# Borin bits, slot mortising bits

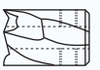
6

HW FLAT COUNTERSINKS Z=2
Page 6.03

HW SPIRAL BITS Z=2
Page 6.03

HW COUNTERSINK Z=2 - 30°
Page 6.03

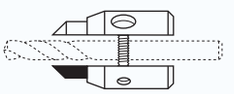
HW SPIRAL BITS Z=2
Page 6.03


HS COUNTERSINKS Z=2
Page 6.03

HS BRAD POINT DRILLS Z=2
Page 6.04

SP BRAD POINT DRILLS Z=2
Page 6.04


HW ADJUSTABLE COUNTERSINK
∅ 3 TO ∅ 7 Z=2
Page 6.04

SP BRAD POINT DRILLS Z=2
Page 6.04

SP SINGLE FLUTE DRILLS "LEWIS" TYPE Z=1
Page 6.05

HS SPIRAL BITS Z=2
Page 6.05

HS SPIRAL BITS Z=2
Page 6.05

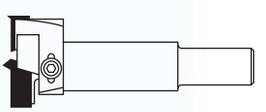
HS STEP DRILLS Z=2
Page 6.05

HS STEP DRILLS Z=2
Page 6.06

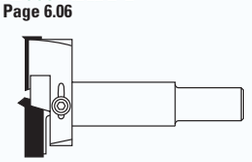
HW/HS 3-DIAMETER BITS "CONFIRMAT" Z=2
Page 6.06

3-DIAMETER HW DRILLS, ADJUSTABLE Z=2
Page 6.06

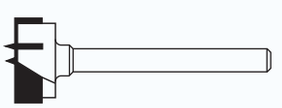
HS TWIST DRILLS Z=2
Page 6.06

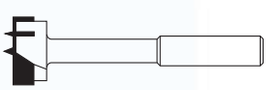

HW ADJUSTABLE DIAMETER BORING BITS 30/60 MM
Page 6.07


HW ADJUSTABLE DIAMETER BORING BITS 60/80 MM
Page 6.07

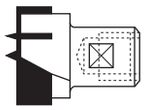




HW HINGE BORING BITS Z=2+2
Page 6.07

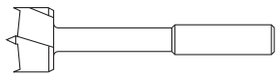

HW HINGE BORING BITS Z=2+2
Page 6.08

Klein®



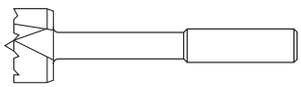
HW INTERCHANGEABLE HINGE BORING BITS Z=2+2
Page 6.08

HS HINGE BORING BITS Z=2+2
Page 6.09

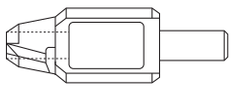


HS HINGE BORING BITS Z=2+2
Page 6.09

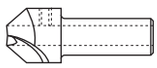
SP "FORSTNER" BITS Z=2+2
Page 6.09



SP "FORSTNER" BITS Z=2+2
Page 6.10



SP PLUG CUTTERS Z=2
Page 6.10

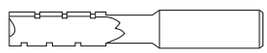


HW/HS COUNTERSINKS Z=2
Page 6.10

HW/HS DOVETAIL BITS 9° - Z=1
Page 6.10

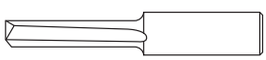
VHW DOVETAIL BITS Z=2
Page 6.11

HW/HS DOVETAIL BITS Z=2
Page 6.11



SP SLOT MORTISING BITS WITH CHIPBREAKER Z=2
Page 6.11

HL RECIPROCATING SLOT MORTISING BITS
Page 6.12

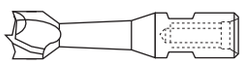


HL RECIPROCATING SLOT MORTISING BITS Z=3
Page 6.12

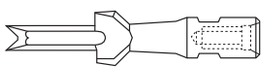
HW RECIPROCATING SLOT MORTISING BITS
Page 6.12

HW/KS GROOVING CUTTERS Z=2
Page 6.12

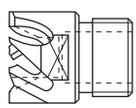
HW/KS SLOT MORTISING CUTTERS Z=2
Page 6.13



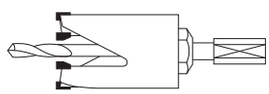
HW/KS BORING BITS Z=2
Page 6.13



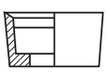
HW/KS SLOT BORING BITS Z=2
Page 6.13



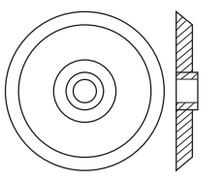
HS DOWEL CUTTERS
Page 6.13



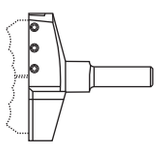
HW HOLE SAWS
Page 6.14



HS CUTTERS FOR COPYING LATHES
Page 6.15



HS CUTTERS FOR COPYING LATES
Page 6.15

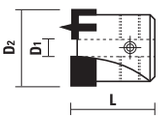


ROUTER BITS FOR DECORATIVE ROSETTES Z=2
Page 6.15

MODULAR DRAWER UNIT
Page 6.16

## HW FLAT COUNTERSINKS Z=2

**ART. R100**

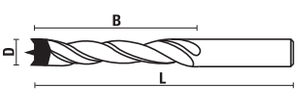



- Use with Art. **R101** and with T.C.T. dowel drills Art. **L103 - L104 - L109 - L110** and with all dowel drills with **4 flutes**

| RH rotation | LH rotation | D1 | D2 | L |
|---|---|---|---|---|
| R100.050.R | R100.050.L | 5 | 16 | 20 |
| R100.060.R | R100.060.L | 6 | 16 | 20 |
| R100.061.R | R100.061.L | 6 | 20 | 20 |
| R100.070.R | R100.070.L | 7 | 20 | 20 |
| R100.080.R | R100.080.L | 8 | 16 | 20 |
| R100.081.R | R100.081.L | 8 | 19 | 20 |
| R100.082.R | R100.082.L | 8 | 20 | 20 |
| R100.090.R | R100.090.L | 9 | 19 | 20 |
| R100.091.R | R100.091.L | 9 | 20 | 20 |
| R100.100.R | R100.100.L | 10 | 20 | 20 |
| R100.101.R | R100.101.L | 10 | 25 | 20 |
| R100.102.R | R100.102.L | 10 | 30 | 20 |
| R100.120.R | R100.120.L | 12 | 25 | 20 |
| R100.121.R | R100.121.L | 12 | 30 | 20 |

## HW SPIRAL BITS Z=2

**ART. R101**

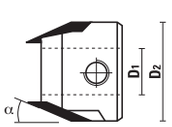



- **4-flutes**
- Use rings Art. **Z003** a page 10.03

| RH rotation | D | B | L |
|---|---|---|---|
| R101.050.R | 5 | 50 | 85 |
| R101.060.R | 6 | 55 | 90 |
| R101.070.R | 7 | 65 | 105 |
| R101.080.R | 8 | 75 | 115 |
| R101.090.R | 9 | 80 | 125 |
| R101.100.R | 10 | 90 | 135 |
| R101.120.R | 12 | 100 | 150 |

## HW COUNTERSINKS Z=2 - 30°

**ART. R102**

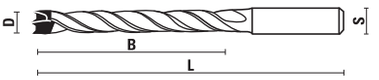



- Use with T.C.T. dowel drills Art. **L103 - L104 - L109 - L110** and with all dowel drills with **4 flutes**

| RH rotation | LH Rotation | D1 | D2 | α |
|---|---|---|---|---|
| R102.080.R NEW | R102.080.L NEW | 8 | 19 | 30° |

