

Welcome to the 2016/2017 catalogue

Dear Customer,

Thank you for your interest in CMT products.

Take a moment to browse our new catalogue and choose from a wider range of innovative and state-of-the-art woodworking tools, from router bits, saw blades, jig and sabre saw blades, hole saws, and boring bits to oscillating tools, CNC cutters, cutter heads, chucks, power tools, and so much more!

A detailed list of spare parts on each product category is also provided to guide you through your purchase.

We continually strive to develop our technical know-how and invest in research and development, but our priority is customer care.

A satisfied customer is worth more than any other achievement, therefore each page of this catalog contains CMT's highest commitment to the professional woodworker.

Should you not find a product that suits your needs, please let us know.

Our highly skilled engineers and design technicians are always keen to assist you with your woodworking operations.

Thank you for your interest in CMT Orange Tools.

Your CMT Team

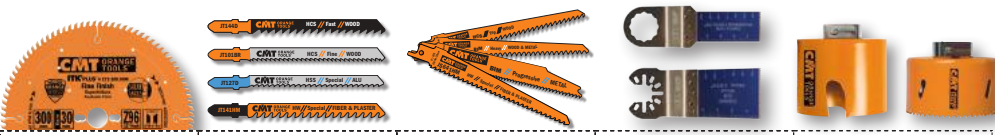


Abbreviations

A	= Cutting angle	Inches	= Inches
α	= Hook angle	K	= Kerf thickness
ATB	= Alternate top bevel grind	L	= Overall length
B	= Bore diameter	L₁	= Working length
β	= Type of grind	LB	= Adjusting length
COMBI3	= Pin-Hole 2/7/42 + 2/9/46,4 + 2/10/60	LH	= Left-hand rotation
COMBI5	= Pin-Hole 2/7/110 + 2/8,4/130 + 2/14/110 + 4/9/100 + 4/19/120	MATB	= Alternate top bevel with chamfer grind
COMBI7	= Pin-Hole 2/10/80 + 1/11/85 + 2/11/115 + 2/11/148 + 2/14/100 + 2/14/125 + 2/19/120	MTCG	= Triple chip grind (trapezoidal) with chamfer
d	= Small cutting diameter	mm	= Millimeters
D	= Diameter	P	= Plate thickness
D₂	= Overall diameter	PTFE	= Non-stick industrial coating, black and orange
D₃	= For shank diameter	R	= Radius
\emptyset	= Diameter	R₁	= Radius
FFT	= Flat flat trapezoidal	RH	= Right-hand rotation
FTG	= Flat top grind	RPM	= Round per minute
FWF	= Flat with alternate chamfer	S	= Shank diameter
H	= Cutting depth	S₁	= Shank diameter
HDF	= Hollow ground teeth	T₁	= Thickness / Maximum joint thickness
I	= Cutting length	TCG	= Triple chip grind (trapezoidal)
l₁	= Short cutting length	V	= Spurs
		Z	= Number of teeth
		\square	= On request
		\bullet	= Solid tungsten carbide

THE RIGHT TOOLS FOR THE BEST RESULTS!

Quick reference charts and pictograms help you choose the right tools for your application.



	SAW BLADES	JIG SAW BLADES	SABRE SAW BLADES	MULTI-CUTTERS	HOLE SAWS
WOOD					CARBIDE
WOOD & METAL			✓	✓	
METAL					BI-METAL
ALUMINIUM					
MULTI-MATERIAL					
PLASTIC					
MASONRY					DIAMOND
SPECIAL					

SINCE 1962 - MADE IN ITALY THEN, STILL MADE IN ITALY TODAY

By now, the story has been told. After over 50 years of success and quality in manufacturing woodworking tools - orange woodworking tools, to be precise - word just sort of gets around. We have grown and we have changed, but one thing still remains the same: our commitment to making only the highest quality woodworking tools.



Pesaro, Italy



Greensboro, United States



Valencia, Spain

NEW! CMT Global Web Site!

- Full line catalogue available on line
- Instructional video on select products
- Instruction manuals available for download
- Listing of authorized CMT distributors
- Company history, tech information, testimonials and more!

CMT ORANGE TOOLS

THE ART OF CUTTING

Market Area: Where are you from?

Language: Choose favourite:

News: [News](#)
[RWF 2008 - August 20-23, 2008](#)
[Atlanta](#)
[More news](#)

OUR TOOLS So, what does it take to make a CMT tool? Like all things of quality, it's not only what you do but how you do it. And anyone who works wood knows that you get out of a piece only what you put into it, and it is no different when manufacturing a tool. You choose your designs and materials carefully and you work using all of your skill and know-how. You'll be happy to know that's what we do at CMT too.

DESIGN

Everything starts with a clear idea and having the potential to express it. We have both. At CMT, our technical department uses the best of both worlds - computer technology and hands-on experience - to engineer and design each tool so that it performs flawlessly each time you use it, and to guarantee that you'll be using it for a long, long time.

MATERIALS

Turning a design into a finished product means finding the right material that will do the job and that lives up to the specifications set out in the design - quality performance from the final product depends on it. When it comes to selecting raw materials, we don't cut corners. At CMT, we know that high quality tools come only from high quality raw materials, so we use only solid bar stock steel and specially formulated micrograin carbide to manufacture our bits and blades.

MANUFACTURING

Like we said, it's not just what you do but how you do it. Over the years we have continuously invested in the latest technology in CNC machining equipment and innovative software to manufacture our tools. The result is that now our entire manufacturing process, from turning and milling the steel shanks to brazing and sharpening the carbide cutting tips, is completely automated. And since a machine is only as intelligent as the person using it, everything is operated by specifically trained operators.

THE FINAL TOUCH

A tool simply wouldn't be a CMT tool if it didn't have the trademark orange color non-stick PTFE coating on it. This unique industrial-strength surface coating is designed to withstand the physical stresses the tool undergoes during use while protecting it from residue build-up and burning. And we really like the orange color too.



QUALITY CONTROL

Nobody's perfect, but we're trying. CMT uses rigorous quality control programs and equipment to ensure that each bit has been manufactured with precision and accuracy and that it will give the long-lasting performance you expect from a CMT orange tool. CMT is in the process of adopting the directives set out in ISO 9001 which will give SPC quality control by an independent party under the Common Market Directives ISO 9001. Quality control is the final step of the production process, but it's just as important as the first.

WE RECYCLE

The water used during production must be pure and free from contaminants or hard minerals like iron or calcium which can build up and damage the machinery. CMT filters and purifies its water using a reverse osmosis system located inside the plant. Also the oil used in grinding and machining our tools must be clean and absolutely free of contaminants. Clean oil, after enough use, gets dirty, so we filter and reprocess dirty oil on the premises. This is our way of guaranteeing the quality of the oil we use, as well as contributing to help protect the environment.

OUR TRADEMARK COLOR ORANGE

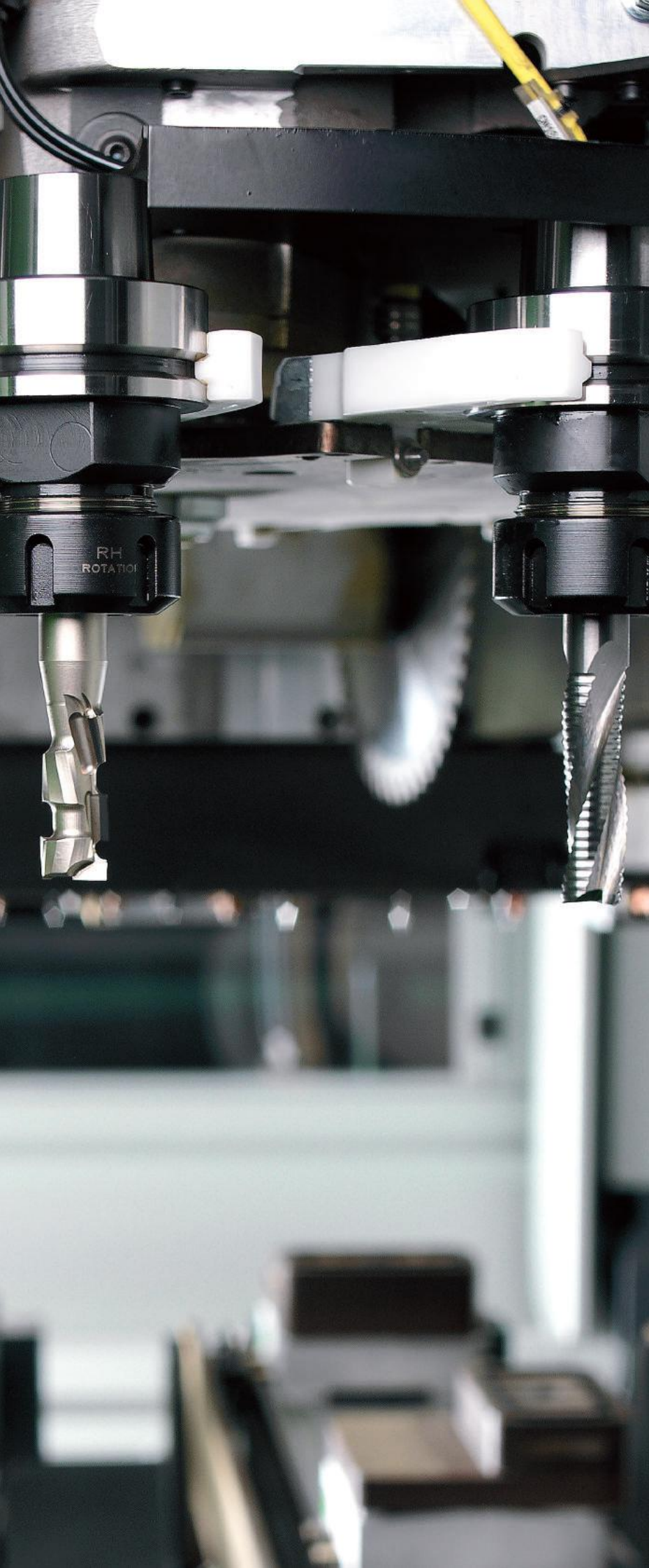
As the story goes, we began small. We also put orange color surface coating on our tools, then we put our tools on the market and soon our orange tools were all over the world. Now, any woodworker anywhere in the world can tell you that orange tools means CMT, and that CMT means quality. Here at CMT we know we produce quality. You should too. That's why we have trademarked the color orange on woodworking tools - it's your guarantee that you are getting a genuine high-quality CMT product.



Loading the automated multi-axis CNC sharpening machines.



Fully automated assembly and marking.



CNC ROUTER CUTTERS & CHUCKS

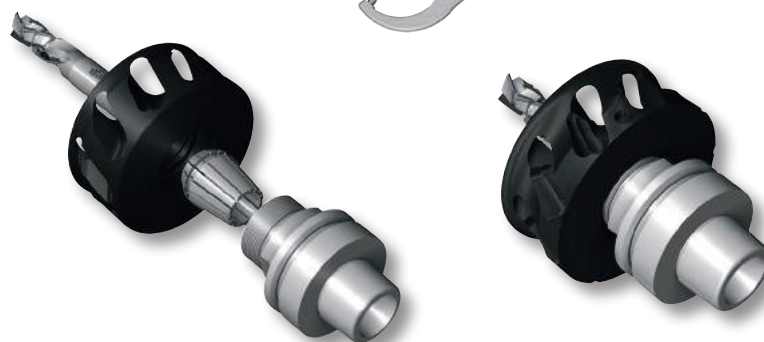
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CNC Chucks	217~220
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CNC Straight Cutters	234~242
CNC Profiled Cutters	243~246
Slot & Mortise Bits	246~252



992 Removes MDF & Chipboard dust from the workpiece

DESCRIPTION	D mm	ORDER NO.
Kinetic Dust Extractor for chucks with DIN6388/EOC25 collets	100	992.101.EOC25
Kinetic Dust Extractor for chucks with ER32 collets	100	992.101.ER32
Kinetic Dust Extractor for chucks with ER40 collets	100	992.101.ER40

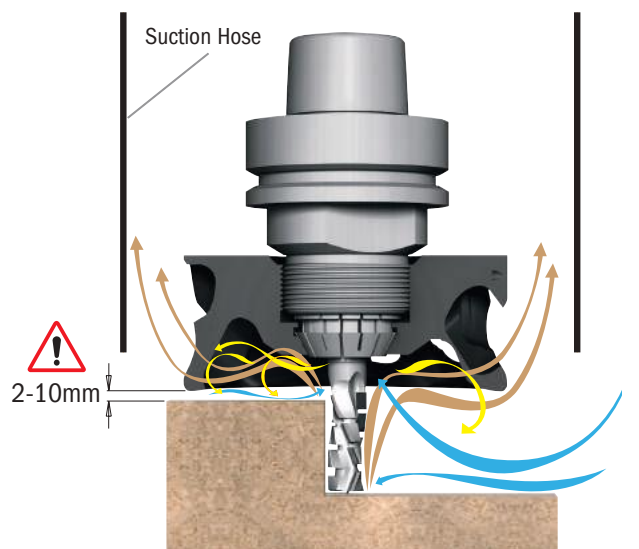
Spare parts 991.284.00 C-Spanner 95-100mm



EASY TO USE!

Install & remove as a clamping nut

- Health & Safety
- Tool Performance & Cut Quality
- Tool Life & Labor Costs
- Recommended for Nesting and Routing operations
- No wasted time during work process
- Replaces the standard clamping nut
- Suitable for any collet chucks with standard router bits
- Available for ER32 - ER40 - EOC25 (DIN6388) collets
- The thick ceramic coat gives to KDE an anti-corrosion, anti-friction and anti-static surface.
- Tool body in light alloy
- Better air quality
- Good performances even at low rpm: from 6,000 up to 20,000 rpm
- Material: chipboard, coated chipboard, MDF, Corian®, plasterboard, OSB, HPL.



Compressed Air Dust Air Vacuumed



Download Instruction

Watch the video on

You Tube



Watch Video

Working **WITHOUT** Kinetic Dust Extractor



Working **WITH** Kinetic Dust Extractor



HSK Chucks for "ER40" Precision Collets



183.310

RH LH

S	DESCRIPTION	To be used with collet	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
HSK-F63	Clamping nut without bearing	ER40	183.310.01	183.310.02
HSK-F63	Clamping nut with bearing	ER40	183.310.11*	

* Suitable for right-hand and left-hand rotation.

For Homag, Eima, IMA from 9/94, Dubus, Weeke, Biesse, SCM, Morbidelli and Masterwood machines.

ISO30 Chucks for "ER40" Precision Collets



995.200

183.201

RH

S	To be used with collet	Retaining stud mm	ORDER NO. Right-hand rotation
ISO30	ER40	Ø12-8	183.201.01

For Biesse machines



995.201

183.211

RH

S	To be used with collet	Retaining stud mm	ORDER NO. Right-hand rotation
ISO30	ER40	Ø13-9	183.211.01

For Biesse machines with Omlat engine, Bulleri, Busellato, CMS and IMA machines.



995.202

183.221

RH

S	To be used with collet	Retaining stud mm	ORDER NO. Right-hand rotation
ISO30	ER40	Ø12,8-9	183.221.01

For Alberti and Masterwood machines.

Clamping Nuts for Chucks with "ER40" Precision Collets



992.383

RH LH

DESCRIPTION	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
Clamping nut without bearing For 183.201/211/221/310 chucks	992.383.01	992.383.02
Clamping nut with bearing For 183.201/211/221/310 chucks	992.383.11	

C-spanner for "ER40" Precision Collets



991.184

DESCRIPTION	ORDER NO.
C-Spanner for "ER40" precision collet	991.184.00

HSK Chuck for “ER32” Precision Collets



183.300

RH **LH**

S	DESCRIPTION	To be used with collet	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
HSK-F63	Clamping nut without bearing	ER32	183.300.01	183.300.02
HSK-F63	Clamping nut with bearing	ER32	183.300.11*	

* Suitable for right-hand and left-hand rotation.

For Homag, Eima from 9/94, Dubus, Weeke, Biesse, SCM, Morbidelli and Masterwood machines.

ISO30 Chucks for “ER32” Precision Collets



183.200

RH **LH**

S	To be used with collet	Retaining stud mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
ISO 30	ER32	Ø12-8	183.200.01	183.200.02

For Biesse machines.

183.210

RH **LH**

S	To be used with collet	Retaining stud mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
ISO 30	ER32	Ø13-9	183.210.01	183.210.02

For Biesse machines with Omlat engine, Bulleri, Busellato, CMS and IMA machines.

183.220

RH **LH**

S	To be used with collet	Retaining stud mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
ISO 30	ER32	Ø12,8-9	183.220.01	183.220.02

For Alberti and Masterwood machines.

ISO30 Chucks for “ER32” Precision Collets



183.250 without aluminium flange

RH **LH**

S	To be used with collet	Retaining stud mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
ISO 30	ER32	Ø8,5	183.250.01	183.250.02

For Morbidelli and SCM machines.

183.251 with aluminium flange already assembled Ø69,5mm.

