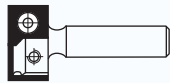


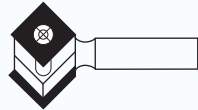
Insert router bits and DP router bits



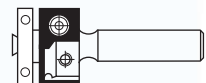
9



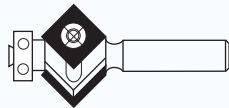
HW INSERT FLUSH TRIM BITS Z=2
Page 9.05



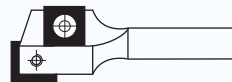
HW INSERT ANGLE BITS Z=2
Page 9.05



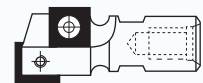
HW INSERT FLUSH TRIM BITS
WITH BALL BEARING GUIDE Z=2
Page 9.05



HW INSERT FLUSH TRIM BITS
WITH BALL BEARING GUIDE Z=2
Page 9.05



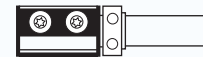
HW INSERT FLUSH BITS Z=2+1
Page 9.05



HW INSERT FLUSH BITS Z=2+1
Page 9.05



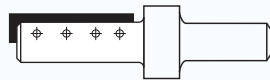
HW INSERT FLUSH TRIMMING BITS Z=2
Page 9.06



HW FLUSH INSERT TRIMMING BITS Z=2
Page 9.06



HW INSERT PLUNGE
ROUTER BITS Z=1 "VERSOFIX"
Page 9.07



HW INSERT PLUNGE ROUTER BITS Z=1
"VERSOFIX"
Page 9.07



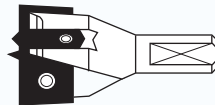
HW INSERT PLUNGE ROUTER BITS Z=1
"VERSOFIX"
Page 9.07



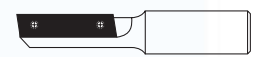
HW INSERT FLUSH TRIM
BITS Z=2 "VERSOFIX"
Page 9.07



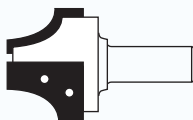
HW INSERT FLUSH TRIM
BITS Z=2 "VERSOFIX"
Page 9.07



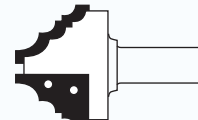
HW INSERT BORING BITS Z=2+2
Page 9.08



HW INSERT PLUNGE
ROUTER CUTTERS Z=1
Page 9.08



HW INSERT PROFILE CUTTERS, GROUP 1
Page 9.09



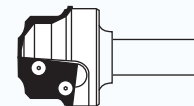
HW INSERT PROFILE CUTTERS, GROUP 2
Page 9.09



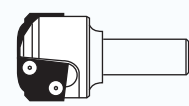
HW INSERT COMPRESSION
ROUTER CUTTERS
Page 9.09



HW INSERT COMPRESSION
ROUTER CUTTER
Page 9.09

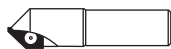


HW INSERT ROUTER BITS FOR
CABINET DOORS Z=2
Page 9.10



HW INSERT ROUTER BITS FOR
CABINET DOORS Z=2
Page 9.10

Klein®



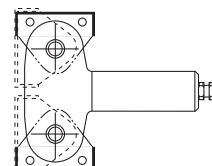
HW INSERT ROUTER BITS FOR
DECORATION AND ENGRAVING Z=1
Page 9.11



COMPLETE SET FOR DECORATING
AND ENGRAVING
Page 9.11



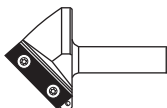
COMPLETE CUTTERS SET FOR
CABINET DOORS
Page 9.12



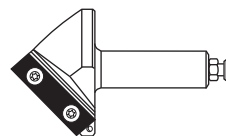
HW INSERT VARI-ANGLE ROUTER
CUTTERS 1° Z=2
Page 9.13



HW INSERT ROUTER BITS FOR
ENGRAVINGS Z=1
Page 9.13



HW INSERT ROUTER BITS FOR
ENGRAVINGS Z=2
Page 9.13



HW INSERT V-GROOVE ROUTER BITS Z=1
Page 9.13



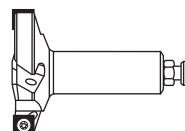
HW INSERT ROUTER BITS
FOR LOCKS Z=2
Page 9.14



HW INSERT ROUTER BITS FOR LOCKS
Z=2 HEAVY METAL TOOL BODY
Page 9.14



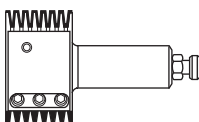
HW INSERT ROUTER BITS LOCKS Z=3
Page 9.14



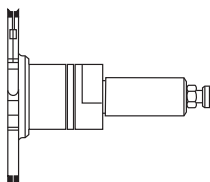
HW INSERT ROUTER BITS FOR PLANING
AND RABBETING Z=2+2
Page 9.14



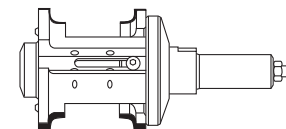
HW INSERT ROUTER CUTTERS,
ROUGHING Z=4
Page 9.15



HW INSERT FINGER JOINT
ROUTER CUTTERS Z=2
Page 9.15



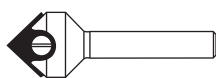
HW INSERT ADJUSTABLE ROUTER
CUTTERS FOR GROOVING
Page 9.15



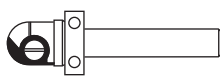
HW INSERT ROUTER BITS FOR ROUNDING
AND CHAMFERING Z=2
Page 9.15



HW INSERT FLUSH TRIMMING
BITS Z=1
Page 9.16



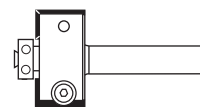
HW INSERT V-GROOVING BITS Z=1
Page 9.16



HW INSERT CORE BOX BITS
WITH UPPER BALL BEARING Z=1
Page 9.16



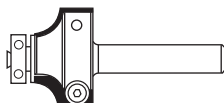
HW INSERT FLUSH TRIMMING BITS
WITH BALL BEARING
Page 9.16



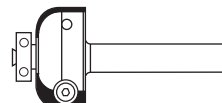
HW INSERT FLUSH TRIMMING BITS
WITH BALL BEARING Z=2
Page 9.16



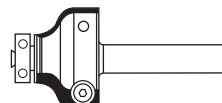
HW INSERT FLUSH TRIMMING BITS
WITH BALL BEARING Z=2
Page 9.17



HW INSERT CORNER ROUNDING BITS
WITH BALL BEARING Z=2
Page 9.17



HW INSERT COVER BITS WITH
BALL BEARING Z=2
Page 9.17



HW INSERT OGEE BITS WITH BALL
BEARING Z=2
Page 9.17



6 PIECE INSERT ROUTER BITS "SET"
Page 9.17



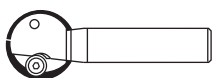
6 PIECE INSERT ROUTER BITS "SET"
Page 9.17



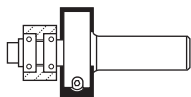
HW INSERT ROUTER BITS Z=2+1
Page 9.18



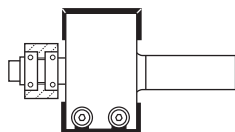
HW INSERT ROUTER BITS Z=2
Page 9.18



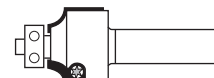
HW INSERT BALL SLOT ROUTER BITS Z=2
Page 9.18



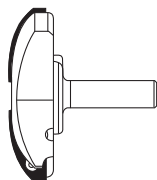
HW INSERT REBATE BITS Z=2
Page 9.18



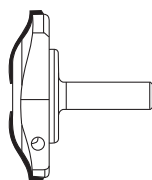
HW INSERT REBATE BITS Z=2
Page 9.19



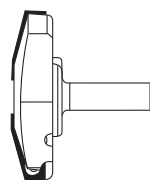
HW INSERT BEADING BITS Z=2
Page 9.19



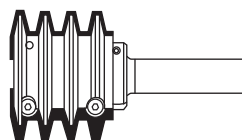
HW INSERT PROFILE RAISED PANEL
ROUTER CUTTERS Z=2
Page 9.19



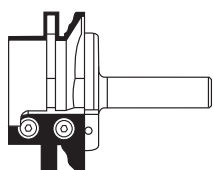
HW INSERT PROFILE RAISED PANEL
ROUTER CUTTERS Z=2
Page 9.19



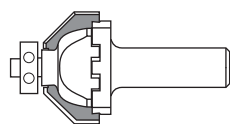
HW INSERT PROFILE RAISED PANEL
ROUTER CUTTERS Z=2
Page 9.20



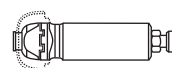
HW INSERT FINGER JOINT
ROUTER CUTTERS Z=2
Page 9.20



HW INSERT COUNTER-PROFILE
CUTTERS Z=2
Page 9.20



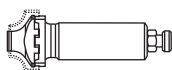
HW INTERCHANGEABLE INSERT
ROUTER BITS "NOVA SYSTEM" Z=2
Page 9.21 ÷ 9.23



HW INSERT ROUTER BITS
"NOVA SYSTEM" Z=2
Page 9.24



HW INSERT ROUTER BITS
"NOVA SYSTEM" Z=2
Page 9.24



HW INSERT ROUTER BITS
"NOVA SYSTEM" Z=2
Page 9.24



DP ROUTER BITS
Page 9.25



DP ROUTER BITS
Page 9.25



DP ROUTER BITS
Page 9.25



DP ROUTER BITS Z=1
Page 9.26



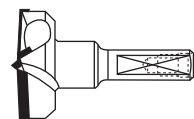
DP ROUTER BITS Z=1
Page 9.26



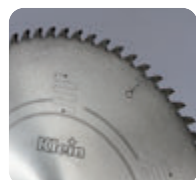
DP DOWEL DRILLS
Page 9.26



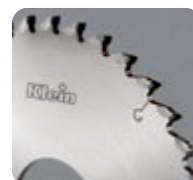
DP THROUGH-HOLE DRILL BITS
Page 9.26



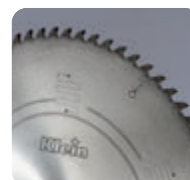
DP HINGE BORING BITS
Page 9.26



DP SAWBLADES
Page 9.27



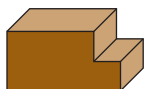
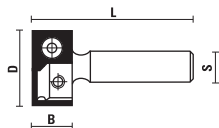
DP CONICAL SCORING SAWBLADES
Page 9.27



DP PANEL SIZING SAWBLADES
Page 9.28

HW INSERT FLUSH TRIM BITS Z=2

ART. W101 - W102

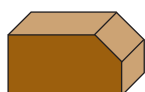
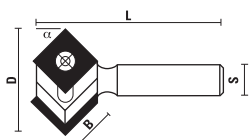


S Ø 6	S Ø 8	D	B	L
W101.190.R	W102.190.R	19	12	55



HW INSERT ANGLE BITS Z=2

ART. W103 - W104

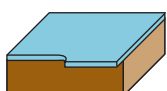
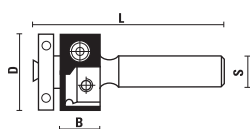


S Ø 6	S Ø 8	D	α	B	L
W103.240.R	W104.240.R	24	22°	12	55
W103.260.R	W104.260.R	26	30°	12	55
W103.290.R	W104.290.R	29	45°	12	55



HW INSERT FLUSH TRIM BITS WITH BALL BEARING GUIDE Z=2

ART. W105 - W106

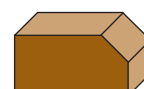
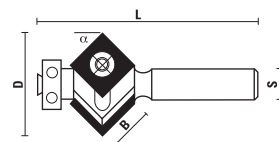


S Ø 6	S Ø 8	D	B	L
W105.190.R	W106.190.R	19	12	65



HW INSERT FLUSH TRIM BITS WITH BALL BEARING GUIDE Z=2

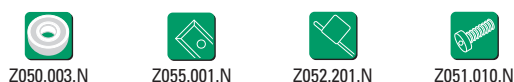
ART. W107 - W108



S Ø 6	S Ø 8	D	α	B	L
W107.220.R	W108.220.R	22	10°	12	55
W107.240.R	W108.240.R	24	22°	12	55
W107.260.R	W108.260.R	26	30°	12	55

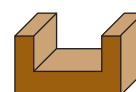
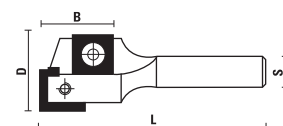


W107.290.R	W108.290.R	29	45°	12	55
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HW INSERT FLUSH BITS Z=2+1

ART. W109 - W110



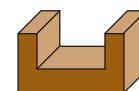
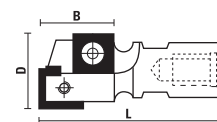
With T.C.T. plunging edge

S Ø 6	S Ø 8	D	B	L
W109.160.R		16	20	50
	W110.160.R	16	20	70
W109.180.R	W110.180.R	18	20	50
W109.200.R	W110.200.R	20	20	50
W109.220.R	W110.220.R	22	20	50



