

Grooving router cutter in turnblade design



Application:

Router cutter for sizing and grooving to finish quality.

Machine:

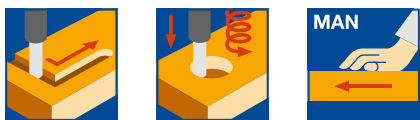
Portable routers, limited suitable: stationary routers with/without CNC control, machining centres.

Workpiece material:

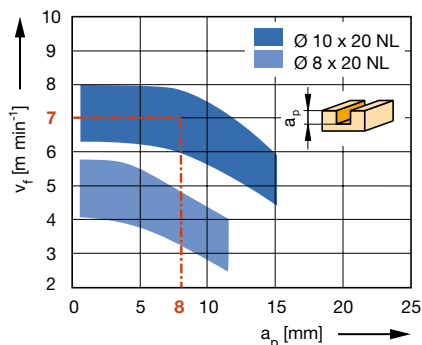
Softwood, chipboard and fibre materials (MDF, HDF etc.), uncoated, plastic coated, veneered etc.

Technical information:

Tungsten carbide turnblade knife clamped by wedge. Design without plunging tip only suitable for ramp plunging. Design with plunging tip limited suitable for axial plunging.



Feed speed v_f depending on cutting depth a_p

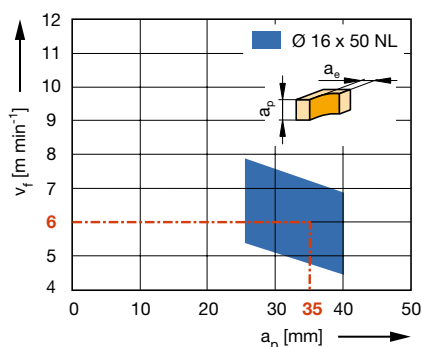


Workpiece material: Plastic coated chipboard

Operation: Grooving, sizing

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f : MDF = 0.8



HW, Z 1, without plunging tip

WL 100 1

D	GL	NL	S	DRI	ID
mm	mm	mm	mm		
8	65	20	10x40	RH	041624 ●
9	65	20	10x40	RH	041631 ●
10	65	20	10x40	RH	041638 ●
10	70	25	10x40	RH	041643 ●
11	75	30	10x40	RH	041655 ●
12	76	30	10x40	RH	041667 ●
14	86	40	12x40	RH	041679 ●
16	94	50	12x40	RH	041685 ●
16	109	50	16x50	RH	041714 ●

RPM: D 8 - 12 mm: $n = 18000 - 24000 \text{ min}^{-1}$

D 14 - 20 mm: $n = 16000 - 24000 \text{ min}^{-1}$

Spare knives:

BEZ	ABM	for D	NL	QAL	VE	ID
	mm	mm	mm		PCS	
Turnblade knife	20x4.1x1.1	8 - 9	20	HW-05	10	005186 ●
Turnblade knife	20x5.5x1.1	10 - 12	20	HW-05	10	005187 ●
Turnblade knife	25x5.5x1.1	10	25	HW-05	10	005188 ●
Turnblade knife	30x5.5x1.1	11 - 24	30	HW-05	10	005189 ●
Turnblade knife	40x5.5x1.1	14	40	HW-05	10	005190 ●
Turnblade knife	50x5.5x1.1	14 - 24	50	HW-05	10	005191 ●

Spare parts:

BEZ	ABM	for D	NL	ID
	mm	mm	mm	
Clamping wedge	17.5x5.15x2.8	8 - 9	20	009258 ●
Clamping wedge	17.5x6.45x4	10 - 11	20	009259 ●
Clamping wedge	22.5x6.54x4	10	25	009260 ●
Clamping wedge	27.5x6.45x4	11	30	009261 ●
Clamping wedge	27.5x7.35x3.7	12 - 14	30	009263 ●
Clamping wedge	37.5x7.35x3.7	14	40	009264 ●
Clamping wedge	47.5x10.28x4.2	16 - 24	50	009266 ●
Countersink screw, Torx® 8	M2.5x5.7	8 - 11		006231 ●
Countersink screw, Torx® 8	M3x7.6	12 - 14		006233 ●
Countersink screw, Torx® 15	M4x9.5	16		007847 ●
Countersink screw, Torx® 15	M4x11.5	16 - 20		006234 ●

Workpiece material: Plastic coated chipboard

Operation: Jointing (max. $a_e = 3 \text{ mm}$)

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f : MDF = 0.8

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Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Казахстан (772)734-952-31

Сургут (3462)77-98-35
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Ярославль (4852)69-52-93

5. Routing

5.1 Sizing and grooving

5.1.1 Shank cutters HW and HW turnblade



Grooving router cutter in turnblade design

Application:

Router cutter for sizing and grooving to finish quality.

