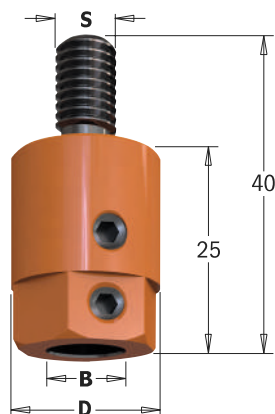


INDUSTRIAL DOWEL DRILLS

PRODUCTS	PAGE
Adapters	318~320
XTreme Solid Carbide Boring Bits	321~323
XTreme Boring Bits	324~325
Adapters & Bushings for Twist Drills	326
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Hinge Boring Bits	337~339
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301

RH **LH**

B mm	D mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	16	M8	10	301.080.01	301.080.02
10	19,5	M8	10	301.000.01	301.000.02

FOR USE ON THE FOLLOWING MACHINES:

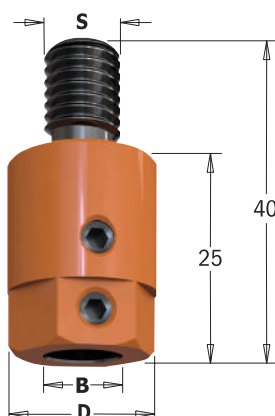
NOTTMEYER® (older models).

Spare parts


990.006.00



991.062.00



302

RH **LH**

B mm	D mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	16	M10	10	302.080.01	302.080.02
10	19,5	M10	10	302.000.01	302.000.02

FOR USE ON THE FOLLOWING MACHINES:

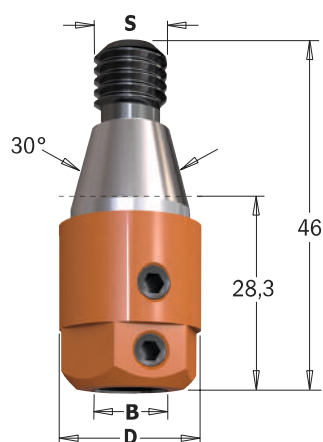
AYEN®, HOLZMA®, KNOEVENAGEL®, MAYER®, TORWEGGE®.

Spare parts


990.006.00



991.062.00



303

RH **LH**

B mm	D mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	16	M10/30°	10	303.080.01	303.080.02
10	19,5	M10/30°	10	303.000.01	303.000.02

FOR USE ON THE FOLLOWING MACHINES:

 ALBERTI® (older models).
 BALESTRINI®, BILEK®, BUSSELLATO® (older models).
 SCHLEICHER®, VITAP® (older models).

Spare parts


990.006.00



991.062.00



304

RH **LH**

B mm	D mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	16	M8/20° 48'	10	304.080.01	304.080.02
10	19,5	M8/20° 48'	10	304.000.01	304.000.02

FOR USE ON THE FOLLOWING MACHINES:

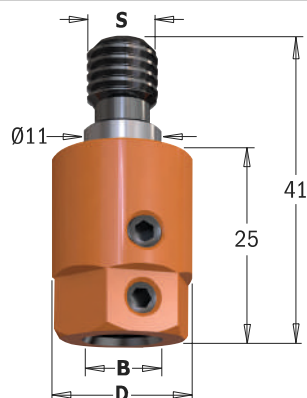
BALESTRINI®, BILEK®.

Spare parts


990.006.00



991.062.00



305

RH **LH**

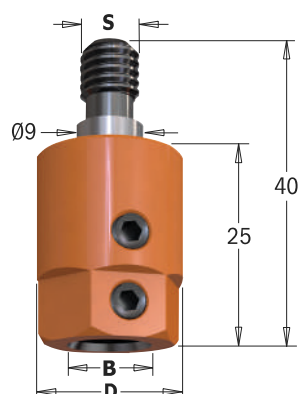
B mm	D mm	S mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	16	M10/11		10	305.080.01	305.080.02
10	19,5	M10/11		10	305.000.01	305.000.02

FOR USE ON THE FOLLOWING MACHINES:

BIESSE® (older models).
MASTERWOOD® (Zangheri & Boschetti).
MORBIDELLI®, TORWEGGE®, VITAP® (new design).
WEEKE®.

Spare parts

990.006.00	991.062.00



358

RH **LH**

B mm	D mm	S mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	16	M8/9		10	358.080.01	358.080.02
10	19,5	M8/9		10	358.000.01	358.000.02

FOR USE ON THE FOLLOWING MACHINES:

MASTERWOOD® (Zangheri & Boschetti).
MORBIDELLI®, NOTTMEYER® (new design).

Spare parts

990.006.00	991.062.00



359

RH **LH**

B mm	D mm	S mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
10	19,5	M10		10	359.000.01	359.000.02

FOR USE ON THE FOLLOWING MACHINES:

SCHEER®.

Spare parts

990.006.00	991.062.00



360.001

RH **LH**

B mm	d mm	D mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
10	20	15		10	360.001.01	360.001.02

FOR USE ON THE FOLLOWING MACHINES:

BIESSE® machines with quick drill change chuck.

Spare parts

990.007.00	991.067.00

**360.101**

B mm	d mm	D mm		ORDER NO. Right-hand & Left-hand rotation
10	17,5	18	 10	360.101.00

FOR USE ON THE FOLLOWING MACHINES:
VITAP®.

Spare parts



990.015.00



991.062.00

**360.201**

B mm	d mm	D mm		ORDER NO. Right-hand & Left-hand rotation
10	19,5	20	 10	360.201.00

FOR USE ON THE FOLLOWING MACHINES:
MORBIDELLI®.

Spare parts



990.009.00



991.067.00

**360.301**

B mm	d mm	D mm		ORDER NO. Right-hand & Left-hand rotation
10	19,5	20	 10	360.301.00

FOR USE ON THE FOLLOWING MACHINES:
MASTERWOOD®, MAGGI®, GRIGGIO®.

Spare parts



990.015.00



991.062.00

**360.401**

B mm	d mm	D mm		ORDER NO. Right-hand & Left-hand rotation
10	20	17	 10	360.401.00

FOR USE ON THE FOLLOWING MACHINES:
WEEKE®.

Spare parts



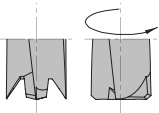
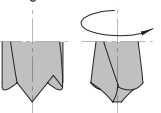
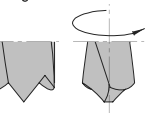
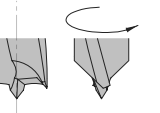
990.009.00



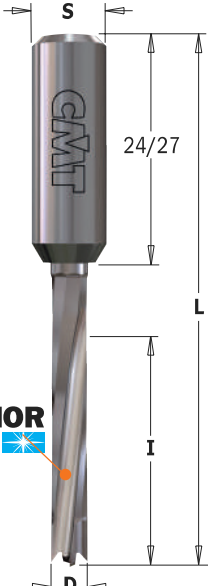
991.067.00

**990.088**

DESCRIPTION		ORDER NO. Right-hand & Left-hand rotation
Retaining screw for WEEKE® machines	 10	990.088.00

LINE	XTREME FLAT	XTREME	XTREME	INDUSTRIAL
PERFORMANCE	SUPERIOR ★★★★★	SUPERIOR ★★★★★	EXCELLENT ★★★★★	VERY GOOD ★★★
BIT				
DESCRIPTION	Designed for heavy duty drilling in Large-Scale Industrial Manufacturing ensuring high impact resistance and greater durability.	Designed for heavy duty drilling in Large-Scale Industrial Manufacturing ensuring high impact resistance and greater durability.	Designed for heavy-duty to medium-duty drilling in large-scale to medium-scale industrial manufacturing ensuring high impact resistance and greater durability.	Designed for medium-duty to light-duty drilling in medium-scale to small-scale industrial manufacturing ensuring rigorous impact resistance and good durability.
USER	LARGE-SCALE INDUSTRIAL MANUFACTURING	LARGE-SCALE INDUSTRIAL MANUFACTURING	LARGE-SCALE TO MEDIUM-SCALE INDUSTRIAL MANUFACTURING	MEDIUM-SCALE TO SMALL-SCALE INDUSTRIAL MANUFACTURING
RECOMMENDED USE	INDUSTRIAL PRODUCTION	INDUSTRIAL PRODUCTION	INDUSTRIAL/REMODELER	REMODELER
MATERIALS	Ideal for chipboard, MDF, HDF and laminates. Nonprotruding center-point and spurs make this tool perfect for low-thickness panels.	Ideal for chipboard, MDF, HDF and laminates.	Excellent for both hard and soft wood. Great for chipboard, MDF, HDF and laminates.	Excellent for both hard and soft wood. Good for chipboard, MDF and laminates.
SHARPENING & MAINTENANCE	Flat edges with reinforced spurs allow perfect finishing and prolonged drilling.  XTREME FLAT SHARPENING	Specially designed reinforced spurs allow for impeccable finishing during operations involving high-speed cutting feed.  XTREME SHARPENING	Specially designed reinforced spurs allow for impeccable finishing during operations involving high-speed cutting feed.  XTREME SHARPENING	Standard design with negatively ground spurs providing good quality finishing without chipping.  NEGATIVELY GROUND SPURS
CARBIDE	INDUSTRIAL CHROMIUM MICROGRAIN CARBIDE The premium quality carbide produces clean bores with no rough edges and maintains a balanced center point. In addition to its safety features, Chromium Micrograin Carbide guarantees exceptional resistance to fatigue and abrasion and allows for an infinite number of resharpenings.	INDUSTRIAL CHROMIUM MICROGRAIN CARBIDE The special chromium enhanced carbide produces clean bores with no rough edges and maintains a balanced center point. In addition to its safety features, Chromium Micrograin Carbide guarantees exceptional resistance to fatigue and abrasion and allows for an infinite number of resharpenings.	INDUSTRIAL SINTERHIP HI-DENSITY CARBIDE The unique tip is made of high quality carbide enhanced via Sinterhip (hot isostatic pressing). This process guarantees long lasting performance and exceptionally clean bores.	INDUSTRIAL GRADE CARBIDE Fine and medium grain carbide grade guarantee reliable prolonged use.
COATING	 SOLID TUNGSTEN CARBIDE	 SOLID TUNGSTEN CARBIDE	CMT P.T.E.E. COATING provides a non-stick surface preventing resin, glue or sludge residue accumulation on the bit body. Baked at 420°, this unique industrial material is specifically designed to fit woodworking tool requirements.	CMT P.T.E.E. COATING provides a non-stick surface preventing resin, glue or sludge residue accumulation on the bit body. Baked at 420°, this unique industrial material is specifically designed to fit woodworking tool requirements.
PRICE RANGE	HIGH	HIGH	MEDIUM/HIGH	MEDIUM

Solid Carbide Dowel Drills



MIRROR FINISH

311.71/72 XTREME FLAT SHARPENING

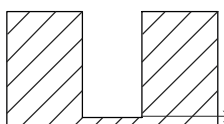
HWM **LONG LIFE** **Z2** **V2** **RH** **LH**

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	30	70	10x27	50	311.050.71	311.050.72
6	30	70	10x27	50	311.060.71	311.060.72
7	30	70	10x27	50	311.070.71	311.070.72
8	30	70	10x24	50	311.080.71	311.080.72
10	30	70	10x26	50	311.100.71	311.100.72

TECHNICAL DETAILS:

- Premium quality super strength steel shank for improved resistance and durability
- Flute length in premium quality HWM
- 2 cutting edges [Z2] + 2 curved ground spurs [V2]
- 2 spiral flutes
- Parallel shank with driving flat and adjustable screw length
- Recommended feed speed 1 ÷ 4m/minute - RPM 6000

APPLICATION:
ideal for chipboard, MDF, HDF and laminates. No center-point or spurs means perfect bores in low-thickness panels. For use on boring machines equipped with adapters/chucks.

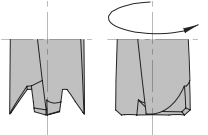


Flat sharpening with no center-point or spurs

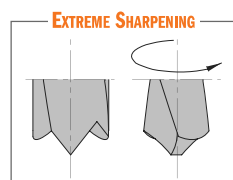
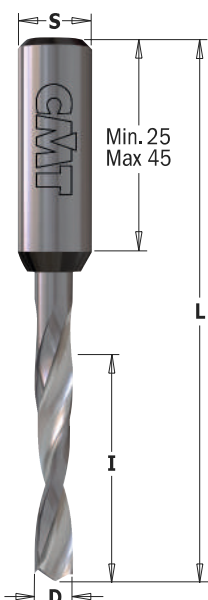
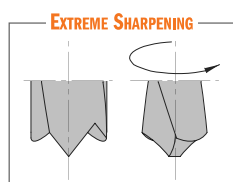
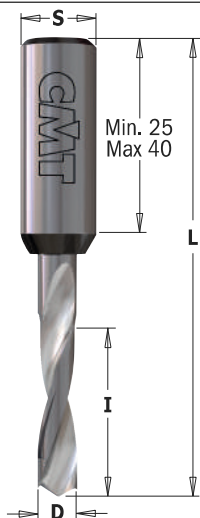
Spare parts  990.003.00

Optional  990.088.00

XTREME FLAT SHARPENING



CMT's new high quality dowel drills guarantee excellent performance and extra-long life!

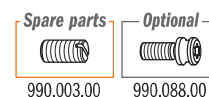


310.21/22 XTREME



D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
1,3	5	57,5	10x30	50	310.013.20*	
2	12	57,5	10x27	50	310.020.21	310.020.22
3	9	57,5	10x40	50	310.530.21	310.530.22
3	18	57,5	10x25	50	310.030.21	310.030.22
4	20	57,5	10x27	50	310.040.21	310.040.22
5	22	57,5	10x27	50	310.050.21	310.050.22
6	22	57,5	10x27	50	310.060.21	310.060.22
6,35 (1/4")	22	57,5	10x27	50	310.064.21	310.064.22
8	22	57,5	10x27	50	310.080.21	310.080.22
10	22	57,5	10x25	50	310.100.21	310.100.22

* Boring bit for panel preboring.
Suitable for both right-hand and left-hand rotation.



311.21/22 XTREME



D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
1,3	5	70	10x45	50	311.013.20*	
2	12	70	10x40	50	311.020.21	311.020.22
3	18	70	10x42	50	311.030.21	311.030.22
3,5	18	70	10x39	50	311.035.21	311.035.22
4	30	70	10x28	50	311.040.21	311.040.22
5	30	70	10x30	50	311.050.21	311.050.22
6	30	70	10x27	50	311.060.21	311.060.22
6,35 (1/4")	30	70	10x30	50	311.064.21	311.064.22
7	35	70	10x25	50	311.070.21	311.070.22
8	35	70	10x25	50	311.080.21	311.080.22
10	35	70	10x25	50	311.100.21	311.100.22

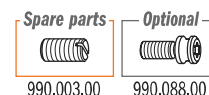
* Boring bit for panel preboring.
Suitable for both right-hand and left-hand rotation.

TECHNICAL DETAILS:

- Premium quality super-strength steel shank.
- High quality HWM body
- Centre point
- 2 cutting edges [Z2].
- 2 spiral flutes
- 2 curved, negatively ground spurs [V2].
- Parallel shank with driving flat and adjustable screw length.

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminates.
For use on boring machines equipped with adaptors and/or with chucks



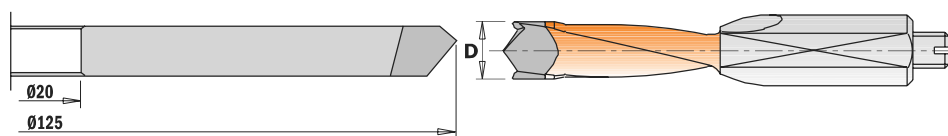
Perfect for all
materials
and long-lasting
performance!

Grinding Wheels for Xtreme Sharpening

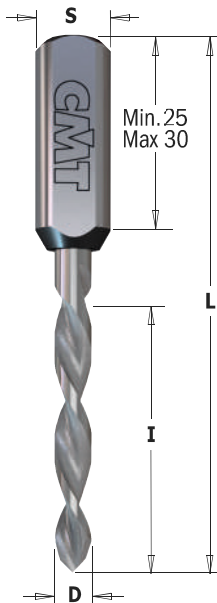


01.02

D mm	DESCRIPTION	DIMENSION mm	B mm		ORDER NO.
Ø3 a 7	Grinding wheel for resharpening	Ø125x5,5	Ø20	1	01.02.0316
Ø8 a 10	Grinding wheel for resharpening	Ø125x7	Ø20	1	01.02.0317



Solid Carbide Dowel Drills for Through Holes



314.21/22 **EXTREME**

HWM LONG LIFE Z2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
*3	27	70	10x30	50	314.030.21	314.030.22
4	35	70	10x25	50	314.040.21	314.040.22
5	35	70	10x25	50	314.050.21	314.050.22
6	35	70	10x25	50	314.060.21	314.060.22
7	35	70	10x25	50	314.070.21	314.070.22
8	35	70	10x25	50	314.080.21	314.080.22
10	35	70	10x27	50	314.100.21	314.100.22

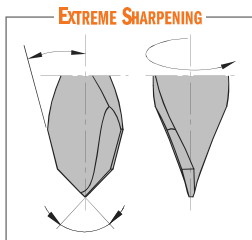
* "V" point 60° sharpening

For panels with maximum 20-30mm in thickness

TECHNICAL DETAILS:

- Premium quality super-strength steel shank
- High quality HWM body
- 2 precision ground cutting edges [Z2] - double angle
- 2 spiral flutes.
- Parallel shank with driving flat and adjustable screw length.