## HW SPIRAL BITS Z=2

**ART. R125**

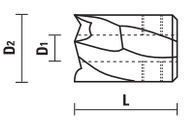



- **4-flutes**
- Use rings Art. **Z003** page 10.03

| RH rotation | D | B | L | S |
|---|---|---|---|---|
| R125.060.R | 6 | 75 | 140 | 13x50 |
| R125.080.R | 8 | 85 | 150 | 13x50 |
| R125.100.R | 10 | 95 | 160 | 13x50 |
| R125.120.R | 12 | 105 | 170 | 13x50 |
| R125.130.R | 13 | 110 | 175 | 13x50 |
| R125.140.R | 14 | 115 | 180 | 13x50 |
| R125.150.R | 15 | 120 | 185 | 13x50 |
| R125.160.R | 16 | 125 | 190 | 16x50 |
| R125.180.R | 18 | 130 | 200 | 16x50 |
| R125.200.R | 20 | 140 | 210 | 16x50 |

## HS COUNTERSINKS Z=2

**ART. R200**



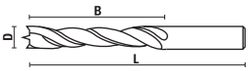

For Art. **R201**

| RH rotation | D1 | D2 | L |
|---|---|---|---|
| R200.040.R | 4 | 10 | 22 |
| R200.050.R | 5 | 12 | 22 |
| R200.051.R | 5 | 15 | 22 |
| R200.060.R | 6 | 15 | 22 |
| R200.061.R | 6 | 16 | 22 |
| R200.062.R | 6 | 20 | 22 |
| R200.080.R | 8 | 16 | 22 |
| R200.081.R | 8 | 20 | 22 |
| R200.082.R | 8 | 22 | 22 |
| R200.083.R | 8 | 25 | 22 |
| R200.100.R | 10 | 20 | 22 |
| R200.101.R | 10 | 25 | 25 |
| R200.102.R | 10 | 30 | 25 |
| R200.120.R | 12 | 25 | 25 |
| R200.121.R | 12 | 30 | 25 |

R200.910.R Set with 6 countersinks ∅ 5/15 - 6/15 - 6/20 - 8/20 - 8/25 - 10/25 + 4 brad point drills ∅ 5 - 6 - 8 -10

## HS BRAD POINT DRILLS Z=2

**ART. R201**

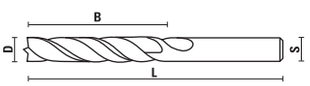



- **4-flutes**
- Use rings Art. Z003 page 10.03

| RH rotation | D | B | L |
|---|---|---|---|
| R201.060.R | 6 | 55 | 95 |
| R201.065.R | 6,5 | 65 | 105 |
| R201.070.R | 7 | 70 | 110 |
| R201.075.R | 7,5 | 70 | 115 |
| R201.080.R | 8 | 75 | 120 |
| R201.090.R | 9 | 80 | 130 |
| R201.100.R | 10 | 90 | 140 |
| R201.110.R | 11 | 95 | 150 |
| R201.120.R | 12 | 100 | 155 |

## SP BRAD POINT DRILLS Z=2

**ART. R205**



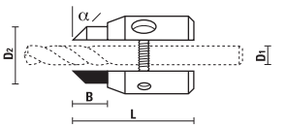

2-**flutes**

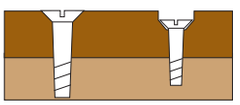
| RH rotation | D | B | L | S |
|---|---|---|---|---|
| R205.030.R | 3 | 33 | 60 | 3 |
| R205.040.R | 4 | 43 | 75 | 4 |
| R205.050.R | 5 | 52 | 85 | 5 |
| R205.060.R | 6 | 57 | 93 | 6 |
| R205.070.R | 7 | 69 | 109 | 7 |
| R205.080.R | 8 | 75 | 117 | 8 |
| R205.090.R | 9 | 81 | 125 | 9 |
| R205.100.R | 10 | 87 | 133 | 10 |
| R205.111.R | 11 | 94 | 150 | 10 |
| R205.120.R | 12 | 101 | 155 | 10 |
| R205.130.R | 13 | 101 | 155 | 10 |
| R205.140.R | 14 | 108 | 170 | 10 |
| R205.150.R | 15 | 114 | 170 | 10 |
| R205.160.R | 16 | 120 | 180 | 10 |
| R205.180.R | 18 | 130 | 200 | 10 |
| R205.200.R | 20 | 130 | 200 | 10 |
| R205.220.R | 22 | 140 | 210 | 13 |
| R205.240.R | 24 | 140 | 215 | 13 |
| R205.260.R | 26 | 140 | 215 | 13 |
| R205.280.R | 28 | 140 | 220 | 13 |
| R205.300.R | 30 | 140 | 220 | 13 |

| | |
|---|---|
| R205.505.R | 5 drills set ∅ 4 -5 -6 -8 -10 |
| R205.508.R | 8 drills set ∅ 3 -4 -5 -6 -7 - 8 -9 -10 |

## HW ADJUSTABLE COUNTERSINKS ∅ 3 TO ∅ 7 Z=2

**ART. A199**



- Spare key supplied; single packed

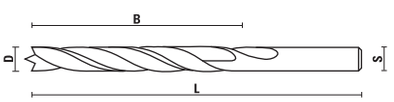
| Item | D1 | D2 | α | B | L |
|---|---|---|---|---|---|
| A199.030.R | 3/7 | 11/15 | 45° | 12 | 32 |

Insert the tool | Adjust the boring depth | Line up the cutting edges of countersink and tool | Tighten the screws

**On request display free of charge by min order 10 pcs.**

## SP BRAD POINT DRILLS Z=2

**ART. R206**

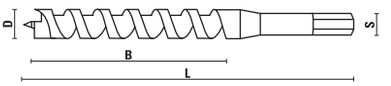



- **2-flutes**
- For wall brackets, girders

| RH rotation | D | B | L | S |
|---|---|---|---|---|
| R206.080.R | 8 | 160 | 245 | 8 |
| R206.090.R | 9 | 160 | 245 | 9 |
| R206.100.R | 10 | 160 | 245 | 10 |
| R206.120.R | 12 | 160 | 245 | 10 |
| R206.121.R | 12 | 250 | 400 | 10 |
| R206.140.R | 14 | 160 | 245 | 10 |
| R206.141.R | 14 | 250 | 400 | 10 |
| R206.160.R | 16 | 160 | 245 | 10 |
| R206.161.R | 16 | 250 | 400 | 10 |
| R206.180.R | 18 | 160 | 245 | 10 |
| R206.181.R | 18 | 250 | 400 | 10 |
| R206.200.R | 20 | 160 | 245 | 10 |
| R206.201.R | 20 | 250 | 400 | 10 |

## SP SINGLE FLUTE DRILLS "LEWIS" TYPE Z=1

**ART. R207**

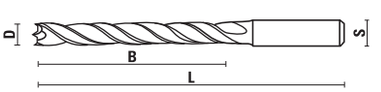



Hex shank

| RH rotation | D | B | L | S |
|---|---|---|---|---|
| R207.080.R | 8 | 220 | 300 | 8 |
| R207.100.R | 10 | 220 | 300 | 10 |
| R207.120.R | 12 | 220 | 300 | 10 |
| R207.140.R | 14 | 220 | 300 | 10 |
| R207.150.R | 15 | 220 | 300 | 10 |
| R207.160.R | 16 | 220 | 300 | 10 |
| R207.180.R | 18 | 220 | 300 | 13 |
| R207.200.R | 20 | 220 | 300 | 13 |
| R207.220.R | 22 | 220 | 300 | 13 |
| R207.240.R | 24 | 220 | 300 | 13 |
| R207.250.R | 25 | 220 | 300 | 13 |
| R207.260.R | 26 | 220 | 300 | 13 |
| R207.280.R | 28 | 220 | 300 | 13 |
| R207.300.R | 30 | 220 | 300 | 13 |

