

ROUTER BITS FOR HAND PORTABLE ROUTER MACHINES S=Ø6 - S=Ø1/4" - S=Ø8



VHW STRAIGHT BITS
Pag. 1.07



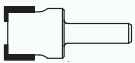
VHW STRAIGHT BITS
Pag. 1.07



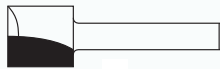
VHW DOUBLE FLUSH TRIMMING BITS
Pag. 1.08



HW MORTISING PILOT BITS Z=2
Pag. 1.08



HW HINGE MORTISING BITS Z=2
Pag. 1.08



HW PLUNGE TYPE STRAIGHT BITS Z=2+1
Pag. 1.08



SOLID CARBIDE SPIRAL CUTTERS, UPCUT
FINISH STYLE Z=2
Pag. 1.09



SOLID CARBIDE SPIRAL CUTTERS,
DOWNCUT FINISH STYLE Z=2
Pag. 1.09



SOLID CARBIDE SPIRAL CUTTERS,
FINISH STYLE Z=2
Pag. 1.09



SOLID CARBIDE COMPRESSION
CUTTERS Z=2+2
Pag. 1.09



SOLID CARBIDE COMPRESSION CUTTERS
Z=2+2 WITH DOUBLE BALL BEARING
Pag. 1.09



HW PANEL PILOT BITS Z=1+1
Pag. 1.10



HW DOUBLE PANEL PILOT BITS
Pag. 1.10



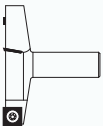
HW BEVEL TRIM BITS Z=2
Pag. 1.10



HW BEVEL TRIM BITS Z=2
Pag. 1.10



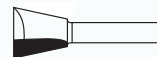
HW ROUTER BITS FOR
PLANING AND RABBETING Z=4
Pag. 1.10



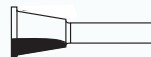
HW INSERT ROUTER BITS FOR
PLANING AND RABBETING Z=3
Pag. 1.10



VHW DOVETAIL BITS Z=2
Pag. 1.10



HW DOVETAIL BITS Z=2
Pag. 1.11



HW DOVETAIL BITS Z=2
Pag. 1.11



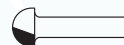
HW V-GROOVE AND
SIGNMAKING BITS
Pag. 1.11



VHW V-GROOVE AND
SIGNMAKING BITS Z=1
Pag. 1.11



VHW U-GROOVE AND SIGNMAKING BITS
Pag. 1.12



HW CORE BOX BITS Z=2
Pag. 1.12



HW PLUNGING ROUND-OVER BITS Z=2
Pag. 1.12



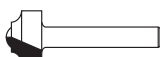
HW PLUNGING ROUND-OVER BITS Z=2
Pag. 1.12



HW PLUNGE TYPE OGEE BITS Z=2
Pag. 1.12



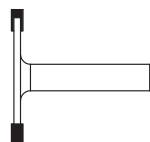
HW PLUNGE TYPE TRADITIONAL
BITS Z=2
Pag. 1.12



HW PLUNGE TYPE CLASSICAL BITS Z=2
Pag. 1.12



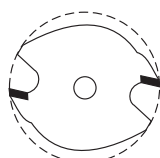
HW BULL NOSE RADIUS BITS Z=2
Pag. 1.13



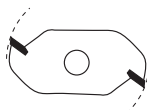
T-SLOT HW CUTTERS Z=4
Pag. 1.13



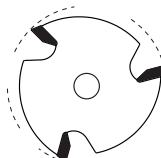
SLOT CUTTER ARBORS
Pag. 1.13



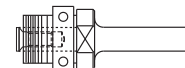
HW SLOT CUTTERS Z=2
Page 1.13



HW SLOT CUTTERS Z=2
Page 1.13



HW SLOT CUTTERS Z=3
Page 1.13



SLOT CUTTER ARBORS
Page 1.14



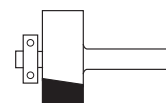
HW SLOT CUTTERS SPECIAL
FIXING SCREW Z=3
Page 1.14



HW TRIMMING BITS
WITH BALL BEARING Z=2
Page 1.14



HW TRIMMING BITS
WITH BALL BEARING Z=2
Page 1.15



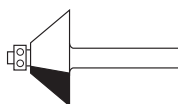
HW RABBETTING BITS
WITH BALL BEARING Z=2
Page 1.15



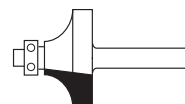
HW RABBETTING BITS WITH
BALL BEARING Z=2
Page 1.15



HW BEVEL TRIM BITS
WITH BALL BEARING Z=2
Page 1.15



HW BEVEL TRIM BIT WITH
BALL BEARING GUIDE
Page 1.15



HW CORNER ROUNDING BITS
WITH BALL BEARING Z=2
Page 1.16



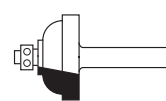
HW CORNER ROUNDING BITS WITH
DELRIN® BALL BEARING Z=2
Page 1.16



HW BEADING BITS
WITH BALL BEARING GUIDE Z=2
Page 1.16



HW COVER BITS
WITH BALL BEARING GUIDE Z=2
Page 1.16



HW DOUBLE FILLET COVE BITS
WITH BALL BEARING GUIDE Z=2
Page 1.17



HW ROMAN OGEE BITS
WITH BALL BEARING GUIDE Z=2
Page 1.17



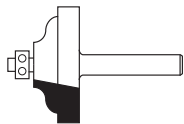
HW DOUBLE ROMAN OGEE BITS Z=2
Page 1.17



HW OGEE BITS
WITH BALL BEARING GUIDE Z=2
Page 1.17



HW OGEE BITS
WITH BALL BEARING GUIDE Z=2
Page 1.17



HW OGEE BITS
WITH BALL BEARING GUIDE Z=2
Page 1.18



HW CLASSICAL Moulding BITS
WITH BALL BEARING GUIDE Z=2
Page 1.18



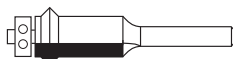
HW CORNER BEADING BITS
WITH BALL BEARING GUIDE Z=2
Page 1.18



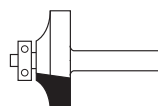
HW EDGE-FLUTING BITS
WITH BALL BEARING GUIDE Z=2
Page 1.18



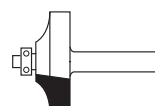
HW MULTI-BEADING BITS
WITH BALL BEARING GUIDE Z=2
Page 1.18



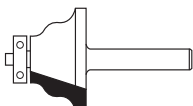
HW FLUSH-TRIM 'V' GROOVE BITS WITH
BALL BEARING GUIDE Z=2
Page 1.19



HW FLAT ROUNDING OVER BITS
WITH BALL BEARING GUIDE Z=2
Page 1.19



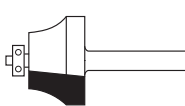
HW FLAT ROUNDING OVER BITS
WITH BALL BEARING GUIDE Z=2
Page 1.19



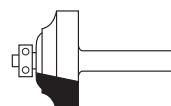
HW PROFILE BITS
WITH BALL BEARING GUIDE
Page 1.19



HW FLAT OGEE BITS WITH
BALL BEARING GUIDE Z=2
Page 1.19



HW OVULO JOINT BITS WITH
BALL BEARING GUIDE Z=2
Page 1.19



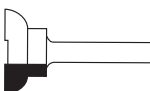
HW OGEE BITS
WITH BALL BEARING GUIDE Z=2
Page 1.20



HW PANEL PILOT BITS WITH
BALL BEARING GUIDE Z=1
Page 1.20



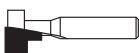
HW FLUSH AND BEVEL TRIM BITS Z=2
Page 1.20



HW FINGER GRIP BITS Z=2
Page 1.20



HW FLUSH AND BEVEL TRIM BITS
WITH BALL BEARING GUIDE Z=2
Page 1.20



HW KEYHOLE BITS (T-SLOT)
Page 1.20



HW CONVEX EDGING BITS Z=2
Page 1.20



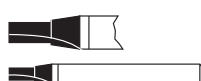
HW DRAWER LOCK BITS Z=2
Page 1.21



HW SEAL PROFILE BITS Z=2
Page 1.21



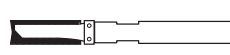
HW DOVETAIL SEAL BITS Z=2
Page 1.21



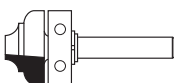
HW SEAL BITS Z=2
Page 1.21



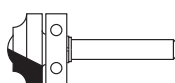
HW FLUSH TRIM BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 1.21



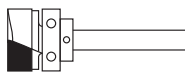
HW 'MINI' FLUSH TRIM BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 1.21



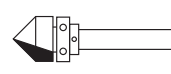
HW FLUSH TRIM BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 1.22



HW FLUSH TRIM BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 1.22



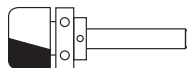
HW FLUSH TRIM BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 1.22



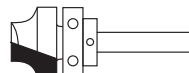
HW GROOVE BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 1.22



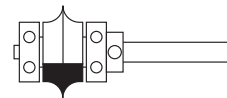
HW CORE BOX BITS WITH UPPER BALL
BEARING GUIDE Z=2
Page 1.22



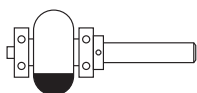
HW BOWL AND TRAY BITS WITH
UPPER BALL BEARING Z=2
Page 1.22



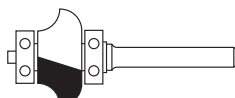
HW FLUSH TRIM BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 1.23



HW "LEAF-EDGE" BEADING BITS WITH
DOUBLE BALL BEARING GUIDE Z=2
Page 1.23



HW "EDGE-FLUTING" BITS WITH
DOUBLE BALL BEARING GUIDE Z=2
Page 1.23



HW RADIUS BITS WITH DOUBLE
BALL BEARING GUIDE Z=2
Page 1.23



HW DOUBLE DIAMETER BITS Z=2
Page 1.23



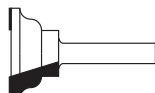
HW DOUBLE RADIUS BITS Z=2
Page 1.24



HW DOUBLE RADIUS BITS Z=2
Page 1.24



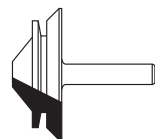
HW DOUBLE RADIUS BITS Z=2
Page 1.24



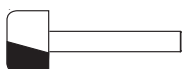
HW DOUBLE RADIUS BITS Z=2
Page 1.24



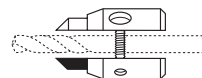
HW MULTI RADIUS BITS Z=2
Page 1.24



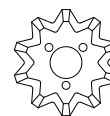
HW 45 DEGREE LOCK MITRE
JOINT BITS Z=2
Page 1.24



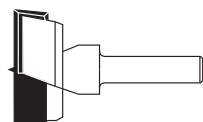
HW BOWL AND TRAY BITS Z=2
Page 1.24



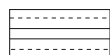
HW ADJUSTABLE COUNTERSINKS Z=2
Page 1.25



HS FLUSH TRIMMERS FOR TABLE
EDGE BANDING MACHINES
Page 1.25



HW BORING BITS
Page 1.25



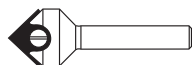
BUSHINGS
Page 1.25



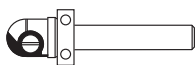
SPACERS
Page 1.25



HW INSERT FLUSH TRIMMING BITS
Z=1
Page 1.26



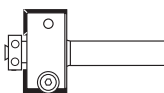
HW INSERT V-GROOVING BITS Z=1
Page 1.26



HW INSERT CORE BOX BITS
WITH UPPER BALL BEARING Z=1
Page 1.26



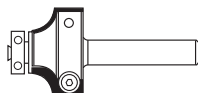
HW INSERT FLUSH TRIMMING BITS
WITH BALL BEARING
Page 1.26



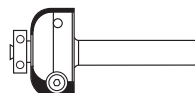
HW INSERT RABBET BITS
WITH BALL BEARING Z=2
Page 1.26



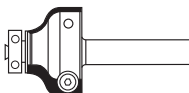
HW INSERT FLUSH TRIMMING BITS
WITH BALL BEARING Z=2
Page 1.26



HW INSERT CORNER ROUNDING BITS
WITH BALL BEARING Z=2
Page 1.27



HW INSERT COVER BITS
WITH BALL BEARING Z=2
Page 1.27



HW INSERT OGEE BITS WITH
BALL BEARING Z=2
Page 1.27



HW INSERT FLUSH TRIMMING BITS Z=2
Pag. 1.27



HW INSERT FLUSH TRIMMING BITS Z=2
Pag. 1.27



HW INSERT FLUSH TRIMMING BITS WITH
UPPER ANF LOWER BALL BEARINGS Z=2
Pag. 1.27



6 PIECE STRAIGHT-DOVETAIL INSERT
ROUTER BITS "STARTER SET"
Page 1.28



6 PIECE PROFILE ROUTER
BITS "STARTER SET"
Page 1.28



6 PIECE STRAIGHT BITS
"STARTER SET"
Page 1.29



6 PIECE CORNER ROUNDING
BITS "STARTER SET"
Page 1.29



6 PIECE DOVETAIL BITS
"STARTER SET"
Page 1.30



12 PIECE CLASSICAL ROUTER BITS
"STARTER SET"
Page 1.31



12 PIECE STRAIGHT ROUTER
BITS "ADVANCED SET"
Page 1.32



12 PIECE PROFILE ROUTER BITS
"ADVANCED SET"
Page 1.33



12 PIECE DOVETAIL BITS
"ADVANCED SET"
Page 1.34



12 PIECE CORNER ROUNDING
BITS "ADVANCED SET"
Page 1.35



6 PIECE INSERT ROUTER BITS "SET"
Page 1.36



6 PIECE INSERT ROUTER BITS "SET"
Page 1.36



DISPLAYS
Page 1.37

ROUTER BITS FOR PORTABLE ROUTERS

The router bits KLEIN® are high quality products which can satisfy the most important applications required by the market today. In order to maintain the high quality level achieved during these years, our production departments have been continually equipped with latest technology and machinery along with more versatile and modern management systems. Moreover we always put a constant attention in the choice of raw materials, such as the development of a special TCT in collaboration with our suppliers, which allow our straight router bits KLEIN® to be at the top of the market for performance, precision and cutting life, ensuring excellent results and even better than our competitors'. An important aspect is also the wideness and variety of our range of router bits. In the catalogue KLEIN®, in fact, there are more than a thousand different items which meet any particular requirements, whether in the industrial or handcrafted manufacture.



ANTI-STICK INDUSTRIAL BURNISHED COATING which ensures protection against rust, corrosion and build-up

TRI-METAL BRAZING OPERATION (alloy+copper+alloy) for best performance and maximum resistance to stress

CERTIFIED INDUSTRIAL CARBIDE to guarantee longer lifetime, sharp cutting edge and best finishing

SHEAR-ANGLE especially designed to obtain smoother cuts compared to competitors

ANTI-KICKBACK DESIGN that reduces the problem of the initial kickback of the piece of wood, ensuring maximum safety

LASER MARKING as a guarantee of the operator, a number of specifications are marked on the cutter shank

QUALITY CONTROL

At Klein in order to best ensure the performance and sharpness of each product, we use both a manual and camera Presetter inspection process to minimize the margin of error and ensure technical specifications.



THE PACKAGING

Eco-friendly packaging with 100% recyclable plastic and paper. The internal card displays technical drawing, features and more



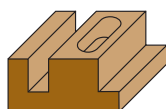
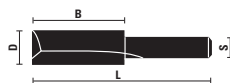
MAINTENANCE

A correct cutter care is essential in order to preserve cutter performance and prolong its life. Keeping in mind our advices will guarantee the maximum tool protection, increasing its productive efficiency. Read and download our guide online here



VHW STRAIGHT BITS

ART. A101/2/3 - B101/2/3 - C101/2/3



- Solid carbide
- Straight cut and plunging (Z=2+1)
- To be used also for working plastic materials, acrylic, polypropylene, acetates and polycarbonates



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	L	Z
A101.015.R			1,5	4	46	2+1
A101.020.R	B101.020.R		2	4	46	2+1
	B101.024.R		2,4	6	46	2+1
A101.025.R			2,5	8	48	2+1
A101.030.R	B101.030.R	C101.030.R	3	11	51	2+1
	B101.032.R		3,2	11	51	2+1
A101.040.R	B101.040.R	C101.040.R	4	11	51	2+1
	B101.048.R		4,8	11	51	2+1
A101.050.R		C101.050.R	5	11	51	2+1
A101.060.R	B101.060.R	C101.060.R	6	19	51	2+1
	B101.064.R		6,4	19	51	2+1
A101.070.R	B101.070.R	C101.070.R	7	19	51	2+1
A101.080.R	B101.080.R	C101.080.R	8	19	51	2+1
	B102.048.R		4,8	16	55	2+1
A102.050.R		C102.050.R	5	16	55	2+1
A102.060.R	B102.060.R	C102.060.R	6	25	57	2+1
	B102.064.R		6,4	25	57	2+1
A102.080.R	B102.080.R	C102.080.R	8	25	57	2+1
A103.080.R	B103.080.R	C103.080.R	8	32	63	2+1

Z=2+1

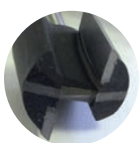
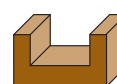
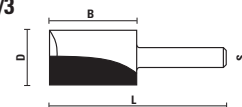


Table for the choice of straight router bits

Items	Soft wood	Hard wood	Composite
A/B/C 101-102 VHW	XXX	XXX	XXX
A/B/C 101-102 HW brazed	XX	XXX	XXX

HW STRAIGHT BITS

ART. A101/2/3 - B101/2/3 - C101/2/3



- Straight cut
- Z=2+1 also plunging

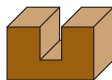


S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	L	Z
A101.090.R		C101.090.R	9	19	51	2
	B101.095.R		9,5	19	51	2
A101.100.R	B101.100.R	C101.100.R	10	19	51	2
A101.101.R		C101.101.R	10	19	51	2+1
A101.110.R	B101.110.R	C101.110.R	11	19	51	2
A101.120.R	B101.120.R	C101.120.R	12	19	51	2
A101.121.R		C101.121.R	12	19	51	2+1
	B101.127.R		12,7	19	51	2
A101.130.R		C101.130.R	13	19	51	2
A101.140.R	B101.140.R	C101.140.R	14	19	51	2
A101.141.R		C101.141.R	14	19	51	2+1
A101.150.R	B101.150.R	C101.150.R	15	19	51	2
A101.160.R	B101.160.R	C101.160.R	16	19	51	2
A101.161.R		C101.161.R	16	19	51	2+1
A101.170.R		C101.170.R	17	19	51	2
A101.180.R	B101.180.R	C101.180.R	18	19	51	2
A101.181.R		C101.181.R	18	19	51	2+1
A101.190.R	B101.190.R	C101.190.R	19	19	51	2
	C101.191.R		19	19	51	2+1
A101.200.R	B101.200.R	C101.200.R	20	19	51	2
A101.201.R		C101.201.R	20	19	51	2+1
A101.210.R		C101.210.R	21	19	51	2
A101.220.R	B101.220.R	C101.220.R	22	19	51	2
A101.221.R		C101.221.R	22	19	51	2+1
		C101.240.R	24	19	51	2
A101.250.R		C101.250.R	25	19	51	2
	B101.254.R		25,4	19	51	2
	B102.095.R		9,5	25	57	2
A102.100.R	B102.100.R	C102.100.R	10	25	57	2
A102.101.R		C102.101.R	10	25	57	2+1
A102.120.R	B102.120.R	C102.120.R	12	25	57	2
A102.121.R		C102.121.R	12	25	57	2+1
	B102.127.R		12,7	25	57	2
		C102.140.R	14	25	57	2
A102.160.R	B102.160.R	C102.160.R	16	25	57	2
A102.161.R		C102.161.R	16	25	57	2+1
	B103.095.R		9,5	32	63	2
A103.100.R	B103.100.R	C103.100.R	10	32	63	2
A103.120.R	B103.120.R	C103.120.R	12	32	63	2
	B103.127.R		12,7	32	63	2
A103.150.R			15	32	63	2
A103.160.R	B103.160.R	C103.160.R	16	32	63	2

Straight bits sets in wooden case see page 1.28 and 1.31

VHW DOUBLE FLUSH TRIMMING BITS

ART. A101

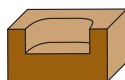
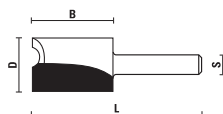


Solid carbide

S Ø 6	D	B	L	Z
A101.031.R	3	11	65	2+1

HW MORTISING PILOT BITS Z=2

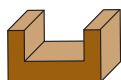
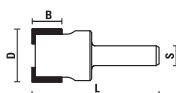
ART. A104 - B104 - C104



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	L
A104.127.R	B104.127.R	C104.127.R	12,7	19	51
A104.160.R	B104.160.R	C104.160.R	16	19	51
A104.190.R	B104.190.R	C104.190.R	19	19	51

HW HINGE MORTISING BITS Z=2

ART. A104



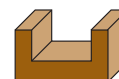
Suitable for routing lateral shallow recesses such as hinge leaves or general large shallow cuts, thanks to the shorter length. Especially made with lateral slots for better chip evacuation.



S Ø 6	D	B	L
A104.580.R	8	9	37
A104.600.R	10	9	37
A104.620.R	12	9	37
A104.630.R	13	9	37
A104.640.R	14	9	37
A104.650.R	15	9	37
A104.660.R	16	9	37
A104.670.R	17	9	37
A104.680.R	18	9	37
A104.700.R	20	9	37
A104.710.R	21	9	37
A104.720.R	22	9	37
A104.730.R	23	9	37
A104.740.R	24	9	37
A104.750.R	25	9	37
A104.800.R	30	9	37

HW PLUNGE TYPE STRAIGHT BITS Z=2+1

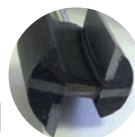
ART. C190



- Straight cut
- Z=2+1 also plunging

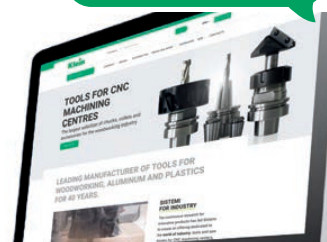
S Ø 8	D	B	L	Z
C190.030.R ▲	3	10	55	2+1
C190.040.R ▲	4	12	55	2+1
C190.050.R ▲	5	14	55	2+1
C190.060.R ▲	6	16	55	2+1
C190.070.R ▲	7	18	55	2+1
C190.080.R ▲	8	20	55	2+1
C190.081.R ▲	8	40	90	2+1
C190.090.R ▲	9	20	55	2+1
C190.100.R ▲	10	20	55	2+1
C190.101.R	10	30	70	2+1
C190.102.R	10	40	90	2+1
C190.120.R	12	20	60	2+1
C190.121.R	12	20	100	2+1
C190.122.R	12	30	70	2+1
C190.123.R	12	40	90	2+1
C190.140.R	14	20	60	2+1
C190.141.R	14	20	100	2+1
C190.142.R	14	40	90	2+1
C190.150.R	15	20	70	2+1
C190.160.R	16	20	70	2+1
C190.161.R	16	20	100	2+1
C190.162.R	16	40	90	2+1
C190.163.R	16	30	70	2+1
C190.180.R	18	20	70	2+1
C190.181.R	18	30	70	2+1
C190.182.R	18	40	90	2+1
C190.200.R	20	20	70	2+1
C190.201.R	20	20	100	2+1
C190.202.R	20	30	70	2+1
C190.203.R	20	40	90	2+1
C190.220.R	22	16	70	2+1
C190.221.R	22	20	100	2+1
C190.222.R	22	30	70	2+1
C190.223.R	22	40	90	2+1
C190.240.R	24	16	70	2+1
C190.241.R	24	30	70	2+1
C190.250.R	25	16	70	2+1

▲ Solid Carbide

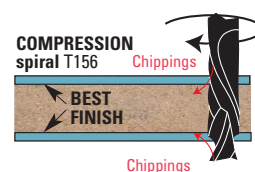
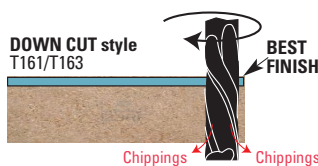
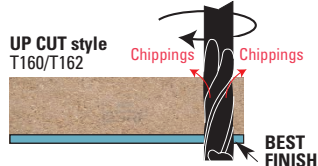


Z=2+1

VISIT OUR WEBSITE
www.sistemiklein.com

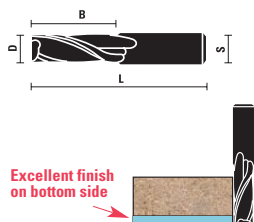


HW SOLID CARBIDE SPIRAL CUTTER FOR PORTABLE AND CNC ROUTERS



SOLID CARBIDE SPIRAL CUTTERS, UPCUT FINISH STYLE Z=2

ART. T160 - T162



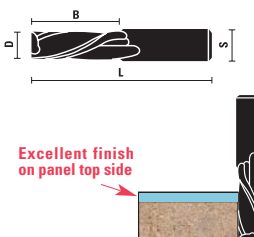
- Can also be used on portable routers
- Right-hand rotation with "UP CUT SPIRAL"



S Ø 6	S Ø 8	D	B	L	Z
T160.030.R	T162.030.R	3	12	60	2
T160.035.R		3,5	14	60	2
T160.040.R	T162.040.R	4	14	60	2
T160.045.R		4,5	16	60	2
T160.050.R	T162.050.R	5	17	60	2
	T162.060.R	6	22	70	2
	T162.070.R	7	32	80	2

SOLID CARBIDE SPIRAL CUTTERS, DOWNCUT FINISH STYLE Z=2

ART. T161 - T163

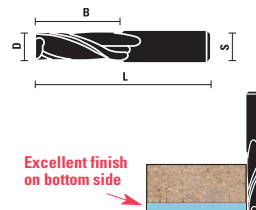


- Can also be used on portable routers
- Right-hand rotation with "DOWN CUT SPIRAL"



S Ø 6	S Ø 8	D	B	L	Z
T161.030.R	T163.030.R	3	12	60	2
T161.035.R		3,5	14	60	2
T161.040.R	T163.040.R	4	14	60	2
T161.045.R		4,5	16	60	2
T161.050.R	T163.050.R	5	17	60	2
	T163.060.R	6	22	70	2
	T163.070.R	7	32	80	2

SOLID CARBIDE SPIRAL CUTTERS, FINISH STYLE Z=2 ART. T164

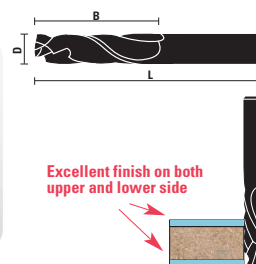


- Can also be used on portable routers
- Right-hand rotation with "UP CUT SPIRAL"

RH rotation	D	B	L	S	Z
T164.032.R	1/8"	1/2"	2"	1/4"	2
T164.048.R	3/16"	3/4"	2"	1/4"	2

SOLID CARBIDE COMPRESSION CUTTERS Z=2+2

ART. T156



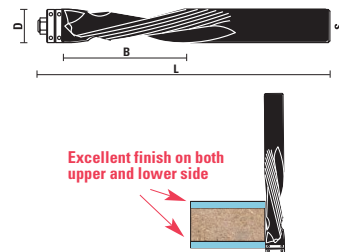
- Right-hand rotation with double flute, compression spiral
- To be used on machining centres, CNC routers and point to point machines



S Ø 8	D	B	L	Z
T156.080.R	8	22	80	2+2
T156.081.R	8	32	80	2+2

SOLID CARBIDE COMPRESSION CUTTERS Z=2+2 WITH DOUBLE BALL BEARING

ART. T166



- Right-hand rotation with double flute compression spiral (UP & DOWN).
- Double ball bearings guide for greater precision of trimming
- Special spiral geometry which provides better chip evacuation and smoother cuts on laminate panels.



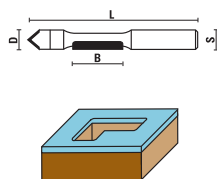
S Ø 8	D	B	L	Z
T166.080.R NEW	8	36	95	2+2



Z050.032.N

HW PANEL PILOT BITS Z=1+1

ART. A105 - B105 - C105



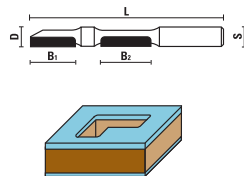
Ideal for working laminated panels

S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	L
A105.060.R ▲			6	19	63
A105.064.R	B105.064.R	C105.064.R	6,4	19	63
		C105.080.R	8	19	63

▲ Solid carbide

HW DOUBLE PANEL PILOT BITS

ART. A106 - C106

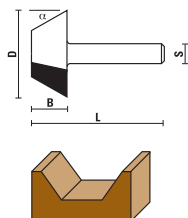


Ideal for working laminated panels top and bottom side

S Ø 6	S Ø 8	D	B1	B2	L
A106.060.R	C106.060.R	6	18	18	75

HW BEVEL TRIM BITS Z=2

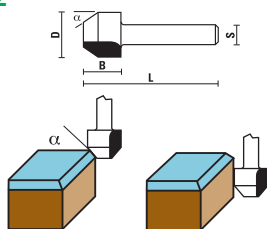
ART. A107 - B107 - C107



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	α	B	L
A107.127.R	B107.127.R		12,7	15°	13	51
A107.143.R	B107.143.R		14,3	10°	16	45
A107.222.R	B107.222.R	C107.222.R	22,2	23°	10	38
A107.254.R	B107.254.R	C107.254.R	25,4	30°	10	38
A107.350.R	B107.350.R	C107.350.R	35	45°	10	38

HW BEVEL TRIM BITS Z=2

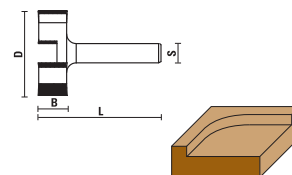
ART. A107 - B107 - C107



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	α	B	L
A107.030.R	B107.030.R	C107.030.R	12,7	30°	12,7	41
A107.045.R	B107.045.R	C107.045.R	12,7	45°	12,7	41

HW ROUTER BITS FOR PLANING AND RABBETING Z=4

ART. C175

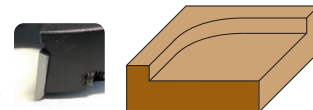
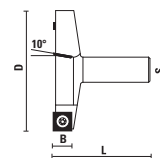


Used for surfacing MDF and particle board and making deep rabbet

S Ø 8	D	B	L	Z
C175.350.R NEW	35	12	51	4

HW INSERT ROUTER BITS FOR PLANING AND RABBETING Z=3

ART. WC190



10° shear angle

- Used for surfacing MDF and particle board and making deep rabbet
- 10° shear angle for better performance
- Suitable for processing ever kind of wood with portable router and CNC
- This item is sold complete with a torx key



S Ø 8	D	B	L	Z
WC190.350.R NEW	35	10,5	60	3



Z051.210.R



Z055.016.N



Z052.201.N

VHW DOVETAIL BITS Z=2

ART. A108 - C108



- To use for joints "Hoffmann" system.
- For frames, matchboards, drawers, window and door frames, pallets and wood products in general

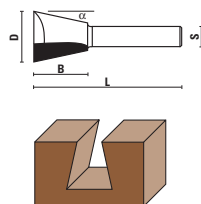
S Ø 6	S Ø 8	D	α	B	L	Nr.
A108.053.R ▲		5,3	17°	4	43	1
A108.078.R ▲		7,8	18°	6	43	2
A108.093.R ▲		9,3	19°	7,5	43	3
	C108.161.R	15,8	20°	13	43	4

▲ Solid carbide



HW DOVETAIL BITS Z=2

ART. A108 - B108 - C108



S Ø 6	S Ø 1/4" (6,35)	D	α	B	L
A108.064.R ▲	B108.064.R	6,4	7°	8	63
A108.080.R ▲	B108.080.R	8	9°	9,5	63
A108.095.R	B108.095.R	9,5	9°	9,5	42
A108.127.R	B108.127.R	12,7	14°	13	45
A108.150.R		15	12°	14,5	58
A108.160.R	B108.160.R	16	7°	16	45
A108.190.R	B108.190.R	19	7°	19	65

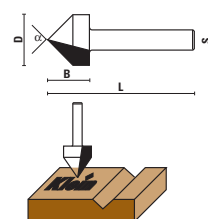
▲ Solid carbide



S Ø 8	D	α	B	L
C108.064.R	6,4	7°	8	44
C108.080.R	8	9°	9,5	42
C108.095.R	9,5	9°	9,5	47
C108.127.R	12,7	14°	13	49
C108.150.R	15	12°	14,5	61
C108.160.R	16	7°	16	49
C108.190.R	19	14°	19	55
C108.191.R	19	7°	19	60

HW V-GROOVE AND SIGNMAKING BITS

ART. A109 - B109 - C109 / A110 - B110 - C110



- Item A110.140.R (B110.140.R) C110.140.R are also known as "laser point" for superior incisions
- Suitable for engravings and sign writing with 60°

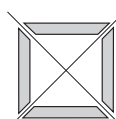


S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	α	B	L	Z
A109.060.R ▲		C109.060.R	6	90°	8	45	2
A109.095.R	B109.095.R	C109.095.R	9,5	90°	11	45	2
A109.127.R	B109.127.R	C109.127.R	12,7	90°	13	45	2
A109.160.R	B109.160.R	C109.160.R	16	90°	13	45	2
A109.190.R		C109.190.R	19	90°	16	45	2
A109.254.R	B109.254.R	C109.254.R	25,4	90°	19	48	2
		① C109.380.R	38	90°	20	63	2