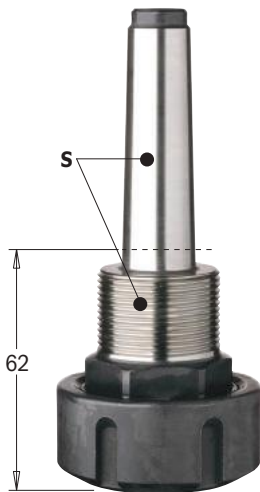
RH **LH**

S	To be used with collet	Retaining stud mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
ISO 30	ER32	Ø8,5	183.251.01	183.251.02

Spare parts 992.501.00 Ø69,5mm aluminium flange *

For Morbidelli and SCM machines.

Chucks for "ER32" Precision Collets



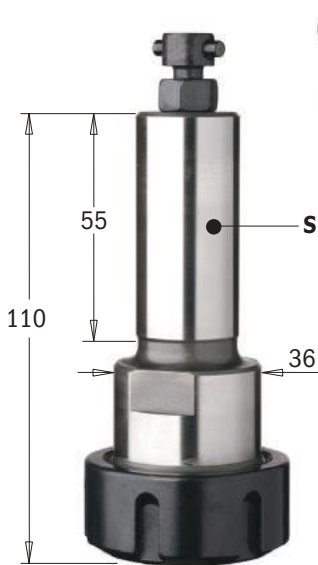
183.000/100

RH **LH**

S mm	To be used with collet	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
MK2/M30x1,5	ER32	183.000.01	183.000.02
MK3/M30x1,5	ER32	183.100.01	

MK2/MK3 tapered shank

Chucks for "ER32" Precision Collets



995.400

183.400

RH

S mm	To be used with collet	Retaining stud	ORDER NO. Right-hand rotation
Ø25x55	ER32	PS LEUCO	183.400.01

For machines with PS Leuco system.

Clamping Nuts for Chucks with "ER32" Collets



992.183

RH **LH**

DESCRIPTION	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
Clamping nut without bearing For 183.000/100/200/250/300/400 chucks	992.183.01	992.183.02
Clamping nut with bearing For 183.000/100/200/250/300/400 chucks	992.183.11	992.183.12

C-Spanner for "ER32" Precision Collets

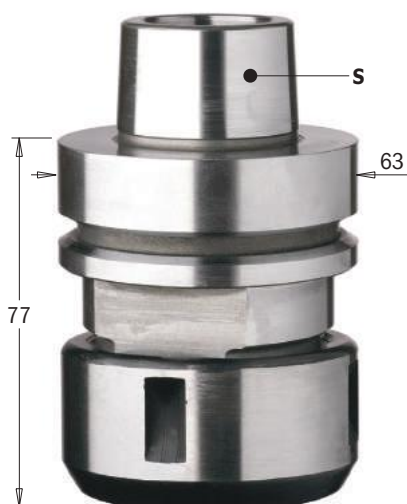


991.183

DESCRIPTION	ORDER NO.
C-Spanner for "ER32" precision collets	991.183.00

HSK Chuck for "DIN6388" - EOC25 Precision Collet

RH



183.320

S	DESCRIPTION	To be used with collet	ORDER NO. Right-hand rotation
HSK-F63	HSK chuck with bearing nut	EOC-25	183.320.01*

Spare parts 992.283.11 Clamping nut with bearing

* Suitable for left-hand rotation too.

For Homag, Eima from 9/94, Dubus, Weeke, Biesse, SCM, Morbidelli & Masterwood machines.

Clamping Nuts



992.283

DESCRIPTION	ORDER NO. Right-hand rotation
Clamping nut without bearing	992.283.01
Clamping nut with bearing	992.283.11

For chuck 183.320.

C-Spanner for "DIN6388" & "ER40"



991.283

DESCRIPTION	ORDER NO.
C-Spanner for USAG 58-62-65	991.283.00

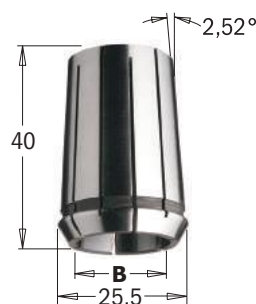
Precision Collets "DIN6388"



185 - EOC-25

mm	B	inches	ORDER NO.	mm	B	inches	ORDER NO.
3			185.030.00	13		1/2	185.130.00
4			185.040.00	14			185.140.00
5			185.050.00	16		5/8	185.160.00
6			185.060.00	18			185.180.00
8		5/16	185.080.00	20			185.200.00
10			185.100.00	25			185.250.00
12			185.120.00				

REMARK: special dimensions available on request.

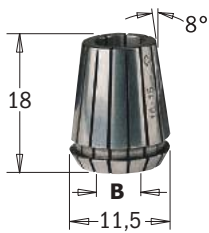


185 - EOC-16

new

mm	B	inches	ORDER NO.	mm	B	inches	ORDER NO.
6			185.060.16	12			185.120.16
8		5/16	185.080.16	14			185.140.16
10			185.100.16	16		5/8	185.160.16

REMARK: special dimensions available on request.



184 - ER11

B mm	ORDER NO.
2	184.020.11
3	184.030.11
4	184.040.11
5	184.050.11
6	184.060.11

TECHNICAL DETAILS:

- replaceable Std "ER11" collets (from 1 to 7mm)
- fit most tapered spindle noses
- +0-0,7mm wide clamping tolerance
- suitable for most conical chucks.

REMARK: special dimensions available on request.



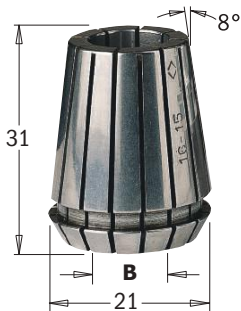
184 - ER16

B mm	ORDER NO.
2	184.020.16
3	184.030.16
4	184.040.16
5	184.050.16
6	184.060.16
7	184.070.16
8	184.080.16
9	184.090.16
10	184.100.16

TECHNICAL DETAILS:

- replaceable Std "ER16" collets (from 1 to 10mm)
- fit most tapered spindle noses
- +0-0,7mm wide clamping tolerance
- suitable for most conical chucks.

REMARK: special dimensions available on request.



184 - ER20

B mm	ORDER NO.
2	184.020.20
3	184.030.20
4	184.040.20
5	184.050.20
6	184.060.20
6,35	184.064.20
7	184.070.20
8	184.080.20
9	184.090.20
10	184.100.20
11	184.110.20
12	184.120.20
12,7	184.127.20
13	184.130.20

TECHNICAL DETAILS:

- replaceable Std "ER20" collets (from 1 to 13mm)
- fit most tapered spindle noses
- +0-0,7mm wide clamping tolerance
- suitable for most conical chucks.

REMARK: special dimensions available on request.



184 - ER25

B mm	ORDER NO.
3	184.030.25
4	184.040.25
5	184.050.25
6	184.060.25
8	184.080.25
9	184.090.25
10	184.100.25
12	184.120.25
13	184.130.25
14	184.140.25
16	184.160.25

TECHNICAL DETAILS:

- replaceable Std "ER25" collets (from 1 to 16mm)
- fit most tapered spindle noses
- +0-0,7mm wide clamping tolerance
- suitable for most conical chucks.

REMARK: special dimensions available on request.



184 - ER32

B mm	ORDER NO.
3	184.030.00
4	184.040.00
5	184.050.00
6	184.060.00
6,35	184.065.00
7	184.070.00
8	184.080.00
9	184.090.00
9,52	184.095.00
10	184.100.00
11	184.110.00
12	184.120.00
13	184.130.00
14	184.140.00
15	184.150.00
16	184.160.00
17	184.170.00
18	184.180.00
19	184.190.00
20	184.200.00

For chucks
183.000/100/200/250/300/400

TECHNICAL DETAILS:

- replaceable Std "ER32" collets (from 3 to 20mm)
- fit most tapered spindle noses
- +0-0,7mm wide clamping tolerance
- suitable for most conical chucks.

REMARK: special dimensions available on request.



184 - ER40

B mm	ORDER NO.
3	184.032.00
4	184.042.00
5	184.052.00
6	184.062.00
7	184.072.00
8	184.082.00
9,52	184.096.00
10	184.102.00
12	184.122.00
13	184.132.00
14	184.142.00
16	184.162.00
18	184.182.00
19	184.192.00
20	184.202.00
25	184.252.00

For chucks
183.201/211/221/310

TECHNICAL DETAILS:

- replaceable Std "ER40" collets (from 3 to 25mm)
- fit most tapered spindle noses
- +0-0,7mm wide clamping tolerance
- suitable for most conical chucks.

REMARK: special dimensions available on request.

Cap Nuts for CNC Machines



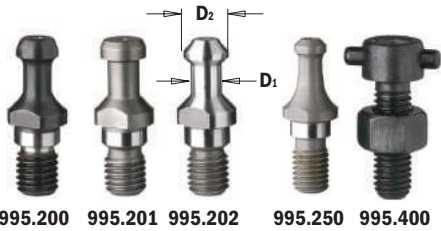
993.0

RH LH

Internal thread				ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
Ø20x14Fx1"				993.020.01	993.020.02
M30x1,5				993.030.01	993.030.02

For machines with M33x3 threaded spindle nose.

ISO30 Retaining Studs



DESCRIPTION	D ₁ mm	D ₂ mm	ORDER NO.
Retaining stud for 183.200/201 "Biesse" chucks	8	12	995.200.00
Retaining stud for 183.210/211 "Biesse, Omlat, Bulleri, Busellato, Weeke and IMA" chucks	9	13	995.201.00
Retaining stud for 183.220/221 "Alberti-Masterwood" chucks	9	12,8	995.202.00
Retaining stud for 183.250/251 "SCM - Morbidelli" chucks	6,5	8,5	995.250.00
Retaining stud for "PS and Leuco" 183.400 chucks	M8		995.400.00

Cutter Arbor with HSK Tapered Shank



183.360

RH LH

S	d mm	D mm		ORDER NO.
HSK-F63	Ø30x100	63		183.360.00
new HSK-F63	Ø30x150	63		183.360.10
HSK-F63	Ø35x100	63		183.361.00
HSK-F63	Ø40x100	63		183.362.00

For Homag, Eima from 9/94, Dubus, Weeke, Biesse, SCM, Morbidelli and Masterwood machines.

Cutter Arbor with ISO30 Tapered Shank



183.260

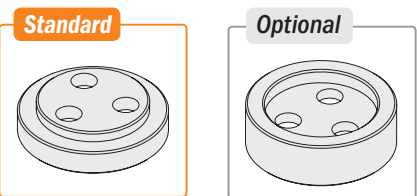
RH LH

S	D mm	D ₃ mm		ORDER NO.
ISO 30	Ø30x100	50		183.260.00

For Biesse machines.

REMARK: special dimensions available on request.

Spare Parts for Chucks



DESCRIPTION	ORDER NO.	DESCRIPTION	ORDER NO.
M6x25 TCEI screw	990.098.00	Optional	
Steel flange for with Ø30mm arbors - Male	992.560.30M	Steel flange for with Ø30mm arbors - Female	992.560.30F
Steel flange for with Ø35mm arbors - Male	992.560.35M	Steel flange for with Ø35mm arbors - Female	992.560.35F
Steel flange for with Ø40mm arbors - Male	992.560.40M	Steel flange for with Ø40mm arbors - Female	992.560.40F



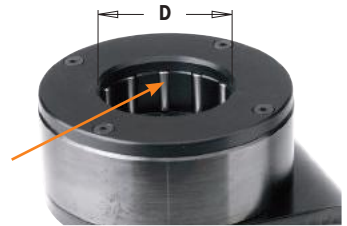
183

DESCRIPTION	D mm	ORDER NO.
Universal assembly supports for chucks HSK-F63	63	183-HSK
Universal assembly supports for chucks ISO30	50	183-ISO

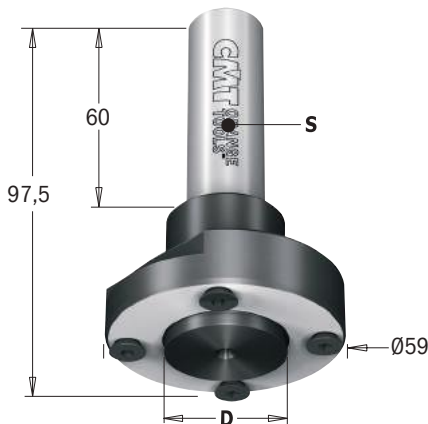
For HSK-F63 and ISO30 chucks

CMT now offers new universal assembly supports for HSK-F63 and ISO30 chucks. Thanks to the bidirectional roller bearings, which clamp the tool left-hand rotation older to the flange, the system offers the highest protection to the tool taper and clamps are no longer needed.

The special bidirectional roller bearing clamps the tool left-hand rotation older to the flange, offering the highest protection to the tool taper.




Saw Blade Arbor with Parallel Shank



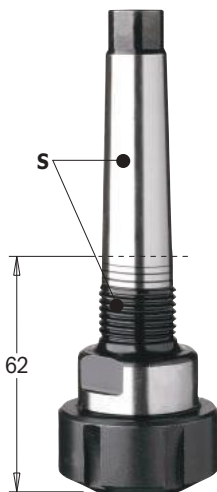
183.410

RH
LH

S mm	D mm	Pin Hole 	L mm	ORDER NO.
20	30	4/M6/48	97,5	183.410.30

Spare parts	990.083.00	M6x10mm TCEI screw
	991.067.00	3mm allen key
	991.064.00	4mm allen key

Collet Chucks Clamp with MK2 Tapered Shank



123

RH
LH

S	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
MK2/Ø20x14Fx1"	123.000.01	123.000.02

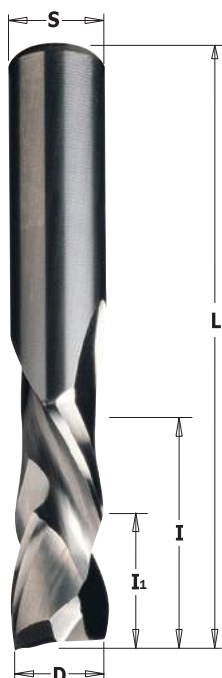
Spare parts	992.123.01	Clamping nut RH
	992.123.02	Clamping nut LH
	991.123.00	Type 40-42 USAG c-spanner

Collets for 123 Chucks

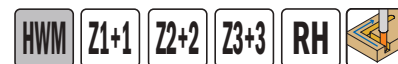


124

D ₃ mm	ORDER NO.	D ₃ mm	ORDER NO.
6	124.060.00	10	124.100.00
6,35	124.064.00	12	124.120.00
8	124.080.00	12,7	124.127.00
9,5	124.095.00	14	124.140.00



190



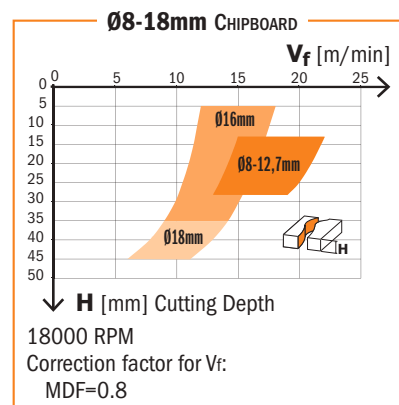
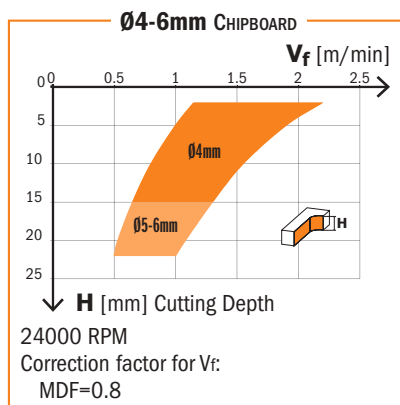
D mm	I mm	I ₁ mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
4	15	7	50	4	1+1	190.040.11
5	22	8	60	5	1+1	190.050.11
6	22	8	60	6	1+1	190.060.11
8	32	7	80	8	2+2	190.080.11
9,52	28,6	7	76,2	9,52	2+2	190.504.11
10	32	7	80	10	2+2	190.100.11
10	42	7	90	10	2+2	190.101.11
12	42	7	90	12	2+2	190.120.11
12	52	7	100	12	2+2	190.121.11
12,7	25,4	16	76,2	12,7	2+2	190.505.11
12,7	28,6	16	76,2	12,7	2+2	190.506.11
12,7	34,9	16	88,9	12,7	2+2	190.507.11
12,7	41,3	16	101,6	12,7	2+2	190.508.11
16	55	24	110	16	2+2	190.160.11
18	55	30	110	18	2+2	190.180.11
...up & downcut mortising bits						
9,52	22,2	4,8	76,2	9,52	2+2	190.513.11
9,52	25,4	5,2	76,2	9,52	3+3	190.813.11
12	25	5,2	83	12	3+3	190.320.11
12,7	22,2	5,2	76,2	12,7	2+2	190.515.11
12,7	34,9	5,2	88,9	12,7	2+2	190.517.11

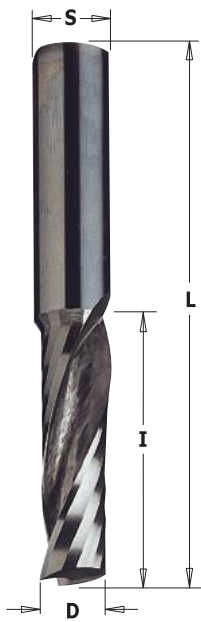
TECHNICAL DETAILS:

- Premium quality HWM.
- 2+2 spiral cutting edges [Z2+2].
- 3+3 spiral cutting edges [Z3+3].
- Provide an excellent finish on both the upper and the lower side of the workpiece.