HW INSERT FLUSH BITS Z=2+1

ART. W111 - W112



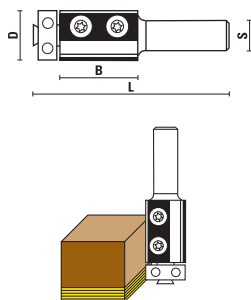
With T.C.T. plunging edge

S M12x1	S M10x1,5	D	B	L
W111.150.R	W112.150.R	15	20	65
W111.160.R	W112.160.R	16	20	65
W111.180.R	W112.180.R	18	20	65
W111.200.R	W112.200.R	20	20	65
W111.220.R	W112.220.R	22	20	65



HW INSERT FLUSH TRIMMING BITS Z=2

ART. W113 - W114



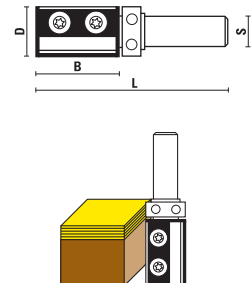
Lower ball bearing

Item	D	B	L	Z	S
W113.190.R	19	30	70	2	8
W114.190.R	19	30	80	2	12
W114.191.R	19	50	100	2	12

Z050.006.N	Z052.201.N	Z055.008.N (B=30)	Z055.010.N (B=50)	Z051.010.R

HW INSERT FLUSH TRIMMING BITS Z=2

ART. W115 - W116



Upper ball bearing

Item	D	B	L	Z	S
W115.190.R	19	30	70	2	8
W116.190.R	19	30	80	2	12
W116.191.R	19	50	100	2	12

Z050.012.N	Z052.201.N	Z055.008.N (B=30)	Z055.010.N (B=50)	Z051.010.R

VERSOFIX CUTTERS AND KNIVES

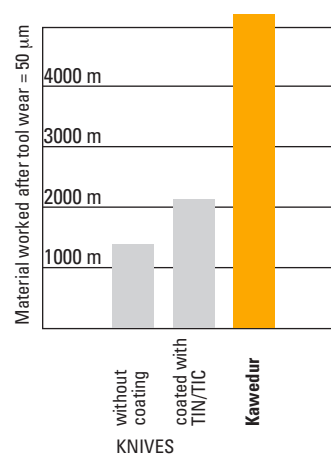
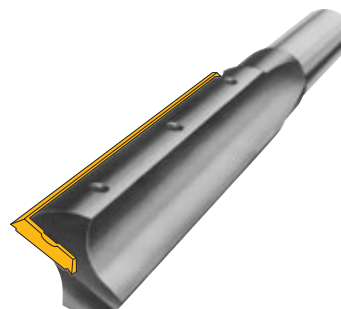
The best single flute replaceable tip straight cutters

The **VERSOFIX** tools and relating replaceable tips, due to their special design, give excellent result in high volume production and are suitable for use in all types of machines

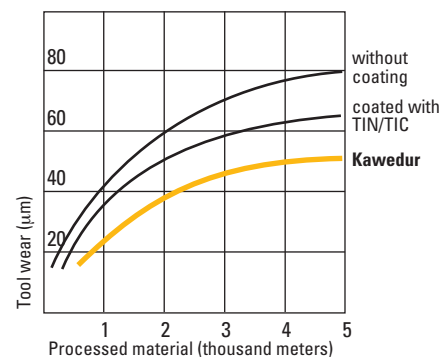
The insert knives are treated with a special coating ensuring the possibility to work also tough materials, i.e. laminated worktops or glass-reinforced plastic panels.

In the solid wood working there isn't any better solution when working with cutters with small shank diameter (Ø8, Ø10, Ø12).

The "**Kawedur**" coating ensures a better chip flow and makes the life of the knives minimum twice longer than any other type of coating (TIN/TIC).



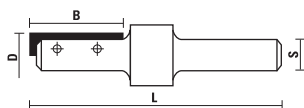
WORKING:
melamine coated chipboard



WORKING PARAMETERS:
RPM n=18.000
Cutting speed vs=14,5 m/sec
Feed speed vf=6 m/min

HW INSERT PLUNGE ROUTER BITS Z=1 "VERSOFIX"

ART. W120 - W121 - W122

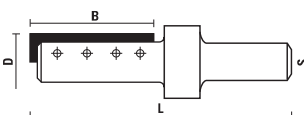


HW knives with "Kawedur" coating

S Ø 6	S Ø 6,35	S Ø 8	D	B	L
W120.080.R	W121.080.R	W122.080.R	8	20	63
W120.100.R	W121.100.R	W122.100.R	10	20	63
W120.120.R	W121.120.R	W122.120.R	12	20	63
W120.140.R	W121.140.R	W122.140.R	14	20	59
W120.150.R	W121.150.R	W122.150.R	15	20	59
W120.160.R	W121.160.R	W122.160.R	16	20	59
W120.180.R	W121.180.R	W122.180.R	18	20	59
W120.200.R	W121.200.R	W122.200.R	20	20	59
W120.220.R	W121.220.R	W122.220.R	22	20	59

HW INSERT PLUNGE ROUTER BITS Z=1 "VERSOFIX"

ART. W123 - W124 - W125



HW knives with "Kawedur" coating

S Ø 10x35	S Ø 12x35	S Ø 12,7x35	D	B	L
W123.080.R	W124.080.R	W125.080.R	8	20	68
W123.100.R	W124.100.R	W125.100.R	10	20	68
W123.120.R	W124.120.R	W125.120.R	12	20	68
		W125.127.R	12,7	30	74
W123.140.R	W124.140.R	W125.140.R	14	30	74
W123.141.R	W124.141.R	W125.141.R	14	50	94
W123.150.R	W124.150.R	W125.150.R	15	30	74
W123.160.R	W124.160.R	W125.160.R	16	30	74
W123.161.R	W124.161.R	W125.161.R	16	50	94
W123.180.R	W124.180.R	W125.180.R	18	30	74
W123.181.R	W124.181.R	W125.181.R	18	50	94
W123.200.R	W124.200.R	W125.200.R	20	30	74
W123.201.R	W124.201.R	W125.201.R	20	50	94
W123.220.R	W124.220.R	W125.220.R	22	30	74



Z052.101.N (For D=8÷12)



Z052.102.N (For D=14)



Z055.220.N (For D=8÷12)
Z055.221.N (For D=14÷22)
Z055.230.N (For D=12,2÷13,9)
Z055.231.N (For D=14÷22)
Z055.250.N (For D=14÷22)



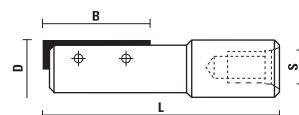
Z051.101.R (For D=8÷12,7)



Z051.102.R (For D=14÷22)

HW INSERT PLUNGE ROUTER BITS Z=1 "VERSOFIX"

ART. W126 - W127

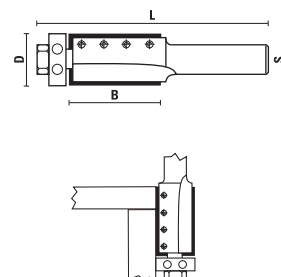


HW knives with "Kawedur" coating

M10x1,5	M12x1	D	B	L
W126.080.R	W127.080.R	8	20	58
W126.100.R	W127.100.R	10	20	58
W126.120.R	W127.120.R	12	20	58
W126.140.R	W127.140.R	14	30	65
W126.141.R	W127.141.R	14	50	85
W126.150.R	W127.150.R	15	30	65
W126.160.R	W127.160.R	16	30	65
W126.161.R	W127.161.R	16	50	85
W126.180.R	W127.180.R	18	30	65
W126.181.R	W127.181.R	18	50	85
W126.200.R	W127.200.R	20	30	65
W126.201.R	W127.201.R	20	50	85
W126.220.R	W127.220.R	22	30	65

HW INSERT FLUSH TRIM BITS Z=2 "VERSOFIX"

ART. W138



- HW knives with "Kawedur" coating
- For CORIAN®
- Ball bearing with Delrin® ring

S Ø 12	D	B	L
W138.190.R	19	30	82



Z050.111.N



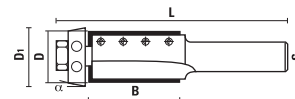
Z055.230.N



Z051.101.R

HW INSERT FLUSH TRIM BITS Z=2 "VERSOFIX"

ART. W138



- HW knives with "Kawedur" coating
- For CORIAN®
- 11° ball bearing with Delrin® ring

S Ø 12	D	D1	B	L	α
W138.220.R	19	22	30	82	11°



Z050.110.N



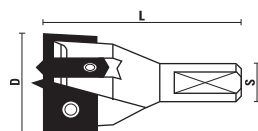
Z055.230.N



Z051.101.R

HW INSERT BORING BITS Z=2+2

ART. W140



RH rotation	LH rotation	D	L	S	Spare knife
W140.250.R	W140.250.L	25	57	10x26	Z055.125.N
W140.260.R	W140.260.L	26	57	10x26	Z055.126.N
W140.300.R	W140.300.L	30	57	10x26	Z055.130.N
W140.350.R	W140.350.L	35	57	10x26	Z055.135.N
W140.400.R	W140.400.L	40	57	10x26	Z055.140.N



Z051.010.R
Screw for knives



Z051.011.R
Screw for spurs



Z051.304.R
Screw for centre point



Z055.100.N



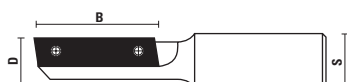
Z055.101.N



Z052.201.N

HW INSERT PLUNGE ROUTER CUTTERS Z=1

ART. W153



Spare knives suitable for plunging

RH rotation	D	B	S	Z
W153.120.R	12	22	Ø20x40	1
W153.140.R	14	22	Ø20x40	1



Z055.423.N (B=30)



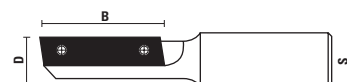
Z051.210.R



Z052.201.N

HW INSERT PLUNGE ROUTER CUTTERS Z=1

ART. W155



Spare knives suitable for plunging

Item	D	B	S	Z
W155.160.R	16	30	Ø20x50	1
W155.161.R	16	50	Ø20x50	1
W155.180.R	18	30	Ø20x50	1
W155.181.R	18	50	Ø20x50	1
W155.200.R	20	30	Ø20x50	1
W155.201.R	20	50	Ø20x50	1
W155.220.R	22	30	Ø20x50	1
W155.221.R	22	50	Ø20x50	1



Z055.425.N (B=50 D=16)
Z055.430.N (B=30)
Z055.450.N (B=50)



Z051.210.R (B=30)



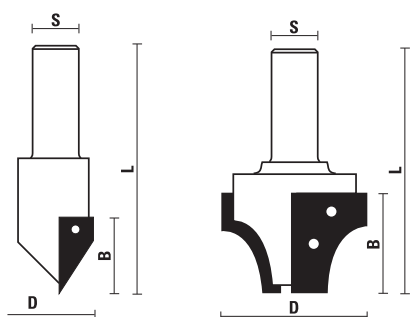
Z051.211.R (B=50)



Z052.201.N

HW INSERT PROFILE CUTTERS, GROUP 1

ART. W160



- From $\varnothing 20$ to $\varnothing 39$ z=1
- From $\varnothing 40$ to $\varnothing 80$ z=2

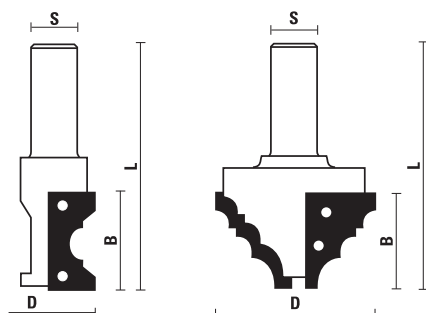
D	B	D	B
20	25	60	30
		60	40
30	25	60	50
30	30		
40	20	70	30
40	30	70	40
40	40	70	50
50	30	80	30
50	40	80	40
50	50	80	50

SPARE KNIVES QUOTED ON REQUEST

Price depends on the diameter and length of the cutters.
For a specific quote a detailed drawing or a sample are required.

HW INSERT PROFILE CUTTERS, GROUP 2

ART. W161



- From $\varnothing 20$ to $\varnothing 39$ z=1
- From $\varnothing 40$ to $\varnothing 80$ z=2

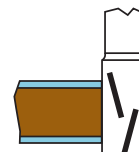
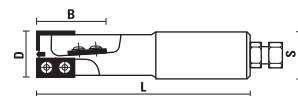
D	B	D	B
20	25	60	30
		60	40
30	25	60	50
30	30		
40	20	70	30
40	30	70	40
40	40	70	50
50	30	80	30
50	40	80	40
50	50	80	50

SPARE KNIVES QUOTED ON REQUEST

Price depends on the diameter and length of the cutters.
For a specific quote a detailed drawing or a sample are required.

