PROFESSIONAL TOOLS

CATALOG

edition 1

PROFESSIONAL TOOLS
SALES & SERVICE

ITA TOOLS

Your Personal B2B Account
With Order Center & Useful Information

Wide range of tools in one place
We always hold on the stock common sizes and types of tools. You don't need to invest in your own warehouse, huge stock and fast delivery are our main advantages.

Access to the stock, prices and orders 24/7
Doesn't matter where you are and what time is it if you have access to B2B system and internet connection you can in easy way place an order, check prices and availability.

Better management of orders, payments, invoices
Simplification and automation of the sales department. Easy access to order history, invoices and actual promotions.

- intuitive and user friendly system
- simple product searching system
- intuitive process of product ordering
- access to the stock
- access to the order history and invoices
- order status monitoring
- access to invoices and payments
- access to actual promotions

B2B

b2b-itatools.pl
www.**ita.tools**

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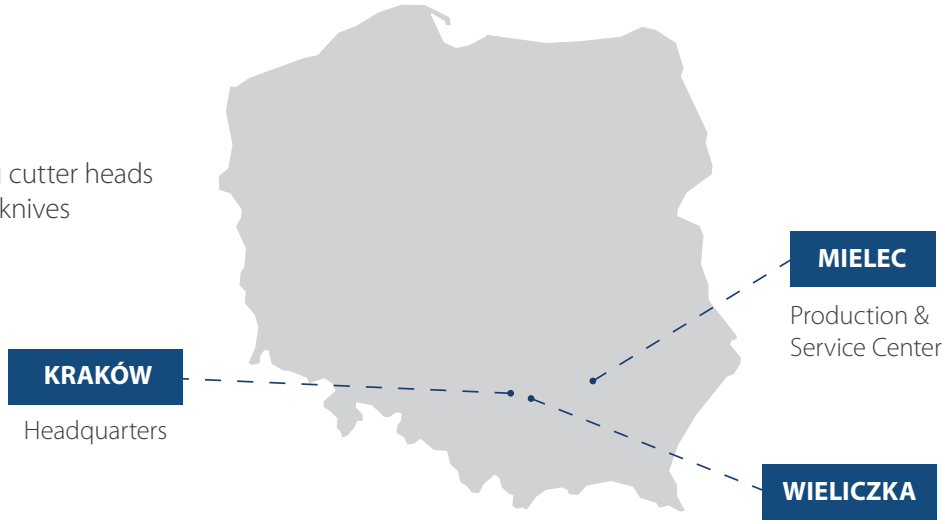
ITA TOOLS
Company details

ITA TOOLS Company is a Polish manufacturer of professional cutting tools located in Cracow with Production and Service center in Mielec Special Industrial Zone and warehouse in Wieliczka. In total, ITA TOOLS employs over 120 workers. We offer a wide range of tools for woodworking industry, furniture production and processing composite materials.

Product range includes:

- Solid carbide spiral bits
- PCD router bits and cutters
- Industrial dowel drills
- Saw blades
- Cutter heads and pre milling cutter heads
- Interchangeable and planer knives
- CNC chuck and accessories
- Other customized tools



CERT
Polska Akademia Jakości
PN-EN ISO 9001:2009
PN-EN ISO 14001:2005
PN-EN ISO 18001:2004
Certyfikat nr:
1586/10/2014/ZSZ/C

Our company has obtained ISO certificate by meeting the following standards:
- PN-EN ISO 9001:2009 – Quality Management System
- PN-EN ISO 14001:2005 – Environmental Management
- PN-EN ISO 18001:2004 – Management BHP

>10	> 120	24/7h	50 000
More than 10 years of experience	More than 120 employees	Service & production	About 50,000 products on offer

Warehouse

Why better than other?

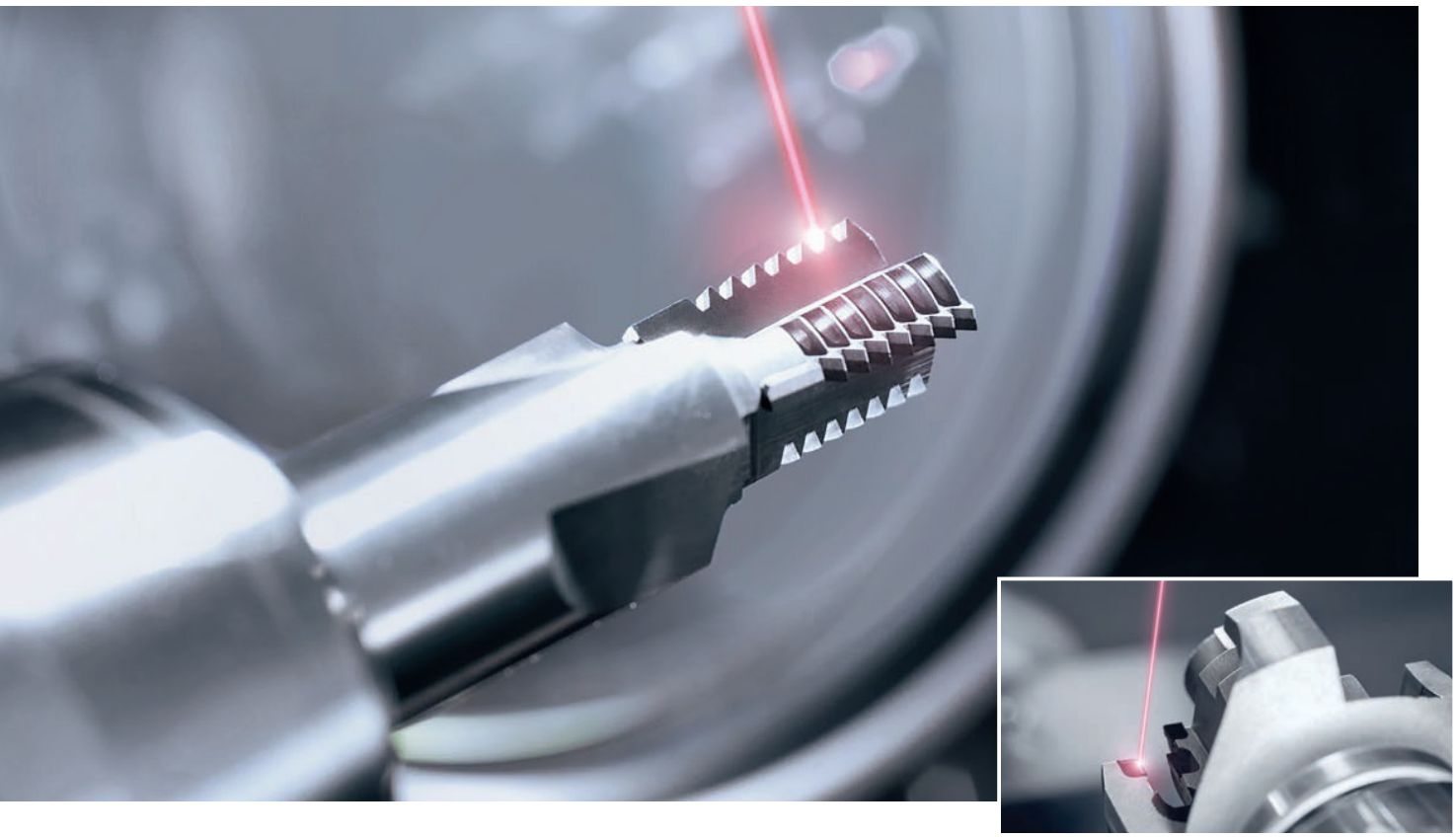
- Industrial tool available on stock!
- B2B system for collect orders 24/7h
- Fast delivery thanks to localization in the middle of Europe
- Customized production. Experienced staff ready to met your specific needs.