## HS SPIRAL BITS Z=2

**ART. R225**




**4-flutes**

| RH rotation | D | B | L | S |
|---|---|---|---|---|
| R225.060.R | 6 | 75 | 140 | 13x50 |
| R225.080.R | 8 | 85 | 150 | 13x50 |
| R225.100.R | 10 | 95 | 160 | 13x50 |
| R225.120.R | 12 | 105 | 170 | 13x50 |
| R225.130.R | 13 | 110 | 175 | 13x50 |
| R225.140.R | 14 | 115 | 180 | 13x50 |
| R225.160.R | 16 | 125 | 190 | 16x50 |
| R225.180.R | 18 | 130 | 200 | 16x50 |
| R225.200.R | 20 | 140 | 210 | 16x50 |
| R225.220.R | 22 | 150 | 220 | 16x50 |
| R225.240.R | 24 | 160 | 235 | 16x50 |
| R225.250.R | 25 | 170 | 250 | 20x50 |
| R225.300.R | 30 | 190 | 270 | 20x50 |

## HS SPIRAL BITS Z=2

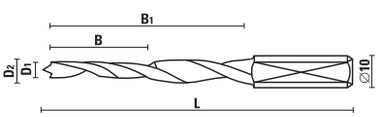
**ART. R226**

**4-flutes**

| RH rotation | D | B | L | S |
|---|---|---|---|---|
| R226.110.R | 11 | 100 | 140 | 10x30 |
| R226.120.R | 12 | 100 | 140 | 10x30 |
| R226.130.R | 13 | 100 | 140 | 10x30 |
| R226.140.R | 14 | 100 | 140 | 10x30 |
| R226.150.R | 15 | 100 | 140 | 10x30 |
| R226.160.R | 16 | 100 | 140 | 10x30 |
| R226.180.R | 18 | 100 | 140 | 10x30 |
| R226.200.R | 20 | 100 | 140 | 10x30 |

## HS STEP DRILLS Z=2

**ART. R202**

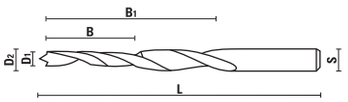



- Flat on the shank
- For **Masterwood** machines

| RH rotation | $D_1$ | $D_2$ | B | $B_1$ | L | Anuba |
|---|---|---|---|---|---|---|
| R202.090.R | 3,8 | 5 | 20 | 40 | 75 | 9 |
| R202.110.R | 4,2 | 5,7 | 20 | 45 | 80 | 11 |
| R202.130.R | 5,2 | 6,5 | 15 | 50 | 85 | 13 |
| R202.140.R | 5,5 | 7 | 15 | 55 | 90 | 14 |
| R202.160.R | 6 | 7,7 | 15 | 60 | 95 | 16 |
| R202.180.R | 6,6 | 8,2 | 20 | 70 | 105 | 18 |
| R202.200.R | 7,2 | 8,7 | 20 | 80 | 115 | 20 |

## HS STEP DRILLS Z=2

**ART. R203**

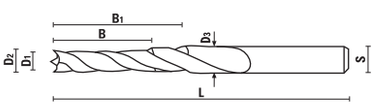



Shank througout cylindrical

| RH rotation | D1 | D2 | B | B1 | L | S | Anuba |
|---|---|---|---|---|---|---|---|
| R203.130.R | 5,4 | 6,5 | 20 | 50 | 80 | 6,5 | 13 |
| R203.131.R | 5,7 | 6,75 | 20 | 65 | 105 | 6,75 | 13 |
| R203.140.R | 6 | 7 | 20 | 50 | 80 | 7 | 14 |
| R203.141.R | 6,25 | 7,25 | 25 | 60 | 90 | 7,25 | 14 |
| R203.142.R | 6,25 | 7,25 | 20 | 65 | 105 | 7,25 | 14 |
| R203.160.R | 6,5 | 7,75 | 25 | 60 | 90 | 7,75 | 16 |
| R203.161.R | 6,5 | 7,75 | 20 | 70 | 110 | 7,75 | 16 |
| R203.180.R | 6,7 | 8,5 | 25 | 60 | 90 | 8,5 | 18 |
| R203.181.R | 6,7 | 8,5 | 25 | 70 | 110 | 8,5 | 18 |

## HW/HS 3-DIAMETER BITS "CONFIRMAT" Z=2

**ART. R104 - R204**

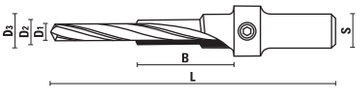


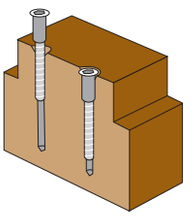

- For **"Confirmat"** joints
- R104 = HW
- R204 = HS

| RH rotation | D1 | D2 | D3 | B | B1 | L | Mat. | S |
|---|---|---|---|---|---|---|---|---|
| R104.100.R | 5,5 | 7,3 | 10 | 35 | 56 | 138 | HW | 10x50 |
| R204.100.R | 5,5 | 7,3 | 10 | 35 | 56 | 138 | HS | 10x50 |
| R204.101.R | 5,5 | 7,3 | 10 | 40 | 60 | 120 | HS | 10x40 |

## 3-DIAMETER HW DRILLS, ADJUSTABLE Z=2

**ART. R108**



- For mounting joints screws
- HS spare drills

| RH rotation | D1 | D2 | D3 | B | L | S |
|---|---|---|---|---|---|---|
| R108.050.R | 5 | 8,5 | 11,5 | 25 | 100 | 10 |

| SPARE KNIFE | D |
|---|---|
| R108.051.R | 5 |

## HS TWIST DRILLS Z=2

**ART. R208**

∅ 9÷11 No step drills

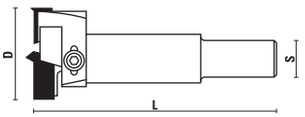
∅ 13÷22 Step drills

For Anuba **SFS INTECK**

| RH rotation | D2 | D1 | B1 | B | L | S | Anuba |
|---|---|---|---|---|---|---|---|
| R208.090.R | 5,2 | | 52 | | 132 | 5,2 | 9 |
| R208.110.R | 5,7 | | 57 | | 139 | 5,7 | 11 |
| R208.130.R | 6,7 | 5,3 | 63 | 12 | 148 | 6,7 | 13 |
| R208.140.R | 7,2 | 5,8 | 69 | 13 | 156 | 7,2 | 14 |
| R208.160.R | 7,7 | 6,3 | 75 | 14 | 165 | 7,7 | 16 |
| R208.180.R | 8,6 | 7,2 | 81 | 14 | 175 | 8,6 | 18 |
| R208.200.R | 8,8 | 7,4 | 81 | 16 | 175 | 8,8 | 20 |
| R208.220.R | 10,2 | 8,8 | 87 | 23 | 184 | 10,2 | 22 |

## HW ADJUSTABLE DIAMETER BORING BITS 30/60 MM

**ART. R110**



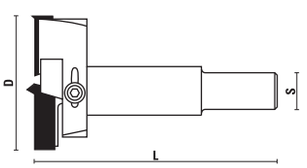

Complete with 1 knife ∅ 30÷45 mm + 1 knife ∅ 45÷60 + key

| RH rotation | D | L | S |
|---|---|---|---|
| R110.600.R | 30÷60 | 90 | 10x30 |
| **SPARE KNIFE** | | | |
| R110.300.R | 30÷45 | | |
| R110.450.R | 45÷60 | | |

Z051.012.R

## HW ADJUSTABLE DIAMETER BORING BITS 60/80 MM

**ART. R110**



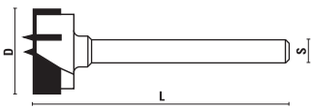

Complete with 1 knife ∅ 60÷80 + key

| RH rotation | D | L | S |
|---|---|---|---|
| R110.800.R | 60÷80 | 100 | 12x40 |
| **SPARE KNIFE** | | | |
| R110.801.R | 60÷80 | | |