APPLICATION:

used for cutting, copying, panel sizing and any routing application on solid wood, wood composites, plastic materials and laminates. Use a high feed speed on well-clamped workpieces. Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.





198



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation
3	12	50	3	198.030.11
3,18	12,7	50,8	6,35	198.001.11
4	15	50	4	198.040.11
4,76	15,87	50,8	6,35	198.005.11
5	17	50	5	198.050.11
6	22	60	6	198.060.11
6,35	19,05	50,8	6,35	198.007.11
6,35	25,4	63,5	6,35	198.008.11
8	22	70	8	198.080.11
8	32	80	8	198.081.11
9,52	28,57	76,2	9,52	198.504.11
10	32	70	10	198.100.11
10	42	80	10	198.101.11
10	52	90	10	198.102.11
12	32	83	12	198.120.11

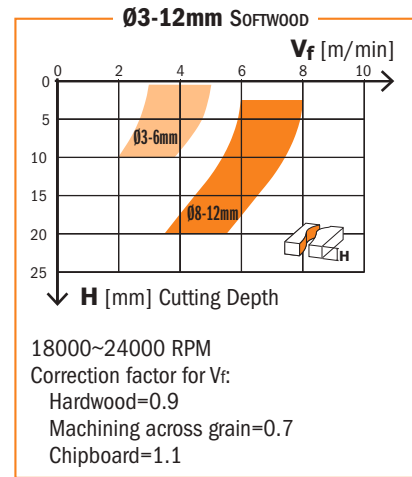
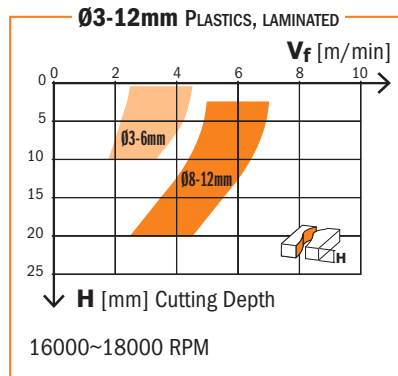
TECHNICAL DETAILS:

- Premium quality HWM.
- 1 spiral cutting edge [Z1].
- Provide an excellent finish on the lower side of the workpiece.
- **Upward chip ejection.**

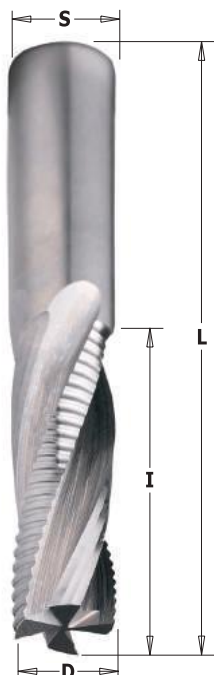
APPLICATION:

used for cutting, copying, panel sizing and any routing applications on solid wood, wood composites, plastic materials and laminates. Use a high feed speed on well-clamped workpieces.

Can be used on machining centres, point to point machines, CNC routers and hand-held routers equipped with chucks or adaptors.



Solid Carbide Upcut Spiral Bits



197



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation
12	42	90	12	197.121.11
14	50	110	14	197.140.11
16	55	110	16	197.160.11
16	35	90	16	197.161.11
18	55	110	18	197.180.11
20	60	120	20	197.200.11
20	70	120	20	197.201.11

TECHNICAL DETAILS:

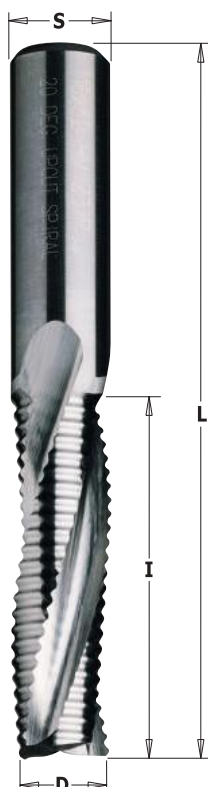
- Premium quality HWM.
- 4 spiral cutting edges (2 with chip-breaker) [Z2+2R].
- Max 0.1mm tooth depth.
- Provide excellent finish on the lower side of the workpiece.
- **Upward chip ejection.**

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood and wood composites. Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.



The special 4 flute design (Z2 finishing + Z2R with chipbreaker) allows high speed with excellent finish on the workpiece.



195

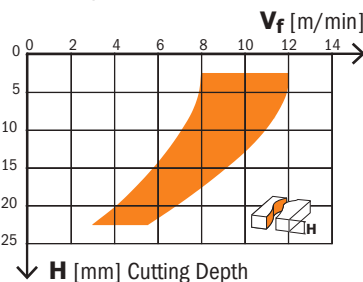
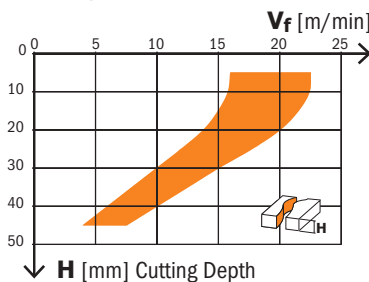
D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	32	80	8	195.081.11	195.081.12
8	42	90	8	195.082.11	
10	32	80	10	195.100.11	195.100.12
10	42	90	10	195.101.11	
12	35	83	12	195.120.11	195.120.12
12	42	90	12	195.121.11	
12	52	100	12	195.122.11	
12,7	38,1	88,9	12,7	195.506.11	
14	58	110	14	195.140.11	
15,88	54	109,5	15,88	195.509.11	
16	55	110	16	195.160.11	195.160.12
16	35	90	16	195.161.11	
16	72	120	16	195.165.11	
18	55	110	18	195.180.11	
19,05	54	109,5	19,05	195.511.11	
20	60	120	20	195.200.11	195.200.12
20	72	120	20	195.201.11	
20	102	165	20	195.202.11	

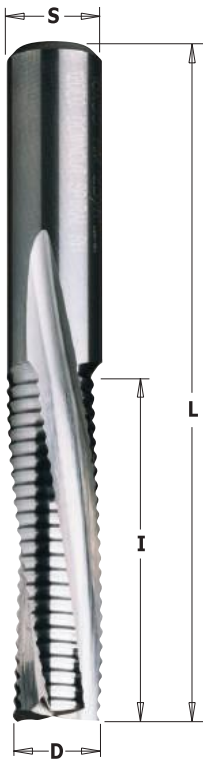
TECHNICAL DETAILS:

- Premium quality HWM.
- 3 spiral cutting edges [Z3R].
- Chip breaker teeth.
- Max 0.3mm tooth depth.
- Provide an excellent finish on the lower side of the workpiece.
- **Upward chip ejection.**

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, or wood composites. Can be used at a high feed speed on well-clamped workpieces. Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.

Ø8-10mm SOFTWOOD**Ø12-20mm SOFTWOOD**



196



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	32	80	8	196.081.11	
10	42	90	10	196.101.11	
12	35	83	12	196.120.11	196.120.12
12	42	90	12	196.121.11	
12	52	100	12	196.122.11	
12,7	38,1	88,9	12,7	196.506.11	
14	50	110	14	196.140.11	
15,88	54	109,5	15,88	196.509.11	
16	55	110	16	196.160.11	196.160.12
18	55	110	18	196.180.11	
19,05	54	109,5	19,05	196.511.11	
20	60	120	20	196.200.11	196.200.12
20	72	120	20	196.201.11	

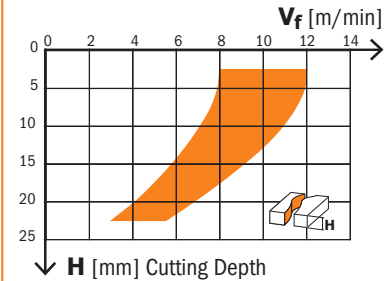
TECHNICAL DETAILS:

- Premium quality HWM.
- 3 spiral cutting edges [Z3R].
- Chip breaker teeth.
- Max 0.3mm tooth depth.
- Provide excellent finish on the upper side of the workpiece.
- **Downward chip ejection.**

APPLICATION:

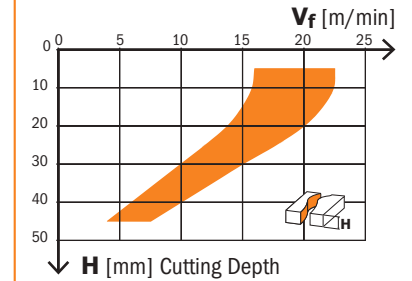
used for ripping, template routing, panel sizing and any routing application on solid wood and wood composites.
Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.

Ø8-10mm SOFTWOOD



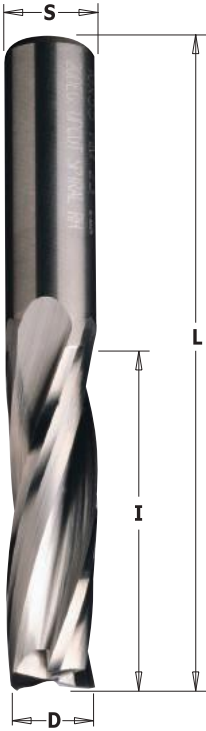
18000 RPM
Correction factor for Vr:
Hardwood=0.8
Chipboard without coating=1.3

Ø12-20mm SOFTWOOD



18000 RPM
Correction factor for Vr:
Hardwood=0.8
Chipboard without coating=1.3

Solid Carbide Upcut Spiral Bits



193

D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
8	32	80	8	193.081.11	193.081.12
10	32	80	10	193.100.11	193.100.12
10	42	90	10	193.101.11	
12	35	83	12	193.120.11	193.120.12
12	42	90	12	193.121.11	
12	52	100	12	193.122.11	
14	58	110	14	193.140.11	
16	55	110	16	193.160.11	193.160.12
16	35	90	16	193.161.11	
16	72	120	16	193.165.11	
18	55	110	18	193.180.11	
20	60	120	20	193.200.11	193.200.12
20	70	120	20	193.201.11	

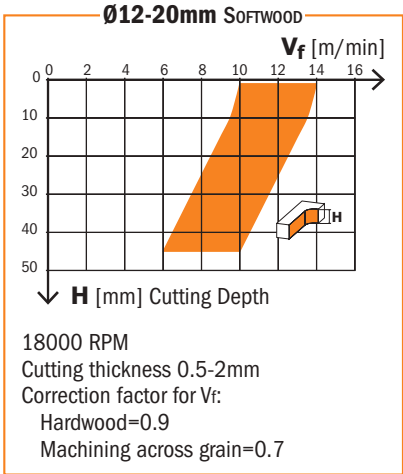
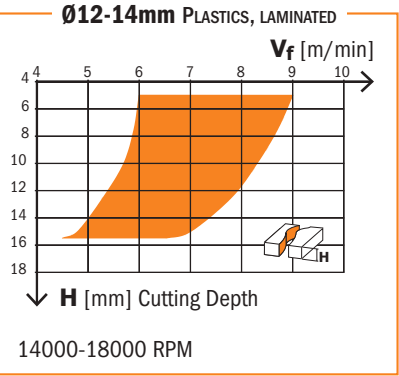
TECHNICAL DETAILS:

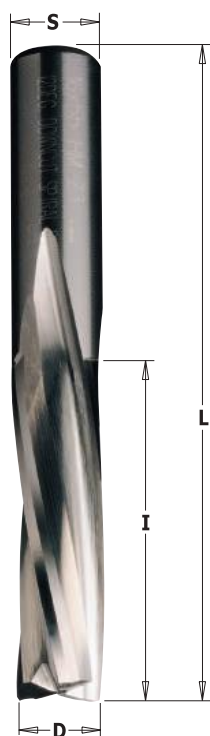
- Premium quality HWM.
- 3 spiral cutting edges [Z3].
- Provide an excellent finish on the lower side of the workpiece.
- **Upward chip ejection.**

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, or wood composites. Can be used at a high feed speed on well-clamped workpieces.

Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.





194



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
10	32	80	10	194.100.11	
10	42	90	10	194.101.11	
12	35	83	12	194.120.11	194.120.12
12	42	90	12	194.121.11	
14	50	110	14	194.140.11	
16	55	110	16	194.160.11	194.160.12
16	35	90	16	194.161.11	
18	55	110	18	194.180.11	
20	60	120	20	194.200.11	194.200.12
20	72	120	20	194.201.11	
20	102	165	20	194.202.11	

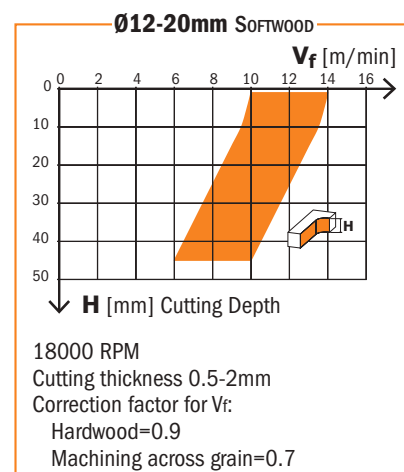
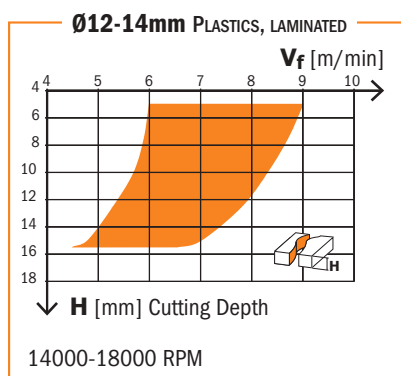
TECHNICAL DETAILS:

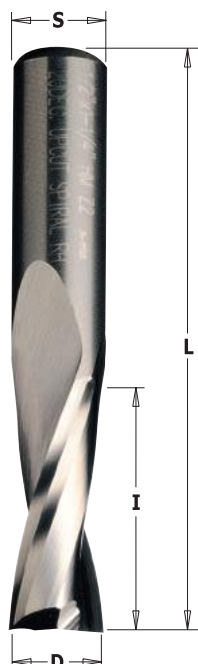
- Premium quality HWM.
- 3 spiral cutting edges [Z3].
- Provide an excellent finish on the upper side of the workpiece.
- **Downward chip ejection.**

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, wood composites, plastic materials and laminates. Can be used at a high feed speed on small, difficult to clamp workpieces.

Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.

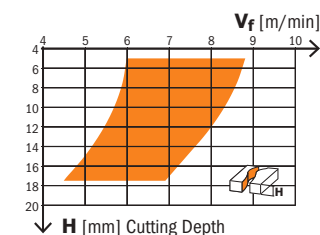




191

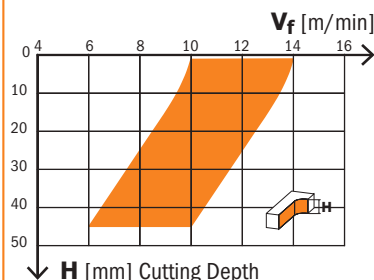
D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
3	12	50	3	191.030.11	
3	12	60	6	191.630.11	
3	12	60	8	191.830.11	
3,18	12,7	50,8	6,35	191.001.11	
3,5	12	60	6	191.635.11	
3,97	12,7	50,8	6,35	191.003.11	
4	15	50	4	191.040.11	
4	15	60	6	191.640.11	
4	15	60	8	191.840.11	
4,76	19,05	50,8	6,35	191.005.11	
5	17	50	5	191.050.11	
5	17	60	6	191.650.11	
5	17	60	8	191.850.11	
6	27	70	6	191.060.11	
6	27	70	8	191.860.11	
6,35	19,05	50,8	6,35	191.007.11	
6,35	25,4	63,5	6,35	191.008.11	
7	32	80	8	191.870.11	
7,94	25,4	76,2	12,7	191.501.11	
8	22	70	8	191.080.11	
8	32	80	8	191.081.11	
8	42	90	8	191.082.11	
9	32	83	12	191.890.11	
9,52	31,75	76,2	12,7	191.503.11	
10	32	80	8	191.800.11	
10	32	80	10	191.100.11	
10	32	83	12	191.900.11	
10	42	90	10	191.101.11	
10	42	90	12	191.901.11	
12	35	83	8	191.820.11	
12	35	83	12	191.120.11	
12	42	90	12	191.121.11	
12	52	100	12	191.122.11	
12,7	31,75	76,2	12,7	191.505.11	
12,7	38,1	88,9	12,7	191.506.11	
12,7	50,8	101,6	12,7	191.507.11	
14	50	110	14	191.140.11	
15,88	55	109,5	15,88	191.509.11	
16	55	110	16	191.160.11	
16	35	90	16	191.161.11	
16	72	120	16	191.165.11	
19,05	55	109,5	19,05	191.511.11	
20	60	120	20	191.200.11	

Ø12-14mm PLASTICS, LAMINATED



14000~18000 RPM

Ø12-20mm SOFTWOOD



18000 RPM
Cutting thickness 0.5-2mm
Correction factor for V_r:
Hardwood=0.9
Machining across grain=0.7

TECHNICAL DETAILS:

- Premium quality HWM.
- 2 spiral cutting edges [Z2].
- Provide an excellent finish on the lower side of the workpiece.
- Upward chip ejection.