Service Center

Full range tools services!

- Sharpening, regeneration, coating
- Modern CNC machine park with Walter®, Vollmer® and DMG MORI® machines
- Certified staff work 24/7 for 3 shifts 7 days in week!
- High precision and perfect quality services

Production and Service
PCD and HM Tools

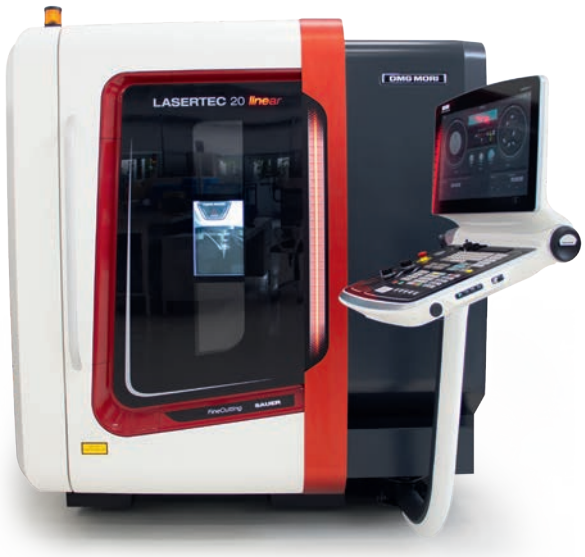


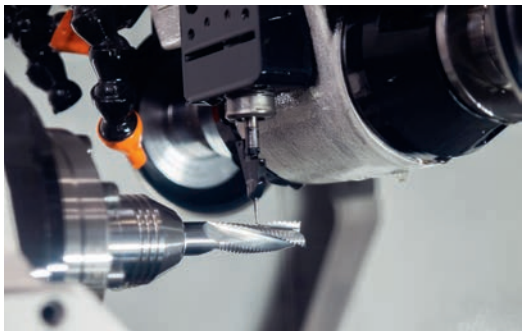
ITA TOOLS company is pioneer in technology of PCD sharpening by Laser Ablation.

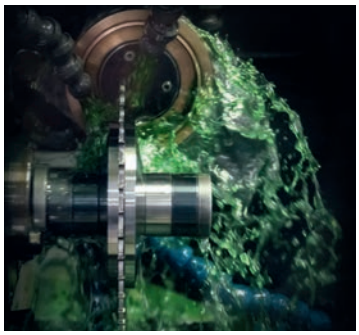
Laser ablation works by focusing a laser onto a substrate to a remove material that is on it's surface. The amount that is removed depends on the intensity, pulse length, and wavelength of the laser, as well as the material itself. The area absorbs the laser that is being directed on it, thereby breaking down the chemical bonds within the area. Laser ablation is a much more efficient, reliable and cost-effective method.

Laser ablation has many benefits over more traditional methods of Sharpening processes, such as:

- The sharpening area doesn't warm up
- Ultimate precision especially for DIA profile cutting edges, thanks a laser we are able to sharp any angle
- Possibility to sharpening chip breakers
- After Laser ablation the cutting blade is more acute, the laser cuts not eroding
- The laser cuts PCD and binder concurrent
- Simple processing of coarse PCD
- Expanding tools life
- Not harmful for ecology







We take care of your tools!

We are still working 24/h, 3 shifts – 7 days in week for you!

- Each tool is registered in database on each step of services
- Ultrasonic cleaning or micro glass grain sandblasting depend of tool and dirt provide best quality
- Measurements before and after services on WALTER Heliset and Zoller projectors

Measurements after sharpening with an **accuracy of 0.01 mm** – indicating diameter before and after sharpening!

- Top quality of induction brazing by CEIA machine.
- Sharpening technology provide by modern WALTER and VOLLMER CNC machines!
- High grinding quality thanks to WALTER CNC machines

Unique on European scale Laser ablation sharpening technology provide by DMG MORI!

- Dynamic balancing with a **tolerance of G2.5**

TOOLCLOUD - the new technology of tools management

Flexibility!
We can tightly reflect company structure in your company

Simplicity!
Easy interface with which handle even inexprerienced users

Mobility!
Access is possible from any device with web browser.

Complexity!
In one place we can check our tool stocks. what is happening with our tools in resharpening centre amd quickly order new products.