HW INSERT COMPRESSION ROUTER CUTTERS

ART. W165



- Axial angle positive and negative compression bits
- HW plunging tip

Item	D	B	L	S	Z
W165.200.R	20	30	110	25x55	2+2+1
W165.201.R	20	50	125	25x55	2+2+1
W165.202.R	20	30	134	MK2 - M 30x1,5	2+2+1
W165.203.R	20	50	157	MK2 - M 30x1,5	2+2+1



Z051.308.R



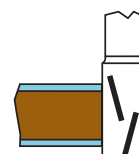
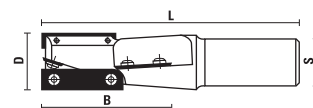
Z052.302.N



Z055.516.N (B=30)
Z055.528.N (B=50)

HW INSERT COMPRESSION ROUTER CUTTERS

ART. W165



- Axial angle positive and negative compression bits
- With spare knife for plunging

Item	D	B	L	S	Z
W165.300.R	30	75	145	25x55	2+2+1



Z051.210.R



Z052.201.N



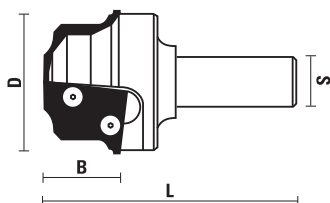
Z055.341.N



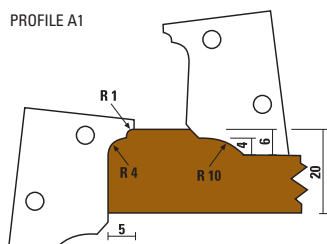
Z055.000.N

HW INSERT ROUTER BITS FOR CABINET DOORS Z=2

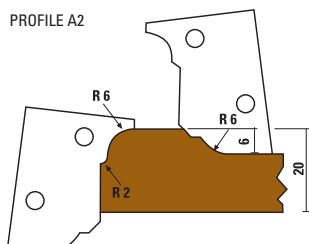
ART. W160



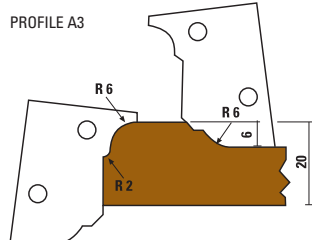
PROFILE A1



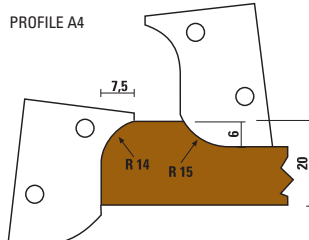
PROFILE A2



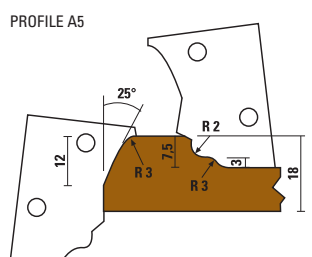
PROFILE A3



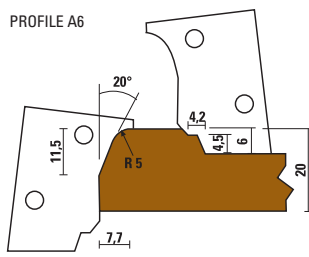
PROFILE A4



PROFILE A5



PROFILE A6



- With reversible knives
- For producing either the external or internal moulding

Item	D	B	L	S	Profile
W160.601.R	60	40	100	20x50	A1
W160.602.R	60	40	100	20x50	A2
W160.603.R	60	40	100	20x50	A3
W160.604.R	60	40	100	20x50	A4
W160.605.R	60	40	100	20x50	A5
W160.606.R	60	40	100	20x50	A6

Spare parts

Tool body without knives

W160.600.R



Z051.010.R



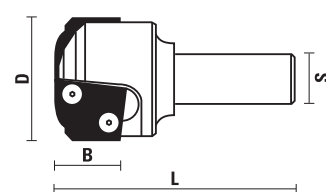
Z055.661.N (A1)
Z055.662.N (A2)
Z055.663.N (A3)
Z055.664.N (A4)
Z055.665.N (A5)
Z055.666.N (A6)



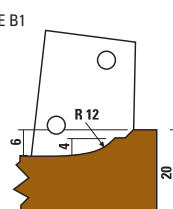
Z052.201.N

HW INSERT ROUTER BITS FOR CABINET DOORS Z=2

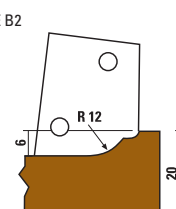
ART. W161



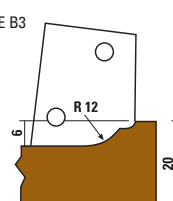
PROFILE B1



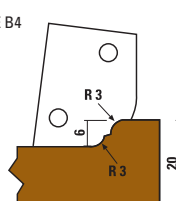
PROFILE B2



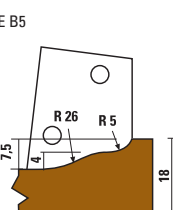
PROFILE B3



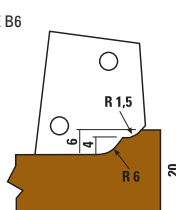
PROFILE B4



PROFILE B5



PROFILE B6



- With reversible knives
- For producing the internal moulding

Item	D	B	L	S	Profile
W161.501.R	50	25	95	20x50	B1
W161.502.R	50	25	95	20x50	B2
W161.503.R	50	25	95	20x50	B3
W161.504.R	50	25	95	20x50	B4
W161.505.R	50	25	95	20x50	B5
W161.506.R	50	25	95	20x50	B6

Spare parts

Tool body without knives

W161.500.R



Z051.010.R



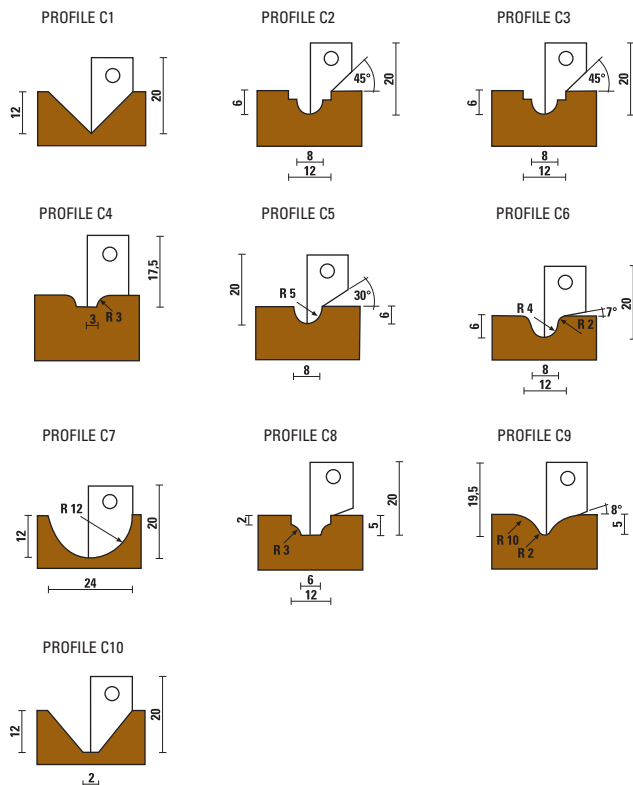
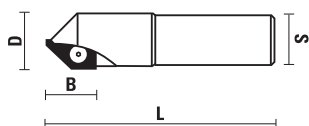
Z055.651.N (B1)
Z055.652.N (B2)
Z055.653.N (B3)
Z055.654.N (B4)
Z055.655.N (B5)
Z055.656.N (B6)



Z052.201.N

HW INSERT ROUTER BITS FOR DECORATION AND ENGRAVING Z=1

ART. W162



With reversible knives

Item	D	B	L	S	Profile
W162.241.R	24	20	95	20x50	C1
W162.242.R	24	20	95	20x50	C2
W162.243.R	24	20	95	20x50	C3
W162.244.R	24	20	95	20x50	C4
W162.245.R	24	20	95	20x50	C5
W162.246.R	24	20	95	20x50	C6
W162.247.R	24	20	95	20x50	C7
W162.248.R	24	20	95	20x50	C8
W162.249.R	24	20	95	20x50	C9
W162.250.R	24	20	95	20x50	C10

Spare parts

Tool body without knives

W162.240.R



Z051.010.R



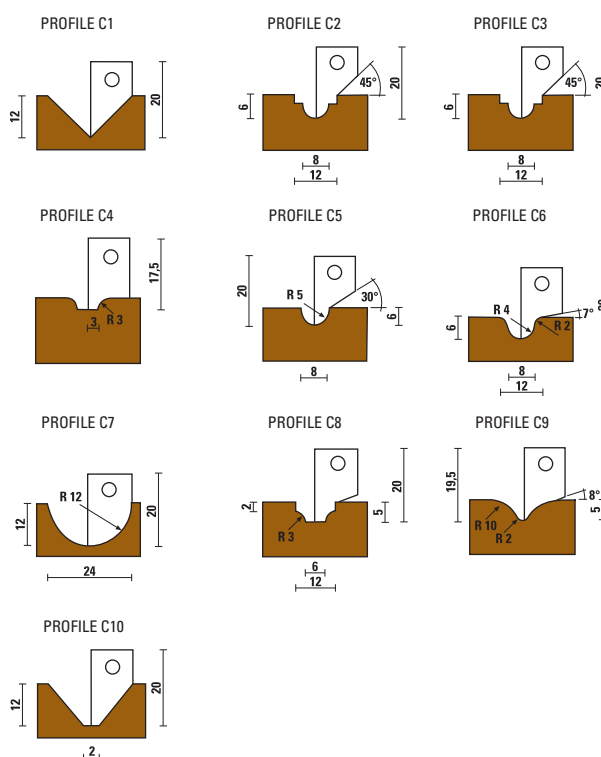
Z055.641.N (C1)
Z055.642.N (C2)
Z055.643.N (C3)
Z055.644.N (C4)
Z055.645.N (C5)
Z055.646.N (C6)
Z055.647.N (C7)
Z055.648.N (C8)
Z055.649.N (C9)
Z055.650.N (C10)



Z052.201.N

COMPLETE SET FOR DECORATING AND ENGRAVING

ART. XW162



- Set includes a tool body with nr. 10 profiled knives
- With reversible knives
- Z=1
- In plastic case

Item

XW162.001.N

complete with:

W162.250.R

Spare knife	Dimension	Profile
Z055.641.R	45°	C1
Z055.642.R	R4/45°	C2
Z055.643.R	R1/R11	C3
Z055.644.R	R3	C4
Z055.645.R	R8/30°	C5
Z055.646.R	R4/R2	C6
Z055.647.R	R12	C7
Z055.648.R	R3/2	C8
Z055.649.R	R2/R10	C9
Z055.650.R	45°/2	C10



Z051.010.R



Z052.201.N

COMPLETE CUTTERS SET FOR CABINET DOORS

ART. XW160

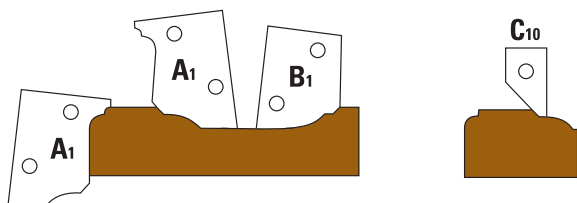


Set including 3 cutters with HW knives

PROFILE EXAMPLES

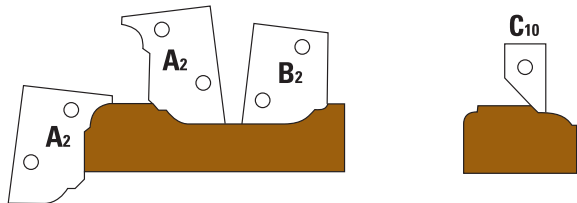
Item

XW160.001.N including: W160.601.R + W161.501.R + W162.241.R



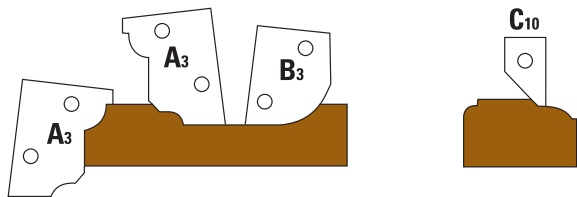
Item

XW160.002.N including: W160.602.R + W161.502.R + W162.241.R



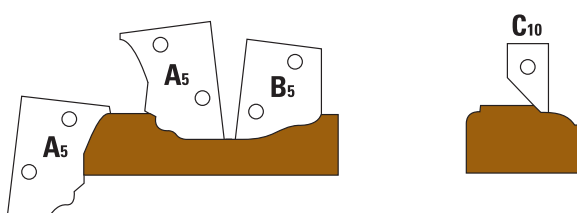
Item

XW160.003.N including: W160.603.R + W161.503.R + W162.241.R



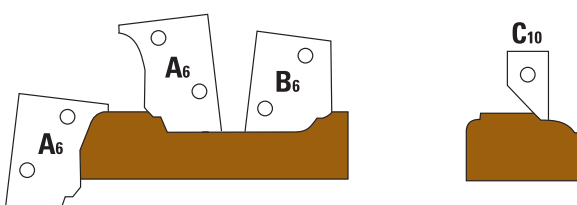
Item

XW160.004.N including: W160.605.R + W161.505.R + W162.241.R



Item

XW160.005.N including: W160.606.R + W161.506.R + W162.241.R

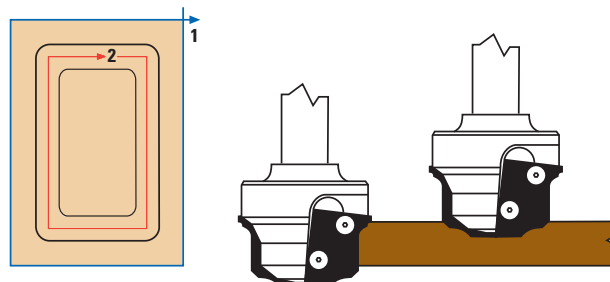


PROFILE EXAMPLE

Item W160

Execution nr. 1 and 2

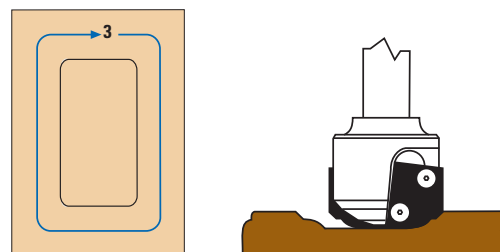
Working with the same cutter you can produce either the external (nr. 1 - routing) or internal - (nr. 2 - profiling) profile



