5 x 26 x 2**	3, top	10	-	72432-6-00100-1 ●
17,5 x 26 x 2**	3, top	12	-	72432-6-00120-1 ●
17,5 x 26 x 2**	3, bottom	10	-	72432-6-00100-2 ●
17,5 x 26 x 2**	3, bottom	12	-	72432-6-00120-2 ●

Bevelling tips T.C.

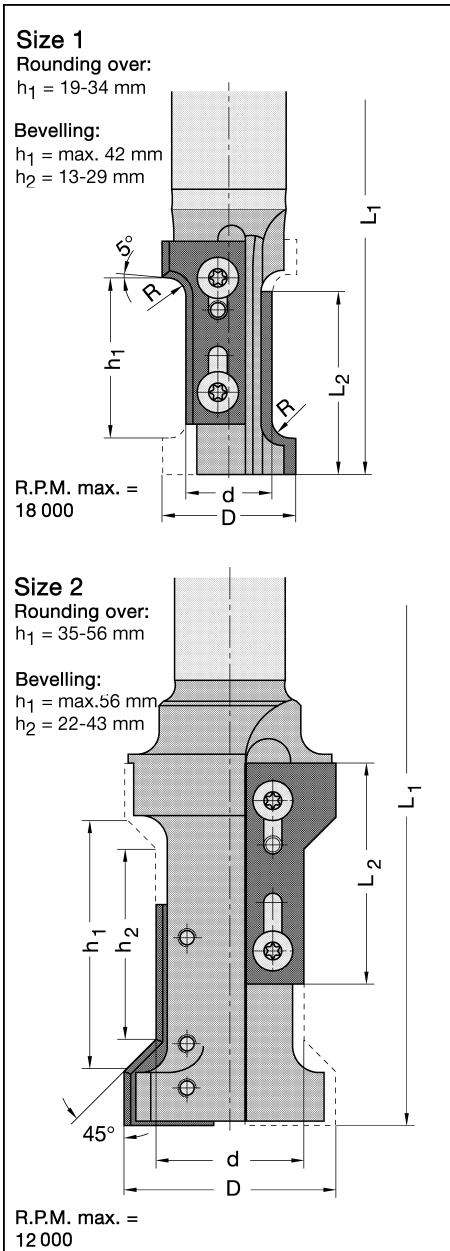
15 x 18 x 2	1	45°	6	72434-6-10045-0 ●
22 x 21 x 2	2	45°	9	72434-6-20045-0 ●
30 x 25 x 2	3	45°	12	72434-6-30045-R ●
17,5 x 26 x 2**	3, top	45°	12	72434-6-30045-1 ●
17,5 x 26 x 2**	3, bottom	45°	12	72434-6-30045-2 ●

Jointing tips, HW 03

25 x 12 x 1,5				72010-6-02504-0 ●
40 x 12 x 1,5				72010-6-04004-0 ●
50 x 12 x 1,7*				72016-6-05004-0 ●

* 3-hole design, 4-sided ** for design up to 05/09

22510 - Series 6975



Technical details

Tool body with 2 adjustable, interchangeable T.C. knives, for rounding over or bevelling applications. In the same body, size 1 or size 2, either rounding over or 45° bevelling knives can be used. Right-hand rotation. For mechanical feed.

Application

For double-sided rounding over or bevelling operations of solid wood or various kinds of panel materials on CNC machines. Cutting on periphery only, not applicable for plunge cutting.

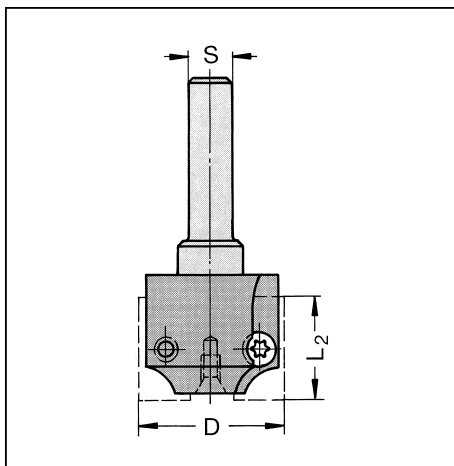
d mm	D _{max} mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.	
Basic tool body size 1 - without knives						
20	34	40	113	20 x 55 m. E. M 8	22510-0-00005-R ●	
20	34	40	113		22510-0-00006-R ●	
Basic tool body size 2 - without knives						
35	57	50	150		22510-0-00206-R ●	
Spare parts / Accessories					Part-No.	PU
Torx clamping screw		M 4 x 5,9, T15		39076-0-04000-R	10	
Torx key		T15, with handle		39077-0-04015-2	1	

Interchangeable T.C. knives

Dimensions B x H x S mm	For size	R/Angle mm/°	Part-No.
Roundg. over knives-h₁=19-34mm, HW04			
40 x 17,2 x 2,2	1	R = 3	72510-6-40030-1 ●
40 x 17,2 x 2,2	1	R = 3	72510-6-40030-2 ●
40 x 18,2 x 2,2	1	R = 4	72510-6-40040-1 ●
40 x 18,2 x 2,2	1	R = 4	72510-6-40040-2 ●
40 x 19,2 x 2,2	1	R = 5	72510-6-40050-1 ●
40 x 19,2 x 2,2	1	R = 5	72510-6-40050-2 ●
40 x 20,2 x 2,2	1	R = 6	72510-6-40060-1 ●
40 x 20,2 x 2,2	1	R = 6	72510-6-40060-2 ●
Bevelling knives-h₂ = 13-29 mm, HW 04			
40 x 20,2 x 2,2	1	45°	72510-6-40450-1 ●
40 x 20,2 x 2,2	1	45°	72510-6-40450-2 ●
Roundg. over knives-h₁= 35-56mm, HW04			
50 x 20,3 x 2,2	2	R = 6	72510-6-50060-1 ●
50 x 20,3 x 2,2	2	R = 6	72510-6-50060-2 ●
50 x 22,3 x 2,2	2	R = 8	72510-6-50080-1 ●
50 x 22,3 x 2,2	2	R = 8	72510-6-50080-2 ●
50 x 24,3 x 2,2	2	R = 10	72510-6-50100-1 ●
50 x 24,3 x 2,2	2	R = 10	72510-6-50100-2 ●
Bevelling knives-h₂= 22-43 mm, HW 04			
50 x 24,3 x 2,2	2	45°	72510-6-50450-1 ●
50 x 24,3 x 2,2	2	45°	72510-6-50450-2 ●
Blanks for special profiles, HW 04			
40 x 20,8 x 2,2	1	unprofiled	72510-6-40000-0 ●
40 x 20,8 x 2,2	1	Special profile	72510-6-40000-1 ●
40 x 20,8 x 2,2	1	Special profile	72510-6-40000-2 ●
50 x 24,8 x 2,2	2	unprofiled	72510-6-50000-0 ●
50 x 24,8 x 2,2	2	Special profile	72510-6-50000-1 ●
Blanks for special profile, HW 04			
50 x 24,8 x 2,2	2	Special profile	72510-6-50000-2 ●
Blanks for special profiles, HW 02			
40 x 20,8 x 2,2	1	unprofiled	72510-6-40002-0 ●
40 x 20,8 x 2,2	1	Special profile	72510-6-40002-1 ●
40 x 20,8 x 2,2	1	Special profile	72510-6-40002-2 ●

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

22140 - Series 4097 basic tool body (without tips)



For size	For D mm	L ₂ mm	Shank mm	Part-No.
1	26	19,4	10	22145-0-26105-R ●
1	26	19,4	12	22146-0-26105-R ●
2	32	26	10	22145-0-32108-R ●
2	32	26	12	22146-0-32108-R ●
3	36	30	10	22145-0-36110-R ●
3	36	30	12	22146-0-36110-R ●

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 6, T15, for D= 26 mm	39081-0-04060-R	10
Torx clamping screw	M 4 x 5,9, extra-large head, T15, f. D=32/36 mm	39076-0-04000-R	10
Covering screw		39052-0-03500-R	10
Torx key	T15, with flag	39077-0-04015-1	5

Reversible T.C. tips

Dimensions B x H x S mm	For size	R mm	Part-No.
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Rounding over tip

19,4 x 9 x 1,5	1	2	72140-6-00002-0 ●
19,4 x 9 x 1,5	1	3	72140-6-00003-0 ●
19,4 x 9 x 1,5	1	4	72140-6-00004-0 ●
19,4 x 9 x 1,5	1	5	72140-6-00005-0 ●
26 x 12,5 x 1,5	2	6	72140-6-00006-0 ●
26 x 12,5 x 1,5	2	8	72140-6-00008-0 ●
30 x 14,5 x 1,5	3	10	72140-6-00010-0 ●

Coving tip

19,4 x 9 x 1,5	1	5	72145-6-00005-0 ●
26 x 12,5 x 1,5	2	6	72145-6-00006-0 ●
26 x 12,5 x 1,5	2	8	72145-6-00008-0 ●
30 x 14,5 x 1,5	3	10	72145-6-00010-0 ●

Rebating tip

19,4 x 9 x 1,5	1	4-sided	72142-6-19500-0 ●
26 x 12,5 x 1,5	2	4-sided	72142-6-26000-0 ●
30 x 14,5 x 1,5	3	4-sided	72142-6-30000-0 ●

Bevelling tip

19,4 x 9 x 1,5	1	L ₃ = 5	72148-6-19545-0 ●
26 x 12,5 x 1,5	2	L ₃ = 8	72148-6-26045-0 ●
30 x 14,5 x 1,5	3	L ₃ = 10	72148-6-30045-0 ●

Special profiles

26,5 x 12,5 x 1,5	2	blank, 2-sided	72149-6-26000-R ●
30,5 x 14,5 x 1,5	3	blank, 2-sided	72149-6-30000-R ●
26 x 12,5 x 1,5	2	profiled on both sides	72149-6-26001-R ●
30 x 14,5 x 1,5	3	profiled on both sides	72149-6-30001-R ●

Technical details/Application

Basic tool body with interchangeable shank, screws for tips and covering screw. Supplied without tips and without guide set. To be used in conjunction with tips for beading, rebating, bevelling, coving, with standard or special profiles. Right-hand rotation. For mechanical feed.

Size 1:

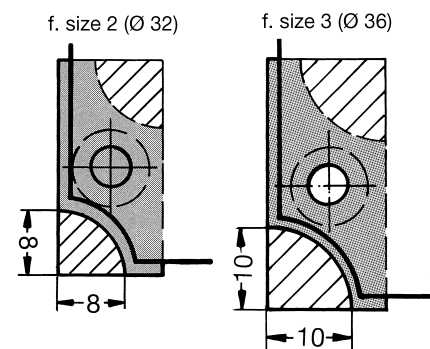
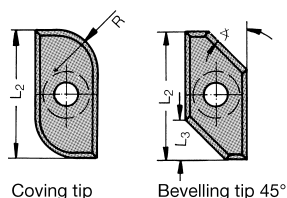
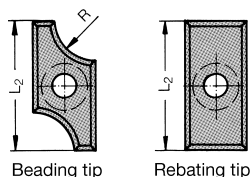
beading of R = 2/3/4/5 mm
bevelling of 5 x 45°
coving of R = 5 mm
rebating of 19,4 mm

Size 2:

beading of R = 6+8 mm
bevelling of 8 x 45°
coving of R = 6+8 mm
rebating of 26 mm
special profile tips

Size 3:

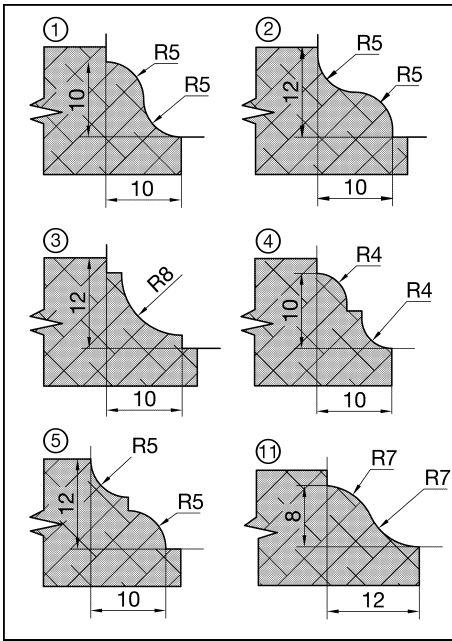
beading of R = 10 mm
bevelling of 10 x 45°
coving of R = 10 mm
rebating of 30 mm
standard-type or special profile tips



Area available for profiling (1:1)

Please specify profile and add sketch and/or wood sample when ordering.

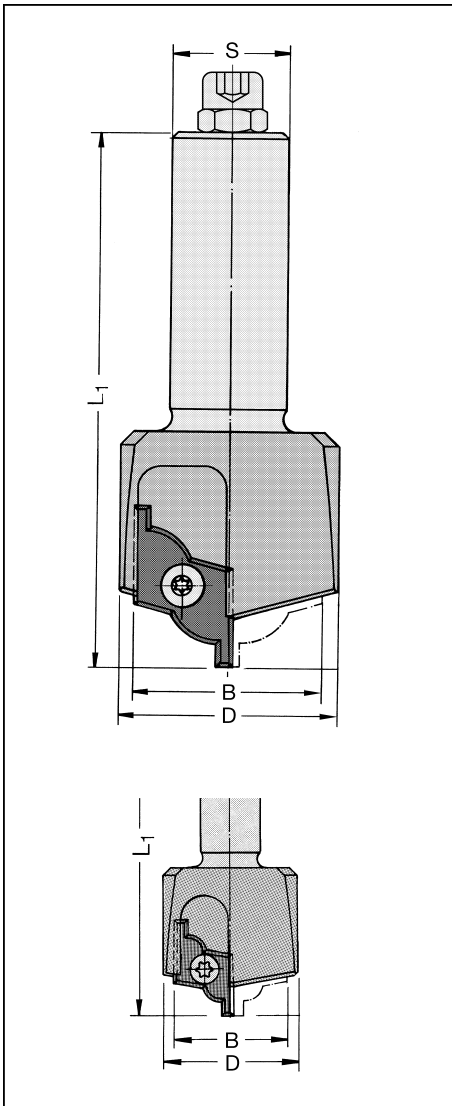
72149 standard profiles for No. 22140



Profile No.	Dimensions B x H x S mm	For size	Part-No.
1	30 x 14,5 x 1,5	3	72149-6-00001-R ●
2	30 x 14,5 x 1,5	3	72149-6-00002-R ●
3	30 x 14,5 x 1,5	3	72149-6-00003-R ●
4	30 x 14,5 x 1,5	3	72149-6-00004-R ●
5	30 x 14,5 x 1,5	3	72149-6-00005-R ●
11	30 x 14,5 x 1,5	3	72149-6-30011-R ●

Universal Profile Cutter for reversible T.C. tip Z1

22451 - CUSTOMIZE - IT



D mm	B max.	L ₁ mm	Shank mm	Part-No.
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Size 1

27	23	69	12 x 40	22451-0-27002-R ●
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Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

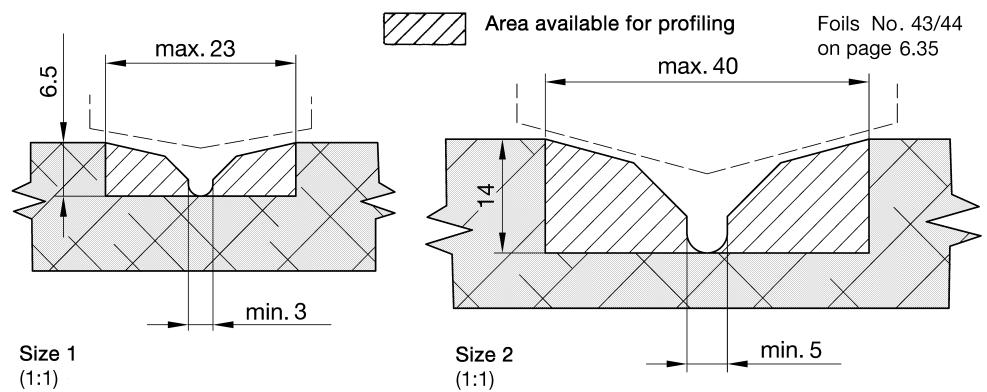
Technical details

Designed to take one reversible T.C. tip, profiled on both sides, with shear angle. Can be resharpened several times (depending on profile depth). For mechanical feed.