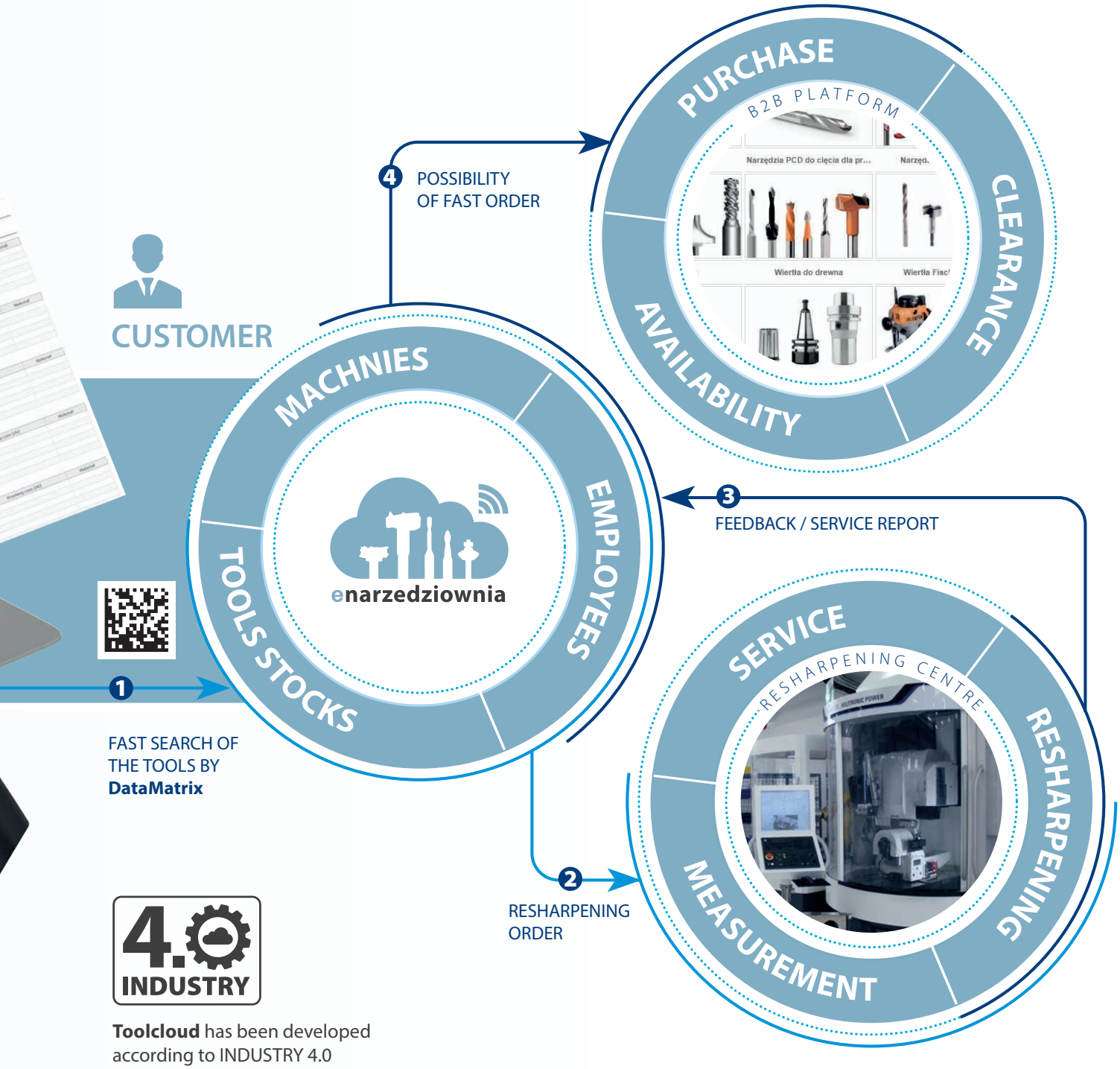
Frugality!
Bright and clear overview on tools stocks and upcoming services will help you to avoid unplanned downtime.

Time Saving!
DPM reader will help you locate the tools and manage them. Now withdrawings by employees or service shippnig will take just a moment.

Principles of operation

We give you tool management system which help to manage your tools. Thanks to our solution you will have your tools and machines under control – in one system.

The system is fully compatible with our B2B platform and grinder. In one place we are able to check the diameter of the tool after sharpening and order new ones when we are unable to sharpen it again.



4.0 INDUSTRY

Toolcloud has been developed according to INDUSTRY 4.0

PCD TOOLS

DT1

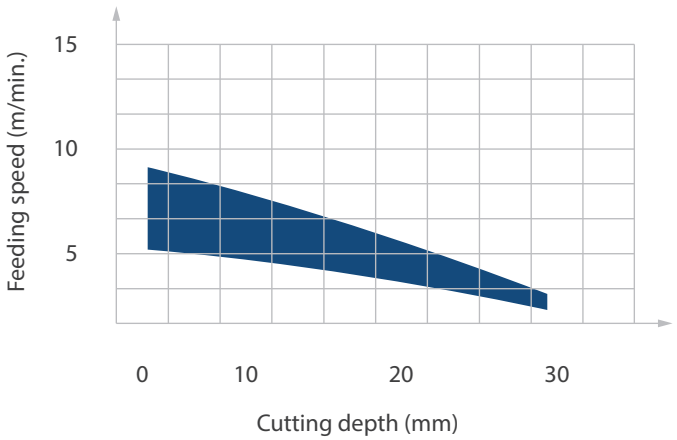
Z1 | RH | LASER ABLATION

TECHNICAL DETAILS:

- Single PCD tip
- Body made from VHM tungsten carbide hardness of 93,8 HRA
- Height of PCD tip 2-4 mm
- It can be re-sharpened (3-4 times)

APPLICATION:

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



Results shown in this diagram are purely empirical, based merely on informative and could change depending of kind of work and type of material.

D mm	l mm	S mm	Z	α	BODY	ARTICLE
4	12	6	1	0	HM	DT1.04.012.06.0MR
5	8	10	1	Neg.	HM	DT1.05.008.10.0MR
5	20	8	1	Neg.	HM	DT1.05.020.08.0MR
6	12	8	1	Neg.	HM	DT1.06.012.08.0MR
6	20	6	1	Neg.	HM	DT1.06.020.06.0MR
6	22	12	1	Neg.	HM	DT1.06.022.12.0MR
8	15	10	1	Neg.	HM	DT1.08.015.10.0MR
8	23	12	1	Neg.	HM	DT1.08.023.12.0MR

Other dimensions are available on order

Diamond Router Bits Z2, Series DT2

DT2

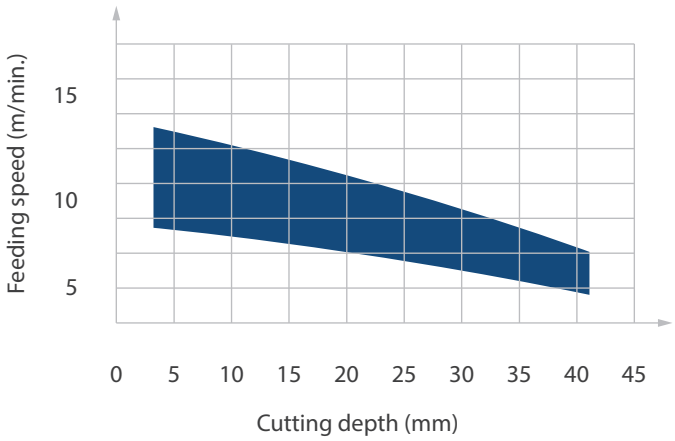
Z2 | RH | LASER ABLATION

TECHNICAL DETAILS:

- Full double PCD tips
- Body made from VHM tungsten carbide hardness of 93,8 HRA
- Height of PCD tip 2-4 mm
- It can be re-sharpened (3-4 times)

APPLICATION:

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



Results shown in this diagram are purely empirical, based merely on informative and could change depending of kind of work and type of material.