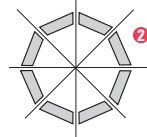
A110.127.R	B110.127.R	C110.127.R	12,7	60°	16	45	2
A110.140.R	B110.140.R	C110.140.R	14	60°	22	57	3
		② C110.190.R	19	45°	25	63	2

▲ Solid carbide

①-② Items for working plasterboard panels



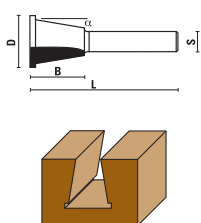
① Bit makes a 45° chamfer that can be used to build square share



② Bit makes a 22,5° chamfer that can be used to build a B-side box (to an octagonal)

HW DOVETAIL BITS Z=2

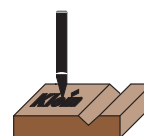
ART. A108 - B108 - C108



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	α	B	L
A108.143.R	B108.143.R	C108.143.R	14,3	13°	13,5	55

VHW V-GROOVE AND SIGNMAKING BITS Z=1

ART. A109 - B109



- Suitable for engraving, signmaking and decorative features on wood, plastic, brass, aluminium, copper and different composite material



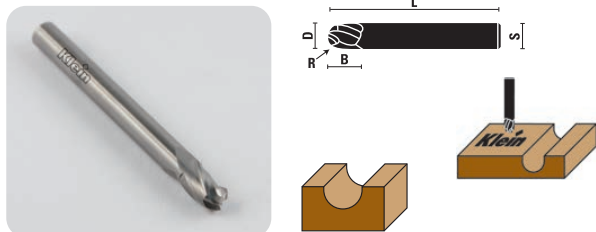
S Ø 6	S Ø 1/4" (6,35)	D	α	B	L	Z
A109.510.R	B109.510.R	0,1	30°	14	50	1
A109.525.R	B109.525.R	0,25	30°	14	50	1
A109.550.R	B109.550.R	0,5	30°	14	50	1
A109.600.R	B109.600.R	1	30°	14	50	1



Dovetail bits sets in wooden case see page 1.29 and 1.33

VHW U-GROOVE AND SIGNMAKING BITS

ART. A111



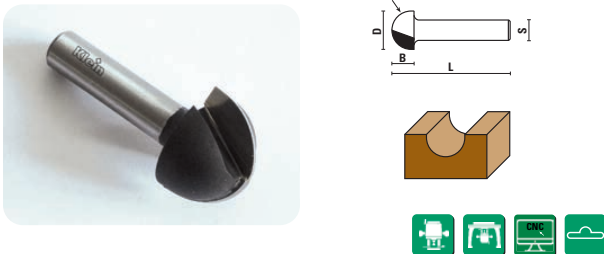
- Solid carbide
- Suitable for engravings and sign writing



S Ø 6	D	R	B	L	Z
A111.060.R	6	3	9	60	3

HW CORE BOX BITS Z=2

ART. A111 - B111 - C111

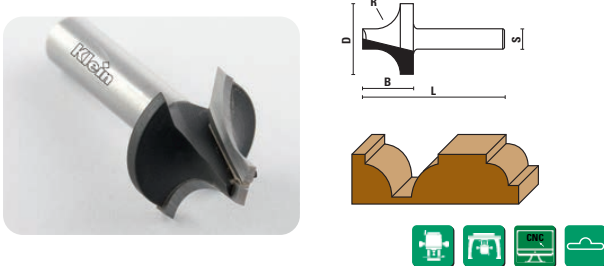


S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A111.032.R ▲	B111.032.R	C111.032.R	3,2	1,6	10	44
A111.048.R ▲	B111.048.R	C111.048.R	4,8	2,4	13	44
A111.064.R ▲	B111.064.R	C111.064.R	6,4	3,2	13	44
A111.080.R ▲	B111.080.R	C111.080.R	8	4	13	47
A111.095.R	B111.095.R	C111.095.R	9,5	4,8	7	38
A111.127.R	B111.127.R	C111.127.R	12,7	6,4	10	38
A111.160.R	B111.160.R	C111.160.R	16	8	11	40
A111.180.R	B111.180.R	C111.180.R	18	9	19	47
		C111.190.R	19	9,5	11	47
		C111.200.R	20	10	19	47
		C111.220.R	22	11	14	45
A111.254.R		C111.254.R	25,4	12,7	17	47

▲ Solid carbide

HW PLUNGING ROUND-OVER BITS Z=2

ART. A112 - B112 - C112



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A112.140.R		C112.140.R	14	4	13	41
A112.160.R		C112.160.R	16	5	13	41
A112.180.R		C112.180.R	18	6	13	41
A112.190.R	B112.190.R	C112.190.R	19	6,4	13	41
A112.220.R		C112.220.R	22	8	14,5	43
A112.254.R	B112.254.R	C112.254.R	25,4	9,5	16	44
		C112.350.R	35	12,7	25,4	63

HW PLUNGING ROUND-OVER BITS Z=2

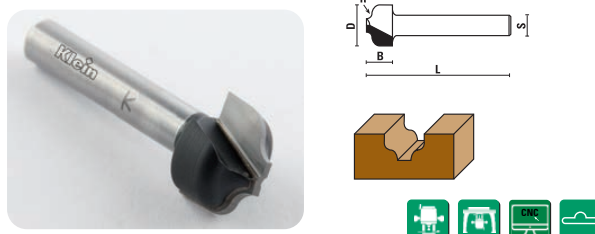
ART. C112



S Ø 8	D	R	B	L
C112.030.R	8	3	10	50
C112.040.R	10	4	10	50
C112.050.R	12	5	10	50

HW PLUNGE TYPE OGEE BITS Z=2

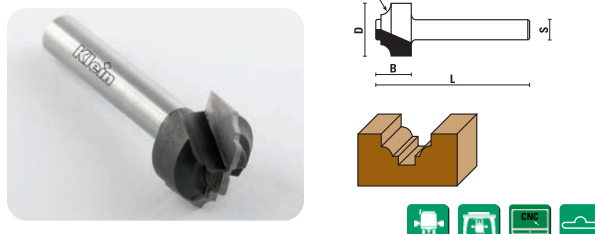
ART. A113 - B113 - C113



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A113.095.R		C113.095.R	9,5	1,6	8	51
A113.127.R	B113.127.R	C113.127.R	12,7	2	10	51
A113.190.R	B113.190.R	C113.190.R	19	3,5	13	54

HW PLUNGE TYPE TRADITIONAL BITS Z=2

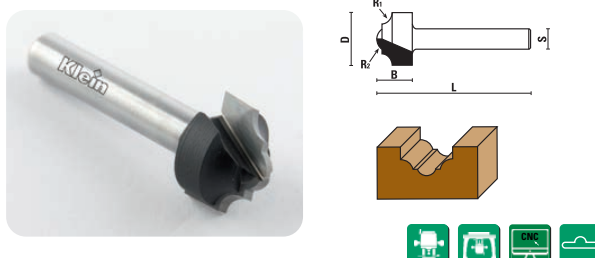
ART. A114 - C114



S Ø 6	S Ø 8	D	R	B	L
A114.127.R	C114.127.R	12,7	2	10	51
A114.190.R	C114.190.R	19	3,5	11	52

HW PLUNGE TYPE CLASSICAL BITS Z=2

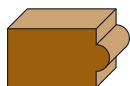
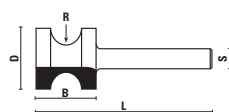
ART. A115 - B115 - C115



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R1	R2	B	L
A115.127.R	B115.127.R	C115.127.R	12,7	2,5	3,5	10	51
A115.190.R	B115.190.R	C115.190.R	19	3,7	4	13	54
		C115.254.R	25,4	5	6,4	17,5	73

HW BULL NOSE RADIUS BITS Z=2

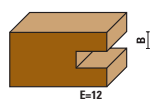
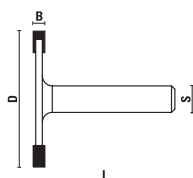
ART. A116 - B116 - C116



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A116.135.R	B116.135.R	C116.135.R	13,5	2	13	41
A116.150.R	B116.150.R	C116.150.R	15	2,8	13	42
A116.167.R	B116.167.R	C116.167.R	16,7	3,6	19	48
A116.222.R	B116.222.R	C116.222.R	22,2	5,2	19	48
A116.260.R	Selling out	C116.260.R	26	6,8	25	54

T-SLOT HW CUTTERS Z=4

ART. C173

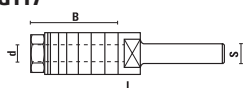


Four wings t-slot cutters for working wood, plastic material and aluminum

S Ø 8	D	B	L
C173.020.R	41	2	43
C173.025.R	41	2,5	43
C173.030.R	41	3	44
C173.035.R	41	3,5	44
C173.040.R	41	4	45
C173.045.R	41	4,5	45
C173.050.R	41	5	46

SLOT CUTTER ARBORS

ART. A117 - B117 - C117 - E117 - G117



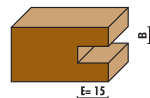
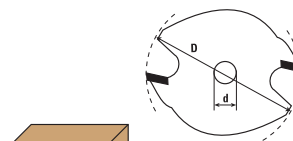
Used with cutters Art. A118 - C118, spacers Art. Z057 and ball bearing Art. Z050 (see section 10)



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	d	B	L
A117.060.R	B117.060.R		6	17	52
A117.080.R	B117.080.R		7,94	34	67
		C117.060.R	6	17	57
		C117.079.R	7,94	34	70
		C117.080.N	7,94	53	96
		C117.081.N	7,94	66	102
		C117.082.N	7,94	38	74
S Ø 12	S Ø 12,7 (1/2")		d	B	L
E117.120.N	G117.120.R		7,94	53	96
E117.121.N	G117.121.R		7,94	66	108
E117.122.N	G117.122.R		7,94	38	80
E117.123.N	G117.123.R		7,94	38	80

HW SLOT CUTTERS Z=2

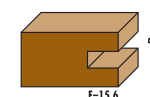
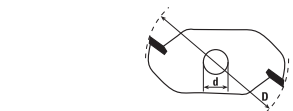
ART. A118



Bore Ø 6	d	D	B	Z
A118.015.R	6	40	1,5	2
A118.018.R	6	40	1,8	2
A118.020.R	6	40	2	2
A118.025.R	6	40	2,5	2
A118.030.R	6	40	3	2
A118.035.R	6	40	3,5	2
A118.040.R	6	40	4	2
A118.050.R	6	40	5	2
A118.060.R	6	40	6	2

HW SLOT CUTTERS Z=2

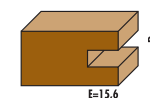
ART. C118



Item	d	D	B	Z
C118.216.R	7,94	47,6	1,6	2
C118.220.R	7,94	47,6	2	2
C118.224.R	7,94	47,6	2,4	2
C118.230.R	7,94	47,6	3	2
C118.232.R	7,94	47,6	3,2	2
C118.240.R	7,94	47,6	4	2
C118.248.R	7,94	47,6	4,8	2
C118.250.R	7,94	47,6	5	2
C118.260.R	7,94	47,6	6	2
C118.264.R	7,94	47,6	6,4	2

HW SLOT CUTTERS Z=3

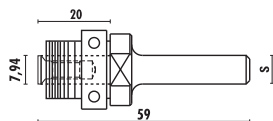
ART. C118



Item	d	D	B	Z
C118.316.R	7,94	47,6	1,6	3
C118.320.R	7,94	47,6	2	3
C118.324.R	7,94	47,6	2,4	3
C118.330.R	7,94	47,6	3	3
C118.332.R	7,94	47,6	3,2	3
C118.340.R	7,94	47,6	4	3
C118.348.R	7,94	47,6	4,8	3
C118.350.R	7,94	47,6	5	3
C118.360.R	7,94	47,6	6	3
C118.364.R	7,94	47,6	6,4	3

SLOT CUTTER ARBORS

ART. A117 - B117 - C117 - E117 - G117



S Ø 6 **S Ø 1/4" (6,35)** **S Ø 8** **S Ø 12** **S Ø 1/2" (12,7)**

A117.280.R B117.280.R C117.280.R E117.280.R G117.280.R

With ball bearing



Z050.008.N



Z051.015.R



nr. 2 - Z057.002.N - 1 mm
nr. 2 - Z057.003.N - 0,5 mm
nr. 5 - Z057.004.N - 0,1 mm
nr. 2 - Z057.005.N - 3 mm

Change the ball bearing to get different cutting depths (see page 10.05)

S Ø 6 **S Ø 1/4" (6,35)** **S Ø 8** **S Ø 12** **S Ø 1/2" (12,7)**

A117.281.R B117.281.R C117.281.R E117.281.R G117.281.R

Without ball bearing



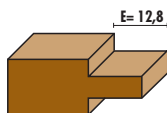
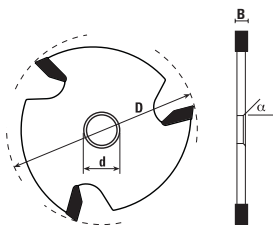
Z051.015.R



nr. 3 - Z057.002.N - 1 mm
nr. 2 - Z057.003.N - 0,5 mm
nr. 6 - Z057.004.N - 0,1 mm
nr. 2 - Z057.005.N - 3 mm
nr. 1 - Z057.006.N - 6 mm

HW SLOT CUTTERS SPECIAL FIXING SCREW Z=3

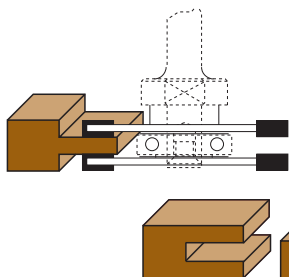
ART. C118



- To be used with slot cutter arbors
- α= 45° bore



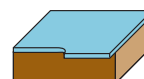
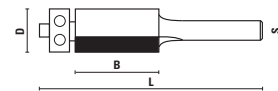
Item	d	D	B	Z
C118.830.R	7,94	47,6	3	3
C118.832.R	7,94	47,6	3,2	3
C118.840.R	7,94	47,6	4	3
C118.848.R	7,94	47,6	4,8	3
C118.850.R	7,94	47,6	5	3
C118.860.R	7,94	47,6	6	3
C118.864.R	7,94	47,6	6,4	3



Example of processing:
The fixing screw (Art. Z051.015.R) used on this spindle has a special head angle that allows it to remain flat on the cutter level.

HW TRIMMING BITS WITH BALL BEARING Z=2

ART. A119 - B119 - C119



Ideal for working laminated panels

S Ø 6 **S Ø 1/4" (6,35)** **D** **B** **L**

A119.064.R B119.064.R 6,4 13 53



Z050.017.N



Z051.006.N

S Ø 6 **S Ø 1/4" (6,35)** **S Ø 8** **D** **B** **L**

A119.095.R B119.095.R C119.095.R 9,5 13 54



Z050.002.N



Z053.002.N



Z054.002.N



Z051.002.R

S Ø 6 **S Ø 1/4" (6,35)** **S Ø 8** **D** **B** **L**

A119.127.R B119.127.R C119.127.R 12,7 13 60



Z050.003.N



Z053.002.N



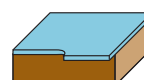
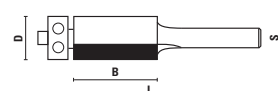
Z054.002.N



Z051.002.R

HW TRIMMING BITS WITH BALL BEARING Z=2

ART. A119 - B119 - C119



- Ideal for working laminated panels
- Shear angle cutting edge



S Ø 6 **S Ø 1/4" (6,35)** **S Ø 8** **D** **B** **L**

A119.160.R B119.160.R C119.160.R 16 16 56



Z050.004.N



Z053.004.N



Z054.002.N



Z051.002.R

S Ø 6 **S Ø 1/4" (6,35)** **S Ø 8** **D** **B** **L**

A119.190.R B119.190.R C119.190.R 19 16 60

A119.191.R B119.191.R C119.191.R 19 25 72



Z050.005.N



Z053.002.N

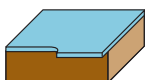
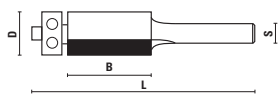


Z051.004.R



HW TRIMMING BITS WITH BALL BEARING Z=2

ART. A120 - B120 - C120

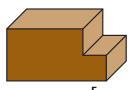
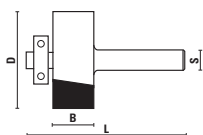


Ideal for working laminated panels

S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	L
A120.064.R	B120.064.R	C120.064.R	6,4	25	67
Z050.017.N	Z051.006.N				
S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	L
A120.095.R	B120.095.R	C120.095.R	9,5	25	67
Z050.002.N	Z053.002.N	Z054.002.N			
		Z051.002.R			
S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	L
A120.127.R	B120.127.R	C120.127.R	12,7	25	67
Z050.003.N	Z053.003.N	Z054.002.N			
		Z051.002.R			

HW RABBETING BITS WITH BALL BEARING Z=2

ART. A121 - B121 - C121



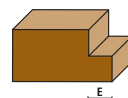
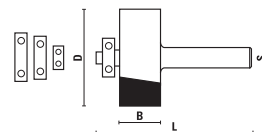
S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	E	L
A121.240.R	B121.240.R	C121.240.R	24	13	4	54
Z050.011.N	Z054.003.N	Z051.004.N				
S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	E	L
A121.317.R	B121.317.R	C121.317.R	31,7	13	9,5	51
A121.350.R	B121.350.R	C121.350.R	35	13	11	51
Z050.003.N	Z053.003.N	Z054.002.N				
		Z051.002.R				



ART. A122 - B122 - C122

HW RABBETING BITS WITH BALL BEARING Z=2

ART. A121 - B121 - C121



Supplied with nr. 4 ball bearings
in order to obtain E= 8 - 9,5 - 11 - 12,7

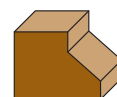
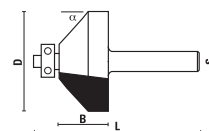
SET



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	B	E	L
A121.850.R	B121.850.R	C121.850.R	35	13	8/9,5/11/12,7	51
E=8 Z050.023.N	E=9,5 Z050.022.N	E=11 Z050.003.N				
		E=12,7 Z050.002.N				
		Z051.002.R				

HW BEVEL TRIM BITS WITH BALL BEARING Z=2

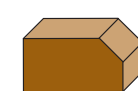
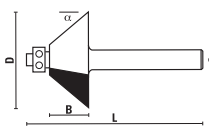
ART. A122 - B122



S Ø 6	S Ø 1/4" (6,35)	D	α	B	L
A122.350.R	B122.350.R	35	45°	18	57
Z050.003.N	Z053.003.N	Z054.002.N			
		Z051.002.R			

HW BEVEL TRIM BITS WITH BALL BEARING GUIDE

ART. A122 - B122 - C122

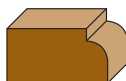
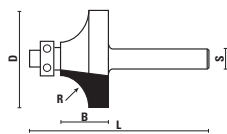


S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	α	B	L	Z
A122.010.R	B122.010.R	C122.010.R	17,5	10°	10	49	3
A122.015.R	B122.015.R	C122.015.R	19	15°	10	49	3
A122.025.R	B122.025.R	C122.025.R	22	25°	10	49	3
A122.045.R	B122.045.R	C122.045.R	30	45°	10	49	3
Z050.004.N	Z053.004.N	Z054.002.N					
		Z051.002.R					

S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	α	B	L	Z
A122.130.R	B122.130.R		13	15°	12,7	46	2
A122.190.R	B122.190.R		19	25°	12,7	46	2
A122.317.R	B122.317.R	C122.317.R	31,7	45°	13	51	2
Z050.001.N	Z053.001.N	Z054.001.N					
		Z051.001.R					

HW CORNER ROUNDING BITS WITH BALL BEARING Z=2

ART. A123 - B123 - C123



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A123.160.R	B123.160.R	C123.160.R	16	1,6	8	46
A123.167.R	B123.167.R	C123.167.R	16,7	2	8	47
A123.187.R		C123.187.R	18,7	3	9,5	49
A123.190.R	B123.190.R	C123.190.R	19	3,2	10	48
A123.207.R	B123.207.R	C123.207.R	20,7	4	10	49
A123.222.R	B123.222.R	C123.222.R	22,2	4,8	13	51
A123.227.R		C123.227.R	22,7	5	12	51
A123.247.R		C123.247.R	24,7	6	12	51
A123.254.R	B123.254.R	C123.254.R	25,4	6,4	13	51
A123.286.R	B123.286.R	C123.286.R	28,6	8	13	51
A123.318.R	B123.318.R	C123.318.R	31,8	9,5	16	56
A123.327.R		C123.327.R	32,7	10	16	55
A123.354.R	B123.354.R	C123.354.R	35,4	11	17	57
A123.367.R		C123.367.R	36,7	12	20	57
A123.380.R	B123.380.R	C123.380.R	38	12,7	19	57



Z050.003.N



Z053.003.N



Z054.002.N

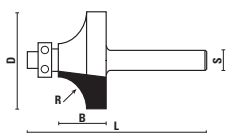


Z051.002.R

Corner rounding bits sets in wooden case see page 1.29

HW CORNER ROUNDING BITS WITH DELRIN® BALL BEARING Z=2

ART. C323



- Complete with Delrin® ball bearing to avoid marking and scratches
- Suitable for working composite material

S Ø 8	D	R	B	L
C323.167.R	16,7	2	8	47
C323.187.R	18,7	3	9,5	49
C323.190.R	19	3,2	10	48
C323.222.R	22,2	4,8	13	51
C323.254.R	25,4	6,4	13	51
C323.286.R	28,6	8	13	51
C323.318.R	31,8	9,5	16	56
C323.354.R	35,4	11	17	57
C323.380.R	38	12,7	19	57



Z050.100.N



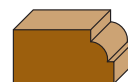
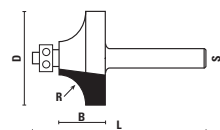
Z054.002.N



Z051.002.R

HW BEADING BITS WITH BALL BEARING GUIDE Z=2

ART. A124 - B124 - C124



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A124.160.R	B124.160.R	C124.160.R	16	1,6	8	46
A124.167.R		C124.167.R	16,7	2	8	47
A124.187.R		C124.187.R	18,7	3	9,5	49
A124.190.R	B124.190.R	C124.190.R	19	3,2	10	48
A124.207.R	B124.207.R	C124.207.R	20,7	4	10	49
A124.222.R	B124.222.R	C124.222.R	22,2	4,8	13	51
A124.227.R		C124.227.R	22,7	5	12	51
A124.247.R		C124.247.R	24,7	6	12	51
A124.254.R	B124.254.R	C124.254.R	25,4	6,4	13	51
A124.286.R	B124.286.R	C124.286.R	28,6	8	13	51
A124.318.R	B124.318.R	C124.318.R	31,8	9,5	16	56
A124.327.R		C124.327.R	32,7	10	16	55
A124.367.R		C124.367.R	36,7	12	20	57
A124.380.R	B124.380.R	C124.380.R	38	12,7	19	57



Z050.002.N



Z053.002.N



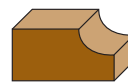
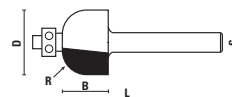
Z054.002.N



Z051.002.R

HW COVE BITS WITH BALL BEARING GUIDE Z=2

ART. A125 - B125 - C125



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A125.160.R	B125.160.R	C125.160.R	16	3,2	13	51
A125.190.R	B125.190.R	C125.190.R	19	4,8	14	51
A125.222.R	B125.222.R	C125.222.R	22,2	6,4	14	51
A125.254.R	B125.254.R	C125.254.R	25,4	8	14	51
A125.286.R	B125.286.R	C125.286.R	28,6	9,5	14	51
A125.350.R	B125.350.R	C125.350.R	35	12,7	16	54



Z050.001.N



Z053.001.N



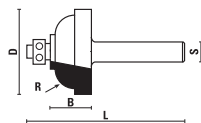
Z054.001.N



Z051.001.R

HW DOUBLE FILLET COVE BITS WITH BALL BEARING GUIDE Z=2

ART. A126 - B126 - C126



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A126.286.R	B126.286.R	C126.286.R	28,6	4,8	13	51
A126.350.R	B126.350.R	C126.350.R	35	8	16	54



Z050.003.N



Z053.003.N



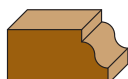
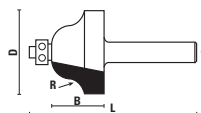
Z054.002.N



Z051.002.R

HW ROMAN OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. A127 - B127 - C127



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A127.254.R	B127.254.R	C127.254.R	25,4	4	16	54
A127.350.R	B127.350.R	C127.350.R	35	6,4	20	57



Z050.001.N



Z053.001.N



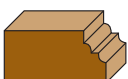
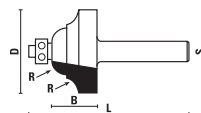
Z054.001.N



Z051.001.R

HW DOUBLE ROMAN OGEE BITS Z=2

ART. A128 - B128 - C128



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A128.254.R	B128.254.R	C128.254.R	25,4	4	16	53
A128.350.R	B128.350.R	C128.350.R	35	6,4	20	57



Z050.001.N



Z053.001.N



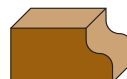
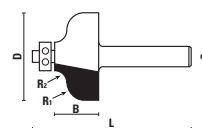
Z054.001.N



Z051.001.R

HW OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. A129 - B129 - C129 / A130 - B130 - C130



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R1	R2	B	L
A129.286.R	B129.286.R	C129.286.R	28,6	4,5	4	13	51
A129.350.R	B129.350.R	C129.350.R	35	6	5	18	55



Z050.003.N



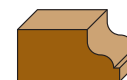
Z053.003.N



Z054.002.N



Z051.002.R



A130.286.R	B130.286.R	C130.286.R	28,6	4,5	4	13	51
A130.350.R	B130.350.R	C130.350.R	35	6	5	18	55



Z050.002.N



Z053.002.N



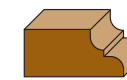
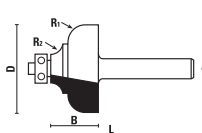
Z054.002.N



Z051.002.R

HW OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. A131 - B131 - C131 / A132 - B132 - C132



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R1	R2	B	L
A131.286.R	B131.286.R	C131.286.R	28,6	4	4	13	51
A131.350.R	B131.350.R	C131.350.R	35	6,4	4,8	18	56



Z050.003.N



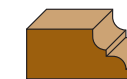
Z053.003.N



Z054.002.N



Z051.002.R



A132.286.R	B132.286.R	C132.286.R	28,6	4	4	13	51
A132.350.R	B132.350.R	C132.350.R	35	6,4	4,8	18	56



Z050.002.N



Z053.002.N



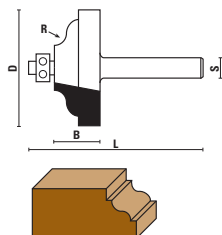
Z054.002.N



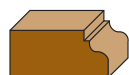
Z051.002.R

HW OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. A133 - B133 - C133 / A134 - B134 - C134



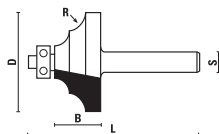
S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A133.350.R	B133.350.R	C133.350.R	35	4	14	52
Z050.002.N	Z053.002.N	Z054.002.N				Z051.002.R



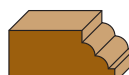
A134.350.R	B134.350.R	C134.350.R	35	4	14	52
Z050.003.N	Z053.003.N	Z054.002.N				Z051.002.R

HW CLASSICAL MOULDING BITS WITH BALL BEARING GUIDE Z=2

ART. A135 - B135 - C135 / A136 - B136 - C136



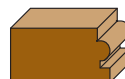
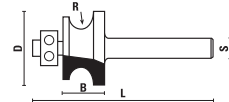
S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A135.286.R	B135.286.R	C135.286.R	28,6	4	13	51
A135.350.R	B135.350.R	C135.350.R	35	5,5	18	60
Z050.003.N	Z053.003.N	Z054.002.N				Z051.002.R



A136.286.R	B136.286.R	C136.286.R	28,6	4	13	51
A136.350.R	B136.350.R	C136.350.R	35	5,5	18	60
Z050.002.N	Z053.002.N	Z054.002.N				Z051.002.R

HW CORNER BEADING BITS WITH BALL BEARING GUIDE Z=2

ART. A137 - B137 - C137

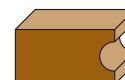
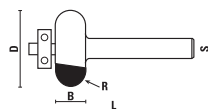


S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A137.220.R	B137.220.R	C137.220.R	22	3,2	14	54
Z050.003.N	Z053.003.N	Z054.002.N				Z051.002.R

S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A137.280.R	B137.280.R	C137.280.R	28	4,8	16	57
A137.320.R	B137.320.R	C137.320.R	32	6,4	19	58
Z050.004.N	Z053.004.N	Z054.002.N				Z051.002.R

HW EDGE-FLUTING BITS WITH BALL BEARING GUIDE Z=2

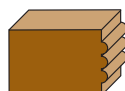
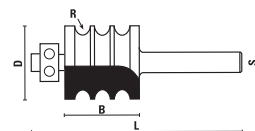
ART. A138 - B138



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A138.210.R	B138.210.R	21	4	8	47
A138.230.R	B138.230.R	23	5	10	49
A138.250.R	B138.250.R	25	6	12	51
Z050.003.N	Z053.003.N	Z054.002.N			Z051.002.R

HW MULTI-BEADING BITS WITH BALL BEARING GUIDE Z=2

ART. B139

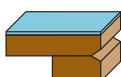
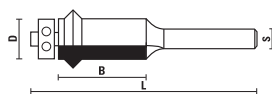


S Ø 1/4" (6,35)	D	R	B	L
B139.220.R*	22	3	25	65
Z050.004.N	Z053.004.N	Z054.002.N		Z051.002.R

* Selling out

HW FLUSH-TRIM "V" GROOVE BITS WITH BALL BEARING GUIDE Z=2

ART. A141 - B141



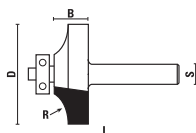
- Ideal for working laminated and melamine panels
- V-decor along the joints of the two wood pieces



S Ø 6	S Ø 1/4" (6,35)	D	B	L
A141.127.R	B141.127.R	12,7	25,4	67
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R	

HW FLAT ROUNDING OVER BITS WITH BALL BEARING GUIDE Z=2

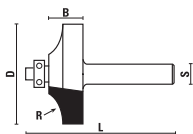
ART. A142 - B142



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A142.300.R	B142.300.R	30	12	10	48
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW FLAT ROUNDING OVER BITS WITH BALL BEARING GUIDE Z=2

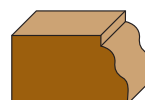
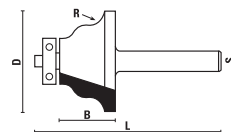
ART. A143 - B143



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A143.300.R	B143.300.R	30	12	10	48
Z050.002.N	Z053.002.N	Z054.002.N	Z051.002.R		

HW PROFILE BITS WITH BALL BEARING GUIDE

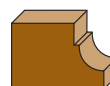
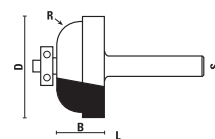
ART. A144 - B144



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A144.318.R	B144.318.R	31,8	4	17,5	57
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW FLAT OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. A145 - C145



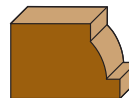
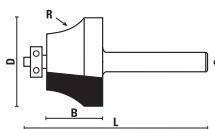
S Ø 6	S Ø 8	D	R	B	L
A145.286.R*	C145.286.R	28,6	4,8	13	51
A145.350.R*	C145.350.R	35	8	16	55

* Selling out

Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R

HW OVOLO JOINT BITS WITH BALL BEARING GUIDE Z=2

ART. A146 - C146



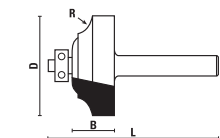
S Ø 6	S Ø 8	D	R	B	L
A146.270.R	C146.335.R*	27	17	17	57
A146.335.R*	C146.335.R*	33,5	9	15	57

* Selling out

Z050.002.N	Z053.002.N	Z054.002.N	Z051.002.R

HW OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. A147 - B147 - C147



S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A147.318.R*		C147.318.R*	31,8	5	13	51
A147.380.R	B147.380.R		38	6	16	54

* Selling out



Z050.003.N



Z053.003.N



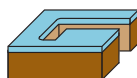
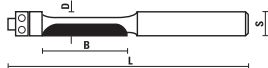
Z054.002.N



Z051.002.R

HW PANEL PILOT BITS WITH BALL BEARING GUIDE Z=1

ART. A150 - C150



Ideal for working laminated panels

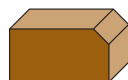
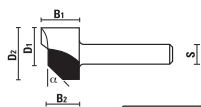
S Ø 6	S Ø 8	D	B	L
A150.064.R	C150.064.R	6,4	19	57



Z050.017.N

HW FLUSH AND BEVEL TRIM BITS Z=2

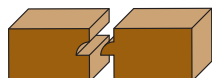
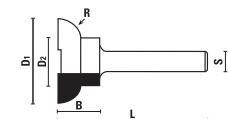
ART. A151 - C151



S Ø 6	S Ø 8	D1	D2	B1	B2	α
A151.200.R	C151.200.R	20	24	15	11	0°/45°

HW FINGER GRIP BITS Z=2

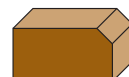
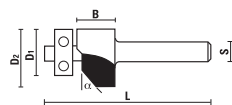
ART. A155



S Ø 6	D1	D2	R	B	L
A155.280.R	28	15	6,4	13	41

HW FLUSH AND BEVEL TRIM BITS WITH BALL BEARING GUIDE Z=2

ART. A152 - C152



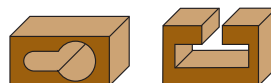
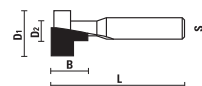
S Ø 6	S Ø 8	D1	D2	B	L	α
A152.190.R	C152.190.R	19	26	15	53	0°/45°



Z050.006.N

HW KEYHOLE BITS (T-SLOT)

ART. A153 - B153 - C153



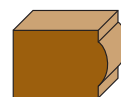
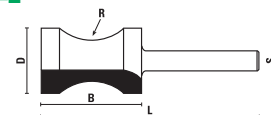
S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D1	D2	B	L	Z
A153.098.R	B153.098.R	C153.098.R	9,8	5	9,8	38,1	1
A153.127.R	B153.127.R	C153.127.R	12,7	8	9,8	38,1	1
		C153.135.R NEW	13,5	8,6	14	52	2



Single flute cutters specifically made for making keyhole slots (smaller T-slots) in picture frames and other wall hanging wood products. Use the plunge tip for the first working step. Use on hand held, table mounted portable router and CNC routers.