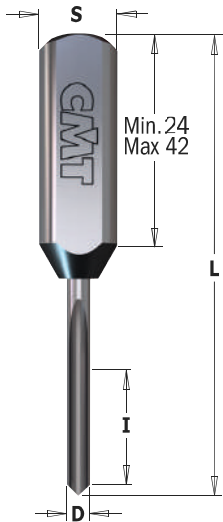
Spare parts	Optional
	
990.008.00	990.088.00



APPLICATION:

for drilling through holes in solid wood, wood derivatives and laminates.
For use on boring machine centres equipped with adaptors and/or chucks.

Solid Carbide Dowel Drills



382 **EXTREME**

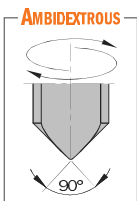
HWM LONG LIFE Z1 LH RH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand & Left-hand rotation
2	12	57,5	10x30	50	382.2057
2	12	70	10x42	50	382.2070
2,5	16	57,5	10x24	50	382.2557
2,5	16	70	10x35	50	382.2570
3	15	57,5	10x26	50	382.3057
3	25	70	10x26	50	382.3070
3,5	18	57,5	10x24	50	382.3557
3,5	18	70	10x36	50	382.3570
5	25	57,5	10x25	50	382.5057
5	35	70	10x25	50	382.5070

TECHNICAL DETAILS:

- Premium quality HWM.
- Cutting head with precision balanced centre point.
- 1 cutting edge [Z1].
- Parallel shank with driving flat and adjustable screw length.

Spare parts	Optional
	
990.003.00	990.088.00



APPLICATION:

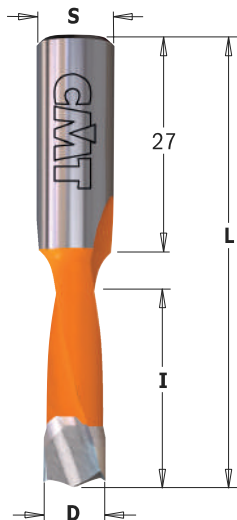
for drilling blind holes in solid wood, wood derivatives, plastic, laminates and melamine.
For use on boring machine centres, point-to-point machines and hand-held routers equipped with adaptors and/or chucks.



SECURITY TIPS:

These boring bits require more power compared to tradition dowel drills.
The number of boring bits to be used in a single drilling unit depends on the machine power.

Dowel Drills



310.41/42 XTREME



D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	27	57,5	10x27	50	310.050.41	310.050.42
6	27	57,5	10x27	50	310.060.41	310.060.42
7	27	57,5	10x27	50	310.070.41	310.070.42
8	27	57,5	10x27	50	310.080.41	310.080.42
9	27	57,5	10x27	50	310.090.41	310.090.42
10	27	57,5	10x27	50	310.100.41	310.100.42

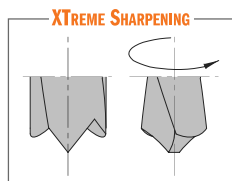
TECHNICAL DETAILS:

- Premium quality super-strength steel
- Orange or black P.T.F.E. coating
- High quality extra-fine micrograin carbide body
- 2 cutting edges [Z2] - double angle
- 2 spiral flutes
- 2 curved, negatively ground spurs [V2]
- Parallel shank with driving flat and adjustable screw length.

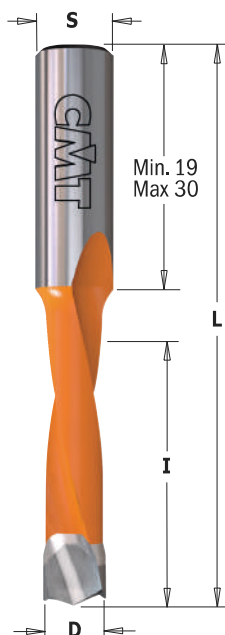
Spare parts	Optional
990.003.00	990.088.00

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminates.
For use on boring machines equipped with adaptors and/or chucks.



Dowel Drills



311.41/42 XTREME



D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	35	70	10x30	50	311.050.41	311.050.42
6	35	70	10x30	50	311.060.41	311.060.42
7	35	70	10x30	50	311.070.41	311.070.42
8	35	70	10x30	50	311.080.41	311.080.42
8	45	70	10x19	50	311.580.41*	311.580.42*
9	35	70	10x30	50	311.090.41	311.090.42
10	35	70	10x30	50	311.100.41	311.100.42
12	35	70	10x30	10	311.120.41	311.120.42

TECHNICAL DETAILS:

- Premium quality super-strength steel
- High quality extra-fine micrograin carbide body
- Orange or black P.T.F.E. coating
- 2 cutting edges [Z2].
- 2 curved, negatively ground spurs [V2].
- 2 spiral flutes.
- Parallel shank with driving flat and adjustable screw length.

Spare parts	Optional
990.003.00	990.088.00

APPLICATION:

for drilling blind holes in solid wood, wood derivatives, plastics and laminates.
For use on boring machines equipped with adaptors and/or chucks.

* Drill bits designed to fit HÄFELE® one-piece lxconnect SC 8/60 spreading connector.

Perfect for all materials and long-lasting performance!

CMT announces the new series of solid carbide boring bits, now available from their extensive industrial line. These bits are entirely made of premium quality super micrograin carbide from CERATIZIT® in Luxemburg.

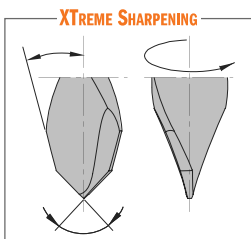
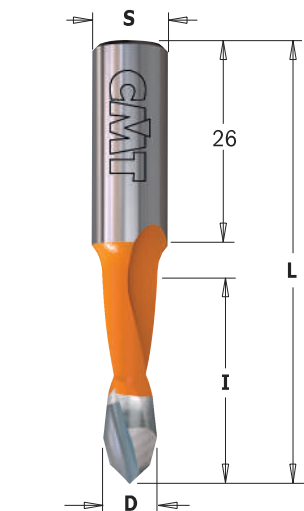
The entire series offers several design features:

- the unique tip has curved, negatively ground spurs to produce exceptionally clear bores with no rough-edges.
- Centre point balanced;
- the cylindrical head is bigger than traditional tips and is extremely resistant to prolonged use.

It lasts longer between sharpenings;

- the plunge edge runs all the way to the centre of the bit to reduce drilling resistance and increase production speed;
- the solid carbide construction guarantees an almost infinite number of resharpenings, and since it is a solid unit of carbide, it offers extra safety features;
- ideal for hardwood and difficult composites such as particle boards, MDF and veneered wood.
- excellent performance on high-speed boring units and CNC routers.

Dowel Drills for Through Holes



313.41/42 XTREME

HW LONG LIFE Z2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	27	57,5	10x26	50	313.050.41	313.050.42
8	27	57,5	10x26	50	313.080.41	313.080.42

For panels 20mm maximum in thickness

TECHNICAL DETAILS:

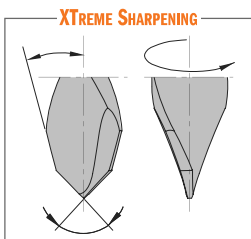
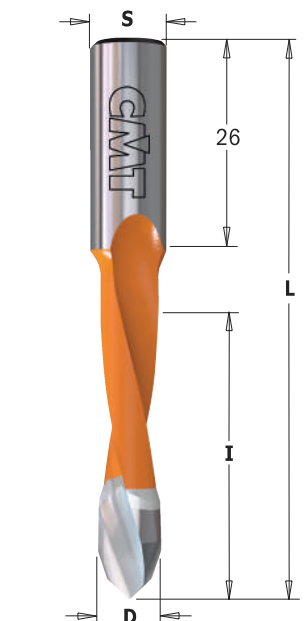
- Super-strength steel.
- Spiral portion coated with orange or black P.T.F.E.
- Extra-fine micrograin carbide spiral portion with centre point.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- Double angle.
- 2 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.

APPLICATION:

for drilling through holes in solid wood, wood derivatives and laminates.
For use on boring machines equipped with adaptors and/or chucks

Spare parts	Optional
990.003.00	990.088.00

Dowel Drills for Through Holes



314.41/42 XTREME

HW LONG LIFE Z2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	35	70	10x26	50	314.050.41	314.050.42
6	35	70	10x26	50	314.060.41	314.060.42
7	35	70	10x26	50	314.070.41	314.070.42
8	35	70	10x26	50	314.080.41	314.080.42
10	35	70	10x26	50	314.100.41	314.100.42

For panels 30mm maximum in thickness

TECHNICAL DETAILS:

- Super-strength steel.
- Spiral portion coated with orange or black P.T.F.E.
- Extra-fine micrograin carbide spiral portion with centre point.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- Double angle.
- 2 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.

APPLICATION:

for drilling through holes in solid wood, wood derivatives and laminates.
For use on boring machines equipped with adaptors and/or chucks.

Spare parts	Optional
990.003.00	990.088.00

Perfect for all materials and long-lasting performance!

CMT announces the new series of solid carbide boring bits, now available from their extensive industrial line. These bits are entirely made of premium quality super micrograin carbide from CERATIZIT® in Luxemburg.

The entire series offers several design features:

- the unique tip has curved, negatively ground spurs to produce exceptionally clear bores with no rough-edges.
- Centre point balanced;
- the cylindrical head is bigger than traditional tips and is extremely resistant to prolonged use.

It lasts longer between sharpenings;

- the plunge edge runs all the way to the centre of the bit to reduce drilling resistance and increase production speed;
- the solid carbide construction guarantees an almost infinite number of resharpenings, and since it is a solid unit of carbide, it offers extra safety features;
- ideal for hardwood and difficult composites such as particle boards, MDF and veneered wood.
- excellent performance on high-speed boring units and CNC routers.



364

B mm	L mm	S mm		ORDER NO.
2	38	10x20	10	364.020.00
2,5	38	10x20	10	364.025.00
3	38	10x20	10	364.030.00
3,2	38	10x20	10	364.032.00
3,5	38	10x20	10	364.035.00
4	38	10x20	10	364.040.00
4,5	38	10x20	10	364.045.00
5	38	10x20	10	364.050.00

For use with the following items: **363** HWM

TECHNICAL DETAILS:

- Super-strength steel.
- Quick and secure assembly on twist drills.
- Precision relief.
- Parallel shank with driving flat.

APPLICATION:

for use with twist drills with common shank and bushing diameter.
For use on boring machines equipped with adapters and/or chucks.

Spare parts

990.001.00	991.062.00

Bushings for Twist Drills



365

B mm	L mm	S mm		ORDER NO.
2	23	10	50	365.020.00
2,5	23	10	50	365.025.00
3	23	10	50	365.030.00
3,2	23	10	50	365.032.00
3,5	23	10	50	365.035.00
4	23	10	50	365.040.00
4,5	23	10	50	365.045.00
5	23	10	50	365.050.00
6	23	10	50	365.060.00

For use with the following items: **363** HWM

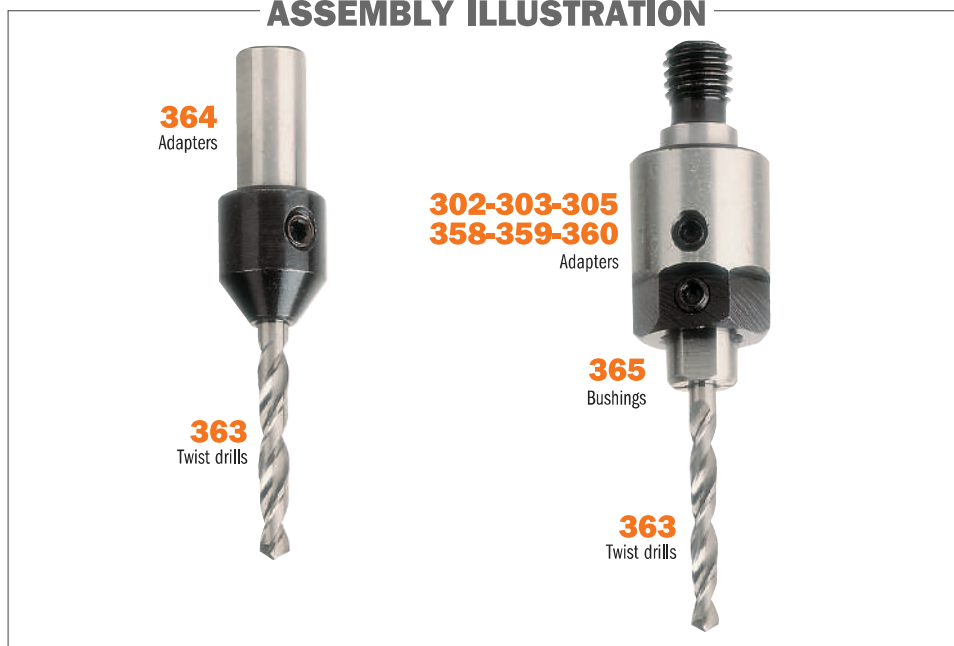
TECHNICAL DETAILS:

- Super-strength steel.
- Shank with driving flat.
- Axial cuttings for cylindrical drill clamps.

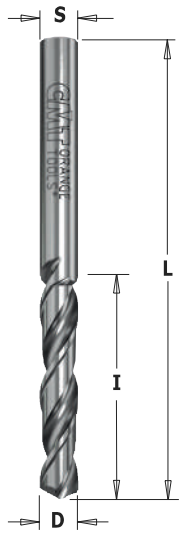
APPLICATION:

for use with twist drills with common shank and bushing diameter. For use on boring machines equipped with adapters and/or chucks.

ASSEMBLY ILLUSTRATION



Solid Carbide Twist Drills "V" Point 120° Sharpening



"V" Point
120°

363.11/12

HWM LONG LIFE Z2 RH LH

S=D mm	I mm	L mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
2	25	50	50	363.020.11	363.020.12
2,5	27	55	50	363.025.11	363.025.12
3	27	55	50	363.030.11	363.030.12
3,2	27	55	50	363.032.11	363.032.12
3,5	27	55	50	363.035.11	363.035.12
4	27	55	50	363.040.11	363.040.12
4,5	28	60	50	363.045.11	363.045.12
5	28	60	50	363.050.11	363.050.12

For use with the following items: **364-365**

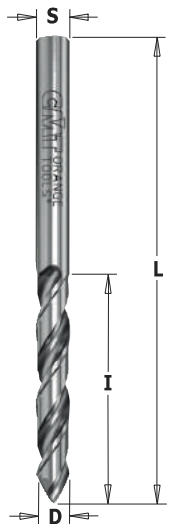
TECHNICAL DETAILS:

- Premium quality HWM.
- 2 precision ground cutting edges [Z2].
- 2 spiral flutes.
- Common shank and drilling diameter (S=D).

APPLICATION:

for drilling through holes in solid wood, wood derivatives and laminates.
For use on boring machines equipped with adapters and/or chucks.

Solid Carbide Twist Drills "V" Point 60° Sharpening



"V" Point
60°

363.41/42

HWM LONG LIFE Z2 RH LH

S=D mm	I mm	L mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
2,5	27	55	50	363.025.41	363.025.42
3	27	55	50	363.030.41	363.030.42
3,5	27	55	50	363.035.41	363.035.42
4	27	55	50	363.040.41	363.040.42

For use with the following items: **364-365**

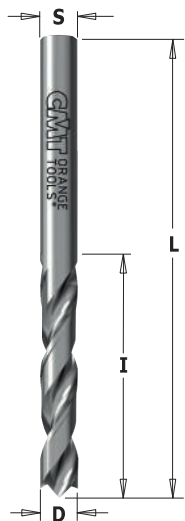
TECHNICAL DETAILS:

- Premium quality HWM.
- 2 precision ground cutting edges [Z2].
- 2 spiral flutes.
- Common shank and drilling diameter (S=D).

APPLICATION:

for drilling through holes in solid wood, wood derivatives and laminates.
For use on boring machines equipped with adapters and/or chucks.

Solid Carbide Twist Drills Negatively Ground Spurs Sharpening



XTreme
Sharpening

363.21/22 XTREME

HWM LONG LIFE Z2 RH LH

S=D mm	I mm	L mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
2,5	27	55	50	363.025.21	363.025.22
3	27	55	50	363.030.21	363.030.22
4	27	55	50	363.040.21	363.040.22
5	28	60	50	363.050.21	363.050.22

For use with the following items: **364-365**

TECHNICAL DETAILS:

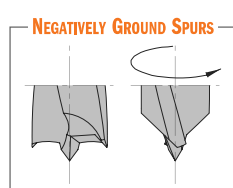
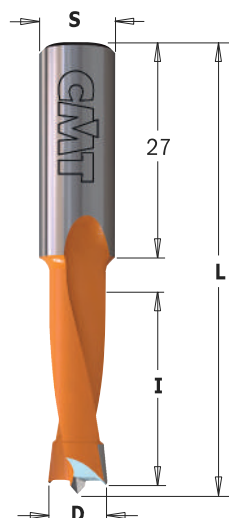
- Premium quality HWM.
- 2 precision ground cutting edges [Z2].
- 2 spiral flutes.
- Common shank and drilling diameter (S=D).

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminates.
For use on boring machines equipped with adapters and/or chucks.