Machine:

Portable routers, stationary routers with/without CNC control, machining centres.

Workpiece material:

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

Technical information:

Tungsten carbide turnblade knife clamped by wedge. Design without plunging tip only suitable for ramp plunging. Design with plunging tip limited suitable for axial plunging.



HW, Z 1, with plunging tip

WL 100 1

D	GL	NL	S	DRI	ID
mm	mm	mm	mm		
14	107	45	12x40	RH	041722 ●

RPM: $n = 16000 - 24000 \text{ min}^{-1}$

Spare knives:

BEZ	ABM	NL	QAL	VE	ID
	mm	mm		PCS	
Turnblade knife	50x5.5x1.1	50	HW-05	10	005191 ●

Spare parts:

BEZ	ABM	ID
	mm	
Clamping wedge with plunging tip	45x3.7x7.35	009749 ●
Countersink screw, Torx® 8	M3x7.6	006233 ●

HW, Z 1, without plunging tip, inch types

WL 100 1

D	NL	GL	S	DRI	ID
in	in	in	in		
1/2"	1 3/16"	2 3/4"	1/2" x 1 3/8"	RH	041060 ●
3/4"	2"	3 7/8"	3/4" x 1"	RH	041067 ●

RPM: D 1/2": $n = 18000 - 24000 \text{ min}^{-1}$

D 3/4": $n = 16000 - 24000 \text{ min}^{-1}$

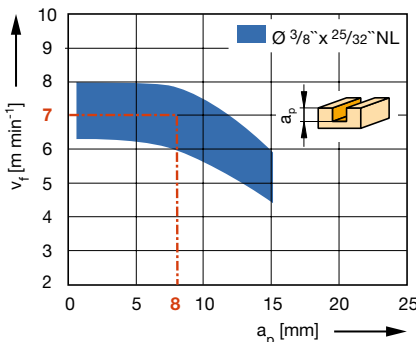
Spare knives:

BEZ	ABM	for D	NL	QAL	VE	ID
	mm	in	in		PCS	
Turnblade knife	30x5.5x1.1	1/2"	1 3/16"	HW-05	10	005189 ●
Turnblade knife	50x5.5x1.1	5/8" - 3/4"	2"	HW-05	10	005191 ●

Spare parts:

BEZ	ABM	for D	NL	ID
	mm	in	in	
Clamping wedge	27.5x7.35x3.7	1/2" - 35/64"	1 3/16"	009263 ●
Clamping wedge	47.5x10.28x4.2	5/8" - 3/4"	2"	009266 ●
Countersink screw, Torx® 8	M3x7.6	1/2"		006233 ●
Countersink screw, Torx® 15	M4x11.5	5/8" - 3/4"		006234 ●

Feed speed v_f depending on cutting depth a_p

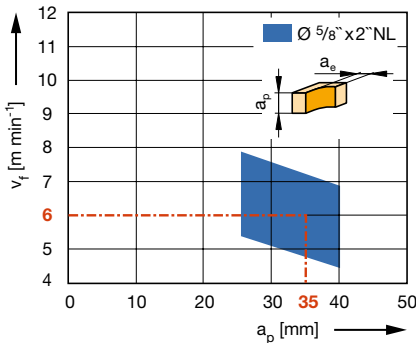


Workpiece material: Plastic coated chipboard

Operation: Grooving, sizing

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f : MDF = 0.8



Workpiece material: Plastic coated chipboard

Operation: Jointing

(maximum chip removal $a_e = 3 \text{ mm}$)

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f : MDF = 0.8

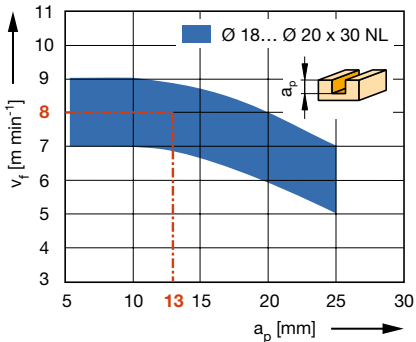
5. Routing

5.1 Sizing and grooving

5.1.1 Shank cutters HW and HW turnblade



Feed speed v_f depending on cutting depth a_p

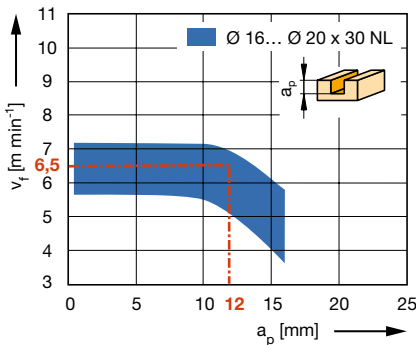


Workpiece material: Plastic coated chipboard

Operation: Grooving, sizing

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f : MDF = 0.8



Router cutter in turnblade design

Application:

Router cutter for sizing and grooving to finish quality. For grooving with constant tool diameter.