HW CONVEX EDGING BITS Z=2

ART. A154 - C154

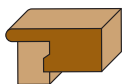
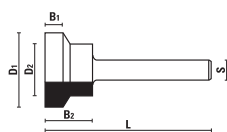


S Ø 6	S Ø 8	D	R	B	L
A154.202.R*	C154.202.R	20,2	18	32	62,6

* Selling out

HW DRAWER LOCK BITS Z=2

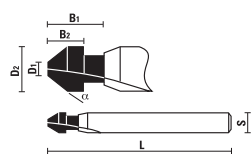
ART. A156



S Ø 6	D1	D2	B1	B2	L
A156.254.R	25,4	18,5	4	13	49

HW SEAL PROFILE BITS Z=2

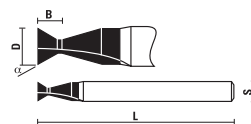
ART. A157 - B157



S Ø 6	S Ø 1/4" (6,35)	D1	D2	α	B1	B2	L
A157.055.R	B157.055.R	2	5,5	38°	8	4	65

HW DOVETAIL SEAL BITS Z=2

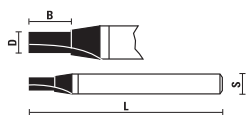
ART. A158 - B158



S Ø 6	S Ø 1/4" (6,35)	D	α	B	L
A158.051.R	B158.051.R	5,1	25°	4	60

HW SEAL BITS Z=2

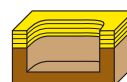
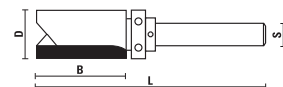
ART. A159 - B159



S Ø 6	S Ø 1/4" (6,35)	D	B	L
A159.030.R	B159.030.R	3	8	55

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

ART. A160 - B160 - C160



- Suitable for trimming and milling on every type of wood

S Ø 6	S Ø 1/4" (6,35)	D	B	L
A160.125.R	B160.125.R	12,7	13	55
A160.126.R	B160.126.R	12,7	19	55
A160.127.R	B160.127.R	12,7	25,4	63
A160.128.R	B160.128.R	12,7	32	69



S Ø 6	S Ø 1/4" (6,35)	D	B	L
A160.160.R	B160.160.R	16	25,4	63



S Ø 8	D	B	L
C160.161.R	16	32	69

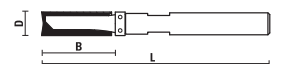


S Ø 6	S Ø 1/4" (6,35)	D	B	L
A160.190.R	B160.190.R	19	25,4	63



HW "MINI" FLUSH TRIM BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. A160 - C160



- Suitable for trimming and milling on every type of wood
- Specially designed for small fine work because can fit into tight spaces and corners
- Perfect for guitar makers



S Ø 6	S Ø 8	D	B	L
A160.048.R NEW		4,8	12	51
A160.064.R NEW		6,4	19	62
	C160.080.R NEW	8	19	62



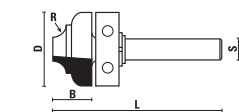
Z050.037.N
(A160.048.R)

Z050.038.N
(A160.064.R)

Z050.039.N
(C160.080.R)

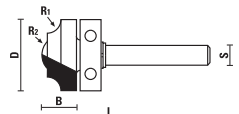
HW FLUSH TRIM BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. A161 - B161



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A161.220.R	B161.220.R	22	3,5	11	51

ART. A162 - B162



S Ø 6	S Ø 1/4" (6,35)	D	R1	R2	B	L
A162.220.R	B162.220.R	22	4	5,5	12	51



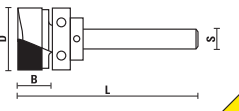
Z050.008.N



DIN 471-15

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

ART. A163 - B163



If shank Ø8 mm is needed, use bushings Art. Z001 see page 10.03

S Ø 6	S Ø 1/4" (6,35)	D	B	L
A163.190.R	B163.190.R	19	11	56



Z050.005.N



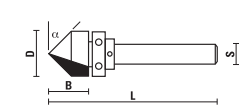
Z058.001.N



Z051.005.R

HW GROOVE BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. A164 - B164



S Ø 6	S Ø 1/4" (6,35)	D	α	B	L
A164.127.R	B164.127.R	12,7	45°	13	51



Z050.007.N



Z058.001.N



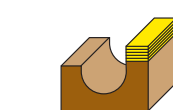
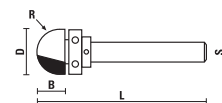
Z052.005.N



Z051.005.R

HW CORE BOX BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. A165 - B165 - C165



Suitable for cutting round-bottom groove that can be both decorative and functional on every type of wood.



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A165.127.R	B165.127.R	12,7	6,4	9,5	51



Z050.007.N



Z058.001.N



Z051.005.R

S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
A165.160.R	B165.160.R	C165.160.R	16	8	11	54



Z050.018.N



Z058.004.N



Z051.005.R

S Ø 6	D	R	B	L
A165.190.R	19	9,5	11	54



Z050.006.N



Z058.005.N



Z051.005.R

S Ø 8	D	R	B	L
C165.190.R	19	9,5	11	54



Z050.026.N



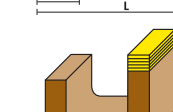
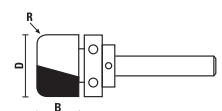
Z058.006.N



Z051.005.R

HW BOWL AND TRAY BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. A166 - B166 - C166



Suitable for making custom bowls, boxes, plates in any shape you can cut template for



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A166.127.R	B166.127.R	12,7	3,2	13	54



Z050.007.N



Z058.001.N



Z051.005.R

S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A166.190.R	B166.190.R	19	6,4	16	59



Z050.005.N



Z058.001.N



Z051.005.R

S Ø 8	D	R	B	L
C166.190.R	19	6,4	16	67



Z050.026.N



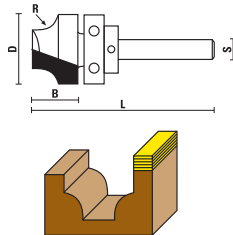
Z058.006.N



Z051.005.R

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

ART. A167 - B167



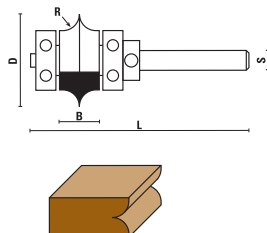
S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A167.127.R	B167.127.R	12,7	3	9,5	48
Z050.007.N	Z058.001.N	Z051.005.R			

S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A167.220.R	B167.220.R	22	5	12	55
Z050.008.N	Z058.001.N	Z051.005.R			

S Ø 6	D	R	B	L
A167.286.R	28,6	8	15	58
Z050.015.N	Z058.003.N	Z051.005.R		

HW "LEAF-EDGE" BEADING BITS WITH DOUBLE BALL BEARING GUIDE Z=2

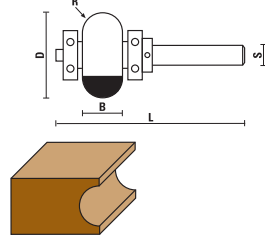
ART. A168 - B168



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A168.254.R	B168.254.R	25,4	4,8	13	66
Z050.011.N	Z058.001.N	Z053.002.N	Z051.004.R	Z051.005.R	

HW "EDGE-FLUTING" BITS WITH DOUBLE BALL BEARING GUIDE Z=2

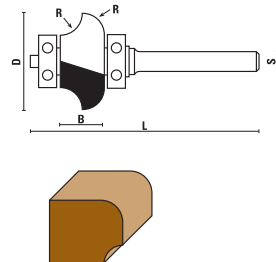
ART. A169 - B169



S Ø 6	S Ø 1/4" (6,35)	D	R	B	L
A169.230.R	B169.230.R	23	5	10	61
Z050.007.N superiore	Z058.001.N	Z051.005.R			
Z050.003.N inferiore	Z053.003.N	Z054.002.R	Z051.002.R		

HW RADIUS BITS WITH DOUBLE BALL BEARING GUIDE Z=2

ART. A170 - C170



Patent

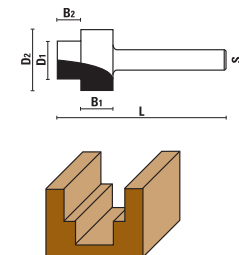
S Ø 6	S Ø 8	D	R	B	L
A170.285.R*	C170.285.R*	28,5	6,4	14	66
A170.320.R*	C170.320.R*	32	8	17	69
A170.350.R*	C170.350.R*	35	9,5	20	72

* Selling out

Z050.018.N	Z058.001.N	Z051.005.R

HW DOUBLE DIAMETER BITS Z=2

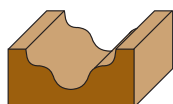
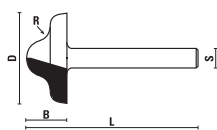
ART. A180 - B180



S Ø 6	S Ø 1/4" (6,35)	D1	D2	B1	B2	L
A180.127.R	B180.127.R	12,7	19	9,5	6,4	51

HW DOUBLE RADIUS BITS Z=2

ART. A181 - C181

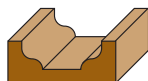
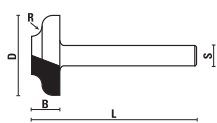


S Ø 6	S Ø 8	D	R	B	L
A181.270.R*	C181.270.R	27	6	12	52

* Selling out

HW DOUBLE RADIUS BITS Z=2

ART. A182 - C182

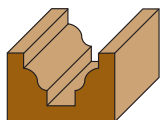
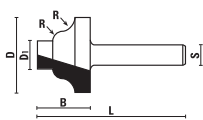


S Ø 6	S Ø 8	D	R	B	L
A182.254.R*	C182.254.R	25,4	3,2	9,5	50

* Selling out

HW DOUBLE RADIUS BITS Z=2

ART. A185

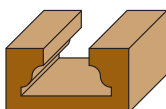
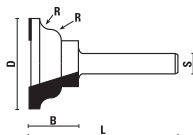


S Ø 6	D	D1	R	B	L
A185.210.R*	21	8	3,2	13	42
A185.250.R*	25	8	4	17	45

* Selling out

HW DOUBLE RADIUS BITS Z=2

ART. A186 - B186

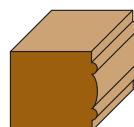
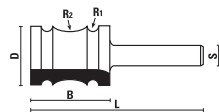


S Ø 6	S Ø 1/4" (6,35)	D	D1	R	B	L
A186.250.R	B186.250.R	25	12	3,2	13	42
A186.290.R*		29	12	4	17	45

* Selling out

HW MULTI RADIUS BITS Z=2

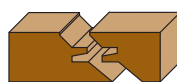
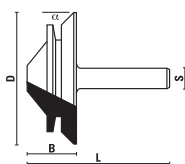
ART. A191



S Ø 6	D	R1	R2	B	L
A191.190.R	19	2	6	25	55

HW 45 DEGREE LOCK MITRE JOINT BITS Z=2

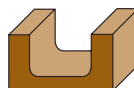
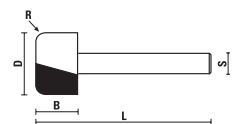
ART. A195 - B195



S Ø 6	S Ø 1/4" (6,35)	D	α	B	L
A195.420.R	B195.420.R	42	45°	16	45

HW BOWL AND TRAY BITS Z=2

ART. A196 - B196 - C196



Suitable for cutting hollows into bowls, boxes, plates, serving trays and spoon

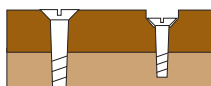
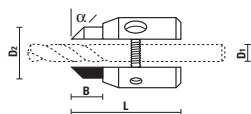


S Ø 6	S Ø 1/4" (6,35)	S Ø 8	D	R	B	L
		C196.110.R	11	3	12,7	54
A196.190.R	B196.190.R	C196.190.R	19	6,4	16	60



HW ADJUSTABLE COUNTERSINKS Z=2

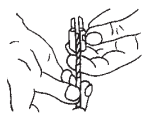
ART. A199



Spare key supplied; single packed



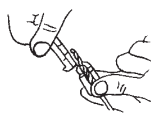
Item	D1	D2	α	B	L
A199.030.R	3/7	11/15	45°	12	32
A199.060.R	6/10	15,5/19,5	45°	12	34



Insert the tool



Adjust the boring depth



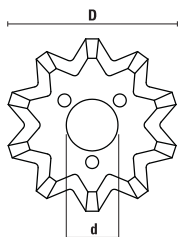
Line up the cutting edges of countersink and tool



Tighten the screws

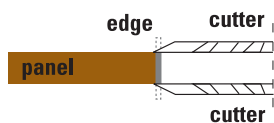
HS FLUSH TRIMMERS FOR TABLE EDGE BANDING MACHINES

ART. AG



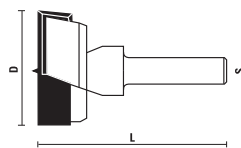
To be used on "VITAP" machines

Item	D	d	B	Z
AG040.01012	40	12	1,1	10



HW BORING BITS

ART. C192



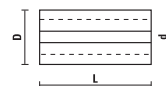
Without spurs



S Ø 8	D	L
C192.250.R	25	57
C192.260.R	26	57
C192.300.R	30	57
C192.350.R	35	57

BUSHINGS

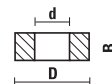
ART. Z001



Item	D	d	L	Item	D	d	L
Z001.001.N	8	6	25	Z001.006.N	12	6	25
Z001.002.N	9,5	6	25	Z001.007.N	12	10	25
Z001.003.N	9,5	8	25	Z001.008.N	16	13	40
Z001.004.N	10	8	25	Z001.009.N	8	6,4	25
Z001.005.N	12	8	25	Z001.010.N	12	9,5	25
Z001.006.N	12	6	25	Z001.011.N	10	6	25
Z001.009.N	8	6,4	25	Z001.012.N	8	5	25
Z001.011.N	10	6	25	Z001.013.N	8	4	25
Z001.017.N	9,5	6,4	25	Z001.014.N	8	3	25
Z001.019.N	12,7	8	25	Z001.015.N	10	5	25
Z001.020.N	12,7	6,4	25	Z001.016.N	10	4	25
Z001.001.N	8	6	25	Z001.017.N	9,5	6,4	25
Z001.002.N	9,5	6	25	Z001.018.N	12,7	9,5	25
Z001.003.N	9,5	8	25	Z001.019.N	12,7	8	25
Z001.004.N	10	8	25	Z001.020.N	12,7	6,4	25
Z001.005.N	12	8	25				

SPACERS

ART. Z057



Item	D	d	B
Z057.001.N	16	7,94	3,6
Z057.002.N	16	7,94	1
Z057.003.N	16	7,94	0,5
Z057.004.N	16	7,94	0,1
Z057.005.N	16	7,94	3
Z057.006.N	16	7,94	6
Z057.007.N	16	7,94	0,4
Z057.008.N	16	7,94	0,05
Z057.009.N	16	7,94	5,3
Z057.010.N	9,5	6,4	2,2
Z057.101.N	10	6	1
Z057.102.N	10	6	1,5
Z057.103.N	10	6	3

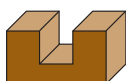
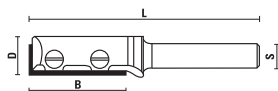
INSERT ROUTER BITS FOR PORTABLE ROUTERS

Always looking for innovative products and most useful solutions, **SISTEMI** has developed a new line of **Klein** router bits 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 HW reversible knives and the possibility of their easy replacement are:

- Longer tool life
- Better Quality/Price ratio
- Better finish quality
- Environmental friendly
- Higher measures precision

HW INSERT FLUSH TRIMMING BITS Z=1

ART. WC101

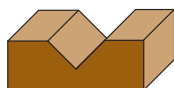
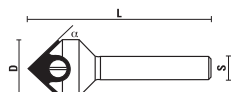


Complete with reversible knives

S Ø 8	D	B	L
WC101.120.R	12	29,5	66
Z055.330.N	Z051.501.R		

HW INSERT V-GROOVING BITS Z=1

ART. WC109

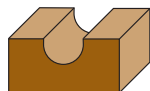
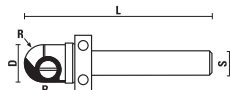


Complete with reversible knives

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

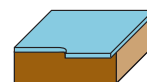
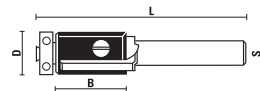


Complete with reversible knives

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

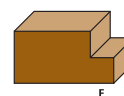
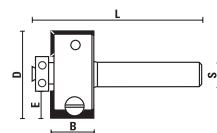


Complete with reversible knives

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

HW INSERT RABBET BITS WITH BALL BEARING Z=2

ART. WC121

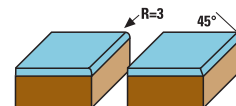
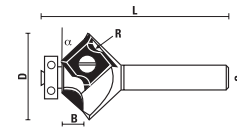


Complete with reversible knives

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	Z051.501.R	
		Screw for ball bearing	Screw for knives	

HW INSERT FLUSH TRIMMING BITS WITH BALL BEARING Z=2

ART. WC122



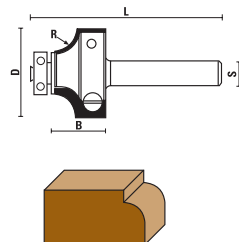
- Complete with reversible knives

- 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	Z051.501.R		
		Screw for ball bearing	Screw for knives		

HW INSERT CORNER ROUNDING BITS WITH BALL BEARING Z=2

ART. WC123



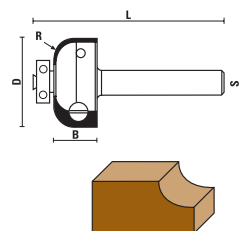
Complete with reversible knives



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

HW INSERT COVER BITS WITH BALL BEARING Z=2

ART. WC125



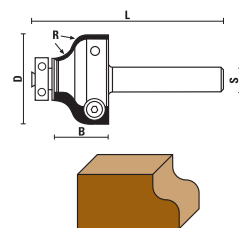
Complete with reversible knives



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

HW INSERT OGEE BITS WITH BALL BEARING Z=2

ART. WC129



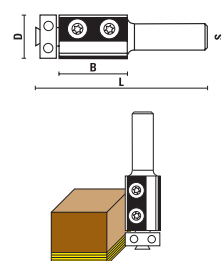
Complete with reversible knives



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	Z051.501.R	
		Screw for ball bearing	Screw for knives	

HW INSERT FLUSH TRIMMING BITS Z=2

ART. W113



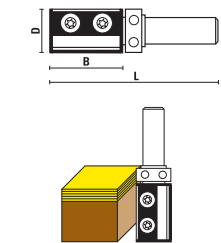
- Lower ball bearing
- This item is sold complete with a torx key



S Ø 8	D	B	L	Z
W113.160.R	16	30	70	2
W113.190.R	19	30	70	2
Z555.008.N	Z050.004.N (D=16)	Z050.006.N (D=19)	Z052.201.N	Z051.017.R (for ball bearing)
				Z051.010.R (for knives)

HW INSERT FLUSH TRIMMING BITS Z=2

ART. W115



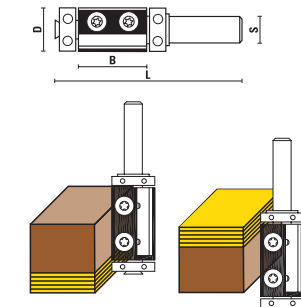
- Upper ball bearing
- This item is sold complete with a torx key



S Ø 8	D	B	L	Z
W115.190.R	19	30	70	2
Z555.008.N	Z050.012.N	Z052.201.N	Z051.017.R (for ball bearing)	Z051.010.R (for knives)

HW INSERT FLUSH TRIMMING BITS WITH UPPER AND LOWER BALL BEARINGS Z=2

ART. W117



- Suitable for trimming with template on the upper and/or lower side
- This item is sold complete with a torx key



S Ø 8	D	B	L
W117.190.R	19	30	85
Z555.008.N	Z050.006.N (lower ball bearing)	Z050.012.N (upper ball bearing)	Z052.201.N
			Z051.017.R (for ball bearing)
			Z051.010.R (for knives)

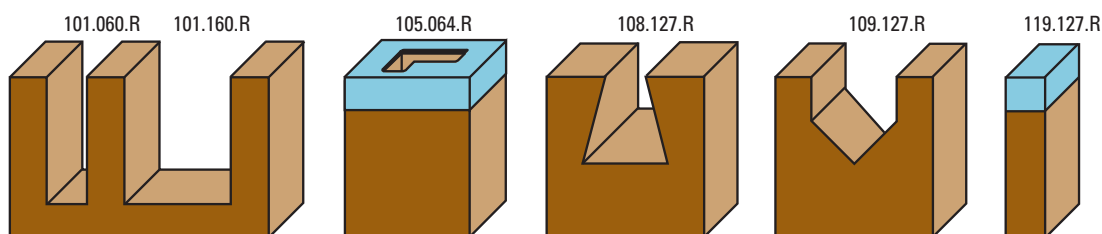
6 PIECE STRAIGHT-DOVETAIL INSERT ROUTER BITS "STARTER SET"

ART. X001



- Set including the 6 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have always on hand the right bit for straight cuts, trimming and engraving.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X001.006.R	X001.064.R	X001.008.R
6-pcs router bit set:	6-pcs router bit set:	6-pcs router bit set:
A101.060.R	B101.064.R	C101.060.R
A101.160.R	B101.160.R	C101.160.R
A105.064.R	B105.064.R	C105.064.R
A108.127.R	B108.127.R	C108.127.R
A109.127.R	B109.127.R	C109.127.R
A119.127.R	B119.127.R	C119.127.R



Scala 1:1

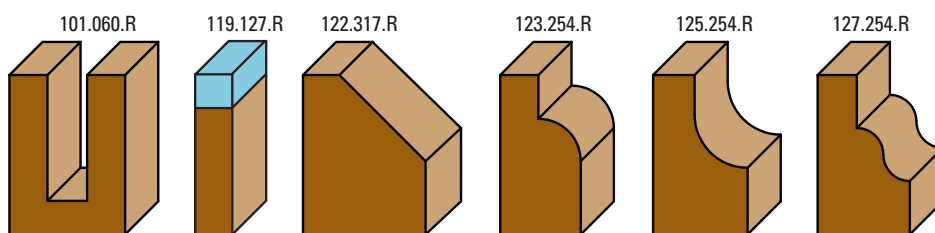
6 PIECE PROFILE ROUTER BITS "STARTER SET"

ART. X002



- Set including the 6 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have always on hand the right bit for straight cuts, trimming and profiling.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X002.006.R	X002.064.R	X002.008.R
6-pcs router bit set:	6-pcs router bit set:	6-pcs router bit set:
A101.060.R	B101.064.R	C101.060.R
A119.127.R	B119.127.R	C119.127.R
A122.317.R	B122.317.R	C122.317.R
A123.254.R	B123.254.R	C123.254.R
A125.254.R	B125.254.R	C125.254.R
A127.254.R	B127.254.R	C127.254.R



Scala 1:1

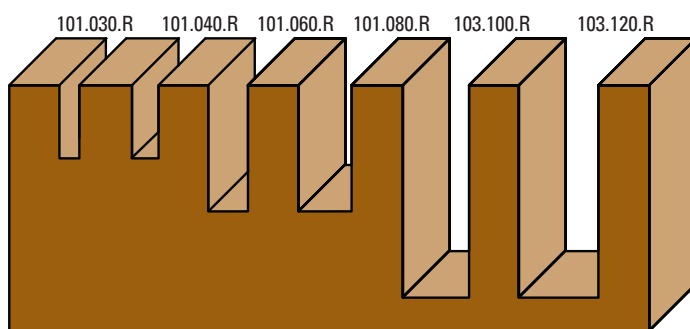
6 PIECE STRAIGHT BITS "STARTER SET"

ART. X003



- Set including the 6 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have always on hand the right bit for straight cuts.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X003.006.R	X003.064.R	X003.008.R
6-pcs router bit set:	6-pcs router bit set:	6-pcs router bit set:
A101.030.R	B101.030.R	C101.030.R
A101.040.R	B101.040.R	C101.040.R
A101.060.R	B101.060.R	C101.060.R
A101.080.R	B101.080.R	C101.080.R
A103.100.R	B103.100.R	C103.100.R
A103.120.R	B103.120.R	C103.120.R



Scale 1:1

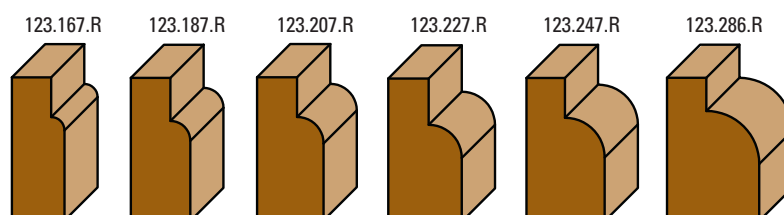
6 PIECE CORNER ROUNDING BITS "STARTER SET"

ART. X011



- Set including the 6 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have always on hand the right bit to produce corner roundings.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X011.006.R	X011.064.R	X011.008.R
6-pcs router bit set:	6-pcs router bit set:	6-pcs router bit set:
A123.167.R	B123.167.R	C123.167.R
A123.187.R	B123.187.R	C123.187.R
A123.207.R	B123.207.R	C123.207.R
A123.227.R	B123.227.R	C123.227.R
A123.247.R	B123.247.R	C123.247.R
A123.286.R	B123.286.R	C123.286.R



Scale 1:1

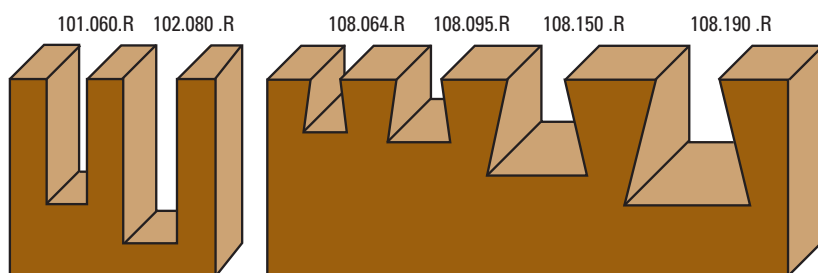
6 PIECE DOVETAIL BITS "STARTER SET"

ART. X012



- Set including the 6 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have the right bit for straight cuts and dovetail joints.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X012.006.R	X012.064.R	X012.008.R
6-pcs router bit set:	6-pcs router bit set:	6-pcs router bit set:
A101.060.R	B101.060.R	C101.060.R
A102.080.R	B102.080.R	C102.080.R
A108.064.R	B108.064.R	C108.064.R
A108.095.R	B108.095.R	C108.095.R
A108.150.R	B108.150.R	C108.150.R
A108.190.R	B108.190.R	C108.190.R



Scale 1:1

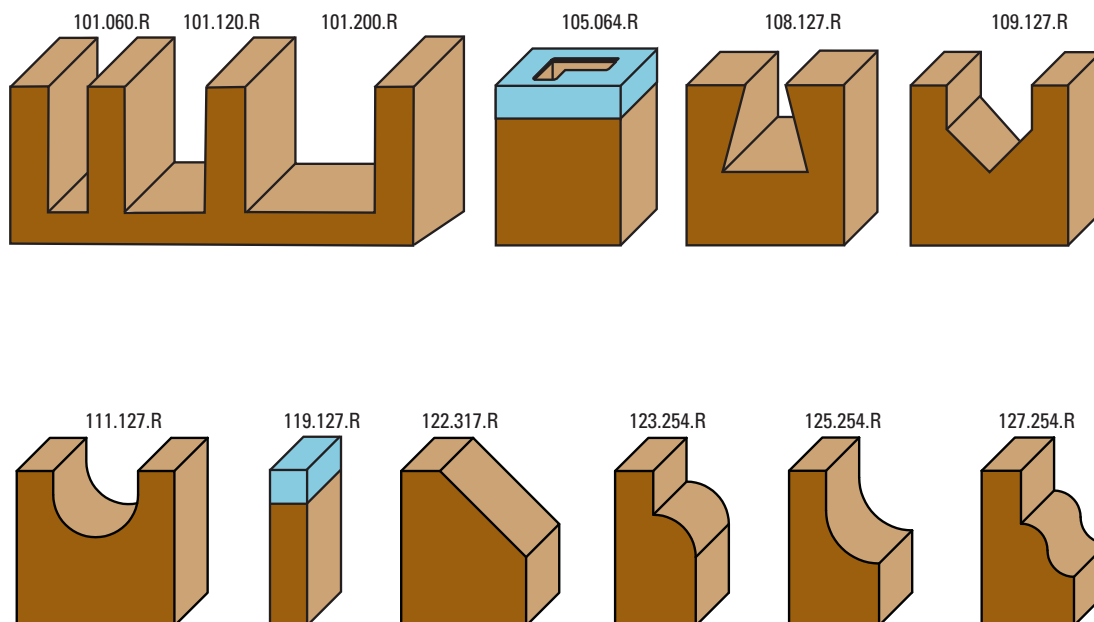
12 PIECE CLASSICAL ROUTER BITS "STARTER SET"

ART. X005



- Set including the 12 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have always on hand the right bit for straight cuts, trimming, engraving and profiling.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X005.006.R	X005.064.R	X005.008.R
12-pcs router bit set:	12-pcs router bit set:	12-pcs router bit set:
A101.060.R	B101.064.R	C101.060.R
A101.120.R	B101.127.R	C101.120.R
A101.200.R	B101.190.R	C101.200.R
A105.064.R	B105.064.R	C105.064.R
A108.127.R	B108.127.R	C108.127.R
A109.127.R	B109.127.R	C109.127.R
A111.127.R	B111.127.R	C111.127.R
A119.127.R	B119.127.R	C119.127.R
A122.317.R	B122.317.R	C122.317.R
A123.254.R	B123.254.R	C123.254.R
A125.254.R	B125.254.R	C125.254.R
A127.254.R	B127.254.R	C127.254.R



Scale 1:1

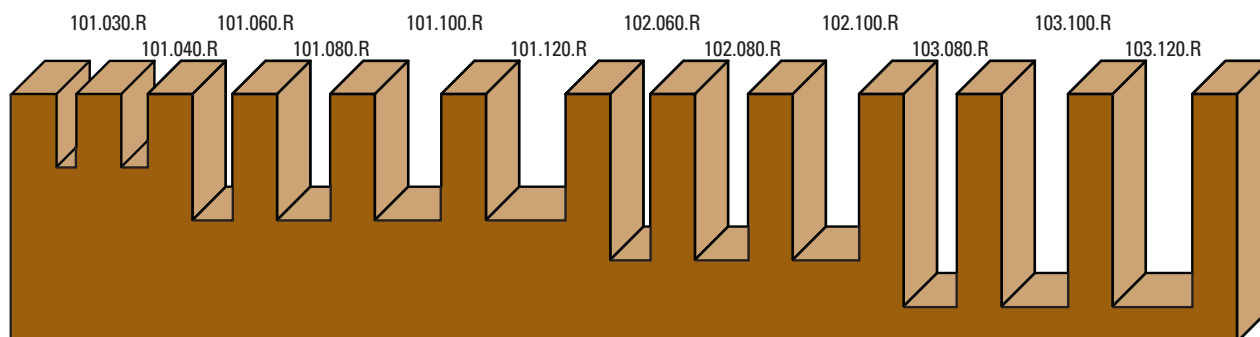
12 PIECE STRAIGHT BITS "ADVANCED SET"

ART. X006



- Set including the 12 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have always on hand the right bit for straight cuts.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X006.006.R	X006.064.R	X006.008.R
12-pcs router bit set:	12-pcs router bit set:	12-pcs router bit set:
A101.030.R	B101.030.R	C101.030.R
A101.040.R	B101.040.R	C101.040.R
A101.060.R	B101.060.R	C101.060.R
A101.080.R	B101.080.R	C101.080.R
A101.100.R	B101.100.R	C101.100.R
A101.120.R	B101.120.R	C101.120.R
A102.060.R	B102.060.R	C102.060.R
A102.080.R	B102.080.R	C102.080.R
A102.100.R	B102.100.R	C102.100.R
A103.080.R	B103.080.R	C103.080.R
A103.100.R	B103.100.R	C103.100.R
A103.120.R	B103.120.R	C103.120.R