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 6, T15, (for size 1)	39081-0-04060-R	10
Torx clamping screw	M 4 x 5,9, extra-large head, T15, (for size 2)	39076-0-04000-R	10
Torx key	T15, with flag	39077-0-04015-1	5
Torx key	T15, with handle	39077-0-04015-2	1

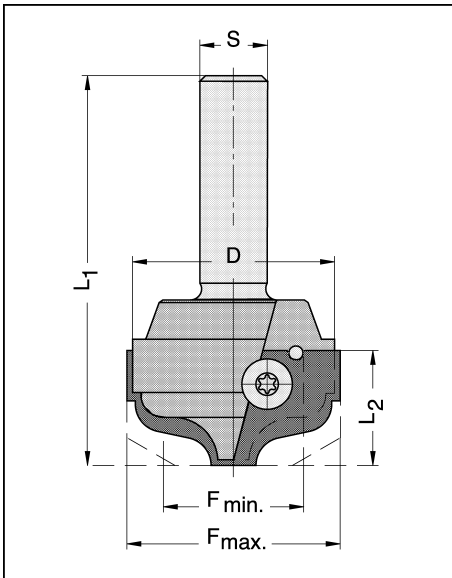
Reversible T.C. tips

B x H x S mm	Design	For size	Part-No.
20 x 12 x 1,5	unprofiled	1	72010-6-02001-0 ●
20 x 12 x 1,5	profiled	1	72451-6-10001-R ●
36 x 21 x 2	unprofiled	2	72451-6-20000-R ●
36 x 21 x 2	profiled	2	72451-6-20001-R ●



RAPIDO Bottom Cutting Profiler for T.C. knives Z2

22543 - CUSTOMIZE - IT



F_{max} mm	D mm	L_2 mm	F_{min} mm	L_1 mm	Shank mm	Part-No.
Reprofiled body						
38	36	20,5	25	70	12 x 40	22543-0-38003-R ●
38	36	20,5	25	70	12,7 (½") x 40	22543-0-38009-R ●
Preprofiled body ¹⁾						
38	36	20,5	-	70	12 x 40	22543-0-36003-R ●
38	36	20,5	-	70	12,7 (½") x 40	22543-0-36009-R ●

¹⁾ Preprofiled = cutter body as per broken lines on illustration is available ex stock, and reprofiling is not necessary.

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
HW 04 (for solid wood)		
22 x 19 x 2	unprofiled	72543-6-22040-R ●
22 x 19 x 2	profiled	72543-6-22041-R ●
HW 01 (for MDF)		
22 x 19 x 2	unprofiled	72543-6-22010-R ●
22 x 19 x 2	profiled	72543-6-22011-R ●

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Technical details

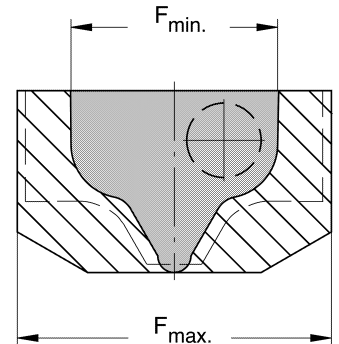
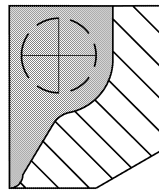
Tool body for two interchangeable T.C. knives, profiled on one side, with shear angle. For mechanical feed. Right-hand rotation. The interchangeable T.C. knives, available in two different T.C. grades can be profiled according to adjacent illustrations.

Application

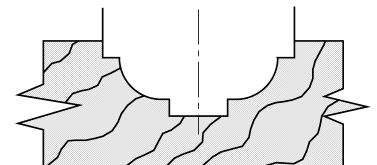
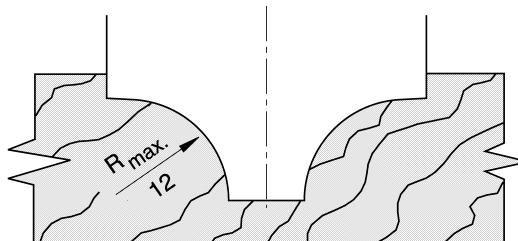
For cutting profile grooves, rosettes, decorative profiles in furniture and door production on stationary routers and CNC machines. **R.P.M. max. = 18 000**



Area available
for profiling (1:1)
Foil No. 45
on page 6.35

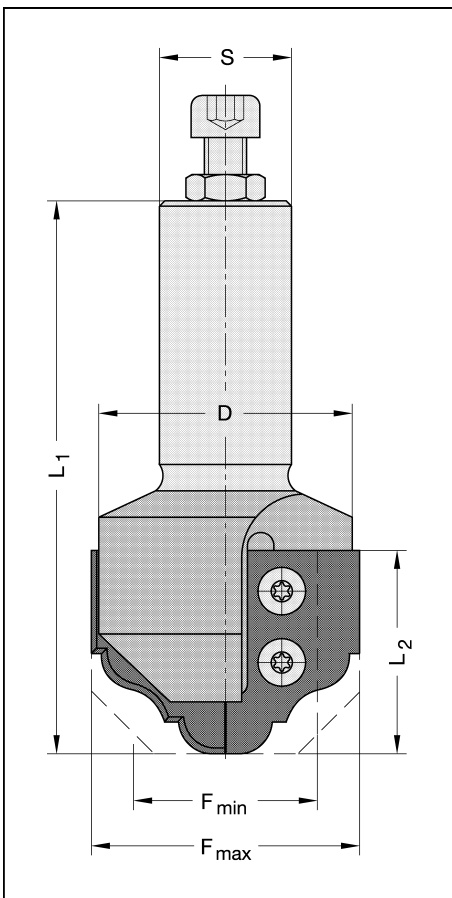


Examples of profiles (1:1)



RAPIDO Bottom Cutting Profiler for T.C. knives Z2

22545 - CUSTOMIZE - IT



Technical details

Tool body for two profiled, interchangeable T.C. knives, with shear angle. For mechanical feed. Right-hand rotation. If required, the basic tool body can be reduced to $F_{min} = 41$ mm for extra costs. The interchangeable T.C. knives, available in two different T.C. grades, can be profiled according to adjacent illustrations.

Application

For cutting profile grooves, rosettes, decorative profiles in furniture and door production on stationary routers and CNC machines. **R.P.M. max. = 12 000**

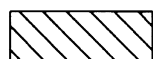
F_{max} mm	D mm	L_2 mm	F_{min} mm	L_1 mm	Shank mm	Part-No.
51	48	38,5	41	105	3/4" x 55 m. E. M 8	22545-0-00304-R ●
51	48	38,5	41	105	20 x 55 m. E. M 8	22545-0-00305-R ●
51	48	38,5	41	105		22545-0-00306-R ●

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs:** up to 9 pcs. only. Repeat orders of same profile: no template costs.

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

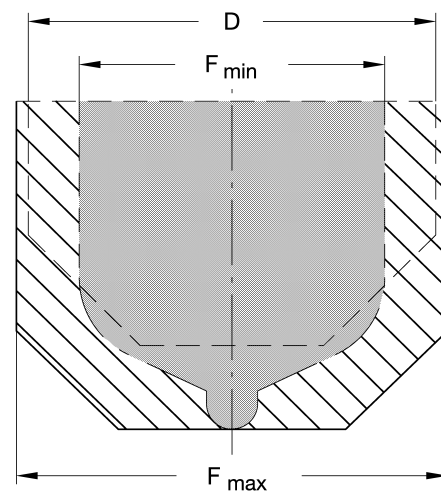
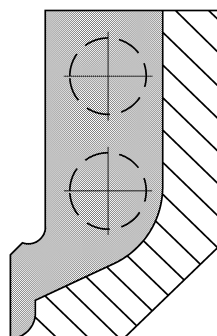
Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
HW 04 (for solid wood)		
40 x 25,5 x 2	unprofiled	72545-6-40100-R ●
40 x 25,5 x 2	profiled	72545-6-40101-R ●
HW 01 (for MDF)		
40 x 25,5 x 2	unprofiled	72545-6-40200-R ●
40 x 25,5 x 2	profiled	72545-6-40201-R ●



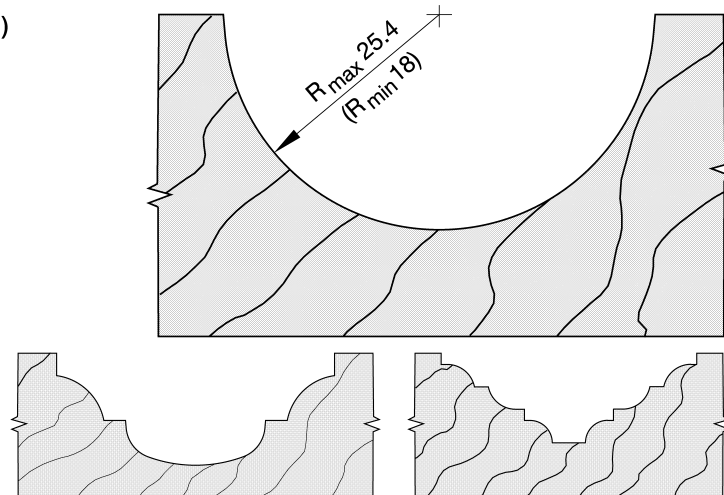
Area available for profiling (1:1)

Foil No. 46
on page 6.35

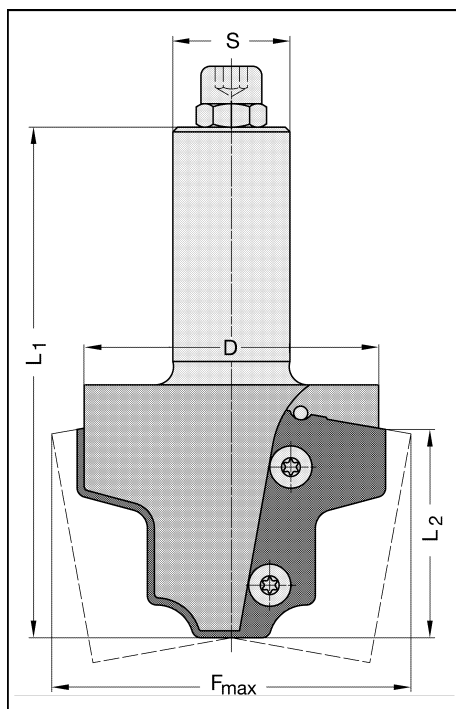


$F < 51$ mm can be obtained only by reducing the basic tool body (Extra charge on request)

Examples of profiles (1:1)



22546 - CUSTOMIZE - IT



F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
Profiled body						
77	74	43	47	115	3/4" x 55 m. E. M 8	22546-0-77004-R ●
77	74	43	47	115	20 x 55 m. E. M 8	22546-0-77005-R ●
77	74	43	47	115		22546-0-77006-R ●
Unprofiled body						
77	74	43	47	113	3/4" x 55 m. E. M 8	22546-0-74004-R ●
77	74	43	47	113	20 x 55 m. E. M 8	22546-0-74005-R ●
77	74	43	47	113		22546-0-74006-R ●

Technical details

Tool body for two profiled, interchangeable T.C. knives, with shear angle. For mechanical feed. Right-hand rotation. The interchangeable knives can be profiled according to adjacent illustrations. **The profile of tool body will be adapted in each case to the appropriate profile of knife.** The interchangeable knives have to be ordered in addition.

Application

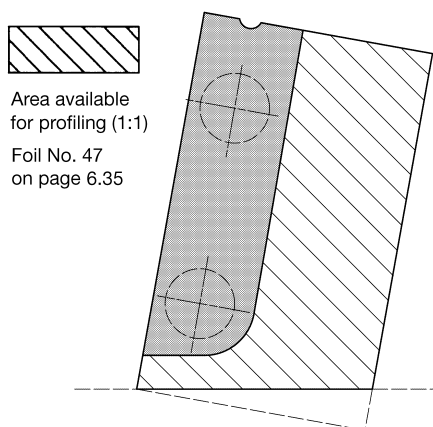
Cutting interior as well as exterior profiles, e.g. on furniture doors through moving Z-axis. Choose appropriate T.C. grade, for solid wood (HW 04) or for wood composites (HW 02). **R.P.M. max. = 12 000**

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

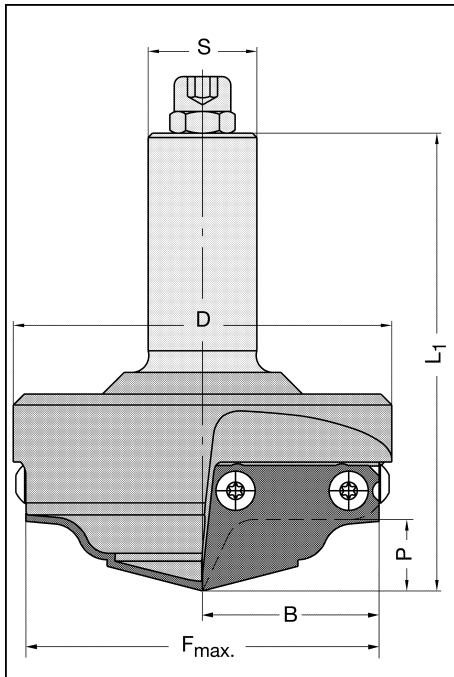
Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
HW 02 (standard grade)		
50 x 30 x 2	unprofiled	72530-6-50300-R ●
50 x 30 x 2	profiled	72546-6-50301-R ●
HW 04 (for solid wood)		
50 x 30 x 2	unprofiled	72531-6-50300-R ●
50 x 30 x 2	profiled	72546-6-50041-R ●



RAPIDO Bottom Cutting Profiler for T.C. knives Z2

22547 - CUSTOMIZE - IT



F_{max} mm	D mm	B mm	P mm	L_1 mm	Shank mm	Part-No.
Profiled body						
60	70	30	16	100	20 x 55 m. E. M 8	22547-0-60005-R ●
60	70	30	16	100		22547-0-60006-R ●
80	90	40	16	105	20 x 55 m. E. M 8	22547-0-80005-R ●
80	90	40	16	105		22547-0-80006-R ●
Unprofiled body						
60	70	30	-	98	20 x 55 m. E. M 8	22547-0-70005-R ●
60	70	30	-	98		22547-0-70006-R ●
80	90	40	-	103	20 x 55 m. E. M 8	22547-0-90005-R ●
80	90	40	-	103		22547-0-90006-R ●

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Technical details

Tool body for two profiled interchangeable T.C. knives, with shear angle. For mechanical feed. Right-hand rotation. The interchangeable knives can be profiled according to illustrations below. **The profile of tool body will be adapted in each case to the appropriate profile of knife.** The interchangeable knives have to be ordered in addition.