2 Flute Dowel Drills

HW Z2 V2 RH LH

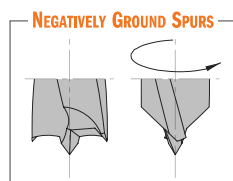
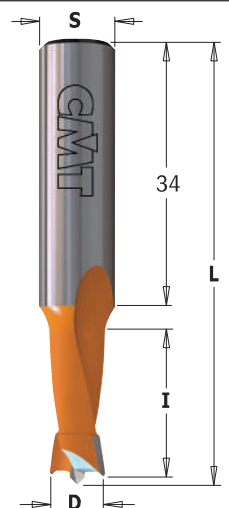


310

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
4	27	57,5	10x27	50	310.040.11	310.040.12
4,5	27	57,5	10x27	50	310.045.11	310.045.12
4,76	27	57,5	10x27	50	310.047.11	310.047.12
5	27	57,5	10x27	50	310.050.11	310.050.12
5,1	27	57,5	10x27	50	310.051.11	310.051.12
5,2	27	57,5	10x27	50	310.052.11	310.052.12
5,55	27	57,5	10x27	50	310.055.11	310.055.12
6	27	57,5	10x27	50	310.060.11	310.060.12
6,35	27	57,5	10x27	50	310.064.11	310.064.12
6,5	27	57,5	10x27	50	310.065.11	310.065.12
7	27	57,5	10x27	50	310.070.11	310.070.12
8	27	57,5	10x27	50	310.080.11	310.080.12
8,2	27	57,5	10x27	50	310.082.11	310.082.12
9	27	57,5	10x27	50	310.090.11	310.090.12
9,52	27	57,5	10x27	50	310.095.11	310.095.12
10	27	57,5	10x27	50	310.100.11	310.100.12
11	27	57,5	10x27	10	310.110.11	310.110.12
12	27	57,5	10x27	10	310.120.11	310.120.12
12,7	27	57,5	10x27	10	310.127.11	310.127.12
13	27	57,5	10x27	10	310.130.11	310.130.12
14	27	57,5	10x27	10	310.140.11	310.140.12
15	27	57,5	10x27	10	310.150.11	310.150.12
16	27	57,5	10x27	10	310.160.11	310.160.12

Spare parts 990.003.00
Optional 990.088.00

2 Flute Dowel Drills



361

HW Z2 V2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	18	57,5	10x34	50	361.050.11	361.050.12
6	18	57,5	10x34	50	361.060.11	361.060.12
7	18	57,5	10x34	50	361.070.11	361.070.12
8	18	57,5	10x34	50	361.080.11	361.080.12
10	18	57,5	10x34	50	361.100.11	361.100.12

TECHNICAL DETAILS:

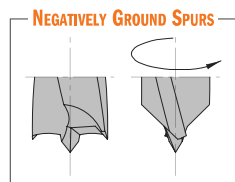
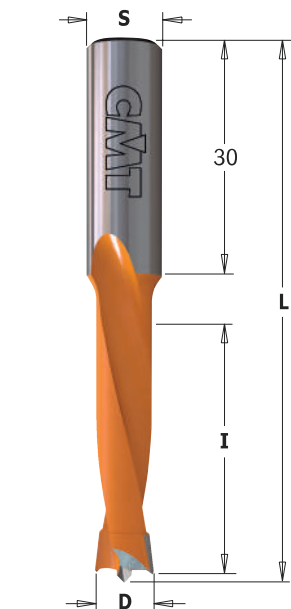
- Super-strength steel.
- Spiral portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges [Z2].
- 2 negatively ground spurs [V2]
- 2 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.

APPLICATION:

used on boring machines equipped with adapters or chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

Spare parts 990.003.00
Optional 990.088.00

2 Flute Dowel Drills



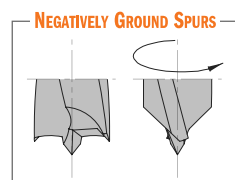
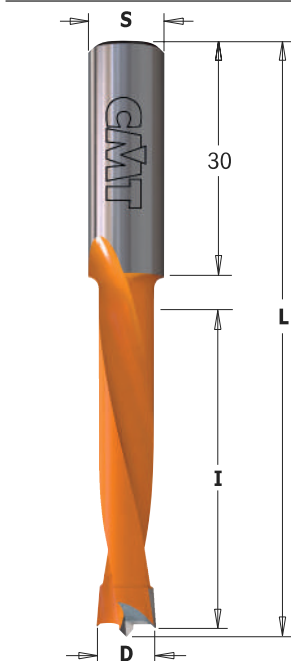
311

HW Z2 V2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
4	35	70	10x30	50	311.040.11	311.040.12
4,5	35	70	10x30	50	311.045.11	311.045.12
4,76	35	70	10x30	50	311.047.11	311.047.12
5	35	70	10x30	50	311.050.11	311.050.12
5,1	35	70	10x30	50	311.051.11	311.051.12
5,2	35	70	10x30	50	311.052.11	311.052.12
5,55	35	70	10x30	50	311.055.11	311.055.12
6	35	70	10x30	50	311.060.11	311.060.12
6,35	35	70	10x30	50	311.064.11	311.064.12
6,5	35	70	10x30	50	311.065.11	311.065.12
7	35	70	10x30	50	311.070.11	311.070.12
8	35	70	10x30	50	311.080.11	311.080.12
8,2	35	70	10x30	50	311.082.11	311.082.12
9	35	70	10x30	50	311.090.11	311.090.12
9,52	35	70	10x30	50	311.095.11	311.095.12
10	35	70	10x30	50	311.100.11	311.100.12
11	35	70	10x30	10	311.110.11	311.110.12
11,1	35	70	10x30	10	311.111.11	311.111.12
12	35	70	10x30	10	311.120.11	311.120.12
12,7	35	70	10x30	10	311.127.11	311.127.12
13	35	70	10x30	10	311.130.11	311.130.12
14	35	70	10x30	10	311.140.11	311.140.12
15	35	70	10x30	10	311.150.11	311.150.12
16	35	70	10x30	10	311.160.11	311.160.12

Spare parts 990.003.00
Optional 990.088.00

2 Flute Dowel Drills



362

HW Z2 V2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	44	77	10x30	50	362.050.11	362.050.12
6	44	77	10x30	50	362.060.11	362.060.12
7	44	77	10x30	50	362.070.11	362.070.12
8	44	77	10x30	50	362.080.11	362.080.12
10	44	77	10x30	50	362.100.11	362.100.12
12	44	77	10x30	10	362.120.11	362.120.12

TECHNICAL DETAILS:

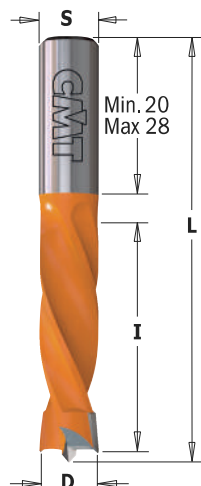
- Super-strength steel.
- Spiral portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges [Z2].
- 2 negatively ground spurs [V2].
- 2 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.

APPLICATION:

used on boring machines equipped with adapters or chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

Spare parts 990.003.00
Optional 990.088.00

4 Flute Dowel Drills

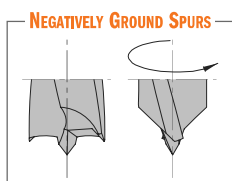
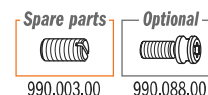


306

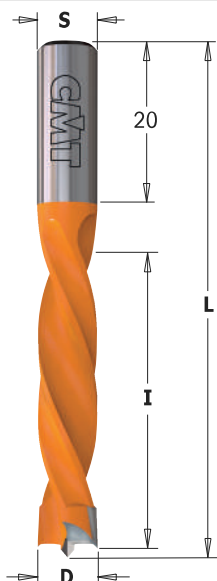
HW HWM Z2 V2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
• 3	18	55,5	8x28		306.030.21	
5	30	55,5	8x20	50	306.050.11	306.050.12
5,55	30	55,5	8x20	50	306.055.11	306.055.12
6	30	55,5	8x20	50	306.060.11	306.060.12
6,35	30	55,5	8x20	50	306.064.11	306.064.12
7	30	55,5	8x20	50	306.070.11	306.070.12
8	30	55,5	8x20	50	306.080.11	306.080.12
9	30	55,5	8x20	50	306.090.11	306.090.12
10	30	55,5	8x20	50	306.100.11	306.100.12
12	30	55,5	8x20	50	306.120.11	306.120.12

• HWM



4 Flute Dowel Drills



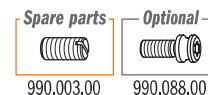
307

HW Z2 V2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	40	67	8x20		307.050.11	307.050.12
5,55	40	67	8x20	50	307.055.11	307.055.12
6	40	67	8x20	50	307.060.11	307.060.12
6,35	40	67	8x20	50	307.064.11	307.064.12
7	40	67	8x20	50	307.070.11	307.070.12
8	40	67	8x20	50	307.080.11	307.080.12
9	40	67	8x20	50	307.090.11	307.090.12
9,52	40	67	8x20	50	307.095.11	307.095.12
10	40	67	8x20	50	307.100.11	307.100.12
12	40	67	8x20	10	307.120.11	307.120.12

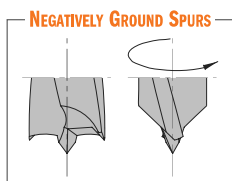
TECHNICAL DETAILS:

- Super-strength steel.
- Cutter portion coated with black or orange P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges [Z2].
- Negatively ground spurs [V2].
- 4 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.

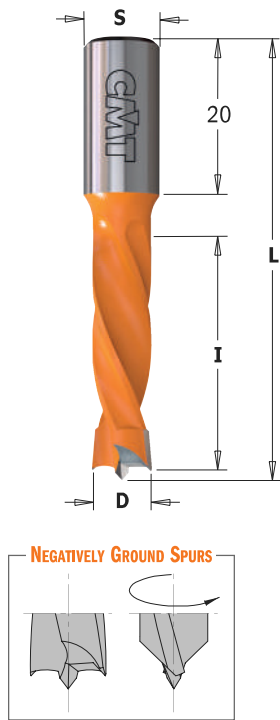


APPLICATION:

used on boring machines equipped with adapters or chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.



4 Flute Dowel Drills



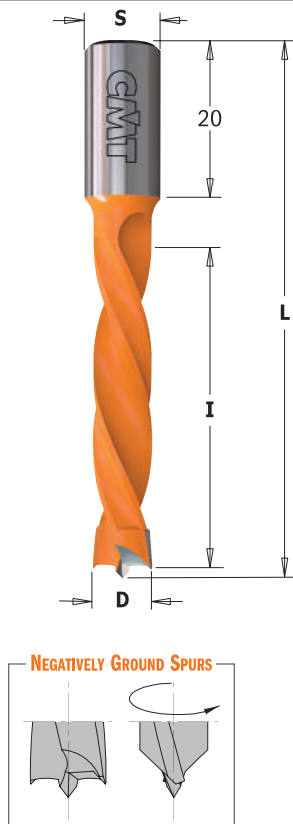
308

HW Z2 V2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
4	26	57,5	10x20	50	308.040.11	308.040.12
5	30	57,5	10x20	50	308.050.11	308.050.12
6	30	57,5	10x20	50	308.060.11	308.060.12
6,35	30	57,5	10x20	50	308.064.11	308.064.12
7	30	57,5	10x20	50	308.070.11	308.070.12
8	30	57,5	10x20	50	308.080.11	308.080.12
9	30	57,5	10x20	50	308.090.11	308.090.12
9,52	30	57,5	10x20	50	308.095.11	308.095.12
10	30	57,5	10x20	50	308.100.11	308.100.12
11	30	57,5	10x20	10	308.110.11	308.110.12
12	30	57,5	10x20	10	308.120.11	308.120.12
12,7	30	57,5	10x20	10	308.127.11	308.127.12
13	30	57,5	10x20	10	308.130.11	308.130.12
14	30	57,5	10x20	10	308.140.11	308.140.12
15	30	57,5	10x20	10	308.150.11	308.150.12
16	30	57,5	10x20	10	308.160.11	308.160.12

Spare parts	Optional
	
990.003.00	990.088.00

4 Flute Dowel Drills



309

HW Z2 V2 RH LH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
4	43	70	10x20	50	309.040.11	309.040.12
5	43	70	10x20	50	309.050.11	309.050.12
6	43	70	10x20	50	309.060.11	309.060.12
6,35	43	70	10x20	50	309.064.11	309.064.12
7	43	70	10x20	50	309.070.11	309.070.12
7,5	43	70	10x20	50	309.075.11	309.075.12
8	43	70	10x20	50	309.080.11	309.080.12
9	43	70	10x20	50	309.090.11	309.090.12
9,52	43	70	10x20	50	309.095.11	309.095.12
10	43	70	10x20	50	309.100.11	309.100.12
11	43	70	10x20	10	309.110.11	309.110.12
12	43	70	10x20	10	309.120.11	309.120.12
12,7	43	70	10x20	10	309.127.11	309.127.12
13	43	70	10x20	10	309.130.11	309.130.12
14	43	70	10x20	10	309.140.11	309.140.12
15	43	70	10x20	10	309.150.11	309.150.12
16	43	70	10x20	10	309.160.11	309.160.12

TECHNICAL DETAILS:

- Super-strength steel.
- Cutter portion coated with black or orange P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges [Z2].
- Negatively ground spurs [V2].
- 4 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.

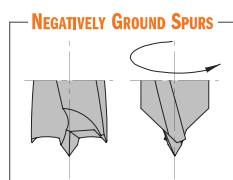
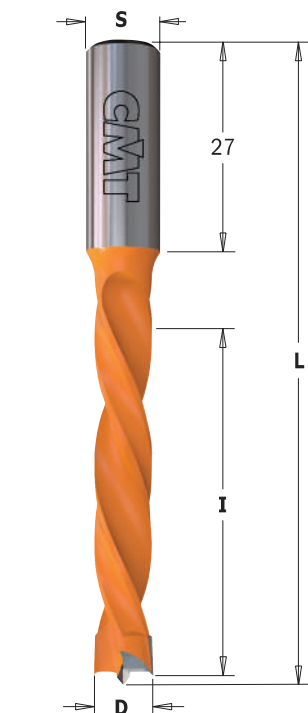
APPLICATION:

used on boring machines equipped with adapters or chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

Spare parts	Optional
	
990.003.00	990.088.00

4 Flute Dowel Drills

HW **Z2** **V2** **RH** **LH**



373

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	50	85	10x27	50	373.050.11	373.050.12
6	50	85	10x27	50	373.060.11	373.060.12
7	50	85	10x27	50	373.070.11	373.070.12
8	50	85	10x27	50	373.080.11	373.080.12
10	50	85	10x27	50	373.100.11	373.100.12
12	50	85	10x27	10	373.120.11	373.120.12

TECHNICAL DETAILS:

- Super-strength steel.
- Cutter portion coated with black or orange P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges [Z2].
- Negatively ground spurs [V2].
- 4 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.

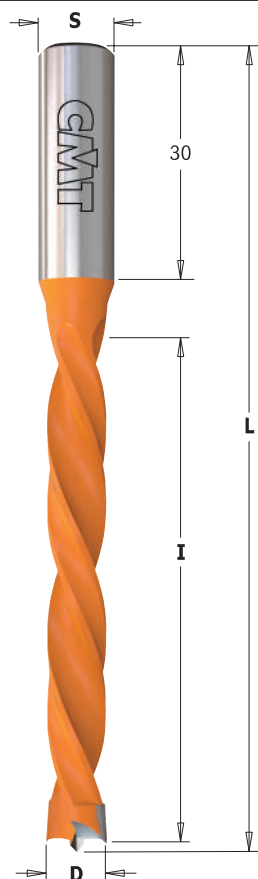
Spare parts	Optional
	
990.003.00	990.088.00

APPLICATION:

used on boring machines equipped with adapters or chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

4 Flute Dowel Drills

HW **Z2** **V2** **RH** **LH**



372

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	65	105	10x30	10	372.050.11	372.050.12
6	65	105	10x30	10	372.060.11	372.060.12
7	65	105	10x30	10	372.070.11	372.070.12
8	65	105	10x30	10	372.080.11	372.080.12
10	65	105	10x30	10	372.100.11	372.100.12
12	65	105	10x30	10	372.120.11	372.120.12

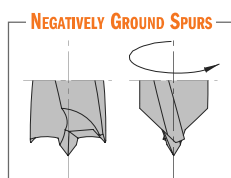
TECHNICAL DETAILS:

- Super-strength steel.
- Cutter portion coated with black or orange P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges [Z2].
- Negatively ground spurs [V2].
- 4 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.

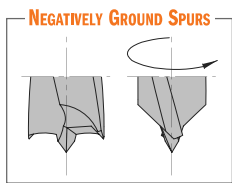
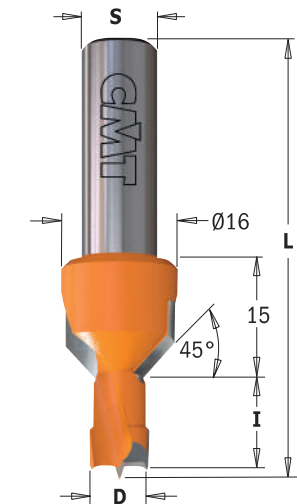
Spare parts	Optional
	
990.003.00	990.088.00

APPLICATION:

used on boring machines equipped with adapters or chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.



Dowel Drills with Countersink



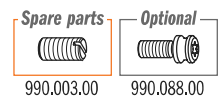
376-377



D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	12	57,5	10	10	376.080.11	376.080.12
8	13	57,5	10	10	376.083.11	376.083.12
8	15	57,5	10	10	376.081.11	376.081.12
8	20	57,5	10	10	376.082.11	376.082.12
10	12	57,5	10	10	376.100.11	376.100.12
10	13	57,5	10	10	376.103.11	376.103.12
10	15	57,5	10	10	376.101.11	376.101.12
10	20	57,5	10	10	376.102.11	376.102.12
8	12	70	10	10	377.080.11	377.080.12
8	13	70	10	10	377.083.11	377.083.12
8	15	70	10	10	377.081.11	377.081.12
8	20	70	10	10	377.082.11	377.082.12
10	12	70	10	10	377.100.11	377.100.12
10	13	70	10	10	377.103.11	377.103.12
10	15	70	10	10	377.101.11	377.101.12
10	20	70	10	10	377.102.11	377.102.12

TECHNICAL DETAILS:

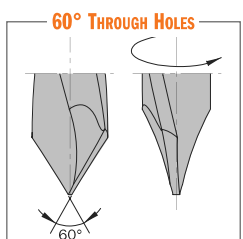
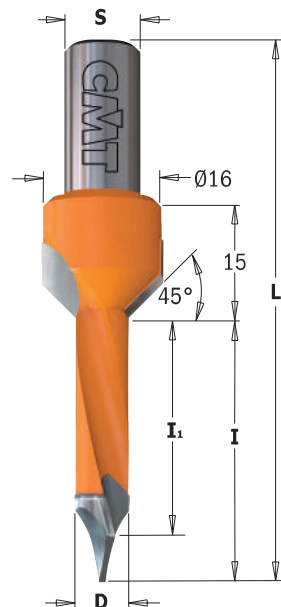
- Super-strength steel.
- Spiral portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 ground spurs [V2].
- 2 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.