Scale 1:1

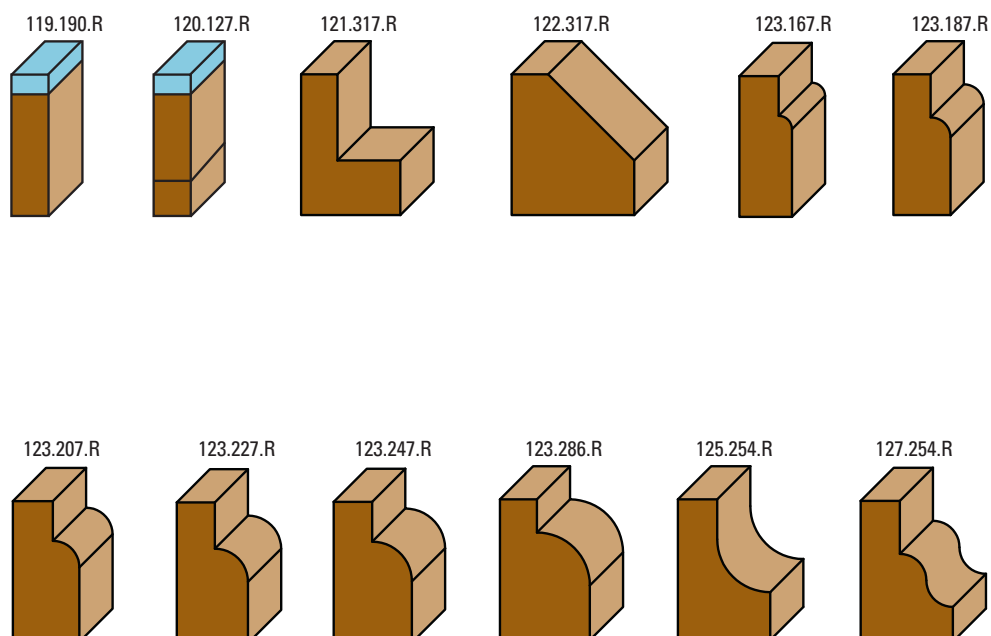
12 PIECE PROFILE ROUTER BITS "ADVANCED SET"

ART. X007



- Set including the 12 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have always on hand the right bit for trimming and profiling.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X007.006.R	X007.064.R	X007.008.R
12-pcs router bit set:	12-pcs router bit set:	12-pcs router bit set:
A119.190.R	B119.190.R	C119.190.R
A120.127.R	B120.127.R	C120.127.R
A121.317.R	B121.317.R	C121.317.R
A122.317.R	B122.317.R	C122.317.R
A123.167.R	B123.167.R	C123.167.R
A123.187.R	B123.187.R	C123.187.R
A123.207.R	B123.207.R	C123.207.R
A123.227.R	B123.227.R	C123.227.R
A123.247.R	B123.247.R	C123.247.R
A123.286.R	B123.286.R	C123.286.R
A125.254.R	B125.254.R	C125.254.R
A127.254.R	B127.254.R	C127.254.R



Scale 1:1

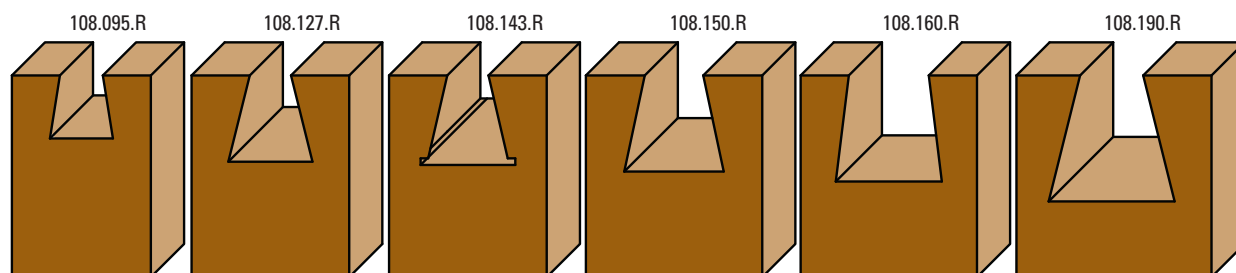
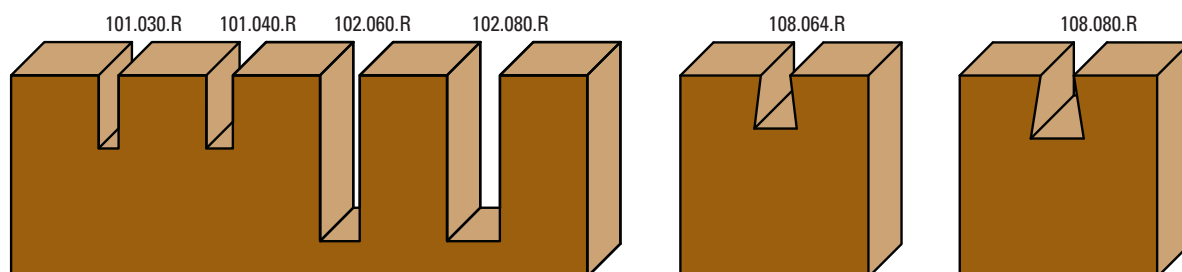
12 PIECE DOVETAIL BITS "ADVANCED SET"

ART. X008



- Set including the 12 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have the right bit for straight cuts and dovetail joints.

S Ø 6	S Ø 1/4" (6,35)	S Ø 8
X008.006.R	X008.064.R	X008.008.R
12-pcs router bit set:	12-pcs router bit set:	12-pcs router bit set:
A101.030.R	B101.030.R	C101.030.R
A101.040.R	B101.040.R	C101.040.R
A102.060.R	B102.060.R	C102.060.R
A102.080.R	B102.080.R	C102.080.R
A108.064.R	B108.064.R	C108.064.R
A108.080.R	B108.080.R	C108.080.R
A108.095.R	B108.095.R	C108.095.R
A108.127.R	B108.127.R	C108.127.R
A108.143.R	B108.143.R	C108.143.R
A108.150.R	B108.150.R	C108.150.R
A108.160.R	B108.160.R	C108.160.R
A108.190.R	B108.190.R	C108.190.R



Scale 1:1

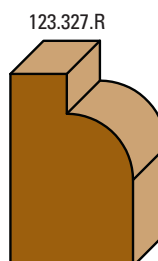
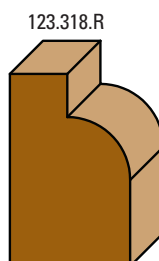
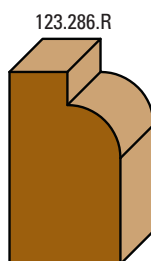
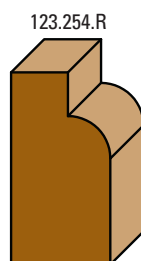
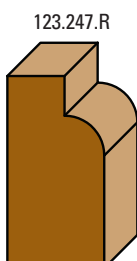
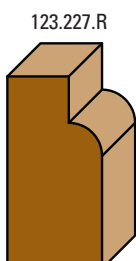
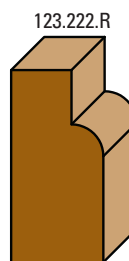
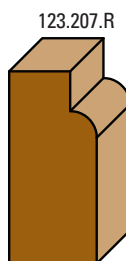
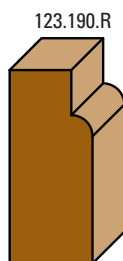
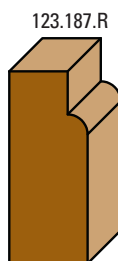
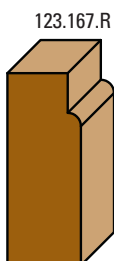
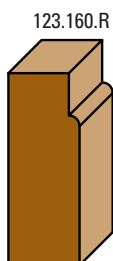
12 PIECE CORNER ROUNDING BITS "ADVANCED SET"

ART. X013



- Set including the 12 most popular T.C.T. router bits in a robust and practical wooden box.
- Ideal to have always on hand the right bit to produce corner roundings.

S Ø 6	S Ø 8
X013.006.R	X013.008.R
12-pcs router bit set:	12-pcs router bit set:
A123.160.R	C123.160.R
A123.167.R	C123.167.R
A123.187.R	C123.187.R
A123.190.R	C123.190.R
A123.207.R	C123.207.R
A123.222.R	C123.222.R
A123.227.R	C123.227.R
A123.247.R	C123.247.R
A123.254.R	C123.254.R
A123.286.R	C123.286.R
A123.318.R	C123.318.R
A123.327.R	C123.327.R



Scale 1:1

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 bits complete with reversible knives

S Ø 8

XWC.001.R

6-pcs router bit set:

WC101.120.R

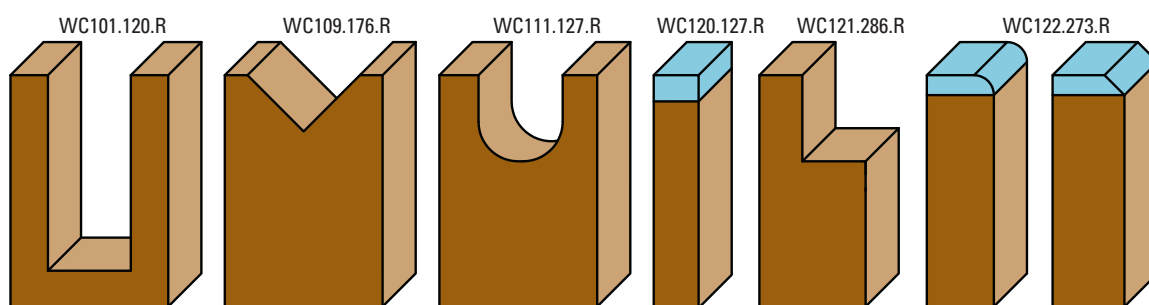
WC109.176.R

WC111.127.R

WC120.127.R

WC121.286.R

WC122.273.R



Scale 1:1

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 bits complete with reversible knives

S Ø 8

XWC.002.R

6-pcs router bit set:

WC120.127.R

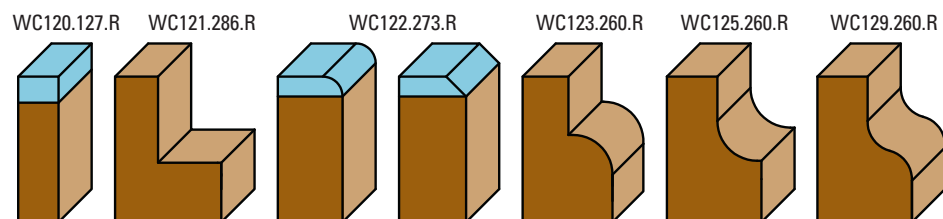
WC121.286.R

WC122.273.R

WC123.260.R

WC125.260.R

WC129.260.R



Scale 1:1

BASE

1 modular panel

Small display, ideal for starting with a basic assortment
Dimensions (cm): 110 (L) x 90 (H) x 30 (P)



Display code **Base 01**
 includes:
 Router bits S=6/8
 for portable routers
60 positions



Display code **Base 02**
 includes:
 Router bits S=12
 for portable routers
30 positions

**Display
 customizable**

STANDARD

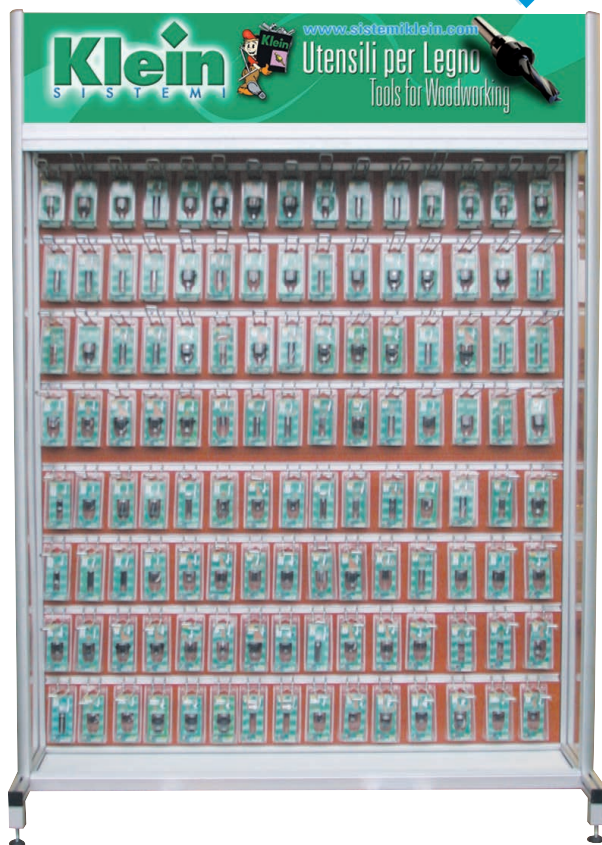
2 modular panels

Consisting of two displays "BASE", can be composed according to customers' needs.
 Suitable for those who want a good variety of products waiting to increase and improve the offer range.

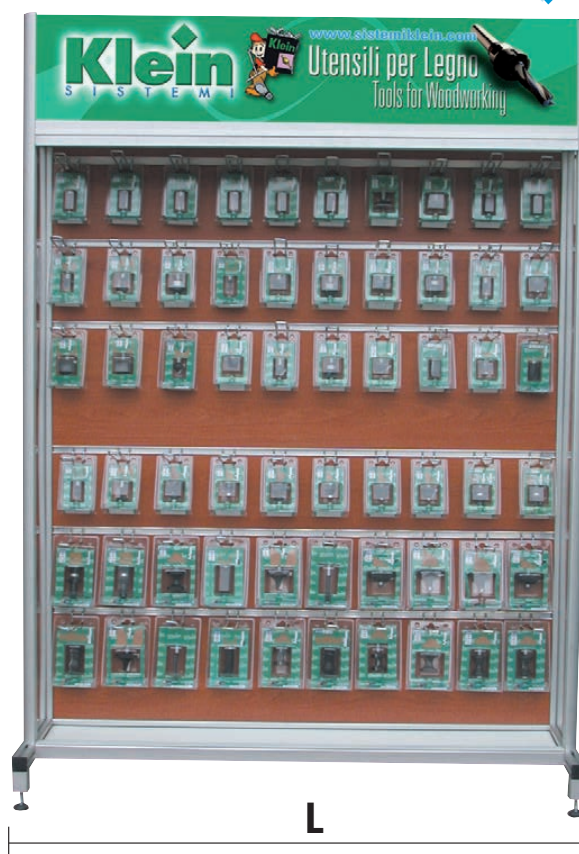
Dimensions (cm): 110 (L) x 145 (H) x 36 (P)

Display code **Standard 01**
 includes:
 Router bits S=6/8 for portable routers
120 positions

Display code **Standard 02**
 includes:
 Router bits S=12 for portable routers
60 positions



H



L

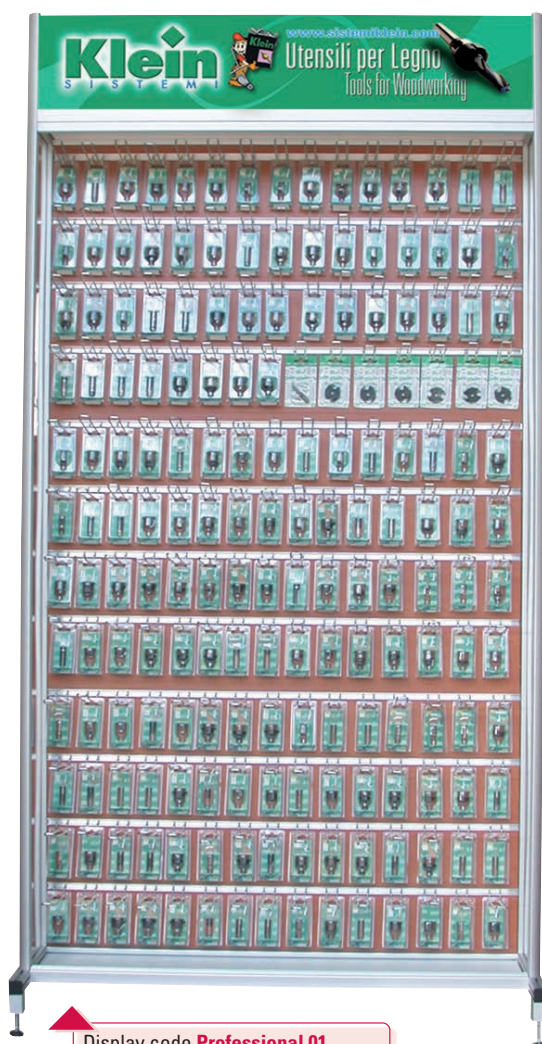
PROFESSIONAL

3 modular panels

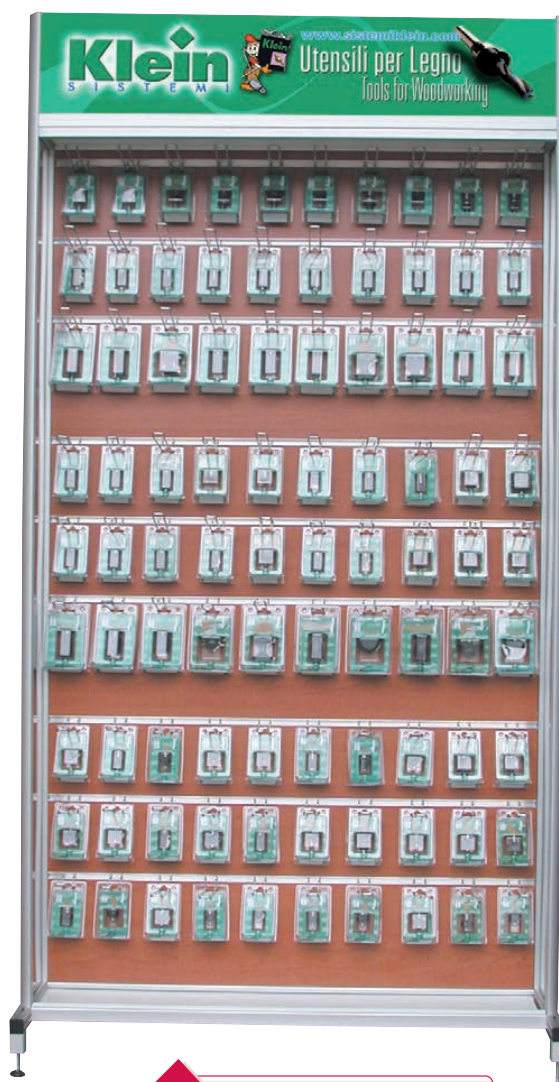
Big display consisting of three panels BASE, allows you to display a large variety of items.
With two or more displays you get the complete assortment to meet all the needs of professional woodworkers.

Dimensions (cm): 110 (L) x 200 (H) x 36 (P)

**Display
customizable**



Display code **Professional 01**
includes:
Router bits for portable routers
S= 6/8 - 180 positions



Display code **Professional 02**
includes:
Router bits for portable routers
S= 12 - 90 positions

ROUTER BITS FOR HAND PORTABLE ROUTER MACHINES S=Ø10 - S=Ø12 - S=Ø1/2"

2



HW STRAIGHT BITS Z=2+1
Page 2.07



HW STRAIGHT BITS LONG TYPE Z=2+1
Page 2.07



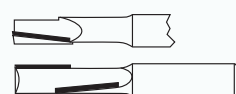
HW STRAIGHT BITS Z=2+1
Page 2.07



HW STRAIGHT BITS Z=2
Page 2.07



HW STRAIGHT BITS LONG TYPE Z=2
Page 2.08



HW STAGGER BITS Z=2
Page 2.08



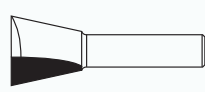
HW PANEL PILOT BITS Z=1+1
Page 2.08



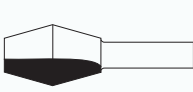
HW PLUNGE TYPE OGEE BITS Z=2
Page 2.08



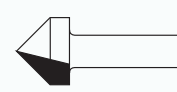
HW PLUNGE TYPE OGEE BITS Z=2
Page 2.08



HW DOVETAIL BITS Z=2
Page 2.08



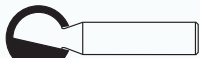
HW 14° BUTTERFLY SPLINE BITS Z=2
Page 2.09



HW V-GROOVE BITS Z=2
Page 2.09



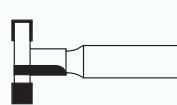
HW CORE BOX BITS Z=2
Page 2.09



HW BALL AND PLUNGE BITS Z=2
Page 2.09



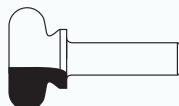
HW PLUNGING ROUND-OVER
BITS Z=2
Page 2.09



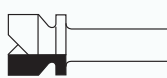
HW T-SLOT ROUTER BITS Z=2
Page 2.09



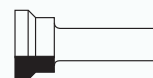
HW BULL NOSE RADIUS BITS Z=2
Page 2.10



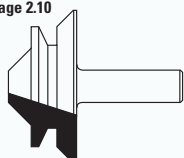
HW FINGER GRIP BITS Z=2
Page 2.10



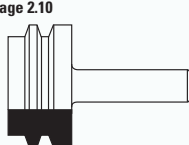
HW FINGER GRIP BITS Z=2
Page 2.10



HW DRAWER LOCK BITS Z=2
Page 2.10



HW 45° LOCK MITER BITS Z=2
Page 2.10



HW GLUE JOINT BITS Z=2
Page 2.10



HW WEDGE TONGUE
AND GROOVE BITS Z=2
Page 2.11



HW PROFILE BITS Z=2
Page 2.11



HW CROWN MOULDING BITS Z=2
Page 2.11



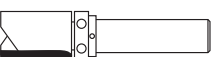
HW CROWN MOULDING BITS Z=2
Page 2.11



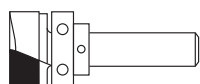
HW PROFILE BITS Z=2
Page 2.11



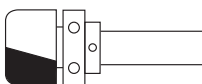
HW PROFILE BITS Z=2
Page 2.11



HW FLUSH TRIM BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 2.12



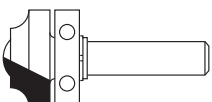
HW PLUNGE BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 2.12



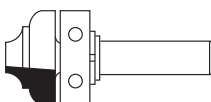
HW BOWL AND TRAY BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 2.12



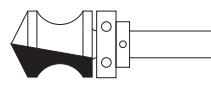
HW BEADING BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 2.12



HW CLASSICAL PLUNGE BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 2.12



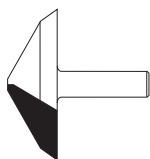
HW CLASSICAL PLUNGE BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 2.13



HW HAND GRIP PLUNGE BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 2.13



HW WINDOW SILL EDGE BITS Z=2
Page 2.13



HW RAISED PANEL BITS Z=2
Page 2.13



HW DOUBLE RADIUS BITS Z=2
Page 2.13



HW COVE BITS Z=2
Page 2.13



HW FLAT SUNK BEAD BITS Z=2
Page 2.14



HW SUNK BEAD BITS Z=2
Page 2.14



HW SUNK BEAD BITS Z=2
Page 2.14



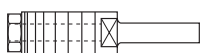
HW FLAT ROUNDING-OVER BITS Z=2
Page 2.14



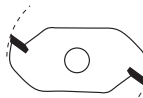
HW SUNK BEAD BITS Z=2
Page 2.14



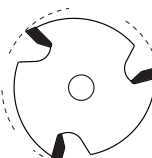
HW COVE BITS WITH
BALL BEARING GUIDE
Page 2.14



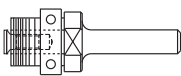
SLOT CUTTER ARBORS
Pag. 2.15



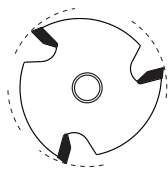
HW SLOT CUTTERS Z=2
Page 2.15



HW SLOT CUTTERS Z=3
Page 2.15



SLOT CUTTER ARBORS
Page 2.15



HW SLOT CUTTERS SPECIAL
FIXING SCREW Z=3
Page 2.15



HW FLUSH TRIM BITS WITH
BALL BEARING GUIDE Z=2
Page 2.16



HW FLUSH TRIM BITS WITH UPPER
AND LOWER BALL BEARING GUIDE Z=2
Page 2.16



**SOLID CARBIDE COMPRESSION CUTTERS
Z=2+2 WITH DOUBLE BALL BEARING**
Page 2.16



**VHW FLUSH TRIM BITS WITH DOUBLE
BALL BEARINGS Z=2**
Page 2.16



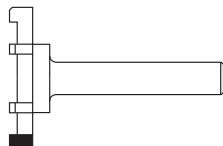
HW INSERT FLUSH TRIMMING BITS Z=2
Page 2.16



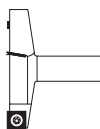
HW FLUSH INSERT TRIMMING BITS Z=2
Page 2.17



**HW INSERT FLUSH TRIMMING BITS WITH
UPPER AND LOWER BALL BEARINGS Z=2**
Page 2.17



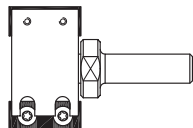
HW SPOILBOARD BITS Z=6
Page 2.17



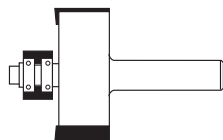
**HW INSERT ROUTER BITS FOR
PLANING AND RABBETING Z=3**
Page 2.17



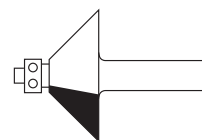
**HW RABBETING BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.18



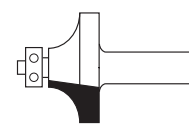
HW INSERT RABBETING BITS Z=2
Page 2.18



**HW RABBETING BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.18



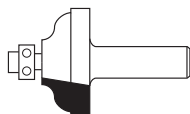
**HW BEVEL TRIM BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.18



**HW CORNER ROUNDING BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.19



**HW CLASSICAL BITS WITH BALL
BEARING GUIDE Z=2**
Page 2.19



**HW OGEE BITS WITH BALL BEARING
GUIDE Z=2**
Page 2.19



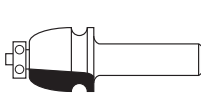
**HW MOULDING BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.19



**HW MOULDING BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.19



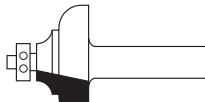
**HW MOULDING BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.20



**HW DRAWING LINE BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.20



**HW ROMAN OGEE BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.20



**HW CLASSICAL OGEE BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.20



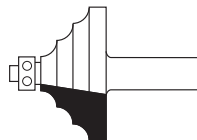
**HW DRAWING LINE BITS WITH
BALL BEARING GUIDE Z=2**
Page 2.21



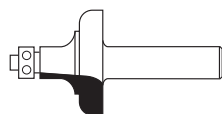
**HW ARCHITECTURAL MOULDING LINE
BITS WITH BALL BEARING GUIDE Z=2**
Page 2.21



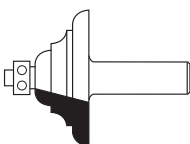
**HW ARCHITECTURAL MOULDING LINE
BITS WITH BALL BEARING GUIDE Z=2**
Page 2.21



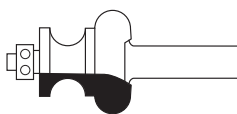
HW MULTI RADIUS BITS Z=2
Page 2.21



HW MULTIPLE PROFILE BITS Z=2
Page 2.21



HW MULTIPLE PROFILE BITS Z=2
Page 2.21



HW MULTIPLE PROFILE BITS Z=2
Page 2.22



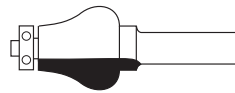
**HW BEADING BITS FOR RADIUS
WINDOW Z=2**
Page 2.22



HW CLASSICAL MULTI-FORM BITS
WITH BALL BEARING GUIDE Z=2
Page 2.22



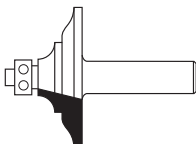
HW HANDRAIL BITS WITH
BALL BEARING GUIDE Z=2
Page 2.22



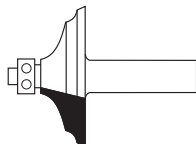
HW HANDRAIL BITS WITH
BALL BEARING GUIDE Z=2
Page 2.23



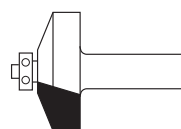
HW EDGE BEADING BITS Z=2
Page 2.23



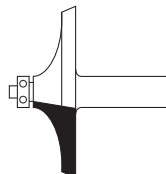
HW HANDRAIL AND TABLE EDGE BITS Z=2
Page 2.23



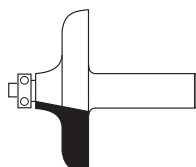
HW HANDRAIL AND TABLE EDGE BITS Z=2
Page 2.23



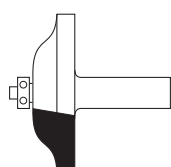
HW RAISED PANEL BITS WITH
BALL BEARING GUIDE Z=2
Page 2.23



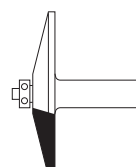
HW HANDRAIL-TABLE EDGE BITS
WITH BALL BEARING GUIDE Z=2
Page 2.23



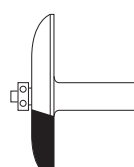
HW HANDRAIL-TABLE EDGE BITS
WITH BALL BEARING GUIDE Z=2
Page 2.24



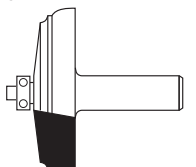
HW RAISED PANEL BITS WITH
BALL BEARING GUIDE Z=2
Page 2.24



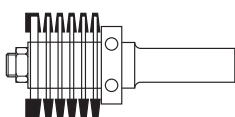
HW RAISED PANEL BITS WITH
BALL BEARING GUIDE Z=2
Page 2.24



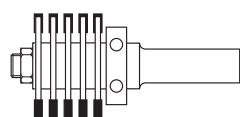
HW RAISED PANEL BITS WITH
BALL BEARING GUIDE Z=2
Page 2.24



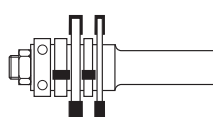
HW RAISED PANEL BITS WITH
BALL BEARING GUIDE Z=2
Page 2.24



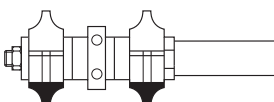
HW FINGER JOINT ASSEMBLY
WITH BALL BEARING GUIDE Z=2
Page 2.25



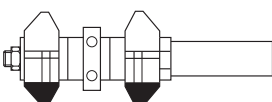
HW FINGER JOINT ASSEMBLY
WITH BALL BEARING GUIDE Z=2
Page 2.25



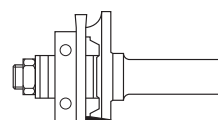
HW SLOT CUTTER SET WITH
BALL BEARING GUIDE Z=2
Page 2.26



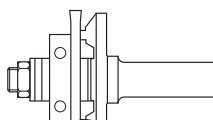
HW DOUBLE CORNER ROUND ASSEMBLY
WITH BALL BEARING GUIDE Z=3
Page 2.26



HW DOUBLE CHAMFER ASSEMBLY WITH
BALL BEARING GUIDE Z=3
Page 2.27



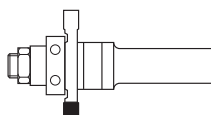
HW BEAD PANELING ASSEMBLY
WITH BALL BEARING GUIDE Z=2
Page 2.27



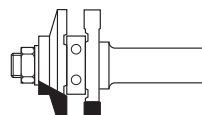
HW V PANELING ASSEMBLY
WITH BALL BEARING GUIDE Z=2
Page 2.28



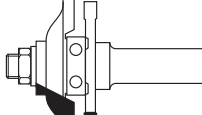
HW OGEE WINDOW SASH ASSEMBLY WITH
BALL BEARING GUIDE Z=2
Page 2.28



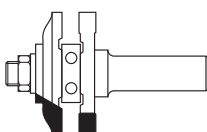
HW TONGUE AND GROOVE ASSEMBLY
WITH BALL BEARING GUIDE Z=2
Page 2.29



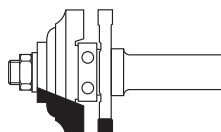
HW STILE AND RAIL ASSEMBLY
WITH BALL BEARING GUIDE Z=2
Page 2.29



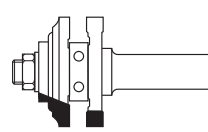
HW STILE AND RAIL ASSEMBLY
WITH BALL BEARING GUIDE Z=2
Page 2.30



HW STILE AND RAIL ASSEMBLY WITH
BALL BEARING GUIDE Z=2
Page 2.30



HW STILE AND RAIL ASSEMBLY WITH
BALL BEARING GUIDE Z=2
Page 2.31



HW STILE AND RAIL ASSEMBLY WITH
BALL BEARING GUIDE Z=2
Page 2.31



2 PIECE SET FOR CABINET DOORS
MAKER "TYPE 1"
Page 2.32



2 PIECE SET FOR CABINET DOORS
MAKER "TYPE 2"
Pag. 2.32



2 PIECE SET FOR CABINET DOORS
MAKER "TYPE 3"
Pag. 2.33



3 PIECE SET FOR CABINET DOORS
MAKER AND JOINTS "TYPE 1"
Pag. 2.33



3 PIECE SET FOR CABINET DOORS MAKER
AND JOINTS "TYPE 2"
Page 2.34



3 PIECE SET FOR CABINET DOORS
MAKER AND JOINTS "TYPE 3"
Page 2.34

INDUSTRIAL ROUTER BITS FOR HAND PORTABLE ROUTER MACHINE AND ROUTER TABLE



STRAIGHT AND TRIMMING ROUTER BITS
Router bits specially designed to work at different cutting heights and diameters. In addition to the lateral cutting edges, many of them also have a third cutting edge at the head to perform drilling operations (Z=2+1).