Machine:

Stationary routers with/without CNC control, machining centres, milling machines with spindles to mount shank tools.

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (MDF, HDF etc.), uncoated, plastic coated, veneered etc., laminated veneer lumber (plywood, multiplex plywood etc.), duromers, plastomers, solid surface material (Corian, Varicor etc.), decorative laminates (HPL-compact laminate, Trespa etc.).

Technical information:

Straight cut. Knife tip designed for seamless cut. Teflon coated tool body for reduced resin and glue build up. With tungsten carbide plunging tip. Suitable for machining the narrow edge of painted or foil coated MDF.

HW, Z 1, NL 30 mm

WL 101 1

D	GL	NL	S	ID	ID
mm	mm	mm	mm	LH	RH
16	85	30	12x40		040867 ●
16	95	30	16x50	040877 ●	040878 ●
16	95	30	20x50		040879 ●
16	105	30	25x60		040872 ●
18	85	30	12x40		040869 ●
20	85	30	12x40		040871 ●
20	95	30	20x50		040882 ●

RPM: $n = 16000 - 20000 \text{ min}^{-1}$

Spare knives:

BEZ	Knife	ABM	for D	QAL	VE	ID
		mm	mm		PCS	
Turnblade knife	Plunging tip	7.6x12x1.5	16 - 18	HW-05F	10	005080 ●
Turnblade knife	Plunging tip	9x12x1.5	20 - 24	HW-05F	10	005158 ●
Turnblade knife	Peripheral tip	30x12x1.5		HW-05F	10	005161 ●

Spare parts:

BEZ	Knife	ABM	for D	ID
		mm	mm	
Screw	Plunging tip	M3.5x4 (head D7)	16 - 20	006068 ●
Screw	Peripheral tip	M3.5x4 (head D9)	16 - 20	006226 ●
Torx® key		Torx® 15		005457 ●

Workpiece material: Hardwood, along grain

Operation: Grooving, sizing

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f :

Machining across grain = 0.8

5. Routing

5.1 Sizing and grooving

5.1.1 Shank cutters HW and HW turnblade



Router cutter in turnblade design

Application:

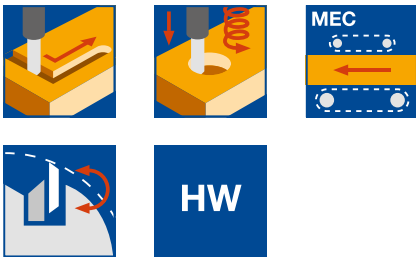
Router cutter for sizing and grooving to finish quality. For grooving with constant tool diameter.

Machine:

Stationary routers with/without CNC control, machining centres, milling machines with spindles to mount shank tools or portable routers.

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (MDF, HDF etc.), uncoated, plastic coated, veneered etc., laminated veneer lumber (plywood, multiplex plywood etc.), duromers, plastomers, solid surface material (Corian, Varicor etc.), decorative laminates (HPL-compact laminate, Trespa etc.).



Technical information:

Straight cut. Knife tip designed for seamless cut. Teflon coated tool body for reduced resin and glue build up. With tungsten carbide turnblade knife plunging edge.

HW, Z 1, inch types

WL 101 1

D	NL	GL	S	DRI	ID
in	in	in	in		
5/8"	1 11/64"	3 5/8"	1/2" x 1 3/8"	RH	041084 ●

RPM: $n = 16000 - 20000 \text{ min}^{-1}$

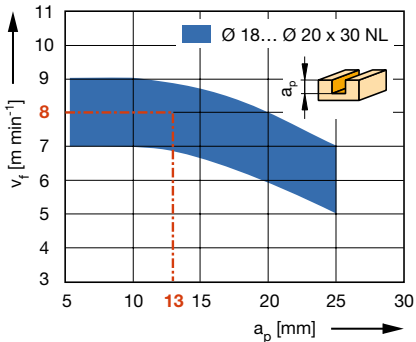
Spare knives:

BEZ	Knife	ABM	QAL	VE	ID
		mm		PCS	
Turnblade knife	Plunging tip	7.6x12x1.5	HW-05F	10	005080 ●
Turnblade knife	Peripheral tip	30x12x1.5	HW-05F	10	005161 ●

Spare parts:

BEZ	Knife	ABM	ID
		mm	
Screw	Plunging tip	M3.5x4 (head D7)	006068 ●
Screw	Peripheral tip	M3.5x4 (head D9)	006226 ●
Torx® key		Torx® 15	005457 ●

Feed speed v_f depending on cutting depth a_p

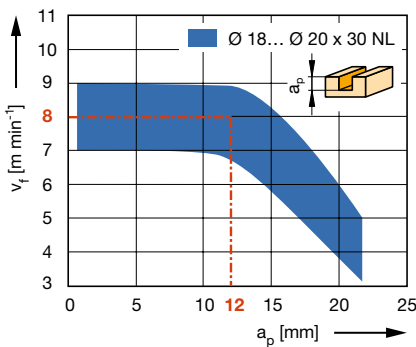


Workpiece material: Plastic coated chipboard

Operation: Grooving, sizing

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f : MDF = 0.8



Workpiece material: Softwood, along grain

Operation: Grooving, sizing

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f :
Machining across grain = 0.8

5. Routing

5.1 Sizing and grooving

5.1.1 Shank cutters HW and HW turnblade



Router cutter in turnblade design

Application:

Router cutter for sizing and grooving. For grooving with constant tool diameter.

Machine:

Stationary routers with/without CNC control, machining centres, milling machines with spindles to mount shank tools.

Workpiece material:

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

Technical information:

Straight cut. Teflon coated tool body for reduced resin and glue build up. Limited suitable for finish cut. Cutting edge overlap visible on workpiece. With tungsten carbide turnblade knife plunging tip.

HW, Z 1+1, with staggered cutting edges

WL 101 2

D	GL	NL	S	DRI	ID
mm	mm	mm	mm		
18	125	50	25x60	RH	040925 ●
20	133	58	25x60	RH	040928 ●

RPM: $n = 16000 - 20000 \text{ min}^{-1}$

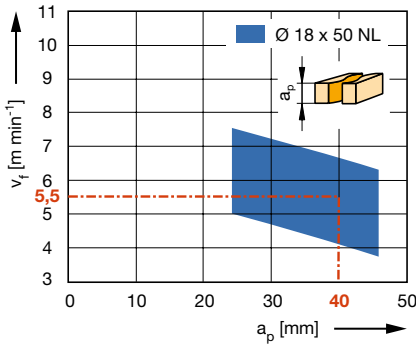
Spare knives:

BEZ	Knife	ABM mm	for D mm	QAL	VE PCS	ID
Turnblade knife	Plunging tip	7.6x12x1.5	16 - 18	HW-05F	10	005080 ●
Turnblade knife	Plunging tip	9x12x1.5	20 - 24	HW-05F	10	005158 ●
Turnblade knife	Peripheral tip	30x12x1.5		HW-05F	10	005161 ●

Spare parts:

BEZ	Knife	ABM mm	for D mm	ID
Oval head screw Torx® 15	Plunging tip	M4x5	18 - 24	007037 ●
Oval head screw Torx® 15	Peripheral tip	M4x5	18 - 24	007038 ●
Torx® key		Torx® 15		005457 ●

Feed speed v_f depending on cutting depth a_p



Workpiece material: Plastic coated chipboard

Operation: Sizing

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f : MDF = 0.8

5. Routing

5.1 Sizing and grooving

5.1.1 Shank cutters HW and HW turnblade



Router cutter in turnblade design

Application:

Router cutter for sizing and grooving to finish quality. For grooving with constant tool diameter.

Machine:

Stationary routers with/without CNC control, machining centres, milling machines with spindles to mount shank tools.

Workpiece material:

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

Technical information:

Straight cut. Teflon coated tool body for reduced resin and glue build up. Limited suitable for finish cut. Cutting edge overlap visible on workpiece. With tungsten carbide turnblade knife plunging tip.