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, wood composites, plastic materials and laminates. Can be used at a high feed speed on well-clamped workpieces.

Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.

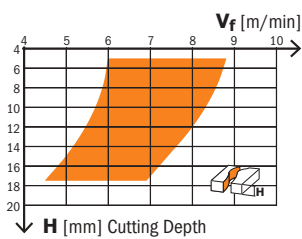


192



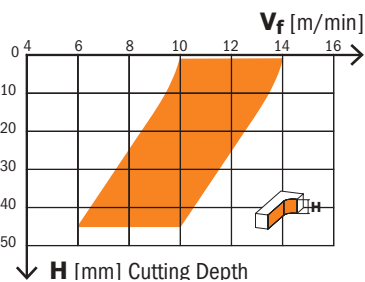
D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
3	12	50	3	192.030.11	
3	12	60	6	192.630.11	
3	12	60	8	192.830.11	
3,18	12,7	50,8	6,35	192.001.11	
3,97	12,7	50,8	6,35	192.003.11	
4	15	50	4	192.040.11	
4	15	60	6	192.640.11	
4	15	60	8	192.840.11	
4,76	19,05	50,8	6,35	192.005.11	
5	17	50	5	192.050.11	
5	17	60	6	192.650.11	
5	17	60	8	192.850.11	
6	27	70	6	192.060.11	
6	27	70	8	192.860.11	
6,35	19,05	50,8	6,35	192.007.11	
6,35	25,4	63,5	6,35	192.008.11	
7,94	25,4	76,2	12,7	192.501.11	
8	22	70	8	192.080.11	
8	32	80	8	192.081.11	
8	42	90	8	192.082.11	
9,52	31,75	76,2	12,7	192.503.11	
10	32	80	8	192.800.11	
10	32	80	10	192.100.11	
10	42	90	10	192.101.11	
10	32	83	12	192.900.11	
12	35	83	8	192.820.11	
12	35	83	12	192.120.11	
12,7	31,75	76,2	12,7	192.505.11	
12,7	38,1	88,9	12,7	192.506.11	
12,7	50,8	101,6	12,7	192.507.11	
14	52	110	14	192.140.11	
16	55	110	16	192.160.11	

Ø12-14mm PLASTICS, LAMINATED



14000-18000 RPM

Ø12-20mm SOFTWOOD



18000 RPM

Cutting thickness 0.5-2mm

Correction factor for Vf:

Hardwood=0.9

Machining across grain=0.7

TECHNICAL DETAILS:

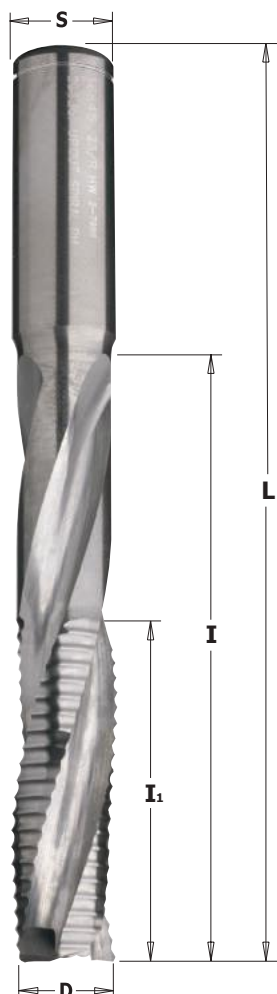
- Premium quality HWM.
- 2 spiral edges [Z2].
- Provide an excellent finish on the upper side of the workpiece.
- Downward chip ejection.

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, wood composites, plastic materials and laminates. Can be used at a high feed speed on small, difficult to clamp work pieces.

Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.

Solid Carbide Upcut Spiral Bits for Locksets



195



D mm	I mm	I ₁ mm	L mm	S mm	ORDER NO. Right-hand rotation	
With Chip-Breaker						
14	95*	45	150	14	195.142.11	
14	125*	45	170	14	195.144.11	
16	95*	45	150	16	195.162.11	
16	120*	50	170	16	195.164.11	
18	95*	45	150	18	195.182.11	
Without Chip-Breaker						
16	95*	45	150	16	193.162.11	

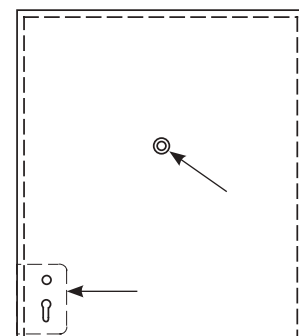
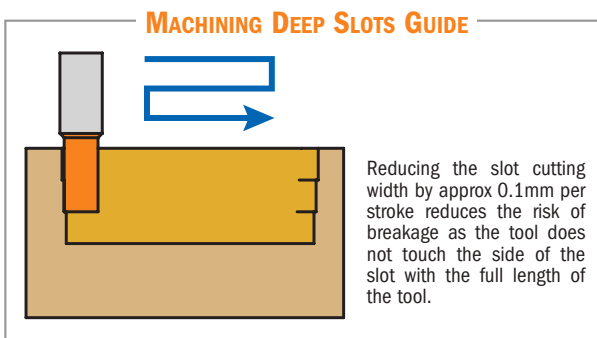
* The maximum cutting length is achieved in 2-3 passes.

TECHNICAL DETAILS:

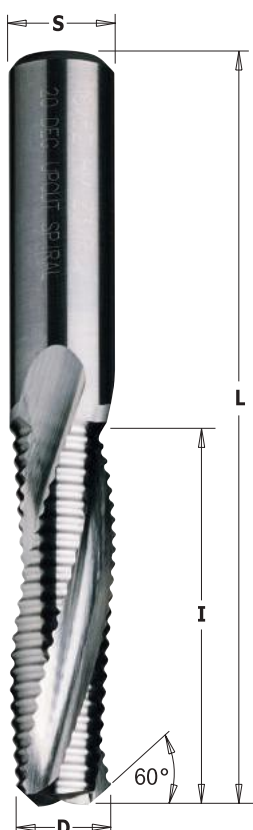
- Premium quality HWM.
- 3 spiral cutting edges [Z3] and [Z3R].
- Max 0.3mm tooth depth.
- Provide an excellent finish on the lower side of the workpiece.
- Seat for seeger ring (not included).
- Upward chip ejection.

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, or wood composites. Can be used at a high feed speed on well-clamped workpieces. Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.



Solid Carbide Upcut with Spiral Bits Chip-Breaker for 60° V-Point Locksets



195.143/163



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
14	58	110	14	195.143.11	
16	55	110	16	195.163.11	

Solid Carbide Upcut Spiral Bits without Chip-Breaker for 60° V-Point Locksets

191.143/163



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
14	50	110	14	191.143.11	
16	55	110	16	191.163.11	

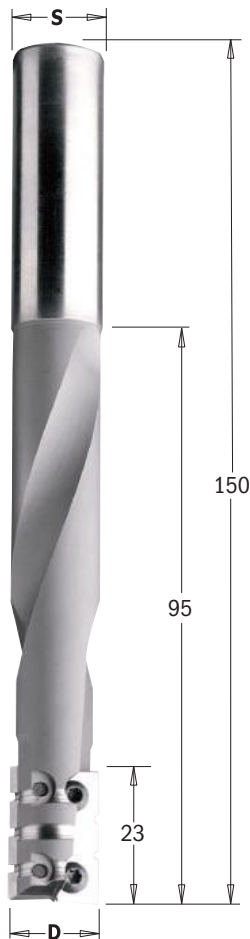
TECHNICAL DETAILS:

- Premium quality HWM.
- 3 spiral cutting edges [Z3].
- Provide an excellent finish on the lower side of the workpiece.
- Upward chip ejection.

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, or wood composites. Can be used at a high feed speed on well-clamped workpieces. Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.

Spiral Bits with Insert Knives & Chip-Breaker for Locksets



662



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation
16	23/95*	150	16	662.160.11

Spare parts

790.230.2R	23x7x1.5mm 2-RT HWM knives
790.230.3R	23x7x1.5mm 3-RT HWM knives
990.082.00	M3x4mm T9 Torx screw
991.069.00	T9 Torx key

* The 95mm length is achieved in 4-5 passes.

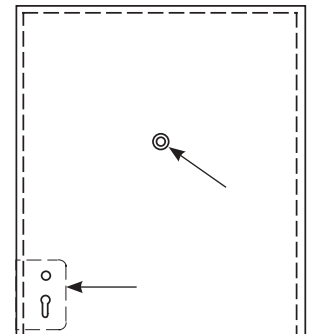
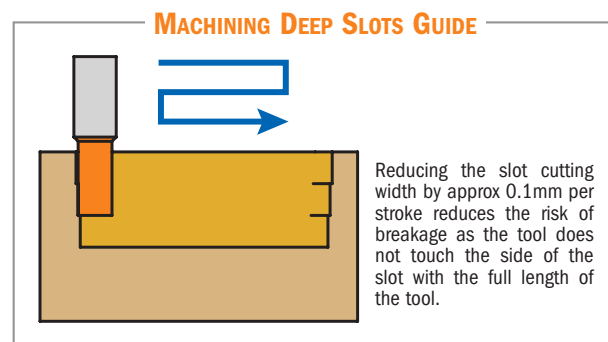
TECHNICAL DETAILS:

- Densimet® tungsten heavy metal alloys for low-vibration.
- 2 cutting edges [Z2R].
- Chip-breaker teeth.

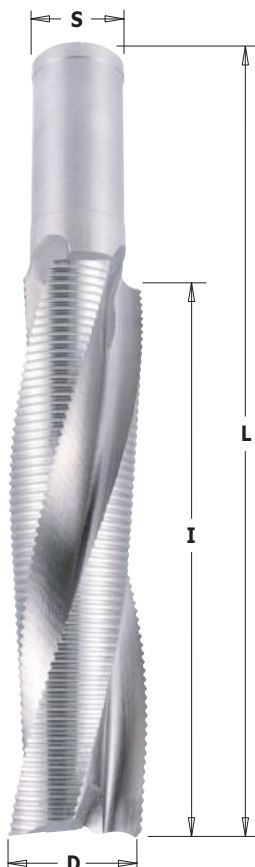
APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, or wood composites. Can be used at a high feed speed on well-clamped workpieces.

Can be used on machining centres, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.



Upcut Spiral Bits with Chipbreaker for Glue-Laminated Wooden Beams



195



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation
30	170	235	30	Y195.300.51
40	165	235	30	195.400.51
50	215	295	30	195.500.51

On request

We manufacture bits without chipbreaker, with left-hand rotation and also in custom dimensions.

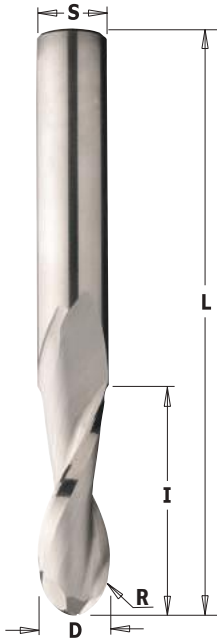
TECHNICAL DETAILS:

- High speed cobalt steel.
- 3 upcut spiral cutting edges with chipbreaker [Z3R].
- Resharpenable cutters.
- Max 6000~10000 RPM.
- Maximum feed speed 2m/minute.
- Upward chip ejection.

APPLICATION:

used for cutting, copying, and routing on glue-laminated wooden beams. To be inserted on Hundegger machines.

Round Nose Solid Carbide Upcut Spiral Bits



199



D mm	R mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation
3,18	1,6	12,7	50,8	6,35	199.001.11
6	3	27	70	6	199.060.11
6,35	3,18	25,4	63,5	6,35	199.008.11
8	4	32	80	8	199.081.11
9,52	4,76	28,57	76,2	9,52	199.504.11
10	5	32	80	10	199.100.11
12	6	35	80	12	199.120.11
12,7	6,35	31,75	76,2	12,7	199.505.11
15,88	7,94	57,15	109,5	15,88	199.509.11
16	8	55	110	16	199.160.11
19,05	9,52	57,15	109,5	19,05	199.511.11

TECHNICAL DETAILS:

- Premium quality HWM.
- 2 upcut spiral cutting edges [Z2].
- Excellent finish on the lower side of the work piece.
- Upward chip ejection.

APPLICATION:

used for ripping, template routing, panel sizing and any routing application on solid wood, wood composites, plastic materials and laminates. Can be used at a high feed speed on well-clamped workpieces.
For use on machining centers, point-to-point boring machines, CNC routers and hand-held routers equipped with chucks or adaptors.

DP Router Cutters with Shear Angle



141



D mm	I mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
6	8	65	12x40	1	141.060.61
8	12	65	12x40	1	141.080.61
*10	22	75	12x40	1+1	141.101.61

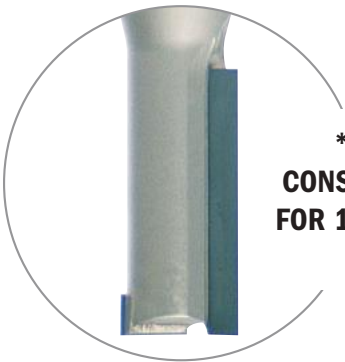
TECHNICAL DETAILS:

- Super strength steel.
- DP cutting edge.
- HW plunging tip for diagonal plunge-cutting.
- Resharpenable cutter (max 3 times).
- Max feed speed 4 m/min.

APPLICATION:

to be used on all CNC routers for jointing and sizing of solid wood and wood-based panels.

40X
LONGER LIFE
THAN CARBIDE



* Z1+1
CONSTRUCTION
FOR 141.101.61
ITEM

DP Router Cutters with Shear Angle



140



D mm	I mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
10	25	72	12x40	1+1 (3 DP+1 HW)	140.039.56
12	27	75	12x40	1+1 (3 DP+1 HW)	140.120.61
12	35	85	12x40	1+1 (4 DP+1 HW)	140.121.61
12,7	27	75	12,7x40	1+1 (3 DP+1 HW)	140.127.61
12,7	35	85	12,7x40	1+1 (4 DP+1 HW)	140.128.61
15,87	27	85	15,87x50	1+1 (3 DP+1 HW)	140.158.61
15,87	45	103	15,87x50	1+1 (5 DP+1 HW)	140.159.61
16	27	85	16x50	1+1 (3 DP+1 HW)	140.160.61
16	35	93	16x50	1+1 (4 DP+1 HW)	140.161.61
18	27	85	20x50	1+1 (3 DP+1 HW)	140.180.61
18	35	95	20x50	1+1 (4 DP+1 HW)	140.181.61
18	45	105	20x50	1+1 (5 DP+1 HW)	140.182.61
19,05	27	85	19,05x50	1+1 (3 DP+1 HW)	140.190.61
19,05	45	105	19,05x50	1+1 (5 DP+1 HW)	140.192.61
20	27	85	20x50	1+1 (3 DP+1 HW)	140.200.61
20	35	95	20x50	1+1 (4 DP+1 HW)	140.201.61
20	45	105	20x50	1+1 (5 DP+1 HW)	140.202.61
20	55	115	20x50	1+1 (6 DP+1 HW)	140.203.61

TECHNICAL DETAILS:

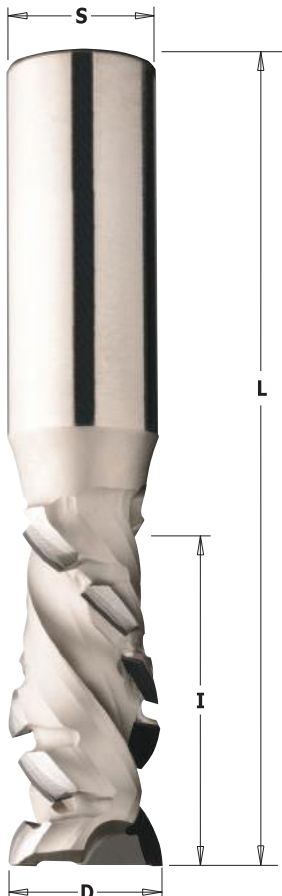
- Super strength steel.
- DP cutting edge.
- HW plunging tip for diagonal plunge-cutting (Z-axis tool entrance).
- Resharpenable cutter (max 3 times).
- Max feed speed 5 m/min.

APPLICATION:

to be used on all CNC routers for jointing, rabbeting, grooving and copying of raw material, melamine and laminates, MDF, HPL and veneered panels.



Diamond Router Cutters with 45° Shear Angle



140



D mm	I mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
20	25	85	20x50	1+1 (6 DP+1 HW)	140.720.61
20	35	95	20x50	1+1 (8 DP+1 HW)	140.721.61
20	45	105	20x50	1+1 (10 DP+1 HW)	140.722.61

TECHNICAL DETAILS:

- Super strength steel.
- "H4" diamond cutting edges featuring 45° shear angle.
- HW plunging tip for plunge cutting.
- Resharpenable cutters (max 8-9 times).
- Maximum feed speed 5m/minute.