See page 2.07-2.08 / 2.12 / 2.16



SLOT CUTTER AND ASSEMBLY ROUTER BITS
Router bits for all the types of jointing. The ball bearing guide defines the depth of the cut, ideal for grooves, frames, doors and edges.

See page 2.15 / 2.25-2.34



ROUTER BITS WITH INTERCHANGEABLE KNIVES
The interchangeable knife is easy to replace and provide an excellent precision and cutting accuracy with the best quality/price ratio. Longer tool life and better finishing quality.

See page 2.17-2.18



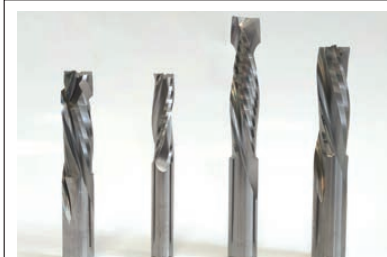
RADIUS AND PROFILE ROUTER BITS
All the router bits with a profile or shape on the cutting edge allow you to decorate the wood as you wish. Some of them have a ball bearing guide.

See page 2.09-2.14 / 2.18-2.24



ENGRAVING AND DECORATING ROUTER BITS
Router bits for all the types of jointing. Router bits with a special "V" or "U" head profile let you carve wood easily and precisely. These router bits are useful for lettering, incision signmaking and decorations on wood.

See page 2.09

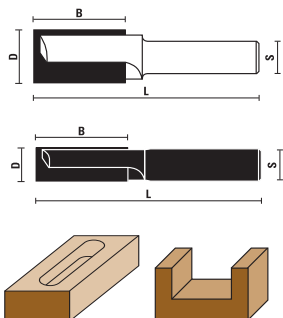


SPIRAL ROUTER BITS
The spiral solid carbide router bits have a special design, which guarantees an extremely precise and clean cut because the cutting edges facilitate the wood chips expulsion.

See page 2.16 or go to section 7

HW STRAIGHT BITS Z=2+1

ART. D101



- Straight cut Z=2+1, plunging
- To be used also for working plastic materials, acrylic, polypropylene, HDPE, acetates and polycarbonates

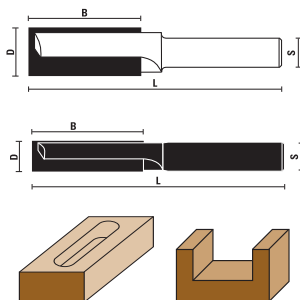


S Ø 10	D	B	L
D101.040.R ▲	4	13	49
D101.050.R ▲	5	15	49
D101.060.R ▲	6	16	53
D101.070.R ▲	7	20	55
D101.080.R ▲	8	23	60
D101.090.R ▲	9	23	60
D101.100.R ▲	10	23	70
D101.120.R	12	23	70
D101.140.R	14	23	70
D101.150.R	15	23	70
D101.160.R	16	23	70
D101.180.R	18	23	70
D101.200.R	20	23	70
D101.220.R	22	23	70
D101.240.R	24	23	70

▲ Solid carbide

HW STRAIGHT BITS LONG TYPE Z=2+1

ART. D102



- Straight cut Z=2+1, plunging
- To be used also for working plastic materials, acrylic, polypropylene, HDPE, acetates and polycarbonates



S Ø 10	D	B	L
D102.100.R ▲	10	40	87
D102.120.R	12	40	87
D102.140.R	14	40	87
D102.160.R	16	45	87
D102.180.R	18	45	87
D102.200.R	20	45	87

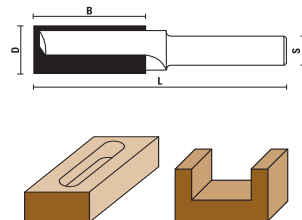
▲ Solid carbide



Z=2+1

HW STRAIGHT BITS Z=2+1

ART. D103



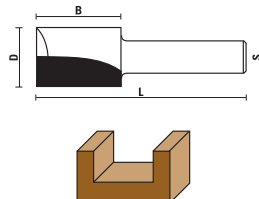
- Straight cut Z=2+1, plunging
- To be used also for working plastic materials, acrylic, polypropylene, HDPE, acetates and polycarbonates



S Ø 12	D	B	L
D103.100.R	10	35	90
D103.120.R	12	35	90
D103.121.R	12	45	90
D103.140.R	14	35	90
D103.141.R	14	50	100
D103.160.R	16	35	90
D103.161.R	16	50	100
D103.180.R	18	35	90
D103.181.R	18	50	100
D103.200.R	20	35	90
D103.201.R	20	50	100
D103.220.R	22	35	90
D103.240.R	24	35	90

HW STRAIGHT BITS Z=2

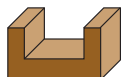
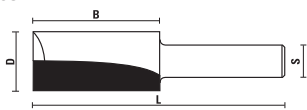
ART. E101 - G101



S Ø 12	S Ø 1/2"(12,7)	D	B	L
E101.040.R		4	11	63
E101.050.R		5	11	60
E101.060.R	G101.060.R	6	19	63
	G101.064.R	6,4	19	63
E101.070.R		7	19	63
E101.080.R	G101.080.R	8	19	63
	G101.095.R	9,5	25	70
E101.100.R	G101.100.R	10	25	70
E101.120.R		12	25	70
	G101.127.R	12,7	25	66
E101.140.R		14	32	73
	G101.143.R	14,3	32	73
E101.150.R		15	25	66
E101.160.R	G101.160.R	16	32	73
E101.170.R		17	32	73
E101.180.R		18	32	73
E101.190.R		19	32	73
E101.200.R		20	32	73
E101.220.R		22	32	73
E101.250.R		25	32	73
	G101.254.R	25,4	32	73
E101.300.R		30	32	73
E101.350.R		35	32	73
E101.400.R		40	32	73

HW STRAIGHT BITS Z=2 LONG TYPE

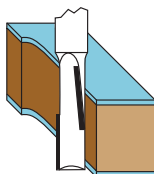
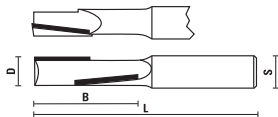
ART. E102 - G102 / E103 - G103



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E102.080.R		8	25	70
	G102.095.R	9,5	32	76
E102.100.R	G102.100.R	10	32	76
E102.120.R	G102.120.R	12	38	80
	G102.127.R	12,7	38	80
E102.160.R	G102.160.R	16	38	80
E102.190.R	G102.190.R	19	38	80
E103.120.R	G103.120.R	12	50	108
	G103.127.R	12,7	50	108
E103.180.R		18	50	92
E103.200.R		20	50	92
E103.220.R		22	50	92

HW STAGGER BITS Z=2

ART. E104 - G104



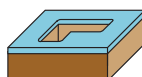
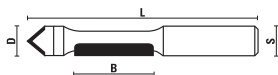
- Excellent for working laminated, panel, melaminic, veneered and plywood
- Good finishing top/bottom



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E104.127.R	G104.127.R	12,7	38	79
E104.128.R	G104.128.R	12,7	54	108

HW PANEL PILOT BITS Z=1+1

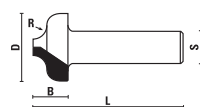
ART. E105 - G105



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E105.127.R	G105.127.R	12,7	30	90

HW PLUNGE TYPE OGEE BITS Z=2

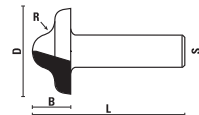
ART. E106 - G106



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E106.190.R	G106.190.R	19	3,5	13	68
E106.254.R	G106.254.R	25,4	3,2	9,5	50
E106.350.R	G106.350.R	35	3,2	9,5	59

HW PLUNGE TYPE OGEE BITS Z=2

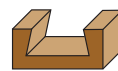
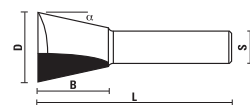
ART. E107 - G107



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E107.270.R	G107.270.R	27	6	12	57

HW DOVETAIL BITS Z=2

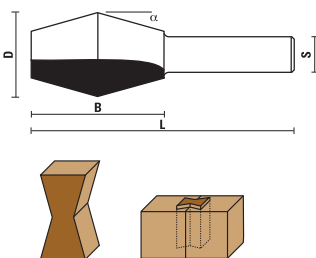
ART. E108 - G108



S Ø 12	S Ø 1/2" (12,7)	D	α	B	L
E108.161.R	G108.161.R	16	7°	22	65
E108.190.R	G108.190.R	19	14°	19	65
E108.191.R	G108.191.R	19	7°	22	65
E108.220.R	G108.220.R	22	14°	22	67
E108.221.R	G108.221.R	22	7°	22	60
E108.254.R	G108.254.R	25,4	14°	25,4	70

HW 14° BUTTERFLY SPLINE BITS Z=2

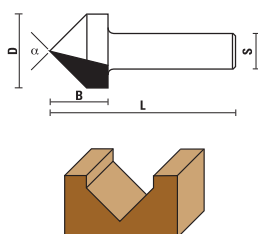
ART. E109 - G109



S Ø 12	S Ø 1/2"(12,7)	D	α	B	L
E109.280.R	G109.280.R	28	14°	46	84

HW V-GROOVE BITS Z=2

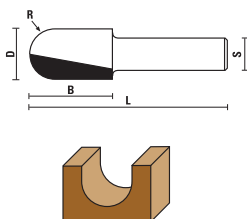
ART. E110 - G110



S Ø 12	S Ø 1/2"(12,7)	D	α	B	L
E110.127.R	G110.127.R	12,7	90°	13	54
E110.160.R	G110.160.R	16	90°	13	51
E110.190.R	G110.190.R	19	90°	16	54
E110.254.R	G110.254.R	25,4	90°	19	57
E110.320.R	G110.320.R	32	90°	25	64
E110.381.R	G110.381.R	38,1	90°	32	70
E110.501.R	G110.501.R	51	90°	44	83

HW CORE BOX BITS Z=2

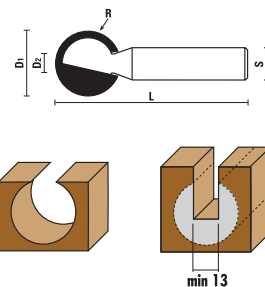
ART. E111 - G111



S Ø 12	S Ø 1/2"(12,7)	D	R	B	L
E111.127.R	G111.127.R	12,7	6,4	32	73
E111.160.R	G111.160.R	16	8	32	70
E111.190.R	G111.190.R	19	9,5	32	70
E111.220.R	G111.220.R	22	11	32	70
E111.254.R	G111.254.R	25,4	12,7	32	70
E111.317.R	G111.317.R	32	16	32	70
E111.380.R	G111.380.R	38	19	32	70
E111.500.R	G111.500.R	50	25	32	70

HW BALL AND PLUNGE BITS Z=2

ART. E112 - G112



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

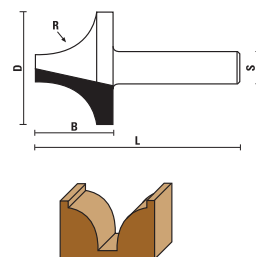


S Ø 12	S Ø 1/2"(12,7)	D1	D2	R	L
E112.127.R	G112.127.R	12,7	6,5	6,4	57
E112.160.R	G112.160.R	16	7,5	8	60
E112.190.R	G112.190.R	19	8,5	9,5	64
E112.254.R	G112.254.R	25,4	9	12,7	70
E112.286.R*		28,6	10,3	14,3	70
E112.320.R	G112.320.R	32	12,7	16	73

* Selling out

HW PLUNGING ROUND-OVER BITS Z=2

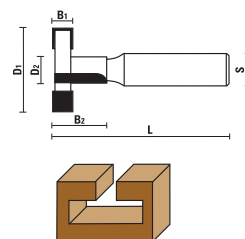
ART. E113 - G113



S Ø 12	S Ø 1/2"(12,7)	D	R	B	L
E113.160.R	G113.160.R	16	5	11	49
E113.190.R	G113.190.R	19	6,4	13	51
E113.220.R	G113.220.R	22	8	14	52
E113.254.R	G113.254.R	25,4	9,5	16	54
E113.349.R	G113.349.R	34,9	12,7	25,4	63,5
E113.445.R	G113.445.R	44,5	16	31,8	70
E113.510.R	G113.510.R	51	19	36	75

HW T-SLOT ROUTER BITS Z=2

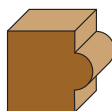
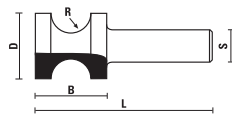
ART. E114 - G114



S Ø 12	S Ø 1/2"(12,7)	D1	D2	B1	B2	L
E114.280.R	G114.280.R	28	9,5	8	21	65
E114.350.R	G114.350.R	35	13	9,5	22	65

HW BULL NOSE RADIUS BITS Z=2

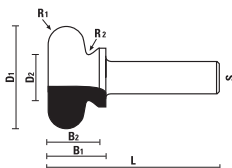
ART. E115 - G115



S Ø 12	S Ø 1/2"(12,7)	D	R	B	L
E115.220.R	G115.220.R	22	5	19	57
E115.260.R	G115.260.R	26	6,8	25	63
E115.280.R	G115.280.R	28	8	25	64
E115.333.R	G115.333.R	33,3	9,5	35	73
E115.429.R	G115.429.R	42,9	12,7	40	78
E115.510.R	G115.510.R	51	16	50	88
E115.600.R	G115.600.R - max RPM 18.000	60	19	50	88

HW FINGER GRIP BITS Z=2

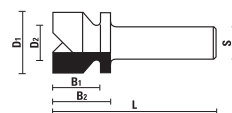
ART. E116 - G116



S Ø 12	S Ø 1/2"(12,7)	D1	D2	R1	R2	B1	B2	L
E116.190.R	G116.190.R	19	10	4,8	2,5	19	14	57
E116.381.R	G116.381.R	38,1	17	6	2	21	18	59
E116.445.R	G116.445.R	44,5	17	8	2	25	22	63

HW FINGER GRIP BITS Z=2

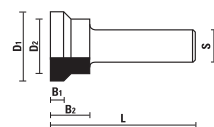
ART. E118 - G118



S Ø 12	S Ø 1/2"(12,7)	D1	D2	B1	B2	L
E118.220.R	G118.220.R	22	13	17	21	59

HW DRAWER LOCK BITS Z=2

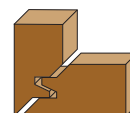
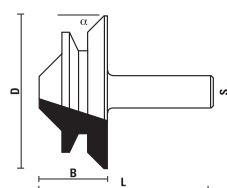
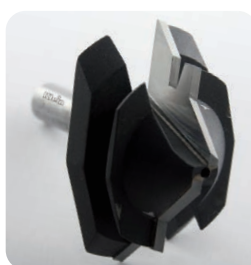
ART. E119 - G119



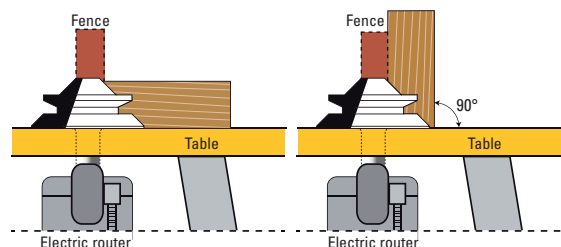
S Ø 12	S Ø 1/2"(12,7)	D1	D2	B1	B2	L
E119.254.R	G119.254.R	25,4	18,5	4	13	49

HW 45° LOCK MITER BITS Z=2

ART. E120 - G120

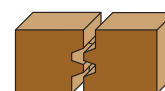
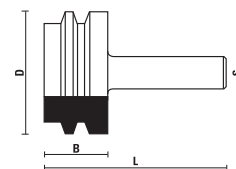


S Ø 12	S Ø 1/2"(12,7)	D	α	B	L
E120.445.R	G120.445.R	44,5	45°	20	58
E120.680.R	G120.680.R - max RPM 18.000	68	45°	29,5	68



HW GLUE JOINT BITS Z=2

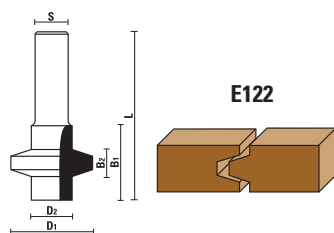
ART. E121 - G121



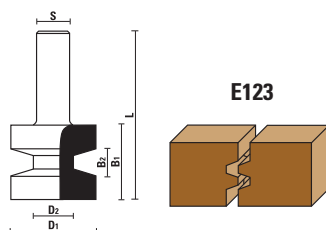
S Ø 12	S Ø 1/2"(12,7)	D	B	L
E121.470.R	G121.470.R	47	28	66

HW WEDGE TONGUE AND GROOVE BITS Z=2

ART. E122 - G122 / E123 - G123



E122



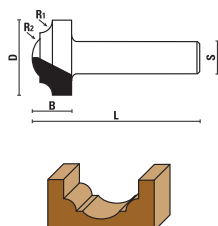
E123



S Ø 12	S Ø 1/2"(12,7)	D1	D2	α	B1	B2	L
E122.320.R	G122.320.R	32	14	15°	32	11	70
E123.320.R	G123.320.R	32	14	15°	32	11	70

HW PROFILE BITS Z=2

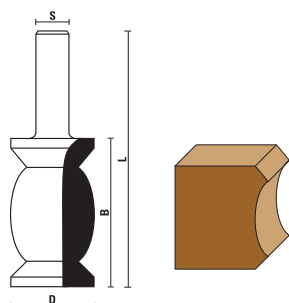
ART. E124 - G124



S Ø 12	S Ø 1/2"(12,7)	D	R1	R2	B	L
E124.190.R	G124.190.R	19	3,6	4	13	70
E124.254.R	G124.254.R	25,4	5	6,4	17,5	73

HW CROWN MOULDING BITS Z=2

ART. E125 - G125

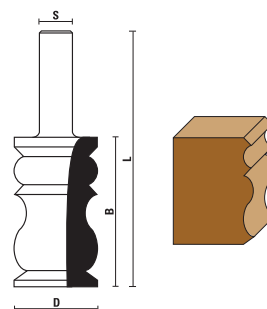


S Ø 12	S Ø 1/2"(12,7)	D	B	L
E125.320.R*	G125.320.R*	32	58	96

* Selling out

HW CROWN MOULDING BITS Z=2

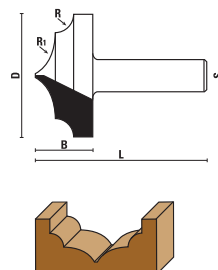
ART. E127 - G127



S Ø 12	S Ø 1/2"(12,7)	D	B	L
E127.320.R	G127.320.R	32	58	96

HW PROFILE BITS Z=2

ART. E128 - G128

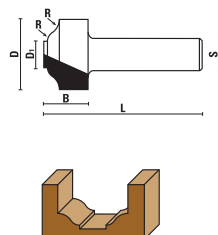


For producing ornaments

S Ø 12	S Ø 1/2"(12,7)	D	R1	R2	B	L
E128.410.R	G128.410.R	41	6,4	15	18	56

HW PROFILE BITS Z=2

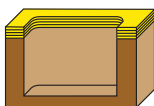
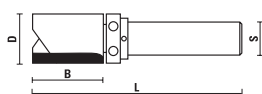
ART. E129 - G129



S Ø 12	S Ø 1/2"(12,7)	D	D1	R	B	L
E129.254.R	G129.254.R	25,4	9,5	4,8	15	53
E129.300.R	G129.300.R	30	12	6	15	53

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

ART. E130 - G130



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E130.190.R	G130.190.R	19	25,4	77
E130.191.R	G130.191.R	19	51	92



Z050.012.N



Z058.002.N



Z051.005.N

S Ø 12	S Ø 1/2" (12,7)	D	B	L
E130.254.R	G130.254.R	25,4	45	95



Z050.009.N



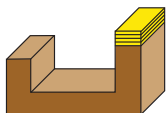
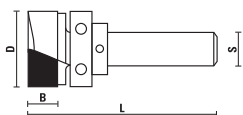
Z058.002.N



Z051.005.N

HW PLUNGE BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. E131 - G131



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E131.190.R	G131.190.R	19	11	64



Z050.012.N



Z058.002.N



Z051.005.N

S Ø 12	S Ø 1/2" (12,7)	D	B	L
E131.254.R	G131.254.R	25,4	11	64



Z050.009.N



Z058.002.N



Z051.005.N

S Ø 12	S Ø 1/2" (12,7)	D	B	L
E131.380.R	G131.380.R	38	16	69



Z050.013.N



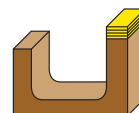
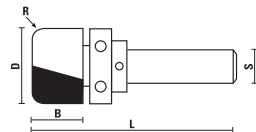
Z058.003.N



Z051.005.N

HW BOWL AND TRAY BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. E132 - G132



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E132.190.R	G132.190.R	19	6,4	16	67



Z050.012.N



Z058.002.N



Z051.005.N

S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E132.286.R	G132.286.R	28,6	6,4	16	67



Z050.015.N



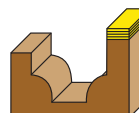
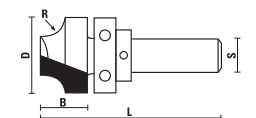
Z058.003.N



Z051.005.N

HW BEADING BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. E133



S Ø 12	D	R	B	L
E133.286.R*	28,6	8	15	58

* Selling out



Z050.015.N



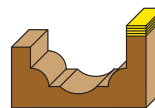
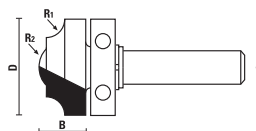
Z058.003.N



Z051.005.N

HW CLASSICAL PLUNGE BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. E134 - G134



For producing ornaments

S Ø 12	S Ø 1/2" (12,7)	D	R1	R2	B	L
E134.350.R	G134.350.R	35	6,4	10	15	68



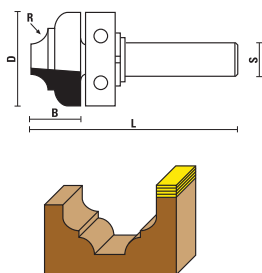
Z050.014.N



DIN 471-15

HW CLASSICAL PLUNGE BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. E135 - G135



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E135.350.R	G135.350.R	35	5	14	67



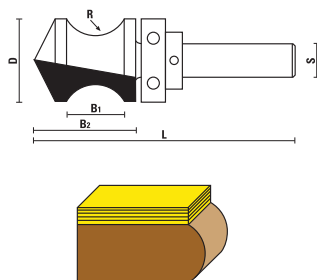
Z050.014.N



DIN 471-15

HW HAND GRIP PLUNGE BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. E136 - G136



S Ø 12	S Ø 1/2" (12,7)	D	R	B1	B2	L
E136.286.R	G136.286.R	28,6	13	22	40	92



Z050.015.N



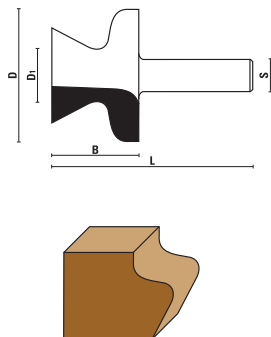
Z058.003.N



Z051.005.N

HW WINDOW SILL EDGE BITS Z=2

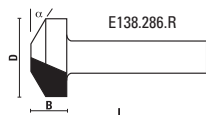
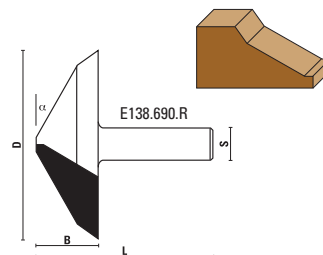
ART. E137 - G137



S Ø 12	S Ø 1/2" (12,7)	D	D1	B	L
E137.510.R	G137.510.R	51	19	32	70

HW RAISED PANEL BITS Z=2

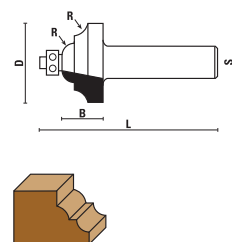
ART. E138 - G138



S Ø 12	S Ø 1/2" (12,7)	D	α	B	L
E138.286.R	G138.286.R	28,6	30°	13	70
E138.690.R	G138.690.R - max RPM 18.000	69	25°	19	57

HW DOUBLE RADIUS BITS Z=2

ART. E139 - G139



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E139.254.R	G139.254.R	25,4	4	16	63
E139.350.R	G139.350.R	35	6,4	20	67



Z050.001.N



Z053.001.N



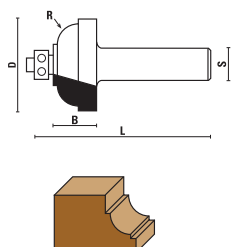
Z054.001.N



Z051.001.R

HW COVE BITS Z=2

ART. E140 - G140



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E140.286.R	G140.286.R	28,6	4,8	13	61
E140.350.R*		35	8	16	64

* Selling out



Z050.003.N



Z053.003.N



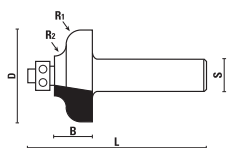
Z054.002.N



Z051.002.R

HW FLAT SUNK BEAD BITS Z=2

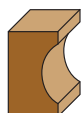
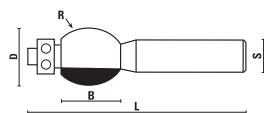
ART. E141 - G141



S Ø 12	S Ø 1/2" (12,7)	D	R1	R2	B	L
E141.350.R	G141.350.R	35	6	5	17,5	65
						
Z050.002.N	Z053.002.N	Z054.002.N	Z051.002.R			

HW SUNK BEAD BITS Z=2

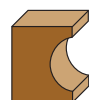
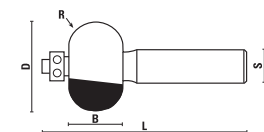
ART. E142 - G142



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E142.190.R	G142.190.R	19	8	13	70
E142.220.R	G142.220.R	22	12	19	78
E142.254.R	G142.254.R	25,4	32	38	98
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW SUNK BEAD BITS Z=2

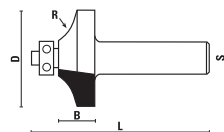
ART. E143 - G143



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E143.330.R	G143.330.R	33	10	20	75
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW FLAT ROUNDING-OVER BITS Z=2

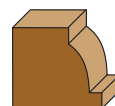
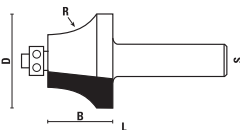
ART. E144 - G144



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E144.300.R	G144.300.R	30	12	10	57
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW SUNK BEAD BITS Z=2

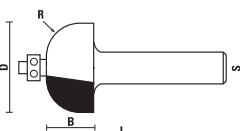
ART. E145 - G145



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E145.270.R	G145.270.R	27	17	17	67
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW COVE BITS WITH BALL BEARING GUIDE

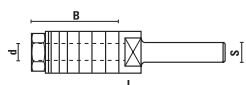
ART. E147 - G147



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L	Z
E147.222.R	G147.222.R	22,2	6,4	14	60	2
E147.254.R	G147.254.R	25,4	8	14	60	2
E147.286.R	G147.286.R	28,6	9,5	14	62	2
E147.350.R	G147.350.R	35	12,7	17	64	2
E147.410.R	G147.410.R	41	16	18	65	2
						
Z050.001.N	Z053.001.N	Z054.001.N	Z051.001.R			
S Ø 12	S Ø 1/2" (12,7)	D	R	B	L	Z
E147.570.R	G147.570.R	57	22	32	81	2
						
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R			

SLOT CUTTER ARBORS

ART. E117 - G117



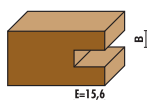
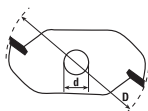
Used with cutters Art. A118 - C118, spacers Art. Z057 and ball bearing Art. Z050 (see section 10)



S Ø 12	S Ø 12,7 (1/2")	d	B	L
E117.120.N	G117.120.R	7,94	53	96
E117.121.N	G117.121.R	7,94	66	108
E117.122.N	G117.122.R	7,94	38	80
E117.123.N	G117.123.R	7,94	38	80

HW SLOT CUTTERS Z=2

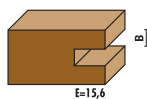
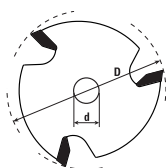
ART. C118



Item	d	D	B	Z
C118.216.R	7,94	47,6	1,6	2
C118.220.R	7,94	47,6	2	2
C118.224.R	7,94	47,6	2,4	2
C118.230.R	7,94	47,6	3	2
C118.232.R	7,94	47,6	3,2	2
C118.240.R	7,94	47,6	4	2
C118.248.R	7,94	47,6	4,8	2
C118.250.R	7,94	47,6	5	2
C118.260.R	7,94	47,6	6	2
C118.264.R	7,94	47,6	6,4	2

HW SLOT CUTTERS Z=3

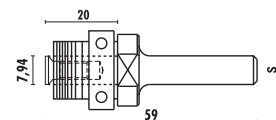
ART. C118



Item	d	D	B	Z
C118.316.R	7,94	47,6	1,6	3
C118.320.R	7,94	47,6	2	3
C118.324.R	7,94	47,6	2,4	3
C118.330.R	7,94	47,6	3	3
C118.332.R	7,94	47,6	3,2	3
C118.340.R	7,94	47,6	4	3
C118.348.R	7,94	47,6	4,8	3
C118.350.R	7,94	47,6	5	3
C118.360.R	7,94	47,6	6	3
C118.364.R	7,94	47,6	6,4	3

SLOT CUTTER ARBORS

ART. A117 - B117 - C117 - E117 - G117



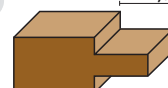
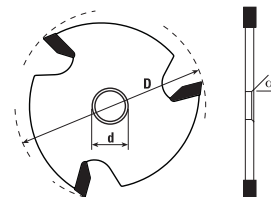
S Ø 12	S Ø 1/2"(12,7)
E117.280.R With ball bearing	G117.280.R
Z050.008.N	Z051.015.R
	nr. 2 - Z057.002.N - 1 mm nr. 2 - Z057.003.N - 0,5 mm nr. 5 - Z057.004.N - 0,1 mm nr. 2 - Z057.005.N - 3 mm

Change the ball bearing to get different cutting depths (see page 10.05)

S Ø 12	S Ø 1/2"(12,7)
E117.281.R Without ball bearing	G117.281.R
Z051.015.R	nr. 3 - Z057.002.N - 1 mm nr. 2 - Z057.003.N - 0,5 mm nr. 6 - Z057.004.N - 0,1 mm nr. 2 - Z057.005.N - 3 mm nr. 1 - Z057.006.N - 6 mm

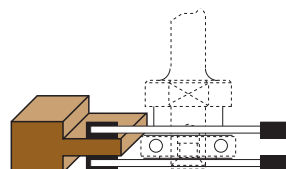
HW SLOT CUTTERS SPECIAL FIXING SCREW Z=3

ART. C118



- To be used with slot cutter arbors
- α= 45° bore

Item	d	D	B	Z
C118.830.R	7,94	47,6	3	3
C118.832.R	7,94	47,6	3,2	3
C118.840.R	7,94	47,6	4	3
C118.848.R	7,94	47,6	4,8	3
C118.850.R	7,94	47,6	5	3
C118.860.R	7,94	47,6	6	3
C118.864.R	7,94	47,6	6,4	3



Example of processing:
The fixing screw (Art. Z051.015.R) used on this spindle has a special head angle that allows it to remain flat on the cutter level.

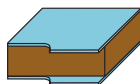
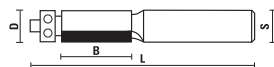


SLOT CUTTER ARBORS WITH SHANK 6 (1/4") AND 8 MM

ART. A117 - B117 - C117 at page 1.13

HW FLUSH TRIM BITS WITH BALL BEARING GUIDE Z=2

ART. E146 - G146



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E146.126.R	G146.126.R	12,7	13	71
E146.127.R	G146.127.R	12,7	25	84
E146.128.R	G146.128.R	12,7	38	98
E146.129.R	G146.129.R	12,7	51	106



Z050.003.N



Z053.003.N



Z054.002.N



Z051.002.R

S Ø 12	S Ø 1/2" (12,7)	D	B	L
E146.190.R	G146.190.R	19	25	82
E146.191.R	G146.191.R shear angle	19	38	98
E146.192.R	G146.192.R shear angle	19	51	108



Z050.005.N



Z053.002.N



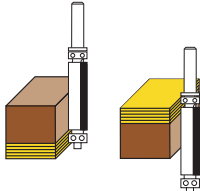
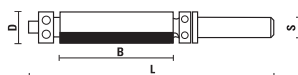
Z054.002.N



Z051.004.R

HW FLUSH TRIM BITS WITH UPPER AND LOWER BALL BEARING Z=2

ART. E146 - G146



- Suitable for trimming with template on the upper and/or lower side
- Klein® trimming bits with straight cut are suitable for smooth and well-finished edges on melamine and veneered panels.