Item W161

Execution nr. 3

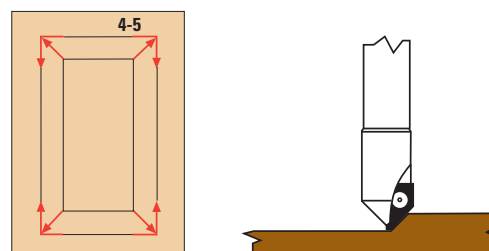
Profiling the internal side



Item W162

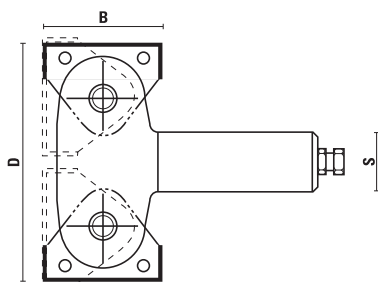
Execution nr. 4 and 5

This cutter is used to work the decoration on top and can be used with different profiled knives



HW INSERT VARI-ANGLE ROUTER CUTTERS 1° Z=2

ART. W168



- Adjustable 0° - 45° top
- Adjustable 0° - 90° bottom
- Adjustable by 1 degree

Item	D	B	Z	S
W168.085.R	85	40	2	25x55
W168.185.R	85	40	2	20x55



Z056.765.N



Z056.791.N



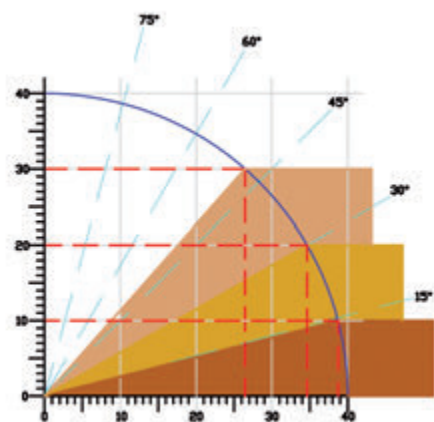
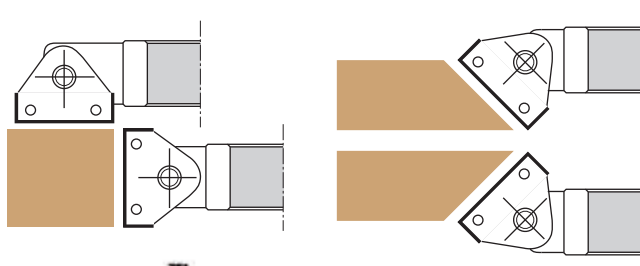
Z055.340.N



Z051.408.N
Z051.409.N

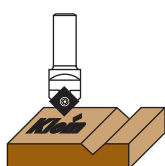
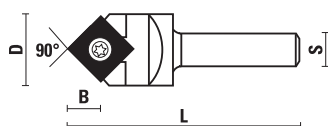


Z052.103.N
Z052.104.N



HW INSERT ROUTER BITS FOR ENGRAVINGS Z=1

ART. W170



Used on handportable machines, CNC routers and machining centres

Item	D	B	L	Z	S
W170.170.R	17	8,4	60	1	12



Z051.212.R



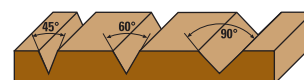
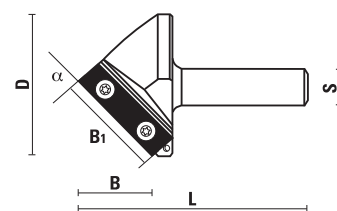
Z052.201.N



Z055.001.N

HW INSERT ROUTER BITS FOR ENGRAVINGS Z=2

ART. W170



Used on handportable machines, CNC routers and machining centres

Item	D	α	B	B1	L	S
W170.210.R	21	45°	25	27	61	12
W170.260.R	26	60°	23	27	61	12
W170.380.R	38	90°	19	27	76	12



Z051.212.R



Z052.201.N



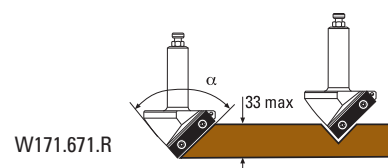
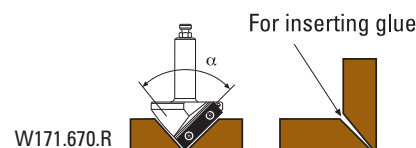
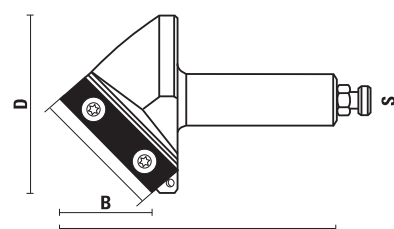
Z055.506.N
(45°-60°)



Z055.507.N
(30°)

HW INSERT V-GROOVE ROUTER BITS Z=1

ART. W171



Used on CNC routers and machining centres

Item	D	B	B1	L	S	α
W171.670.R	67	33	46,5	97	20	91°
W171.671.R NEW	67	33	46,5	97	20	90°



Z051.402.R



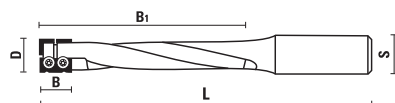
Z052.201.N



Z055.505.N

HW INSERT ROUTER BITS FOR LOCKS Z=2

ART. W172 - W173



Used on CNC routers and machining centres

Item	D	B	B1	L	S
W172.160.R	16	16	115	170	16x55
W172.161.R	16	23	105	150	16x45
W172.180.R	18	16	115	170	16x55
W173.160.R	16	16	115	170	20x55
W173.161.R	16	23	115	170	20x55
W173.180.R	18	16	115	170	20x55



Z051.308.R



Z052.302.N



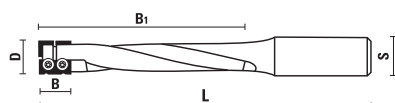
Z055.501.N
Z055.502.N
(16x7x1,5)



Z055.503.N
Z055.504.N
(23x7x1,5)

HW INSERT ROUTER BITS FOR LOCKS Z=2 HEAVY METAL TOOL BODY

ART. W172 - W173



- Used on CNC routers and machining centres
- Heavy metal tool body
- Low-vibration machining
- Reduced risk of tool breakage

Item	D	B	B1	L	S
W172.160.RAP NEW	16	16	115	170	16x55



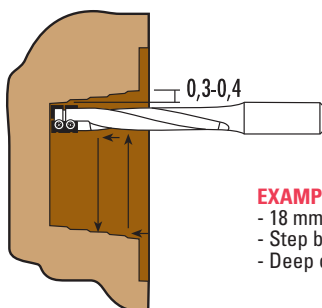
Z051.308.R



Z052.302.R



Z055.501.N
Z055.502.N

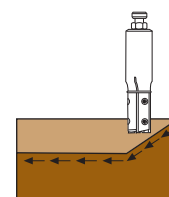
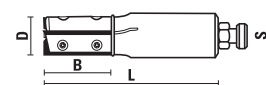


EXAMPLE OF USE:

- 18 mm: n. 12.000-20.000 min⁻¹
- Step by step cutting 0,3-0,4 mm
- Deep cutting with excellent chip flow

HW INSERT ROUTER BITS Z=3

ART. W174 - W175



- Extremely silent
- Improved balancing compared with traditional system
- Used on CNC routers and machining centres
- **NO CUTTING EDGE FOR BORING**

Item	Rotat.	D	B	L	S
W174.180.R	Dx	18	50	102	20
W174.180.L	Sx	18	50	102	20

W175.180.R	Dx	18	50	102	25
W175.180.L	Sx	18	50	102	25



Z051.404.R



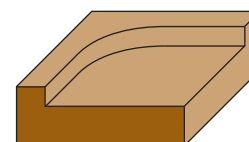
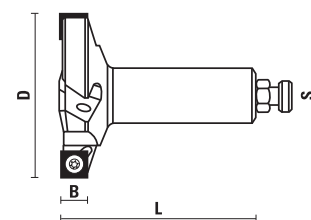
Z052.007.N



Z055.500.R
Z055.500.L

HW INSERT ROUTER BITS FOR PLANING AND RABBETING Z=2+2

ART. W176 - W177



- Ideal for removing material over large surface areas
- Used on CNC routers and machining centres

Item	D	B	L	S
W176.800.R	80	12	90	20
W177.800.R	80	12	90	25



Z051.402.R



Z051.403.R



Z052.201.N



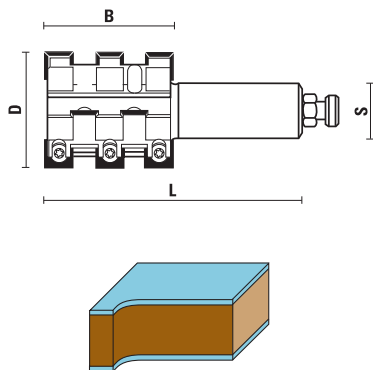
Z055.001.N
knife



Z055.007.N
spur

HW INSERT ROUTER CUTTERS, ROUGHING Z=4

ART. W178 - W179



- Multi cutting flutes router cutter 12x12x1,5
- Used on CNC routers and machining centres

Item	D	B	L	S	Z
W178.500.R	50	56	113	20	4
W178.501.R	50	78	135	20	4

W179.500.R	50	56	113	25	4
W179.501.R	50	78	135	25	4



Z051.400.R



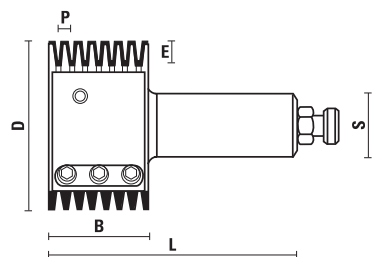
Z052.201.N



Z055.001.N

HW INSERT FINGER JOINT ROUTER CUTTERS Z=2

ART. W180 - W181



Used on CNC routers and machining centres

Item	D	B	L	P	E	S
W180.700.R	70	40	100	5,4	8	20
W181.700.R	70	40	100	5,4	8	25



Z051.401.R



Z052.003.N



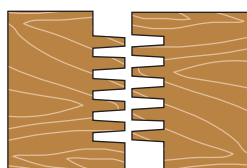
Z055.628.N



Z056.100.N

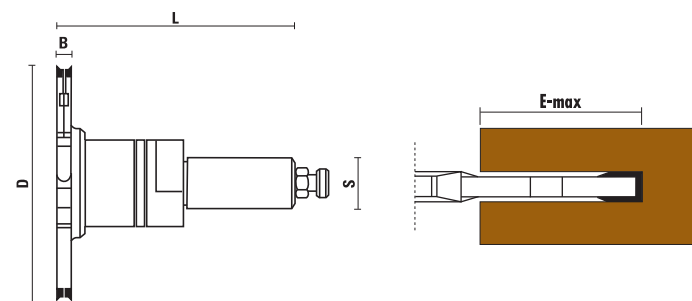


Z056.101.N



HW INSERT ADJUSTABLE ROUTER CUTTERS FOR GROOVING

ART. W182 - W183



- Suitable for producing different thickness grooves
- Thickness adjustable in 0,1 mm steps by means of spacers
- Used on CNC routers and machining centres
- Can be produced with HSK or ISO30 shank on request

Item	D	B	L	S	E-max
W182.120.R	120	4÷15,5	140	20	33
W183.120.R	120	4÷15,5	140	25	33