APPLICATION:

to be used on all CNC routers for jointing, rabbeting, grooving and copying of raw material, melamine and laminates, MDF, HPL and veneered panels.



SAW BLADES
JIG SAW BLADES
SABRE SAW BLADES
TOOLS FOR MULTI-CUTTERS
TOOLS WITH BORE & KNIVES
ROUTER BITS & SETS
CNC ROUTER CUTTER & CHUCKS
INDUSTRIAL DOWEL DRILLS
BITS FOR HAND POWER TOOLS
HOLE SAW BLADES
POWER TOOLS & ACCESSORIES
DISPLAY CABINETS & SPARE PARTS

DP Router Cutters with Shear Angle



142



D mm	I mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
20	27	85	20x50	2+2 (6 DP+1 HW)	142.200.61
20	36	95	20x50	2+2 (8 DP+1 HW)	142.201.61
20	45	105	20x50	2+2 (10 DP+1 HW)	142.202.61
20	55	115	20x50	2+2 (12 DP+1 HW)	142.203.61
25	27	90	25x55	2+2 (6 DP+1 HW)	142.250.61
25	36	100	25x55	2+2 (8 DP+1 HW)	142.251.61
25	45	110	25x55	2+2 (10 DP+1 HW)	142.252.61
25	55	120	25x55	2+2 (12 DP+1 HW)	142.253.61

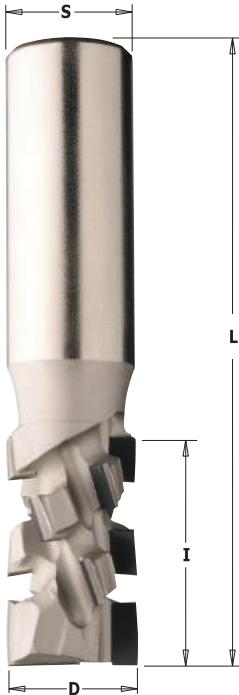
TECHNICAL DETAILS:

- Super strength steel.
- DP cutting edge.
- HW plunging tip for diagonal plunge-cutting (Z-axis tool entrance).
- Resharpenable cutter (max 3 times).
- Max feed speed 10 m/min.

APPLICATION:

to be used on all CNC routers for jointing, rabbeting, grooving, copying and dividing cuts of raw material, melamine and laminates, MDF, HPL and veneered panels.

40X
LONGER LIFE
THAN CARBIDE



Diamond Router Cutters with 20° Shear Angle



142



D mm	I mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
20	25	85	20x45	2+2 (8 DP+1 HW)	142.720.61
20	30	90	20x45	2+2 (10 DP+1 HW)	142.721.61
20	35	95	20x45	2+2 (12 DP+1 HW)	142.722.61
20	40	100	20x45	2+2 (14 DP+1 HW)	142.723.61
20	45	105	20x45	2+2 (16 DP+1 HW)	142.724.61
20	50	110	20x45	2+2 (18 DP+1 HW)	142.725.61
20	55	115	20x45	2+2 (20 DP+1 HW)	142.726.61

TECHNICAL DETAILS:

- Super strength steel.
- "H4" diamond cutting edges featuring 20° shear angle.
- HW plunging tip for diagonal plunge-cutting (Z-axis tool entrance).
- Resharpenable cutters (max 8-10 times).
- Maximum feed speed 20m/minute.

APPLICATION:

used on all CNC routers for jointing, rabbeting, grooving, copying and dividing raw material, melamine, laminated, MDF, HPL and veneered panels.

40X
LONGER LIFE
THAN CARBIDE

DP Router Cutters with Shear Angle for Nesting (Densimet® Tungsten Heavy Metal Alloys)



new



143



D mm	I mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
12	25	70	12x40	3 (9 DP)	143.120.61
12	31	80	12x40	3 (12 DP)	143.121.61

TECHNICAL DETAILS:

- Densimet® tungsten heavy metal alloys for low-vibration.
- DP cutting edge.
- Resharpenable cutter (max 6 times).
- Max feed speed 25 m/min.

APPLICATION:

to be used on all CNC routers for jointing, rabbeting, grooving, copying and dividing cuts of raw material, melamine and laminates, MDF, HPL and veneered panels.
High performance on pre-and finish-routing.

40X
LONGER LIFE
THAN CARBIDE

DP Spiral Router Cutters with Shear Angle



143

	D mm	I mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
new	18	25	82	20x50	3 (10 DP+1 HW)	143.180.61
new	18	30	87	20x50	3 (13 DP+1 HW)	143.181.61
new	18	35	92	20x50	3 (15 DP+1 HW)	143.182.61
new	20	25	82	20x50	3 (10 DP+1 HW)	143.200.61
new	20	30	85	20x50	3 (13 DP+1 HW)	143.201.61
new	20	35	92,5	20x50	3 (15 DP+1 HW)	143.202.61
new	20	40	97	20x50	3 (18 DP+1 HW)	143.203.61
new	20	45	102	20x50	3 (21 DP+1 HW)	143.204.61
new	20	50	106,5	20x50	3 (24 DP+1 HW)	143.205.61
new	20	55	111	20x50	3 (27 DP+1 HW)	143.206.61
new	20	60	116,5	20x50	3 (30 DP+1 HW)	143.207.61
new	20	65	121,5	20x50	3 (31 DP+1 HW)	143.208.61
	22	30	92	25x50	3 (12 DP+1 HW)	143.220.61
	22	35	97	25x50	3 (15 DP+1 HW)	143.221.61
	22	40	102	25x50	3 (18 DP+1 HW)	143.222.61
	22	45	107	25x50	3 (20 DP+1 HW)	143.223.61
	22	50	112	25x50	3 (21 DP+1 HW)	143.224.61
	22	55	117	25x50	3 (24 DP+1 HW)	143.225.61
	22	60	122	25x50	3 (30 DP+1 HW)	143.226.61
	22	65	127	25x50	3 (31 DP+1 HW)	143.227.61
	22	70	132	25x50	3 (36 DP+1 HW)	143.228.61

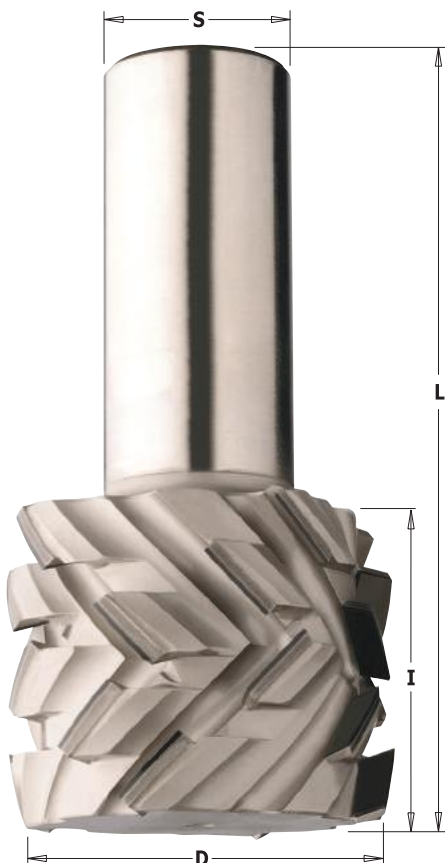
☐ On request

TECHNICAL DETAILS:

- Super strength steel.
- DP cutting edge.
- HW plunging tip for diagonal plunge-cutting (Z-axis tool entrance).
- Resharpenable cutter (max 10/12 times).
- Max feed speed 25 m/min.

40X
LONGER LIFE
THAN CARBIDE

Diamond Router Cutters with 40° Shear Angle



145

	D mm	I mm	L mm	S mm	Z	ORDER NO. Right-hand rotation
	50	23	80	25x55	3+3 (9 DP)	145.501.61
	50	23	80	25x55	4+4 (12 DP)	145.511.61
	50	28	85	25x55	3+3 (15 DP)	145.502.61
	50	28	85	25x55	4+4 (20 DP)	145.512.61
	50	38	95	25x55	3+3 (21 DP)	145.503.61
	50	38	95	25x55	4+4 (28 DP)	145.513.61

☐ On request

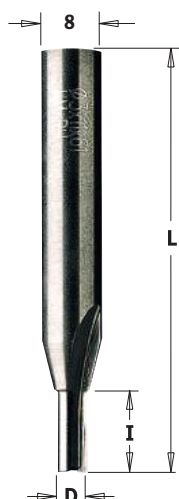
TECHNICAL DETAILS:

- Super strength steel.
- "H4" diamond cutting edges featuring 40° shear angle.
- Resharpenable cutters (max 8-10 times).
- Maximum feed speed 30m/minute.

APPLICATION:

used on all CNC routers for jointing, rabbeting, grooving, copying and dividing raw material, melamine, laminated, MDF, HPL and veneered panels. High performance routing.

40X
LONGER LIFE
THAN CARBIDE



174



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
3	10	55	8	174.030.11	
4	10	55	8	174.040.11	
5	12	55	8	174.050.11	
6	14	55	8	174.060.11	
7	20	55	8	174.070.11	

TECHNICAL DETAILS:

- Premium quality HWM.
- 2 radial relief cutting edges [Z2].

Router Cutters

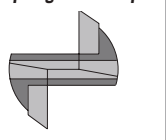


174



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
8	20	55	8	174.080.11	
8	30	70	8	174.081.11	
8	40	90	8	174.082.11	
9	20	55	8	174.090.11	
10	20	60	8	174.100.11	
10	30	70	8	174.102.11	
10	40	90	8	174.101.11	
11	20	60	8	174.110.11	
12	20	60	8	174.120.11	
12	30	70	8	174.122.11	
12	40	90	8	174.121.11	
13	20	60	8	174.130.11	
14	20	60	8	174.140.11	
14	30	70	8	174.142.11	
14	40	90	8	174.141.11	
15	20	60	8	174.150.11	
16	20	70	8	174.160.11	
16	30	70	8	174.162.11	
16	40	90	8	174.161.11	
18	20	70	8	174.180.11	
18	30	70	8	174.181.11	
18	40	80	8	174.182.11	
19	20	70	8	174.190.11	
20	20	70	8	174.200.11	
20	30	70	8	174.201.11	
20	40	90	8	174.202.11	
22	20	70	8	174.220.11	
22	30	70	8	174.221.11	
22	40	90	8	174.222.11	
24	20	70	8	174.240.11	
24	30	70	8	174.241.11	
24	40	90	8	174.242.11	
25	20	70	8	174.250.11	
26	20	70	8	174.260.11	
26	30	70	8	174.261.11	
28	20	70	8	174.280.11	
28	30	70	8	174.281.11	
29	20	70	8	174.290.11	
30	20	70	8	174.300.11	

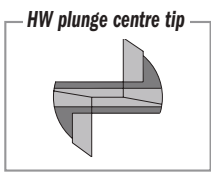
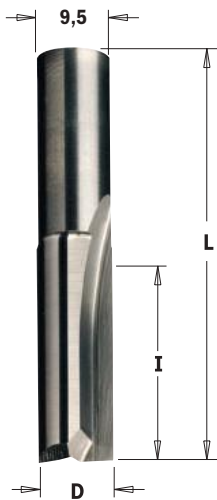
HW plunge centre tip

**TECHNICAL DETAILS:**

- Super strength steel.
- 2 precision ground HW cutting edges and 1 HW plunge centre tip [Z2+1].

APPLICATION:

used for drilling, grooving or jointing on solid wood and wood composites.
Can be used on machining centres, CNC routers and hand-held routers equipped with chucks or adaptors.



112



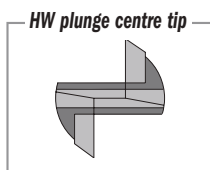
D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
3	10	48	9,5	112.030.11	
4	10	48	9,5	112.040.11	
5	12	39	9,5	112.050.11	
6	14	41	9,5	112.060.11	
7	16	43	9,5	112.070.11	
8	18	48	9,5	112.080.11	
8	30	60	9,5	112.081.11	
9	20	52	9,5	112.090.11	
10*	22	52	9,5	112.100.11	
10*	35	65	9,5	112.101.11	
11*	26	52	9,5	112.110.11	
12*	26	52	9,5	112.120.11	

* Super strength steel
2 precision ground HW cutting edges [Z2+1]

TECHNICAL DETAILS:

- Premium quality HWM.
- 2 radial relief cutting edges [Z2+1].

Router Cutters



113



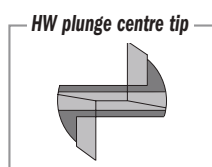
D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
12	26	52	12	113.120.11	
12	40	70	12	113.121.11	
13	26	52	12	113.130.11	
14	28	56	12	113.140.11	
14	40	72	12	113.141.11	
15	32	60	12	113.150.11	
16	32	60	12	113.160.11	
16	40	72	12	113.161.11	
17	35	64	12	113.170.11	
18	35	64	12	113.180.11	
19	38	68	12	113.190.11	
20	38	68	12	113.200.11	
22	40	72	12	113.220.11	
24	40	72	12	113.240.11	
25	40	72	12	113.250.11	
26	42	74	12	113.260.11	
28	42	74	12	113.280.11	
30	42	74	12	113.300.11	

TECHNICAL DETAILS:

- Super strength steel.
- 2 precision ground HW cutting edges and 1 HW plunge centre tip [Z2+1].

APPLICATION:

used for grooving, jointing and routing on solid wood, wood composites, plastic materials and laminates.

**TECHNICAL DETAILS:**

- Premium quality HWM.
- 2 radial relief cutting edges [Z2].
- 1 HW [Z1] plunge centre tip.

APPLICATION:

for grooving, jointing and routing on solid wood, wood composites, plastic materials and laminates.



175



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
• 4	10	65	10	175.040.11	
• 5	12	65	10	175.050.11	
• 6	14	65	10	175.060.11	
• 7	17	65	10	175.070.11	
8	20	65	10	175.080.11	
10	25	70	10	175.100.11	
12	25	70	10	175.120.11	
14	25	70	10	175.140.11	
15	25	70	10	175.150.11	
16	25	70	10	175.160.11	
18	25	70	10	175.180.11	
20	25	70	10	175.200.11	
22	25	70	10	175.220.11	
24	25	70	10	175.240.11	
25	25	70	10	175.250.11	
26	25	70	10	175.260.11	
30	25	70	10	175.300.11	
35	25	70	10	175.350.11	

• HWM

176



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
10	40	87	10	176.100.11	
12	40	87	10	176.120.11	
14	40	87	10	176.140.11	
15	40	87	10	176.150.11	
16	40	87	10	176.160.11	
18	40	87	10	176.180.11	
20	40	87	10	176.200.11	

177



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	
10	35	90	12	177.100.11	
12	35	90	12	177.120.11	
12	50	100	12	177.121.11	
14	35	90	12	177.140.11	
16	35	90	12	177.160.11	
16	60	110	12	177.161.11	
18	35	90	12	177.180.11	
18	60	110	12	177.181.11	
20	35	90	12	177.200.11	
22	35	90	12	177.220.11	
24	35	90	12	177.240.11	
25	35	90	12	177.250.11	
26	35	90	12	177.260.11	
28	35	90	12	177.280.11	
30	35	90	12	177.300.11	
35	35	90	12	177.350.11	

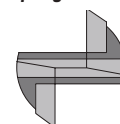
TECHNICAL DETAILS:

- Super strength steel.
- 2 precision ground HW cutting edges and 1 HW plunge centre tip [Z2+1].

APPLICATION:

used for grooving, jointing and general routing operation on solid wood, wood composites, plastics and laminates. Can be used on machining centres, CNC routers and hand-held routers.

HW plunge centre tip



Straight Router Cutters with Insert Knives

CMT ORANGE TOOLS™



653



D mm	I mm	L mm	S mm	Spare knives		ORDER NO. Right-hand rotation
				side	top	
16	28,3	92	20	790.283.12	790.075.00	653.661.11
16	48,3	111,5	20	790.483.12	790.075.00	653.662.11
18	48,3	111,5	20	790.483.12	790.075.00	653.681.11
20	48,3	111,5	20	790.483.12	790.096.00	653.701.11

Spare parts	790.075.00	7,5x12x1,5mm knife
	790.096.00	9,6x12x1,5mm knife
	790.283.12	28,3x12x1,5mm knife
	790.483.12	48,3x12x1,5mm knife
	990.072.00	M3,5x3,5mm Torx screw
	990.074.00	M4x3,5mm Torx screw
	990.075.00	M4x6mm Torx screw
	991.061.00	T15 Torx key

TECHNICAL DETAILS:

- Super strength steel.
- 2 cutting edges [Z1+1].

APPLICATION:

straight router bit with one replaceable plunging knife and one-sided knife fixed by special Torx screws. The body is precision balanced. For finishing and routing, plunge cutting and grooving in board materials (laminated chipboards, MDF) and hardwood. For use on CNC machining centres.