S Ø 12	S Ø 1/2" (12,7)	D	B	L
E146.592.R	G146.592.R	19	51	108



Z050.005.N
(upper ball bearing)



Z050.012.N
(lower ball bearing)



Z053.002.N



Z054.002.N



Z051.004.N

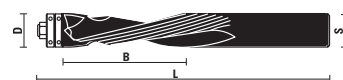


Z058.002.N

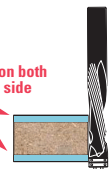


SOLID CARBIDE COMPRESSION CUTTERS Z=2+2 WITH DOUBLE BALL BEARING

ART. T166



Excellent finish on both upper and lower side



- Right-hand rotation with double flute compression spiral (UP & DOWN).
- Double ball bearings guide for greater precision of trimming
- Special spiral geometry which provides better chip evacuation and smoother cuts on laminate panels.



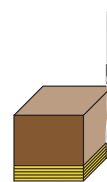
S Ø 12	D	B	L	Z
T166.120.R NEW	12	51	110	2+2



Z050.031.N

VHW FLUSH TRIM BITS WITH DOUBLE BALL BEARINGS Z=2

ART. T168



- Solid carbide (VHW)
- Right-hand rotation with "UP CUT SPIRAL"
- Double ball bearings guide for **greater precision of trimming**
- Special spiral geometry which provides **better chip evacuation and smoother cuts** compared to standard flush trim bits
- For natural wood, pressed wood, veneered, laminate and melamine

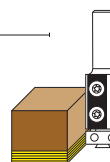
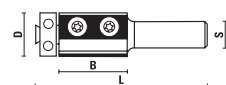
S Ø 12	D	B	L	Z
T168.127.R	12,7 (1/2")	51	125	2



Z050.007.N

HW INSERT FLUSH TRIMMING BITS Z=2

ART. W114 - WG114



- Lower ball bearing
- This item is sold complete with a torx key

S Ø 12	D	B	L	Z
W114.190.R	19	30	80	2
W114.191.R	19	50	100	2

S Ø 1/2" (12,7)	D	B	L	Z
WG114.190.R	19	30	80	2
WG114.191.R	19	50	100	2



Z555.008.N
(B=30)



Z555.010.N
(B=50)



Z052.201.N



Z051.017.R
(for ball bearing)



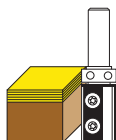
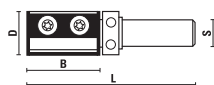
Z050.006.N
(D=19)



Z051.010.R
(for knives)

HW INSERT FLUSH TRIMMING BITS Z=2

ART. W116 - WG116



- Upper ball bearing
- This item is sold complete with a torx key



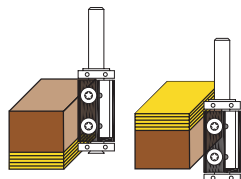
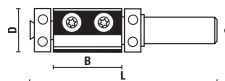
S Ø 12	D	B	L	Z
W116.190.R	19	30	80	2
W116.191.R	19	50	100	2

S Ø 1/2" (12,7)	D	B	L	Z
WG116.190.R	19	30	80	2
WG116.191.R	19	50	100	2

Z555.008.N (B=30)	Z555.010.N (B=50)	Z050.012.N	Z052.201.N	Z051.017.R (for ball bearing)	Z051.010.R (for knives)

HW INSERT FLUSH TRIMMING BITS WITH UPPER AND LOWER BALL BEARINGS Z=2

ART. W118 - WG118



- Suitable for trimming with template on the upper and/or lower side
- This item is sold complete with a torx key



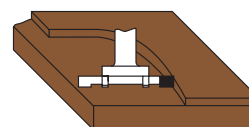
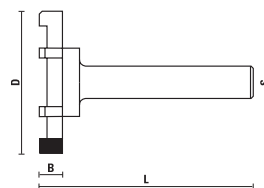
S Ø 12	D	B	L	Z
W118.191.R	19	50	110	2

S Ø 1/2" (12,7)	D	B	L	Z
WG118.191.R	19	50	105	2

Z052.201.N	Z555.010.N (B=50)	Z050.006.N (lower ball bearing)	Z050.012.N (upper ball bearing)	Z051.017.R (for ball bearing)	Z051.010.R (for knives)

HW SPOILBOARD BITS Z=6

ART. E350 - G350



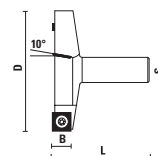
- Used for surfacing MDF, wood and particle board and making deep rabbet
- Suitable for processing ever kind of wood



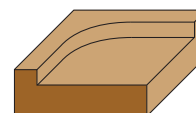
S Ø 12	S Ø 1/2" (12,7)	D	B	L	Z
E350.521.R	G350.521.R	52	6,5	83	6

HW INSERT ROUTER BITS FOR PLANING AND RABBETING Z=3

ART. WE190 - WG190



10° shear angle



- Used for surfacing MDF, wood and particle board and making deep rabbet
- 10° shear angle for better performance
- Suitable for processing ever kind of wood
- For greater performance PCD knives can be mounted
- This item is sold complete with a torx key



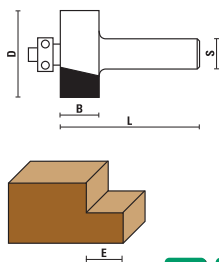
S Ø 12	D	B	L	Z
WE190.380.R NEW	38	12	60	3
Z051.210.R	Z555.001.N	Z052.201.N		

S Ø 12	D	B	L	Z
WE190.635.R	63,5 (2-1/2")	14	70 (2-3/4")	3
Z051.210.R	Z555.007.N	Z052.201.N		

S Ø 1/2" (12,7)	D	B	L	Z
WG190.635.R	2-1/2"	14	2-3/4"	3
Z051.020.R	Z555.007.N	Z052.103.N		

HW RABBETING BITS WITH BALL BEARING GUIDE Z=2

ART. E150 - G150



S Ø 12	S Ø 1/2" (12,7)	D	B	E	L
E150.320.R	G150.320.R	32	13	9,5	60
E150.350.R	G150.350.R	35	13	11	60
SET					
E150.850.R	G150.850.R	35	13	8-9,5-11-12,7	60



Z050.002.N (E=12,7)
Z050.003.N (E=11)
Z050.004.N (E=9,5)
Z050.023.N (E=8)



Z053.002.N
Z053.003.N
Z053.004.N



Z051.002.R

Art. E150.850.R/G150.850.R

Supplied with ball bearing set for different thickness rebates



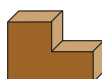
Z050.023.R



Z050.004.R



Z050.003.R

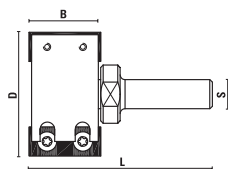


Z050.002.R

Scale 1:2

HW INSERT RABBETING BITS Z=2

ART. WE150



- Suitable for working with FESTOOL® CMS-OF 1010/ BASIS 5A/BASIS 6
- To be used with FESTOOL® Compact Modular System (CMS)
- This item is sold complete with a torx key

S Ø 12	D	B	L	Z
WE150.500.R	50	30	70	2

SPARE PARTS

Rabbeting head

WE150.505.R	50	30	2
-------------	----	----	---

Cutter arbor

E117.130.N	S= Ø12x36
------------	-----------



Z051.010.R



Z052.201.N



Z055.110.N

ASSEMBLY



WE150.505.R
Rabbeting head

+



E117.130.R
Cutter arbor

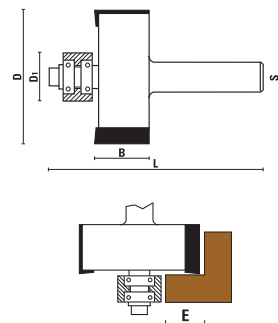
=



WE150.500.R

HW RABBETING BITS WITH BALL BEARING GUIDE Z=2

ART. E150 - G150



- Changing guide rings several thickness rebates 1,6 up to 18,25 mm can be obtained

- This item is sold complete with a guide collar D=19 mm (our item Z050.903.N) to obtain rabbet width of E=16 mm.



S Ø 12	S Ø 1/2" (12,7)	D	D1	B	E	L
E150.510.R	G150.510.R	51	19	22,5	16	78



Z050.007.N



Z057.010.N



Z051.008.R

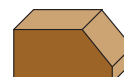
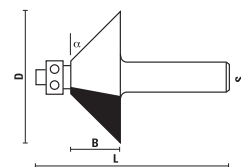
Spare rings

	D1	E
Z050.901.N	14,3	18,25
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	11,1
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 16 rings set

HW BEVEL TRIM BITS WITH BALL BEARING GUIDE Z=2

ART. E151 - G151



S Ø 12	S Ø 1/2" (12,7)	D	α	B	L
E151.351.R	G151.351.R	35	60°	20,6	60
E151.508.R	G151.508.R	50,8	45°	19	68
E151.635.R	G151.635.R	60,5	45°	25	74



Z050.003.N



Z053.003.N



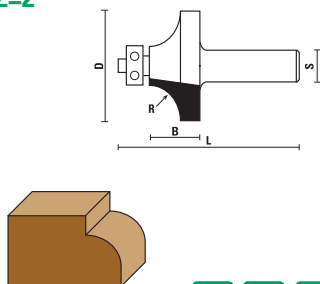
Z054.002.N



Z051.002.R

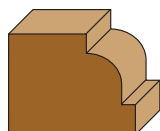
HW CORNER ROUNDING BITS WITH BALL BEARING GUIDE Z=2

ART. E152 - G152



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E152.191.R	G152.191.R	19,1	3,2	9,5	59
E152.207.R	G152.207.R	20,7	4	10	59
E152.220.R	G152.220.R	22	5	13	62
E152.254.R	G152.254.R	25,4	6,4	13	62
E152.286.R	G152.286.R	28,6	8	14	62
E152.318.R	G152.318.R	31,8	9,5	16	65
E152.327.R		32,7	10	16	65
E152.367.R		36,7	12	20	67
E152.380.R	G152.380.R	38	12,7	19	67
E152.410.R	G152.410.R*	41	14	20	70
E152.427.R		42,7	15	22	70
E152.445.R	G152.445.R	44,5	16	22,2	71
E152.487.R		48,7	18	26	72
E152.508.R	G152.508.R	50,8	19	25,4	73
E152.527.R		52,7	20	27	73
E152.570.R	G152.570.R	57	22	29	78
E152.635.R	G152.635.R	63,5	25	32	81
E152.700.R	G152.700.R - max RPM 18.000	70	28	35	84
E152.726.R		72,6	30	36	85
E152.760.R	G152.760.R - max RPM 18.000	76	32	38	87
E152.825.R		82,5	35	41	90
E152.890.R	G152.890.R - max RPM 16.000	89	38	45	94

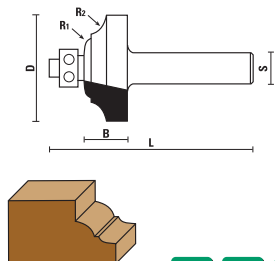
* Selling out



Changing the ball bearing art. Z050.003.N with art. Z050.002.N the profile shown can be obtained

HW CLASSICAL BITS WITH BALL BEARING GUIDE Z=2

ART. E153

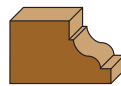
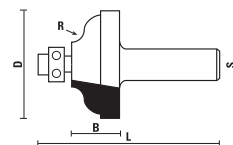


S Ø 12	D	R1	R2	B	L
E153.381.R	38,1	5,5	6	15,9	63,5



HW OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. E154 - G154



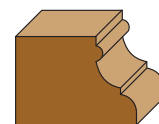
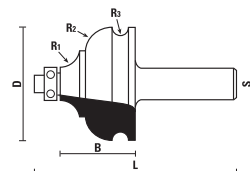
S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E154.350.R*		35	4	13	61
E154.413.R	G154.413.R	41,3	6,4	19	67
E154.570.R*		57	9,5	25	75

* Selling out



HW MOULDING BITS WITH BALL BEARING GUIDE Z=2

ART. E156 - G156

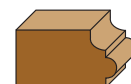
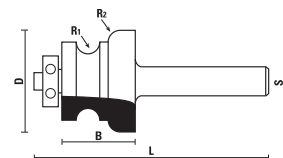


S Ø 12	S Ø 1/2" (12,7)	D	R1	R2	R3	B	L
E156.413.R	G156.413.R	41,3	6,4	9,5	3,2	28,5	75,5



HW MOULDING BITS WITH BALL BEARING GUIDE Z=2

ART. E157 - G157

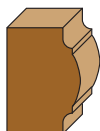
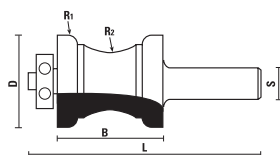


S Ø 12	S Ø 1/2" (12,7)	D	R1	R2	B	L
E157.400.R	G157.400.R	40	5,5	6	30	78



HW MOULDING BITS WITH BALL BEARING GUIDE Z=2

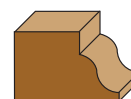
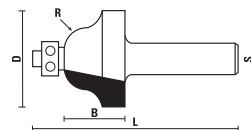
ART. E158 - G158



S Ø 12	S Ø 1/2" (12,7)	D	R1	R2	B	L
E158.350.R	G158.350.R	35	5	13	40	88
						
Z050.004.N	Z053.004.N		Z054.002.N		Z051.002.R	

HW ROMAN OGEE BITS WITH BALL BEARING GUIDE Z=2

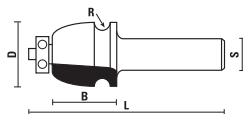
ART. E148 - G148



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E148.254.R	G148.254.R	25,4	4	16	63
E148.350.R	G148.350.R	35	6,4	20	67
					
Z050.001.N	Z053.001.N	Z054.001.N	Z051.001.R		

HW DRAWING LINE BITS WITH BALL BEARING GUIDE Z=2

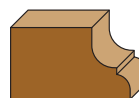
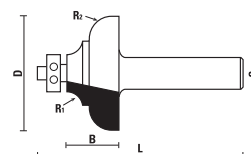
ART. E160



S Ø 12	D	R	B	L
E160.260.R Selling out	26	3,5	25	74
				
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R	

HW CLASSICAL OGEE BITS WITH BALL BEARING GUIDE Z=2

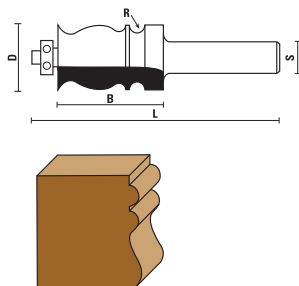
ART. E149 - G149



S Ø 12	S Ø 1/2" (12,7)	D	R1	R2	B	L
E149.286.R	G149.286.R	28,6	4	4	13	60
E149.350.R	G149.350.R	35	6	4,8	18	64
E149.380.R* Selling out		38	4,7	8	16	65
E149.510.R	G149.510.R	51	9,5	9,5	23	72
						
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R			

HW DRAWING LINE BITS WITH BALL BEARING GUIDE Z=2

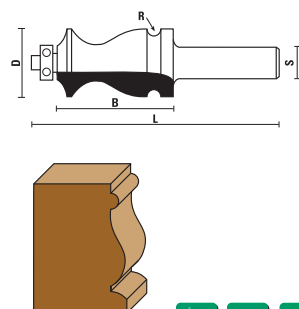
ART. E161 - G161



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E161.254.R	G161.254.R	25,4	3,5	45	94
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW ARCHITECTURAL MOULDING LINE BITS WITH BALL BEARING GUIDE Z=2

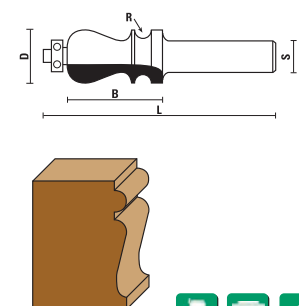
ART. E162 - G162



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E162.270.R	G162.270.R	27	3	45	94
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW ARCHITECTURAL MOULDING LINE BITS WITH BALL BEARING GUIDE Z=2

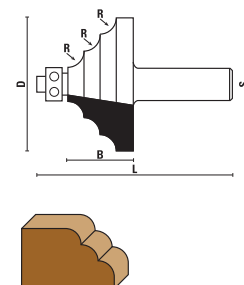
ART. E163 - G163



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E163.220.R	G163.220.R	22	4	38	87
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW MULTI RADIUS BITS Z=2

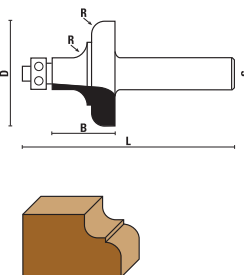
ART. E165 - G165



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E165.470.R	G165.470.R	47	6	24	73
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW MULTIPLE PROFILE BITS Z=2

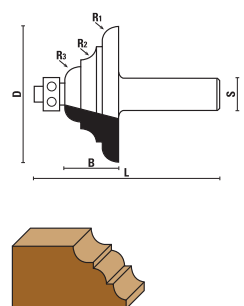
ART. E166 - G166



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E166.510.R	G166.510.R	51	8,5	31	80
					
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW MULTIPLE PROFILE BITS Z=2

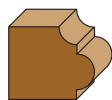
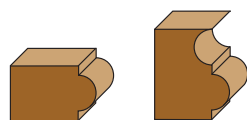
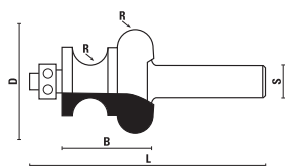
ART. E167 - G167



S Ø 12	S Ø 1/2" (12,7)	D	R1	R2	R3	B	L
E167.590.R	G167.590.R	59	6,5	6,5	7,5	22	70
							
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R				

HW MULTIPLE PROFILE BITS Z=2

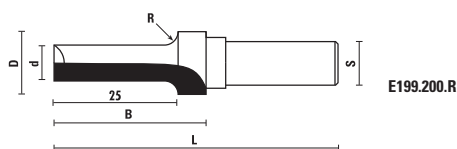
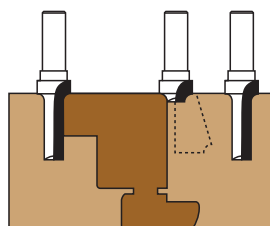
ART. E168 - G168



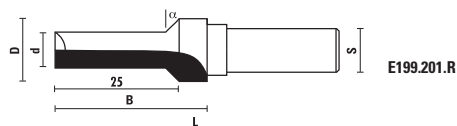
S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E168.510.R	G168.510.R	51	6,4	32	80
Z050.004.N	Z053.004.N	Z054.002.N	Z051.002.R		

HW BEADING BITS FOR RADIUS WINDOW Z=2

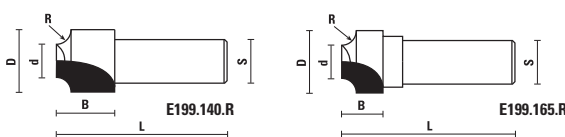
ART. E199 - C199



E199.200.R

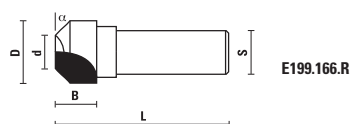


E199.201.R



E199.140.R

E199.165.R



E199.166.R

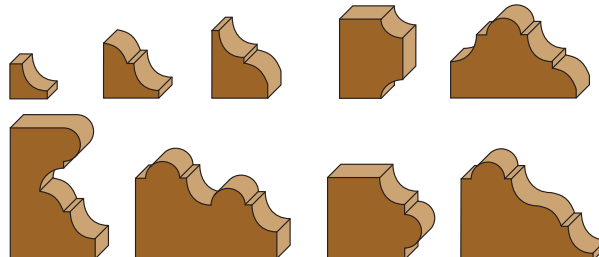
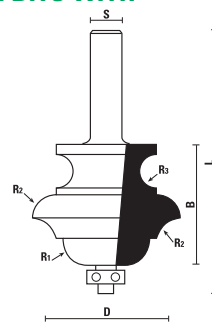


- To use on "ARKADE + ZINKEL" or on similar equipment
- Bits for glass-fixing lath see item Art. T141.061.R (HW) and Art. U211.061.R (HS)

S Ø 12	S Ø 8	D	d	R	α	B	L
E199.140.R	C199.140.R	14	6	3	16	46	
E199.165.R	C199.165.R	16,5	8,5	3	11	46	
E199.166.R		16,5	8,5		45°	11	46
E199.200.R	C199.200.R	20	12	3	33	68	
E199.201.R	C199.201.R	20	12		45°	33	68

HW CLASSICAL MULTI-FORM BITS WITH BALL BEARING GUIDE Z=2

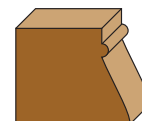
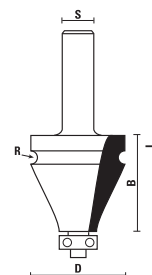
ART. E169 - G169



S Ø 12	S Ø 1/2" (12,7)	D	R1	R2	R3	B	L
E169.540.R	G169.540.R max RPM 18.000	54	9	8,5	6,4	47	96
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R				

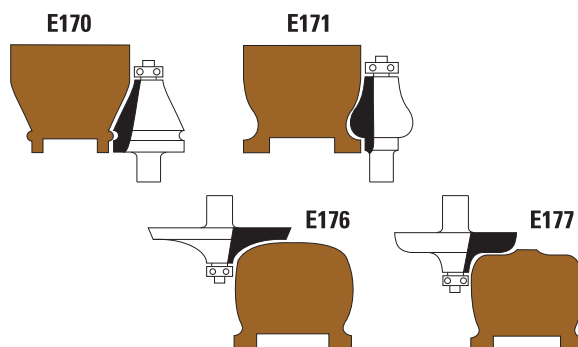
HW HANDRAIL BITS WITH BALL BEARING GUIDE Z=2

ART. E170 - G170



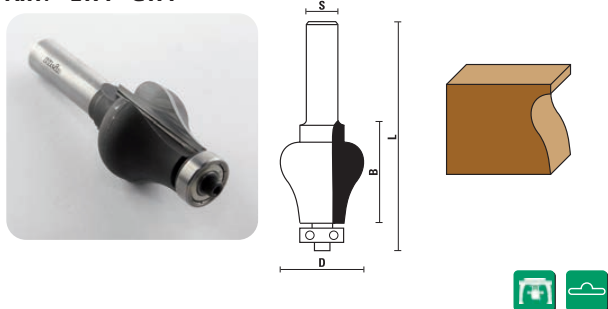
S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E170.350.R	G170.350.R	35	3,2	37	86
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

SAMPLE OF HANDRAIL PATTERNS



HW HANDRAIL BITS WITH BALL BEARING GUIDE Z=2

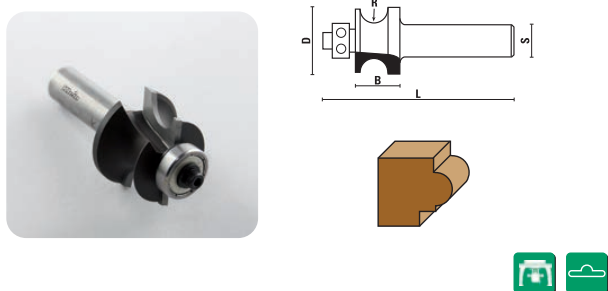
ART. E171 - G171



S Ø 12	S Ø 1/2" (12,7)	D	R	B	
E171.320.R	G171.320.R	32	38	87	
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW EDGE BEADING BITS Z=2

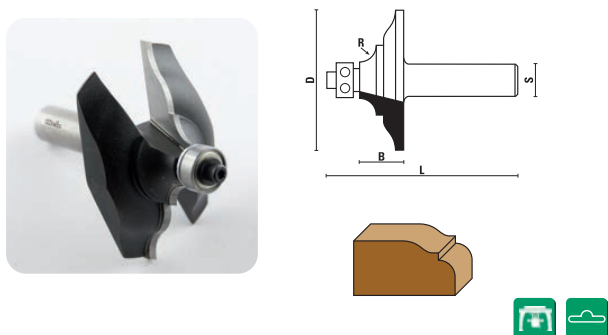
ART. E172 - G172



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E172.220.R	G172.220.R	22	3,2	14	63
E172.280.R	G172.280.R	28	4,8	16	66
E172.320.R	G172.320.R	32	6,4	19	67
E172.380.R	G172.380.R	38	9,5	25	74
Z050.004.N	Z053.004.N	Z054.002.N	Z051.002.R		

HW HANDRAIL AND TABLE EDGE BITS Z=2

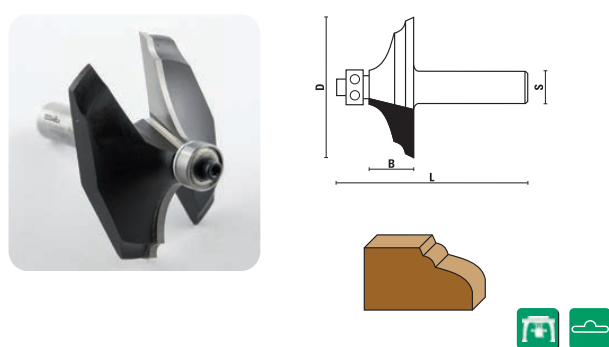
ART. E173 - G173



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E173.640.R	G173.640.R - max RPM 18.000	64	6,5	20	69
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW HANDRAIL AND TABLE EDGE BITS Z=2

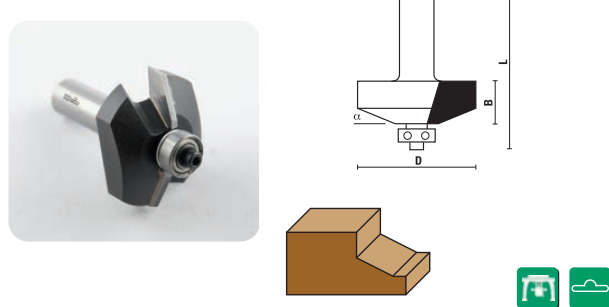
ART. E174 - E174



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E174.660.R	G174.660.R - max RPM 18.000	66	20	69
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R	

HW RAISED PANEL BITS WITH BALL BEARING GUIDE Z=2

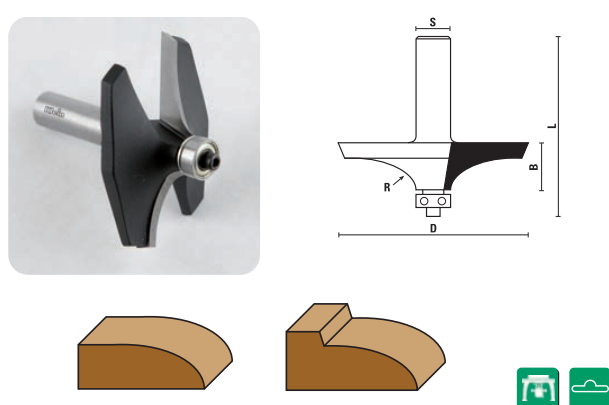
ART. E175 - E175



S Ø 12	S Ø 1/2" (12,7)	D	α	B	L
E175.420.R	G175.420.R	42	25°	13	62
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW HANDRAIL-TABLE EDGE BITS WITH BALL BEARING GUIDE Z=2

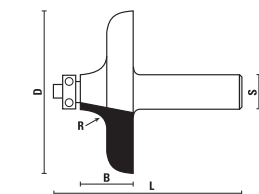
ART. E176 - G176



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E176.690.R	G176.690.R - max RPM 18.000	69	43	16	64
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW HANDRAIL-TABLE EDGE BITS WITH BALL BEARING GUIDE Z=2

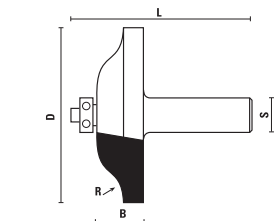
ART. E177 - G177



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E177.640.R	G177.640.R - max RPM 18.000	64	9,5	20	69
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW RAISED PANEL BITS WITH BALL BEARING GUIDE Z=2

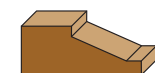
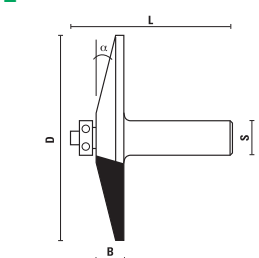
ART. E178 - G178



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E178.670.R	G178.670.R - max RPM 18.000	67	19	17	65
E178.860.R	G178.860.R - max RPM 16.000	86	22	16	65
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW RAISED PANEL BITS WITH BALL BEARING GUIDE Z=2

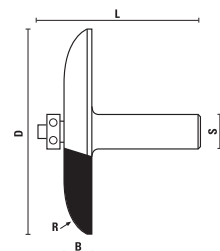
ART. E178 - G178



S Ø 12	S Ø 1/2" (12,7)	D	α	B	L
E178.861.R	G178.861.R - max RPM 16.000	86	15°	13	61
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW RAISED PANEL BITS WITH BALL BEARING GUIDE Z=2

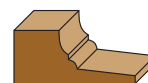
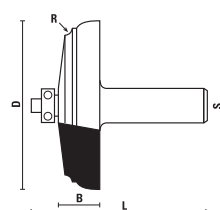
ART. E178 - G178



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E178.862.R	G178.862.R - max RPM 16.000	86	40	13	61
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW RAISED PANEL BITS WITH BALL BEARING GUIDE Z=2

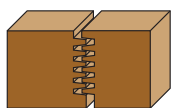
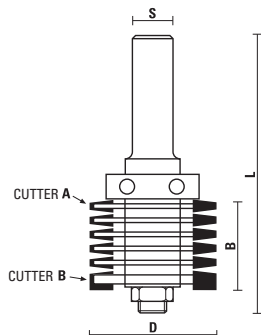
ART. E179 - G179



S Ø 12	S Ø 1/2" (12,7)	D	R	B	L
E179.640.R	G179.640.R - max RPM 18.000	64	3	13	62
Z050.003.N	Z053.003.N	Z054.002.N	Z051.002.R		

HW FINGER JOINT ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E180 - G180



Working height 11 to 36 mm



S Ø 12	S Ø 1/2" (12,7)	D	B	L	Z
E180.397.R	G180.397.R	39,7	36	96	2

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2" (12,7)
E117.120.R	G117.120.R

Finger cutter "A" (5 pcs.) Ø 39,2 x 1,85 d=8 Z=2
C180.500.R

Straight cutter "B" (1 pcs.) Ø 39,7 x 5,5 d=8 Z=2
C180.501.R



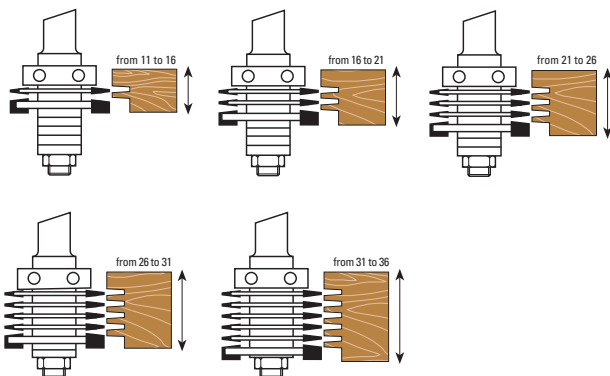
Z050.010.N



Z057.001.N - 6 pcs.

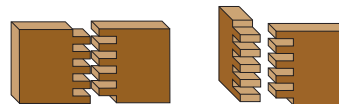
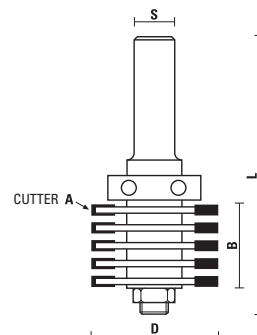


Z057.002.N - 2 pcs.
Z057.003.N - 1 pcs.
Z057.004.N - 10 pcs.



HW FINGER JOINT ASSEMBLY WITH BALL BEARING GUIDE Z=3

ART. E181 - G181



- Working height 22 to 45 mm
- Supplied with nr. 3 ball bearings for producing nr. 3 different cutting depths (E=9,8 - E=9,3 - E=6,8)



S Ø 12	S Ø 1/2" (12,7)	D	B	L	Z	E
E181.476.R	G181.476.R	47,6	36	96	3	9,8

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2" (12,7)
E117.120.R	G117.120.R

Finger cutter "A" (5 pcs.) Ø 47,6 x 4 d=8 Z=3
C118.340.R



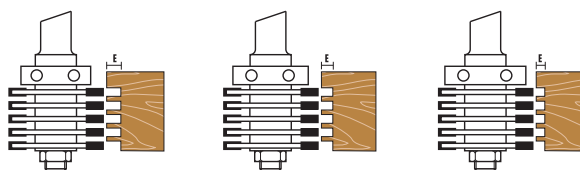
Z050.107.N - 1 pcs.
Z050.108.N - 1 pcs.
Z050.109.N - 1 pcs.



Z057.009.N - 4 pcs.



Z057.004.N - 4 pcs.
Z057.008.N - 8 pcs.