Z051.013.R

## HW HINGE BORING BITS Z=2+2

**ART. R111**



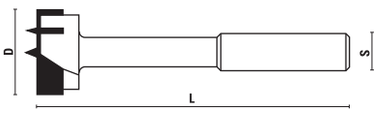

For **soft and hard wood, plywood and laminated chipboard**

| RH rotation | D | L | S |
|---|---|---|---|
| R111.140.R | 14 | 90 | 10x60 |
| R111.141.R | 14 | 120 | 10x100 |
| R111.150.R | 15 | 90 | 10x60 |
| R111.151.R | 15 | 120 | 10x100 |
| R111.160.R | 16 | 90 | 10x60 |
| R111.161.R | 16 | 120 | 10x100 |
| R111.170.R | 17 | 90 | 10x60 |
| R111.180.R | 18 | 90 | 10x60 |
| R111.181.R | 18 | 120 | 10x100 |
| R111.190.R | 19 | 90 | 10x60 |
| R111.200.R | 20 | 90 | 10x60 |
| R111.201.R | 20 | 120 | 10x100 |
| R111.210.R | 21 | 90 | 10x60 |
| R111.220.R | 22 | 90 | 10x60 |
| R111.221.R | 22 | 120 | 10x100 |
| R111.230.R | 23 | 90 | 10x60 |
| R111.240.R | 24 | 90 | 10x60 |
| R111.250.R | 25 | 90 | 10x60 |
| R111.251.R | 25 | 120 | 10x100 |
| R111.260.R | 26 | 90 | 10x60 |
| R111.261.R | 26 | 120 | 10x100 |
| R111.270.R | 27 | 90 | 10x60 |
| R111.280.R | 28 | 90 | 10x60 |
| R111.300.R | 30 | 90 | 10x60 |
| R111.301.R | 30 | 120 | 10x100 |
| R111.320.R | 32 | 90 | 10x60 |
| R111.340.R | 34 | 90 | 10x60 |
| R111.350.R | 35 | 90 | 10x60 |
| R111.351.R | 35 | 120 | 10x100 |
| R111.360.R | 36 | 90 | 10x60 |
| R111.380.R | 38 | 90 | 10x60 |
| R111.400.R | 40 | 90 | 10x60 |
| R111.401.R | 40 | 120 | 10x100 |
| R111.420.R | 42 | 90 | 10x60 |
| R111.450.R | 45 | 90 | 10x60 |
| R111.480.R | 48 | 90 | 10x60 |
| R111.500.R | 50 | 90 | 10x60 |
| R111.550.R | 55 | 90 | 10x60 |
| R111.600.R | 60 | 90 | 10x60 |

R111.905.R 5 drills set ∅ 15 -20 -25 -30 -35

## HW HINGE BORING BITS Z=2+2

**ART. R112**

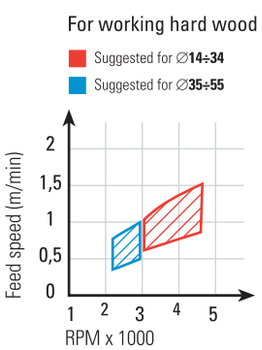



For **soft and hard wood, plywood and laminated chipboard**

| RH rotation | D | L | S |
|---|---|---|---|
| R112.150.R | 16 | 120 | 13x50 |
| R112.160.R | 16 | 120 | 13x50 |
| R112.200.R | 20 | 120 | 13x50 |
| R112.220.R | 22 | 130 | 13x50 |
| R112.240.R | 24 | 130 | 13x50 |
| R112.250.R | 25 | 130 | 13x50 |
| R112.260.R | 26 | 130 | 13x50 |
| R112.280.R | 28 | 130 | 13x50 |
| R112.300.R | 30 | 130 | 13x50 |
| R112.320.R | 32 | 130 | 16x50 |
| R112.350.R | 35 | 130 | 16x50 |
| R112.400.R | 40 | 130 | 16x50 |
| R112.450.R | 45 | 130 | 16x50 |
| R112.500.R | 50 | 130 | 16x50 |
| R112.550.R | 55 | 140 | 16x50 |
| R112.600.R | 60 | 140 | 16x50 |
| R112.650.R | 65 | 140 | 16x50 |
| R112.700.R | 70 | 140 | 16x50 |
| R112.800.R | 80 | 140 | 20x50 |
| R112.900.R | 90 | 140 | 20x50 |

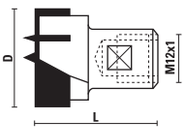
## T.C.T. HINGE BORING BITS Z=2+2 (art. R111-R112)

How to determine the feeding speed according to the machine (RPM):




## HW INTERCHANGEABLE HINGE BORING BITS Z=2+2

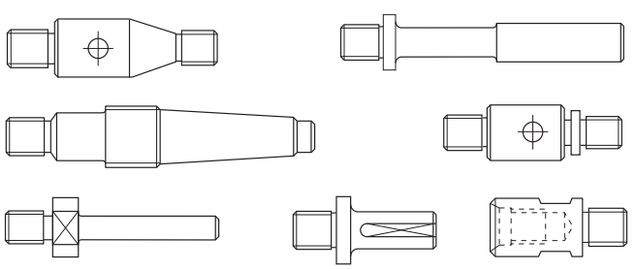
**ART. R130**




Use with Art. Z021

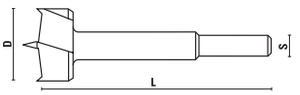
| RH rotation | LH rotation | D | L |
|---|---|---|---|
| R130.200.R | R130.200.L | 20 | 30 |
| R130.250.R | R130.250.L | 25 | 30 |
| R130.260.R | R130.260.L | 26 | 30 |
| R130.280.R | R130.280.L | 28 | 30 |
| R130.300.R | R130.300.L | 30 | 30 |
| R130.320.R | R130.320.L | 32 | 30 |
| R130.340.R | R130.340.L | 34 | 30 |
| R130.350.R | R130.350.L | 35 | 30 |
| R130.360.R | R130.360.L | 36 | 30 |
| R130.380.R | R130.380.L | 38 | 30 |
| R130.400.R | R130.400.L | 40 | 30 |
| R130.450.R | | 45 | 30 |
| R130.480.R | | 48 | 30 |
| R130.500.R | | 50 | 30 |
| R130.550.R | | 55 | 30 |
| R130.600.R | | 60 | 30 |
| R130.650.R | | 65 | 30 |
| R130.700.R | | 70 | 30 |

Art. Z021 see section spare part page 10.04, 10.05



## HS HINGE BORING BITS Z=2+2

**ART. R211**

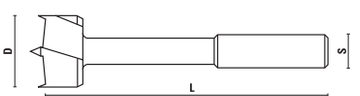



For **soft and hard wood**

| RH rotation | D | L | S |
|---|---|---|---|
| R211.100.R | 10 | 90 | 10x30 |
| R211.120.R | 12 | 90 | 10x30 |
| R211.140.R | 14 | 90 | 10x30 |
| R211.150.R | 15 | 90 | 10x30 |
| R211.160.R | 16 | 90 | 10x30 |
| R211.180.R | 18 | 90 | 10x30 |
| R211.200.R | 20 | 90 | 10x30 |
| R211.220.R | 22 | 90 | 10x30 |
| R211.240.R | 24 | 90 | 10x30 |
| R211.250.R | 25 | 90 | 10x30 |
| R211.260.R | 26 | 90 | 10x30 |
| R211.300.R | 30 | 90 | 10x30 |
| R211.350.R | 35 | 90 | 10x30 |
| R211.400.R | 40 | 90 | 10x30 |
| R211.500.R | 50 | 90 | 10x30 |