APPLICATION:

used for drilling and countersinking in solid wood, wood composites, plastic and laminated materials. Suitable for high performance speed on boring machines equipped with adapters or chucks.

Dowel Drills for Through Holes with Countersink



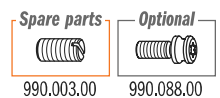
378



D mm	I mm	I ₁ mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	35	31	70	10	10	378.052.11	378.052.12
7	35	29,5	70	10	10	378.072.11	378.072.12
8	35	29	70	10	10	378.082.11	378.082.12
10	35	26,5	70	10	10	378.102.11	378.102.12

TECHNICAL DETAILS:

- Super-strength steel.
- Spiral portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 ground spurs [V2].
- 2 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.



APPLICATION:

used for drilling and countersinking in solid wood, wood composites, plastic and laminated materials. Suitable for high performance speed on boring machines equipped with adapters or chucks.

2 Flute Dowel Drills for Through Holes

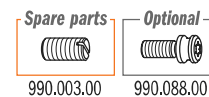


313 For panels with maximum 20mm in thickness

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	27	57,5	10x26	50	313.050.11	313.050.12
6	27	57,5	10x26	50	313.060.11	313.060.12
8	27	57,5	10x26	50	313.080.11	313.080.12
10	27	57,5	10x26	50	313.100.11	313.100.12

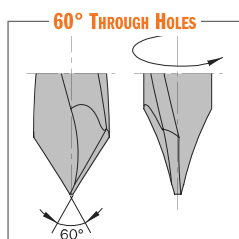
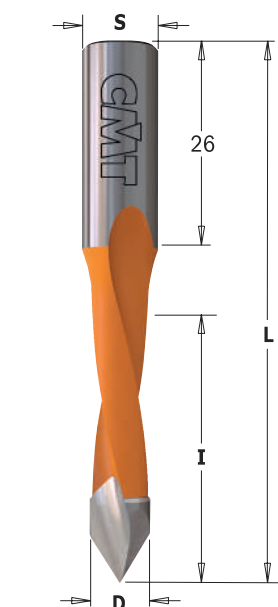
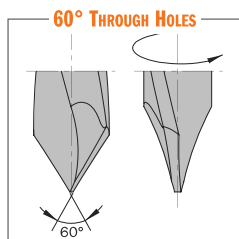
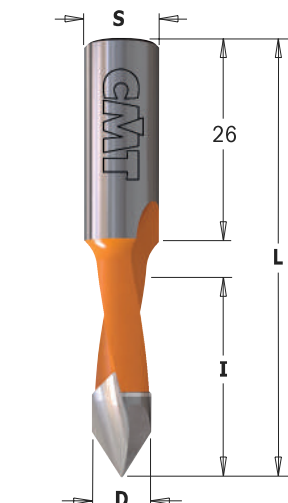
TECHNICAL DETAILS:

- Super-strength steel.
- Spiral portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.



APPLICATION:

used on boring machines and dowel drilling devices.
Use for drilling through holes in solid wood, wood composites, plastic and laminated materials.



314 For panels with maximum 25-30mm in thickness



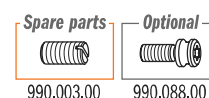
D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
4	30	70	10x26	50	314.040.11	314.040.12
4,76	35	70	10x26	50	314.047.11	314.047.12
5	35	70	10x26	50	314.050.11	314.050.12
5,55	35	70	10x26	50	314.055.11	314.055.12
6	35	70	10x26	50	314.060.11	314.060.12
6,35	35	70	10x26	50	314.064.11	314.064.12
7	35	70	10x26	50	314.070.11	314.070.12
8	35	70	10x26	50	314.080.11	314.080.12
9	35	70	10x26	50	314.090.11	314.090.12
9,52	35	70	10x26	50	314.095.11	314.095.12
10	35	70	10x26	50	314.100.11	314.100.12
12	35	70	10x26	10	314.120.11	314.120.12
12,7	35	70	10x26	10	314.127.11	314.127.12

366 For panels with maximum 30-40mm in thickness

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	44	77	10x26	50	366.050.11	366.050.12
6	44	77	10x26	50	366.060.11	366.060.12
8	44	77	10x26	50	366.080.11	366.080.12
10	44	77	10x26	50	366.100.11	366.100.12
12	44	77	10x26	10	366.120.11	366.120.12

TECHNICAL DETAILS:

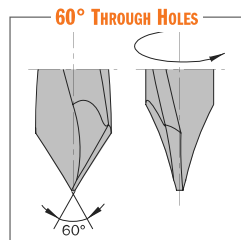
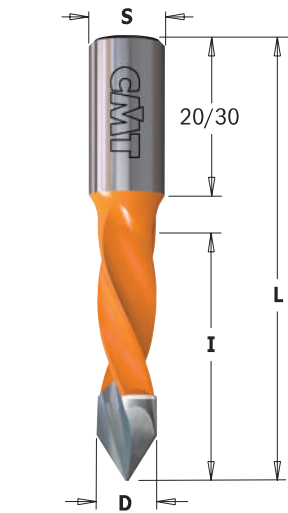
- Super-strength steel.
- Spiral portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 spiral flutes.
- Parallel shank with driving flat and length adjusting screw.



APPLICATION:

used on boring machines and dowel drilling devices.
Use for drilling through holes in solid wood, wood composites, plastic and laminated materials.

4 Flute Dowel Drills for Through Holes



374 For panels with maximum 20-25mm in thickness

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	30	57,5	10x20	50	374.050.11	374.050.12
8	30	57,5	10x20	50	374.080.11	374.080.12

375 For panels with maximum 30-35mm in thickness

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
4	40	70	10x20	50	375.040.11	375.040.12
5	40	70	10x20	50	375.050.11	375.050.12
6	40	70	10x20	50	375.060.11	375.060.12
7	40	70	10x20	50	375.070.11	375.070.12
8	40	70	10x20	50	375.080.11	375.080.12
9	40	70	10x20	50	375.090.11	375.090.12
10	40	70	10x20	50	375.100.11	375.100.12

381 For panels with maximum 60-65mm in thickness

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	70	115	10x30	10	381.050.11	381.050.12
6	70	115	10x30	10	381.060.11	381.060.12
8	70	115	10x30	10	381.080.11	381.080.12
10	70	115	10x30	10	381.100.11	381.100.12

TECHNICAL DETAILS:

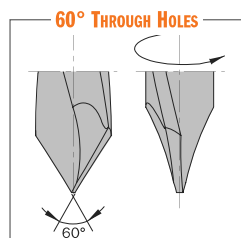
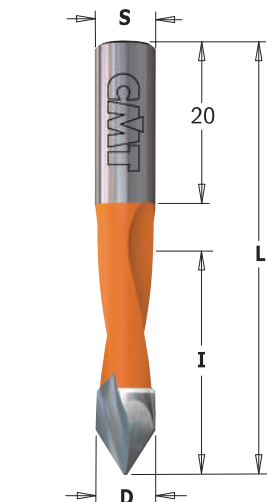
- Super-strength steel
- Spiral portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point
- 2 precision ground cutting edges [Z2] - 4 spiral flutes
- Parallel shank with driving flat and length adjusting screw.

Spare parts	Optional
990.003.00	990.088.00

APPLICATION:

used on boring machines and dowel drilling devices.
Use for drilling through holes in solid wood, wood composites, plastic and laminated materials.

2 Flute Dowel Drills for Through Holes



367 For panels with maximum 20-25mm in thickness

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	30	56	8x20	50	367.050.11	367.050.12
8	30	56	8x20	50	367.080.11	367.080.12

368 For panels with maximum 35-40mm in thickness

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	43	70	8x20	50	368.050.11	368.050.12
6	43	70	8x20	50	368.060.11	368.060.12
7	43	70	8x20	50	368.070.11	368.070.12
8	43	70	8x20	50	368.080.11	368.080.12

TECHNICAL DETAILS:

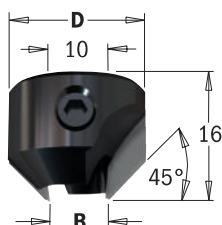
- Super-strength steel
- Spiral portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point
- 2 precision ground cutting edges [Z2]
- 2 spiral flutes
- Parallel shank with driving flat and length adjusting screw.

Spare parts	Optional
990.003.00	990.088.00

APPLICATION:

used on boring machines and dowel drilling devices.
Use for drilling through holes in solid wood, wood composites, plastic and laminated materials.

Countersinks for 2 Flutes Dowel Drills



315



B mm	D mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5 ~ 10	20			315.200.11	315.200.12
11 ~ 12	22			315.220.11	315.220.12

315 ASSEMBLY ILLUSTRATION



TECHNICAL DETAILS:

- Super-strength steel
- 2 precision ground carbide tipped cutting edges [Z2].
- Direct clamp on the shank of the drills.

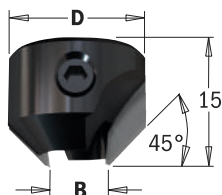
APPLICATION:

used for chamfering and drilling in solid wood, wood composites, plastic and laminated materials.

Spare parts

990.006.00	991.062.00

Countersinks for 4 Flutes Dowel Drills



316



B mm	D mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
4	16			316.040.11	316.040.12
5	16			316.050.11	316.050.12
6	16			316.060.11	316.060.12
7	16			316.070.11	316.070.12
8	18			316.080.11	316.080.12
9	18			316.090.11	316.090.12
10	20			316.100.11	316.100.12
12	20			316.120.11	316.120.12

TECHNICAL DETAILS:

- Super-strength steel.
- 2 HW precision ground cutting edges [Z2].

APPLICATION:

used for drilling and chamfering in solid wood, wood composites, plastic and laminated materials.

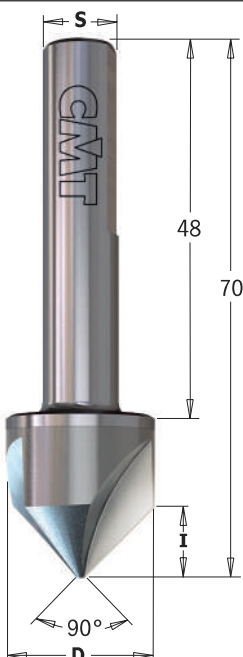
Spare parts

990.002.00	991.062.00

316 ASSEMBLY ILLUSTRATION



90° Solid Carbide Countersink



521



D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation
19,5	9	70	10x48		521.002.21

TECHNICAL DETAILS:

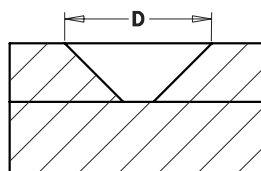
- Super strength steel.
- 3 HWM precision ground cutting edges [Z3].
- Parallel shank with driving flat and length adjusting screw.

APPLICATION:

- For making 90° countersink blind holes accepting flat-head fasteners that sit flush with the surface.
- Suitable for wood, wood-based, non-ferrous materials and metal.

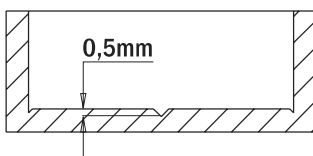
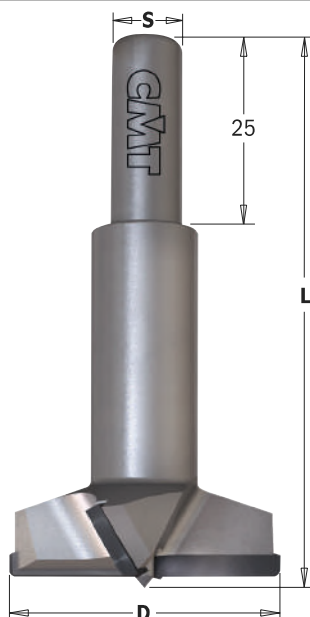
Spare parts

990.003.00



LINE	XTREME DIAMOND	XTREME FLAT	INDUSTRIAL with chipbreaker	INDUSTRIAL
PERFORMANCE	SUPERIOR ★★★★★	SUPERIOR ★★★★★	EXCELLENT ★★★	VERY GOOD ★★★
BIT				
DESCRIPTION	Designed for heavy duty drilling in Large-Scale Industrial Manufacturing ensuring high impact resistance, greater durability and good chip evacuation thanks to the chipbreaker.	Designed for heavy duty drilling in Large-Scale Industrial Manufacturing ensuring high impact resistance and greater durability.	Designed for medium to light-duty drilling in medium to small-scale industrial manufacturing ensuring good chip evacuation thanks to the chipbreaker.	Designed for medium to light-duty drilling in medium to small-scale industrial manufacturing ensuring rigorous impact resistance and good durability.
USER	LARGE-SCALE INDUSTRIAL MANUFACTURING	LARGE-SCALE INDUSTRIAL MANUFACTURING	MEDIUM TO SMALL-SCALE INDUSTRIAL MANUFACTURING	MEDIUM TO SMALL-SCALE INDUSTRIAL MANUFACTURING
RECOMMENDED USE	INDUSTRIAL PRODUCTION	INDUSTRIAL PRODUCTION	INDUSTRIAL/REMODELER	INDUSTRIAL/REMODELER
MATERIALS	Ideal for chipboard, MDF, HDF, laminates and abrasive panels in which long service life is imperative.	Ideal for chipboard, MDF, HDF and laminates. Non-protruding center-point and spurs make this tool perfect for low-thickness panels.	Excellent for solid wood. Good for chipboard, MDF, HDF and laminates.	Excellent for solid wood. Good for chipboard, MDF, HDF and laminates.
SHARPENING & MAINTENANCE	NEGATIVELY GROUND SPURS: standard design HW head featuring precision balanced centre point. 2 HW precision ground cutting edges and 2 negatively ground spurs.	XTREME FLAT SHARPENING: flat edges with reinforced spurs allow perfect finishing and prolonged drilling at high-speed cutting feed.	NEGATIVELY GROUND SPURS: standard design HW head featuring precision balanced centre point. 2 HW precision ground cutting edges with chipbreaker and 2 negatively ground spurs.	NEGATIVELY GROUND SPURS: standard design HW head featuring precision balanced centre point. 2 HW precision ground cutting edges with chipbreaker and 2 negatively ground spurs.
DIAMOND / CARBIDE	The special polycrystalline diamond formula increases tool life up to 20 times longer than HW hinge bits. Good number of resharpenings guaranteed. The best quality/price ratio	INDUSTRIAL CHROMIUM MICROGRAIN CARBIDE Special chromium enhanced carbide produces clean bores with no rough edges even in corners. Chromium Micrograin Carbide guarantees exceptional resistance to fatigue and abrasion for longer lifetime.	INDUSTRIAL GRADE CARBIDE Fine and medium grain carbide grade guarantee reliable prolonged use.	INDUSTRIAL GRADE CARBIDE Fine and medium grain carbide grade guarantee reliable prolonged use.
COATING	High-quality nickel-plated with anti-friction and anti-corrosion properties.	C.M.T. P.T.F.E. coating provides a non-stick surface preventing resin, glue or sludge residue accumulation on the bit body. Baked at 420°, this unique industrial material is specifically designed to fit woodworking tool requirements.	C.M.T. P.T.F.E. coating provides a non-stick surface preventing resin, glue or sludge residue accumulation on the bit body. Baked at 420°, this unique industrial material is specifically designed to fit woodworking tool requirements.	C.M.T. P.T.F.E. coating provides a non-stick surface preventing resin, glue or sludge residue accumulation on the bit body. Baked at 420°, this unique industrial material is specifically designed to fit woodworking tool requirements.
PRICE RANGE	HIGH	MEDIUM/HIGH	MEDIUM	MEDIUM

DP - Hinge Boring Bits



New construction with 0,5mm centre point

317-369



D mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
15	57,5	10x25	10	317.150.61	317.150.62
35	57,5	10x25	10	317.350.61	317.350.62
15	70	10x25	10	369.150.61	369.150.62
16	70	10x25	10	369.160.61	369.160.62
20	70	10x25	10	369.200.61	369.200.62
25	70	10x25	10	369.250.61	369.250.62
26	70	10x25	10	369.260.61	369.260.62
35	70	10x25	10	369.350.61	369.350.62

TECHNICAL DETAILS:

- Super-strength steel
- DP head with precision balanced centre point
- 2 DP precision ground cutting edges [Z2].
- 2 DP negatively ground spurs [V2].
- Parallel shank with driving flat and length adjusting screw.

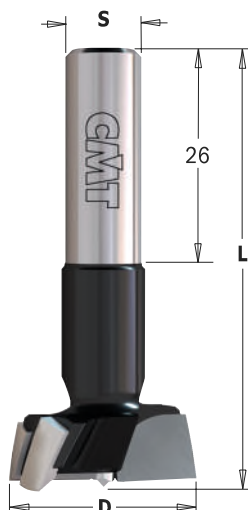
APPLICATION:

ideal for hinges. Use on boring machines equipped with adapters or chucks. Use for drilling accurate and clean-cut blind holes in wood composites, plastic and laminated materials. Boring performance 20 times longer than HW materials.

REMARK: special dimensions available on request.