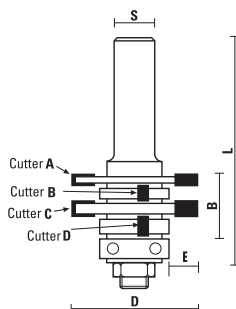
Z050.107.N
Ball bearing Ø28
E=9,8

Z050.108.N
Ball bearing Ø29
E=9,3

Z050.109.N
Ball bearing Ø34
E=6,8

HW SLOT CUTTER SET WITH BALL BEARING GUIDE Z=2

ART. E182 - G182



- For groovings 3,2 mm up to 18 mm
- Some possible combinations to obtain different measures of grooves
- Adding or removing the spacers included in the kit, can be obtained more measures (see drawing)



S Ø 12	S Ø 1/2"(12,7)	D	B	L	Z	E
E182.476.R	G182.476.R	47,6	3,2÷18	76	2	12,8

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2"(12,7)
E117.123.R	G117.123.R

Cutter (4 pcs.)

"A" - C118.232.R	Ø 47,6 x 3,2	d=8	Z=2
"B" - C118.240.R	Ø 47,6 x 4	d=8	Z=2
"C" - C118.248.R	Ø 47,6 x 4,8	d=8	Z=2
"D" - C118.264.R	Ø 47,6 x 6,4	d=8	Z=2



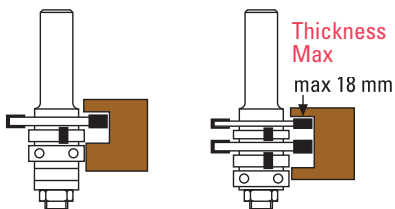
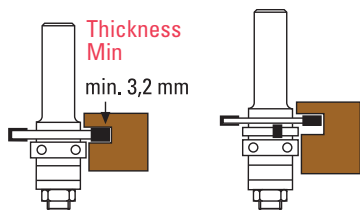
Z050.008.N - 1 pcs.



Z057.006.N - 3 pcs.
Z057.002.N - 5 pcs.

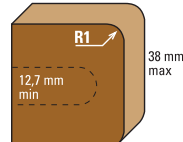
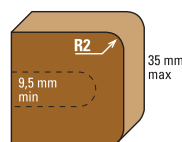
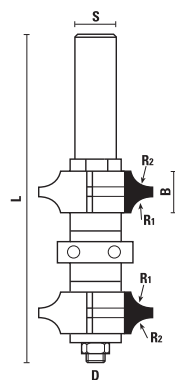


Z057.003.N - 5 pcs.
Z057.004.N - 10 pcs.



HW DOUBLE CORNER ROUND ASSEMBLY WITH BALL BEARING GUIDE Z=3

ART. E186 - G186 - C186



- R2 = 4,8 mm (working height 9,5 to 35 mm)
- R1 = 6,4 mm (working height 12,7 to 38 mm)



S Ø 12	S Ø 1/2"(12,7)	S Ø 8	D	R1	R2	B	L
E186.350.R	G186.350.R	C186.350.R	35	6,4	4,8	14	108

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2"(12,7)	S Ø 8
E117.121.R	G117.121.R	C117.081.R

Top cutter	Ø 35/Ø 8	Z=3	R1=6,4	R2=4,8
C186.500.R				

Bottom cutter	Ø 35/Ø 8	Z=3	R1=6,4	R2=4,8
C186.501.R				



Z050.008.N - 1 pcs.



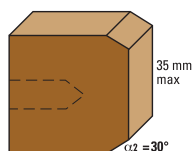
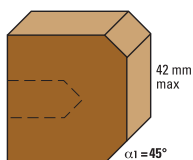
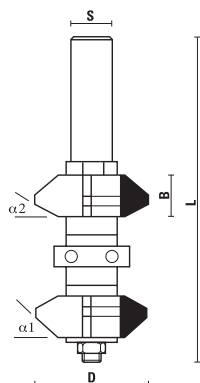
Z057.002.N - 2 pcs.
Z057.005.N - 2 pcs.
Z057.006.N - 2 pcs.



Z057.003.N - 1 pcs.
Z057.004.N - 4 pcs.

HW DOUBLE CHAMFER ASSEMBLY WITH BALL BEARING GUIDE Z=3

ART. E187 - G187 - C187



- $\alpha_1 = 45^\circ$ (Working height 0 to 42 mm)
- $\alpha_2 = 30^\circ$ (Working height 0 to 35 mm)



S Ø 12	S Ø 1/2"(12,7)	S Ø 8	D	B	α1	α2	L
E187.350.R	G187.350.R	C187.350.R	35	14	45°	30°	108

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2"(12,7)	S Ø 8
E117.121.R	G117.121.R	C117.081.R

Top cutter

Ø 35/Ø 8	Z=3	α1=45°	α2=30°
----------	-----	--------	--------

C187.500.R

Bottom cutter

Ø 35/Ø 8	Z=3	α1=45°	α2=30°
----------	-----	--------	--------

C187.501.R



Z050.008.N - 1 pcs.



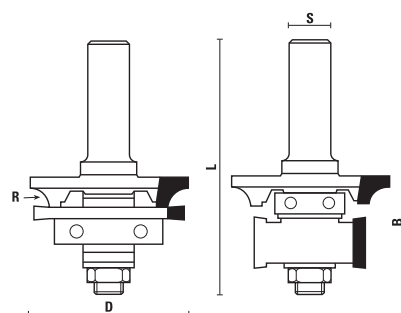
Z057.002.N - 3 pcs.
Z057.005.N - 2 pcs.
Z057.006.N - 2 pcs.



Z057.003.N - 1 pcs.
Z057.004.N - 4 pcs.

HW BEAD PANELING ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E188 - G188 - C188



S Ø 12	S Ø 1/2"(12,7)	S Ø 8	D	R	B	L
E188.490.R	G188.490.R	C188.490.R	49	6	30	80

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2"(12,7)	S Ø 8
E117.122.R	G117.122.R	C117.082.R

Profile cutter

Ø 49 x 9	d=8	Z=2
----------	-----	-----

C188.500.R

Grooving cutter

Ø 46 x 4	d=8	Z=2
----------	-----	-----

C188.501.R

Rabbeting cutter

Ø 33,5 x 17,5	d=8	Z=2
---------------	-----	-----

C188.502.R



Z050.008.N - 1 pcs.
Z050.016.N - 1 pcs.



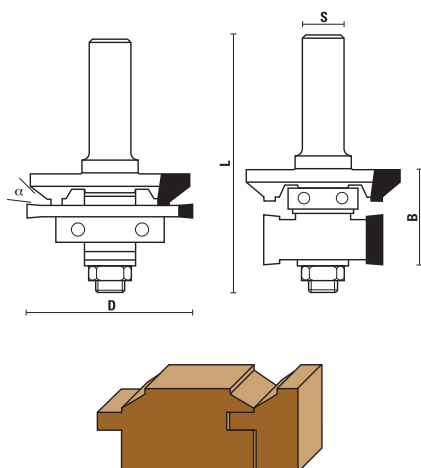
Z057.002.N - 2 pcs.
Z057.005.N - 3 pcs.



Z057.003.N - 1 pcs.
Z057.007.N - 1 pcs.
Z057.004.N - 3 pcs.
Z057.008.N - 1 pcs.

HW V PANELING ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E189 - G189 - C189



S Ø 12	S Ø 1/2"(12,7)	S Ø 8	D	α	B	L
E189.425.R	G189.425.R	C189.425.R	42,5	45°	30	80

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2"(12,7)	S Ø 8
E117.122.R	G117.122.R	C117.082.R

Profile cutter 45° Ø 42,5 x 9 d=8 Z=2
C189.500.R

Grooving cutter Ø 46 x 4 d=8 Z=2
C188.501.R

Rabbeting cutter Ø 33,5 x 17,5 d=8 Z=2
C188.502.R



Z050.008.N - 1 pcs.
Z050.016.N - 1 pcs.



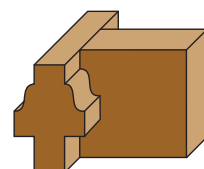
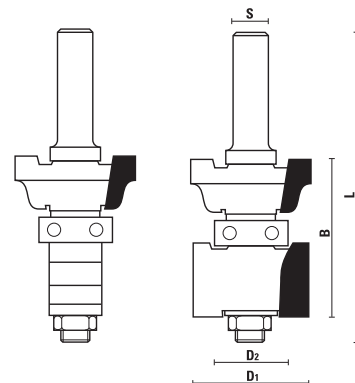
Z057.002.N - 2 pcs.
Z057.005.N - 3 pcs.



Z057.003.N - 1 pcs.
Z057.007.N - 1 pcs.
Z057.004.N - 3 pcs.
Z057.008.N - 1 pcs.

HW OGEE WINDOW SASH ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E191 - G191 - C191



S Ø 12	S Ø 1/2"(12,7)	S Ø 8	D1	D2	B	L
E191.350.R	G191.350.R	C191.350.R	35	22	47	96

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2"(12,7)	S Ø 8
E117.120.R	G117.120.R	C117.080.R

Profile cutter Ø 35 x 17 d=8 Z=2
C191.500.R

Rabbeting cutter Ø 35 x 22 d=8 Z=2
C191.501.R



Z050.008.N - 1 pcs.



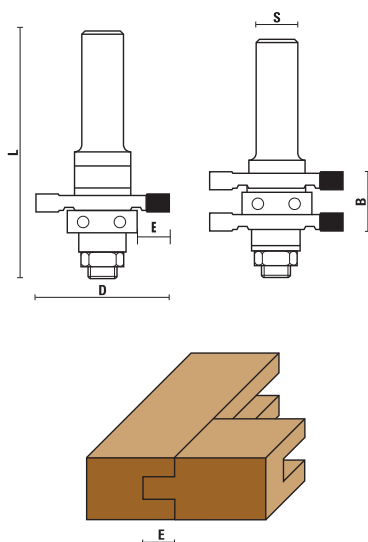
Z057.005.N - 1 pcs.
Z057.006.N - 3 pcs.



Z057.003.N - 1 pcs.
Z057.004.N - 3 pcs.
Z057.008.N - 1 pcs.

HW TONGUE AND GROOVE ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E193 - G193 - C193



S Ø 12	S Ø 1/2" (12,7)	S Ø 8	D	B	L	E
E193.410.R	G193.410.R		41	19	76	9,5
		C193.410.R	41	19	70	9,5

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2" (12,7)	S Ø 8
E117.123.R	G117.123.R	C117.079.R

Grooving cutter (2 pcs.)	Ø 41 x 6,4	d=8	Z=2
C193.500.R			



Z050.008.N - 1 pcs.



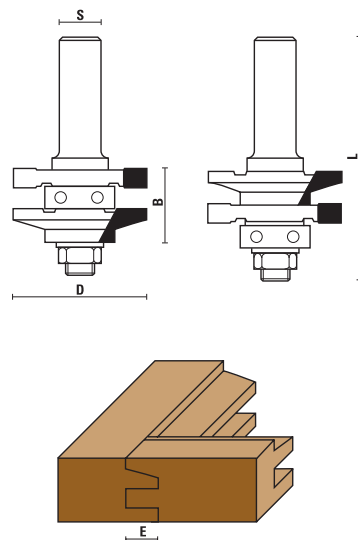
Z057.002.N - 1 pcs.
Z057.006.N - 2 pcs.



Z057.004.N - 4 pcs.
Z057.008.N - 2 pcs.

HW STILE AND RAIL ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E194 - G194 - C194



S Ø 12	S Ø 1/2" (12,7)	S Ø 8	D	B	L	E
E194.410.R	G194.410.R		41	22	76	9,5
		C194.410.R	41	22	70	9,5

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2" (12,7)	S Ø 8
E117.123.R	G117.123.R	C117.079.R

Profile cutter	Ø 41 x 11	d=8	Z=2
C194.500.R			

Grooving cutter	Ø 41 x 6,4	d=8	Z=2
C193.500.R			



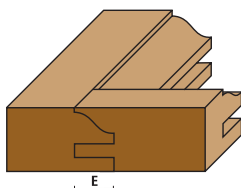
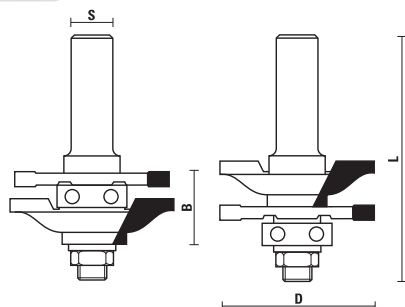
Z050.008.N - 1 pcs.



Z057.004.N - 3 pcs.
Z057.008.N - 1 pcs.

HW STILE AND RAIL ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E195 - G195 - C195



S Ø 12	S Ø 1/2" (12,7)	S Ø 8	D	B	L	E
E195.460.R	G195.460.R		46	22	76	12
		C195.460.R	46	22	70	12

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2" (12,7)	S Ø 8
E117.123.R	G117.123.R	C117.079.R

Profile cutter Ø 46 x 15 d=8 Z=2
C195.500.R

Grooving cutter Ø 46 x 4 d=8 Z=2
C188.501.R



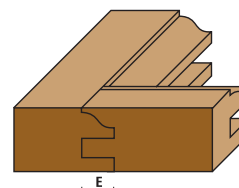
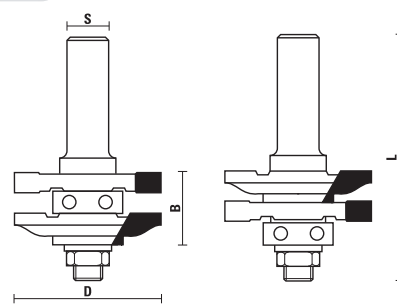
Z050.008.N - 1 pcs.



Z057.004.N - 3 pcs.
Z057.008.N - 1 pcs.

HW STILE AND RAIL ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E196 - G196 - C196



S Ø 12	S Ø 1/2" (12,7)	S Ø 8	D	B	L	E
E196.410.R	G196.410.R		41	22	76	9,5
		C196.410.R	41	22	70	9,5

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2" (12,7)	S Ø 8
E117.123.R	G117.123.R	C117.079.R

Profile cutter Ø 41 x 11 d=8 Z=2
C196.500.R

Grooving cutter Ø 41 x 6,4 d=8 Z=2
C193.500.R



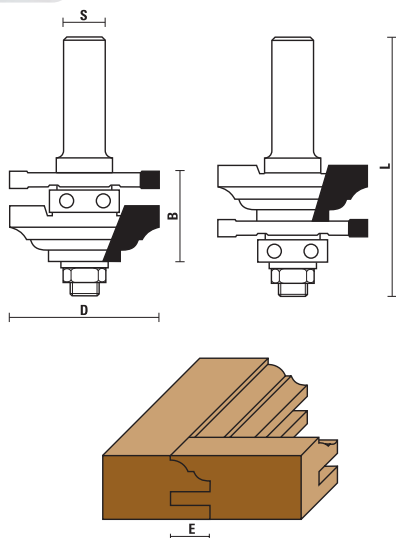
Z050.008.N - 1 pcs.



Z057.004.N - 2 pcs.
Z057.008.N - 2 pcs.

HW STILE AND RAIL ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E197 - G197 - C197



S Ø 12	S Ø 1/2"(12,7)	S Ø 8	D	B	L	E
E197.460.R	G197.460.R		46	22	76	12
		C197.460.R	46	22	70	12

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2"(12,7)	S Ø 8
E117.123.R	G117.123.R	C117.079.R

Profile cutter	Ø 46 x 15	d=8	Z=2
C197.500.R			

Grooving cutter	Ø 46 x 4	d=8	Z=2
C188.501.R			



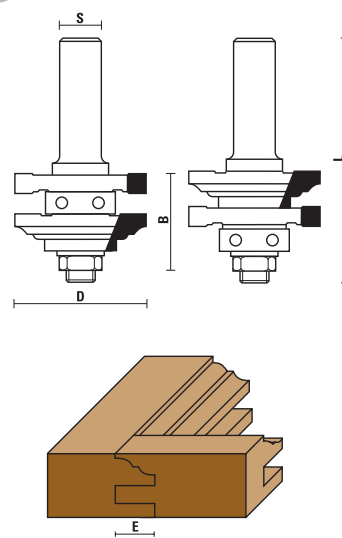
Z050.008.N - 1 pcs.



Z057.004.N - 2 pcs.
Z057.008.N - 2 pcs.

HW STILE AND RAIL ASSEMBLY WITH BALL BEARING GUIDE Z=2

ART. E198 - G198 - C198



S Ø 12	S Ø 1/2"(12,7)	S Ø 8	D	B	L	E
E198.410.R	G198.410.R		41	22	76	9,5
		C198.410.R	41	22	70	9,5

SPARE PARTS

Arbor

S Ø 12	S Ø 1/2"(12,7)	S Ø 8
E117.123.R	G117.123.R	C117.079.R

Profile cutter	Ø 41 x 11	d=8	Z=2
C198.500.R			

Grooving cutter	Ø 41 x 6,4	d=8	Z=2
C193.500.R			



Z050.008.N - 1 pcs.

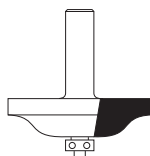


Z057.004.N - 2 pcs.
Z057.008.N - 2 pcs.

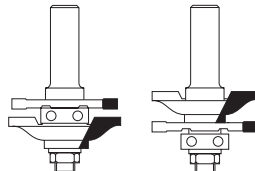
2 PIECE SET FOR CABINET DOORS MAKER "TYPE 1"

ART. X021

- Set including stile and rail bit, raised panel bit.
- Practical plastic case.

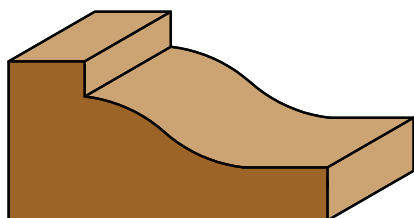


E178.860.R

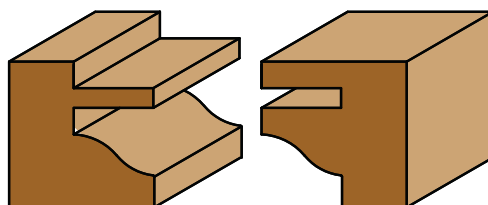


E195.460.R

S Ø 12	S Ø 1/2"(12,7)
X021.012.R	X021.127.R
2-pcs router bit set:	2-pcs router bit set:
E178.860.R	G178.860.R
E195.460.R	G195.460.R



E178.860.R



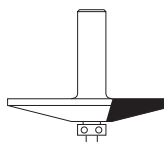
E195.460.R

Scale 1:1

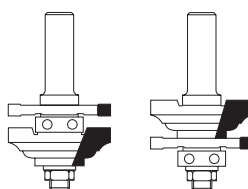
2 PIECE SET FOR CABINET DOORS MAKER "TYPE 2"

ART. X022

- Set including stile and rail bit, raised panel bit.
- Practical plastic case.

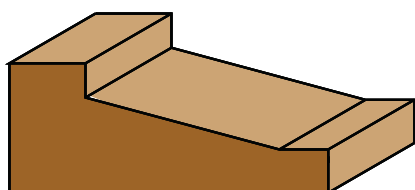


E178.861.R

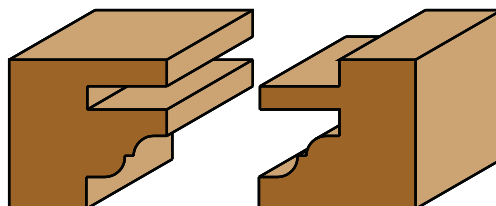


E197.460.R

S Ø 12	S Ø 1/2"(12,7)
X022.012.R	X022.127.R
2-pcs router bit set:	2-pcs router bit set:
E178.861.R	G178.861.R
E197.460.R	G197.460.R



E178.861.R



E197.460.R

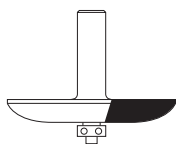
Scale 1:1

2 PIECE SET FOR CABINET DOORS MAKER "TYPE 3"

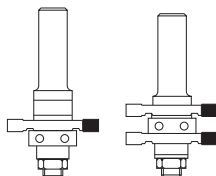
ART. X023



- Set including stile and rail bit, raised panel bit.
- Practical plastic case.



E178.862.R



E193.410.R

S Ø 12 **S Ø 1/2" (12,7)**

X023.012.R

X023.127.R

2-pcs router bit set:

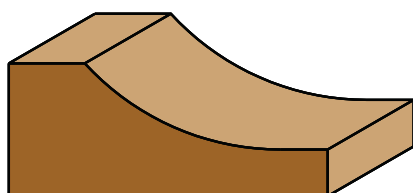
2-pcs router bit set:

E178.862.R

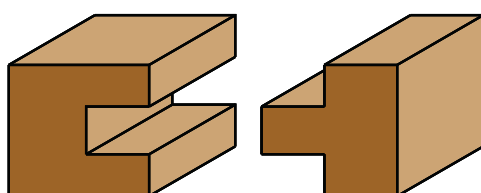
G178.862.R

E193.410.R

G193.410.R



E178.862.R



E193.410.R

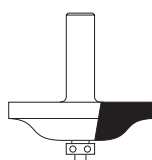
Scale 1:1

3 PIECE SET FOR CABINET DOORS MAKER AND JOINTS "TYPE 1"

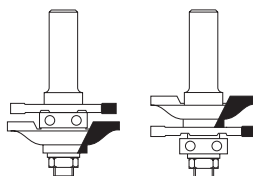
ART. X024



- Set including stile and rail bit, raised panel bit and slot cutter.
- Practical plastic case.



E178.860.R



E195.460.R



E182.476.R

S Ø 12 **S Ø 1/2" (12,7)**

X024.012.R

X024.127.R

3-pcs router bit set:

3-pcs router bit set:

E178.860.R

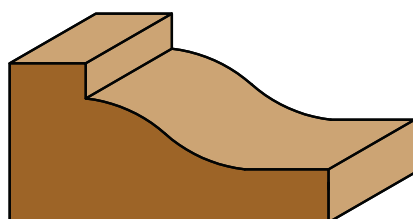
G178.860.R

E195.460.R

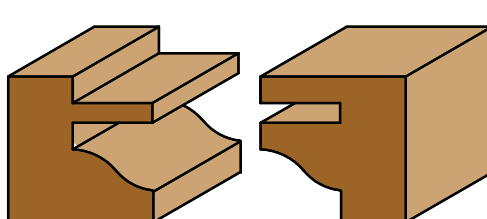
G195.460.R

E182.476.R

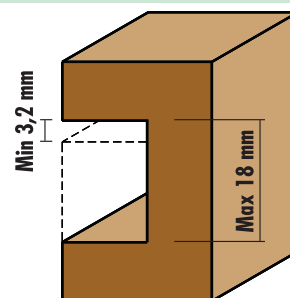
G182.476.R



E178.860.R



E195.460.R



E182.476.R

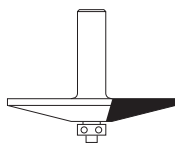
Scale 1:1

3 PIECE SET FOR CABINET DOORS MAKER AND JOINTS "TYPE 2"

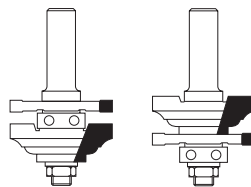
ART. X025

- Set including stile and rail bit, raised panel bit and slot cutter.

- Practical plastic case.



E178.861.R



E197.460.R



E182.476.R

S Ø 12

X025.012.R

3-pcs router bit set:

E178.861.R

E197.460.R

E182.476.R

S Ø 1/2"(12,7)

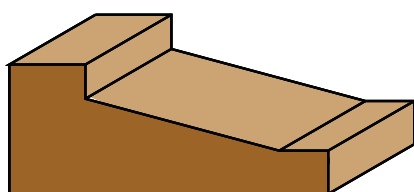
X025.127.R

3-pcs router bit set:

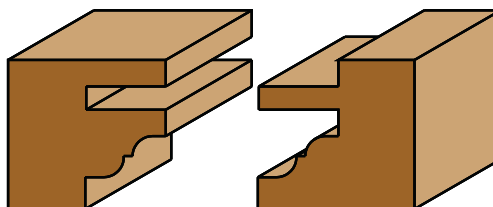
G178.861.R

G197.460.R

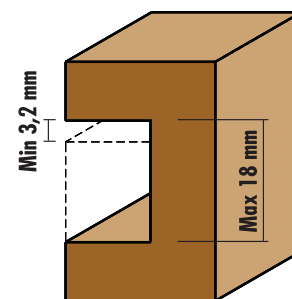
G182.476.R



E178.861.R



E197.460.R



E182.476.R

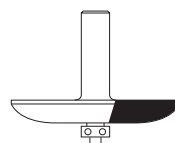
Scale 1:1

3 PIECE SET FOR CABINET DOORS MAKER AND JOINTS "TYPE 3"

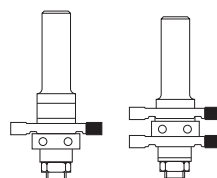
ART. X026

- Set including stile and rail bit, raised panel bit and slot cutter.

- Practical plastic case.



E178.862.R



E193.410.R



E182.476.R

S Ø 12

X026.012.R

3-pcs router bit set:

E178.862.R

E193.410.R

E182.476.R

S Ø 1/2"(12,7)

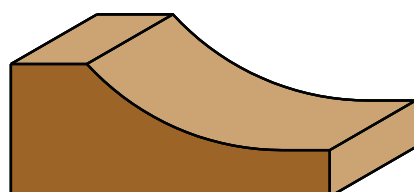
X026.127.R

3-pcs router bit set:

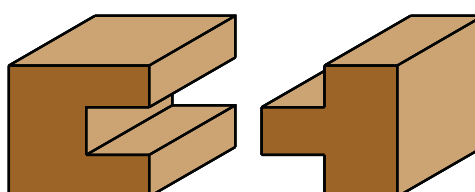
G178.862.R

G193.410.R

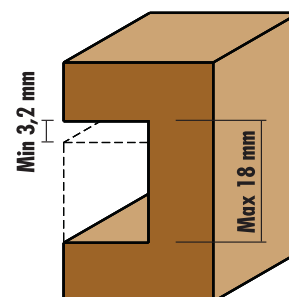
G182.476.R



E178.862.R



E193.410.R



E182.476.R

Scale 1:1



HW ROUTER BITS WITH NEGATIVE
AXIAL ANGLE Z=2
Page 3.05



HW STRAIGHT PLUNGE BITS Z=1
Page 3.05



HW STRAIGHT PLUNGE BITS
WITH BALL BEARING GUIDE Z=2
Page 3.05



HW FACE-INLAY BITS
WITH BALL BEARING GUIDE Z=2
Page 3.05



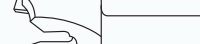
HW FLUSH TRIM BITS
WITH BALL BEARING GUIDE Z=2
Page 3.06



HW FLUSH TRIM BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 3.06



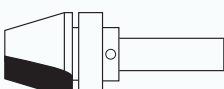
HW TOPMOUNT ROUTER BITS Z=2
Page 3.06



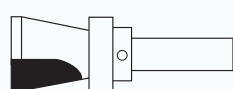
HW BEVEL HOLE ROUTER BITS Z=3
Page 3.06



HW BEVEL UNDERMOUNT BITS
WITH BALL BEARING GUIDE Z=2
Page 3.06



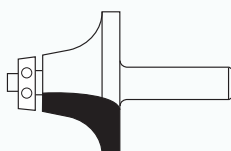
HW TOPMOUNT COUNTERTOP BITS
WITH UPPER BALL BEARING GUIDE Z=2
Page 3.06



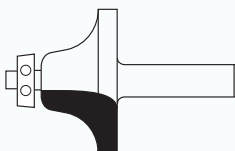
HW TOPMOUNT COUNTERTOP BITS
WITH UPPER BALL BEARING GUIDE Z=2
Page 3.07



HW CORNER ROUNDING BITS WITH
DELRIN® BALL BEARING GUIDE Z=2
Page 3.07



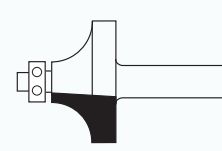
HW ROUNDOVER BITS WITH
BALL BEARING GUIDE Z=2
Page 3.07



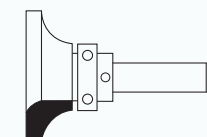
HW OGEE BITS WITH
BALL BEARING GUIDE Z=2
Page 3.07



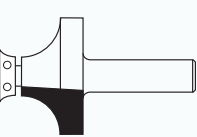
HW COUNTER-TOP BITS WITH
BALL BEARING GUIDE Z=2
Page 3.07



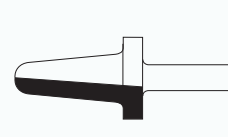
HW CORNER ROUNDING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.08



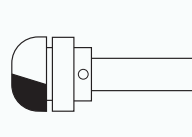
HW ROUNDING-UNDER BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 3.08



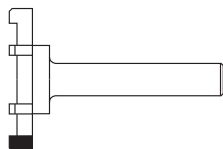
HW CORNER-ROUNDING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.08



HW UPSTAND BITS Z=2
Page 3.08



HW COVE BITS WITH
UPPER BALL BEARING GUIDE Z=2
Page 3.09



HW BOWL AND COUNTERTOP
TRIM BITS Z=2
Page 3.09



HW PROFILE BITS Z=2
Page 3.09



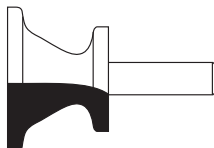
HW PROFILE BITS Z=2
Page 3.09



HW UNDERMOUNT PROFILE BOWL
BITS WITH BALL BEARING GUIDE Z=2
Page 3.09



HW BEVEL HOB BITS WITH
BALL BEARING GUIDE Z=2
Page 3.09



HW BEADING BITS Z=2
Page 3.10



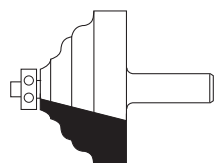
HW TRIPLE BEADING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.10



HW DOUBLE BEADING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.10



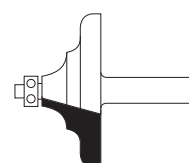
HW MULTI BEADING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.10



HW EDGE MOULDING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.10



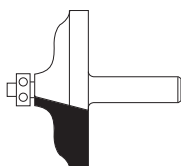
HW WAVY EDGE BITS WITH
BALL BEARING GUIDE Z=2
Page 3.10



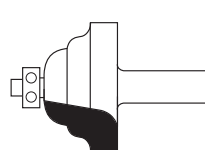
HW EDGE MOULDING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.11



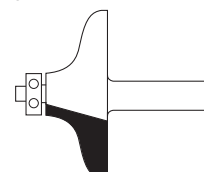
HW ROMAN OGEE BITS WITH
BALL BEARING GUIDE Z=2
Page 3.11



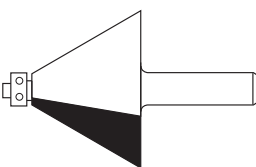
HW EDGE MOULDING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.11



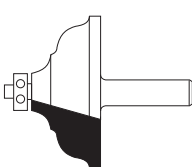
HW EDGE MOULDING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.11



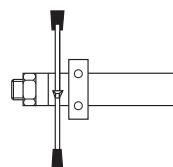
HW EDGE MOULDING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.11



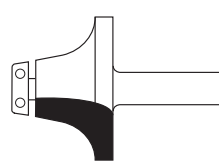
HW BEVEL BITS WITH
BALL BEARING GUIDE Z=2
Page 3.11



HW EDGE MOULDING BITS WITH
BALL BEARING GUIDE Z=2
Page 3.12



HW ROUTER BITS FOR SINK REPAIRING
Page 3.12



HW ROUNDING OVER UNDERMOUNT
BOWL BITS WITH BALL BEARING
GUIDE Z=2
Page 3.12



HW ROUNDING OVER UNDERMOUNT BOWL
BITS WITH BALL BEARING GUIDE Z=2
Page 3.12



INSERT FLUSH TRIM BITS Z=2
Page 3.12



INSERT FLUSH TRIM BITS Z=2
Page 3.12



HW/HS STRAIGHT PLUNGE CUTTING
BITS FOR "ELU" Z=2
Page 3.13



HW STRAIGHT PLUNGE CUTTING BITS
FOR "ELU" Z=2
Page 3.13



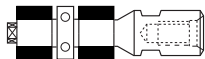
HW STRAIGHT PLUNGE CUTTING
BITS FOR "SCHEER" Z=2
Page 3.13



HW STRAIGHT PLUNGE CUTTING
BITS FOR "SCHEER" Z=2
Page 3.13



HW DRILL BITS FOR "FESTOOL"
MACHINES Z=2
Page 3.14



HW FLUSH TRIMMING BITS
WITH BALL BEARING GUIDE Z=2
Page 3.14



HW RADIUS BITS Z=2
Page 3.14



HW RADIUS BITS WITH
BALL BEARING GUIDE Z=2
Page 3.14



HW RADIUS BITS Z=2
Page 3.14



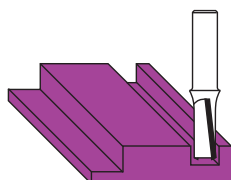
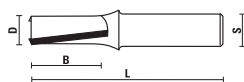
HW RADIUS BITS Z=2
Page 3.14

ROUTER BITS FOR WORKING SOLID SURFACE MATERIALS

HW router bits for working solid surface are manufactured by Sistemi Klein® with high quality raw materials, softer cutting angles and the use of carefully selected Delrin bearings to allow safe and optimal processing of solid surfaces and to decorate Corian®, Avonite®, Hanex® and more. Nowadays, working and routing "Solid Surface" material is more and more common. Solid Surface such as Corian®, Avonite®, Hanex®... are largely used in many different fields, both domestic (bathrooms, kitchens and labs) and health (hospital and clinics). It is a useful, versatile and easy to clean product. All the Klein router bits for working solid surface are developed and made with a special solid carbide for cutting these sturdy materials. The soft form of our cutting angles and the Delrin® ball bearings, allow safe and easy operations.