D mm	l mm	S mm	Z	α	BODY	ARTICLE
6	10	12	2	Neg.	HM	DT2.06.010.12.0MR
8	15	10	2	Neg.	HM	DT2.08.015.10.0MR
10	10	12	2	Neg.	HM	DT2.10.010.12.0MR
10	15	8	2	Neg.	HM	DT2.10.015.08.0MR
10	15	10	2	Neg.	HM	DT2.10.015.10.0MR
12	15	12	2	Neg.	HM	DT2.12.015.12.0MR
10	22	12	2	Neg.	HM	DT2.10.022.12.0MR
12	20	12	2	Neg.	HM	DT2.12.020.12.0MR
16	35	20	2	Neg.	HM	DT2.16.035.20.1SR

Other dimensions are available on order

DTS Z2+1

Z2+1 | RH | LASER ABLATION

TECHNICAL DETAILS:

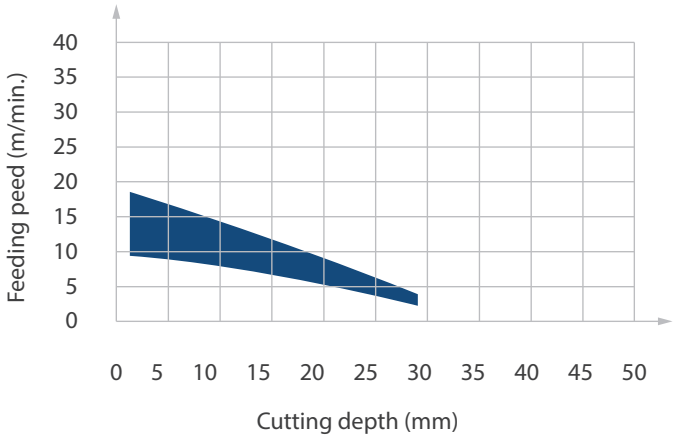
- Full double PCD tips, positive - negative
- Body made from VHM tungsten carbide hardness of 93,8 HRA
- Height of PCD tip 3 mm
- It can be re-sharpened (3-4 times)
- PCD tip on the bottom to drill

APPLICATION:

For make canals on raw and coated chipboard, HPL, MDF, HDF, plywood and carbon fibre.

ADVANTAGES:

Fast feed rate, perfect chip ejection,excellent finish of the working edge and quiet work. Doesn't leave smudges on the working material (MDF, HPL).



Results shown in this diagram are purely empirical, based merely on informative and could change depending of kind of work and type of material.

D mm	I mm	S mm	Z	α	BODY	ARTICLE RH
8	12	12	2+1	Pos.-Neg.	HM	DTS.08.012.12.0DR
8	15	12	2+1	Pos.-Neg.	HM	DTS.08.015.12.0DR
8	20	12	2+1	Pos.-Neg.	HM	DTS.08.020.12.0DR
12	15	12	2+1	Pos.-Neg.	HM	DTS.12.015.12.0DR
12	20	12	2+1	Pos.-Neg.	HM	DTS.12.020.12.0DR
12	25	12	2+1	Pos.-Neg.	HM	DTS.12.025.12.0DR
16	33	16	2+1	Pos.-Neg.	HM	DTS.16.033.16.0MR
20	25	20	2+1	Pos.-Neg.	HM	DTS.20.025.20.0SR

Other dimensions are available on order

Diamond Router Bits Z1+1, Series DTA – ECO

DTA Z1+1

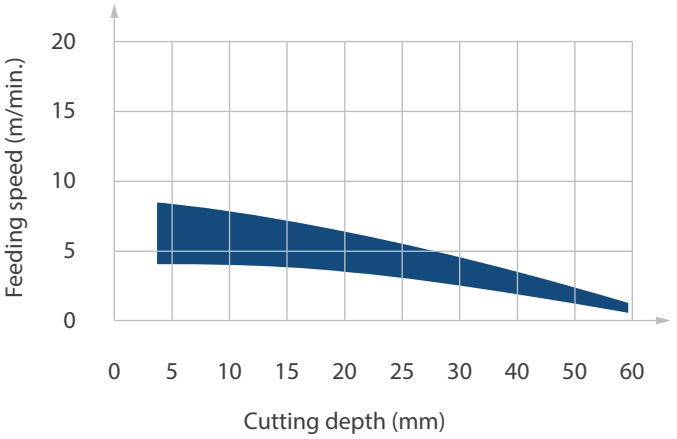
Z1+1 | RH | LH

TECHNICAL DETAILS:

- One full PCD blade spread out on three helix wings
- Body made from stainless steel > 28 HRC or HM monolith
- Approval class of shank h6
- The shank surface roughness Ra ≤0,3 µm
- Height of PCD tip 2,5 mm
- It can be re-sharpened (2-3 times)
- HM tip on the bottom to drill

APPLICATION:

For jointing, rabbeting, grooving, copying and dividing cuts of raw materials, chipboard panels with or without laminate.



Results shown in this diagram are purely empirical, based merely on informative and could change depending of kind of work and type of material.

HM MONOLITH BODY

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
8	27	8	1+1	DTA.08.027.08.0MR	DTA.08.027.08.0ML
8	36	8	1+1	DTA.08.036.08.0MR	DTA.08.036.08.0ML