Spare parts	Optional
	
990.003.00	990.088.00

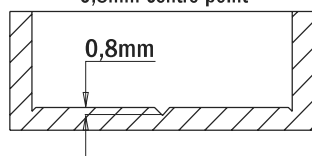
Hinge Boring Bits



XTreme Sharpening Curved Spurs



New construction with 0,8mm centre point



317 XTREME

HW Z2 V2 RH LH

D mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
15	57,5	10x26	10	317.150.41	317.150.42
18	57,5	10x26	10	317.180.41	317.180.42
20	57,5	10x26	10	317.200.41	317.200.42
25	57,5	10x26	10	317.250.41	317.250.42
26	57,5	10x26	10	317.260.41	317.260.42
35*	57,5	10x26	10	317.350.41	317.350.42

369 XTREME

HW Z2 V2 RH LH

D mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
15	70	10x26	10	369.150.41	369.150.42
18	70	10x26	10	369.180.41	369.180.42
20	70	10x26	10	369.200.41	369.200.42
25	70	10x26	10	369.250.41	369.250.42
26	70	10x26	10	369.260.41	369.260.42
35*	70	10x26	10	369.350.41	369.350.42

*with chipbreaker

TECHNICAL DETAILS:

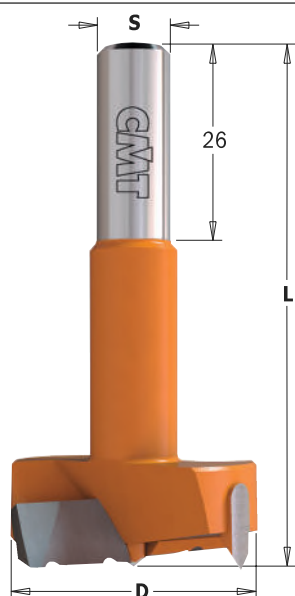
- Super-strength steel.
- Cutter portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges [Z2].
- 2 negatively ground spurs [V2].
- Parallel shank with driving flat and length adjusting screw.

APPLICATION:

ideal for hinges. Use on boring machines equipped with adapters or chucks. Use for drilling accurate and cleancut blind holes in solid wood, wood composites, plastic and laminated materials.

Spare parts	Optional
	
990.003.00	990.088.00

Hinge Boring Bits with Chipbreaker



317C - 369C

HW Z2R V2 RH LH

D mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
35	57,5	10x26	10	317.350.11C	317.350.12C
40	57,5	10x26	10	317.400.11C	317.400.12C
45	57,5	10x26	10	317.450.11C	317.450.12C
35	70	10x26	10	369.350.11C	369.350.12C
40	70	10x26	10	369.400.11C	369.400.12C
45	70	10x26	10	369.450.11C	369.450.12C

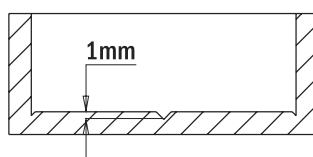
TECHNICAL DETAILS:

- Super-strength steel.
- Cutter portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges with chipbreaker [Z2R].
- 2 negatively ground spurs [V2].
- Parallel shank with driving flat and length adjusting screw.

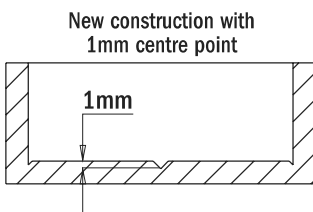
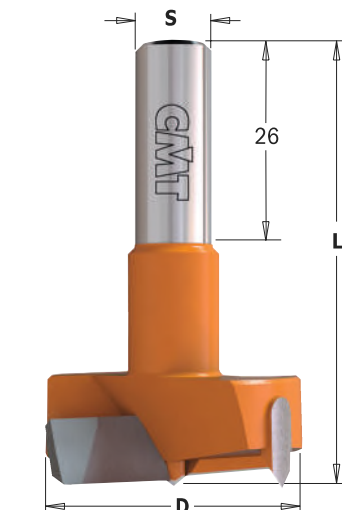
APPLICATION:

ideal for hinges. Used on boring machines equipped with adapters or chucks. For drilling accurate and clean-cut blind holes in solid wood.

Spare parts	Optional
	
990.003.00	990.088.00



New construction with 1mm centre point



317

HW Z2 V2 RH LH

D mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
14	57,5	10x26	10	317.140.11	317.140.12
15	57,5	10x26	10	317.150.11	317.150.12
16	57,5	10x26	10	317.160.11	317.160.12
17	57,5	10x26	10	317.170.11	317.170.12
18	57,5	10x26	10	317.180.11	317.180.12
19	57,5	10x26	10	317.190.11	317.190.12
20	57,5	10x26	10	317.200.11	317.200.12
22	57,5	10x26	10	317.220.11	317.220.12
24	57,5	10x26	10	317.240.11	317.240.12
25	57,5	10x26	10	317.250.11	317.250.12
26	57,5	10x26	10	317.260.11	317.260.12
28	57,5	10x26	10	317.280.11	317.280.12
30	57,5	10x26	10	317.300.11	317.300.12
32	57,5	10x26	10	317.320.11	317.320.12
34	57,5	10x26	10	317.340.11	317.340.12
35	57,5	10x26	10	317.350.11	317.350.12
38	57,5	10x26	10	317.380.11	317.380.12
40	57,5	10x26	10	317.400.11	317.400.12
42	57,5	10x26	10	317.420.11	317.420.12
45	57,5	10x26	10	317.450.11	317.450.12
50	57,5	10x26	10	317.500.11	317.500.12
55	57,5	10x26	10	317.550.11	317.550.12
60	57,5	10x26	10	317.600.11	317.600.12

TECHNICAL DETAILS:

- Super-strength steel.
- Cutter portion coated with orange or black P.T.F.E.
- HW head with precision balanced centre point.
- 2 HW precision ground cutting edges [Z2].
- 2 negatively ground spurs [V2].
- Parallel shank with driving flat and length adjusting screw.

APPLICATION:

ideal for hinges. Use on boring machines equipped with adapters or chucks.
Use for drilling accurate and clean-cut blind holes in solid wood, wood composites, plastic and laminated materials.

369

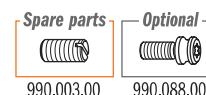
HW Z2 V2 RH LH

D mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
14	70	10x26	10	369.140.11	369.140.12
15	70	10x26	10	369.150.11	369.150.12
16	70	10x26	10	369.160.11	369.160.12
18	70	10x26	10	369.180.11	369.180.12
20	70	10x26	10	369.200.11	369.200.12
22	70	10x26	10	369.220.11	369.220.12
25	70	10x26	10	369.250.11	369.250.12
26	70	10x26	10	369.260.11	369.260.12
30	70	10x26	10	369.300.11	369.300.12
35	70	10x26	10	369.350.11	369.350.12
40	70	10x26	10	369.400.11	369.400.12
45	70	10x26	10	369.450.11	369.450.12
50	70	10x26	10	369.500.11	369.500.12
55	70	10x26	10	369.550.11	369.550.12
60	70	10x26	10	369.600.11	369.600.12

370

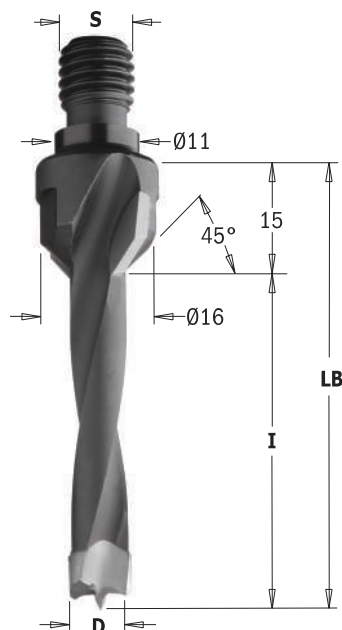
HW Z2 V2 RH LH

D mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
18	77	10x30	10	370.180.11	370.180.12
20	77	10x30	10	370.200.11	370.200.12
25	77	10x30	10	370.250.11	370.250.12
30	77	10x30	10	370.300.11	370.300.12
35	77	10x30	10	370.350.11	370.350.12



Dowel Drills with Threaded Shank with Countersink

HW **Z2** **V2** **RH** **LH**



325-327-329-330

D mm	I mm	LB mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	20	35	M10/11x4	10	325.050.11	325.050.12
6	20	35	M10/11x4	10	325.060.11	325.060.12
8	20	35	M10/11x4	10	325.080.11	325.080.12
10	20	35	M10/11x4	10	325.100.11	325.100.12
12	20	35	M10/11x4	10	325.120.11	325.120.12
5	30	45	M10/11x4	10	327.050.11	327.050.12
6	30	45	M10/11x4	10	327.060.11	327.060.12
8	30	45	M10/11x4	10	327.080.11	327.080.12
10	30	45	M10/11x4	10	327.100.11	327.100.12
12	30	45	M10/11x4	10	327.120.11	327.120.12
5	40	55	M10/11x4	10	329.050.11	329.050.12
6	40	55	M10/11x4	10	329.060.11	329.060.12
8	40	55	M10/11x4	10	329.080.11	329.080.12
10	40	55	M10/11x4	10	329.100.11	329.100.12
12	40	55	M10/11x4	10	329.120.11	329.120.12
5	50	65	M10/11x4	10	330.050.11	330.050.12
6	50	65	M10/11x4	10	330.060.11	330.060.12
8	50	65	M10/11x4	10	330.080.11	330.080.12
10	50	65	M10/11x4	10	330.100.11	330.100.12
12	50	65	M10/11x4	10	330.120.11	330.120.12

TECHNICAL DETAILS:

- Super-strength steel.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 spiral flutes.
- 2 ground spurs [V2].

APPLICATION:

used on boring machines equipped with chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

Dowel Drills with Threaded Shank without Countersink



338-339-340

HW **Z2** **V2** **RH** **LH**

D mm	I mm	LB mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	30	45	M10/11x4	10	338.050.11	338.050.12
6	30	45	M10/11x4	10	338.060.11	338.060.12
8	30	45	M10/11x4	10	338.080.11	338.080.12
10	30	45	M10/11x4	10	338.100.11	338.100.12
12	30	45	M10/11x4	10	338.120.11	338.120.12
5	40	55	M10/11x4	10	339.050.11	339.050.12
6	40	55	M10/11x4	10	339.060.11	339.060.12
8	40	55	M10/11x4	10	339.080.11	339.080.12
10	40	55	M10/11x4	10	339.100.11	339.100.12
12	40	55	M10/11x4	10	339.120.11	339.120.12
5	50	65	M10/11x4	10	340.050.11	340.050.12
6	50	65	M10/11x4	10	340.060.11	340.060.12
8	50	65	M10/11x4	10	340.080.11	340.080.12
10	50	65	M10/11x4	10	340.100.11	340.100.12
12	50	65	M10/11x4	10	340.120.11	340.120.12

TECHNICAL DETAILS:

- Super-strength steel.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 ground spurs [V2].
- 4 spiral flutes.

APPLICATION:

used on boring machines equipped with chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

Dowel Drills with Threaded Shank



344



D mm	I mm	LB mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	43	63	M8	10	344.050.11	344.050.12
6	43	63	M8	10	344.060.11	344.060.12
8	43	63	M8	10	344.080.11	344.080.12
10	43	63	M8	10	344.100.11	344.100.12
12	43	63	M8	10	344.120.11	344.120.12

FOR USE ON THE FOLLOWING MACHINES:

NOTTMEYER® (older models)

346



D mm	I mm	LB mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	43	63	M10	10	346.050.11	346.050.12
6	43	63	M10	10	346.060.11	346.060.12
8	43	63	M10	10	346.080.11	346.080.12
10	43	63	M10	10	346.100.11	346.100.12
12	43	63	M10	10	346.120.11	346.120.12

FOR USE ON THE FOLLOWING MACHINES:

AYEN®, HOLZMA®, KNOEVENAGEL®, MAYER®, TORWEGGE®.

TECHNICAL DETAILS:

- Super-strength steel.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 ground spurs [V2].
- 4 spiral flutes.

APPLICATION:

used on boring machines equipped with chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

Dowel Drills with Threaded Shank



352-353



D mm	I mm	LB mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
5	30	45	M8/9	10	352.050.11	352.050.12
6	30	45	M8/9	10	352.060.11	352.060.12
8	30	45	M8/9	10	352.080.11	352.080.12
10	30	45	M8/9	10	352.100.11	352.100.12
12	30	45	M8/9	10	352.120.11	352.120.12
5	40	55	M8/9	10	353.050.11	353.050.12
6	40	55	M8/9	10	353.060.11	353.060.12
8	40	55	M8/9	10	353.080.11	353.080.12
10	40	55	M8/9	10	353.100.11	353.100.12
12	40	55	M8/9	10	353.120.11	353.120.12

FOR USE ON THE FOLLOWING MACHINES:

MASTERWOOD® (Zangheri & Boschetti)
MORBIDELLI®, NOTTMEYER® (new design)

TECHNICAL DETAILS:

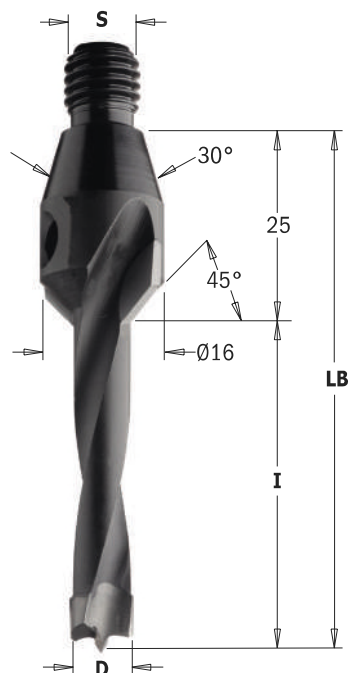
- Super-strength steel.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 ground spurs [V2].
- 4 spiral flutes.

APPLICATION:

used on boring machines equipped with chucks.
Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

Dowel Drills with Threaded Shank with Countersink

HW Z2 V2 RH LH



332-334-336-337

D mm	I mm	LB mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
☐ 5	20	45	M10/30°	10	332.050.11	332.050.12
☐ 6	20	45	M10/30°	10	332.060.11	332.060.12
☐ 8	20	45	M10/30°	10	332.080.11	332.080.12
☐ 10	20	45	M10/30°	10	332.100.11	332.100.12
☐ 12	20	45	M10/30°	10	332.120.11	332.120.12
☐ 5	30	55	M10/30°	10	334.050.11	334.050.12
☐ 6	30	55	M10/30°	10	334.060.11	334.060.12
☐ 8	30	55	M10/30°	10	334.080.11	334.080.12
☐ 10	30	55	M10/30°	10	334.100.11	334.100.12
☐ 12	30	55	M10/30°	10	334.120.11	334.120.12
☐ 5	40	65	M10/30°	10	336.050.11	336.050.12
☐ 6	40	65	M10/30°	10	336.060.11	336.060.12
☐ 8	40	65	M10/30°	10	336.080.11	336.080.12
☐ 10	40	65	M10/30°	10	336.100.11	336.100.12
☐ 12	40	65	M10/30°	10	336.120.11	336.120.12
☐ 5	50	75	M10/30°	10	337.050.11	337.050.12
☐ 6	50	75	M10/30°	10	337.060.11	337.060.12
☐ 8	50	75	M10/30°	10	337.080.11	337.080.12
☐ 10	50	75	M10/30°	10	337.100.11	337.100.12
☐ 12	50	75	M10/30°	10	337.120.11	337.120.12

☐ On request

TECHNICAL DETAILS:

- Super-strength steel.
- HW head with precision balanced centre point.
- 2 precision ground cutting edge [Z2].
- 2 ground spurts [V2].
- 2 spiral flutes.

APPLICATION:

used on boring machines equipped with chucks. Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

Dowel Drills with Threaded Shank without Countersink



341-342-343

HW Z2 V2 RH LH

D mm	I mm	LB mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
☐ 5	30	55	M10/30°	10	341.050.11	341.050.12
☐ 6	30	55	M10/30°	10	341.060.11	341.060.12
☐ 8	30	55	M10/30°	10	341.080.11	341.080.12
☐ 10	30	55	M10/30°	10	341.100.11	341.100.12
☐ 12	30	55	M10/30°	10	341.120.11	341.120.12
☐ 5	40	65	M10/30°	10	342.050.11	342.050.12
☐ 6	40	65	M10/30°	10	342.060.11	342.060.12
☐ 8	40	65	M10/30°	10	342.080.11	342.080.12
☐ 10	40	65	M10/30°	10	342.100.11	342.100.12
☐ 12	40	65	M10/30°	10	342.120.11	342.120.12
☐ 5	50	75	M10/30°	10	343.050.11	343.050.12
☐ 6	50	75	M10/30°	10	343.060.11	343.060.12
☐ 8	50	75	M10/30°	10	343.080.11	343.080.12
☐ 10	50	75	M10/30°	10	343.100.11	343.100.12
☐ 12	50	75	M10/30°	20	343.120.11	343.120.12

☐ On request

TECHNICAL DETAILS:

- Super-strength steel.
- HW head with precision balanced centre point.
- 2 precision ground cutting edges [Z2].
- 2 ground spurts [V2].
- 4 spiral flutes.

APPLICATION:

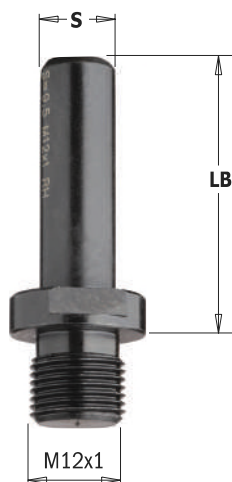
used on boring machines equipped with chucks. Used to drill blind holes in solid wood, wood composites, plastic and laminated materials.