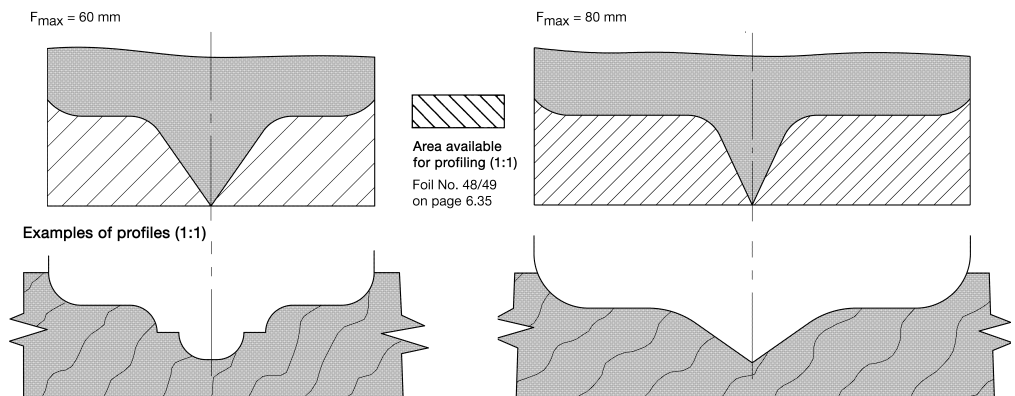
Application

For cutting wide profile grooves, rosettes in furniture and door production, as well as for cutting flat, deep profiles, such as panel raising operations on CNC machines. **R.P.M. max. = 18 000 ($F_{max} = 60$ mm) R.P.M. max. = 12 000 ($F_{max} = 80$ mm)**

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

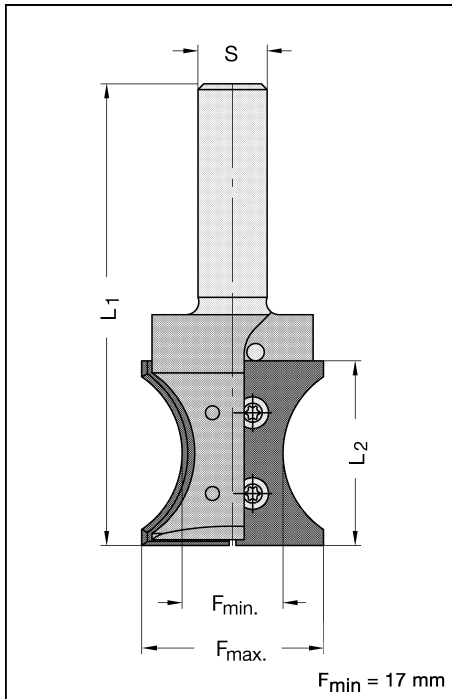
Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
HW 02 (standard grade)		
30 x 30 x 2	unprofiled	72530-6-30300-R ●
30 x 30 x 2	profiled	72547-6-30301-R ●
40 x 30 x 2	unprofiled	72530-6-40300-R ●
40 x 30 x 2	profiled	72547-6-40301-R ●
HW 04 (for solid wood)		
30 x 30 x 2	unprofiled	72531-6-30300-R ●
30 x 30 x 2	profiled	72547-6-30041-R ●
40 x 30 x 2	unprofiled	72531-6-40300-R ●
40 x 30 x 2	profiled	72547-6-40041-R ●



RAPIDO Profile Cutter for T.C. knives Z2

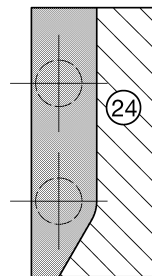
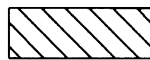
22529 - CUSTOMIZE - IT



F _{max} mm	F _{min} mm	L ₂ mm	f. knives No.	L ₁ mm	Shank mm	Part-No.		
Profiled body								
31,5	17	32	24	80	12 x 40	22529-0-00002-R ●		
31,5	17	32	24	80	½" x 40	22529-0-00009-R ●		
Unprofiled body								
31,5	17	32	24	78	12 x 40	22529-0-31502-R ●		
31,5	17	32	24	78	½" x 40	22529-0-31509-R ●		
Spare parts / Accessories						Part-No.	PU	
Torx clamping screw						39081-0-03040-R	10	
Torx key						T 9, with handle	39077-0-03009-2	1

Interchangeable T.C. knives

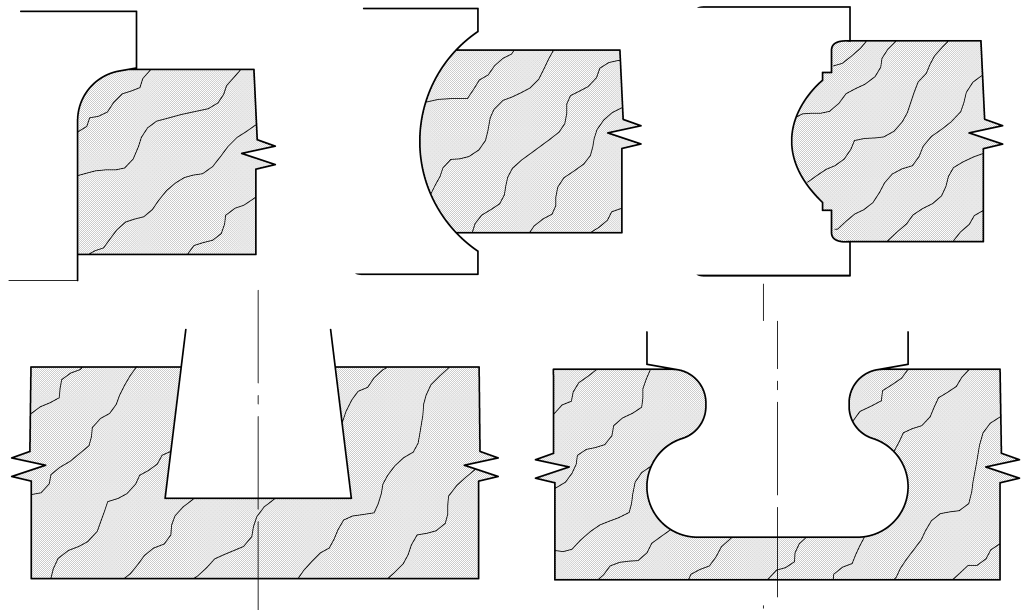
Dimensions B x H x S mm	Design	Part-No.
HW 02 (standard grade)		
32 x 15 x 1,5	unprofiled	72529-6-32150-R ●
32 x 15 x 1,5	profiled	72529-6-32151-R ●



Area available
for profiling (1:1)

Foil No. 24
on page 6.34

Examples of profiles (1:1)



Technical details

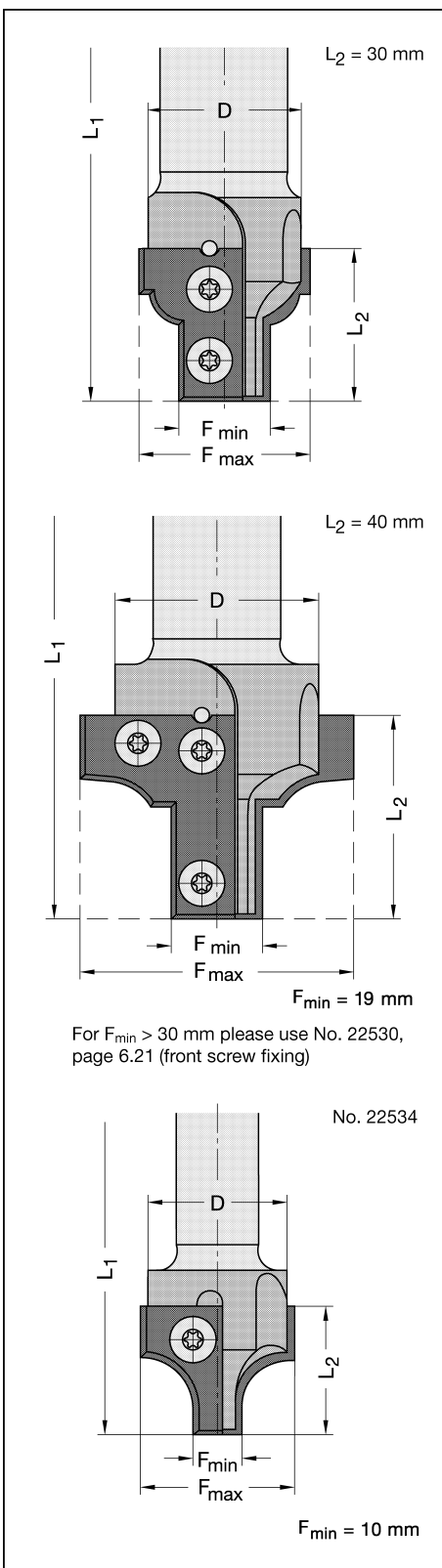
Tool body for two profiled interchangeable T.C. knives. Ramp plunge cutting operations also possible. For mechanical feed. Right-hand rotation. The interchangeable T.C. knives can be profiled according to opposite illustrations. **The profile of tool body will be adapted in each case to the appropriate profile of knife.** The interchangeable knives have to be ordered **in addition**.

Application

To produce decorative edge profiles in furniture and door production, especially for narrow radii, on stationary routers or CNC machines. **R.P.M. max. = 18 000**

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

22532 - CUSTOMIZE - IT



F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
Profiled body						
34	31	30	1	81	½" x 40	22532-0-34309-R ●
34	31	30	1	96		22532-0-34306-R ●
53	50	40	18	91	12 x 40	22532-0-44402-R ●
53	50	40	18	91	½" x 40	22532-0-44409-R ●
53	50	40	18	106	¾" x 55 m. E. M 8	22532-0-44404-R ●
53	50	40	18	106		22532-0-44406-R ●
Unprofiled body						
34	31	30	1	94		22532-0-31306-R ●
53	50	40	18	104	¾" x 55 m. E. M 8	22532-0-41404-R ●
53	50	40	18	104		22532-0-41406-R ●

1) Preprofiled = cutter body as per broken lines on below illustration is available ex stock, reprofiling not necessary.
Technical details: Tool body for two profiled interchangeable T.C. knives. Also designed to be face ground. Right-hand rotation. For mechanical feed. **The profile of tool body will be adapted in each case to the appropriate profile of knife.**

Application

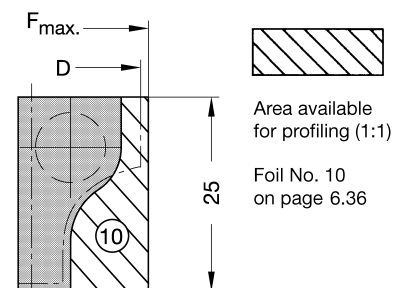
For cutting decorative profiles in furniture and door production, as well as for ceiling and wall panelling, etc. on stationary routers and CNC machines. Can also be used for ramp plunge cutting. **R.P.M. max. = 18 000 ($F_{max} = 30/34$ mm) R.P.M. max. = 12 000 ($F_{max} = 53$ mm)**

Please order the interchangeable knives **in addition** (page 7.2). Maximum profile width and profile depth according to illustrations on page 6.35 - 6.39 (full size). Part Nos. on page 6.34.

22534 - CUSTOMIZE - IT

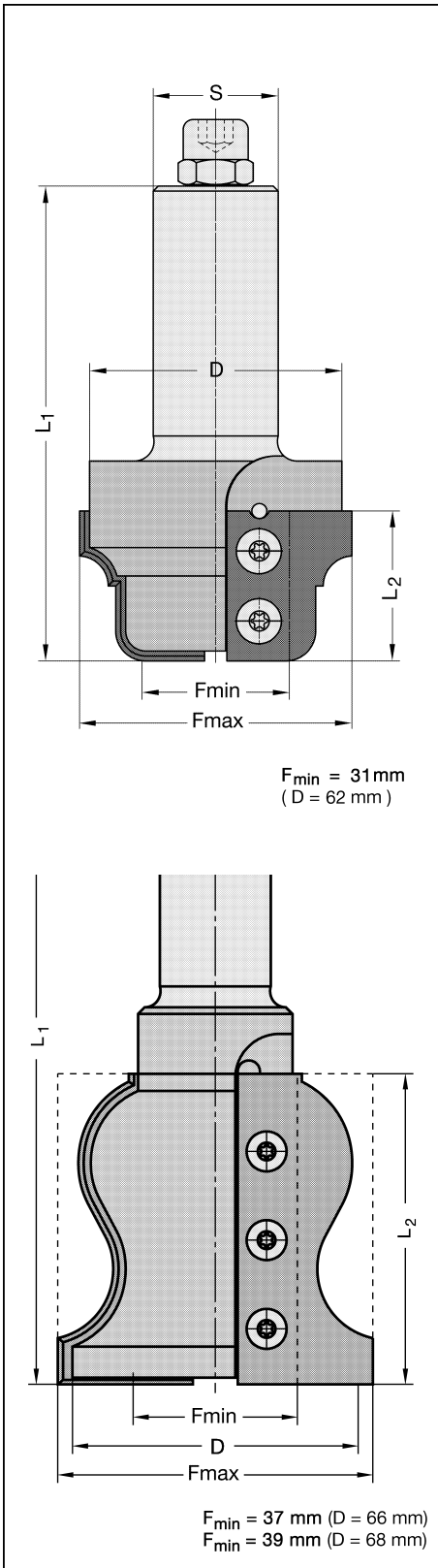
F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
Reprofiled body						
30	28	25	10	71	12 x 40	22534-0-30252-R ●
30	28	25	10	71	½" x 40	22534-0-30259-R ●
30	28	25	10	86	¾" x 55 m. E. M 8	22534-0-30254-R ●
30	28	25	10	86		22534-0-30256-R ●
Preprofiled body 1)						
30	28	25	10	71	12 x 40	22534-0-28002-R ●
30	28	25	10	71	½" x 40	22534-0-28009-R ●
30	28	25	10	86	¾" x 55 m. E. M 8	22534-0-28004-R ●
30	28	25	10	86		22534-0-28006-R ●

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1



RAPIDO Profile Cutter for T.C. knives Z2

22530 CUSTOMIZE - IT



F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
Profiled body						
45/55/65*	-	25	22/23/25	90	¼" x 55 m. E. M 8	22530-0-55254-R ●
45/55/65*	-	25	22/23/25	90	20 x 55 m. E. M 8	22530-0-55255-R ●
45/55/65*	-	25	22/23/25	90		22530-0-55256-R ●
45/55/65*	-	30	1/2/3	95	¼" x 55 m. E. M 8	22530-0-55304-R ●
45/55/65*	-	30	1/2/3	95	20 x 55 m. E. M 8	22530-0-55305-R ●
45/55/65*	-	30	1/2/3	95		22530-0-55306-R ●
45/55/65*	-	40	4/5/6	105	¼" x 55 m. E. M 8	22530-0-55404-R ●
45/55/65*	-	40	4/5/6	105	20 x 55 m. E. M 8	22530-0-55405-R ●
45/55/65*	-	40	4/5/6	105		22530-0-55406-R ●
45/55/65*	-	50	7/8/9	115	¼" x 55 m. E. M 8	22530-0-55504-R ●
45/55/65*	-	50	7/8/9	115	20 x 55 m. E. M 8	22530-0-55505-R ●
45/55/65*	-	50	7/8/9	115		22530-0-55506-R ●
71	66	60	27	130	¼" x 55 m. E. M 8	22530-0-71604-R ●
71	66	60	27	130	20 x 55 m. E. M 8	22530-0-71605-R ●
71	66	60	27	130		22530-0-71606-R ●
71	66	70	19	140	¼" x 55 m. E. M 8	22530-0-71704-R ●
71	66	70	19	140	20 x 55 m. E. M 8	22530-0-71705-R ●
71	66	70	19	140		22530-0-71706-R ●
73	68	100	28	170	¼" x 55 m. E. M 8	22530-0-73104-R ●
73	68	100	28	170	20 x 55 m. E. M 8	22530-0-73105-R ●
73	68	100	28	170		22530-0-73106-R ●
Unprofiled body						
45/55/65*	62	25	22/23/25	88		22530-0-52256-R ●
45/55/65*	62	30	1/2/3	93		22530-0-52306-R ●
45/55/65*	62	40	4/5/6	103		22530-0-52406-R ●
45/55/65*	62	50	7/8/9	113		22530-0-52506-R ●
71	66	60	27	128		22530-0-66606-R ●
71	66	70	19	138		22530-0-66706-R ●
73	68	100	28	168		22530-0-68106-R ●

* The tool body can be profiled for knives of H = 20, 25 or 30 mm (No. 1/2/3) resulting in a F_{max} 45, 55 or 65 mm respectively.

Technical details

Tool body for two profiled interchangeable T.C. knives. Also designed to be face ground. Right-hand rotation. For mechanical feed. Maximum profile width and depth according to illustrations on pages 6.35 - 6.39 (full size). **The profile of tool body will be adapted in each case to the appropriate profile of knife.** The interchangeable knives have to be ordered in addition (see page 7.1).

Application

For cutting decorative profiles in furniture and door production, as well as for ceiling or wall panelling, etc. on stationary routers or CNC machines.