Z051.405.R



Z051.406.R



Z055.006.N



Z055.000.N



Z057.100.N



Z052.006.N



Z052.302.N



Z060.750.N



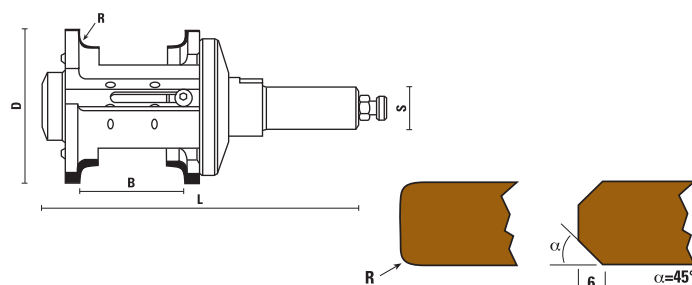
Z060.751.N



Z056.102.N

HW INSERT ROUTER BITS FOR ROUNDING AND CHAMFERING Z=2

ART. W184 - W185



- For corner rounding and chamfering with single pass
- Different radii or 45° chamfers
- Adjustable for various wood thicknesses
- Used on CNC routers and machining centres

Item	D	R	B	L	S
W184.903.R	90	3	18÷58	185	20
W184.904.R	90	4	18÷58	185	20
W184.905.R	90	5	18÷58	185	20
W184.906.R	90	6	18÷58	185	20
W184.908.R	90	8	20÷60	185	20
W184.910.R	90	10	22÷62	185	20
W184.945.R	90	45°	12÷62	185	20

W185.903.R	90	3	18÷58	185	25
W185.904.R	90	4	18÷58	185	25
W185.905.R	90	5	18÷58	185	25
W185.906.R	90	6	18÷58	185	25
W185.908.R	90	8	20÷60	185	25
W185.910.R	90	10	22÷62	185	25
W185.945.R	90	45°	12÷62	185	25



Z051.400.R



Z052.201.N



Z055.011.N



Z055.870.R/L
Z055.871.R/L
Z055.872.R/L
Z055.873.R/L
Z055.874.R/L
Z055.875.R/L
Z055.876.R/L

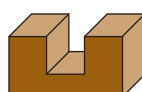
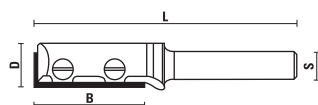
INSERT ROUTER BITS FOR PORTABLE ROUTERS

Always looking for innovative products and most useful solutions, **SISTEMI** has developed a new line of router bits **KLEIN** with interchangeable carbide knives, which have a higher hardness than the tips used in traditional brazed router bits. The main advantages granted by the use of HM reversible knives and the possibility of their easy replacement are:

- **Longer tool life** ⇒ the knives are getting less worn out and in case of damage they can be easily replaced;
- **Better finish quality** ⇒ also working abrasive materials, the cutting edge can be maintained always sharp;
- **Higher measures precision** ⇒ the dimensions of the tools are not changing because there is no resharpening;
- **Better Quality/Price ratio** ⇒ higher production efficiency, less costs and better performances;

HW INSERT FLUSH TRIMMING BITS Z=1

ART. WC101

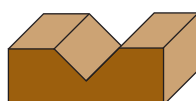
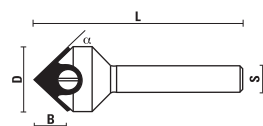


With reversible knives

S Ø 8	D	B	L
WC101.120.R	12	29,5	66
			
Z050.330.N	Z051.501.R		

HW INSERT V-GROOVING BITS Z=1

ART. WC109

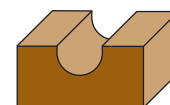
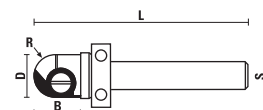


With reversible knives

S Ø 8	D	B	α	L
WC109.176.R	17,6	8,5	45°	53
				
Z055.001.N	Z051.501.R			

HW INSERT CORE BOX BITS WITH UPPER BALL BEARING Z=1

ART. WC111

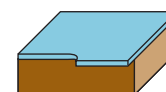
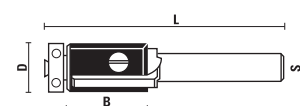


With reversible knives

S Ø 8	D	B	R	L
WC111.127.R	12,7	13	6	59
				
Z050.018.N	Z055.550.N	Z051.501.R		

HW INSERT FLUSH TRIMMING BITS WITH BALL BEARING

ART. WC120

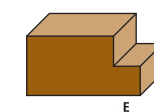
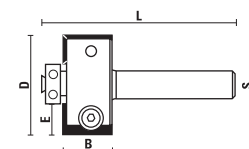


With reversible knives

S Ø 8	D	B	L	Z
WC120.127.R	12,7	20	62	2
				
Z050.003.N	Z055.551.N	Z051.503.N Screw for ball bearing	Z051.501.R Screw for knives	

HW INSERT FLUSH TRIMMING BITS WITH BALL BEARING Z=2

ART. WC121

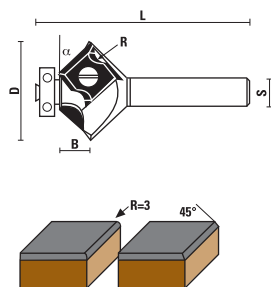


With reversible knives

S Ø 8	D	B	E	L
WC121.286.R	28,6	13,2	7,95	48
				
Z050.002.N	Z055.552.N	Z051.503.N Screw for ball bearing	Z051.501.R Screw for knives	

HW INSERT FLUSH TRIMMING BITS WITH BALL BEARING Z=2

ART. WC122



- With reversible knives

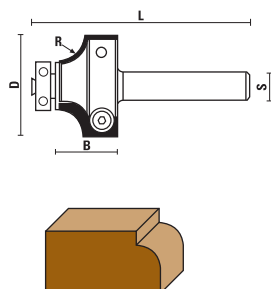
- The same knives can be used for both 45° and R= 3 bevel



S Ø 8	D	B	R	α	L
WC122.273.R	27,3	5,7	3	45°	59
Z050.003.N	Z055.553.N	Z051.503.N Screw for ball bearing	Z051.501.R Screw for knives		

HW INSERT CORNER ROUNDING BITS WITH BALL BEARING Z=2

ART. WC123



With reversible knives



S Ø 8	D	B	R	L
WC123.260.R	26	15,7	6	55
Z050.003.N	Z055.554.N	Z051.503.N Screw for ball bearing	Z051.501.R Screw for knives	

6 PIECE INSERT ROUTER BITS "SET"

ART. XWC



- Set including the 6 most popular HW router bits in S=8 in a robust and practical wooden box.

- Ideal to have always on hand the right bit for straight cuts, trimming and engraving.

- Router bit with reversible knives

See page 1.35

Item

XWC.001.R

6-pcs router bit set:

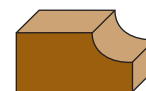
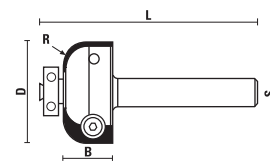
WC101.120.R - WC109.176.R

WC111.127.R - WC120.127.R

WC121.286.R - WC122.273.R

HW INSERT COVER BITS WITH BALL BEARING Z=2

ART. WC125



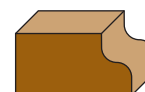
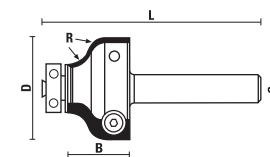
With reversible knives



S Ø 8	D	B	R	L
WC125.260.R	26	12,7	6	55
Z050.003.N	Z055.555.N	Z051.503.N Screw for ball bearing	Z051.501.R Screw for knives	

HW INSERT OGEE BITS WITH BALL BEARING Z=2

ART. WC129



With reversible knives



S Ø 8	D	B	R	L
WC129.260.R	26	15,7	4,5	55
Z050.003.N	Z055.556.N	Z051.503.N Screw for ball bearing	Z051.501.R Screw for knives	

6 PIECE INSERT ROUTER BITS "SET"

ART. XWC



- Set including the 6 most popular HW router bits in S=8 in a robust and practical wooden box.

- Ideal to have always on hand the right bit for trimming and profiling.

- Router bit with reversible knives

See page 1.35

Item

XWC.002.R

6-pcs router bit set:

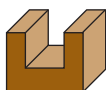
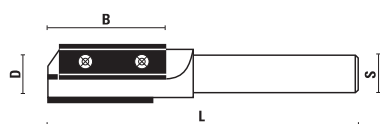
WC120.127.R - WC121.286.R

WC122.273.R - WC123.260.R

WC125.260.R - WC129.260.R

HW INSERT ROUTER BITS Z=2+1

ART. WE100



With HW boring tip

S Ø 12	D	B	L
WE100.160.R	16	50	110
WE100.180.R	18	50	110
WE100.200.R	20	50	110
WE100.220.R	22	50	110



Z051.010.R



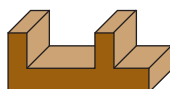
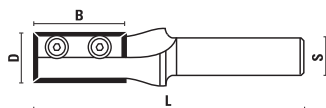
Z052.201.N



Z055.340.N

HW INSERT ROUTER BITS Z=2

ART. WE101



S=1/2" on request art. WG

S Ø 12	D	B	L
WE101.120.R	12	29,5	81
WE101.140.R	14	29,5	86
WE101.160.R	16	29,5	88
WE101.180.R	18	29,5	86
WE101.200.R	20	29,5	86
WE101.220.R	22	29,5	88



Z051.321.R



Z052.007.N



Z055.529.N



Z051.211.R



Z052.201.N



Z055.330.N



Z051.400.R



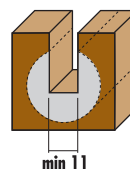
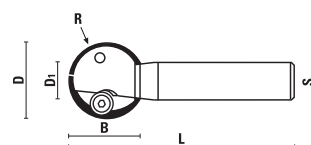
Z052.201.N



Z055.329.N

HW INSERT BALL SLOT ROUTER BITS Z=2

ART. WE112



These tools can produce grooves for sliding panels or electrical wires, after a first groove wich allows the tool shank moving

S=1/2" on request art. WG

S Ø 12	D	D1	R	B	L
WE112.127.R	12,7	10	6,4	10	67
WE112.160.R	16	13	8	14	70
WE112.190.R	19	15	9,5	17	67
WE112.254.R	25,4	17	12,7	24	73



Z051.308.R
(D da 12,7 a 19)



Z051.400.R
(D=25,4)



Z052.201.N (Z051.308)
Z052.302.N (Z051.400)



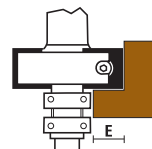
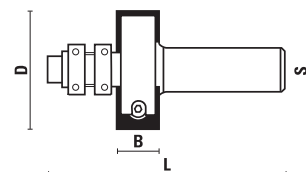
Z055.572.N
Z055.573.N



Z055.574.N
Z055.575.N

HW INSERT REBATE BITS Z=2

ART. WE150



S=1/2" on request art. WG

S Ø 12	D	B	L	E
WE150.380.R	38	12	66	12



Z050.007.N



Z051.400.R



Z052.201.N



Z055.001.N



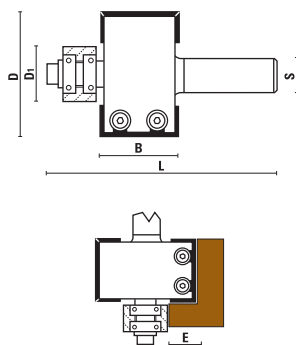
Z054.410.N



Z054.002.N

HW INSERT REBATE BITS Z=2

ART. WE150



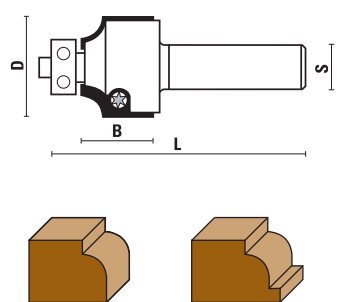
S=1/2" on request art. WG

S Ø 12	D	B	L	E
WE150.510.R	51	29,5	84	16
Z050.007.N	Z051.400.R	Z052.201.N	Z055.329.N	Z054.410.N

BEARING RINGS	D1	E
Z050.901.N	14,31	8,25
Z050.902.N	16	17,5
Z050.903.N	19	16
Z050.904.N	20,6	15,2
Z050.905.N	22,2	14,3
Z050.906.N	25,4	12,7
Z050.907.N	27	12
Z050.908.N	28,6	10
Z050.909.N	31,8	9,5
Z050.910.N	32,5	9,25
Z050.911.N	35	8
Z050.912.N	38	6,4
Z050.913.N	39	6
Z050.914.N	41,3	4,8
Z050.915.N	44,4	3,2
Z050.916.N	47,6	1,6
Z050.999.N	set complete with 16 bearing rings	

HW INSERT BEADING BITS Z=2

ART. WE152



Changing the ball bearing with art. Z050.004.N the profile shown can be obtained

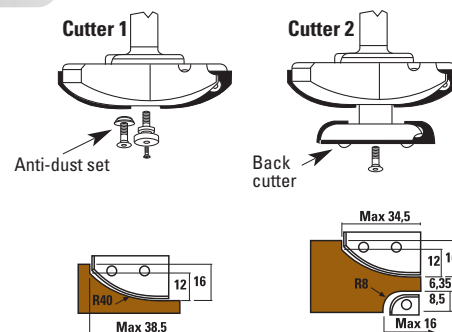
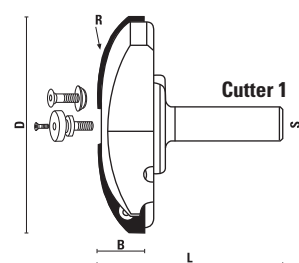
S=1/2" on request art. WG