## HS HINGE BORING BITS Z=2+2

**ART. R212**

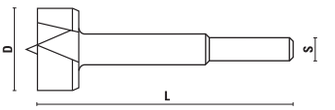



For **soft and hard wood**

| RH rotation | D | L | S |
|---|---|---|---|
| R212.150.R | 15 | 120 | 13x50 |
| R212.200.R | 20 | 120 | 13x50 |
| R212.250.R | 25 | 130 | 13x50 |
| R212.300.R | 30 | 130 | 13x50 |
| R212.350.R | 35 | 130 | 16x50 |
| R212.400.R | 40 | 130 | 16x50 |
| R212.500.R | 50 | 130 | 16x50 |
| R212.600.R | 60 | 140 | 16x50 |

## SP "FORSTNER" BITS Z=2+2

**ART. R213**




For **soft and hard wood**

| RH rotation | D | L | S |
|---|---|---|---|
| R213.100.R | 10 | 90 | 8x30 |
| R213.120.R | 12 | 90 | 8x30 |
| R213.140.R | 14 | 90 | 8x30 |
| R213.150.R | 15 | 90 | 8x30 |
| R213.160.R | 16 | 90 | 8x30 |
| R213.180.R | 18 | 90 | 8x30 |
| R213.200.R | 20 | 90 | 8x30 |
| R213.220.R | 22 | 90 | 8x30 |
| R213.240.R | 24 | 90 | 8x30 |
| R213.250.R | 25 | 90 | 8x30 |
| R213.260.R | 26 | 90 | 8x30 |
| R213.280.R | 28 | 90 | 8x30 |
| R213.300.R | 30 | 90 | 8x30 |
| R213.320.R | 32 | 90 | 10x30 |
| R213.340.R | 34 | 90 | 10x30 |
| R213.350.R | 35 | 90 | 10x30 |
| R213.360.R | 36 | 90 | 10x30 |
| R213.380.R | 38 | 90 | 10x30 |
| R213.400.R | 40 | 90 | 10x30 |
| R213.450.R | 45 | 90 | 10x30 |
| R213.500.R | 50 | 90 | 10x30 |

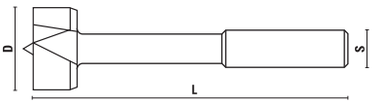
| | | |
|---|---|---|
| R213.905.R | 5 boring bits set | ∅ 15 - 20 - 25 - 30 - 35 |
| R213.915.R | 15 boring bits set | ∅ 10 - 12 - 15 - 16 - 18 - 20 - 22 25 - 26 - 28 - 30 - 35 - 40 - 45 - 50 |

R213.905.R

R213.915.R

## SP "FORSTNER" BITS Z=2+2

**ART. R214**

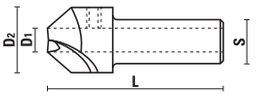



For **soft and hard wood**

| RH rotation | D | L | S |
|---|---|---|---|
| R214.150.R | 15 | 125 | 13x50 |
| R214.200.R | 20 | 130 | 13x50 |
| R214.220.R | 22 | 130 | 13x50 |
| R214.250.R | 25 | 135 | 13x50 |
| R214.300.R | 30 | 140 | 13x50 |
| R214.350.R | 35 | 140 | 16x50 |
| R214.400.R | 40 | 140 | 16x50 |
| R214.500.R | 50 | 140 | 16x50 |

## HW/HS COUNTERSINKS Z=2

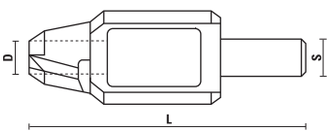
**ART. R150 - R250**

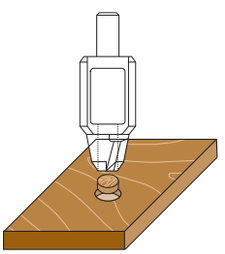



| RH rotation | LH rotation | $D_1$ | $D_2$ | L | S | Mat. |
|---|---|---|---|---|---|---|
| R150.030.R | R150.030.L | 3 | 15 | 40 | 10x25 | HW |
| R150.040.R | R150.040.L | 4 | 15 | 40 | 10x25 | HW |
| R150.050.R | R150.050.L | 5 | 15 | 40 | 10x25 | HW |
| R150.060.R | R150.060.L | 6 | 15 | 40 | 10x25 | HW |
| R250.030.R | R250.030.L | 3 | 15 | 40 | 10x25 | HS |
| R250.040.R | R250.040.L | 4 | 15 | 40 | 10x25 | HS |
| R250.050.R | R250.050.L | 5 | 15 | 40 | 10x25 | HS |
| R250.060.R | R250.060.L | 6 | 15 | 40 | 10x25 | HS |

## SP PLUG CUTTERS Z=2

**ART. R220**



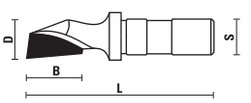



For **soft and hard wood**

| RH rotation | D | L | S |
|---|---|---|---|
| R220.080.R | 8 | 140 | 13x50 |
| R220.100.R | 10 | 140 | 13x50 |
| R220.120.R | 12 | 140 | 13x50 |
| R220.150.R | 15 | 140 | 13x50 |
| R220.200.R | 20 | 140 | 13x50 |
| R220.250.R | 25 | 140 | 13x50 |
| R220.300.R | 30 | 140 | 13x50 |
| R220.350.R | 35 | 140 | 16x50 |
| R220.400.R | 40 | 140 | 16x50 |

## HW/HS DOVETAIL BITS 9° - Z=1

**ART. R151 - R251**

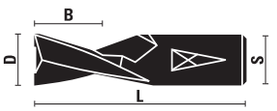



For **OMEC** machines

| RH rotation | D | B | L | S | Z | Mat. |
|---|---|---|---|---|---|---|
| R151.140.R | 14 | 18 | 60 | 12x30 | 1 | HW |
| R251.140.R | 14 | 18 | 60 | 12x30 | 1 | HS |

## VHW DOVETAIL BITS Z=2

**ART. R152**

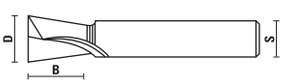



- For **OMEC** machines
- Solid carbide

| RH rotation | D | B | L |
|---|---|---|---|
| R152.140.R | 14 | 16 | 60 |

## HW/HS DOVETAIL BITS Z=2

**ART. R160 - R260**

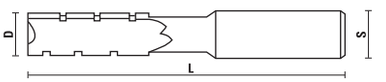



| RH rotation | D | B | S | Mat. |
|---|---|---|---|---|
| R160.120.R | 12 | 13 | 10x40 | HW |
| R160.140.R | 14 | 15 | 10x40 | HW |
| R160.150.R | 15 | 16 | 10x40 | HW |
| R160.160.R | 16 | 17 | 10x40 | HW |
| R160.180.R | 18 | 20 | 10x40 | HW |
| R260.120.R | 12 | 13 | 10x40 | HS |
| R260.140.R | 14 | 15 | 10x40 | HS |
| R260.150.R | 15 | 16 | 10x40 | HS |
| R260.160.R | 16 | 17 | 10x40 | HS |
| R260.180.R | 18 | 20 | 10x40 | HS |