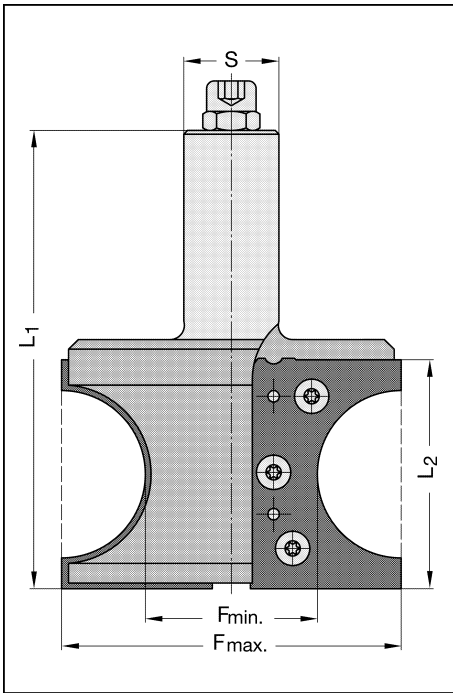
Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

Maximum R.P.M.

F_{max} mm	$L_2 =$ mm						
	25	30	40	50	60	70	100
45	18000	18000	18000	17300	-	-	-
55	18000	18000	15600	13800	-	-	-
65	15200	15200	13300	12000	-	-	-
71	-	-	-	-	12000	12000	-
73	-	-	-	-	-	-	11000

RAPIDO Profile Cutter for T.C. knives Z2

22530-90 without interchangeable T.C. knives



F_{max} mm	F_{min} mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
Profiled body						
90	40	60	30	125	¼" x 55 m. E. M 8	22530-0-90004-R ●
90	40	60	30	125	20 x 55 m. E. M 8	22530-0-90005-R ●
90	40	60	30	125		22530-0-90006-R ●
Unprofiled body						
87	40	60	30	123	¼" x 55 m. E. M 8	22530-0-87004-R ●
87	40	60	30	123	20 x 55 m. E. M 8	22530-0-87005-R ●
87	40	60	30	123		22530-0-87006-R ●

Technical details

Tool body for two profiled interchangeable T.C. knives, **with synthetic fit**. For mechanical feed. Right-hand rotation. The interchangeable T.C. knives can be profiled according to illustrations. **The profile of tool body will be adapted in each case to the appropriate profile of the knife.** The interchangeable knives have to be ordered **in addition** (see page 7.2).

Application

For cutting deep, closed profiles, on both sides e.g. bull nose profiles up to $R = 25$ mm. **R.P.M. max. = 12 000**

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs:** up to 9 pcs. only. Repeat orders of same profile: no template costs.

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

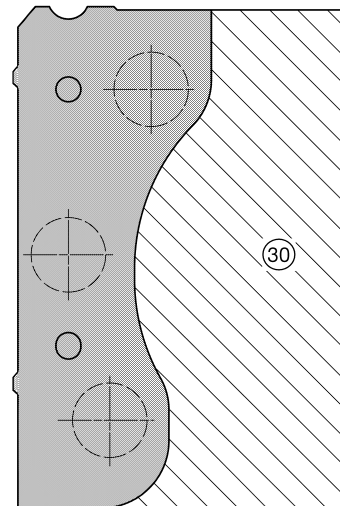
Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
HW 02 (standard grade)		
60 x 40 x 2	unprofiled	72534-6-60400-R ●
60 x 40 x 2	profiled	72534-6-60401-R ●



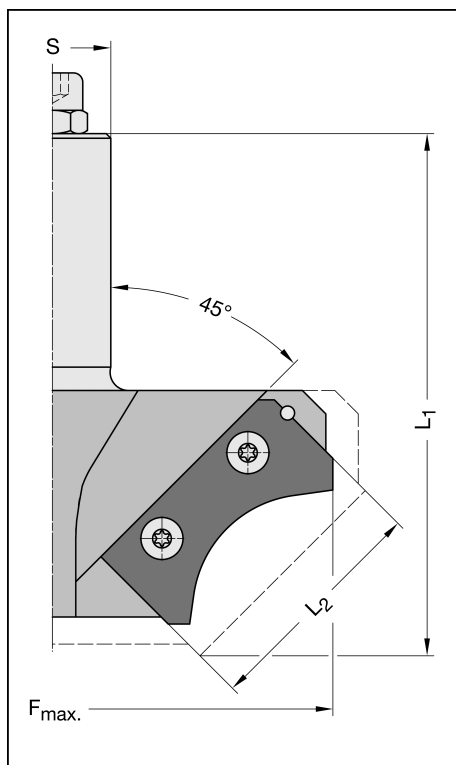
Area available
for profiling (1:1)

Foil No. 30
on page 6.38



RAPIDO Profile Cutter for T.C. knives Z2

22538-45 without interchangeable T.C. knives



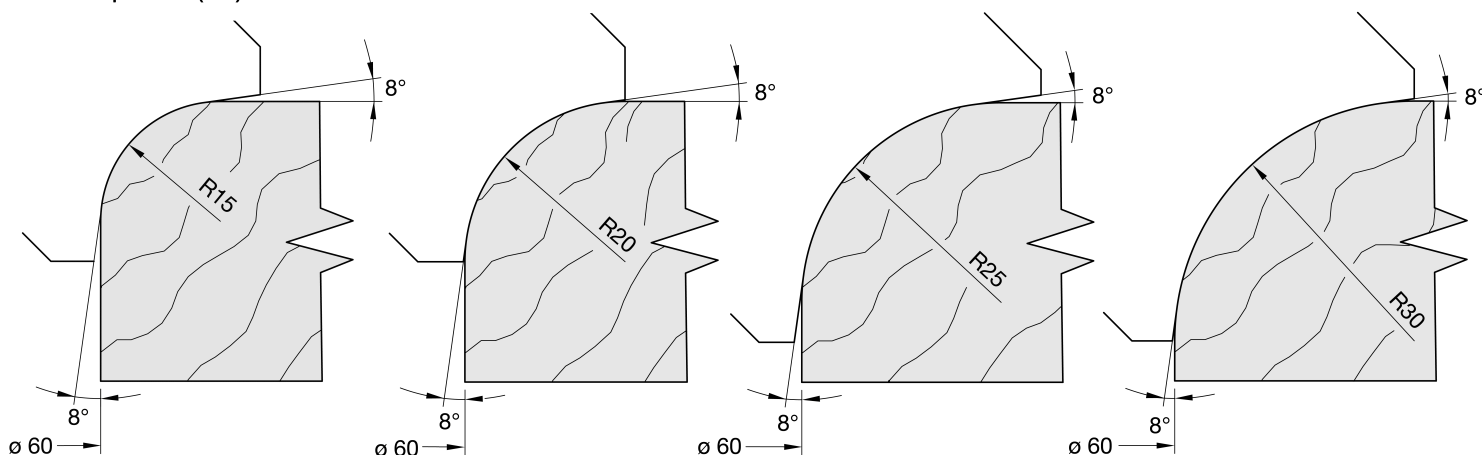
Technical details

Tool body for two profiled interchangeable T. C. knives, with shear angle. For mechanical feed. Right-hand rotation. **The profile of tool body will be adapted in each case to the appropriate profile of knives.** The interchangeable knives have to be ordered **in addition** (see page 7.2).

Application

For cutting decorative profiles in furniture and door production, as well as for ceiling and wall panelling, etc. on stationary routers and CNC machines. Especially for cutting large rounded over profiles. **R.P.M. max. = 9 000** Area available for profiling, see foils 5b/6b/8b/9b on pages 6.36 and 6.37.

Standard profiles (1:1)



F_{max} mm	R mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
Body profiled for rounding over knives						
100	15-20	40	-	98	20 x 55 m. E. M 8	22538-0-00205-R ●
100	15-20	40	-	98		22538-0-00206-R ●
Body profiled, special profiles						
105/110*	-	40	5b/6b	108	20 x 55 m. E. M 8	22538-0-11005-R ●
105/110*	-	40	5b/6b	108		22538-0-11006-R ●
125/130*	-	50	8b/9b	110	20 x 55 m. E. M 8	22538-0-13005-R ●
125/130*	-	50	8b/9b	110		22538-0-13006-R ●
Unprofiled body						
105/110*	-	40	5b/6b	106	20 x 55 m. E. M 8	22538-0-10505-R ●
105/110*	-	40	5b/6b	106		22538-0-10506-R ●
125/130*	-	50	8b/9b	108	20 x 55 m. E. M 8	22538-0-12505-R ●
125/130*	-	50	8b/9b	108		22538-0-12506-R ●

* Knives with H = 25 mm or 30 mm can be used, for special profiles which means for B = 40 mm F_{max} . 105 or 110 mm and B = 50 mm F_{max} . 125 or 130 mm.

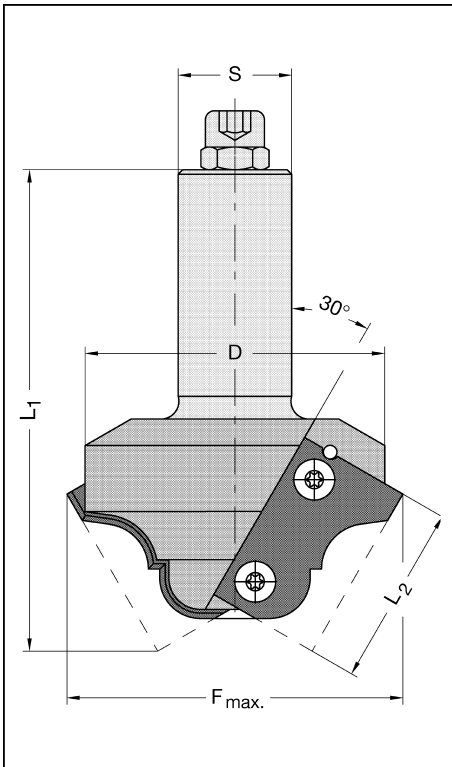
Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
Standard rounding over knives, HW 02		
40 x 25 x 2	R 15 mm	72538-6-00015-R ●
40 x 25 x 2	R 20 mm	72538-6-00020-R ●
50 x 25 x 2	R 25 mm	72538-6-00025-R ●
50 x 25 x 2	R 30 mm	72538-6-00030-R ●
Special profiles, HW 02		
40 x 25 x 2	profiled	72530-6-40251-R ●
40 x 30 x 2	profiled	72530-6-40301-R ●
50 x 25 x 2	profiled	72530-6-50251-R ●
50 x 30 x 2	profiled	72530-6-50301-R ●
Blank knives, HW 02		
40 x 25 x 2	unprofiled	72530-6-40250-R ●
40 x 30 x 2	unprofiled	72530-6-40300-R ●
50 x 25 x 2	unprofiled	72530-6-50250-R ●
50 x 30 x 2	unprofiled	72530-6-50300-R ●

Quantity discounts, ordering same profile: 5 - 9 pcs = 12 %, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders for same profile: no template costs.

RAPIDO Profile Cutter for T.C. knives Z2

22538-30 without interchangeable T.C. knives



F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.	
Profiled body							
82/87*	-	40	5a/6a	104	3/4" x 55 m. E. M 8	22538-0-74404-R ●	
82/87*	-	40	5a/6a	104		22538-0-74406-R ●	
Unprofiled body							
82/87*	83	40	5a/6a	102	3/4" x 55 m. E. M 8	22538-0-70404-R ●	
82/87*	83	40	5a/6a	102		22538-0-70406-R ●	
Spare parts / Accessories						Part-No.	PU
Torx clamping screw						M 4 x 5,9, T15	39076-0-04000-R 10
Torx key						T15, with handle	39077-0-04015-2 1

Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
Standard profile knives, HW 02		
40 x 30 x 2	profile No. 1	72538-6-00001-R ●
40 x 30 x 2	profile No. 2	72538-6-00002-R ●
Special profiles, HW 02		
40 x 25 x 2	unprofiled	72530-6-40250-R ●
40 x 25 x 2	profiled	72530-6-40251-R ●
40 x 30 x 2	unprofiled	72530-6-40300-R ●
40 x 30 x 2	profiled	72530-6-40301-R ●

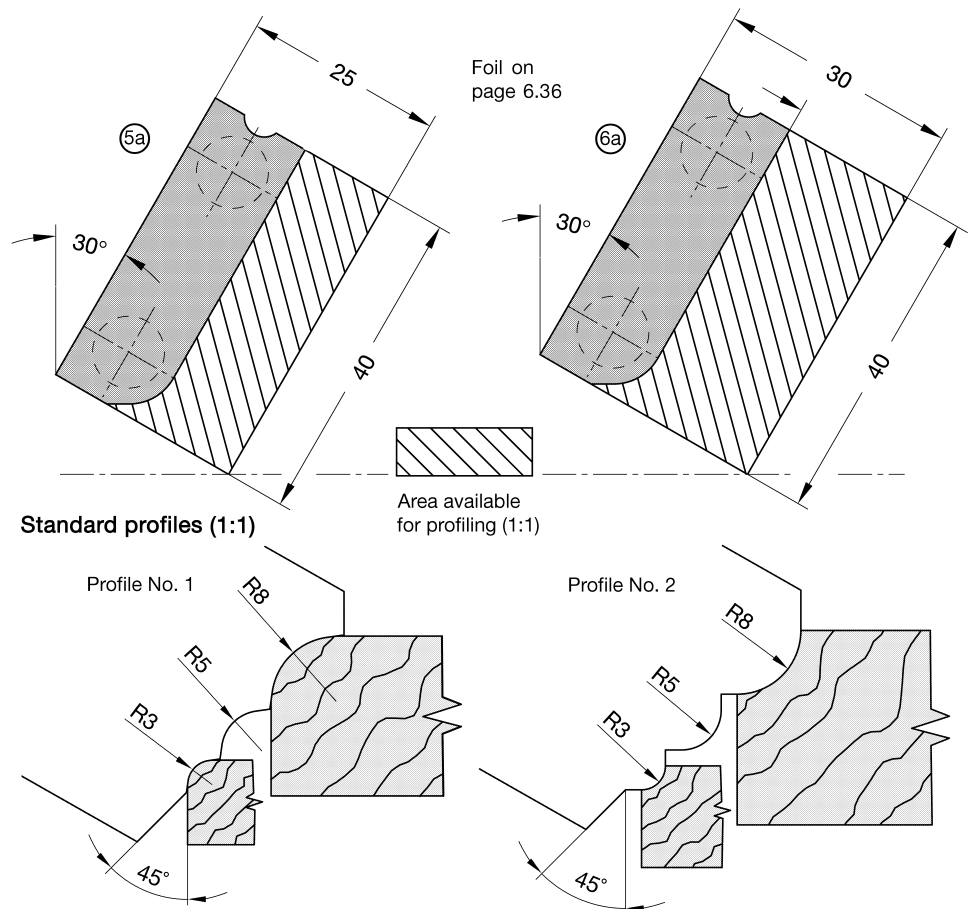
Technical details

Tool body for two profiled interchangeable T.C. knives. Shear angle design. Also designed to be face ground. Right-hand rotation. For mechanical feed. **The profile of tool body will be adapted in each case to the appropriate profile of knife.** The interchangeable knives have to be ordered **in addition** (see page 7.2).

Application

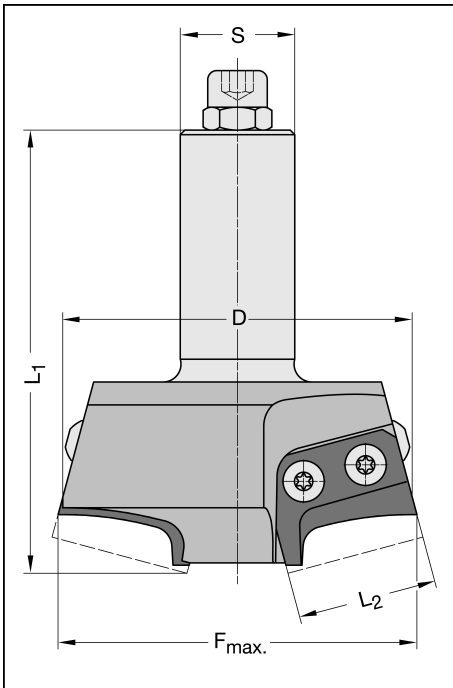
For cutting decorative profiles in furniture and door production, as well as for ceiling and wall panelling, etc. on stationary routers and CNC machines. Especially when cutting large deep profiles. **R.P.M. max. = 12 000**

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs. *For tool body of D = 83 mm either knives of H = 25 or 30 mm can be used result in F_{max} of 82 or 87 mm, respectively.