Spoilboard Surfacing Router Cutters with Insert Knives

new



663



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	Spare parts	
60	12	80	12x50	663.004.11	790.120.03	990.075.00
80	12	90	20x60	663.003.11	790.120.03	990.075.00

Spare parts	991.061.00	T15 Torx key
	990.036.00	M8x25mm TE screw (only for 663.003.11)
	990.020.00	Hex nut for threaded arbors M8 (only for 663.003.11)

The screw 990.036.00 and the nut 990.020.00 (on the shank) only fit item 663.003.11

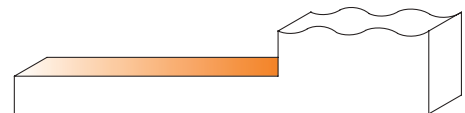
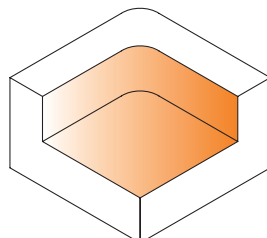
TECHNICAL DETAILS:

- Super strength steel.
- 3 cutting edges [Z3].

APPLICATION:

the new router bit for CNC routers is ideal for fast removal of material over a large surface area leaving an improved finish at the bottom of the cut. Used on soft and hardwood, particle board and MDF. The cutter uses 4-sided inserts in super micrograin carbide.

A cost effective solution compared to brazed router bits and solid carbide spiral bits.



Drawings are 1:2 scale

Adjustable Chamfering CNC Cutter

CMT ORANGE TOOLS™

INSERT
CARBIDE

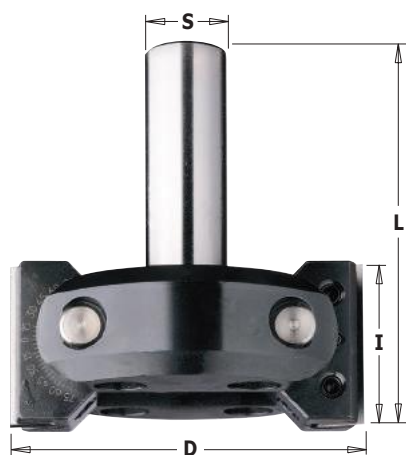
Z2

RH



2X
LONGER LIFE

663.201.11

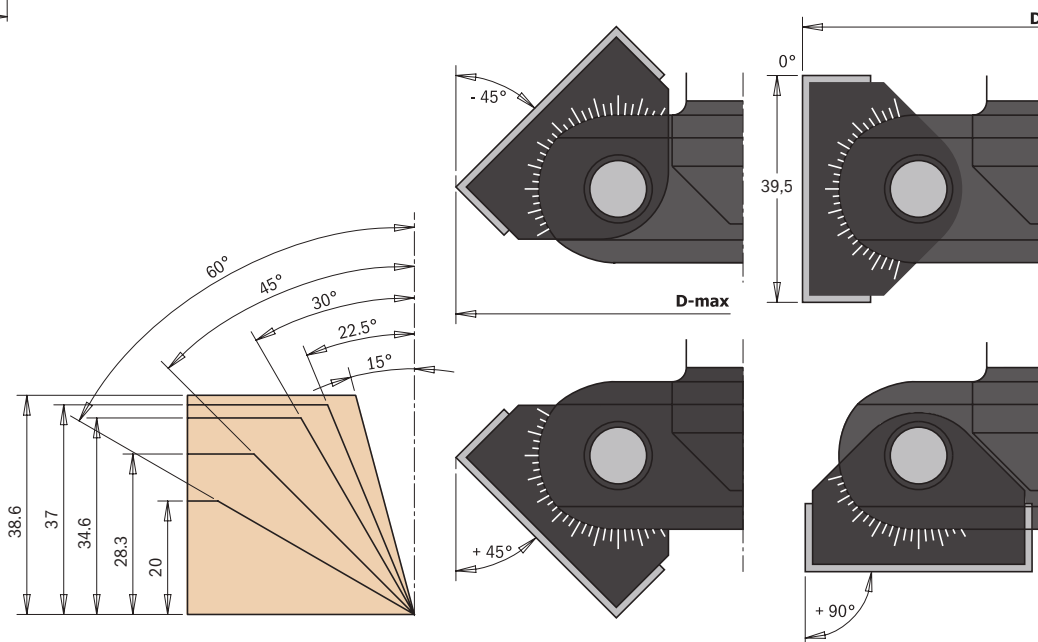


D mm	D_Max 45° mm	I mm	A	L mm	S mm	ORDER NO. Right-hand rotation
85	102	39,5	0°-45° - 0°+90°	92	20	663.201.11

Spare parts	790.395.12	39,5x12x1,5mm knife
	663.999.01	38x6x12mm wedge
	990.087.00	M6x8mm STEI screw (4x2mm threaded pin)
	991.067.00	3mm hex key
	663.999.02	Kit with 2 wedges and 1 screw for blocking rotation
	990.099.00	M8x25mm TCEI screw
	990.023.00	M8 (4mm) nut
	991.081.00	4mm "T" hex key

TECHNICAL DETAILS: tool body in steel, two TC reversible knives in swiveling blade carriers. Cutting on periphery and both sides. Swiveling range towards top 0-45°, toward bottom 0-90°, infinitely variable adjustment according to precise scale. With positive stops at 7,5° through adjustment aide. No displacement of adjusted beveling angle when replacing blades. Right-hand rotation.

APPLICATION: for jointing, rebating and chamfering of solid wood and wooden boards. Suitable for CNC router machines and stationary router machine with manual or mechanical feed.



V-Groove - Folding - Signmaking CNC Router Cutters with Insert Knives

INSERT
CARBIDE

Z1

RH



2X
LONGER LIFE

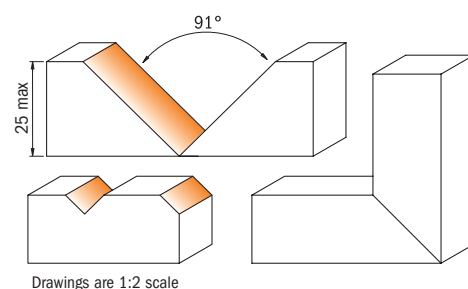
663.101.11

D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation
52	25	100	20	663.101.11

Spare parts	790.360.01	36x12x1,5mm knife
	990.077.00	M3,5x7mm Torx screw
	991.061.00	T15 Torx key
Optional	S790.360.03	36x12x1,5mm HW-SMG replaceable knife (4 cutting edges 35°)

TECHNICAL DETAILS:
- Super Strength steel.
- 1 cutting edges [Z1].

APPLICATION: this innovative CNC router bit offers you an endless range of possibilities for V-Groove, miter folds, signmaking, lettering and chamfer edges. The tool mounts a high grade HWM reversible knife ideal for general purpose, chipboard and plywood, but a higher quality is available for laminated and MDF material.



Drawings are 1:2 scale

Complete Set for Decorating on MDF



616.000.01

This unique system includes a tool body with 22 profile knives designed for multiple applications on your CNC routers. Ideal for MDF, laminates, veneers, plastic, wood and solid surface materials.

TECHNICAL DETAILS:

- Knives 20x20x2mm.
- We recommend re-sharpened that knives be on the profiled cutting edges.



SAW BLADES

JIG SAW BLADES

SABRE SAW BLADES

TOOLS FOR MULTI-CUTTERS

TOOLS WITH BORE & KNIVES

ROUTER BITS & SETS

CNC ROUTER CUTTER & CHUCKS

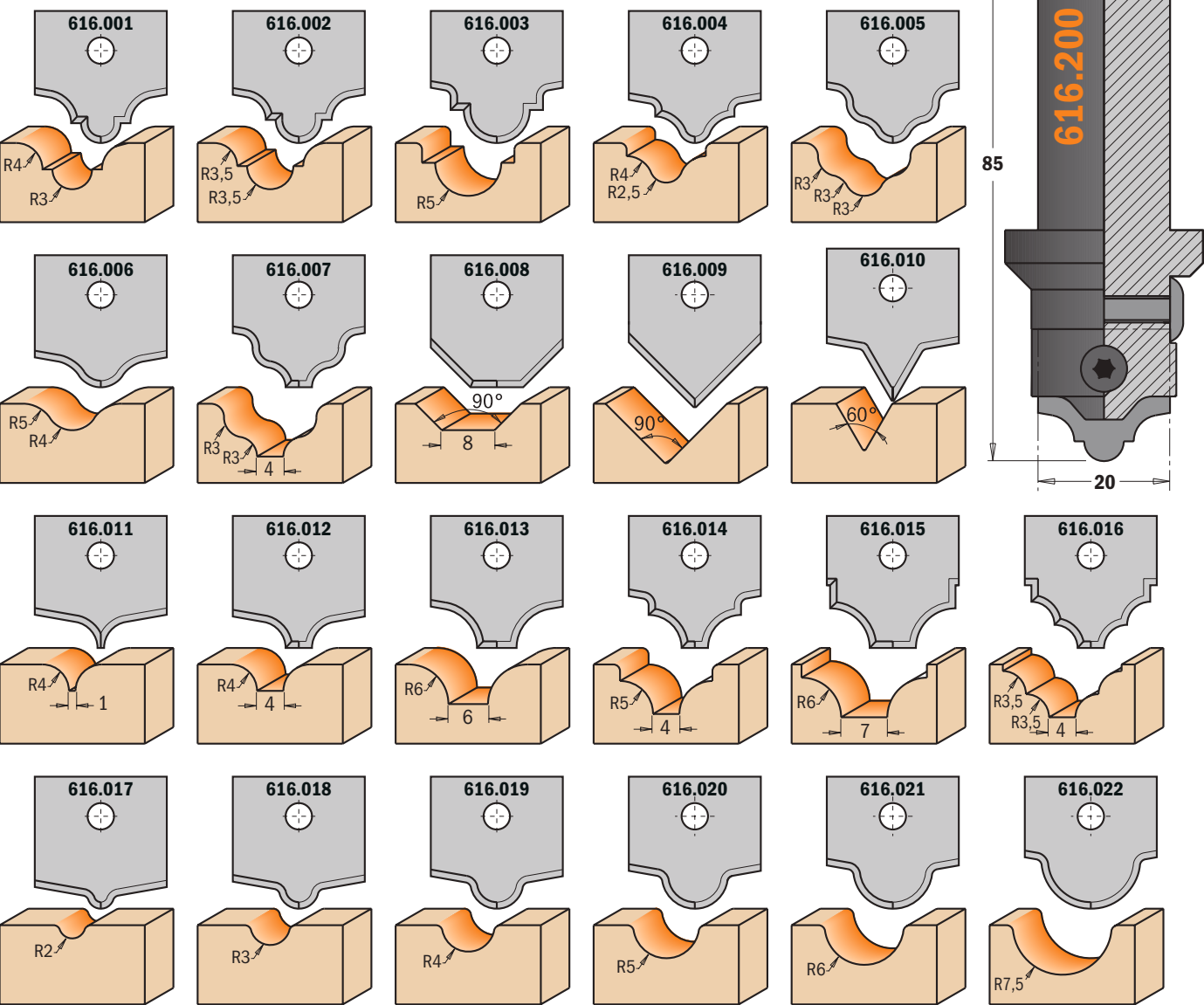
INDUSTRIAL DOWEL DRILLS

BITS FOR HAND POWER TOOLS



HOLE SAW BLADES

POWER TOOLS & ACCESSORIES

DISPLAY CABINETS & SPARE PARTS



Drawings are 1:1 scale

DESCRIPTION	S mm	ORDER NO. Right-hand rotation	Spare parts		
Complete Set for Decorating on MDF	20	616.000.01			
Router cutter body with shank Ø20mm (insert knives not included)	20	616.200	616.200	990.077.00	991.061.00
Router cutter body with shank Ø12mm (insert knives not included)	12	616.120		990.077.00	991.061.00

REMARK: tool body and insert knives can be sold individually.

SAW BLADES
JIG
SAW BLADES
SAW BLADES
TOOLS FOR MULTI-CUTTERS
TOOLS WITH BORE & KNIVES
ROUTER BITS & SETS
CNC ROUTER CUTTER & CHUCKS
INDUSTRIAL DOWEL DRILLS
BITS FOR HAND POWER TOOLS
HOLE SAW BLADES
POWER TOOLS & ACCESSORIES
DISPLAY CABINETS & SPARE PARTS

INSERT CARBIDE

Z2

RH



Complete Set for MDF Doors

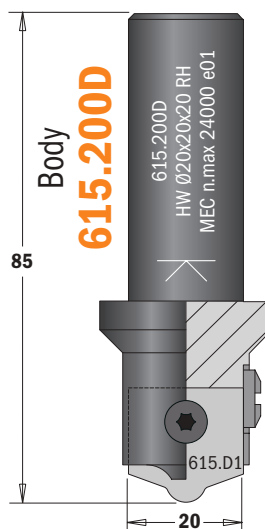
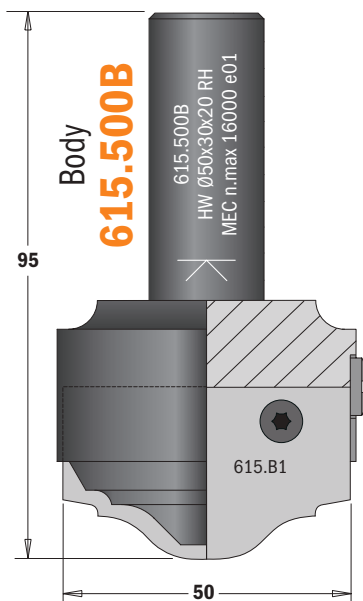
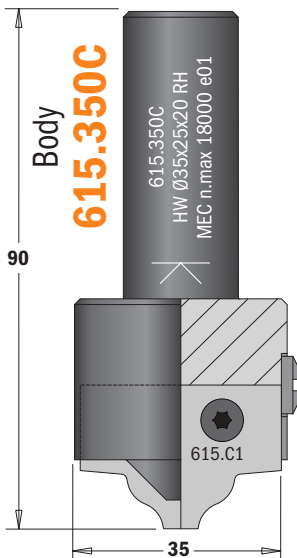
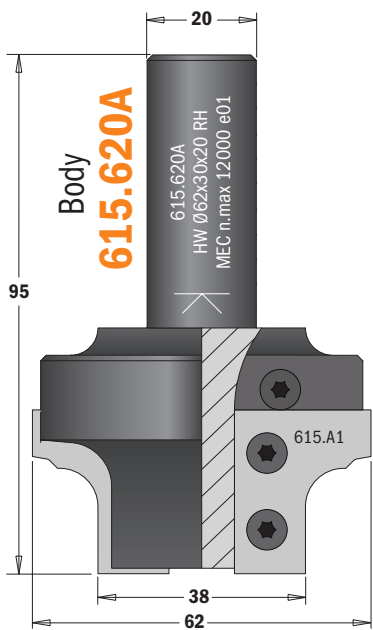


615.004.01

Open some new doors with CMT. Our 4-piece set includes the most popular profile to make MDF panel doors for kitchens and bathrooms. Each bit is made from bar stock steel and is equipped with 5 different profile knives allowing enormous possibilities for easy and economical construction. The highest materials, the lowest tolerance in balancing and the precision in the sharpening of the knives let you obtain a smooth finish on your CNC machine.