- Add. charge for threaded shank
- Add. charge for inside threaded shank

## SP SLOT MORTISING BITS WITH CHIPBREAKER Z=2

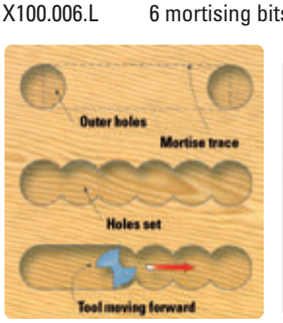
**ART. S201- S202**




Chipbreaker execution

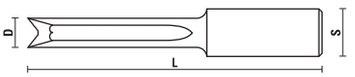
| RH rotation | LH rotation | D | L | S | |
|---|---|---|---|---|---|
| S201.060.R | S201.060.L | 6 | 105 | 13x50 | |
| S201.061.R | S201.061.L | 6 | 120 | 13x50 | Long execution |
| S201.070.R | S201.070.L | 7 | 110 | 13x50 | |
| S201.080.R | S201.080.L | 8 | 115 | 13x50 | |
| S201.081.R | S201.081.L | 8 | 130 | 13x50 | Long execution |
| S201.090.R | S201.090.L | 9 | 120 | 13x50 | |
| S201.100.R | S201.100.L | 10 | 125 | 13x50 | |
| S201.101.R | S201.101.L | 10 | 140 | 13x50 | Long execution |
| S201.110.R | S201.110.L | 11 | 130 | 13x50 | |
| S201.120.R | S201.120.L | 12 | 135 | 13x50 | |
| S201.121.R | S201.121.L | 12 | 150 | 13x50 | Long execution |
| S201.130.R | S201.130.L | 13 | 140 | 13x50 | |
| S201.140.R | S201.140.L | 14 | 145 | 13x50 | |
| S201.141.R | S201.141.L | 14 | 160 | 13x50 | Long execution |
| S201.150.R | S201.150.L | 15 | 150 | 13x50 | |
| S201.160.R | S201.160.L | 16 | 155 | 13x50 | |
| S202.060.R | S202.060.L | 6 | 105 | 16x50 | |
| S202.061.R | S202.061.L | 6 | 120 | 16x50 | Long execution |
| S202.070.R | S202.070.L | 7 | 110 | 16x50 | |
| S202.080.R | S202.080.L | 8 | 115 | 16x50 | |
| S202.081.R | S202.081.L | 8 | 130 | 16x50 | Long execution |
| S202.090.R | S202.090.L | 9 | 120 | 16x50 | |
| S202.100.R | S202.100.L | 10 | 125 | 16x50 | |
| S202.101.R | S202.101.L | 10 | 140 | 16x50 | Long execution |
| S202.110.R | S202.110.L | 11 | 130 | 16x50 | |
| S202.120.R | S202.120.L | 12 | 135 | 16x50 | |
| S202.121.R | S202.121.L | 12 | 150 | 16x50 | Long execution |
| S202.130.R | S202.130.L | 13 | 140 | 16x50 | |
| S202.140.R | S202.140.L | 14 | 145 | 16x50 | |
| S202.141.R | S202.141.L | 14 | 160 | 16x50 | Long execution |
| S202.150.R | S202.150.L | 15 | 150 | 16x50 | |
| S202.160.R | S202.160.L | 16 | 155 | 16x50 | |
| S202.161.R | S202.161.L | 16 | 170 | 16x50 | Long execution |
| S202.180.R | S202.180.L | 18 | 165 | 16x50 | |
| S202.181.R | S202.181.L | 18 | 180 | 16x50 | Long execution |
| S202.200.R | S202.200.L | 20 | 175 | 16x50 | |
| S202.220.R | S202.220.L | 22 | 180 | 16x50 | |
| S202.240.R | S202.240.L | 24 | 180 | 16x50 | |

| | |
|---|---|
| X100.006.R | 6 mortising bits set ∅ 6 - 8 - 10 - 12 - 14 - 16 Rh rotation |
| X100.006.L | 6 mortising bits set ∅ 6 - 8 - 10 - 12 - 14 - 16 Lh rotation |



## HL RECIPROCATING SLOT MORTISING BITS

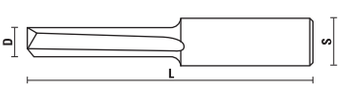
**ART. S210 - S211 - S212 - S213**




| Item | D | L | S | Z |
|---|---|---|---|---|
| S210.060.N | 6 | 100 | 16x50 | 2 |
| S210.070.N | 7 | 100 | 16x50 | 2 |
| S210.080.N | 8 | 100 | 16x50 | 2 |
| S210.090.N | 9 | 100 | 16x50 | 2 |
| S210.100.N | 10 | 110 | 16x50 | 2 |
| S210.120.N | 12 | 110 | 16x50 | 2 |
| S210.140.N | 14 | 110 | 16x50 | 2 |
| S210.160.N | 16 | 110 | 16x50 | 2 |
| | | | | |
| S211.060.N | 6 | 100 | 13x50 | 4 |
| S211.070.N | 7 | 100 | 13x50 | 4 |
| S211.080.N | 8 | 100 | 13x50 | 4 |
| S211.090.N | 9 | 100 | 13x50 | 4 |
| S211.100.N | 10 | 110 | 13x50 | 4 |
| S211.120.N | 12 | 110 | 13x50 | 4 |
| S211.140.N | 14 | 110 | 13x50 | 4 |
| S211.160.N | 16 | 110 | 13x50 | 4 |
| | | | | |
| S212.060.N | 6 | 60 | 12x30 | 2 |
| S212.070.N | 7 | 60 | 12x30 | 2 |
| S212.080.N | 8 | 60 | 12x30 | 2 |
| S212.100.N | 10 | 60 | 12x30 | 4 |
| S212.120.N | 12 | 60 | 12x30 | 4 |
| | | | | |
| S213.060.N | 6 | 73 | 10x40 | 4 |
| S213.070.N | 7 | 73 | 10x40 | 4 |
| S213.080.N | 8 | 73 | 10x40 | 4 |
| S213.100.N | 10 | 73 | 10x40 | 4 |
| S213.120.N | 12 | 73 | 10x40 | 4 |

## HL RECIPROCATING SLOT MORTISING BITS Z=3

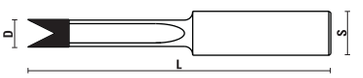
**ART. S214**




| RH rotation | LH rotation | D | L | S | Z |
|---|---|---|---|---|---|
| S214.060.R | S214.060.L | 6 | 110 | 16x50 | 3 |
| S214.080.R | S214.080.L | 8 | 110 | 16x50 | 3 |
| S214.100.R | S214.100.L | 10 | 110 | 16x50 | 3 |
| S214.120.R | S214.120.L | 12 | 110 | 16x50 | 3 |
| S214.140.R | S214.140.L | 14 | 115 | 16x50 | 3 |
| S214.160.R | S214.160.L | 16 | 115 | 16x50 | 3 |
| S214.180.R | S214.180.L | 18 | 115 | 16x50 | 3 |
| S214.200.R | S214.200.L | 20 | 115 | 16x50 | 3 |

## HW RECIPROCATING SLOT MORTISING BITS

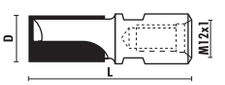
**ART. S110 - S111**




| Item | D | L | S | Z |
|---|---|---|---|---|
| S110.060.N NEW | 6 | 100 | 16x50 | 2 |
| S110.080.N NEW | 8 | 100 | 16x50 | 2 |
| S110.100.N NEW | 10 | 110 | 16x50 | 2 |
| S110.120.N NEW | 12 | 110 | 16x50 | 2 |
| S110.140.N NEW | 14 | 110 | 16x50 | 2 |
| S110.160.N NEW | 16 | 110 | 16x50 | 2 |
| | | | | |
| S111.060.N NEW | 6 | 100 | 13x50 | 2 |
| S111.080.N NEW | 8 | 100 | 13x50 | 2 |
| S111.100.N NEW | 10 | 110 | 13x50 | 2 |
| S111.120.N NEW | 12 | 110 | 13x50 | 2 |
| S111.140.N NEW | 14 | 110 | 13x50 | 2 |
| S111.160.N NEW | 16 | 110 | 13x50 | 2 |