HW, Z 1+1, with 50 mm/30 mm turnblade knives

WL 101 1

D mm	GL mm	NL mm	S mm	ID LH	ID RH
18	115	50	16x50		040847 ●
18	115	50	20x50		040848 ●
18	125	50	25x60	040849 ●	040850 ●

RPM: $n = 16000 - 20000 \text{ min}^{-1}$

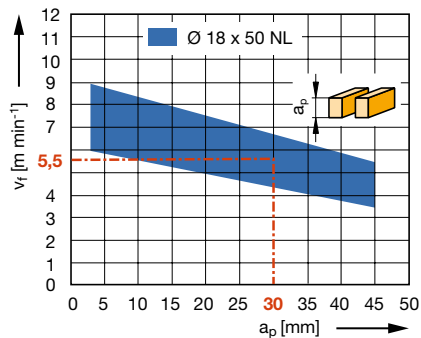
Spare knives:

BEZ	Knife	ABM mm	QAL	VE PCS	ID
Turnblade knife	Plunging tip	7.6x12x1.5	HW-05F	10	005080 ●
Turnblade knife	Peripheral tip	30x12x1.5	HW-05F	10	005161 ●
Turnblade knife	Peripheral tip	50x12x1.7	HW-05F	10	007668 ●

Spare parts:

BEZ	Knife	ABM mm	ID
Oval head screw Torx® 15	Plunging tip	M4x5	007037 ●
Oval head screw Torx® 15	Peripheral tip	M4x5	007038 ●
Torx® key		Torx® 15	005457 ●

Feed speed v_f depending on cutting depth a_p



Workpiece material: Plastic coated chipboard

Operation: Sizing

Speed: $n = 18000 \text{ min}^{-1}$

Correction factor for v_f : MDF = 0.8

5. Routing

5.1 Sizing and grooving

5.1.1 Shank cutters HW and HW turnblade



Router cutter in turnblade design

Application:

Router cutter for sizing, grooving and finish cutting to finish quality. Z 2 for increased feed rates.

Machine:

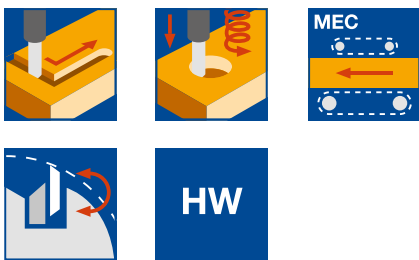
Stationary routers with/without CNC control, machining centres, milling machines with spindles to mount shank tools.

Workpiece material:

Softwood and hardwood, chipboard and fibre materials (MDF, HDF etc.), uncoated, plastic coated, veneered etc., laminated veneer lumber (plywood, multiplex plywood etc.).

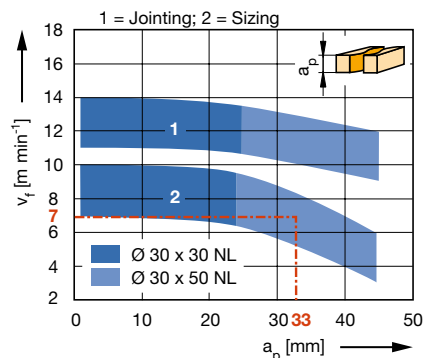
Technical information:

Straight cut. Knife tip designed for seamless cut. Design with plunging tip limited suitable for axial plunging. Suitable for machining the narrow edge of painted or foil coated MDF.



Feed speed v_f depending on grooving depth a_p

1 = Jointing cut $a_e = 0.5 - 2$ mm
2 = Sizing cut



Workpiece material: Plastic coated chipboard

Operation: Jointing, sizing

Speed: $n = 18000$ min⁻¹

Correction factor for v_f :

Machining across grain = 0.7; MDF = 0.8

HW, Z 2

WL 101 2

D	GL	NL	S	ID	ID
mm	mm	mm	mm	LH	RH
25	125	50	25x60	040857 ●	040858 ●
30	105	30	25x60		040854 ●
30	125	50	25x60		040853 ●

RPM: $n = 14000 - 20000$ min⁻¹

Spare knives:

BEZ	Knife	ABM	for D	QAL	VE	ID
		mm	mm		PCS	
Turnblade knife	Plunging tip	7.6x12x1.5	25	HW-05F	10	005080 ●
Turnblade knife	Plunging tip	12x12x1.5	30	HW-05F	10	005081 ●
Turnblade knife	Peripheral tip	30x12x1.5	30	HW-05F	10	005161 ●
Turnblade knife	Peripheral tip	50x12x1.5	25/30	HW-05F	10	006506 ●

Spare parts:

BEZ	Knife	ABM	for D	ID
		mm	mm	
Oval head screw Torx® 15	Plunging tip	M4x5	25/30	007037 ●
	Peripheral tip		25	
Oval head screw Torx® 15	Peripheral tip	M4x5	30	007038 ●
Torx® key		Torx® 15		005457 ●

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