BITS FOR HAND POWER TOOLS

PRODUCTS	PAGE
Adapters & Extension	344-345
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Boring Bits	346-349
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509-532-533 ...with parallel shank for interchangeable bits

RH **LH**

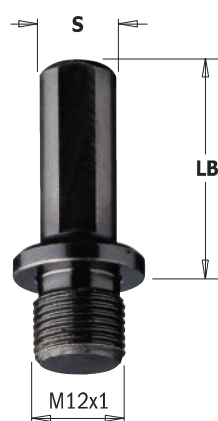
S mm	LB mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8x30	35			10	532.080.01
9,5x30	35			10	532.095.01
10x50	60			1	533.100.01
12x30	35			10	532.120.01
13x50	100			1	509.130.01
16x50	100			1	509.160.01

For use with the following parts: **501 HW**
TECHNICAL DETAILS:

- Super strength steel
- Precision grinding on all contact surfaces.

APPLICATION:

for use on boring machines equipped with adapters and/or chucks.


511 ...with parallel shank for quick change drills

RH **LH**

S mm	LB mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
10x20 (with driving flat and screw)	27			10	511.270.01
10x35 (with driving flat and screw)	40			10	511.400.01

For use with the following parts: **501 HW**
TECHNICAL DETAILS:

- Super strength steel
- Precision grinding on all contact surfaces.

APPLICATION:

for use on boring machines equipped with adapters and/or chucks.

Spare parts



990.003.00


506
RH **LH**

S mm	LB mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
M10/11x4	15			1	506.150.01
M10/11x4	25			1	506.250.01
M10/11x4	35			1	506.350.01

For use with the following parts: **501 HW**
TECHNICAL DETAILS:

- Super strength steel.
- Precision grinding on all contact surfaces.

APPLICATION:

for use on boring machines equipped with adapters and/or chucks.


503
RH **LH**

S mm	LB mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
M10/30°	25			1	503.250.01
M10/30°	35			1	503.350.01
M10/30°	45			1	503.450.01

For use with the following parts: **501 HW**
TECHNICAL DETAILS:

- Super strength steel
- Precision grinding on all contact surfaces.

APPLICATION:

for use on boring machines equipped with adapters and/or chucks.



534

S mm				ORDER NO. Right-hand rotation	
MK2/Ø20x14F.x1"			1	534.020.01	
MK2/M30x1,5			1	534.030.01	

For use with the following parts: **501 HW**

TECHNICAL DETAILS:

- Super strength steel.

APPLICATION:

for use on CNC machining centers or hand-held routers equipped with adapters and/or chucks.

Extension for drills with hexagonal shank

new



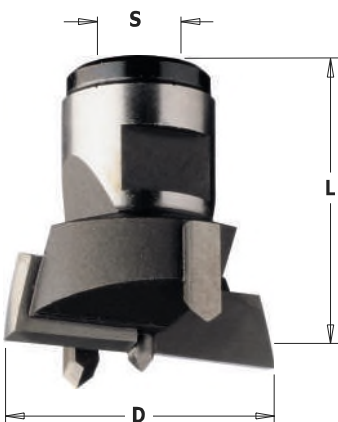
507

S	mm	L inches	B mm		ORDER NO.
Hexagonal 1/4"	330	13	8	25	507.080.33
Hexagonal 11/32"	330	13	9,5	25	507.095.33
Hexagonal 11/32"	330	13	10	25	507.100.33

TECHNICAL DETAILS:

- High strength resistant steel
- Precision grinding on all contact surfaces.

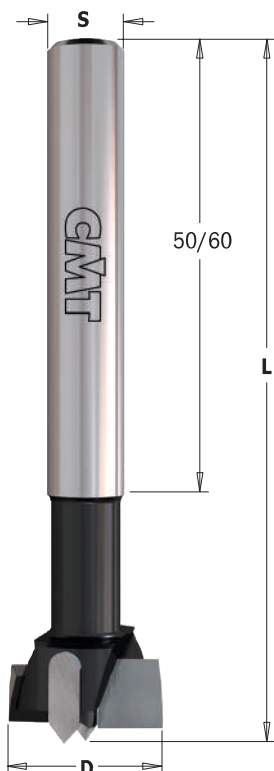
Interchangeable Boring Bits with Threaded Shank



501

HW Z2+2 RH LH

D mm	L mm	S mm			ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
20	30	M12x1		1	501.200.11	501.200.12
22	30	M12x1		1	501.220.11	501.220.12
24	30	M12x1		1	501.240.11	501.240.12
25	30	M12x1		1	501.250.11	501.250.12
26	30	M12x1		1	501.260.11	501.260.12
30	30	M12x1		1	501.300.11	501.300.12
32	30	M12x1		1	501.320.11	501.320.12
34	30	M12x1		1	501.340.11	501.340.12
35	30	M12x1		1	501.350.11	501.350.12
36	30	M12x1		1	501.360.11	501.360.12
38	30	M12x1		1	501.380.11	501.380.12
40	30	M12x1		1	501.400.11	501.400.12
45	30	M12x1		1	501.450.11	501.450.12
50	30	M12x1		1	501.500.11	501.500.12
55	30	M12x1		1	501.550.11	501.550.12
60	30	M12x1		1	501.600.11	501.600.12



512

HW Z2 V2 RH

D mm	L mm	S mm		ORDER NO. Right-hand rotation
14	90	10x60	10	512.140.11
15	90	10x60	10	512.150.11
16	90	10x60	10	512.160.11
17	90	10x60	10	512.170.11
18	90	10x60	10	512.180.11
19	90	10x60	10	512.190.11
20	90	10x60	10	512.200.11
21	90	10x60	10	512.210.11
22	90	10x60	10	512.220.11
23	90	10x60	10	512.230.11
24	90	10x60	10	512.240.11
25	90	10x60	10	512.250.11
26	90	10x60	10	512.260.11
27	90	10x60	10	512.270.11
28	90	10x60	10	512.280.11
29	90	10x60	10	512.290.11
30	90	10x60	10	512.300.11
31	90	10x60	10	512.310.11
32	90	10x60	10	512.320.11
33	90	10x60	10	512.330.11
34	90	10x60	10	512.340.11
35	90	10x60	10	512.350.11
38	90	10x60	10	512.380.11
40	90	10x60	10	512.400.11
42	90	10x60	10	512.420.11
45	90	10x50	10	512.450.11
48	90	10x50	10	512.480.11
50	90	10x50	10	512.500.11
55	90	10x50	5	512.550.11
58	90	10x50	5	512.580.11
60	90	10x50	5	512.600.11

TECHNICAL DETAILS:

- Super strength steel
- HW precision balanced centre point
- 2 HW precision ground cutting edges [Z2]
- 2 HW negatively ground spurs [V2]
- Parallel shank.

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminate materials. **Ideal for hinges.**

5-Piece Boring Bit Set for Hinges



512.001.01

HW Z2 V2 RH

The perfect set for hinge work and other related applications. Machined from special high speed steel and featuring tungsten carbide tipped cutting edges.

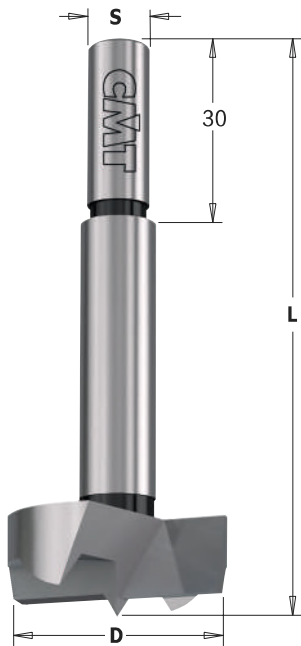
TECHNICAL DETAILS:

- Super strength steel
- HW precision balanced centre point
- 2 HW precision ground cutting edges [Z2]
- 2 HW negatively ground spurs [V2].

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminated materials. **Ideal for hinges.**

DESCRIPTION	S mm	L mm	BIT DIAMETER mm		ORDER NO. Right-hand rotation
5-Piece Boring Bit Set for Hinges	10	90	15-20-25-30-35	5	512.001.01



512

SP Z2 V2 RH

D mm	L mm	S mm		ORDER NO. Right-hand rotation
8	90	8x30	10	512.081.31
10	90	8x30	10	512.101.31
12	90	8x30	10	512.121.31
14	90	8x30	10	512.141.31
15	90	8x30	10	512.151.31
16	90	8x30	10	512.161.31
18	90	8x30	10	512.181.31
20	90	8x30	10	512.201.31
22	90	8x30	10	512.221.31
24	90	8x30	10	512.241.31
25	90	8x30	10	512.251.31
26	90	8x30	10	512.261.31
28	90	8x30	10	512.281.31
30	90	8x30	10	512.301.31
32	90	10x30	10	512.321.31
34	90	10x30	10	512.341.31
35	90	10x30	10	512.351.31
38	90	10x30	10	512.381.31
40	90	10x30	10	512.401.31
45	90	10x30	10	512.451.31
50	90	10x30	10	512.501.31

TECHNICAL DETAILS:

- Long-lasting cutting performance
- SP steel
- Precision balanced centre point
- 2 ground spurs [V2]
- 2 precision ground cutting edges [Z2]

APPLICATION:

used for drilling blind holes in solid wood, wood derivatives and laminates. **Ideal for hinges.**

5-Piece Boring Bit Set for Hinges



512.001.00

SP Z2 V2 RH

The perfect hinge work set for the most popular brand applications. Machined from special high speed steel its really does a great job for those traditional hinge jobs.

TECHNICAL DETAILS:

- Long-lasting cutting performance
- SP steel
- Precision balanced centre point
- 2 ground spurs [V2]
- 2 precision ground cutting edges [Z2].

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminates. **Ideal for hinges.**

DESCRIPTION	S mm	L mm	BIT DIAMETER mm		ORDER NO. Right-hand rotation
5-Piece Boring Bit Set for Hinges	10	90	15-20-25-30-35	5	512.001.00



513

HW Z2 V2 RH

D mm	L mm	S mm		ORDER NO. Right-hand rotation
15	120	13	1	513.150.11
16	120	13	1	513.160.11
18	120	13	1	513.180.11
20	120	13	1	513.200.11
22	125	13	1	513.220.11
25	125	13	1	513.250.11
26	125	13	1	513.260.11
28	130	13	1	513.280.11
30	130	13	1	513.300.11
35	130	13	1	513.350.11
40	130	13	1	513.400.11
45	130	13	1	513.450.11
50	130	13	1	513.500.11
55	140	13	1	513.550.11
60	140	13	1	513.600.11

514

D mm	L mm	S mm		ORDER NO. Right-hand rotation
15	120	16	1	514.150.11
16	120	16	1	514.160.11
18	120	16	1	514.180.11
20	120	16	1	514.200.11
22	125	16	1	514.220.11
25	125	16	1	514.250.11
26	125	16	1	514.260.11
28	130	16	1	514.280.11
30	130	16	1	514.300.11
32	130	16	1	514.320.11
35	130	16	1	514.350.11
40	130	16	1	514.400.11
45	130	16	1	514.450.11
50	130	16	1	514.500.11
55	140	16	1	514.550.11
60	140	16	1	514.600.11

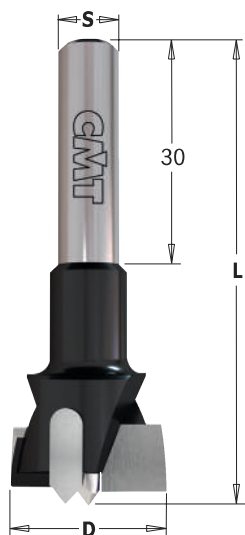
TECHNICAL DETAILS:

- Super strength steel
- HW precision balanced centre point
- 2 HW precision ground cutting edges [Z2]
- 2 HW negatively ground spurs [V2].

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminates. **Ideal for hinges.**

Boring Bits with Parallel Shank



392

HW Z2 V2 RH

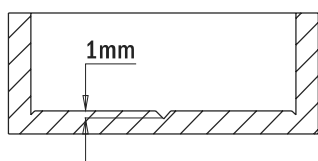
D mm	L mm	S mm		ORDER NO. Right-hand rotation	
15	60	8	10	392.150.11	
20	60	8	10	392.200.11	
25	60	8	10	392.250.11	
26	60	8	10	392.260.11	
30	60	8	10	392.300.11	
35	60	8	10	392.350.11	
35	60	12,7	10	392.351.11	
40	60	8	10	392.400.11	

TECHNICAL DETAILS:

- Super strength steel
- HW precision balanced centre point
- 2 HW precision ground cutting edges [Z2]
- 2 HW negatively ground spurs [V2].

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminates. **Ideal for hinges.**



New construction with
1mm centre point

Mortise Chisel & Bit Sets



543

HSS Z1 RH

D	S		ORDER NO. Right-hand rotation	
mm	inches	mm	inches	
6,35	1/4	19	3/4	1
8	5/16	19	3/4	1
9,5	3/8	19	3/4	1
12,7	1/2	19	3/4	1
15,8	5/8	19	3/4	1
19	3/4	19	3/4	1

It's tough to beat the old faithful mortise and tenon joint for strength and accuracy, even with all the other joinery options in the world of woodworking. It isn't the easiest joint to make, but it surely helps to have the best quality tools in your shop. That's why we've added a new selection of chisel and bit sets in all the popular sizes 6,35mm (1/4") to 19mm (3/4") diameter.

These sets are for use on any standard drill press mortising attachment of mortising machines.



Sample of Chisel Mortiser

529



d mm	D mm	L mm	S mm	Z		ORDER NO. Right-hand rotation
8	18	140	13	4	5	529.080.31
10	20	140	13	4	5	529.100.31
12	24	140	13	4	5	529.120.31
14	26	140	13	4	5	529.140.31
15	27	140	13	4	5	529.150.31
16	28	140	13	4	5	529.160.31
18	30	140	13	4	5	529.180.31
20	32	140	13	4	5	529.200.31
22	34	140	13	5	5	529.220.31
25	37	140	13	5	5	529.250.31
30	42	140	13	5	5	529.300.31
32	44	140	13	5	5	529.320.31
35	47	160	16	6	2	529.350.31
40	52	160	16	6	2	529.400.31
45	57	160	16	6	2	529.450.31
50	62	160	16	6	2	529.500.31

d inches	D inches	L inches	S inches	Z		ORDER NO. Right-hand rotation
3/8	49/64	5-1/2	1/2	4	5	529.095.31
1/2	61/64	5-1/2	1/2	4	5	529.127.31
5/8	1-7/64	5-1/2	1/2	4	5	529.158.31
3/4	1-7/32	5-1/2	1/2	4	5	529.191.31
7/8	1-11/32	5-1/2	1/2	4	5	529.222.31
1	1-15/32	5-1/2	1/2	5	5	529.254.31
1-1/4	1-19/32	5-1/2	1/2	5	5	529.317.31
1-3/8	1-27/32	6-5/16	5/8	6	2	529.349.31
1-1/2	1-31/32	6-5/16	5/8	6	2	529.381.31
1-5/8	2-3/32	6-5/16	5/8	6	2	529.413.31
1-3/4	2-7/32	6-5/16	5/8	6	2	529.445.31
2	2-15/32	6-5/16	5/8	6	2	529.508.31

Use our D=16mm bushing to increase the 13mm shank
(article no. 799.130.00 on page 426)

TECHNICAL DETAILS:

- SP steel
- Long lasting cutting performance
- 4 cutting edges.

APPLICATION:

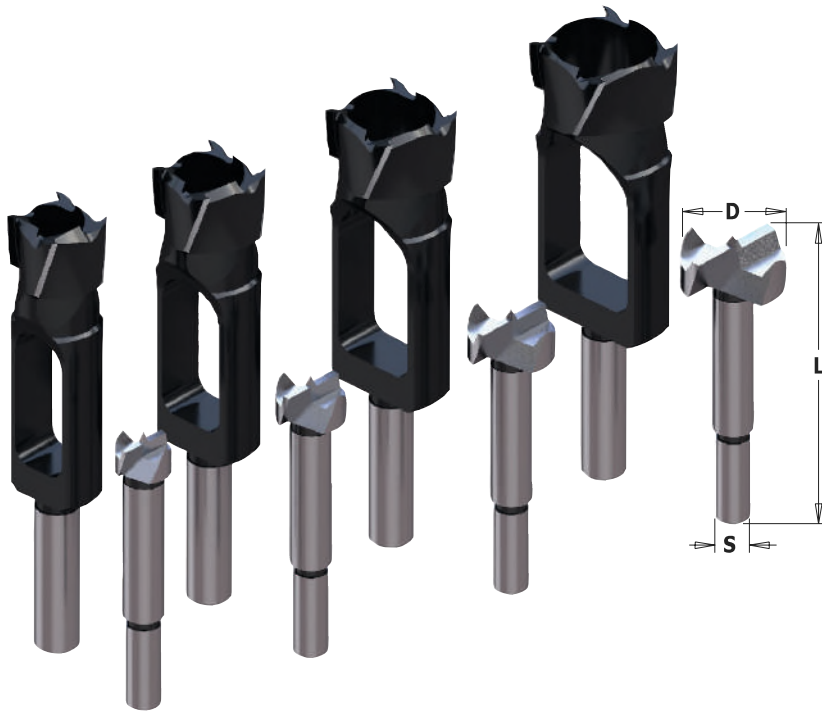
for drilling plugs in natural soft or medium-density woods.

D mm	D inches	Max RPM Softwood	Max RPM Hardwood
< Ø16	5/8	1000	500
< Ø40	1-37/64	500	300
> Ø40	1-37/64	200	150

500.001/02/03

SP RH

We offer a wide range of boring bits and plug cutters in the most popular diameters. If you need to drill plugs in soft to medium-density hardwood, you've got three different sets to choose from.