## HW/KS GROOVING CUTTERS Z=2

**ART. S120 - S220**

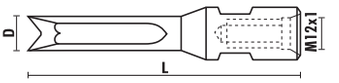



For the lock housing

| RH rotation | D | L | Mat. |
|---|---|---|---|
| S120.200.R | 20 | 60 | HM |
| S120.220.R | 22 | 60 | HM |
| | | | |
| S220.200.R | 20 | 60 | SP |
| S220.220.R | 22 | 60 | SP |

## HW/KS SLOT MORTISING CUTTERS Z=2

**ART. S121 - S221**

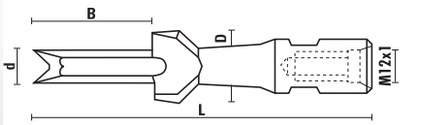



For cutting slots

| RH rotation | D | L | Mat. |
|---|---|---|---|
| S121.120.R | 12 | 100 | HW |
| S121.140.R | 14 | 100 | HW |
| | | | |
| S221.120.R | 12 | 100 | SP |
| S221.140.R | 14 | 100 | SP |

## HW/KS SLOT BORING BITS Z=2

**ART. S123 - S223**

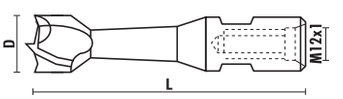



To produce slots and holes

| RH rotation | d | D | B | L | Mat. |
|---|---|---|---|---|---|
| S123.110.R | 11 | 19 | 62 | 155 | HW |
| S123.120.R | 12 | 19 | 62 | 155 | HW |
| | | | | | |
| S223.110.R | 11 | 19 | 62 | 155 | SP |
| S223.120.R | 12 | 19 | 62 | 155 | SP |

## HW/KS BORING BITS Z=2

**ART. S122 - S222**

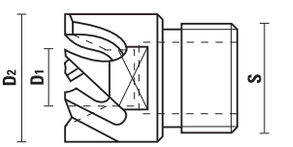



For boring

| RH rotation | D | L | Mat. |
|---|---|---|---|
| S122.180.R | 18 | 100 | HW |
| S122.200.R | 20 | 100 | HW |
| | | | |
| S222.180.R | 18 | 100 | SP |
| S222.200.R | 20 | 100 | SP |

## HS DOWEL CUTTERS

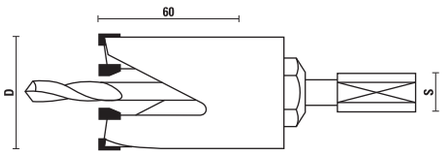
**ART. S250**




| RH rotation | D1 | D2 | Z | S |
|---|---|---|---|---|
| S250.080.R | 8 | 25 | 4 | 21/14x1" |
| S250.082.R | 8,2 | 25 | 4 | 21/14x1" |
| S250.100.R | 10 | 25 | 4 | 21/14x1" |
| S250.102.R | 10,2 | 25 | 4 | 21/14x1" |
| S250.120.R | 12 | 25 | 4 | 21/14x1" |
| S250.122.R | 12,2 | 25 | 4 | 21/14x1" |
| S250.162.R | 16,2 | 32 | 5 | 26/14x1" |

## HW HOLE SAWS

**ART. S180**



- For large boring depth, **suitable for wood, chipboard, plastic materials, glass fibers** ecc.
- Bore depth 60 mm
- Right hand rotation
- Single packed

| Item | D | S | Z | RPM |
|---|---|---|---|---|
| S180.220.R | 22 | 10 | 2 | 2.800 |
| S180.250.R | 25 | 10 | 2 | 2.800 |
| S180.270.R | 27 | 10 | 2 | 2.800 |
| S180.300.R | 30 | 10 | 2 | 2.300 |
| S180.320.R NEW | 32 | 12 | 2 | 2.300 |
| S180.350.R | 35 | 12 | 3 | 2.300 |
| S180.380.R | 38 | 12 | 3 | 2.300 |
| S180.400.R | 40 | 12 | 3 | 1.800 |
| S180.450.R | 45 | 12 | 3 | 1.800 |
| S180.480.R | 48 | 12 | 3 | 1.800 |
| S180.500.R | 50 | 12 | 3 | 1.800 |
| S180.550.R | 55 | 12 | 4 | 1.500 |
| S180.600.R | 60 | 12 | 4 | 1.500 |
| S180.650.R | 65 | 12 | 4 | 1.200 |
| S180.680.R | 68 | 12 | 4 | 1.200 |
| S180.700.R | 70 | 12 | 4 | 1.200 |
| S180.750.R NEW | 75 | 12 | 5 | 1.000 |
| S180.800.R | 80 | 12 | 5 | 1.000 |
| S180.850.R NEW | 85 | 12 | 5 | 1.000 |
| S180.900.R | 90 | 12 | 5 | 1.000 |
| S180.999.R | 100 | 12 | 5 | 700 |
| S180.999.R127 NEW | 127 | 12 | 5 | 500 |

**Spare parts**

| Arbor | |
|---|---|
| S181.100.R | S=10 |
| S181.120.R | S=12 |

| HS centering drill | |
|---|---|
| S182.063.R | D=6,3 L=100 |

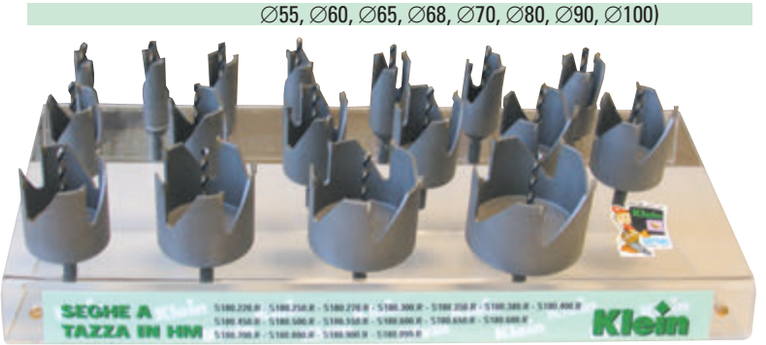
**11 pcs. display**

S180.011.N (∅22, ∅25, ∅27, ∅30, ∅35, ∅38, ∅40, ∅45, ∅50, ∅55, ∅60)

S180.011.N

**17 pcs. display**

S180.017.N (∅22, ∅25, ∅27, ∅30, ∅35, ∅38, ∅40, ∅45, ∅50, ∅55, ∅60, ∅65, ∅68, ∅70, ∅80, ∅90, ∅100)




S180.017.N

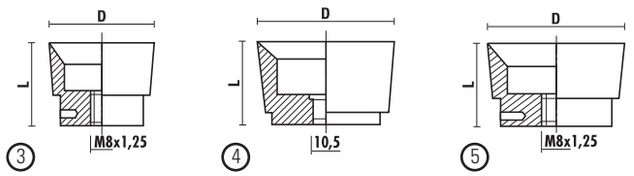
## Application table

| WOOD | | |
|---|---|---|
| Hard | Chipboard | Composites |
| XXX | XXX | XXX |

| PLASTIC | | | |
|---|---|---|---|
| Fiberglass | Acrylic | PVC | Rubber |
| XXX | XX | XX | XX |