RAPIDO Profile Cutter for T.C. knives Z2

22537 without interchangeable T.C. knives



F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
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Body profiled, special profiles

80	78	30	33	95	20 x 55 m. E. M 8	22537-0-80305-R ●
80	78	30	33	95		22537-0-80306-R ●

Technical details

Tool body for two profiled interchangeable T. C. knives, with shear angle. For mechanical feed. Right-hand rotation. **The profile of tool body will be adapted in each case to the appropriate profile of knives.** The interchangeable knives have to be ordered in addition (see page 7.2).

Application

For cutting decorative profiles in furniture and door production, as well as for ceiling and wall panelling, etc. on stationary routers and CNC machines. Especially for cutting large rounded over profiles. **R.P.M. max. = 9 000**

Quantity discounts, ordering same profile: 5 - 9 pcs = 12 %, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders for same profile: no template costs.

Interchangeable T.C. knives

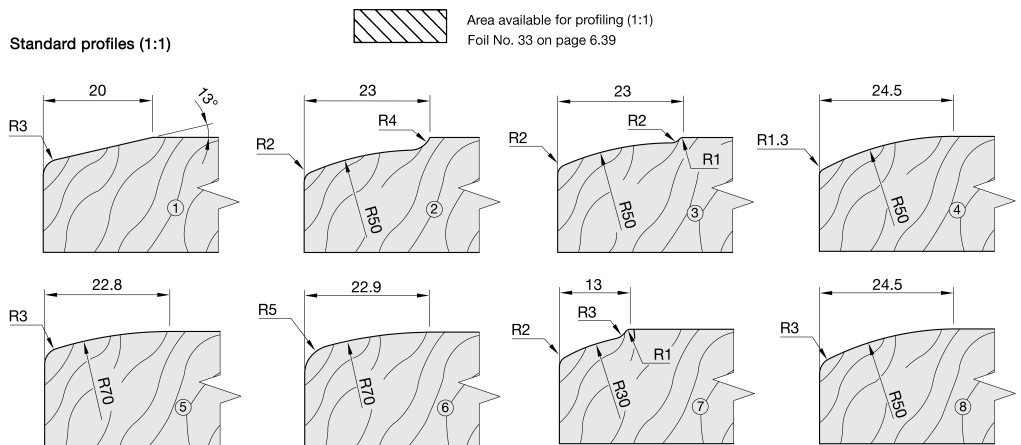
Dimensions B x H x S mm	Design	Part-No.
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Standard profile knives, HW 02

30 x 25 x 2	profile No. 1	72537-6-00001-R ●
30 x 25 x 2	profile No. 2	72537-6-00002-R ●
30 x 25 x 2	profile No. 3	72537-6-00003-R ●
30 x 25 x 2	profile No. 4	72537-6-00004-R ●
30 x 25 x 2	profile No. 5	72537-6-00005-R ●
30 x 25 x 2	profile No. 6	72537-6-00006-R ●
30 x 25 x 2	profile No. 7	72537-6-00007-R ●
30 x 25 x 2	profile No. 8	72537-6-00008-R ●

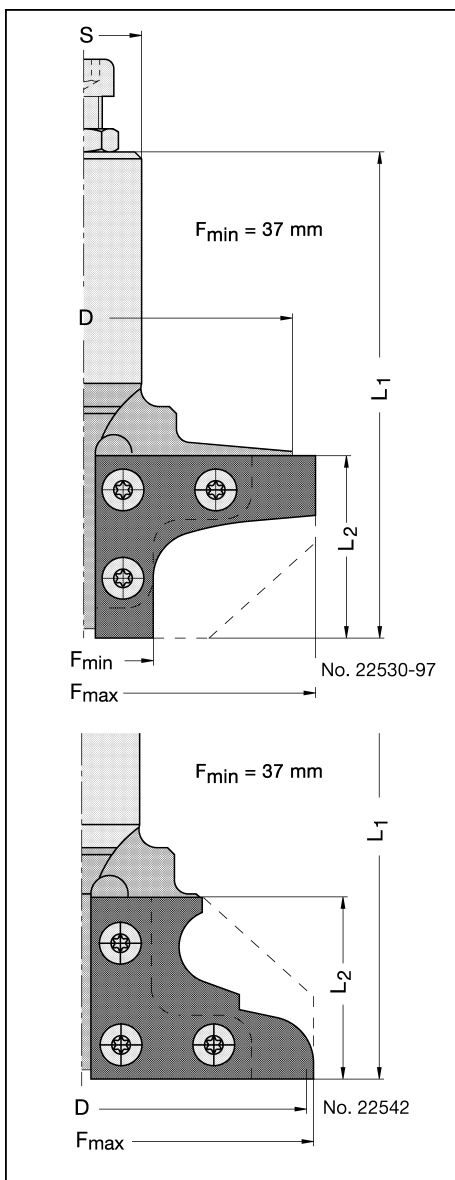
Special profiles, HW 02

30 x 25 x 2	unprofiled	72530-6-30250-R ●
30 x 25 x 2	profiled	72537-6-30251-R ●



RAPIDO Profile Cutters for T.C. knives Z2

22530-97 without interchangeable T.C. knives



F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
Profiled body						
105	102	36	20	104	¾" x 55 m. E. M 8	22530-0-10004-R ●
105	102	36	20	104	20 x 55 m. E. M 8	22530-0-10005-R ●
105	102	36	20	104		22530-0-10006-R ●
Unprofiled body						
105	102	36	20	102	¾" x 55 m. E. M 8	22530-0-97404-R ●
105	102	36	20	102	20 x 55 m. E. M 8	22530-0-97405-R ●
105	102	36	20	102		22530-0-97406-R ●

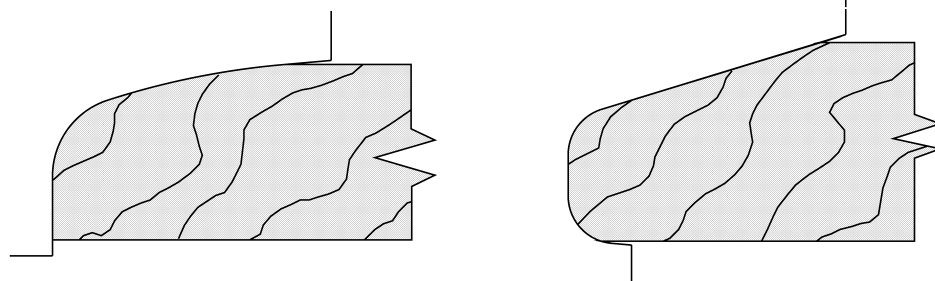
Maximum profile width and profile depth according to illustrations on pages 6.35 - 6.39. (full size).

22542 without interchangeable T.C. knives

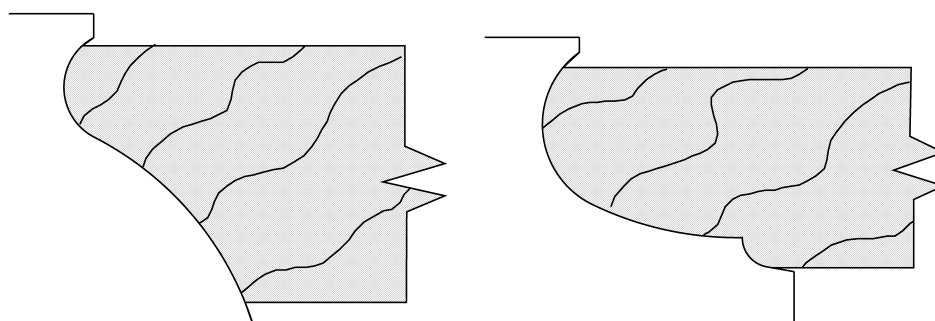
F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.
Profiled body						
105	102	36	21	105	¾" x 55 m. E. M 8	22542-0-10004-R ●
105	102	36	21	105	20 x 55 m. E. M 8	22542-0-10005-R ●
105	102	36	21	105		22542-0-10006-R ●
Unprofiled body						
105	102	36	21	103	¾" x 55 m. E. M 8	22542-0-97404-R ●
105	102	36	21	103	20 x 55 m. E. M 8	22542-0-97405-R ●
105	102	36	21	103		22542-0-97406-R ●

Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

Examples of profiles (1:1) for No. 22530-97



Examples of profiles (1:1) for No. 22542



Technical details

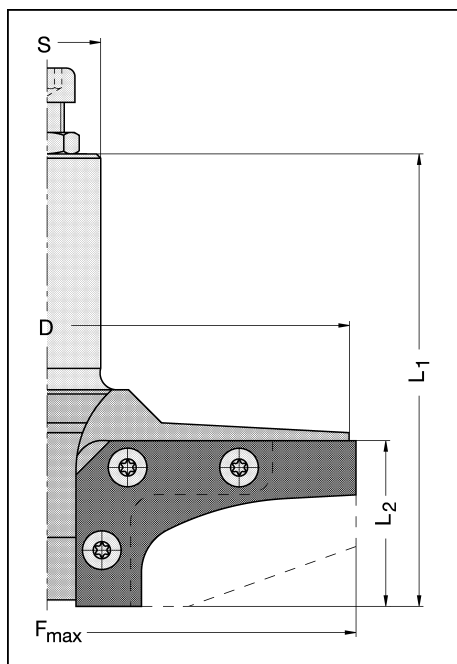
Tool body for two profiled interchangeable T.C. knives, with shear angle. For mechanical feed. Right-hand rotation. **The profile of tool body will be adapted in each case to the appropriate profile of knife.** The interchangeable knives have to be ordered **in addition** (see page 7.2).

Application

Especially for cutting deep, large decorative profiles in furniture and door production, as well as for ceiling or wall panelling, etc. on stationary routers and CNC machines. **R.P.M. max. = 8 000**

RAPIDO Profile Cutter for T.C. knives Z2

22440 without interchangeable T.C. knives



F_{max} mm	D mm	L_2 mm	f. knives No.	L_1 mm	Shank mm	Part-No.	
Profiled body							
144	141	38	29	107	25* x 55 m. E. M 8	22440-0-14406-R ●	
Unprofiled body							
144	141	38	29	105	25* x 55 m. E. M 8	22440-0-14106-R ●	
* For safety reasons, shank of 25 mm cannot be reduced.							
Spare parts / Accessories						Part-No.	PU
Torx clamping screw			M 4 x 5,9, T15		39076-0-04000-R	10	
Torx key			T15, with handle		39077-0-04015-2	1	

Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
HW 02 (standard grade)		
40 x 66 x 2	unprofiled	72440-6-40660-R ●
40 x 66 x 2	profiled	72440-6-40661-R ●

Quantity discounts, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25 %. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Technical details

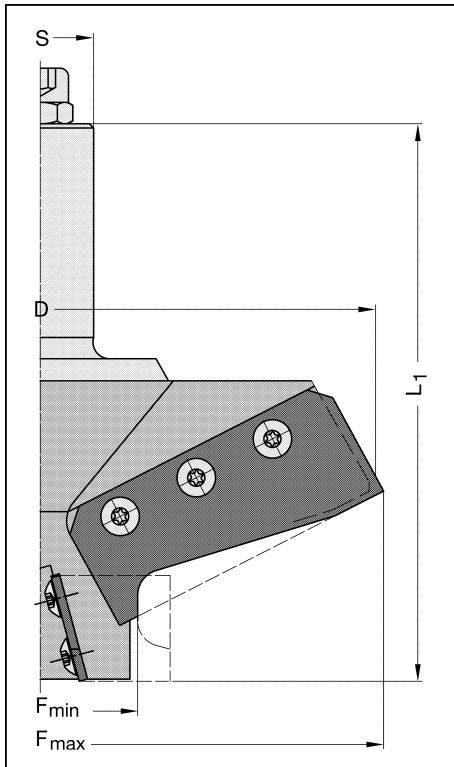
Tool body for two profiled interchangeable T.C. knives, with shear angle. For mechanical feed. Right-hand rotation. **The profile of tool body will be adapted in each case to the appropriate profile of knife.** The interchangeable knives have to be ordered in addition (see page 7.2).

Application

For panel raising operations on stationary routers and CNC machines, as well as for cutting flat exterior profiles. **R.P.M. max. = 6 000**

RAPIDO Profile Cutter for T.C. knives Z2+2

22442 without interchangeable T.C. knives



F_{max} mm	D mm	F_{min} mm	f. knives No.	L_1 mm	Shank mm	Part-No.	
Profiled body							
160	157	38	31	131	25* x 55 m. E. M 8	22442-0-16006-R ●	
Unprofiled body							
160	157	38	31	129	25* x 55 m. E. M 8	22442-0-15706-R ●	
Spare parts / Accessories						Part-No.	PU
Torx clamping screw			M 4 x 5,9, T15			39076-0-04000-R	10
Torx key			T15, with handle			39077-0-04015-2	1

Interchangeable T.C. knives

Dimensions B x H x S mm	Design	Part-No.
70 x 30 x 2	unprofiled	72530-6-70300-R ●
70 x 30 x 2	profiled	72442-6-70301-R ●
25 x 25 x 2	unprofiled	72530-6-25250-R ●
25 x 25 x 2	profiled	72442-6-25251-R ●

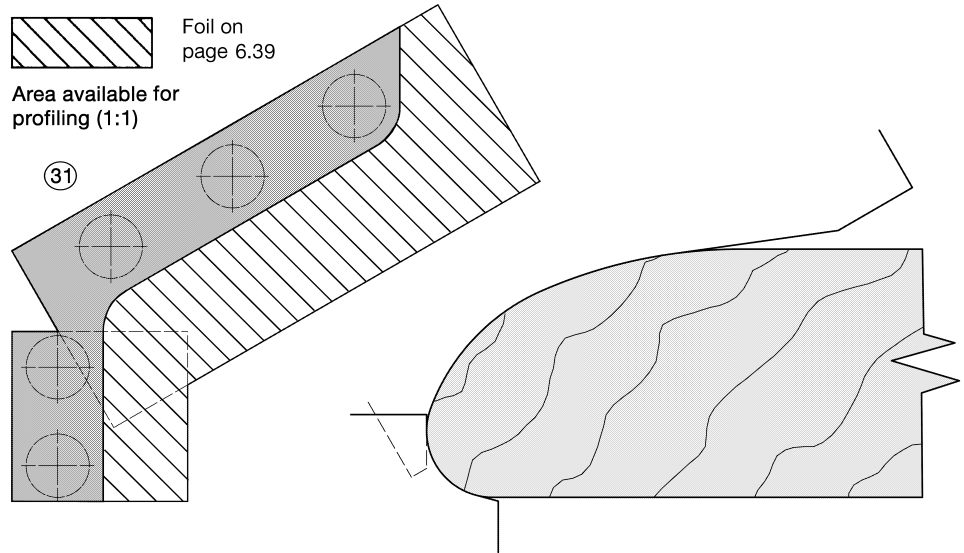
Technical details

Tool body made of high-quality, light metal. For two upper and lower, staggered profiled interchangeable T.C. knives, with shear angle. For mechanical feed. Right-hand rotation. **The profile of the tool body will be adapted in each case to the appropriate profile of knife.** The interchangeable knives have to be ordered in addition (see page 7.2).

Quantity discounts, ordering same profile: 5 to 9 pcs = 12 %, up from 10 pcs = 25 %. **Template costs**: up to 9 pcs only. Repeat orders for same profile: no template costs. * For safety reasons, shank of 25 mm cannot be reduced. The light metal tool body can be provided with the appropriate steel shank SK30/SK40 or HSK-F 63 for use with automatic tool changers. This will avoid additional tolerances which arise from assembling the parallel shank in a clamping chuck. Price on request.