HW ROUTER BITS WITH NEGATIVE AXIAL ANGLE Z=2

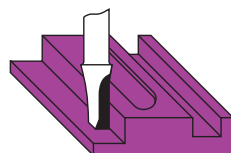
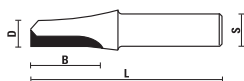
ART. E300 - G300



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E300.095.R	G300.095.R	9,5	25	70
E300.127.R	G300.127.R	12,7	32	73
E300.128.R	G300.128.R	12,7	38	79
E300.129.R	G300.129.R	12,7	50	107,5

HW STRAIGHT PLUNGE BITS Z=1

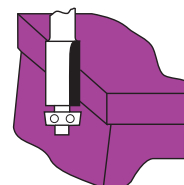
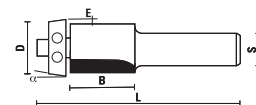
ART. E301 - G301



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E301.095.R	G301.095.R	9,5	25	70

HW STRAIGHT PLUNGE BITS WITH BALL BEARING GUIDE Z=2

ART. E302 - G302



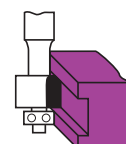
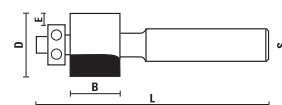
5° ball bearing with Delrin® ring

S Ø 12	S Ø 1/2" (12,7)	D	B	L	α	E
E302.190.R	G302.190.R	19	25	82,5	5°	1,6
Z050.103.N	Z053.002.N	Z051.004.R				

S Ø 12	D	B	L	α
E302.191.R	19	25,4	80	0°
Z050.101.N	Z053.002.N	Z051.004.R		

HW FACE-INLAY BITS WITH BALL BEARING GUIDE Z=2

ART. E305 - E306 - E307



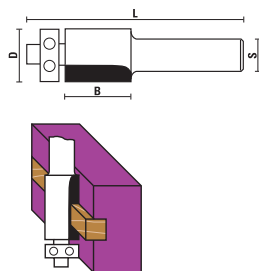
S Ø 12	D	B	L	E
E305.127.R Selling out	22	12,7	82	4,8
Z050.007.N	Z054.003.N	Z051.004.R		

S Ø 12	D	B	L	E
E306.064.R Selling out	22	6,4	76	3,2
E306.127.R	22	12,7	82	3,2
Z050.011.N	Z054.003.N	Z051.004.R		

S Ø 12	D	B	L	E
E307.127.R Selling out	22	12,7	82	1,6
Z050.005.N	Z054.003.N	Z051.004.R		

HW FLUSH TRIM BITS WITH BALL BEARING GUIDE Z=2

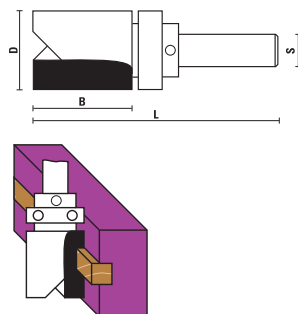
ART. E310 - G310



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E310.190.R	G310.190.R	19	25	82
				
Z050.101.N	Z053.002.N	Z051.004.R		

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

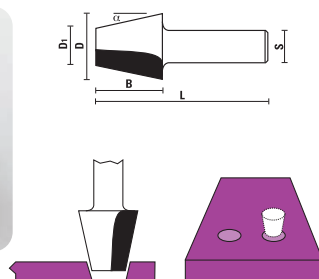
ART. E312 - G312



S Ø 12	S Ø 1/2" (12,7)	D	B	L
E312.286.R	G312.286.R	28,6	38	92
				
Z050.015.N	Z058.003.N	Z051.005.R		

HW TOPMOUNT ROUTER BITS Z=2

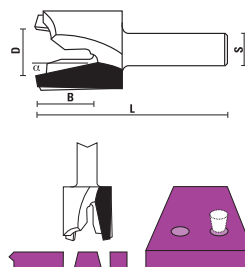
ART. E315



S Ø 12	D	D ₁	B	L	α
E315.240.R	23	12,3	25	63,1	15°
E315.340.R	34	23,3	25	63,1	15°
E315.450.R	45	34,3	25	63,1	15°

HW BEVEL HOLE ROUTER BITS Z=3

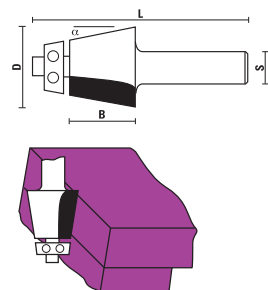
ART. E315



S Ø 12	D	B	L	α
E315.730.R	23	20	72	15°
E315.840.R	34	20	72	15°
E315.950.R	45	20	72	15°

HW BEVEL UNDERMOUNT BITS WITH BALL BEARING GUIDE Z=2

ART. E316 - G316



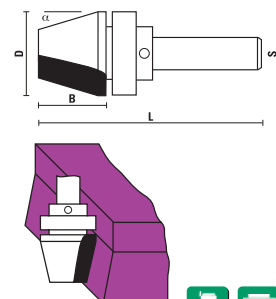
12° ball bearing with Delrin® ring

S Ø 12	S Ø 1/2" (12,7)	D	B	L	α
E316.320.R	G316.320.R	32	25	81	12°
					

S Ø 12	S Ø 1/2" (12,7)	D	B	L	α
E316.390.R	G316.390.R	39	32	78	12°
					
Z050.106.N	Z053.002.N	Z051.007.R			

HW TOPMOUNT COUNTERTOP BITS WITH UPPER BALL BEARING GUIDE Z=2

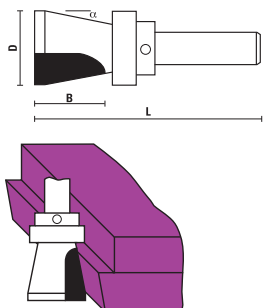
ART. E317 - G317



S Ø 12	S Ø 1/2" (12,7)	D	B	L	α
E317.286.R	G317.286.R	28,6	25	78	12°
					
Z050.015.N	Z058.003.N	Z051.005.R			

HW TOPMOUNT COUNTERTOP BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. E321

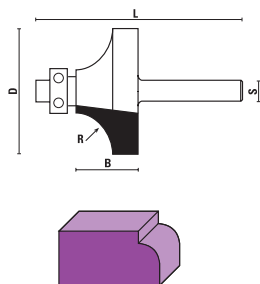


S Ø 12	D	B	L	α
E321.286.R	28,6	26	79	12°



HW CORNER ROUNDING BITS WITH DELRIN® BALL BEARING GUIDE Z=2

ART. C323



- Complete with Delrin® ball bearing to avoid marking and scratches
- Suitable for working composite material

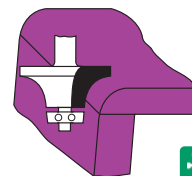
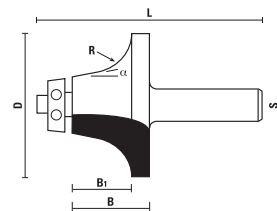
S Ø 8	D	R	B	L
C323.167.R	16,7	2	8	47
C323.187.R	18,7	3	9,5	49
C323.190.R	19	3,2	10	48
C323.222.R	22,2	4,8	13	51
C323.254.R	25,4	6,4	13	51
C323.286.R	28,6	8	13	51
C323.318.R	31,8	9,5	16	56
C323.354.R	35,4	11	17	57
C323.380.R	38	12,7	19	57



**SAWBLADES
FOR CUTTING
SOLID SURFACE
AT SECTION 12**

HW ROUNDOVER BITS WITH BALL BEARING GUIDE Z=2

ART. E325 - G325



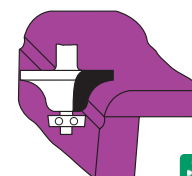
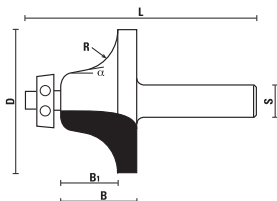
18° ball bearing with Delrin® ring

S Ø 12	S Ø 1/2" (12,7)	D	B	B ₁	L	R	α
E325.540.R	G325.540.R	54	25	19	79	12,7	18°
E325.570.R	G325.570.R	57	32	25	83	14	18°



HW OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. E326 - G326



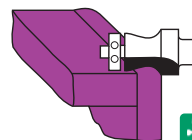
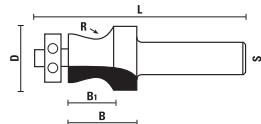
15° ball bearing with Delrin® ring

S Ø 12	S Ø 1/2" (12,7)	D	B	B ₁	L	R	α
E326.550.R	G326.550.R	55	25	19	75	12,7	15°
E326.610.R		61	32	25	86	14	15°



HW COUNTER-TOP BITS WITH BALL BEARING GUIDE Z=2

ART. E330 - G330



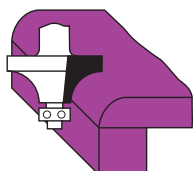
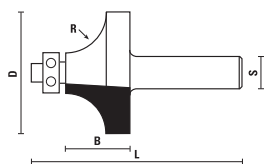
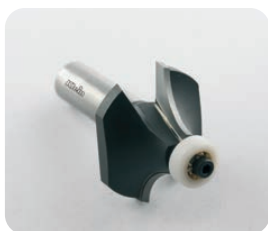
For anti-drip profile on washbasin

S Ø 12	S Ø 1/2" (12,7)	D	B	B ₁	L	R
E330.220.R	G330.220.R	25	22	16	79	8
E330.290.R	G330.290.R	25	29	24	85	8



HW CORNER ROUNDING BITS WITH BALL BEARING GUIDE Z=2

ART. E334 - G334



S Ø 12	S Ø 1/2" (12,7)	D	B	L	R
E334.254.R	G334.254.R	25,4	13	62	6,4
E334.286.R	G334.286.R	28,6	13,5	61	8
E334.380.R	G334.380.R	38	19	65	12,7
E334.510.R	G334.510.R	51	25	72	19



Z050.100.N



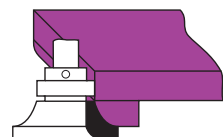
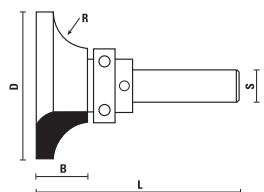
Z053.002.N



Z051.002.R

HW ROUNDING-UNDER BITS WITH UPPER BALL BEARING GUIDE Z=2

ART. E335 - G335



For bottom rounding

S Ø 12	S Ø 1/2" (12,7)	D	B	L	R
E335.540.R	G335.540.R	54	20	73	12,7
E335.670.R*	G335.670.R	67	25	77	19

*Selling out



Z050.104.N



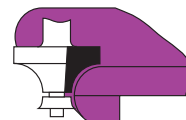
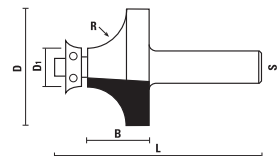
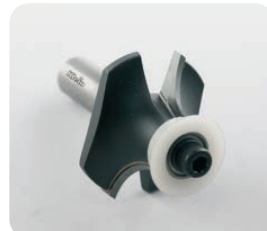
Z058.003.N



Z051.005.R

HW CORNER-ROUNDING BITS WITH BALL BEARING GUIDE Z=2

ART. E336 - G336



R=12,7 ball bearing

S Ø 12	S Ø 1/2" (12,7)	D	D1	R	B	L
E336.410.R	G336.410.R	41	16	13	19	68



S Ø 12	S Ø 1/2" (12,7)	D	D1	R	B	L
E336.540.R	G336.540.R	54	16	19	25	74



Z050.113.N



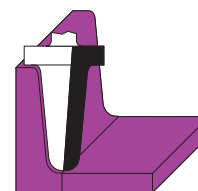
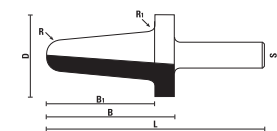
Z053.002.N



Z051.004.R

HW UPSTAND BITS Z=2

ART. E340 - G340

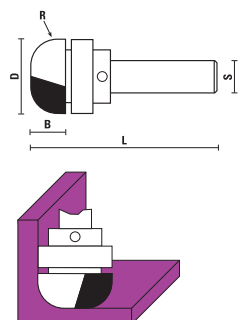


S Ø 12	S Ø 1/2" (12,7)	D	B	B1	R	R1	L
E340.390.R*		39	40	30	6	3	78
E340.391.R	G340.391.R	39	55	45	6	3	93

*Selling out

HW COVE BITS WITH UPPER BALL BEARING GUIDE Z=2

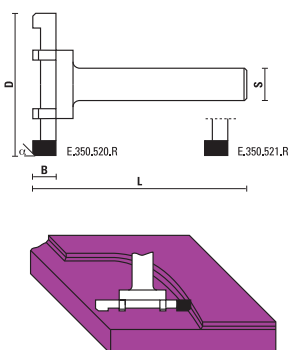
ART. E342 - G342



S Ø 12	S Ø 1/2" (12,7)	D	B	R	L
E342.286.R	G342.286.R	28,6	13	10	73
Z050.104.N	Z058.003.N	Z051.005.R			

HW BOWL AND COUNTERTOP TRIM BITS Z=6

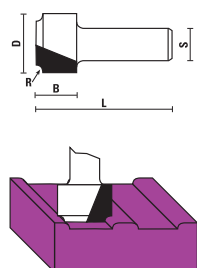
ART. E350 - G350



S Ø 12	S Ø 1/2" (12,7)	D	B	L	Z	α
E350.520.R	G350.520.R	52	6,5	83	6	0,5x45°
E350.521.R	G350.521.R	52	6,5	83	6	0°

HW PROFILE BITS Z=2

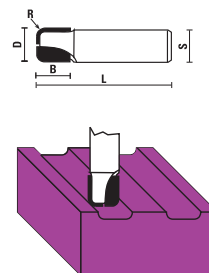
ART. E360



S Ø 12	D	B	R	L
E360.246.R	24,6	16	2	60

HW PROFILE BITS Z=2

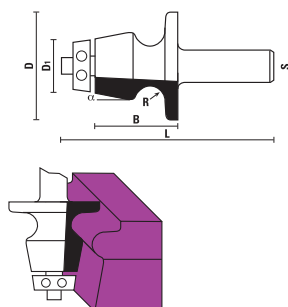
ART. E361



S Ø 12	D	B	R	L
E361.127.R	12,7	13	3,2	51
E361.160.R	16	13	3,2	51
E361.190.R	19	13	3,2	51

HW UNDERMOUNT PROFILE BOWL BITS WITH BALL BEARING GUIDE Z=2

ART. E362

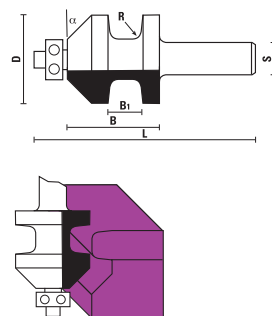


10° ball bearing with Delrin® ring

S Ø 12	D	D1	B	R	L	α
E362.420.R	42	22	33	6,4	84	10°
Z050.102.N	Z053.002.N	Z051.004.R				

HW BEVEL HOB BITS WITH BALL BEARING GUIDE Z=2

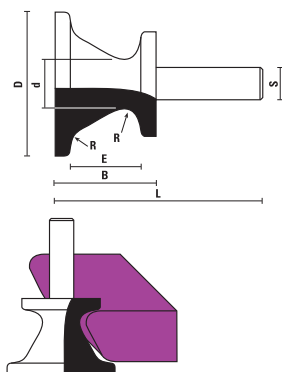
ART. E363



S Ø 12	D	B	B1	R	L	α
E363.350.R	35	36,5	12-13	3,2	89	45°
Z050.011.N	Z054.003.N	Z051.004.R				

HW BEADING BITS Z=2

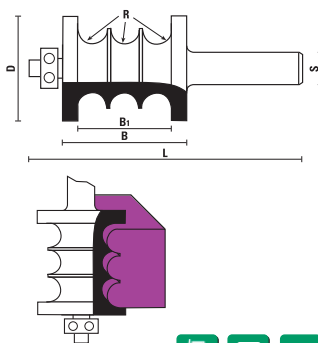
ART. E364



S Ø 12		D	d	B	E	R	L
E364.370.R	Selling out	37	16	25	12-13	4,8	84
E364.540.R	Selling out	54	19	37	24-26	6,4	96
E364.710.R	Selling out	71	22	50	36-39	9,5	109

HW TRIPLE BEADING BITS WITH BALL BEARING GUIDE Z=2

ART. E365

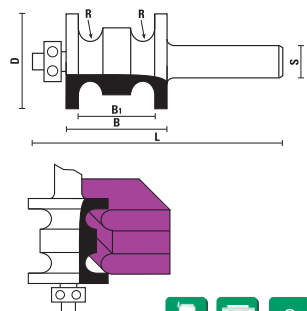


S Ø 12		D	B	B1	R	L
E365.410.R	Selling out	41	51	39	6	101



HW DOUBLE BEADING BITS WITH BALL BEARING GUIDE Z=2

ART. E366

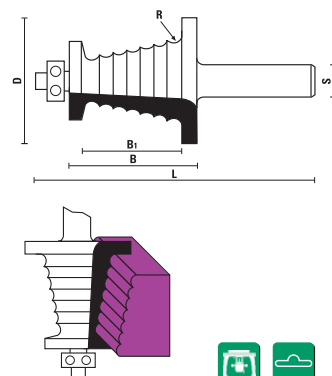


S Ø 12		D	B	B1	R	L
E366.380.R	Selling out	38	51	38	6	79



HW MULTI BEADING BITS WITH BALL BEARING GUIDE Z=2

ART. E367

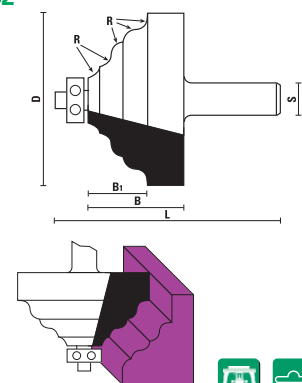


S Ø 12		D	B	B1	R	L
E367.510.R	Selling out	51	51	38	3	99



HW EDGE MOULDING BITS WITH BALL BEARING GUIDE Z=2

ART. E370

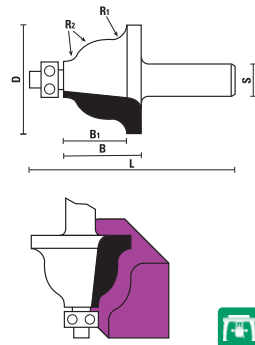


S Ø 12		D	B	B1	R	L
E370.700.R	Selling out	70	40	33	4,8	87



HW WAVY EDGE BITS WITH BALL BEARING GUIDE Z=2

ART. E371

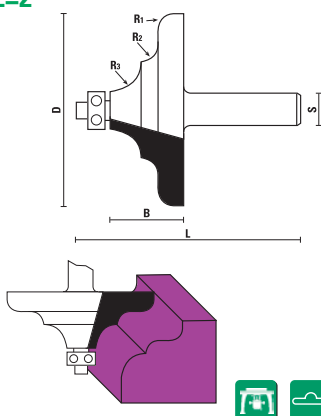


S Ø 12		D	B	B1	R1	R2	L
E371.440.R	Selling out	44	32	25	6	13	82,5



HW EDGE MOULDING BITS WITH BALL BEARING GUIDE Z=2

ART. E373



S Ø 12	D	R1	R2	R3	B	L
E373.760.R Selling out	76	6,4	6	12,7	30	78



Z050.100.N



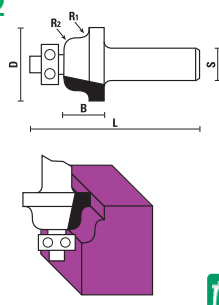
Z053.002.N



Z051.002.R

HW ROMAN OGEE BITS WITH BALL BEARING GUIDE Z=2

ART. E375



S Ø 12	D	B	R1	R2	L
E375.286.R	28,6	16	3,2	4	63,5



Z050.100.N



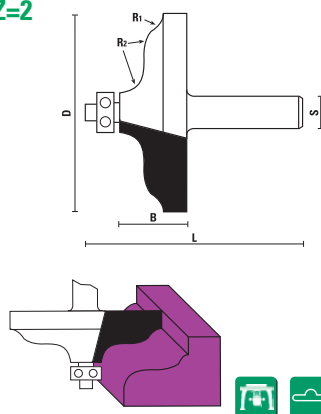
Z053.002.N



Z051.002.R

HW EDGE MOULDING BITS WITH BALL BEARING GUIDE Z=2

ART. E376



S Ø 12	D	B	R1	R2	L
E376.790.R Selling out	79	28	5,2	9	74,5



Z050.100.N



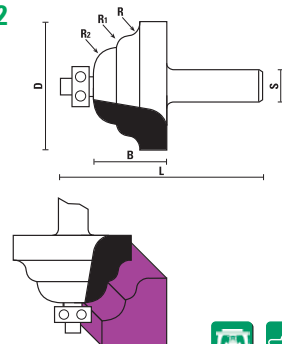
Z053.002.N



Z051.002.R

HW EDGE MOULDING BITS WITH BALL BEARING GUIDE Z=2

ART. E377



S Ø 12	D	R	R1	R2	B	L
E377.510.R Selling out	51	4,4	4,4	9,5	28	82,5



Z050.100.N



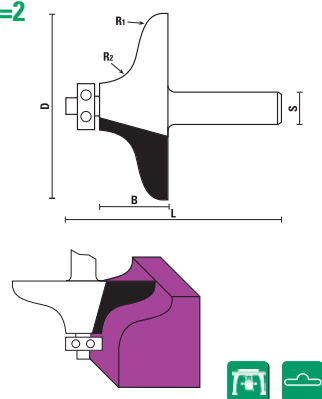
Z053.002.N



Z051.002.R

HW EDGE MOULDING BITS WITH BALL BEARING GUIDE Z=2

ART. E378



S Ø 12	D	B	R1	R2	L
E378.760.R Selling out	76	28	8	12,7	79



Z050.101.N



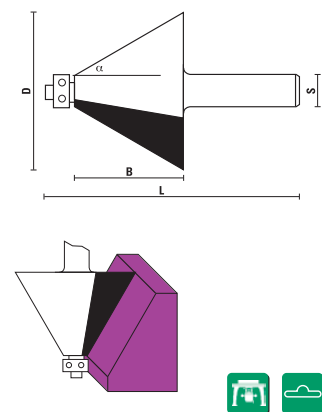
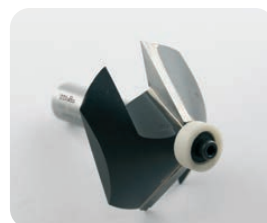
Z053.002.N



Z051.004.R

HW BEVEL BITS WITH BALL BEARING GUIDE Z=2

ART. E380 - G380



S Ø 12	S Ø 1/2" (12,7)	D	B	L	α
E380.510.R	G380.510.R	51	19	67	45°
E380.640.R	G380.640.R	64	44	93	30°



Z050.100.N



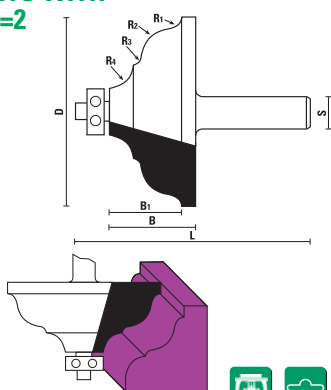
Z053.002.N



Z051.002.R

HW EDGE MOULDING BITS WITH BALL BEARING GUIDE Z=2

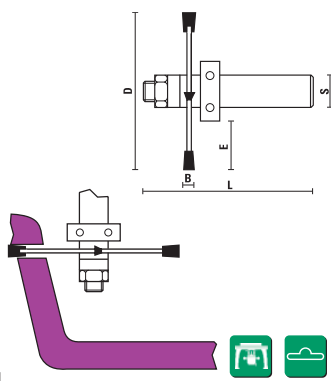
ART. E381



S Ø 12	D	B	B1	R1	R2	R3	R4	L
E381.760.R Selling out	76	34,9	29	4,8	12,7	3,2	9,5	84
								
Z050.101.N	Z053.002.N	Z051.004.R						

HW ROUTER BITS FOR SINK REPAIRING

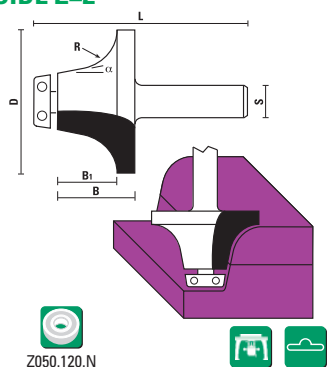
ART. E382 - G382



S Ø 12	S Ø 1/2" (12,7)	D	E	B	L	Z
E382.670.R	G382.670.R	80	25,7	6	96	4
SPARE PARTS						
Spare arbor						
E117.120.N						
Spare cutter D = Ø 80/Ø 8 Z = 4						
C118.980.R						

HW ROUNDING OVER UNDERMOUNT BOWL BITS WITH BALL BEARING GUIDE Z=2

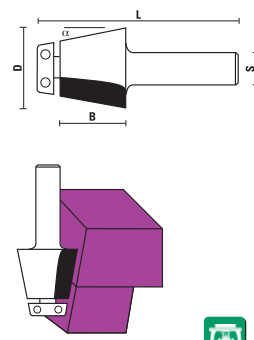
ART. E383 - G383



S Ø 12	S Ø 1/2" (12,7)	D	B	B1	R	L	α
E383.450.R	G383.450.R	45	17,5	13,5	9,5	63,5	17°
E383.510.R	G383.510.R	51	17,5	13,5	12,7	63,5	17°
E383.540.R	G383.540.R	54	25	20	12,7	73	17°
E383.570.R	G383.570.R	57	25	20	19	76	17°

HW ROUNDING OVER UNDERMOUNT BOWL BITS WITH BALL BEARING GUIDE Z=2

ART. E384

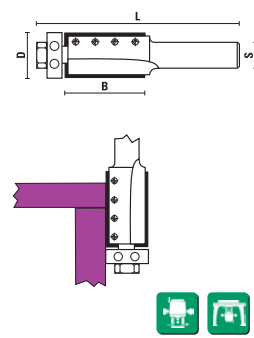


12° ball bearing with Delrin® ring

S Ø 12	D	B	L	α
E384.320.R	32	25	76	12°
				
Z050.102.N				

INSERT FLUSH TRIM BITS Z=2

ART. W138

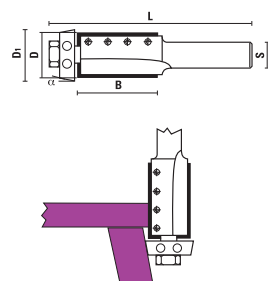


- HW knives with "Kawedur" coating
- For CORIAN®
- Ball bearing with Delrin® ring

S Ø 12	D	B	L
W138.190.R	19	30	82
			
Z050.111.N	Z055.230.N	Z051.101.N	

INSERT FLUSH TRIM BITS Z=2

ART. W138



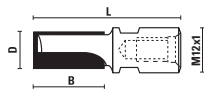
- HW knives with "Kawedur" coating
- For CORIAN®
- 11° ball bearing with Delrin® ring

S Ø 12	D	D1	B	L	α
W138.220.R	19	22	30	82	11°
					
Z050.110.N	Z055.230.N	Z051.101.N			

See also section 9 page 9.07 for more details

HW/HS STRAIGHT PLUNGE CUTTING BITS FOR "ELU" Z=2

ART. F101



S = M12x1	D	B	L	Mat.
F101.060.R	6	18	60	HW
F101.070.R	7	20	60	HW
F101.080.R	8	25	60	HW
F101.100.R	10	25	60	HW
F101.120.R	12	25	60	HW
F101.140.R	14	25	60	HW
F101.150.R	15	25	60	HW
F101.160.R	16	25	60	HW
F101.180.R	18	25	60	HW
F101.200.R	20	25	60	HW
F101.220.R	22	25	60	HW
F101.240.R	24	25	60	HW
F101.250.R	25	25	60	HW
F101.300.R	30	25	60	HW

HW STRAIGHT PLUNGE CUTTING BITS FOR "ELU" Z=2

ART. F103 - F104 - F105

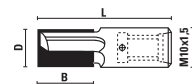


Long execution

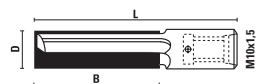
S = M12x1	D	B	L
F103.080.R	8	35	67
F103.100.R	10	35	67
F103.120.R	12	35	67
F103.140.R	14	35	67
F103.160.R	16	35	67
F103.180.R	18	35	67
F103.200.R	20	35	67
F103.220.R	22	35	67
F104.120.R	12	45	77
F104.150.R	15	45	77
F104.160.R	16	45	77
F104.161.R	16	50	82
F104.180.R	18	45	77
F104.200.R	20	45	77
F105.140.R	14	60	92
F105.160.R	16	60	92
F105.180.R	18	60	92
F105.200.R	20	60	92
F105.220.R	22	60	92

HW STRAIGHT PLUNGE CUTTING BITS FOR "SCHEER" Z=2

ART. F152 - F153



S = M10x1.5	D	B	L
F152.040.R	4	10	55
F152.050.R	5	12	55
F152.060.R	6	14	55
F152.080.R	8	20	55
F152.100.R	10	22	55
F152.120.R	12	22	55
F152.140.R	14	25	55
F152.150.R	15	25	55
F152.160.R	16	25	55
F152.180.R	18	25	55
F152.200.R	20	25	55
F152.220.R	22	25	55
F152.240.R	24	25	55
F152.250.R	25	25	55
F152.300.R	30	25	55

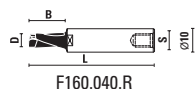


Long execution

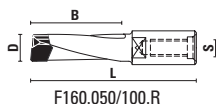
S = M10x1.5	D	B	L
F153.060.R	6	30	65
F153.080.R	8	35	70
F153.100.R	10	35	70
F153.120.R	12	35	70
F153.140.R	14	35	70
F153.160.R	16	45	75
F153.180.R	18	45	75
F153.200.R	20	45	75
F153.220.R	22	45	75

HW DRILL BITS FOR "FESTOOL" MACHINES Z=2

ART. F160



F160.040.R

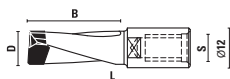


F160.050/100.R

- To be used on **Festool®** joining machines "Domino DF500"
- Suitable for creating dowel cross-cut for making "Domino®" joints for frames, drawers, cabinets and furniture



S = M6x0,75	D	B	L
F160.040.R Solid carbide	4	11	38
F160.050.R	5	20	49
F160.060.R	6	28	49
F160.080.R	8	28	49
F160.100.R	10	28	49



To be used on **Festool®** joining machines "Domino XL DF700"
Suitable for creating dowel cross-cut for making "Domino®" joints for kitchen cabinets, tables and door frames

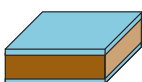
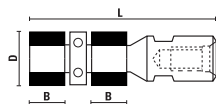


S = M8x1	D	B	L
F161.080.R	8	50	90
F161.100.R	10	70	90
F161.120.R	12	70	90
F161.140.R	14	70	90



HW FLUSH TRIMMING BITS WITH BALL BEARING GUIDE Z=2

ART. F108



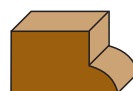
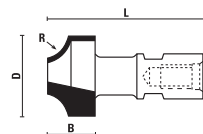
S = M12x1	D	B	L
F108.190.R	19	20	90



Z050.020.N

HW RADIUS BITS Z=2

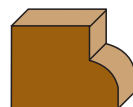
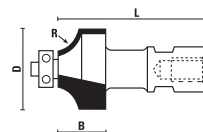
ART. F110



S = M12x1	D	R	B	L
F110.320.R selling out	32	10	15	60
F110.370.R selling out	37	12	18	60

HW RADIUS BITS WITH BALL BEARING GUIDE Z=2

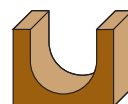
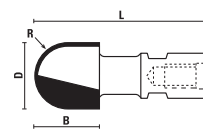
ART. F111



S = M12x1	D	R	B	L
F111.290.R	29	8	13	60
F111.330.R	33	10	15	60
F111.370.R	37	12	17	60
F111.430.R	43	15	20	60
F111.530.R	53	20	25	60

HW RADIUS BITS Z=2

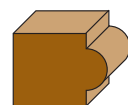
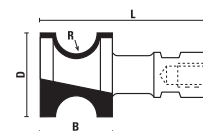
ART. F112



S = M12x1	D	R	B	L
F112.160.R	16	8	18	60
F112.200.R	20	10	18	60
F112.240.R	24	12	18	60
F112.300.R	30	15	18	60

HW RADIUS BITS Z=2

ART. F114



S = M12x1	D	R	B	L
F114.450.R	45	15	50	80