S Ø 12	D	R	B	L
WE152.250.R	25	20	3	68
WE152.280.R	28	20	6	68
WE152.320.R	32	30	8	78
WE152.360.R	36	30	10	78

Z050.004.N	Z051.400.R	Z052.201.N	Z055.520.N
			Z055.521.N
			Z055.522.N
			Z055.523.N

HW INSERT PROFILE RAISED PANEL ROUTER CUTTERS Z=2

ART. WE178



S=1/2" on request art. WG

S Ø 12	D	R	B	L
WE178.860.R - Cutter 1	86	40	21,2	72
WE178.870.R - Cutter 2	86	40	21,2	72

(Complete with back cutter)

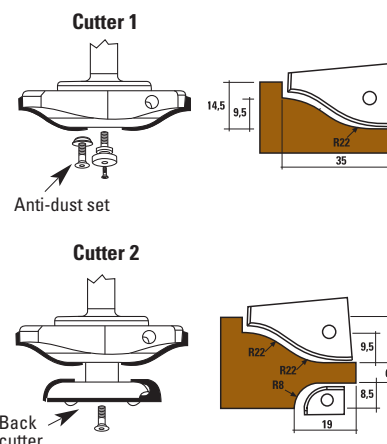
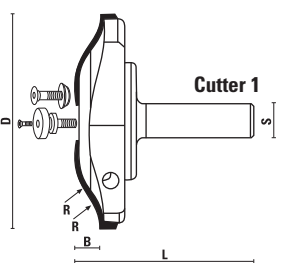
Z050.050.N	Z051.400.R	Z051.050.R	Z052.201.N	Z055.560.N

WE178.999.R - Back cutter Ø=54x26,7

Z051.308.R	Z052.302.N	Z055.569.N

HW INSERT PROFILE RAISED PANEL ROUTER CUTTERS Z=2

ART. WE178



S=1/2" on request art. WG

S Ø 12	D	R	B	L
WE178.862.R - Cutter 1	86	22	19	69
WE178.872.R - Cutter 2	86	22	19	69

(Complete with back cutter)

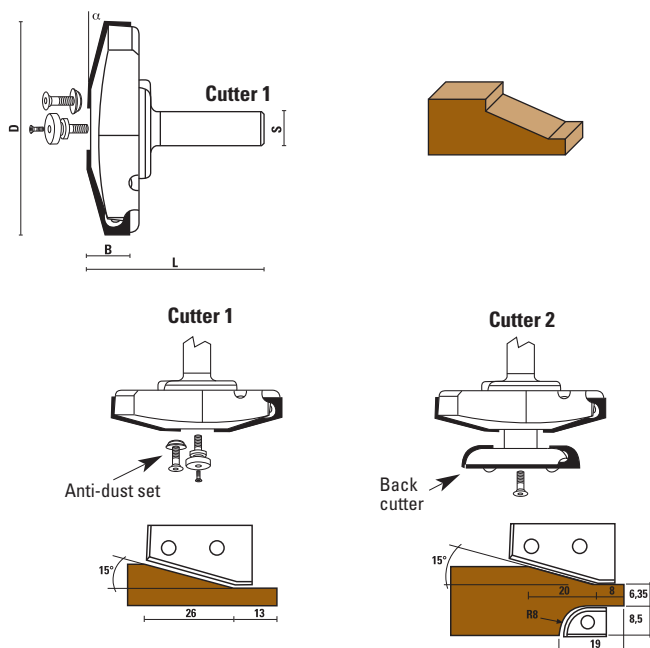
Z050.050.N	Z051.400.R	Z051.050.R	Z052.201.N	Z055.562.N

WE178.999.R - Back cutter Ø=54x26,7

Z051.308.R	Z052.302.N	Z055.569.N

HW INSERT PROFILE RAISED PANEL ROUTER CUTTERS Z=2

ART. WE178



S=1/2" on request art. WG

S Ø 12	D	α	B	L
WE178.861.R - Cutter 1	86	15°	20	71
WE178.871.R - Cutter 2	86	15°	20	71

(Complete with back cutter)

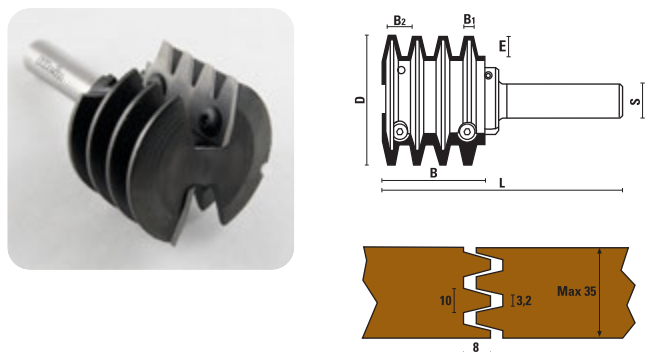
Z050.050.N	Z051.400.R	Z051.050.R	Z052.201.N	Z055.561.N

WE178.999.R - Back cutter Ø=54x26,7

Z051.308.R	Z052.302.N	Z055.569.N

HW INSERT FINGER JOINT ROUTER CUTTERS Z=2

ART. WE180

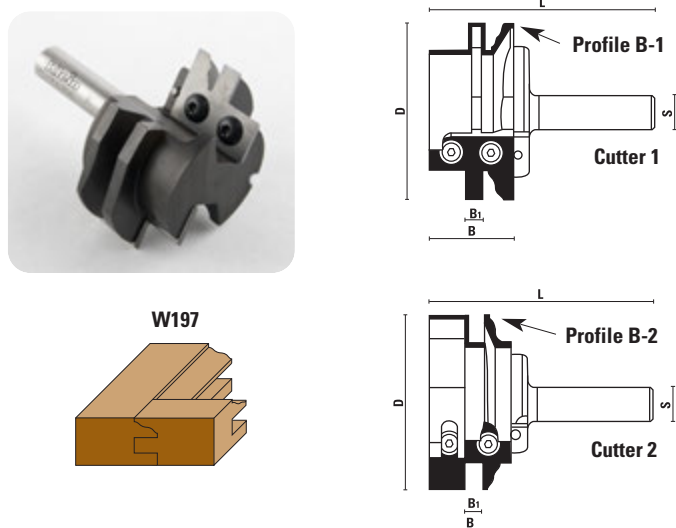


S Ø 12	D	B	B ₁	B ₂	E	L
WE180.500.R	50	40	3,2	10	8	93

Z051.400.R	Z052.201.N	Z055.571.N

HW INSERT COUNTER-PROFILE CUTTERS Z=2

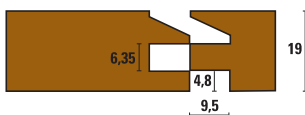
ART. WE194 - W195 - WE197 - WE198



S=1/2" on request art. WG

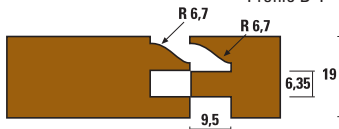
S Ø 12	D	B	B ₁	L
WE194.620.R - Cutter 1	62	30	6,35	75
WE194.621.R - Cutter 2	62	30	6,35	75

Z051.400.R	Z052.201.N	Z055.580.N Profile A-1	Z055.581.N Profile A-2



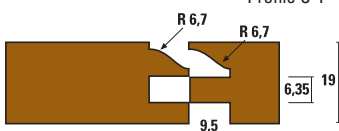
S Ø 12	D	B	B ₁	L
WE195.620.R - Cutter 1	62	30	6,35	75
WE195.621.R - Cutter 2	62	30	6,35	75

Z051.400.R	Z052.201.N	Z055.582.N Profile B-1	Z055.583.N Profile B-2



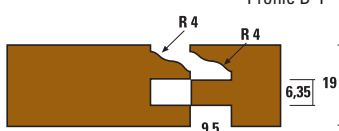
S Ø 12	D	B	B ₁	L
WE197.620.R - Cutter 1	62	30	6,35	75
WE197.621.R - Cutter 2	62	30	6,35	75

Z051.400.R	Z052.201.N	Z055.584.N Profile C-1	Z055.585.N Profile C-2



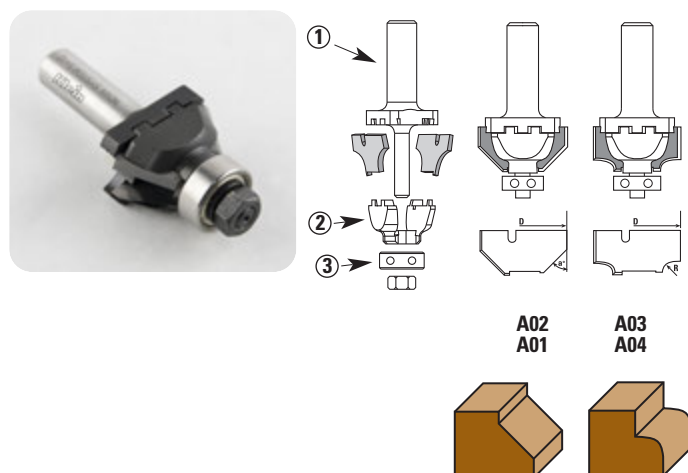
S Ø 12	D	B	B ₁	L
WE198.620.R - Cutter 1	62	30	6,35	75
WE198.621.R - Cutter 2	62	30	6,35	75

Z051.400.R	Z052.201.N	Z055.586.N Profile D-1	Z055.587.N Profile D-2



HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W200 - W201



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA



S Ø 8	S Ø 12	D	α	R
W200.350.C	W200.350.E	35	30°	
W200.A01 - Spare inserts		Pair		

W200.380.C	W200.380.E	38	45°	
W200.A02 - Spare inserts		Pair		

W201.350.C	W201.350.E	35		3,2
W201.A03 - Spare inserts		Pair		

W201.351.C	W201.351.E	35		4,8
W201.A04 - Spare inserts		Pair		

SPARE PARTS

1) Arbor

W200.000.C W200.000.E

2) Safety shield

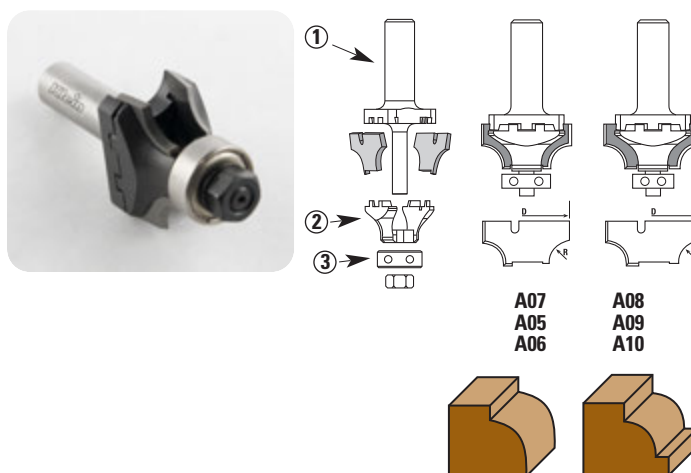
W201.001.N

3) Ball bearing

Z050.005.N - Ø19/Ø6,4 x 7,1 mm

HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W202 - W203 - W204 - W205



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA



S Ø 8	S Ø 12	D	R
W202.350.C	W202.350.E	35	6,4
W202.A05 - Spare inserts		Pair	

W202.351.C	W202.351.E	35	8
W202.A06 - Spare inserts		Pair	

W203.380.C	W203.380.E	38	9,5
W203.A07 - Spare inserts		Pair	

W204.350.C	W204.350.E	35	4,8
W204.A08 - Spare inserts		Pair	

W204.351.C	W204.351.E	35	6,4
W204.A09 - Spare inserts		Pair	

W205.380.C	W205.380.E	38	8
W205.A10 - Spare inserts		Pair	

SPARE PARTS

1) Arbor

W200.000.C W200.000.E

2) Safety shield

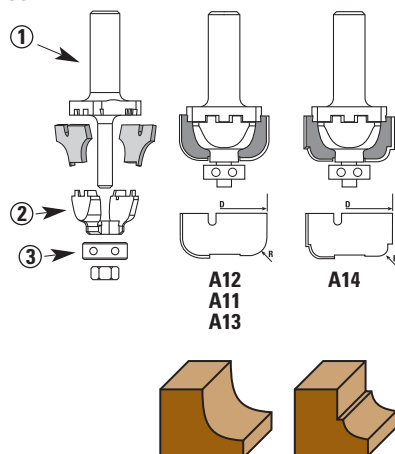
W201.002.N

3) Ball bearing

Z050.005.N - Ø19/Ø6,4 x 7,1 mm

HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W206 - W207 - W208



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA

S Ø 8	S Ø 12	D	R
W206.350.C	W206.350.E	35	6,4
W206.A11 - Spare inserts		Pair	
W206.351.C	W206.351.E	35	8
W206.A12 - Spare inserts		Pair	
W207.380.C	W207.380.E	38	9,5
W207.A13 - Spare inserts		Pair	
W208.350.C	W208.350.E	35	4,8
W208.A14 - Spare inserts		Pair	