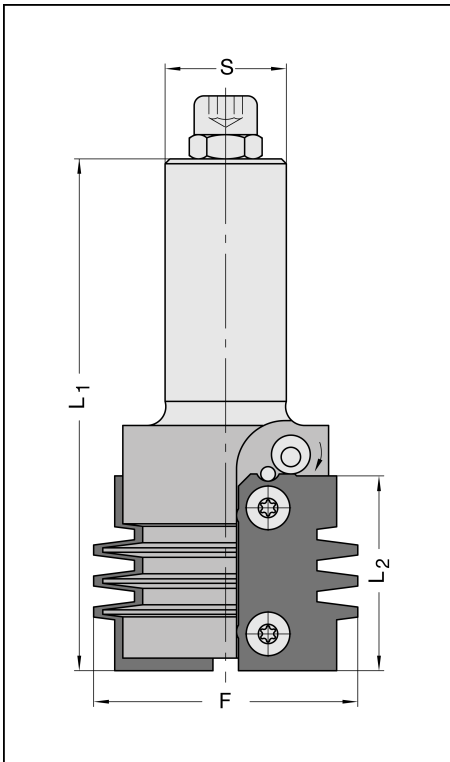
Application

Especially for large, deep, closed profile, e.g. table edges. Optimum cutting edge geometry on top and bottom for perfect surface quality through staggered knife position, even across the grain. **R.P.M. max. = 6 000**



RAPIDO Glue Joint Cutter w. interch. T.C. knives Z2

22560



Profile No.	h mm	F mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
2	15-28	55	30	95		22560-5-00206-R ●
3	25-38	55	40	105		22560-5-00306-R ●
5	35-58	71	60	130		22560-5-00506-R ●

Use tool body No. 22530 (page 4.60) for special profiles.

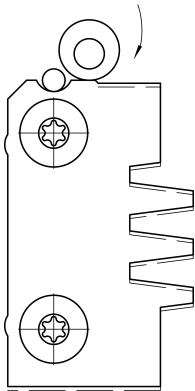
Technical details

Tool body with 2 profiled interchangeable T.C. knives. Right-hand rotation. For mechanical feed.

Application

To produce glue joints with straight shoulders in soft and hardwood.

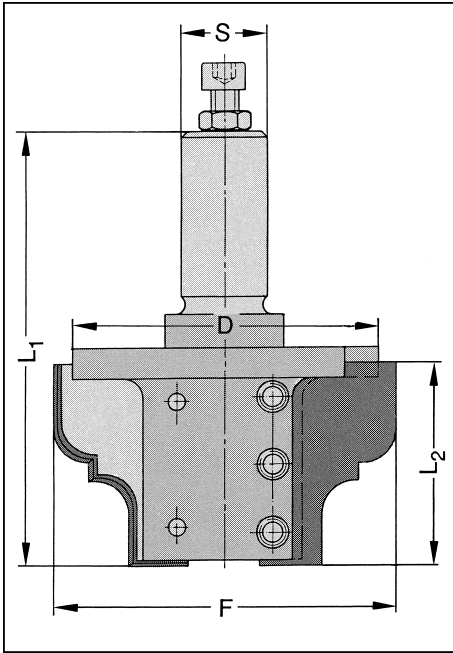
Spare parts / Accessories		Part-No.	PU
Interch. T.C. knives	profile 1, 40 x 25 x 2 mm	72560-6-40001-R	2
Interch. T.C. knives	profile 2, 30 x 25 x 2 mm	72560-6-30002-R	2
Interch. T.C. knives	profile 3, 40 x 25 x 2 mm	72560-6-40003-R	2
Interch. T.C. knives	profile 4, 50 x 25 x 2 mm	72560-6-50004-R	2
Interch. T.C. knives	profile 5, 60 x 30 x 2 mm	72560-6-60005-R	2
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1



By adjusting the eccentric ring, the knife will slide downwards up to 0,2 mm. This will reduce the strength of the glue joint connection which may be necessary for certain types of wood.

Multi-Profile Cutterhead for T.C. knives Z2

22480 tool body



F mm	D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
60	56	30	85	16 x 45 m. E. M 6	22480-0-60303-R ○
90	80	40	109		22480-0-90406-L ○
90	80	40	109		22480-0-90406-R ●
100	90	60	129		22480-0-10606-R ●

* HW 01 (for MDF) and HW 04 (for solid wood) see page 7.3. **Quantity discounts**, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25%. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Spare parts / Accessories	Part-No.	PU
Clamping wedge 30 mm, Right-hand rotation	39280-0-03000-R	2
Clamping wedge 40 mm, Right-hand rotation	39280-0-04000-R	2
Clamping wedge 40 mm, Left-hand rotation	39280-0-04000-L	2
Clamping wedge 60 mm, Right-hand rotation	39280-0-06000-R	2
Allen screw M 6 x 8 ISO 4028, for F = 60 mm	39266-0-06008-R	10
Ball pressing screw M 8 x 12, for F = 90/100 mm	39072-0-08012-R	5
Key with T-handle	39140-0-00401-0	1

Interchangeable T.C. knives and support plates

Dimensions B x H x S mm	For F = mm	Profile depth max. mm	Part-No.
-------------------------	------------	-----------------------	----------

Interchangeable T.C. knives - HW 02* (standard grade)

30 x 25 x 2	60	11	unprofiled	72530-6-30250-R ●
30 x 25 x 2	60	11	profiled	72480-6-30021-R ●
40 x 36 x 2	90	17	unprofiled	72480-6-40360-R ●
40 x 36 x 2	90	17	profiled	72480-6-40361-R ●
60 x 41 x 2	100	22	unprofiled, bevel 30°	72480-6-60410-R ●
60 x 41 x 2	100	22	profiled	72480-6-60411-R ●

Support plates 4,2 mm thickness

30 x 25 x 2	unprofiled	72481-0-30250-R ●
30 x 25 x 2	profiled	72481-0-30251-R ●
40 x 36 x 2	unprofiled	72481-0-40360-R ●
40 x 36 x 2	profiled	72481-0-40361-R ●
60 x 41 x 2	unprofiled, bevel 30°	72482-0-60410-R ●
60 x 41 x 2	profiled	72482-0-60411-R ●

Application

For cutting decorative profiles in furniture and door production, as well as for ceiling and wall panelling, etc. on stationary routers and CNC machines. **R.P.M. max. = 12 000 (L₂ 30 and 40 mm) R.P.M. max. = 9 000 (L₂ 60 mm)**

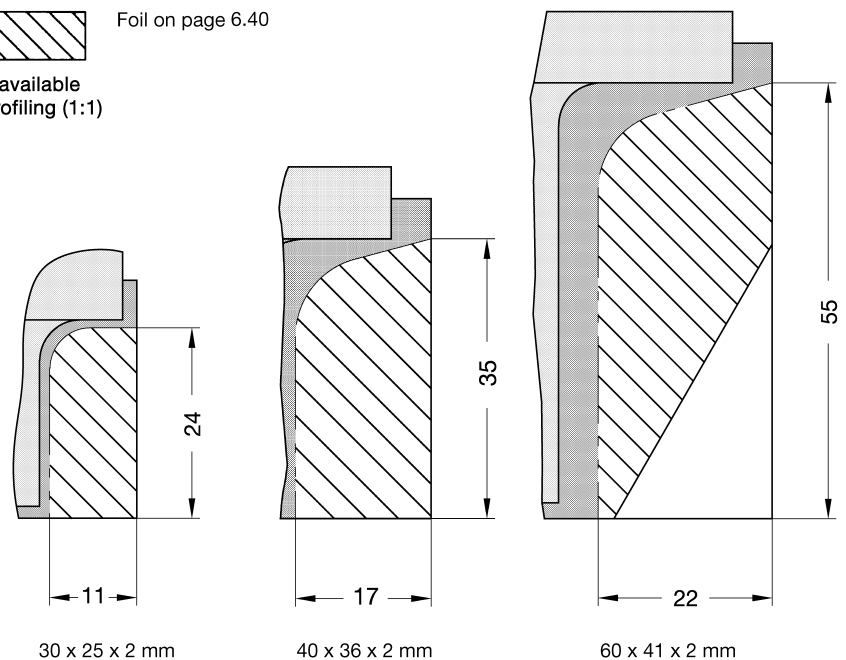
Technical details

Tool body for profiled interchangeable T.C. knives with support plate. Also designed to be face ground. For mechanical feed. Please order the interchangeable T.C. knives and support plates **in addition** (see page 7.3).



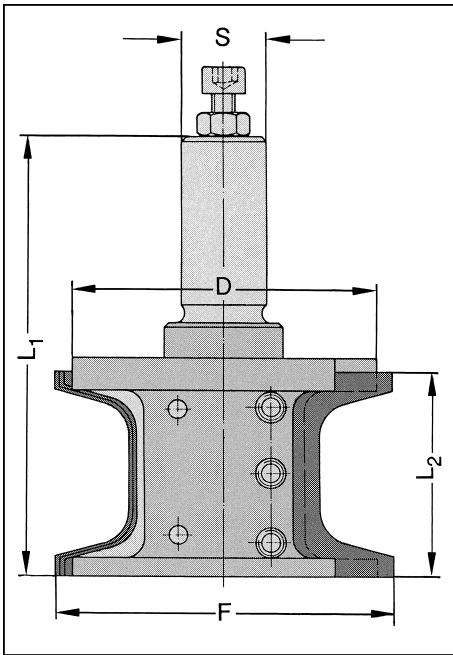
Foil on page 6.40

Area available for profiling (1:1)



Multi-Profile Cutterhead for T.C. knives Z2

22485 tool body



F mm	D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
90	80	40	109		22485-0-90406-L ○
90	80	40	109		22485-0-90406-R ●
100	90	60	129		22485-0-10606-R ●

* HW 01 (for MDF) and HW 04 (for solid wood) see page 7.3. **Quantity discounts**, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25%. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Technical details

Tool body for profiled interchangeable T.C. knives with support plates. Mechanical feed. Please order the interchangeable T.C. knives and support plates **in addition** (see page 7.3).

Application

For cutting decorative profiles in furniture and door production, as well as for ceiling and wall panelling, etc. on stationary routers and CNC machines. **R.P.M. max. = 12 000 (L₂= 40 mm) R.P.M. max. = 9 000 (L₂= 60 mm)**

Spare parts / Accessories	Part-No.	PU
Clamping wedge 40 mm, Right-hand rotation	39280-0-04000-R	2
Clamping wedge 40 mm, Left-hand rotation	39280-0-04000-L	2
Clamping wedge 60 mm, Right-hand rotation	39280-0-06000-R	2
Clamping wedge 60 mm, Left-hand rotation	39280-0-06000-L	2
Ball pressing screw	39072-0-08012-R	5
Key with T-handle	39140-0-00401-0	1

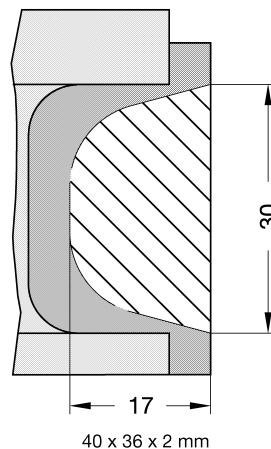
Interchangeable T.C. knives and support plates

Dimensions B x H x S mm	For F = mm	Profile depth max. mm	Part-No.
Interchangeable T.C. knives - HW 02* (standard grade)			
40 x 36 x 2	90	17	unprofiled 72480-6-40360-R ●
40 x 36 x 2	90	17	profiled 72485-6-40361-R ●
60 x 41 x 2	100	22	unprofiled 72485-6-60410-R ●
60 x 41 x 2	100	22	profiled 72485-6-60411-R ●
Support plates 4,2 mm thickness			
40 x 36 x 2			unprofiled 72481-0-40360-R ●
40 x 36 x 2			profiled 72481-0-40361-R ●
60 x 41 x 2			unprofiled 72481-0-60410-R ●
60 x 41 x 2			profiled 72481-0-60411-R ●

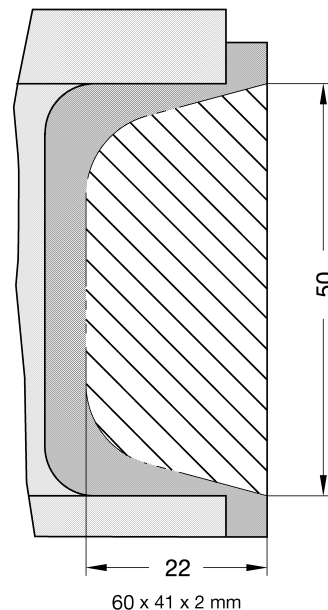


Foil on page 6.40

Area available for profiling (1:1)



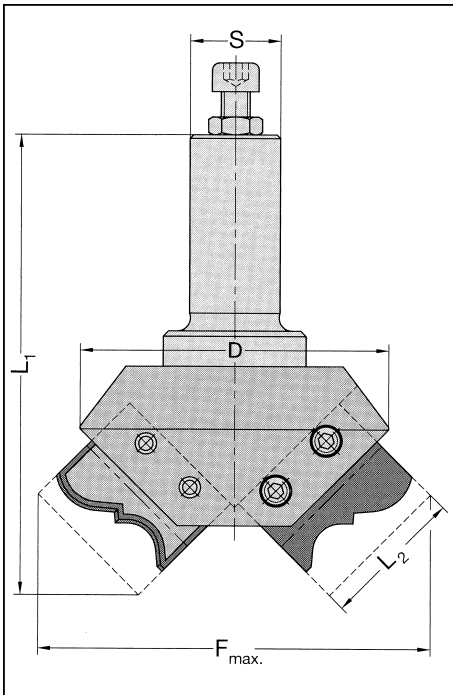
40 x 36 x 2 mm



60 x 41 x 2 mm

Angled Multi-Profiler for T.C. knives Z2

22460 tool body



F _{max} mm	D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
110	86,5	40	123		22460-0-00006-R ●
148*	119	60	142		22460-0-00606-L ●
148*	119	60	142		22460-0-00606-R ●

*Can be supplied also with shanks SK 30/40, MK 2, HSK-F 63 (on request). * **HW 01** (for MDF) and **HW 04** (for solid wood) see page 7.3. **Quantity discounts**, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25%. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Technical details

Tool body for profiled interchangeable T.C. knives with support plates, D = 119 mm made of high-quality, light metal. The unprofiled T.C. knives can be also used for the multi-profile cutterheads Nos. 22480/485 (pages 4.69/4.70). For mechanical feed. Please order the interchangeable T.C. knives and support plates **in addition** (see page 7.3).