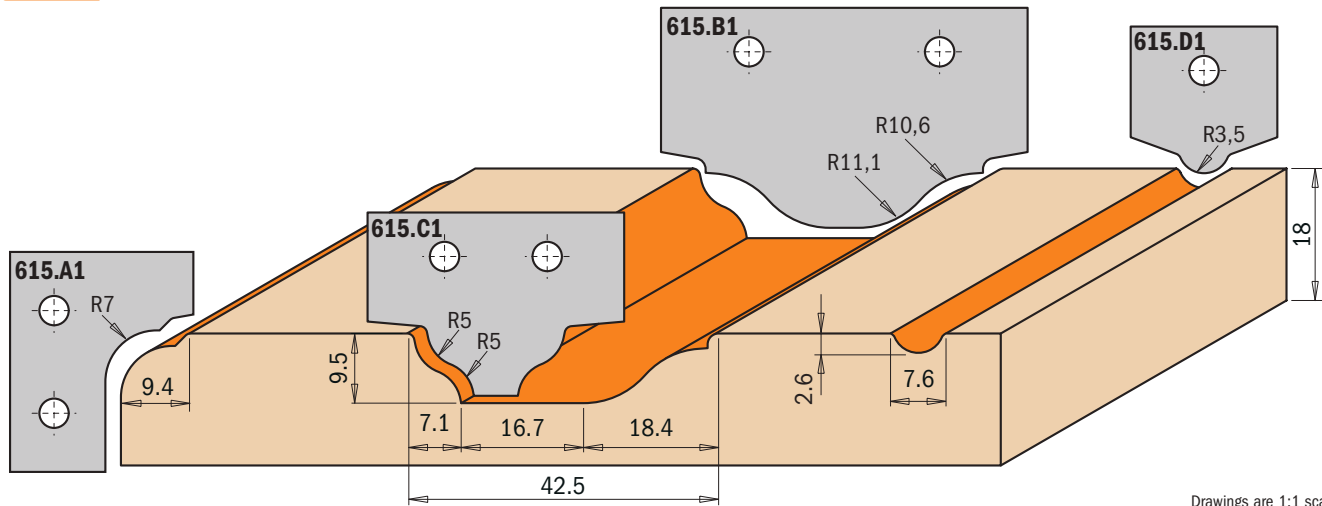
Spare parts

- 991.061.00 T15 Tork key
- 990.073.00 M3,5x5mm Torx screw
- 990.075.00 M4x6mm Torx screw
- 990.077.00 M3,5x7mm Torx screw



Standard

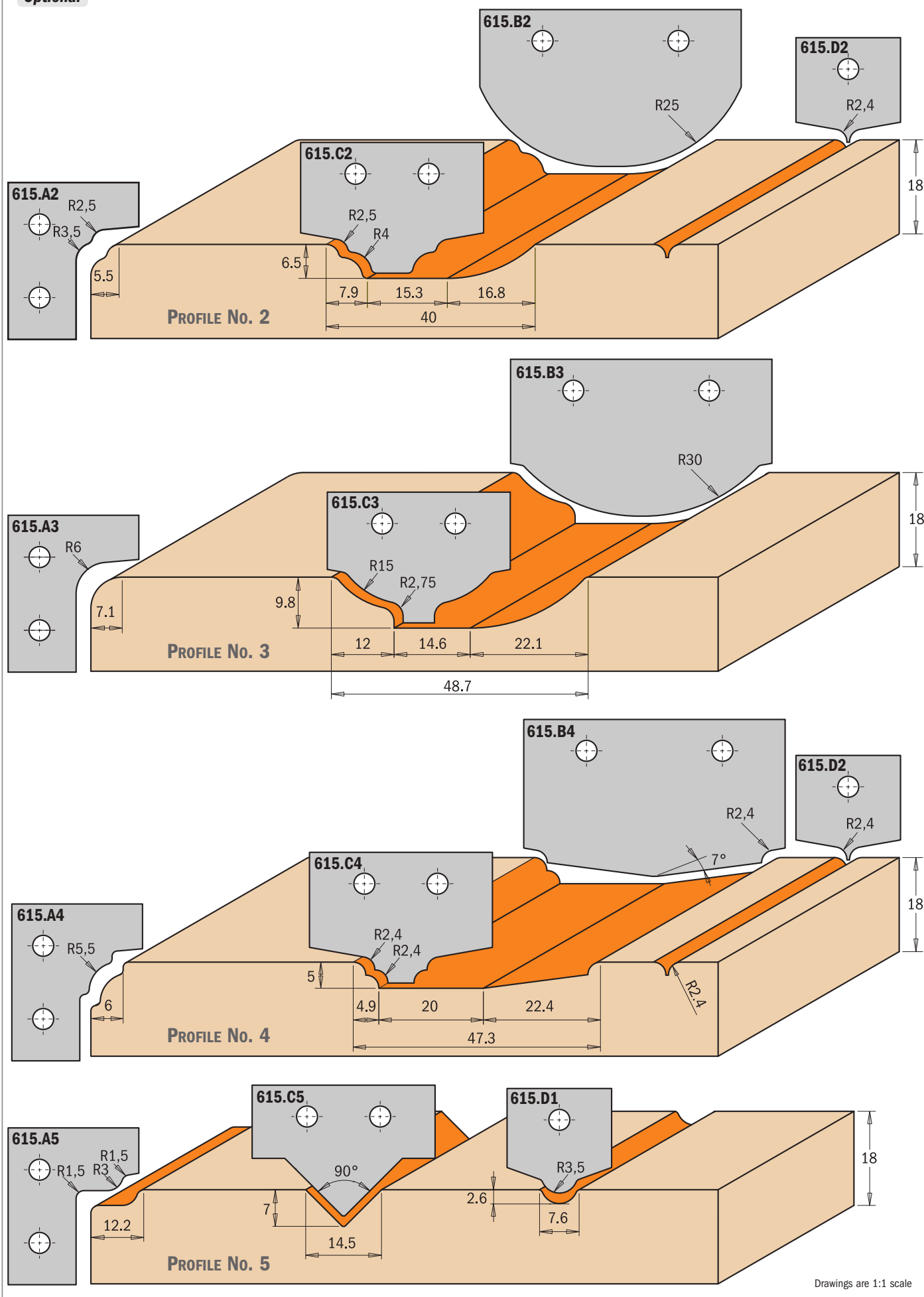
Profile No. 1



Drawings are 1:1 scale

DESCRIPTION		S mm	ORDER NO. Right-hand rotation
Complete Set for MDF Doors	(Profile no. 1)	20	615.004.01

Optional



Universal Profile Cutter for CNC Machines

new

CMT ORANGE TOOLS™



663.301.11

SP Z2 RH  

D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation
65	40-50	93	20	663.301.11

Spare parts

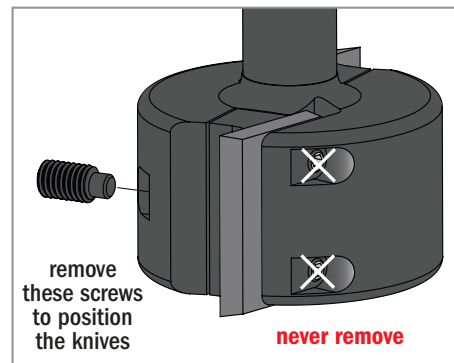
692.999.01	38x15x16mm wedge for cutter
990.068.00	M5x5mm TCEI screw
991.064.00	Hex key 4mm

TECHNICAL DETAILS:

- Super Strength steel.
- 2 cutting edges [Z2]
for knives 40x4mm and 50x4mm.

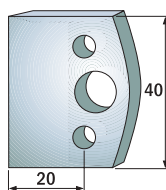
APPLICATION:

for universal profiling of solid wood on CNC router machines. For cutting width 40mm and 50mm (serie 690). Profile knives may only be ordered and used in pairs. For router machines with mechanical feed.

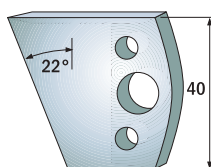


TO BE USED WITH SP KNIVES SERIE 690 (SEE PAGES 96~109)

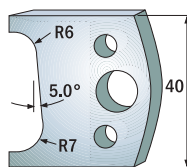
690.000



690.001

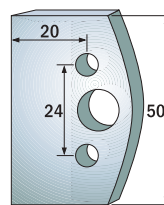


690.002

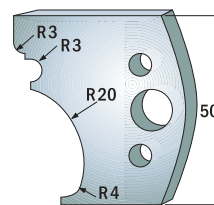


Profile knives cutting length=40mm (serie 690)

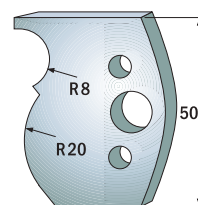
690.500



690.501



690.502



Profile knives cutting length=50mm (serie 690.5)

Slot & Mortise Boring Bits



163

HW Z2 RH 

D mm	L mm	S mm	ORDER NO. Right-hand rotation
12	100	M12x1	163.120.11
14	100	M12x1	163.140.11
16	100	M12x1	163.160.11

TECHNICAL DETAILS:

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

APPLICATION:

used for cutting mortises and slots in solid wood and wood composites. Assembled in chucks.

163

HL Z2 RH 

D mm	L mm	S mm	ORDER NO. Right-hand rotation
12	100	M12x1	163.120.31
14	100	M12x1	163.140.31
16	100	M12x1	163.160.31
18	100	M12x1	163.180.31

TECHNICAL DETAILS:

- Long lasting cutter performance.
- 2 HL precision ground cutting edges [Z2].

APPLICATION:

used for cutting mortises and slots in solid wood and wood composites. Assembled in chucks.

Slot & Mortise Boring Bits



164



D mm	L mm	S mm	ORDER NO. Right-hand rotation
18	100	M12x1	164.180.11
20	100	M12x1	164.200.11
22	100	M12x1	164.220.11

TECHNICAL DETAILS:

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

APPLICATION:

used for drilling blind holes in solid wood, wood composites, plastic and laminated materials. Used on slot and mortise machines equipped with chucks.

164



D mm	L mm	S mm	ORDER NO. Right-hand rotation
15	100	M12x1	164.150.31
18	100	M12x1	164.180.31
20	100	M12x1	164.200.31
24	100	M12x1	164.240.31

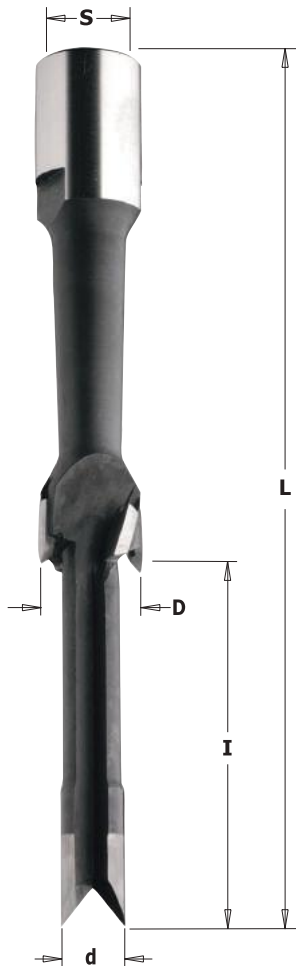
TECHNICAL DETAILS:

- Long lasting cutter performance.
- HL cutting head with precision balanced centre point.
- 2 precision ground edges [Z2].
- 2 ground spurs [V2].

APPLICATION:

used for drilling blind holes in soft and hardwood. Used on slot and mortise machines equipped with chucks.

Slot & Mortise Boring Bits



166-167



d mm	D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation
11	19	62	155	M12x1	166.190.11
11	22	62	155	M12x1	166.220.11
12	19	62	155	M12x1	167.190.11
12	24	62	155	M12x1	167.240.11

TECHNICAL DETAILS:

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

APPLICATION:

used for drilling and cutting mortise slots in solid wood, wood composites, plastic and laminated materials.



102

D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
6	50	105	16	102.060.31	102.060.32
7	55	110	16	102.070.31	102.070.32
8	60	115	16	102.080.31	102.080.32
9	65	120	16	102.090.31	102.090.32
10	70	125	16	102.100.31	102.100.32
11	75	130	16	102.110.31	102.110.32
12	80	135	16	102.120.31	102.120.32
13	85	140	16	102.130.31	102.130.32
14	90	145	16	102.140.31	102.140.32
15	95	150	16	102.150.31	102.150.32
16	100	155	16	102.160.31	102.160.32
17	105	160	16	102.170.31	102.170.32
18	110	165	16	102.180.31	102.180.32
19	115	170	16	102.190.31	102.190.32
20	120	175	16	102.200.31	102.200.32
22	125	180	16	102.220.31	102.220.32
24	125	180	16	102.240.31	102.240.32

172

D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
6	50	105	13	172.060.31	172.060.32
7	55	110	13	172.070.31	172.070.32
8	60	115	13	172.080.31	172.080.32
9	65	120	13	172.090.31	172.090.32
10	70	125	13	172.100.31	172.100.32
11	75	130	13	172.110.31	172.110.32
12	80	135	13	172.120.31	172.120.32
13	85	140	13	172.130.31	172.130.32
14	90	145	13	172.140.31	172.140.32
15	95	150	13	172.150.31	172.150.32
16	100	155	13	172.160.31	172.160.32
18	110	165	13	172.180.31	172.180.32
20	120	175	13	172.200.31	172.200.32

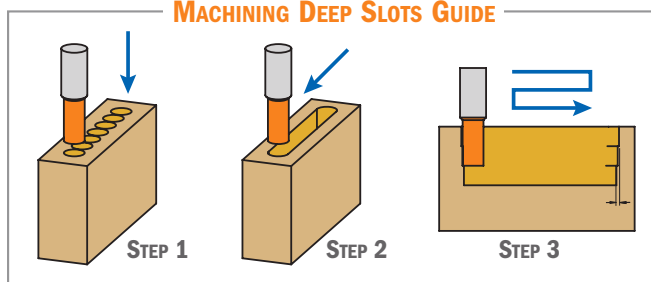
TECHNICAL DETAILS:

- Long-lasting cutting performance.
- 2 HL precision ground straight cutting edges with chip-breaker teeth [Z2R].

APPLICATION:

for cutting mortise slots in soft and hardwood. Used on machining centres equipped with chucks.

MACHINING DEEP SLOTS GUIDE



6-Piece Mortising Bit Sets

102-172



Ideal for heavy mortise jobs.

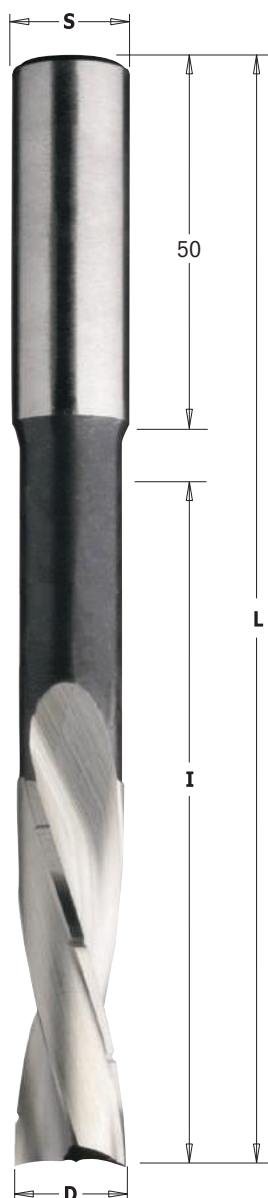
Made of super strength high speed steel and available in left-hand or right-hand rotation.

Safely packaged in a hardwood and glass box for protection, these sets are economical and a perfect addition to any workshop.

S mm	D mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
16	6-8-10-12-14-16	102.001.00	102.001.10
13	6-8-10-12-14-16	172.001.00	172.001.10



Twisted Slot Mortising Bits with Chip-Breaker



161



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
6	60	120	16	161.060.31	161.060.32
8	70	130	16	161.080.31	161.080.32
10	80	140	16	161.100.31	161.100.32
12	90	150	16	161.120.31	161.120.32
14	100	160	16	161.140.31	161.140.32
16	110	170	16	161.160.31	161.160.32

160



D mm	I mm	L mm	S mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
6	60	120	13	160.060.31	160.060.32
8	70	130	13	160.080.31	160.080.32
10	80	140	13	160.100.31	160.100.32
12	90	150	13	160.120.31	160.120.32
14	100	160	13	160.140.31	160.140.32
16	110	170	13	160.160.31	160.160.32

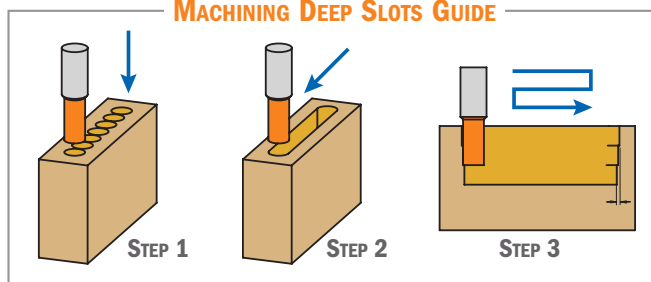
TECHNICAL DETAILS:

- Long-lasting cutting performance.
- 2 HS precision ground twisted cutting edges with chip-breaker teeth [Z2R].

APPLICATION:

for cutting mortise slots in soft and hardwood.
Used on machining centres equipped with chucks.
RPM 3000~5000

MACHINING DEEP SLOTS GUIDE



6-Piece Mortising Bit Sets



160-161



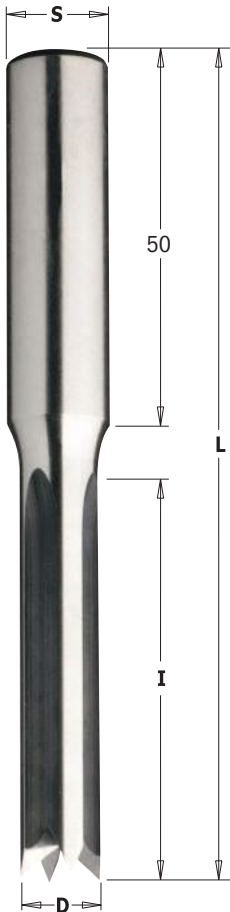
Ideal for heavy mortise jobs.

Made of super strength high speed steel and available in left-hand or right-hand rotation.

Safely packaged in a hardwood and glass box for protection, these sets are economical and a perfect addition to any workshop.