SPARE PARTS

1) Arbor

W200.000.C W200.000.E

2) Safety shield

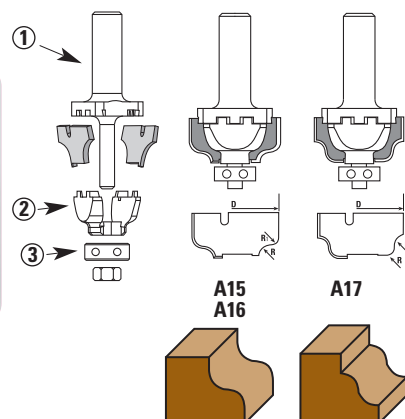
W201.001.N

3) Ball bearing

Z050.005.N - Ø19/Ø6,4 x 7,1 mm

HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W209 - W210



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA

S Ø 8	S Ø 12	D	R	R1
W209.360.C	W209.360.E	36	4,0	4,5
W209.A15 - Spare inserts		Pair		
W209.380.C	W209.380.E	38	4,0	4,5
W209.A16 - Spare inserts		Pair		
W210.350.C	W210.350.E	35	4,0/4,0	
W210.A17 - Spare inserts		Pair		

SPARE PARTS

1) Arbor

W200.000.C W200.000.E

2) Safety shield

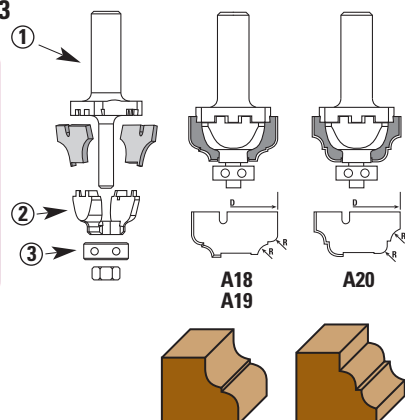
W201.001.N

3) Ball bearing

Z050.005.N - Ø19/Ø6,4 x 7,1 mm

HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W211 - W212 - W213



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA

S Ø 8	S Ø 12	D	R
W211.350.C	W211.350.E	35	4,0/4,0
W211.A18 - Spare inserts		Pair	
W212.380.C	W212.380.E	38	4,0/4,0
W212.A19 - Spare inserts		Pair	
W213.380.C	W213.380.E	38	4,0/4,0
W213.A20 - Spare inserts		Pair	

SPARE PARTS

1) Arbor

W200.000.C W200.000.E

2) Safety shield

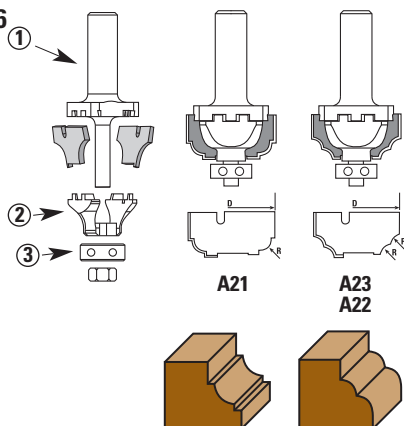
W201.001.N

3) Ball bearing

Z050.005.N - Ø19/Ø6,4 x 7,1 mm

HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W214 - W215 - W216



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA



S Ø 8	S Ø 12	D	R
W214.350.C	W214.350.E	35	4,8
W214.A21 - Spare inserts		Pair	
W215.350.C	W215.350.E	35	4,0/4,0
W215.A22 - Spare inserts		Pair	
W216.380.C	W216.380.E	38	4,0/4,0
W216.A23 - Spare inserts		Pair	

SPARE PARTS

1) Arbor

W200.000.C W200.000.E

2) Safety shield

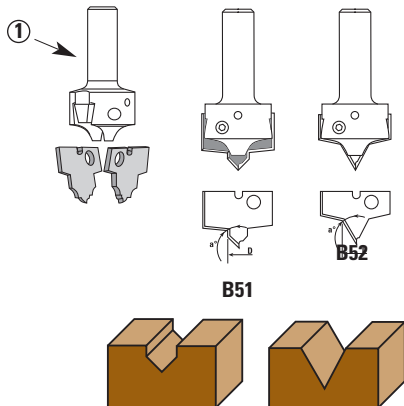
W201.001.N

3) Ball bearing

Z050.005.N - Ø19/Ø6,4 x 7,1 mm

HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W250 - W251



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA



S Ø 8	S Ø 12	D	α
W250.095.C	W250.095.E	9,5	45°
W250.B51 - Spare inserts		Pair	
W251.127.C	W251.127.E	12,7	30°
W251.B52 - Spare inserts		Pair	

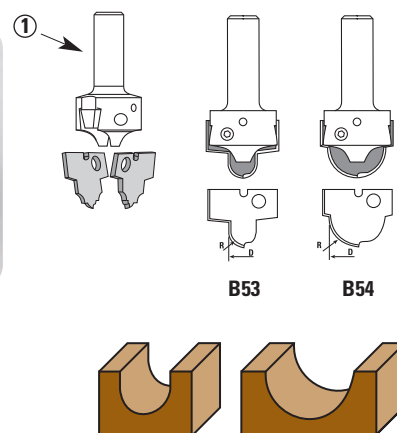
SPARE PARTS

1) Safety shield

W250.000.C W250.000.E

HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W252 - W253



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA



S Ø 8	S Ø 12	D	R
W252.127.C	W252.127.E	12,7	6,4
W252.B53 - Spare inserts		Pair	
W253.254.C	W253.254.E	25,4	12,7
W253.B54 - Spare inserts		Pair	

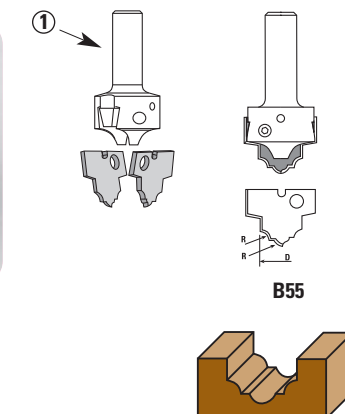
SPARE PARTS

1) Safety shield

W250.000.C W250.000.E

HW INTERCHANGEABLE INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W254



- Replaceable carbide tips
- Patent pending # 129720
- These tools have been checked by the BIA



S Ø 8	S Ø 12	D	R
W254.190.C	W254.190.E	19	4,0/4,0
W254.B55 - Spare inserts		Pair	

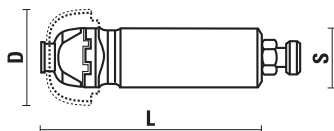
SPARE PARTS

1) Safety shield

W250.000.C W250.000.E

HW INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W261 - W262

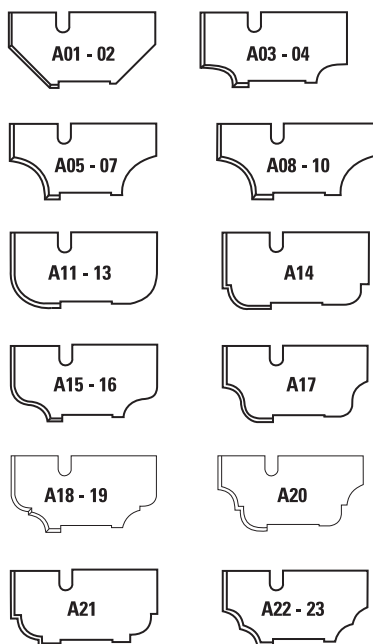


- Patented system
- HW standard knives
- Used on CNC router machines
- Additional knife profiles available on request

Item	D	L	S
W261.000.R only tool body	35÷38	92,5	20
W262.000.R only tool body	35÷38	92,5	25

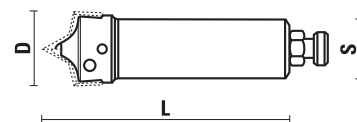
Add the requested knives

W200.A01	W206.A12
W200.A02	W208.A14
W201.A03	W209.A15
W201.A04	W209.A16
W202.A05	W210.A17
W202.A06	W211.A18
W203.A07	W212.A19
W204.A08	W213.A20
W204.A09	W214.A21
W205.A10	W215.A22
W206.A11	W216.A23



HW INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W260



- Patented system
- HW standard knives
- Used on CNC router machines
- Additional knife profiles available on request

Item	D	L	S
W260.000.R only tool body	29,5	82,5	20

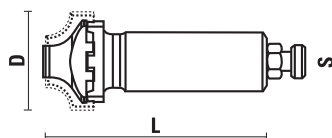
Add the requested knives

W250.B51
W251.B52
W252.B53
W253.B54
W254.B55



HW INSERT ROUTER BITS "NOVA SYSTEM" Z=2

ART. W263 - W264



- Patented system
- HW standard knives
- Used on CNC router machines
- Additional knife profiles available on request

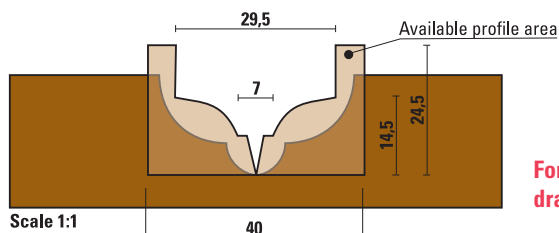
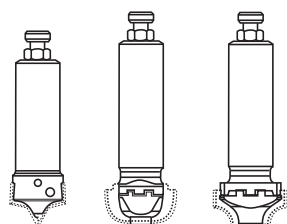
Item	D	L	S
W263.000.R only tool body	35÷38	92,5	20
W264.000.R only tool body	35÷38	92,5	25

Add the requested knives

W202.A05
W202.A06
W203.A07
W204.A08
W204.A09
W205.A10



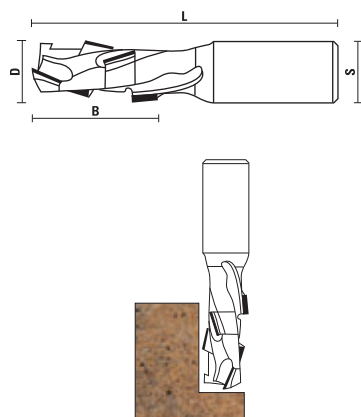
On the tool bodies W260 - W261 - W262 - W263 - W264 special profile knives on customer's drawing can fit



For special knives please provide drawing and quantity requested.

DP ROUTER BITS

ART. X500 - X501 - X502 - X503

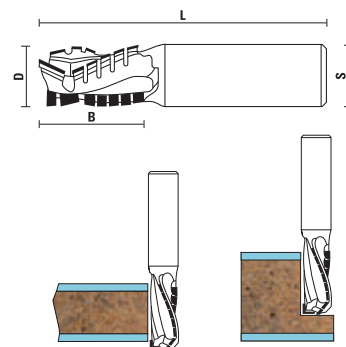


- 2/3 times regrindable
- HW plunging tip
- Recommended for grooving and routing solid hard wood, veneered and laminated MDF
- Used on CNC router machines

RH rotation	LH rotation	D	B	L	S	Z
X500.120.R		12	25	75	12x35	3+1
X500.121.R		12	34	85	12x35	4+1
X501.160.R		16	25	85	16x45	3+1
X501.161.R	X501.161.L	16	34	94	16x45	4+1
X501.180.R		18	25	85	16x45	3+1
X501.181.R	X501.181.L	18	34	94	16x45	4+1
X501.182.R		18	43	103	16x45	5+1
X502.180.R	X502.180.L	18	25	85	20x50	3+1
X502.181.R	X502.181.L	18	34	95	20x50	4+1
X502.182.R	X502.182.L	18	43	103	20x50	5+1
X502.200.R	X502.200.L	20	25	85	20x50	3+1
X502.201.R	X502.201.L	20	34	94	20x50	4+1
X502.202.R	X502.202.L	20	43	103	20x50	5+1
X502.203.R	X502.203.L	20	53	112	20x50	6+1
X503.160.R		16	25	85	25x55	3+1
X503.180.R		18	25	85	25x55	3+1
X503.181.R	X503.181.L	18	34	94	25x55	4+1
X503.182.R	X503.182.L	18	43	103	25x55	5+1
X503.203.R	X503.203.L	20	52	112	25x55	6+1

DP ROUTER BITS

ART. X505 - X506

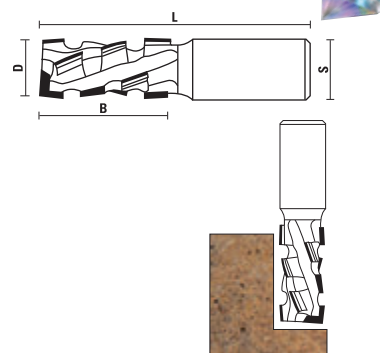


- DP plunging tip
- Recommended for grooving and routing veneered and double-sided laminated boards, also MDF
- Excellent finish on both sides of the workpiece thanks to the alternate shear angle
- Higher feed rate (max. 20.000 m/min)
- Used on CNC router machines