Diamond Router Bits Z1+1, Series DTA – ECO

STEEL BODY

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
10	25	12	1+1	DTA.10.025.12.0SR	DTA.10.025.12.0SL
10	35	12	1+1	DTA.10.035.12.0SR	DTA.10.035.12.0SL
12	25	12	1+1	DTA.12.025.12.0SR	DTA.12.025.12.0SL
12	35	12	1+1	DTA.12.035.12.0SR	DTA.12.035.12.0SL
12	45	12	1+1	DTA.12.045.12.0SR	DTA.12.045.12.0SL
16	25	16	1+1	DTA.16.025.16.0SR	DTA.16.025.16.0SL
16	35	16	1+1	DTA.16.035.16.0SR	DTA.16.035.16.0SL
16	45	16	1+1	DTA.16.045.16.0SR	DTA.16.045.16.0SL
16	55	20	1+1	DTA.16.055.10.0SR	DTA.16.055.10.0SL
18	25	20	1+1	DTA.18.025.20.0SR	DTA.18.025.20.0SL
18	35	20	1+1	DTA.18.035.20.0SR	DTA.18.035.20.0SL
18	45	20	1+1	DTA.18.045.20.0SR	DTA.18.045.20.0SL
18	45	25	1+1	DTA.18.045.25.0SR	DTA.18.045.25.0SL
20	25	20	1+1	DTA.20.025.20.0SR	DTA.20.025.20.0SL
20	34	20	1+1	DTA.20.035.20.0SR	DTA.20.035.20.0SL
20	45	20	1+1	DTA.20.045.20.0SR	DTA.20.045.20.0SL
20	55	20	1+1	DTA.20.055.20.0SR	DTA.20.055.20.0SL
20	65	20	1+1	DTA.20.065.20.0SR	DTA.20.065.20.0SL
20	80	20	1+1	DTA.20.080.20.0SR	DTA.20.080.20.0SL

Other dimensions are available on order

Diamond Router Bits Z2+1, series DTN – ECO NESTING

DTN Z2+1

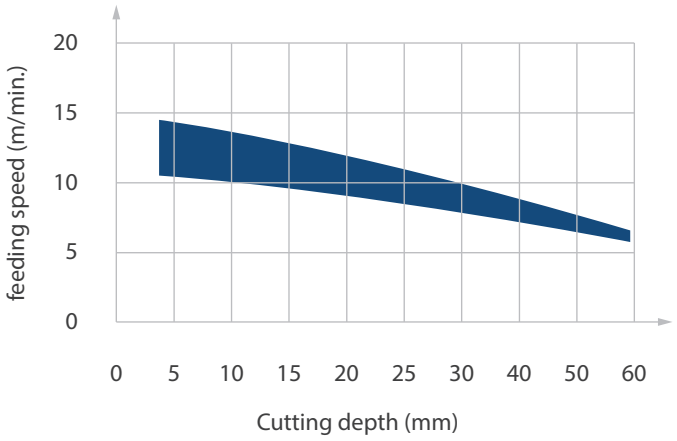
Z2+1 | RH | LH

TECHNICAL DETAILS:

- Two full PCD blades spread out on four helix wings
- Body made from stainless steel > 28 HRC or HM monolith
- Approval class of shank h6
- The shank surface roughness Ra ≤0,3 µm
- Height of PCD tip 2,5 mm
- It can be re-sharpened (2-3 times)
- HM tip on the bottom to drill

APPLICATION:

For nesting, jointing, rabbeting, grooving, copying and dividing cuts of raw materials, chipboard panels with or without laminate.



Results shown in this diagram are purely empirical, based merely on informative and could change depending of kind of work and type of material.

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
12	25	12	2+1	DTN.12.025.12.0SR	DTN.12.025.12.0SL
12	25	16	2+1	DTN.12.025.16.0SR	DTN.12.025.16.0SL
12	25	20	2+1	DTN.12.025.20.0SR	DTN.12.025.20.0SL
12	35	20	2+1	DTN.12.035.20.0SR	DTN.12.035.20.0SL
16	25	16	2+1	DTN.16.025.16.0SR	DTN.16.025.16.0SL
16	25	20	2+1	DTN.16.025.20.0SR	DTN.16.025.20.0SL

Diamond Router Bits Z2+1, Series DTN – ECO NESTING

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
16	35	16	2+1	DTN.16.035.16.0SR	DTN.16.035.16.0SL
16	35	20	2+1	DTN.16.035.20.0SR	DTN.16.035.20.0SL
16	45	16	2+1	DTN.16.045.16.0SR	DTN.16.045.16.0SL
16	45	20	2+1	DTN.16.045.20.0SR	DTN.16.045.20.0SL
16	55	16	2+1	DTN.16.055.16.0SR	DTN.16.055.16.0SL
18	25	20	2+1	DTN.18.025.20.0SR	DTN.18.025.20.0SL
18	35	20	2+1	DTN.18.035.20.0SR	DTN.18.035.20.0SL
20	25	20	2+1	DTN.20.025.20.0SR	DTN.20.025.20.0SL
20	35	20	2+1	DTN.20.035.20.0SR	DTN.20.035.20.0SL
20	45	20	2+1	DTN.20.045.20.0SR	DTN.20.045.20.0SL
20	55	20	2+1	DTN.20.055.20.0SR	DTN.20.055.20.0SL
25	25	25	2+1	DTN.25.025.25.0SR	DTN.25.025.25.0SL

Other dimensions are available on order

Diamond Router Bits Z3+1 – TURBO

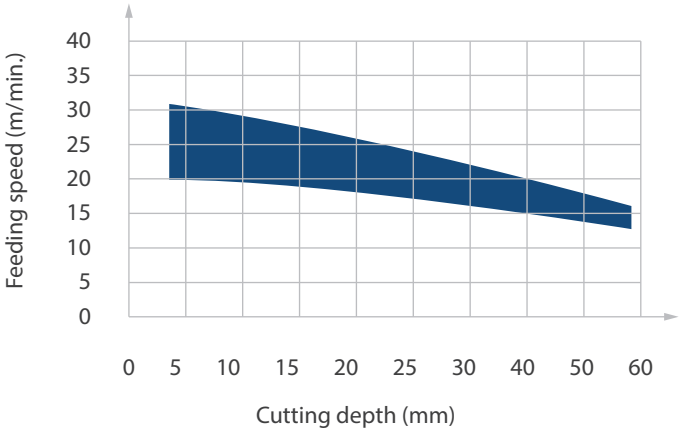
DTE Z3+1

Z3+1 | RH | LH

TECHNICAL DETAILS:

- Three full PCD blades spread out on three helix wings
- Body from special hard steel or DENSIMET
- Height of PCD tip:
  D = 12 / H = 2,5 (2-3 sharpening operations)
  D = 16 - 18 / H = 4 (5-6 sharpening operations)
  D = 20 - 25 / H = 4,5 (5-6 sharpening operations)
- PCD tip on the bottom to drill
- Fast feed rate, excellent finish of the working edge and quiet work

APPLICATION:
For jointing, rabbeting, grooving, copying and dividing cuts of raw materials, chipboard panels with or without veneer, MDF, hardwood, plywood.