S mm	D mm	ORDER NO. Right-hand rotation	ORDER NO. Left-hand rotation
16	6-8-10-12-14-16	161.001.00	161.001.10
13	6-8-10-12-14-16	160.001.00	160.001.10

Reciprocating Slot Mortising Bits



104

D mm	I mm	L mm	S mm	ORDER NO. Right-hand & Left-hand rotation
6	45	100	13	104.060.30
7	45	100	13	104.070.30
8	45	100	13	104.080.30
9	45	100	13	104.090.30
10	55	110	13	104.100.30
11	55	110	13	104.110.30
12	55	110	13	104.120.30
13	55	110	13	104.130.30
14	55	110	13	104.140.30
15	55	110	13	104.150.30
16	55	110	13	104.160.30

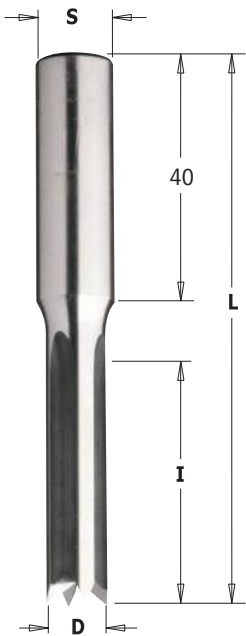
TECHNICAL DETAILS:

- Long-lasting cutting performance.
- 4 HL precision ground cutting edges [Z4].

APPLICATION:

used for cutting mortise slots in soft and hardwood.
Used on machining centres equipped with chucks.

Reciprocating Slot Mortising Bits



105

D mm	I mm	L mm	S mm	ORDER NO. Right-hand & Left-hand rotation
6	28	73	10	105.060.30
7	28	73	10	105.070.30
8	28	73	10	105.080.30
9	28	73	10	105.090.30
10	28	73	10	105.100.30
11	28	73	10	105.110.30
12	28	73	10	105.120.30
13	28	73	10	105.130.30
14	28	73	10	105.140.30
15	28	73	10	105.150.30
16	28	73	10	105.160.30

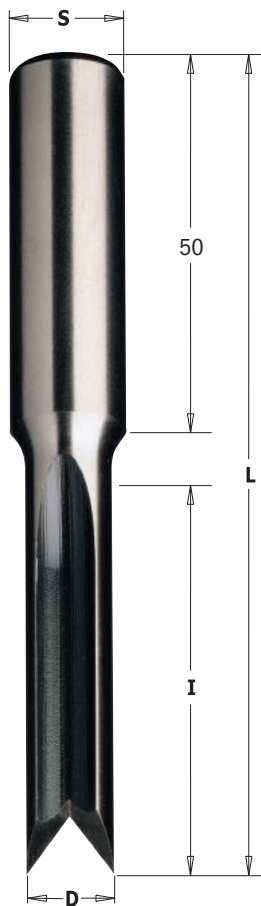
TECHNICAL DETAILS:

- Long-lasting cutting performance.
- 4 HL precision ground cutting edges [Z4].

APPLICATION:

used for cutting mortise slots in soft and hardwood.
Used on machining centres equipped with chucks.

Reciprocating Slot Mortising Bits



103



D mm	I mm	L mm	S mm	ORDER NO. Right-hand & Left-hand rotation
6	45	100	16	103.060.30
7	45	100	16	103.070.30
8	45	100	16	103.080.30
9	45	100	16	103.090.30
10	55	110	16	103.100.30
11	55	110	16	103.110.30
12	55	110	16	103.120.30
13	55	110	16	103.130.30
14	55	110	16	103.140.30
15	55	110	16	103.150.30
16	55	110	16	103.160.30

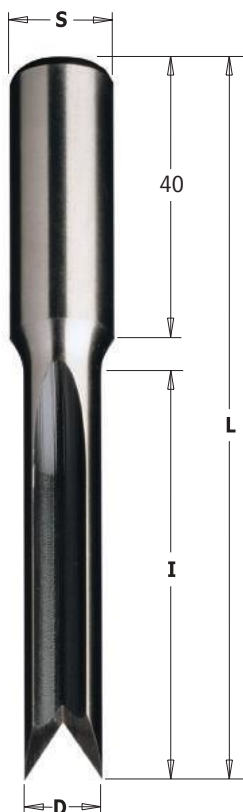
TECHNICAL DETAILS:

- Long-lasting cutter performance.
- 2 HL precision ground cutting edges [Z2].

APPLICATION:

used for cutting mortise slots in soft and hardwood. Used on machining centres equipped with chucks.

Reciprocating Slot Mortising Bits



179



D mm	I mm	L mm	S mm	ORDER NO. Right-hand & Left-hand rotation
6	45	90	13	179.060.50
7	50	95	13	179.070.50
8	50	95	13	179.080.50
9	55	100	13	179.090.50
10	60	105	13	179.100.50
11	65	110	13	179.110.50
12	70	115	13	179.120.50
13	75	120	13	179.130.50

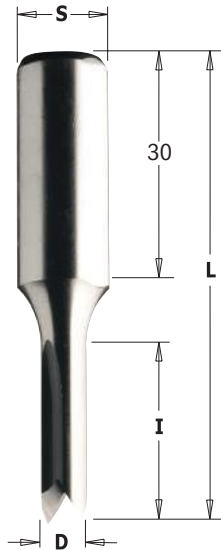
TECHNICAL DETAILS:

- Long-lasting cutter performance.
- 2 HS precision ground cutting edges [Z2].

APPLICATION:

used for cutting mortise slots in soft and hardwood. Used on machining centres equipped with chucks.

Reciprocating Slot Mortising Bits



106

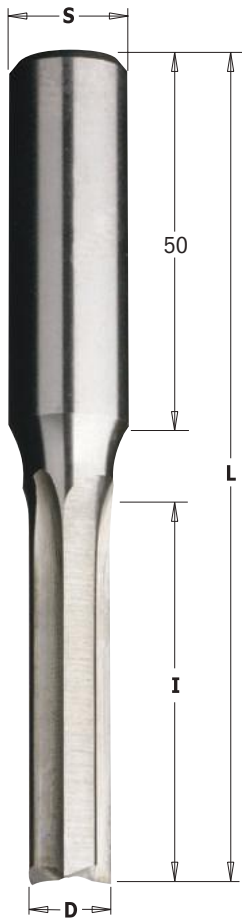


D mm	I mm	L mm	S mm	Z	ORDER NO.
					Right-hand & Left-hand rotation
6	25	60	12	2	106.060.30
7	25	60	12	2	106.070.30
8	25	60	12	2	106.080.30
9	25	60	12	2	106.090.30
10	25	60	12	4	106.100.30
11	25	60	12	4	106.110.30
12	25	60	12	4	106.120.30
13	25	60	12	4	106.130.30
14	25	60	12	4	106.140.30
15	25	60	12	4	106.150.30

TECHNICAL DETAILS:

- Long-lasting cutter performance.
- 2 or 4 HL precision ground cutting edges [Z2-Z4].

Slot Mortising Bits



107



D mm	I mm	L mm	S mm	ORDER NO.	ORDER NO.
				Right-hand rotation	Left-hand rotation
6	55	110	16	107.060.31	107.060.32
8	55	110	16	107.080.31	107.080.32
10	55	110	16	107.100.31	107.100.32
12	55	110	16	107.120.31	107.120.32
14	60	115	16	107.140.31	107.140.32
16	60	115	16	107.160.31	107.160.32
18	60	115	16	107.180.31	107.180.32
20	60	115	16	107.200.31	107.200.32

TECHNICAL DETAILS:

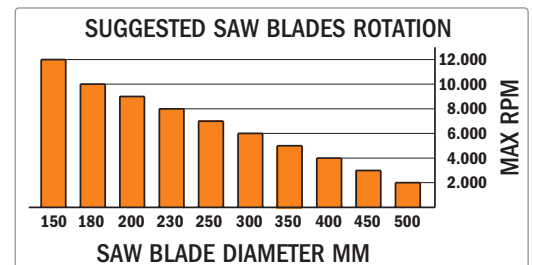
- Long-lasting cutter performance.
- 3 HL precision ground cutting edges [Z3].

APPLICATION:

used for cutting mortise slots in soft and hardwood.
Used in machining centres equipped with chucks.

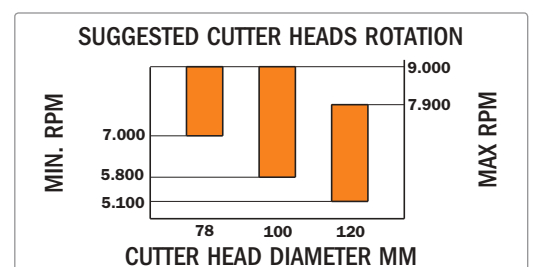
Saw blade safety

- ALWAYS** thoroughly check all blades for damage and flaws before using. Do not use blades with missing or damaged teeth.
- ALWAYS** wear safety glasses and ear protection when using power tools.
- ALWAYS** thoroughly read the owners manual and manufacturer's instructions before working with tools.
- ALWAYS** use a fence and splitter when using the table saw. Do not make freehand cuts.
- ALWAYS** use pusher blocks or a pusher stick, especially when working with small or narrow pieces.
- ALWAYS** unplug your saw before cleaning or adjusting the tool, or before making blade changes.
- ALWAYS** keep your tools sharpened, clean and stored in a safe place to avoid breakage and accidents and to extend the life of your bits and blades.
- ALWAYS** feed the work against the rotation of the blade on table saws.
- ALWAYS** be sure your workpiece is completely supported, before and after the cut.
- NEVER** remove guards from radial arm saws and miter saws.
- NEVER** remove the splitter or anti-kickback devices from table saws.
- NEVER** use dull or damaged blades.
- NEVER** use blades with missing or chipped teeth.
- NEVER** force the cut or overload the saw.
- NEVER** change blades with the saw plugged in.
- NEVER** make adjustments to any saw while the blade is turning.



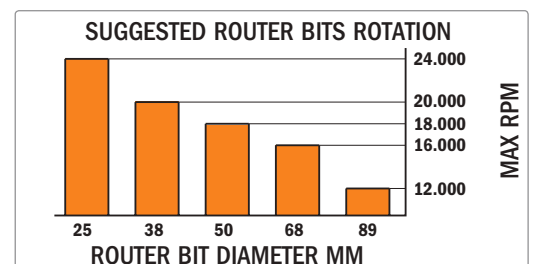
Cutter head safety

- ALWAYS** thoroughly check all cutters for damage and flaws before using.
- ALWAYS** wear safety glasses and ear protection when using power tools.
- ALWAYS** thoroughly read the owners manual and manufacturer's instructions before working with tools.
- ALWAYS** use guards that were supplied with your shaper.
- ALWAYS** use a fence with your shaper. Do not make freehand cuts.
- ALWAYS** use pusher blocks, especially when working with small or narrow pieces.
- ALWAYS** unplug your shaper before cleaning or adjusting the tool, or before making cutter or knife changes.
- ALWAYS** be sure the spindle nut is tight before plugging in the shaper.
- ALWAYS** check that knives are properly and securely installed in the cutterhead when using interchangeable-knife systems.
- ALWAYS** keep your tools sharpened, clean and stored in a safe place to avoid breakage and accidents and to extend the life of your bits and blades.
- ALWAYS** feed the work against the rotation of the knives.
- ALWAYS** be sure your workpiece is completely supported, before and after the cut.
- NEVER** remove guards or any other safety devices from your shaper.
- NEVER** use dull or damaged knives.
- NEVER** force the cut or overload the shaper.
- NEVER** change cutters or knives or make adjustments with the shaper plugged in.
- NEVER** make adjustments to the shaper while the cutter is turning.



Router bits safety

- ALWAYS** thoroughly check all tools for possible flaws before using.
- ALWAYS** wear safety glasses and ear protection.
- ALWAYS** thoroughly read the owners manual and manufacturer instructions before using.
- ALWAYS** check that at least 75% of the shank is securely inserted into the collet of the router.
- ALWAYS** use template guide collars when possible to absorb lateral bit deflection.
- ALWAYS** use a fence when working on the router table.
- ALWAYS** reduce the router speed when working with larger diameter bits.
- ALWAYS** keep your fence adjusted so there is some clearance between the bearing guide and the workpiece.
- ALWAYS** take care to remove large quantities of stock (cross section > 10mm) in more than one run.
- ALWAYS** keep your tools sharpened, clean and stored in a safe place to avoid breakage and accidents and to extend the life of your bits and blades.
- NEVER** use dull or defective, even suspiciously defective, tools.
- NEVER** force the shank entirely into the collet (bottoming out). Leave about a 3,2mm (1/8") space from the bottom.
- NEVER** force the bit into your router or overload the router.



Explanation of symbol



Tungsten carbide
tipped



Solid tungsten carbide



High speed steel



Alloyed tools steel



High-alloyed tool steel



High performance steel



High carbon steel



Bimetal



High speed steel



TiN coated bimetal
with 8% cobalt teeth



Cermet Carbide



Insert carbide



Carbide grit



Polycrystalline
diamond



Polycrystalline
diamond



Diamond grit



One cutting edge



One + one
cutting edges



Two cutting edges



Two + one
cutting edges



Two + two
cutting edges



Three cutting edges



Three + three
cutting edges



Three cutting edges
with chipbreaker



Four cutting edges



Twelve cutting edges



One spur



Two spur



Four spur



Right-hand rotation



Left-hand rotation



Right-hand &
Left-hand rotation



Antikick-back



Radial relief



Tool with plunging
capacity



Axial angle



Mechanical feed



Manual feed



Grooving, sizing



Rebating



Slotting



Non-axial boring



Spiral boring



Tool with bearing



Plastic box
for cutter head



Plastic carry case
for saw blades



Clamshell carry case
for saw blades



Cardboard box
for saw blades



Industrial Thin-kerf blade



ORANGE CHROME



High-Density Carbide



XTREME
High
performance tool



Non-Stick
Orange Shield
Coating™



Shear Angle Grind



Saw blade
with dampening slots
with fill



Saw blade
with dampening slots
without fill



Warning



Not for hand held use
for router table only



Wear safety shoes



Wear five finger gloves



Wear safety glasses



Wear ear protection



Wear dust mask



Wear safety helmet

Conditions of trading

PREMISE

C.M.T. products are the result of technological innovation achieved through continuous research applied on a vast scale. Drawings, technical data, photos of the products and packaging are supplied for the sole purpose of informing the customer and are not binding in any manner. **C.M.T.** may undertake, when necessary, modifications and improvements without applying these innovations to the parts already supplied. The operational tolerances conform to technical standards that are acceptable for this range of tools.

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All orders for our products are meant to be accepted at the price and sale conditions that are legally in force at the date of delivery.

Every order will be treated and supplied according to the following general sale conditions. By placing an order or accepting an offer, the customer accepts, without any reservations, all conditions expressly mentioned hereafter.

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We will notify the acceptance of any order by an order confirmation in which we will indicate all details pertaining to the items purchased, their price and expected delivery date. Therefore, we will not be able to accept any modification after three working days from the date of receipt.

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C.M.T. will only be able to accept and process orders for a minimum net amount of € 100,00.

In case of acceptance of the order, we will add € 15,00 for shipping and handling.

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The prices stated in **C.M.T.'s** quotation and price lists are gross and are intended to be "ex-works".

Prices and VAT will be those in force at the date of shipping. To the best of our knowledge, the prices indicated in our catalogues, price lists and order confirmations are correct. However, **C.M.T.** cannot be held legally liable for reserving the right to change prices without notification in line with the manufacturer's cost increases.

DELIVERY

Delivery dates in the order confirmation are given as an indication of the estimated delivery time. They have to be considered as reliable only in case of normal operating conditions, and there shall be no liability on the part of the Seller for any failure to deliver due to causes beyond the Seller's control. **C.M.T.** will also not be able to accept any cancellation of existing orders which were not delivered in time due to external impediments.

Standard products will be shipped within five working days from receipt of the order.

SHIPPING AND HANDLING

The packing of our products will be charged on the final invoice, while shipping is "ex-works" from our factory at Chiusa di Ginestreto (Pesaro).

All products supplied by **C.M.T.** travel at the customer's own risk.

C.M.T. retains the right to charge freight costs on the invoice in case of value under the minimum amount acceptable of €100,00.

C.M.T. will not be held responsible for any damage, theft or tampering that might occur during transport, and for which the forwarder will be legally liable according to article 1693 of the Civil Code. The customer, for his part, will have to check the goods at the moment of receipt and, in case any anomaly or damage is found, he will have to apply for a refund to be addressed to the forwarder.

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Cash payments can only be accepted for purchases done directly at the **C.M.T.** factory located in Chiusa di Ginestreto (Pesaro) in accordance with article 1182, sub-section 3 of the Civil Code, or upon delivery of the goods provided there is a written agreement between the parties.

Deferred methods of payment will have to be previously agreed with the Seller. In this case, if one or more instalments are not paid, the agreement will automatically expire according to article 1186 of the Civil Code.

A delay in payment, even partial, will automatically incur interest in the amount of an extra 5% to be charged to the customer's account.

In case of non payment, **C.M.T.** reserves the right to suspend any further supply of its products.

WARRANTY

All professional tools by **C.M.T.** are manufactured according to high standards of technology and are therefore warranted against any possible defect. This warranty does not cover damage or tampering which can be ascribed to inappropriate use. It is also not applicable for tools that have been re-sharpened.

This warranty does not cover the possible injuries resulting from inappropriate use of defective tools.

C.M.T. will repair or replace any goods which the buyer shall prove to have been defective in material or workmanship upon analysis by its technical department. Any complaint must be communicated within fifteen days from receipt of the goods together with a written form in which the customer provides a detailed description of the defect. Any return of tools will only be accepted upon authorisation by **C.M.T.** and the freight will be at the customer's own expense.

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