Item	D	B	L	S	Z	Nr. denti
X505.200.R	20	30	88	20x50	3+3	11
X505.201.R	20	35	95	20x50	3+3	13
X505.202.R	20	42	102	20x50	3+3	16
X505.250.R	25	30	88	20x50	3+3	11
X505.251.R	25	35	95	20x50	3+3	13
X505.252.R	25	45	102	20x50	3+3	17
X505.253.R	25	50	110	20x50	3+3	19
X506.200.R	20	30	88	25x50	3+3	11
X506.201.R	20	35	95	25x50	3+3	13
X506.202.R	20	42	102	25x50	3+3	16
X506.250.R	25	30	88	25x50	3+3	11
X506.251.R	25	35	95	25x50	3+3	13
X506.252.R	25	45	102	25x50	3+3	17
X506.253.R	25	50	110	25x50	3+3	19

DP ROUTER BITS

ART. X508 - X509

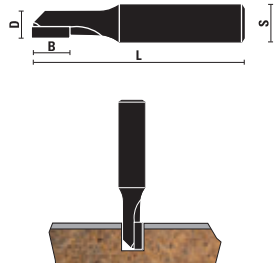


- HW plunging tip
- Used on CNC router machines
- Recommended for grooving and routing solid hard wood, veneered and laminated MDF
- Double number of DP tips compared with items X501÷X503

RH rotation	LH rotation	D	B	L	S	Z
X508.160.R NEW		16	25	85	16x45	6+1
X508.161.R NEW	X508.161.L NEW	16	34	94	16x45	8+1
X508.180.R NEW		18	25	85	16x45	6+1
X508.181.R NEW	X508.181.L NEW	18	34	94	16x45	8+1
X508.182.R NEW		18	43	103	16x45	10+1
X509.180.R NEW	X509.180.L NEW	18	25	85	20x50	6+1
X509.181.R NEW	X509.181.L NEW	18	34	95	20x50	8+1
X509.182.R NEW	X509.182.L NEW	18	43	103	20x50	10+1
X509.200.R NEW	X509.200.L NEW	20	25	85	20x50	6+1
X509.201.R NEW	X509.201.L NEW	20	34	94	20x50	8+1
X509.202.R NEW	X509.202.L NEW	20	43	103	20x50	10+1
X509.203.R NEW	X509.203.L NEW	20	53	112	20x50	12+1

DP ROUTER BITS Z=1

ART. X510

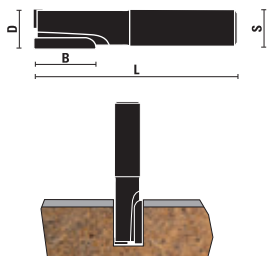


- Right hand rotation
- Solid carbide tool body
- **2/3 times regrindable**
- For cutting and boring on panels of composite materials with lacquered or veneered surfaces

Item	D	B	L	S
X510.040.R	4	10	60	12x35
X510.050.R	5	10	60	12x35
X510.060.R	6	10	60	12x35
X510.080.R	8	15	60	12x35
X510.100.R	10	15	60	12x35

DP ROUTER BITS Z=2

ART. X512

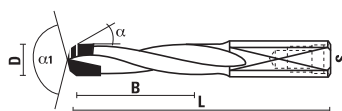


- Right hand rotation
- Solid carbide tool body (only Ø8 - Ø10 - Ø12)
- **2/3 times regrindable**
- For cutting and boring on panels of composite materials with lacquered or veneered surfaces

Item	D	B	L	S
X512.080.R	8	15	60	12x35
X512.100.R	10	15	60	12x35
X512.120.R	12	25	70	12x35
X512.160.R	16	35	80	16x40

DP DOWEL DRILLS

ART. X530 - X531

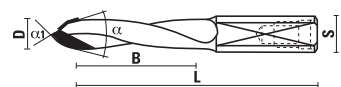


- Shank with flat and screw
- Suitable for drilling very abrasive materials
- Used on CNC router machines

RH rotation	LH rotation	D	B	L	S	Z
X530.050.R	X530.050.L	5	27	57,5	10x26	2
X530.060.R	X530.060.L	6	27	57,5	10x26	2
X530.080.R	X530.080.L	8	27	57,5	10x26	2
X531.050.R	X531.050.L	5	35	70	10x30	2
X531.080.R	X531.080.L	8	35	70	10x30	2

DP THROUGH-HOLE DRILL BITS

ART. X532 - X533

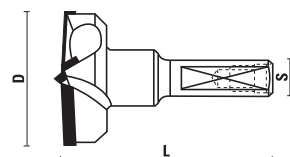


- Shank with flat and screw
- Suitable for drilling very abrasive materials
- Used on CNC router machines

RH rotation	LH rotation	D	B	L	S	Z
X532.050.R	X532.050.L	5	27	57,5	10x26	1
X533.050.R	X533.050.L	5	35	70	10x26	1
X533.060.R	X533.060.L	6	35	70	10x26	2
X533.080.R	X533.080.L	8	35	70	10x26	2

DP HINGE BORING BITS

ART. X540 - X541

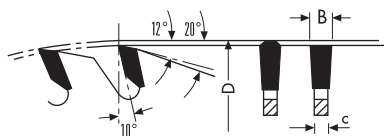


- Shank with flat and screw
- **HW centerpoint**
- Suitable for drilling very abrasive materials
- Used on CNC router machines

RH rotation	LH rotation	D	L	S	Z
X540.150.R	X540.150.L	15	56	10x26	2+2
X540.160.R	X540.160.L	16	56	10x26	2+2
X540.180.R	X540.180.L	18	56	10x26	2+2
X540.200.R	X540.200.L	20	56	10x26	2+2
X540.250.R	X540.250.L	25	56	10x26	2+2
X540.260.R	X540.260.L	26	56	10x26	2+2
X540.300.R	X540.300.L	30	56	10x26	2+2
X540.350.R	X540.350.L	35	56	10x26	2+2
X540.400.R	X540.400.L	40	56	10x26	2+2
X541.150.R	X541.150.L	15	70	10x26	2+2
X541.200.R	X541.200.L	20	70	10x26	2+2
X541.250.R	X541.250.L	25	70	10x26	2+2
X541.350.R	X541.350.L	35	70	10x26	2+2

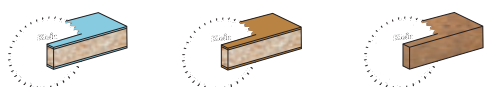
DP SAWBLADES

ART. XFC



- (FZ/TR) DP triple chip teeth
- For cutting along and across grain of **softwoods, hardwood and exotic timber, double-side veneer laminate boards, MDF and plywood**
- Tooth height H= 4 mm

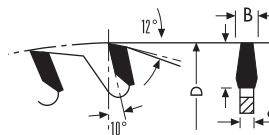
Pin holes: PH02= 2/7/42 + 2/9,5/46,5 + 2/10/60



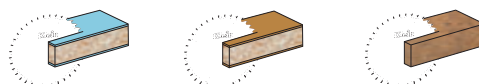
Item	D	d	B/c	Z	Pin holes
XFC250.04830 NEW	250	30	3,2/2,2	48	PH02
XFC250.06030 NEW	250	30	3,2/2,2	60	PH02
XFC300.06030 NEW	300	30	3,2/2,2	60	PH02
XFC300.07230 NEW	300	30	3,2/2,2	72	PH02
XFC350.07230 NEW	350	30	3,5/2,5	72	PH02
XFC350.08430 NEW	350	30	3,5/2,5	84	PH02
XFC350.09630 NEW	350	30	3,5/2,5	96	PH02

DP CONICAL SCORING SAWBLADES

ART. XFI



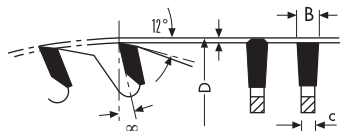
- (KON/FZ) DP conical teeth
- For cutting along and across grain of **softwoods, hardwood and exotic timber, double-side veneer laminate boards, MDF and plywood**
- Tooth height H= 2,5 mm



Item	D	d	B/c	Z	Pin holes
XFI120.02020 NEW	120	20	3,1-3,7/2,2	20	
XFI120.02022 NEW	120	22	3,1-3,7/2,2	20	
XFI125.01020 NEW	125	20	2,8-3,4/2,2	10+10	
XFI125.01022 NEW	125	22	2,8-3,4/2,2	10+10	
XFI125.02420 NEW	125	20	3,1-3,7/2,2	20	
XFI125.02422 NEW	125	22	3,1-3,7/2,2	20	
XFI160.03645 NEW	160	45	4,4-5,0/3,2	36	Giben
XFI160.03655 NEW	160	55	4,4-5,0/3,2	36	Gabbiani
XFI180.03620 NEW	180	20	4,4-5,0/3,2	36	
XFI180.03645 NEW	180	45	4,4-5,0/3,2	36	Holzma
XFI180.04450 NEW	180	50	4,4-5,0/3,2	44	Giben
XFI181.03645 NEW	180	45	4,8-5,6/3,5	36	Holzma
XFI182.03620 NEW	180	20	5,8-6,6/4,0	36	Anthon
XFI200.03620 NEW	200	20	4,4-5,0/3,2	36	
XFI200.03630 NEW	200	30	4,4-5,0/3,2	36	
XFI200.03645 NEW	200	45	4,4-5,0/3,2	36	Holzma
XFI200.03665 NEW	200	65	4,4-5,0/3,2	36	Selco
XFI201.03645 NEW	200	45	4,8-5,6/3,5	36	Holzma
XFI201.03665 NEW	200	65	4,8-5,6/3,5	36	Selco
XFI202.03620 NEW	200	20	5,0-5,8/3,5	36	Schelling
XFI203.03645 NEW	200	45	5,8-6,6/4,0	36	Holzma
XFI215.04250 NEW	215	50	4,4-5,0/3,2	42	Giben

DP PANEL SIZING SAWBLADES

ART. XHC



- (FZ/TR) DP triple chip teeth
- For cutting along and across grain of **softwoods, hardwood and exotic timber, double-side veneer laminate boards, MDF and plywood**
- Tooth height **H= 4 mm** (can be produced also with H= 5/6 mm)

Pin holes:

PH01= 2/7/42 + 2/9,5/46,5 + 2/10/60

PH04= 2/14/110 + 2/7/110 + 4/9/100 + 4/19/120 + 2/9/130 (Selco-Gabbani-SCM)

PH05= 4/15/105 + 3/7/100 (Giben-Homag-MacMazza)

Item	D	d	B/c	Z	Pin holes
XHC300.06030 NEW	300	30	4,4/3,2	60	PH01
XHC300.06065 NEW	300	65	4,4/3,2	60	Selco
XHC320.06050 NEW	320	50	4,4/3,2	60	Giben
XHC320.06065 NEW	320	65	4,4/3,2	60	Selco
XHC330.06050 NEW	330	50	4,4/3,2	60	Giben
XHC350.07230 NEW	350	30	4,4/3,2	72	PH01
XHC350.07250 NEW	350	50	4,4/3,2	72	Giben
XHC350.07260 NEW	350	60	4,4/3,2	72	Holzma
XHC350.07265 NEW	350	65	4,4/3,2	72	Selco
XHC350.07275 NEW	350	75	4,4/3,2	72	PH05
XHC350.07280 NEW	350	80	4,4/3,2	72	PH04
XHC360.07250 NEW	360	50	4,4/3,2	72	Giben
XHC360.07265 NEW	360	65	4,4/3,2	72	Selco
XHC370.07230 NEW	370	30	4,4/3,2	72	PH01
XHC380.07260 NEW	380	60	4,8/3,5	72	Holzma
XHC400.07230 NEW	400	30	4,4/3,2	72	2/10/60
XHC400.07260 NEW	400	60	4,4/3,2	72	Anthon
XHC400.07275 NEW	400	75	4,4/3,2	72	Giben-Homag
XHC400.07280 NEW	400	80	4,4/3,2	72	PH04
XHC401.07260 NEW	400	60	4,8/3,5	72	Holzma
XHC420.07260 NEW	420	60	4,8/3,5	72	Holzma
XHC430.07275 NEW	430	75	4,8/3,5	72	Giben
XHC430.07280 NEW	430	80	4,8/3,5	72	PH04
XHC450.07230 NEW	450	30	4,8/3,5	72	Schelling
XHC450.07280 NEW	450	80	4,8/3,5	72	PH04
XHC451.07260 NEW	450	60	4,8/3,5	72	Holzma
XHC451.07280 NEW	450	80	4,8/3,5	72	PH04
XHC460.07230 NEW	460	30	4,4/3,2	72	Schelling
XHC470.07275 NEW	470	75	4,4/3,2	72	Giben
XHC480.07230 NEW	480	30	4,4/3,2	72	Schelling
XHC481.07260 NEW	480	60	4,8/3,5	72	Holzma
XHC481.07280 NEW	480	80	4,8/3,5	72	Selco
XHC500.07260 NEW	500	60	4,8/3,5	72	Holzma
XHC520.07260 NEW	520	60	4,8/3,5	60	Holzma