## HS CUTTERS FOR COPYING LATHES

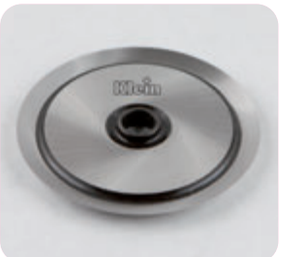
**ART. S260**

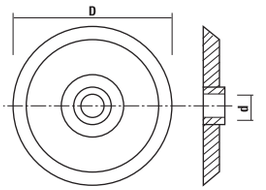



| Item | Drawing | D | L |
|---|---|---|---|
| S260.320.N | 1 | 32 | 15 |
| S260.350.N | 2 | 35 | 20 |
| S260.360.N | 3 | 36 | 26 |
| S260.400.N | 4 | 40 | 25 |
| S260.450.N | 5 | 45 | 26 |

## HS CUTTERS FOR COPYING LATHES

**ART. S270**

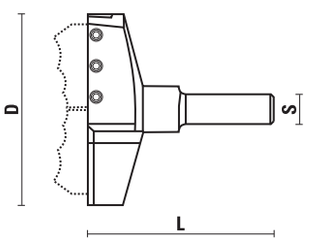


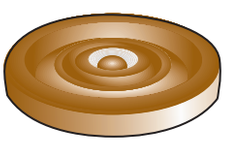



| Item | D | d |
|---|---|---|
| S270.750.N | 75 | 10,3 |

## ROUTER BITS FOR DECORATIVE ROSETTES Z=2

**ART. SB**



- To use on drilling machines and/or router machines
- Right hand rotation
- Supplied without knives, complete with screws and key

| Item | D | L | S |
|---|---|---|---|
| SB080.000 | 80 | 81 | 12 |

Z051.407.R

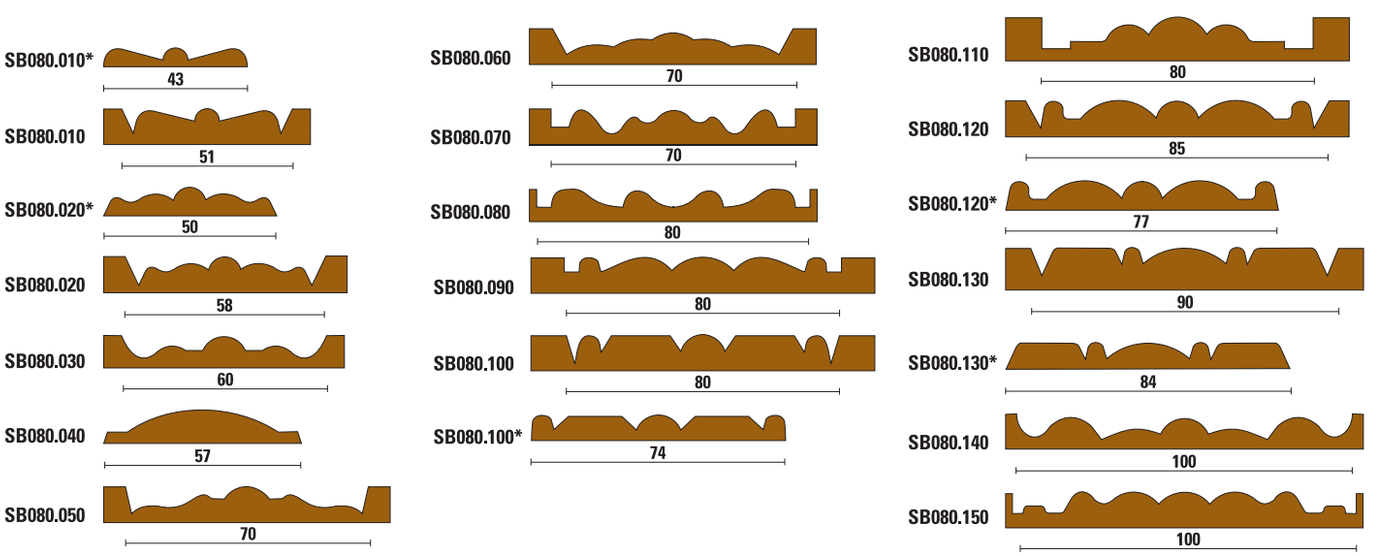
Z052.406.N

Suggested RPM:

| | |
|---|---|
| Hardwood | 1.500÷2.000 |
| Softwood | 3.000÷6.000 |
| MDF | 3.000÷6.000 |

### AVAILABLE PROFILED KNIVES FOR ROSETTE BITS

| Item | |
|---|---|
| SB080.010÷SB080.150 | T.C.T. PROFILE KNIFE |




Items marked with asterisk can produce a protruding rosette for gluing

## MODULAR DRAWER UNIT

# *Drawer unit*

"Elegant, sturdy Klein drawer unit with an innovative, modern design and great modularity, where you can keep all your Klein tools in a clean, secure, well-organized place. Say good-bye to messiness and damaged tools. Now, with the new Klein drawer unit, you can put your storeroom in order in a convenient, functional way.

**SMALL OUTSIDE BUT LARGE INSIDE**
**the Klein drawer unit takes up little space but can contain countless articles in its 10 drawers and 80 containers (8 containers per drawer).**

- **STURDY**
  since each drawer can hold around 8 kg.
- **LIGHT**
  since it's made of a high-strength polypropylene co-polymer.
- **SECURE**
  since each drawer has its own key.
- **PRACTICAL**
  since it can be equipped with 4 casters for convenient movement or with slip-resistant feet.
- **CONVENIENT**
  since it features a wooden top which acts as a practical surface for taking notes or keeping tools.
- **VERSATILE**
  since the tubs in the drawers can be removed easily as desired.

**Whether it's placed next to a CNC router, or close to a point-to-point boring machine, along the panel production line or in any carpentry shop, the new Klein drawer unit can be a real help in keeping the tools you use every day in perfect order and in good condition.**

**The new Klein drawer unit can hold a wide range of tools.**
**Ask our customer service how to receive it.**

## Modular drawer unit "Craftsman"

**Ideal to store the most common tools in a workshop**

### 1st Drawer
*Router bits S=M12x1*

Art. F101.080.R
F101.100.R
F101.120.R
F101.160.R
F101.180.R
F101.200.R
F101.220.R
F101.250.R

### 2nd Drawer
*Router bits S=M12x1*

Art. F103.120.R
F103.160.R
F103.180.R
F103.200.R
F104.120.R
F104.160.R
F104.200.R
F105.160.R

### 3rd Drawer
*Hinge boring bits L=90*

Art. R111.150.R
R111.180.R
R111.200.R
R111.250.R
R111.260.R
R111.300.R
R111.350.R
R111.400.R

### 4th Drawer
*Forstner bits*

Art. R213.150.R
R213.160.R
R213.180.R
R213.200.R
R213.250.R
R213.300.R
R213.350.R
R213.400.R

### 5th Drawer
*Interchangeable hinge boring bits*

Art. R130.200.R
R130.250.R
R130.260.R
R130.300.R
R130.340.R
R130.350.R
R130.400.R
Z021.408+410+412

### 6th Drawer
*Interchangeable hinge boring bits*

Art. R130.450.R
R130.480.R
R130.500.R
R130.550.R
R130.600.R
R130.650.R
R130.700.R
Z021.213+216+500

### 7th Drawer
*Mortising bits R*

Art. S202.060.R
S202.080.R
S202.100.R
S202.120.R
S202.140.R
S202.160.R
S202.180.R
S202.200.R

### 8th Drawer
*Mortising bits L*

Art. S202.060.L
S202.080.L
S202.100.L
S202.120.L
S202.140.L
S202.160.L
S202.180.L
S202.200.L

### 9th Drawer
*Plug cutters*

Art. R220.080.R
R220.100.R
R220.120.R
R220.150.R
R220.200.R
R220.250.R
R220.300.R
R220.350.R

### 10th Drawer
*Reversible knives*

Art. Z055.000.N
Z055.001.N
Z055.003.N
Z055.007.N
Z055.008.N
Z055.009.N
Z055.010.N
Z055.011.N