500.001.08 Boring Bit & Plug Cutter Set

SET CONTAINS	D mm	L mm	S mm	ORDER NO. Right-hand rotation
Boring Bit with Parallel Shank	8	90	10	512.081.31
Boring Bit with Parallel Shank	10	90	10	512.101.31
Boring Bit with Parallel Shank	12	90	10	512.121.31
Boring Bit with Parallel Shank	15	90	10	512.151.31
Plug Cutter	8	140	13	529.080.31
Plug Cutter	10	140	13	529.100.31
Plug Cutter	12	140	13	529.120.31
Plug Cutter	15	140	13	529.150.31



500.002.08 Boring Bit & Plug Cutter Set

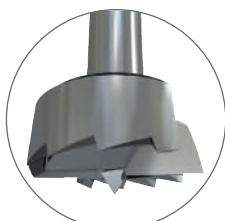
SET CONTAINS	D mm	L mm	S mm	ORDER NO. Right-hand rotation
Boring Bit with Parallel Shank	16	90	10	512.161.31
Boring Bit with Parallel Shank	20	90	10	512.201.31
Boring Bit with Parallel Shank	25	90	10	512.251.31
Boring Bit with Parallel Shank	30	90	10	512.301.31
Plug Cutter	16	140	13	529.160.31
Plug Cutter	20	140	13	529.200.31
Plug Cutter	25	140	13	529.250.31
Plug Cutter	30	140	13	529.300.31

500.003.08 Boring Bit & Plug Cutter Set

SET CONTAINS	D mm	L mm	S mm	ORDER NO. Right-hand rotation
Boring Bit with Parallel Shank	15	90	10	512.151.31
Boring Bit with Parallel Shank	20	90	10	512.201.31
Boring Bit with Parallel Shank	25	90	10	512.251.31
Boring Bit with Parallel Shank	30	90	10	512.301.31
Plug Cutter	15	140	13	529.150.31
Plug Cutter	20	140	13	529.200.31
Plug Cutter	25	140	13	529.250.31
Plug Cutter	30	140	13	529.300.31



toothed rim $\geq \varnothing 25\text{mm}$



standard rim $< \varnothing 25\text{mm}$

537

D mm	L mm	S mm		ORDER NO. Right-hand rotation
10	90	8	6	537.100.31
12	90	8	6	537.120.31
14	90	8	6	537.140.31
15	90	8	6	537.150.31
16	90	8	6	537.160.31
18	90	8	6	537.180.31
20	90	8	6	537.200.31
22	90	8	6	537.220.31
24	90	8	6	537.240.31
25	90	8	6	537.250.31
26	90	8	6	537.260.31
28	90	8	6	537.280.31
30	90	8	6	537.300.31
32	90	10	6	537.320.31
35	90	10	6	537.350.31
38	90	10	6	537.380.31
40	90	10	6	537.400.31
45	90	10	6	537.450.31
50	90	10	6	537.500.31
55	90	10	6	537.550.31
68	157	12,7	6	537.680.31
70	157	12,7	6	537.700.31
75	157	12,7	2	537.750.31
80	157	12,7	2	537.800.31
85	157	12,7	2	537.850.31
90	157	12,7	2	537.900.31
95	157	12,7	2	537.950.31
100	157	12,7	2	537.990.31

new
new
new
new
new
new
new

STANDARD RIM AND TOOTHED RIM:

Standard rims provide better guidance but tend to overheat. To overcome heat the larger diameters ($\geq \varnothing 25\text{mm}$) are designed with toothed rims.

D inches	L inches	S inches		ORDER NO. Right-hand rotation
1/4	3-35/64	3/8	6	537.064.31
3/8	3-35/64	3/8	6	537.095.31
1/2	3-35/64	3/8	6	537.127.31
5/8	3-35/64	3/8	6	537.158.31
3/4	3-35/64	3/8	6	537.190.31
7/8	3-35/64	3/8	6	537.222.31
1	3-35/64	3/8	6	537.254.31
1-1/8	3-35/64	3/8	6	537.285.31
1-1/4	3-35/64	3/8	6	537.317.31
1-3/8	3-35/64	3/8	6	537.349.31
1-1/2	3-35/64	3/8	6	537.381.31
1-5/8	3-35/64	3/8	6	537.413.31
1-3/4	3-35/64	3/8	6	537.445.31
1-7/8	3-35/64	3/8	6	537.476.31
2	3-35/64	3/8	6	537.508.31
2-1/8	3-35/64	3/8	6	537.540.31
2-1/4	3-35/64	3/8	6	537.571.31
2-1/2	3-35/64	3/8	6	537.635.31
3	3-35/64	3/8	2	537.762.31
3-1/2	3-35/64	3/8	2	537.889.31
4	3-35/64	3/8	2	537.991.31
4-1/2	3-35/64	3/8	2	537.993.31

new
new
new
new
new
new
new

TECHNICAL DETAILS:

- Long-lasting cutting performance
- Super strength SP steel
- Precision balanced centre point
- 2 ground spurs [V2]
- 2 precision ground cutting edges [Z2].

APPLICATION:

for drilling precise flat bottom holes of any size in softwood. Create oval and arched openings at any angle. Create niches for the installation of brackets/straps, frames/grids.

Forstner Bit Sets

We offer a wide range of Forstner bits in the most popular diameters to execute the cleanest holes for brackets/straps in softwood. Drill ovals and arched openings at any angle for the installation of hinge parts. Available in 4, 5, 7, 12 and 16 bit sets.

537.000.04
537.000.05
537.000.07
537.000.12



537.000.16



DESCRIPTION	SHANK mm	SHANK inches	BIT DIAMETER		ORDER NO. Right-hand rotation
5 pcs. Router Bit Set in clamshell	Ø8-10		Ø15-20-25-30-35mm	6	537.000.05
12 pcs. Router Bit Set in clamshell	Ø8-10		Ø10-12-14-15-16-18-20-22-25-26-30-35mm	6	537.000.12
4 pcs. Router Bit Set in clamshell		Ø3/8	Ø1/4" - 1/2" - 3/4" - 1"	6	537.000.04
7 pcs. Router Bit Set in clamshell		Ø3/8	Ø1/4" - 3/8" - 1/2" - 5/8" - 3/4" - 7/8" - 1"	6	537.000.07
16 pcs. Router Bit Set in plastic box		Ø3/8	Ø1/4" - 3/8" - 1/2" - 5/8" - 3/4" - 7/8" - 1" - 1-1/8" - 1-1/4" - 1-3/8" - 1-1/2" - 1-5/8" - 1-3/4" - 1-7/8" - 2" - 2-1/8"	8	537.000.16



531

HW Z2 RH

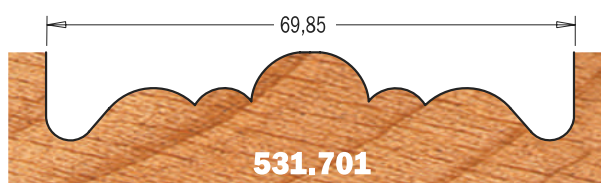
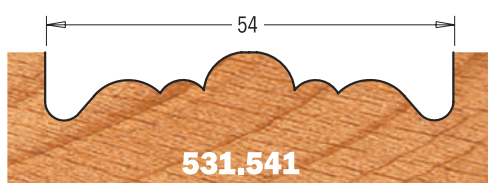
D mm	L mm	S mm	Max RPM		ORDER NO. Right-hand rotation
54	73,5	9,5	1500	10	531.541
54	71,3	9,5	1500	10	531.542
54	67,3	9,5	1500	10	531.543
54	72,3	9,5	1500	10	531.544
70	76,5	9,5	1000	5	531.701
70	74	9,5	1000	5	531.702

TECHNICAL DETAILS:

- Super strength steel
- 2 HW precision ground cutting edges [Z2]
- Parallel hexagonal shank
- Right-hand rotation (RH).

APPLICATION:

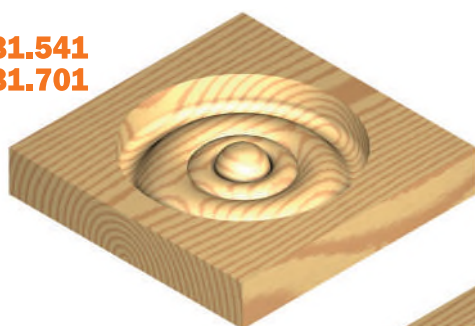
for use on drill presses and low speed power tools (see table above for max RPM). We recommend securely clamping your workpiece throughout drilling operations.



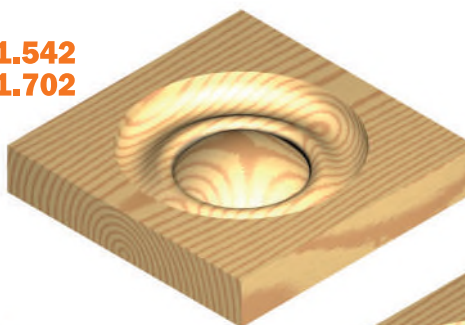
Drawings are 1:1 scale



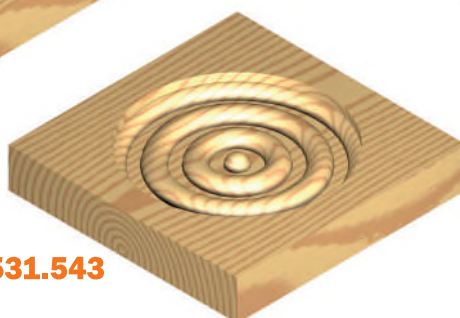
**531.541
531.701**



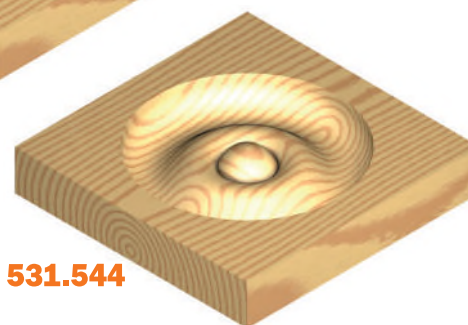
**531.542
531.702**



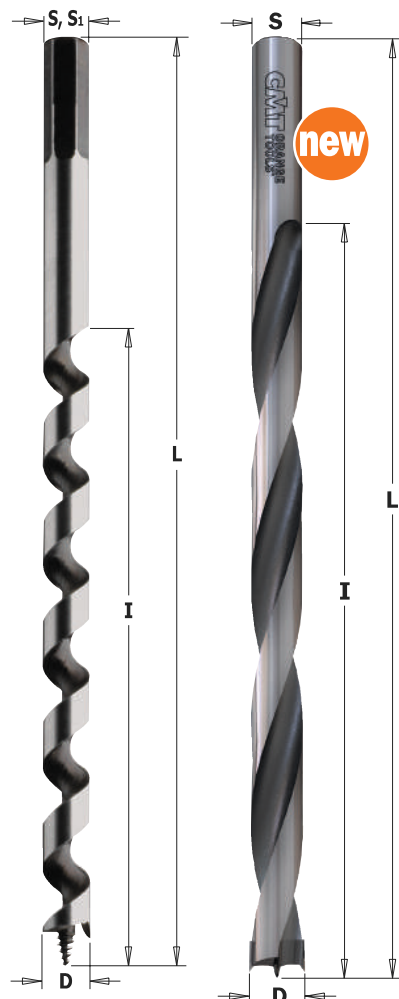
531.543



531.544



HSS Z1 V1 RH



542-535

D mm	I mm	L mm	S	S1 mm	RPM max		ORDER NO. Right-hand rotation
6	155	230	Hexagonal	6	800 ~ 1400	1	542.060.51
8	155	230	Hexagonal	6,35	800 ~ 1400	1	542.080.51
10	155	230	Hexagonal	9	600 ~ 1200	1	542.100.51
12	155	230	Hexagonal	12	600 ~ 1100	1	542.120.51
14	155	230	Hexagonal	12	600 ~ 1000	1	542.140.51
16	155	230	Hexagonal	12	500 ~ 900	1	542.160.51
18	155	230	Hexagonal	12	500 ~ 800	1	542.180.51
20	155	230	Hexagonal	12	400 ~ 700	1	542.200.51
8	360	460	Hexagonal	6,55	800 ~ 1000	1	535.080.51
10	360	460	Hexagonal	9	600 ~ 1000	1	535.100.51
12	360	460	Hexagonal	12	600 ~ 1000	1	535.120.51
14	360	460	Hexagonal	12	500 ~ 900	1	535.140.51
16	360	460	Hexagonal	12	500 ~ 900	1	535.160.51
18	360	460	Hexagonal	12	450 ~ 800	1	535.180.51
20	360	460	Hexagonal	12	400 ~ 700	1	535.200.51

TECHNICAL DETAILS:

- Long-lasting cutting performance
- Super strength HSS steel
- Precision balanced centre point
- 1 precision ground cutting edge [Z1]
- 1 spiral flute - 1 spur [V1].

APPLICATION:

for deep boring on soft and medium-density wood. Ideal for the preparation and installation of floating shelves.

542

HW LONG LIFE Z2 RH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation
12	180	240	13	1	542.120.11
14	180	240	13	1	542.140.11

TECHNICAL DETAILS:

- Long-lasting cutting performance
- Super strength steel
- HW head with precision balanced centre point
- 2 precision ground cutting edges [Z2]
- 2 spiral flutes.

APPLICATION:

for deep boring on soft and medium-density wood. Ideal for the preparation and installation of floating shelves.

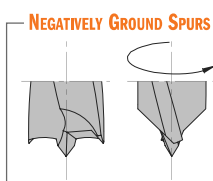
Brad Point Bits



540

HW Z2 V2 RH

D mm	L mm	S mm		ORDER NO. Right-hand rotation
5	90	8x30	1	540.050.11
6	90	8x30	1	540.060.11
8	90	8x30	1	540.080.11
10	90	8x30	1	540.100.11
12	90	8x30	1	540.120.11



TECHNICAL DETAILS:

- Super strength steel
- HW head with precision balanced centre point
- 2 precision ground cutting edges [Z2]
- 2 spiral flutes.

APPLICATION:

for drilling blind holes in solid wood, wood derivatives and laminates. For use on hand-held power drills and drill presses.

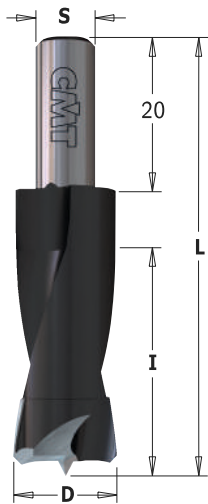
541 Stop Collars

D mm		ORDER NO.
5	10	541.050.00
6	10	541.060.00
8	10	541.080.00
10	10	541.100.00
12	10	541.120.00

Spare parts

990.002.00	991.062.00
990.002.00	991.062.00
990.002.00	991.062.00
990.002.00	991.062.00
990.002.00	991.062.00

Stop collars with precision clamping nut and key for quick and easy assembly.



312

HW Z2 RH

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	
4	30	58	8		312.040.11	
5	30	58	8		312.050.11	
6	30	58	8		312.060.11	
8	30	58	8		312.080.11	
10	30	58	8		312.100.11	
12	30	58	8		312.120.11	
14	30	58	8		312.140.11	
16	30	58	8		312.160.11	

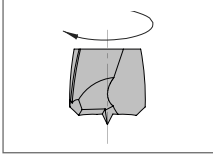
These drill bits are made with high-strength steel to facilitate high speed rotation. Perfect for creating blind holes in solid wood, wood derivatives and laminates. For use on hand-held routers and MAFELL® machines - model DD40

Spare parts	Optional
	
990.003.00	990.088.00

TECHNICAL DETAILS:

- Super strength steel
- Black P.T.F.E. coating
- HW precision balanced centre point
- 2 HW precision ground cutting edges [Z2]
- No lateral spurs
- 2 spiral flutes
- Parallel shank with driving flat and length adjusting screw.

SHARPENING WITH CHAMFER



Router Bits for DOMINO® Joining Machines by FESTOOL®



380

HW HWM Z2 RH

D mm	I mm	L mm	S mm	FESTOOL®		ORDER NO. Right-hand rotation
• 4	11	38	M6x0,75	DF500		380.040.11
5	20	49	M6x0,75	DF500		380.050.11
6	28	49	M6x0,75	DF500		380.060.11
8	28	49	M6x0,75	DF500		380.080.11
10	28	49	M6x0,75	DF500		380.100.11
8	50	90	M8x1	DF700		380.081.11
10	70	90	M8x1	DF700		380.101.11
12	70	90	M8x1	DF700		380.121.11
14	70	90	M8x1	DF700		380.141.11

• HWM

TECHNICAL DETAILS:

- Premium quality super-strength steel
- Black P.T.F.E. coating
- HWM head
- No lateral spurs
- 2 cutting edges [Z2]
- 2 spiral flutes.

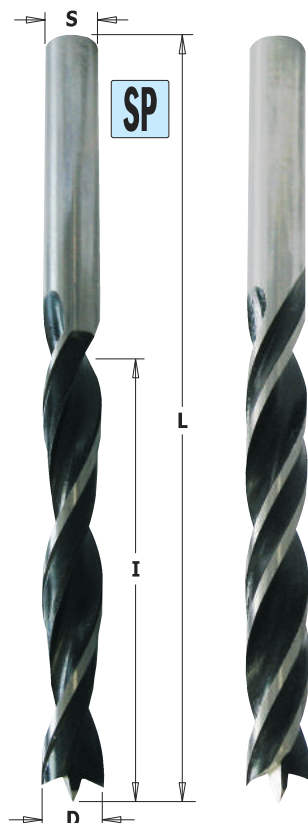
APPLICATION:

for use on "DOMINO®" machines to rout slots for hinges.