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DENSIMET BODY

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
10	22	12	3+1	DTE.10.022.12.0DR	DTE.10.022.12.0DL
12	22	12	3+1	DTE.12.022.12.0DR	DTE.12.022.12.0DL
12	27	12	3+1	DTE.12.027.12.0DR	DTE.12.027.12.0DL

STEEL BODY

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
16	25	16	3+1	DTE.16.025.16.0SR	DTE.16.025.16.0SL
16	25	20	3+1	DTE.16.025.20.0SR	DTE.16.025.20.0SL

Diamond Router Bits Z3+1 – TURBO

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
16	35	16	3+1	DTE.16.035.16.0SR	DTE.16.035.16.0SL
18	25	20	3+1	DTE.18.025.20.0SR	DTE.18.025.20.0SL
18	35	20	3+1	DTE.18.035.20.0SR	DTE.18.035.20.0SL
18	45	20	3+1	DTE.18.045.20.0SR	DTE.18.045.20.0SL
20	25	20	3+1	DTE.20.025.20.0SR	DTE.20.025.20.0SL
20	35	20	3+1	DTE.20.035.20.0SR	DTE.20.035.20.0SL
20	45	20	3+1	DTE.20.045.20.0SR	DTE.20.045.20.0SL
20	50	20	3+1	DTE.20.050.20.0SR	DTE.20.050.20.0SL
20	55	20	3+1	DTE.20.055.20.0SR	DTE.20.055.20.0SL
20	65	20	3+1	DTE.20.065.20.0SR	DTE.20.065.20.0SL
25	25	20	3+1	DTE.25.025.20.0SR	DTE.25.025.20.0SL
25	35	25	3+1	DTE.25.035.25.0SR	DTE.25.035.25.0SL
25	45	20	3+1	DTE.25.045.20.0SR	DTE.25.045.20.0SL
25	65	20	3+1	DTE.25.065.20.0SR	DTE.25.065.20.0SL

Other dimensions are available on order

Diamond Router Bits Z3+3+1 – NESTING

DTM Z3+3+1

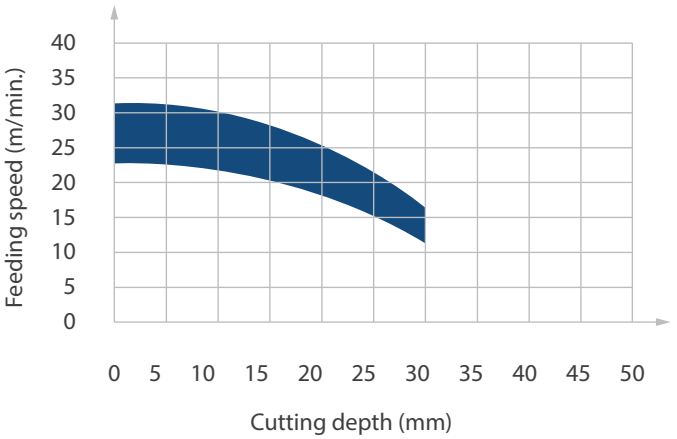
Z3+3+1 | RH

TECHNICAL DETAILS:

- Three full PCD blades spread out on six helix wings
- Body from special hard steel or DENSIMET
- Height of PCD tip 2,5 mm
- It can be re-sharpened (2-3 times)
- Construction positive or negative
- PCD tip on the bottom to drill
- Fast feed rate,excellent finish of the working edge and quiet work

APPLICATION:

For nesting with high feed rate in: chipboard, MDF and plywood.



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positive

arrangement of tips

D mm	I mm	S mm	ARTICLE DENSIMET BODY
12	19	12	DTM.12.019.12.0DRP
12	24	12	DTM.12.024.12.0DRP

negative

arrangement of tips

D mm	I mm	S mm	ARTICLE DENSIMET BODY
12	19	12	DTM.12.019.12.0DRN
12	24	12	DTM.12.024.12.0DRN
16	35	16	DTM.16.035.16.0DRN

DGM

SYMMETRICAL ROTATION

ASYMMETRICAL ROTATION

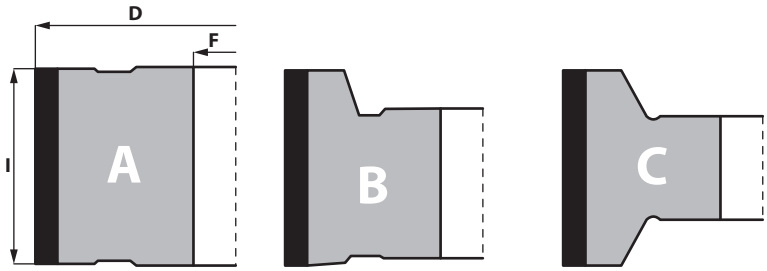
RH LH SYM MEC

TECHNICAL DETAILS:

- Height of PCD tip 4,5 mm
- It can be re-sharpened (5–6 times)
- Additional grooves at the main hole 4x8 (DKN)

APPLICATION:

Finishing Diamond cutter heads for edge banding machines with mechanical feed.
Suitable for MDF and chipboard panels.



Possibility to request with PCD hight tip 5 or 6 mm., and with number of teeth Z3+3 or Z2+2

D mm	F mm	I mm	Z	BODY CONF.	ARTICLE RH	ARTICLE LH	SYMBOL symmetrical
60	25 DKN	48	2+2	A	DGM.060025048.1RA4	DGM.060025048.1LA4	
60	25 DKN	48	2+2	A	DGM.060025048.0RA4	DGM.060025048.0LA4	
60	20 DKN	55	2+2	B	DGM.060020055.0RB4	DGM.060020055.0LB4	
60	25 DKN	56	2+2	A	DGM.060025056.0RA4	DGM.060025056.0LA4	
60	25 DKN	64	3+3	A	DGM.060025064.0RA4	DGM.060025064.0LA4	
70	30 DKN	48	2+2	C	DGM.070030048.0RC4	DGM.070030048.0LC4	
80	30 DKN	45	3+3	A			DGM.080030045.SSA4
80	30 DKN	56	2+2	A	DGM.080030056.0RA4	DGM.080030056.0LA4	
100	20 DKN	65	2+2	A	DGM.100020065.0RC4	DGM.100020065.0LC4	
100	30 DKN	43	3+3	B	DGM.100030043.0RB4	DGM.100030043.0LB4	
100	30 DKN	48	3+3	B	DGM.100030048.0RB4	DGM.100030048.0LB4	
100	30 DKN	56	3+3	C	DGM.100030056.0RC4	DGM.100030056.0LC4	
100	20 DKN	64	3+3	C	DGM.100020064.0RC4	DGM.100020064.0LC4	
100	30 DKN	64	3+3	B	DGM.100030064.0RB4	DGM.100030064.0LB4	
125	30 DKN	34	3+3	A	DGM.125030034.0RA4	DGM.125030034.0LA4	
125	30 DKN	64	3+3	B	DGM.125030064.0RB4	DGM.125030064.0LB4	