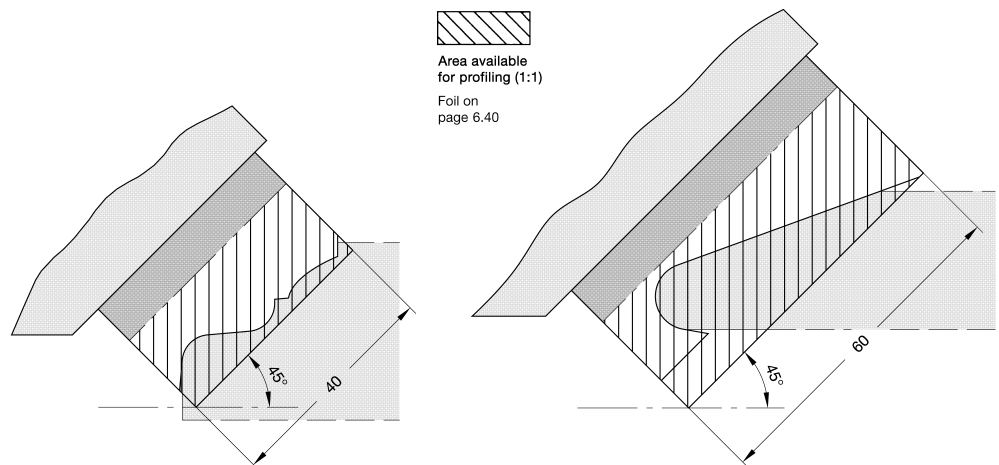
Application

Especially for large, deep, decorative profiles in furniture and door production, as well as ceiling or wall panelling on stationary routers and CNC machines. **R.P.M. max. = 12 000 (F_{max} = 110 mm) R.P.M. max. = 8 000 (F_{max} = 148 mm)**

Spare parts / Accessories	Part-No.	PU
Clamping wedge 40 mm, Right-hand rotation	39280-0-04000-R	2
Clamping wedge 60 mm, Right-hand rotation	39280-0-06000-R	2
Clamping wedge 60 mm, Left-hand rotation	39280-0-06000-L	2
Ball pressing screw	39072-0-08012-R	5
Key with T-handle	39140-0-00401-0	1

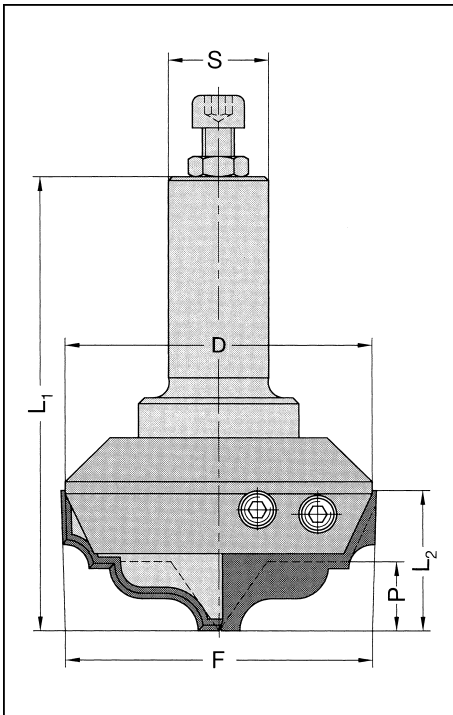
Interchangeable T.C. knives and support plates

Dimensions B x H x S mm	For F _{max} = mm		Part-No.
Interchangeable T.C. knives - HW 02* (standard grade)			
40 x 36 x 2	110	unprofiled	72480-6-40360-R ●
40 x 36 x 2	110	profiled	72460-6-40361-R ●
60 x 41 x 2	148	unprofiled	72485-6-60410-R ●
60 x 41 x 2	148	profiled	72460-6-60411-R ●
Support plates 4,2 mm thickness			
40 x 36 x 2		unprofiled	72481-0-40360-R ●
40 x 36 x 2		profiled	72461-0-40361-R ●
60 x 41 x 2		unprofiled	72481-0-60410-R ●
60 x 41 x 2		profiled	72461-0-60411-R ●



Bottom Cutting Multi-Profiler for T.C. knives Z2

22470 tool body



F _{max} mm	D mm	P mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
60	62	15	34	105	20 x 55 m. E. M 8	22470-0-60005-R ●
76	76	17	35	112		22470-0-00006-R ●

* HW 01 (for MDF) and HW 04 (for solid wood) see page 7.3. **Quantity discounts**, ordering same profile: 5 - 9 pcs. = 12%, up from 10 pcs. = 25%. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Technical details

Tool body for profiled interchangeable T.C. knives with support plates. Right-hand rotation. For mechanical feed. Equipped with 1 pc. interchangeable T.C. knife each, **Type A and B**, as well as with 2 support plates, F_{max} 60 mm tool with 2 knives and support plates of the same type.

Application

For cutting wide profile grooves, rosettes, flat, deep profiles, e.g. raised panels on CNC machines. Also applicable for rebating and surfacing operations. **R.P.M. max. = 18 000 (F_{max} = 60 mm) R.P.M. max. = 12 000 (F_{max} = 76 mm)**

Spare parts / Accessories	Part-No.	PU
Clamping wedge 28 mm, Right-hand rotation	39270-0-02800-R	2
Clamping wedge 28 mm, Left-hand rotation	39270-0-02800-L	2
Clamping wedge 35 mm, Right-hand rotation	39270-0-03500-R	2
Clamping wedge 35 mm, Left-hand rotation	39270-0-03500-L	2
Ball pressing screw M 8 x 12 (for F = 76 mm)	39072-0-08012-R	5
Ball pressing screw M 6 x 10 (for F = 60 mm)	39072-0-06010-R	5
Key with T-handle	39140-0-00401-0	1

Interchangeable T.C. knives and support plates

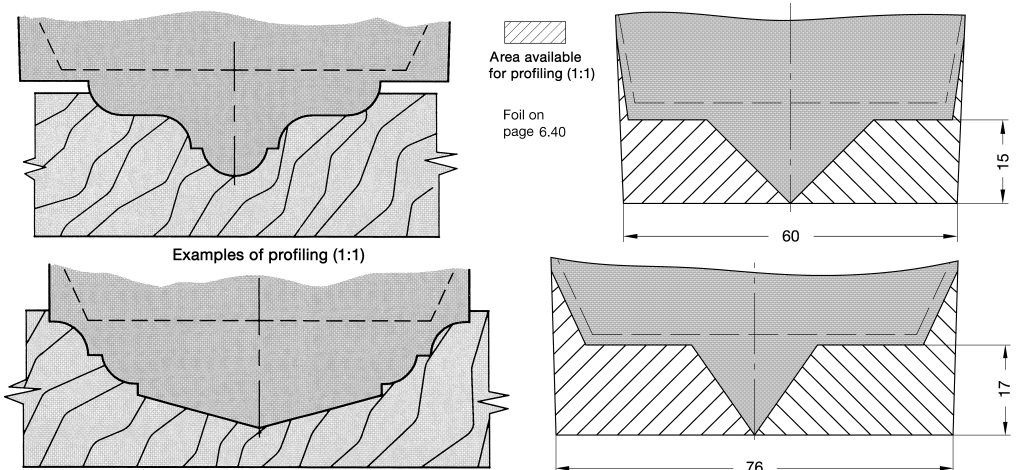
Dimensions B x H x S mm	For F = mm	Type	Part-No.
----------------------------	---------------	------	----------

Interchangeable T.C. knives - HW 02* (standard grade)

30 x 35 x 2	60		unprofiled	72530-6-30350-R ●
30 x 35 x 2	60		profiled	72470-6-30021-R ●
40 x 36 x 2	76	A	unprofiled	72470-6-40360-A ●
40 x 36 x 2	76	B	unprofiled	72470-6-40360-B ●
40 x 36 x 2	76	A	profiled	72470-6-40361-A ●
40 x 36 x 2	76	B	profiled	72470-6-40361-B ●

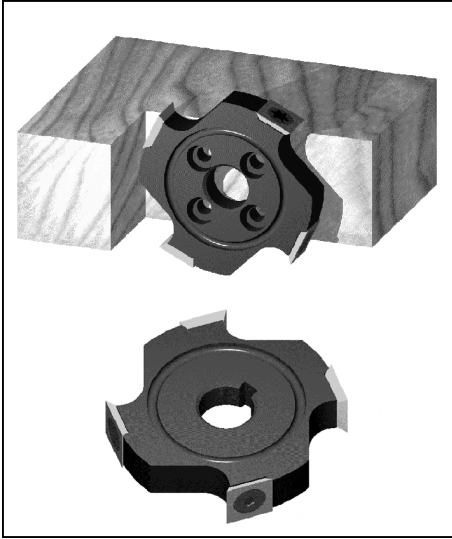
Support plates 4,2 mm thickness

30 x 35 x 2		unprofiled	72471-0-30350-R ●
30 x 35 x 2		profiled	72471-0-30351-R ●
40 x 36 x 2		unprofiled	72481-0-40360-R ●
40 x 36 x 2		profiled	72471-0-40361-R ●



Corner Notching Cutter with reversible T.C. tips Z4

61200



D mm	L ₂ mm	d mm	KN mm	Z	Part-No.
70	14,3	16*	-	4	61200-5-70143-V ●
70	14,3	16	5 x 2,3	4	61200-5-70143-1 ●

Solid T.C. - Corner forming router cutter on page 3.8.

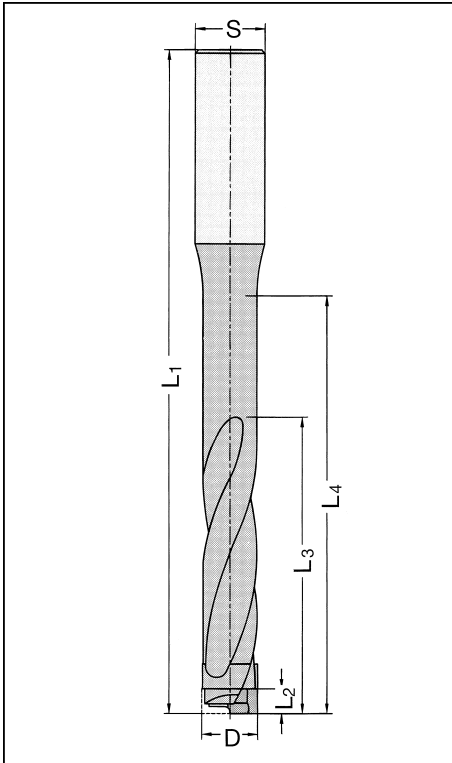
* With 4 retaining holes

Technical details

Tool body with four straight T.C. tips, with four cutting edges. For mechanical feed.

Spare parts / Accessories		Part-No.	PU
Reversible T.C. tip		72020-6-01430-0	10
Torx countersunk screw		39085-0-05012-R	10
Torx key		T20, with handle	1

22315



D mm	L ₂ mm	L ₃ mm	L ₄ mm	L ₁ mm	Shank mm	Part-No.
14	7	105	110	170 ¹⁾	16 x 55	22315-5-14173-R ●

¹⁾ Shortening of total length L₁ possible by shortening the shank. For use with Weldon tool-holders, state shank type as per illustration on page 4.75. Clamping flat available at extra costs, on request. For other shank types enclose sketch or sample.

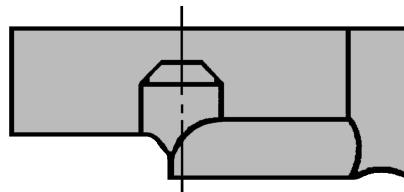
Technical details

Sturdy tool body with three flutes and interchangeable T.C. tip. **Tool body made of high-density metal**, for reduced risk of breakage and vibration-free running. Right-hand rotation. Flute length L₃ = 105 mm also good for deeper lock case pockets (ST).

Application

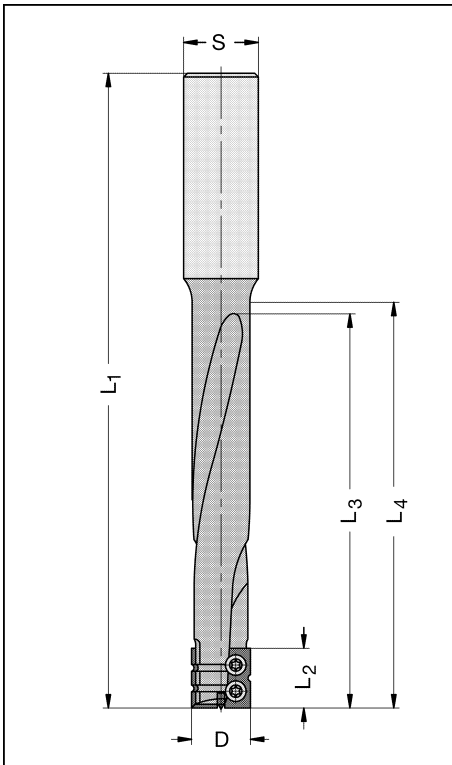
Designed to machine lock case and face plate pockets with step-by-step adjustment. Interchangeable T.C. tip ensures constant cutting circle. **Recommended operation data:** Stroke 5 mm, feed rate vf = 12 m/min, R.P.M. = 12 000

Spare parts / Accessories		Part-No.	PU
T.C. plunge tip	for ø 14 mm	72095-6-14000-R	5
T.C. plunge tip	for ø 14,5 mm	72095-6-14500-R	5
T.C. plunge tip	for ø 15 mm	72095-6-15000-R	5
T.C. plunge tip	for ø 15,5 mm	72095-6-15500-R	5
T.C. plunge tip	for ø 16 mm	72095-6-16000-R	5
T.C. plunge tip	for ø 16,5 mm	72095-6-16500-R	5
T.C. plunge tip	for ø 17 mm	72095-6-17000-R	5
T.C. plunge tip	for ø 18 mm	72095-6-18000-R	5
Torx countersunk screw		39084-0-03089-R	10
Torx key	T 9, with handle	39077-0-03009-2	1

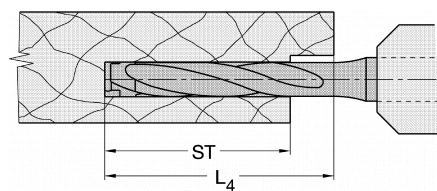


T.C. plunge tip

22310

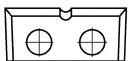


- Constant diameter through interchangeable tip design
- Special T.C. grade for increased tool life (compared with tools of solid T.C.)
- Tool body of high-density metal, for reduced risk of breakage and vibration-free running
- Economical-priced change of blunt or damaged tips

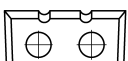


ST = depth of lockset

Interchangeable tips:



Form A



Form B

D mm	L ₂ mm	L ₃ mm	L ₄ mm	L ₁ mm	Shank mm	Part-No.
16	16	105	105	150 ¹⁾	16 x 45	22310-5-16153-R ●
16	16	105	113	170	16 x 55	22310-5-16173-R ●
16	16	105	110	170	20 x 55	22310-5-16170-R ●
16	16	105	123	180 ¹⁾	16 x 55	22310-5-16183-R ●
16	16	105	134	210 ¹⁾	25 ²⁾ x 65	22310-5-16216-R ●
18	16	105	110	170	20 ²⁾ x 55	22310-5-18170-R ●

¹⁾ Shortening of total length L₁ possible by shortening the shank. ²⁾ Reducing of shank diameter and providing clamping flat available at extra costs on request. Further diameters and lengths optional on request.

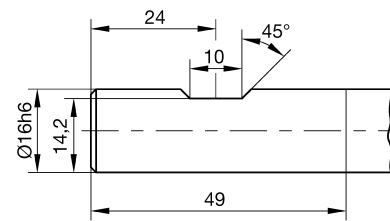
Technical details:

Sturdy tool body with two flutes and one interchangeable T.C. tip each, form A and B, with chip-breaking grooves. **Tool body of high-density metal**, for reduced risk of breakage and vibration-free running. With brazed T.C. tip for plunge cutting. Right-hand rotation. Flute length L₃= 105 mm also good for deeper lock case pockets (ST). **Application:** Designed to machine lock case and face plate pockets with step-by-step adjustment. Interchangeable T.C. tips ensure constant cutting circle. **Recommended operating data:** Feed rate vf = 12 m/min, R.P.M. = 12-18000. Stroke: solid wood 8-10 mm, chipboard 15 mm

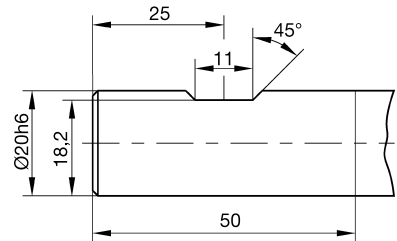
For use with Weldon tool-holders, please state type of shank or enclose a detailed sketch or sample.