Brad Point Bits

SP HSS Z2 RH



517

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Right-hand rotation
3	33	61	3,0	1	517.030.31	517.030.51
4	43	75	4	1	517.040.31	517.040.51
4,5	47	80	4,5	1		517.045.51
5	52	86	5	1	517.050.31	517.050.51
6	57	93	6	1	517.060.31	517.060.51
7	69	109	7	1	517.070.31	517.070.51
8	75	117	8	1	517.080.31	517.080.51
9	80	120	9	1	517.090.31	517.090.51
10	80	120	10	1	517.100.31	517.100.51
11	89	142	8	1	517.110.31	517.110.51
12	96	151	8	1	517.120.31	517.120.51
13	96	151	8	1	517.130.31	517.130.51
14	96	151	10	1	517.140.31	517.140.51
15	100	160	10	1	517.150.31	517.150.51
16	100	160	10	1	517.160.31	517.160.51
18	130	180	10	1	517.180.31	
20	135	200	10	1	517.200.31	

SP

TECHNICAL DETAILS:

- Super strength SP steel
- Precision balanced center point
- 2 precision ground SP cutting edges [Z2]
- 2 flutes.

APPLICATION:

for drilling holes in natural wood.

HSS

TECHNICAL DETAILS:

- Super strength HSS steel
- Long lasting cutting performance
- Precision balanced center point
- 2 precision ground cutting edges [Z2]
- 4 spiral flutes.

APPLICATION:

used for drilling holes in soft and hardwood.
Long-lasting cutting performance.

Brad Point Bit Sets



517

5-Piece Brad Point Bit Set

An economical collection of the five most popular sized brad points - 4, 5, 6, 8 and 10mm. Safely packaged in a reusable plastic case for easy storage and access.

8-Piece Brad Point Bit Set

A complete collection of the most popular brad points in the most requested sizes - 3, 4, 5, 6, 7, 8, 9 and 10mm. Safely packaged in a reusable plastic case for easy storage and access.

HSS SP Z2 RH

DESCRIPTION	Z	BIT DIAMETER		ORDER NO. Right-hand rotation
5-Pcs. HSS Brad Point Set	4 flutes	Ø4-5-6-8-10mm	50	517.001.01
5-Pcs. SP Brad Point Set	2 flutes	Ø4-5-6-8-10mm	50	517.001.00
8-Pcs. HSS Brad Point Set	4 flutes	Ø3-4-5-6-7-8-9-10mm	30	517.002.01
8-Pcs. SP Brad Point Set	2 flutes	Ø3-4-5-6-7-8-9-10mm	30	517.002.00

HSS Z2 RH LH

516

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
2	24	49	2	10	516.020.51	516.020.52
2,5	30	57	2,5	10	516.025.51	516.025.52
3	33	61	3	10	516.030.51	516.030.52
3,5	39	70	3,5	10	516.035.51	516.035.52
4	43	75	4	10	516.040.51	516.040.52
4,5	47	80	4,5	10	516.045.51	516.045.52
5	52	86	5	10	516.050.51	516.050.52
5,5	57	93	5,5	10	516.055.51	516.055.52
6	57	93	6	10	516.060.51	516.060.52
7	69	109	7	10	516.070.51	516.070.52
8	75	117	8	10	516.080.51	516.080.52
9	81	125	9	10	516.090.51	516.090.52
10	87	133	10	10	516.100.51	516.100.52

TECHNICAL DETAILS:

- Super strength HSS steel
- Long lasting cutting performance
- Precision balanced centre point
- 2 precision ground cutting edges [Z2]
- 2 spiral flutes
- Common shank and cutting diameter (S=D).

APPLICATION:

for drilling blind holes in soft and medium-density wood.

Drill Bits for ANUBA® Hinges

515

HSS Z2 RH

ANUBA® nr.	d mm	D-S mm	I ₁ mm	I mm	LB mm	L mm		ORDER NO. Right-hand rotation
9,5	3,8	5,2	18	56	74	132	1	515.095.51
11	4,8	5,7	17	60	76	145	1	515.110.51
13	5,8	6,7	18	68	83	155	1	515.130.51
14,5	6,3	7,2	19	75	89	165	1	515.145.51
16	6,7	7,7	25	85	100	165	1	515.160.51
18	7,7	8,7	25	85	102	165	1	515.180.51
20	8,8	9,8	25	90	104	165	1	515.200.51

Parallel Shank with Driving Flat

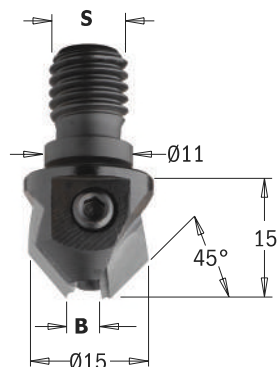
ANUBA® nr.	d mm	D mm	I mm	LB mm	S mm	L mm		ORDER NO. Right-hand rotation
13	5,2	6,5	15	50	10x35	85	1	515.131.51
14	5,5	7	15	55	10x35	90	1	515.141.51
16	6	7,7	15	60	10x35	95	1	515.161.51

TECHNICAL DETAILS:

- Super strength HSS steel
- 2 HSS precision ground cutting edges [Z2]
- 2 spiral flutes.

APPLICATION:

for drilling holes in medium density wood.
For the installation of ANUBA® hinges.

350

HW Z2 RH LH

B mm	S mm				ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
3	M10/Ø11x4			10	350.030.11	350.030.12
4	M10/Ø11x4			10	350.040.11	350.040.12
5	M10/Ø11x4			10	350.050.11	350.050.12

TECHNICAL DETAILS:

- Super strength steel
- 2 HW precision ground cutting edges [Z2]
- Fastening screw for quick and easy drill bit change.

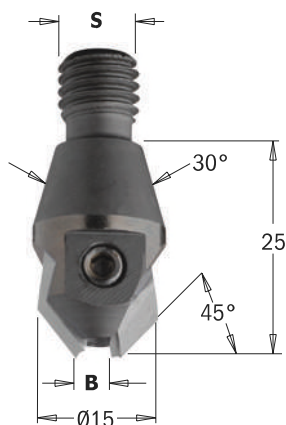
Spare parts



990.001.00

APPLICATION:

for use with spiral bits featuring a parallel shank of equal dimension to countersink shank diameter.



351

B mm	S mm				ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
3	M10/30°			10	351.030.11	351.030.12
4	M10/30°			10	351.040.11	351.040.12
5	M10/30°			10	351.050.11	351.050.12

TECHNICAL DETAILS:

- Super strength steel
- 2 HW precision ground cutting edges [Z2]
- Fastening screw for quick and easy drill bit change.

Spare parts

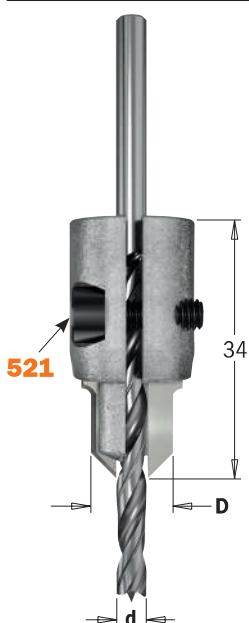


990.001.00

APPLICATION:

for use with spiral bits featuring a parallel shank of equal dimension to countersink shank diameter.

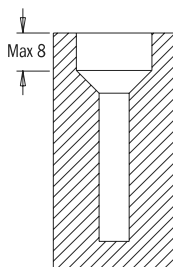
Adjustable Countersink



521.001

HW Z2 RH

d mm	D mm		ORDER NO. Right-hand rotation	Spare parts
3 ~ 7	11 ~ 15		521.001.11	
		10		990.061.00 991.067.00



TWIST DRILLS	OVERALL DIAMETER
Ø3	Ø11
Ø4	Ø12
Ø5	Ø13
Ø6	Ø14
Ø7	Ø15

TECHNICAL DETAILS:

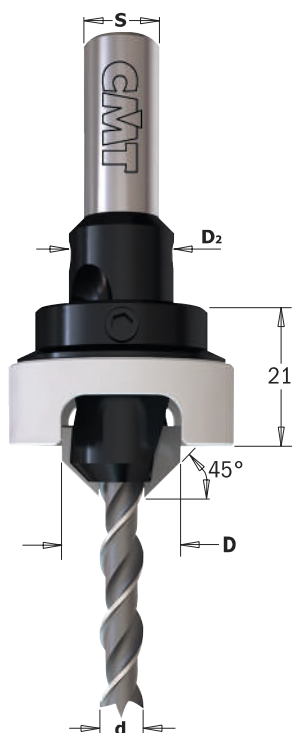
- Super strength steel
- 2 HW precision ground cutting edges [Z2]
- Fastening screw for quick and easy drill bit change.

APPLICATION:

for use with spiral bits featuring a parallel shank of equal dimension to countersink shank diameter.

Twist drill bit NOT included

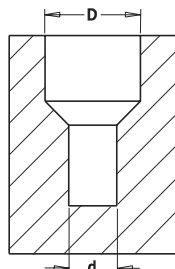
Drill Bits with 45° Countersink Set



521A

d mm	D mm	D ₂ mm	A	S mm		ORDER NO. Right-hand rotation
3	12	10	45°	8	10	521.312.11A
4	12	10	45°	8	10	521.412.11A
4,5	16	14	45°	10	10	521.4516.11A
5	16	14	45°	10	10	521.516.11A
6	16	14	45°	10	10	521.616.11A

Spare parts: **990.014.00** Screw
991.060.00 Hex key



TECHNICAL DETAILS:

- Super strength steel
- Countersink: 2 HW precision ground cutting edges [Z2].

APPLICATION:

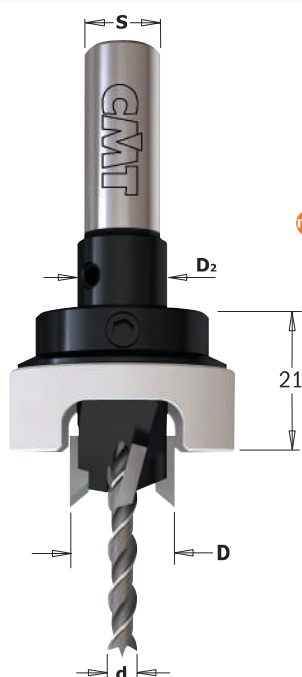
for drilling countersink and blind holes in solid wood, wood derivatives and laminates.
For use with hand-held power drills or drill presses.

Stop collars with precision clamping nut for quick and easy assembly.
The DELRIN® protection sleeve lets you work without marring the workpiece.

Spare parts

521.312.11	517.030.51P	541.101.00
521.412.11	517.040.51P	541.101.00
521.4516.11	517.045.51P	541.141.00
521.516.11	517.050.51P	541.141.00
521.616.11	517.060.51P	541.141.00

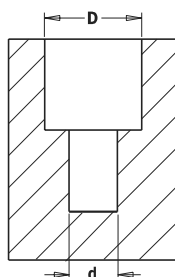
Drill Bits with 90° Countersink Set



515A

d mm	D mm	D ₂ mm	S mm		ORDER NO. Right-hand rotation
4	12	10	10	10	515.412.11A
4	14	12	10	10	515.414.11A
4	15	14	10	10	515.415.11A
5	15	14	10	10	515.515.11A
6	14	12	10	10	515.614.11A
6	15	14	10	10	515.615.11A

Spare parts: **990.014.00** Screw
991.060.00 Hex key



TECHNICAL DETAILS:

- Super strength steel
- Countersink: 2 HW precision ground cutting edges [Z2]
- Countersink: 2 HW negatively ground spurs [V2].

APPLICATION:

for drilling countersink and blind holes in solid wood, wood derivatives and laminates.
For use with hand-held power drills or drill presses.

Stop collars with precision clamping nut for quick and easy assembly.
The DELRIN® protection sleeve lets you work without marring the workpiece.

Spare parts

515.412.11	517.040.51P	541.101.00
515.414.11	517.040.51P	541.121.00
515.415.11	517.040.51P	541.141.00
515.515.11	517.050.51P	541.141.00
515.614.11	517.060.51P	541.121.00
515.615.11	517.060.51P	541.141.00

Stop Collars with DELRIN® Sleeve



541

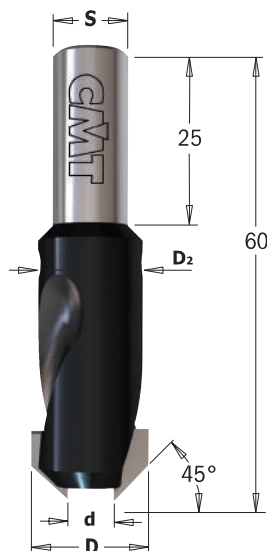
B mm		ORDER NO.
10	1	541.101.00
12	1	541.121.00
14	1	541.141.00

Spare parts

990.014.00	991.060.00
990.014.00	991.060.00
990.014.00	991.060.00

Stop collars with precision clamping nut for quick and easy assembly.
The DELRIN® protection sleeve lets you work without leaving marks on the workpiece.

45° Countersink with Parallel Shank



521

HW **Z2** **RH** **LH**

d mm	D mm	D ₂ mm	A	S mm		ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
3	12	10	45°	8	10	521.312.11	521.312.12
4	12	10	45°	8	10	521.412.11	521.412.12
4,5	16	14	45°	10	10	521.4516.11	
5	16	14	45°	10	10	521.516.11	521.516.12
6	16	14	45°	10	10	521.616.11	521.616.12

Spare parts



990.014.00

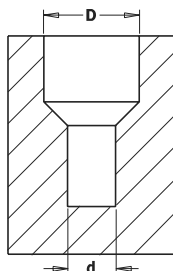
990.014.00

990.014.00

990.014.00

990.014.00

Spare parts: **991.060.00** 2mm hex key



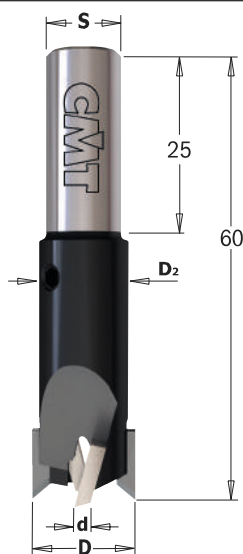
TECHNICAL DETAILS:

- Super strength steel
- 2 HW precision ground cutting edges [Z2].

APPLICATION:

for use with spiral bits featuring a parallel shank of equal dimension to countersink shank diameter.

90° Countersink with Parallel Shank



515

HW **Z2** **V2** **RH**

d mm	D mm	D ₂ mm	A	S mm		ORDER NO. Right-hand rotation	
4	12	10	90°	10	10	515.412.11	
4	14	12	90°	10	10	515.414.11	
4	15	14	90°	10	10	515.415.11	
5	15	14	90°	10	10	515.515.11	
6	14	12	90°	10	10	515.614.11	
6	15	14	90°	10	10	515.615.11	

Spare parts



990.014.00

990.014.00

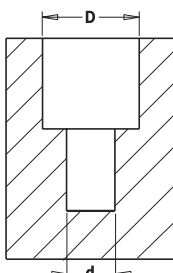
990.014.00

990.014.00

990.014.00

990.014.00

Spare parts: **991.060.00** 2mm hex key



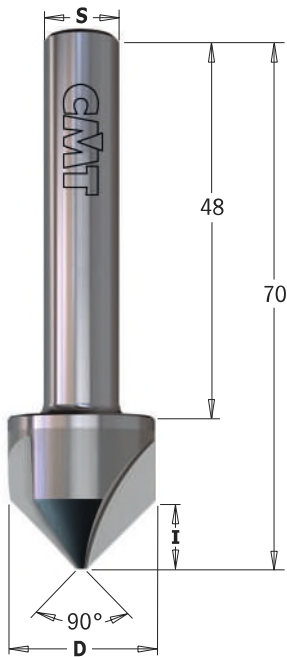
TECHNICAL DETAILS:

- Super strength steel
- 2 HW precision ground cutting edges [Z2]
- 2 HW negatively ground spurs [V2].

APPLICATION:

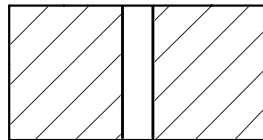
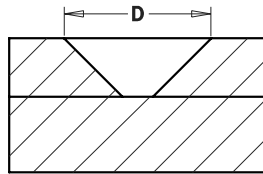
for use with spiral bits featuring a parallel shank of equal dimension to countersink shank diameter.

90° Solid Carbide Countersink with Parallel Shank



521

D mm	I mm	L mm	S mm		ORDER NO. Right-hand rotation
19,5	9	70	10x48	10	521.002.11

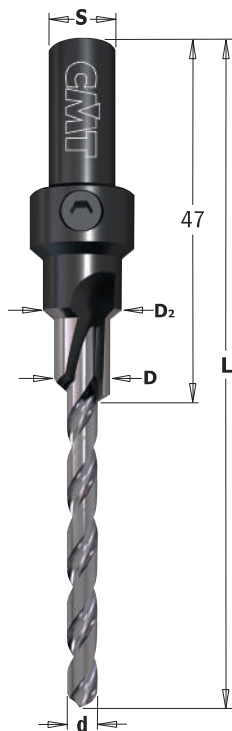


For drilling use bits
series **516** or **517**

TECHNICAL DETAILS:

- For making 90° countersink blind holes accepting flat-head fasteners that sit flush with the surface.
- 3 wear-resistant precision ground cutting edges providing a smooth finish on hardened materials.
- Solid carbide tool that is harder than cobalt steel, providing a longer tool life at higher speeds.
- Parallel shank to accommodate most drill chucks.
- Suitable for wood, wood-based, non-ferrous materials and metal.

Drill Bit with Countersink for Screw Joints



515

d mm	D mm	D ₂ mm	L mm	S mm		ORDER NO. Right-hand rotation
4,2	7,6	10,6	87	9	1	515.042.31
5	7,6	10,6	93,7	9	1	515.050.31

TECHNICAL DETAILS:

- Super strength SP steel
- Long lasting cutting performance
- 1 SP precision ground cutting edge [Z1]
- 1 spiral flute.

APPLICATION:

for drilling blind holes in soft and hardwood.