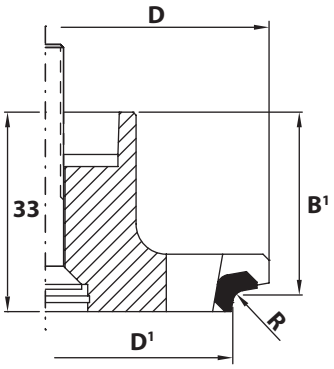
Profiling DIA Heads for Edgebanding Machines

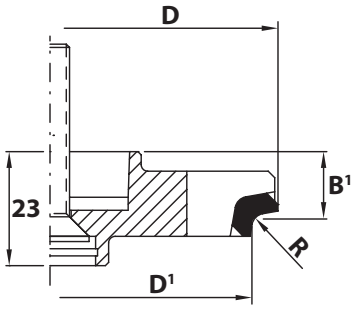
DGB

RH LH Z4

TECHNICAL DETAILS:
- Height of PCD tip 3 mm
- It can be re-sharpened (3-4 times)

APPLICATION:
Diamond cutter heads intended for edge profiling for edge banding machines with mechanical feed. Suitable for MDF and chipboard panels.





HSK32 Type 33

D mm	D¹ mm	MOUNTING mm	B¹ mm	R	Z	ARTICLE RH	ARTICLE LH
74	70	HSK32	31,5	R1	4	DGB.074032000.4RC2	DGB.074032000.4LC2
74	70	HSK32	31,5	R2	4	DGB.074032000.4RC1	DGB.074032000.4LC1
74	70	HSK32	31,5	R3	4	DGB.074032000.4RC3	DGB.074032000.4LC3

HSK25R Type 23

D mm	D¹ mm	MOUNTING mm	B¹ mm	R	Z	ARTICLE RH	ARTICLE LH
76	70	HSK25R	17,5	R1	4	DGB.076025000.4RA3	DGB.076025000.4LA3
76	70	HSK25R	17,5	R2	4	DGB.076025000.4RA4	DGB.076025000.4LA4

HOG
Compact

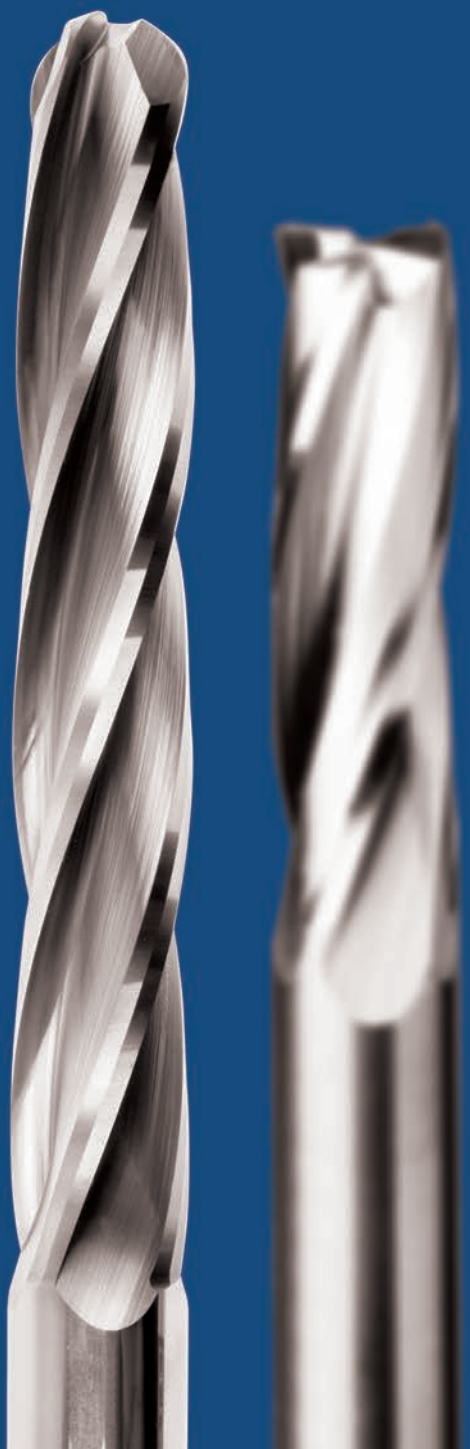
RH LH MEC

TECHNICAL DETAILS:
- Multi blades contraction finishing and chipbreaker
- The shape of the tips – one-sided stage
- Low-vibration hardened body
- Optimal system of chip removing
- Adapted to the most common clamping systems
- Height of PCD tip 6 mm

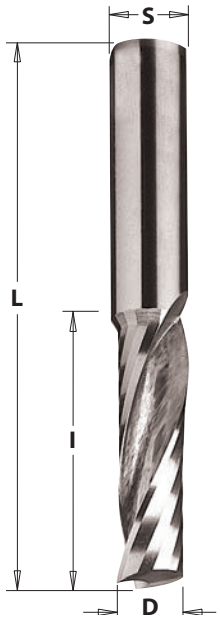
APLICATION:
Formating with height quality finishing such materials as: chipboard, MDF, HDF, playwood, honeycomb and plywood panels with or without veneer, melamine, paper or plastic coatings.

D mm	F mm	I mm	Z	ARTICLE RH	ARTICLE LH
250	60	12	42/6	HOG.250060012.CR26	HOG.250060012.CL26
250	80	12	42/6	HOG.250080012.CR36	HOG.250080012.CL36
250	100	12	42/6	HOG.250100012.CR16	HOG.250100012.CL16

SOLID CARBIDE SPIRAL BITS



198



VHM **Z1** **RH**

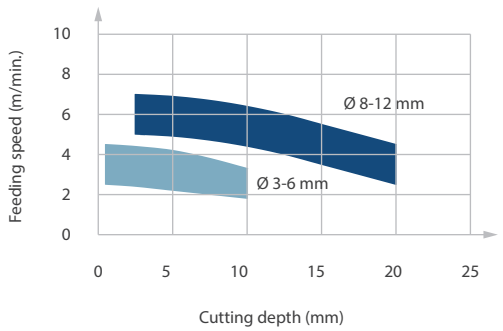
TECHNICAL DETAILS:
- 1 spiral cutting edge [Z1]
- Upward chip ejection

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.