Spare parts / Accessories	Part-No.	PU
Interch. T.C. tip 16 x 7 x 1,5 mm, Form A (1 groove)	72125-6-01600-A	10
Interch. T.C. tip 16 x 7 x 1,5 mm, Form B (2 grooves)	72125-6-01600-B	10
Torx clamping screw	39081-0-03040-R	10
Torx key	T 9, with handle	1

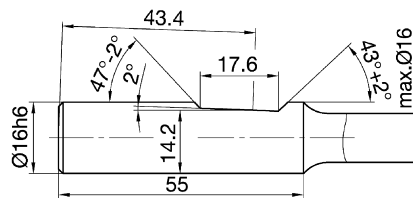
① DIN 6535-HB 16 (DIN 1835-B16) e.g. MAKA



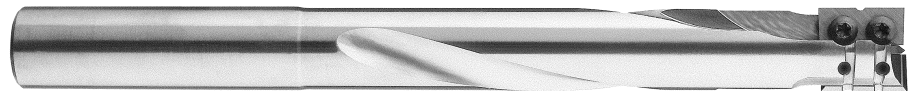
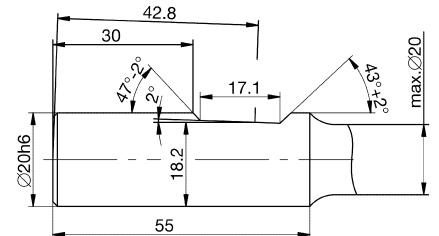
② DIN 6535-HB 20 (DIN 1835-B20)



③ For WEEKE / HOMAG

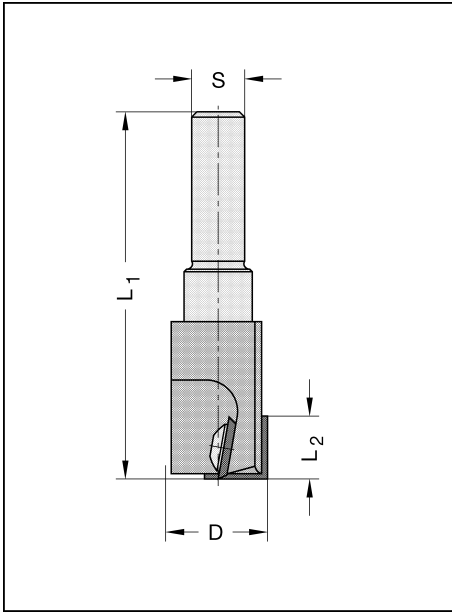


④ For WEEKE / HOMAG



Grooving/Face plate Cutter with reversible T.C. tips Z1+1

22320 interchangeable shank design



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
16	12	70	10 x 30	22325-5-16000-R ●
18	12	70	10 x 30	22325-5-18000-R ●
20	12	70	10 x 30	22325-5-20000-R ●
24	12	70	10 x 30	22325-5-24000-R ●
16	12	70	12 x 30	22326-5-16000-R ●
18	12	70	12 x 30	22326-5-18000-R ●
20	12	70	12 x 30	22326-5-20000-R ●
24	12	70	12 x 30	22326-5-24000-R ●

Technical details

One straight edge, cutting on periphery, 4-sided, and one reversible T.C. centre tip for plunge cutting with shear angle. Right-hand rotation. For manual and mechanical feed.

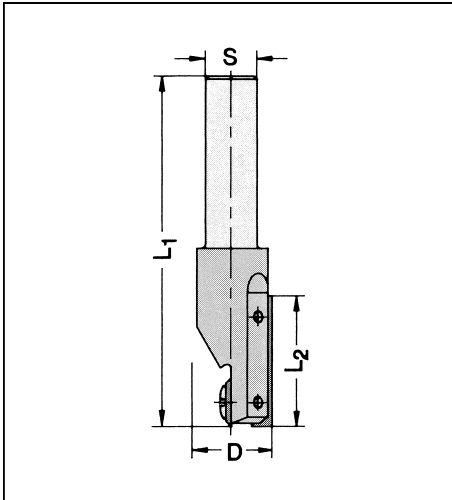
Application

For grooving and rebating on stationary and portable routers. Especially to be used in door production, e.g. for routing **face plate pockets, hinge grooves, fixing straps for floor sealings.**

Spare parts / Accessories	Part-No.	PU
Reversible T.C. tip	7,5 x 12 x 1,5 mm, for D= 16/18 mm	72010-6-00751-0 10
Reversible T.C. tip	9 x 12 x 1,5 mm, for D= 20 mm	72010-6-00900-0 10
Reversible T.C. tip	12 x 12 x 1,5 mm, 4-sided, f. D= 24 mm periphery and plunge tip	72014-6-01201-0 10
Torx clamping screw	M 3,5 x 4 extra-large head, T15, f. D= 16/18 mm, periphery tip	39076-0-03500-R 10
Torx clamping screw	M 4 x 4 extra-large head, T15, f. D= 20 mm, periphery tip	39076-0-04040-R 10
Torx clamping screw	M 4 x 5,9, extra large head, T15, f. D= 24 mm, periphery and plunge tip	39076-0-04000-R 10
Torx clamping screw	M 4 x 5, T15, for D= 16/18/20 mm plunge tip	39081-0-04050-R 10
Torx key	T15, with flag	39077-0-04015-1 5

Grooving/Face plate Cutter with reversible T.C. tips Z1+1

22360



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
16	30	81	12 x 40	22366-5-16030-L ●
16	30	81	12 x 40	22366-5-16030-R ●
18	30	81	12 x 40	22366-5-18030-R ●
20	30	81	12 x 40	22366-5-20030-R ●
16	30	91	16 x 45 m. E. M 6	22360-5-16303-R ●

m. E. = with adjusting screw

Technical details

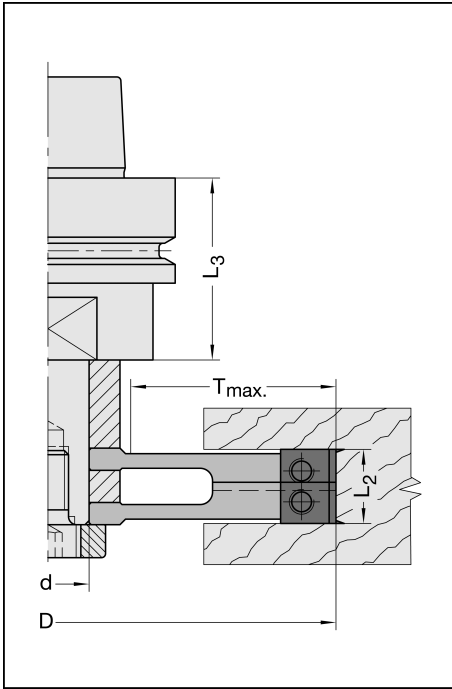
One straight edge, cutting on periphery and one reversible T.C. centre tip for plunge cutting with shear angle. For manual and mechanical feed.

Application

For grooving and rebating on stationary and portable routers. Especially to be used in door production, e.g. for routing **face plate pockets, hinge grooves, fixing straps for floor sealings**. For spare parts see page 1.7.

Adjustable Grooving Cutter w. rev. T.C. tips Z4-V4

60200 for floor sealings



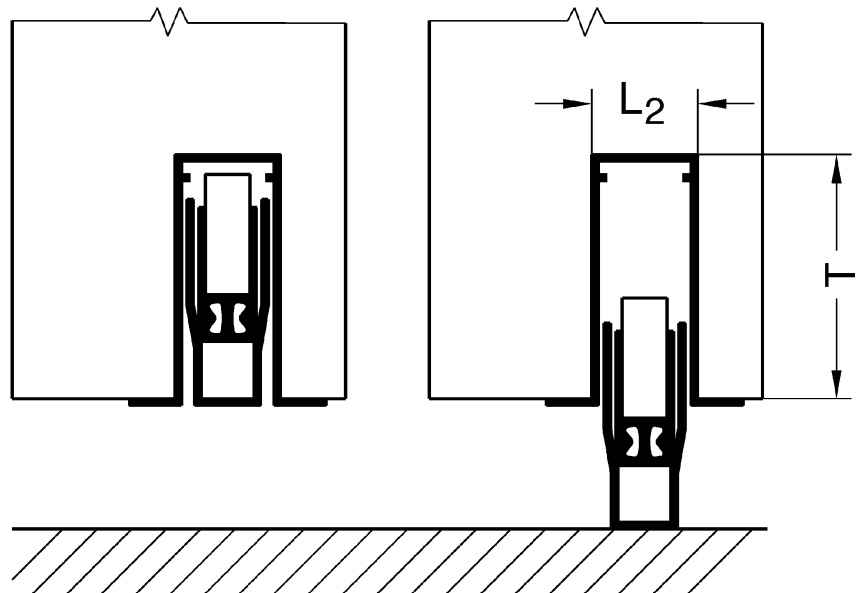
D mm	L ₂ mm	T _{max} mm	L ₃ mm	Shank mm	Part-No.
140	11-21	45	45	SK 30	60200-5-00002-R ●
140	11-21	45	45	SK 30 serrated collar	60200-5-00083-R ●
140	11-21	45	45	SK 40	60200-5-00003-R ●
140	11-21	45	-	25 x 55 m. E.	60200-5-00006-R ●

Technical details/Application

Two-piece steel tool body, adjustable by spacers. Each cutter unit with two periphery tips and two spurs. Feather key provides positive drive. Mounted on arbor. For mechanical feed. Either for right-hand or left-hand rotation. For cutting grooves for automatic floor seals in doors on CNC machines. **R.P.M. max. = 9 000**

Arbors d = 20 x 40 mm see page 6.22 - 6.24.

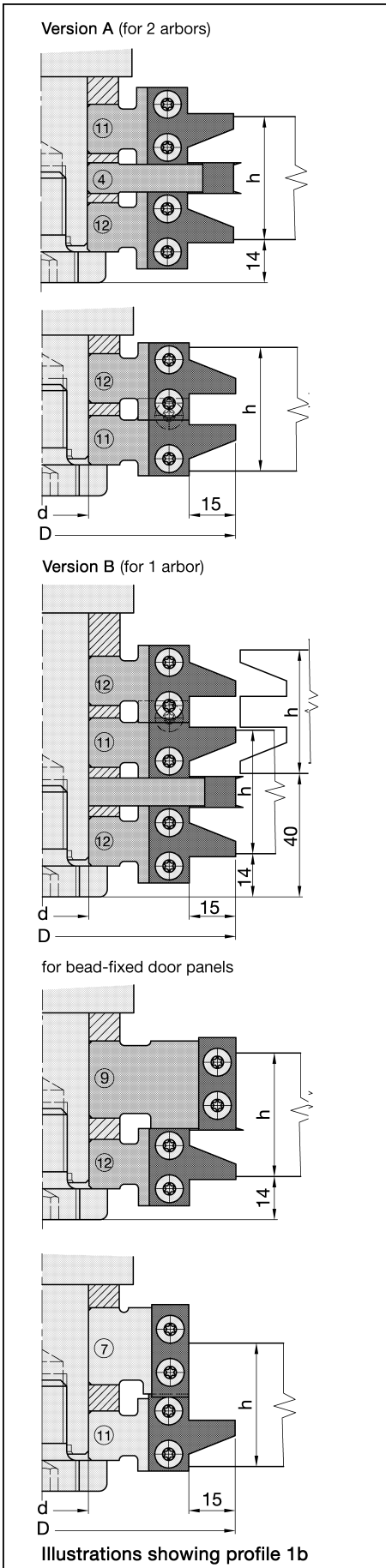
Spare parts / Accessories	Part-No.	PU	
Adj. grooving cutter	60200-5-14001-R	1	
Reversible T.C. tip	72050-6-25000-0	10	
Reversible spur	72020-6-01414-1	10	
Clamping wedge	39100-0-01050-0	2	
Allen screw	39266-0-06012-R	10	
Torx countersunk screw	M 5 x 7, for spur	39085-0-05007-R	10
Torx key	T15, with handle	39077-0-04015-2	1



Single cutters (with knives)

Description	Dimensions mm	Profile No.	Part-No.
Jointing cutter No. 7	94,8 x 30 x 30, Z2		64433-5-09401-R ●

Profiles 1b - 5b in full size (1 : 1) on page 7.17.

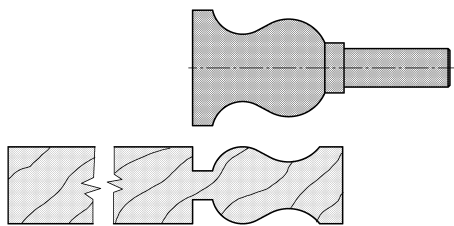
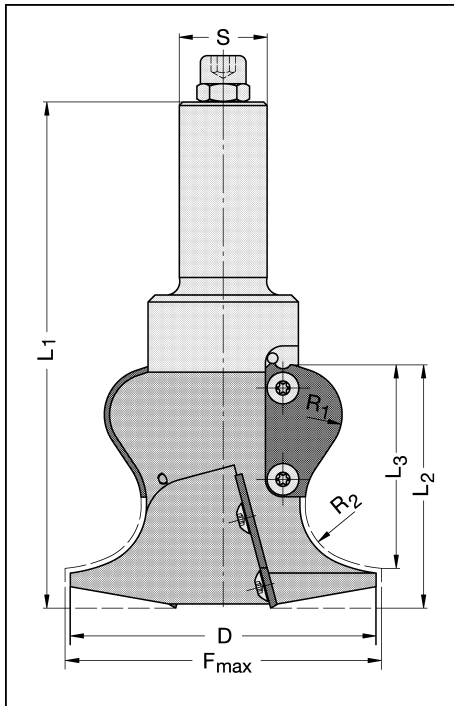


PU = packing unit

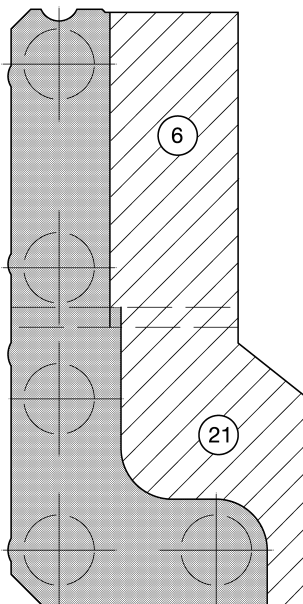
● popular size, ex stock
○ while stocks last

Handrail Cutter with interchangeable T.C. knives Z2+2

22565 shank 20 x 55 m. E. M 8



 Area available for profiling (1:1)



F _{max} mm	D mm	L ₂ mm	L ₃ mm	L ₁ mm	Profile	Part-No.
Profiled body, with profiled T.C. knives						
90	87	76	62	145	1	22565-5-90105-R ●
90	87	76	59	145	2	22565-5-90205-R ●
90	87	76	63	145	3	22565-5-90305-R ●

Quantity discounts, (for special profiles only): ordering same profile: 5-9 pcs. = 12%, up from 10 pcs. = 25%. **Template costs**: up to 9 pcs. only. Repeat orders of same profile: no template costs.

Technical details

Tool body with 2+2 staggered profiled interchangeable T.C. knives, with shear angle. Cutting on bottom and periphery. Right-hand rotation. For mechanical feed. **The profile of the tool body will be adapted in each case to the appropriate profile of knife.** For special profiles the knives have to be ordered in addition.

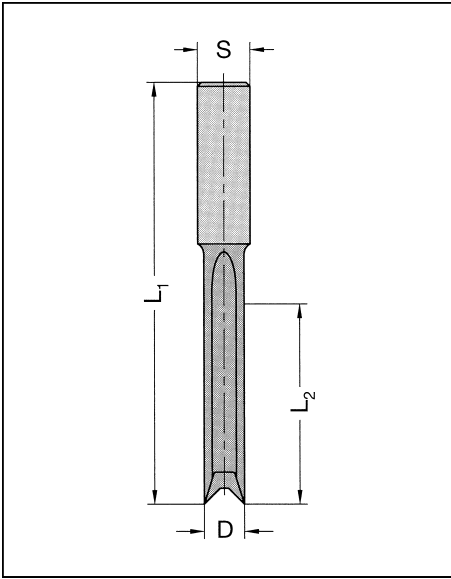
Spare parts / Accessories		Part-No.	PU
Torx clamping screw	M 4 x 5,9, T15	39076-0-04000-R	10
Torx key	T15, with handle	39077-0-04015-2	1

Interchangeable T.C. knives

Dimensions B x H x S mm	Profile	Part-No.
40 x 25 x 2	1 top	72565-6-40001-1 ●
40 x 50 x 2	1 bottom	72565-6-40001-2 ●
40 x 25 x 2	2 top	72565-6-40002-1 ●
40 x 50 x 2	2 bottom	72565-6-40002-2 ●
40 x 25 x 2	3 top	72565-6-40003-1 ●
40 x 50 x 2	3 bottom	72565-6-40003-2 ●
Special profiles		
40 x 30 x 2	unprofiled	72530-6-40300-R ●
40 x 30 x 2	profiled	72565-6-40301-1 ●
40 x 50 x 2	unprofiled	72530-6-40500-R ●
40 x 50 x 2	profiled	72565-6-40501-2 ●

Reciprocating Slot Mortise Bit Z2

30020-5 T.C.T.



D mm	L ₂ mm	L ₁ mm	Shank mm	Part-No.
10	50	105	13 x 40	30020-5-10000-R ●

Technical details

Two cutting edges with two flutes, stepped parallel shank. For right-hand and left-hand rotation.

Application

For oscillating cutting of mortises and slots. HS steel for soft and hardwood. T.C.-tipped for hard and exotic wood.