D mm	I mm	L mm	S mm	ARTICLE
3	12	50	3	198.03.012.050.03R
4	15	50	4	198.04.015.050.04R
5	17	50	5	198.05.017.050.05R
6	22	60	6	198.06.022.060.06R
8	22	70	8	198.08.022.070.08R
10	32	70	10	198.10.032.070.10R
10	42	80	10	198.10.042.080.10R
10	52	90	10	198.10.052.090.10R
12	32	83	12	198.12.032.083.12R

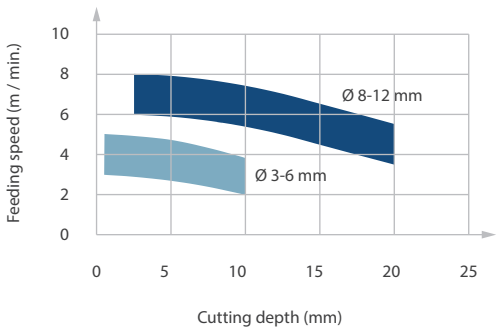
Other dimensions are available on order

Ø 3-12 mm | Plastic



RPM: 16000 - 18000
Results shown in this diagram are purely empirical, based merely on informative and hypothetical calculation.
Each application may require different parameters in consideration of materials in use and machining conditions.

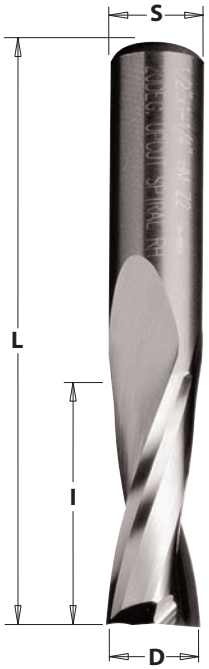
Ø 3-12 mm | Soft wood



RPM: 18000 - 24000
Correction factor:
- hardwood = 0,9
- milling across fiber = 0,7
- wet chipboard = 1,1

Solid Carbide Upcut Spiral Bits Z2

191



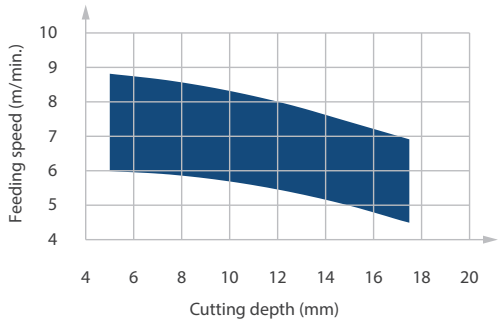
VHM **Z2** **RH** **LH**

TECHNICAL DETAILS:
- 2 spiral cutting edges
- 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 vboring machines, CNC routers.

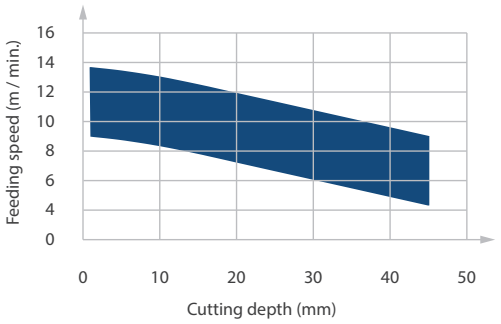
D mm	I mm	L mm	S mm	ARTICLE RH	ARTICLE LH
3	12	50	3	191.03.012.050.03R	191.03.012.050.03L
3	12	60	6	191.03.012.060.06R	191.03.012.060.06L
3	12	60	8	191.03.012.060.08R	191.03.012.060.08L
4	15	50	4	191.04.015.050.04R	191.04.015.050.04L
4	15	60	6	191.04.015.060.06R	191.04.015.060.06L
4	15	60	8	191.04.015.060.08R	191.04.015.060.08L
5	17	50	5	191.05.017.050.05R	191.05.017.050.05L
5	17	60	6	191.05.017.060.06R	191.05.017.060.06L
5	17	60	8	191.05.017.060.08R	191.05.017.060.08L
6	27	70	6	191.06.027.070.06R	191.06.027.070.06L
6	27	70	8	191.06.027.070.08R	191.06.027.070.08L
7	32	80	8	191.07.032.080.08R	191.07.032.080.08L

Ø 12-14 mm | Plastic



RPM: 14000-18000
Results shown in this diagram are purely empirical, based merely on informative and hypothetical calculation.
Each application may require different parameters in consideration of materials in use and machining conditions.

Ø 12-20 mm | Soft wood



RPM: 18000
Correction factor:
- hardwood = 0,9
- milling across of fiber = 0,7

Solid Carbide Upcut Spiral Bits Z2

D mm	I mm	L mm	S mm	ARTICLE RH	ARTICLE LH
8	22	70	8	191.08.022.070.08R	191.08.022.070.08L
8	32	80	8	191.08.032.080.08R	191.08.032.080.08L
8	42	90	8	191.08.042.090.08R	191.08.042.090.08L
9	32	83	12	191.09.032.083.12R	191.09.032.083.12L
10	32	80	8	191.10.032.080.08R	191.10.032.080.08L
10	32	80	10	191.10.032.080.10R	191.10.032.080.10L
10	32	83	12	191.10.032.083.12R	191.10.032.083.12L
10	42	90	10	191.10.042.090.10R	191.10.042.090.10L
10	42	90	12	191.10.042.090.12R	191.10.042.090.12L
12	35	83	8	191.12.035.083.08R	191.12.035.083.08L
12	35	83	12	191.12.035.083.12R	191.12.035.083.12L
12	42	90	12	191.12.042.090.12R	191.12.042.090.12L
12	52	100	12	191.12.052.100.12R	191.12.052.100.12L
16	35	90	16	191.16.035.090.16R	191.16.035.090.16L
20	60	120	20	191.20.060.120.20R	191.20.060.120.20L

Other dimensions are available on order

Solid Carbide Upcut Spiral Bits Z3

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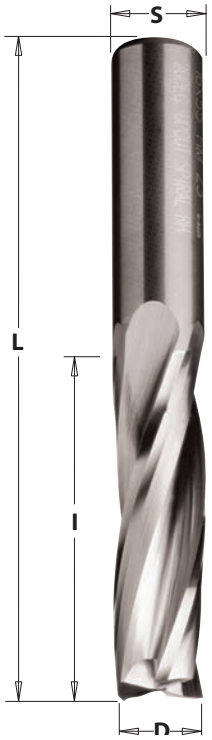
VHM **Z3** **RH** **LH**



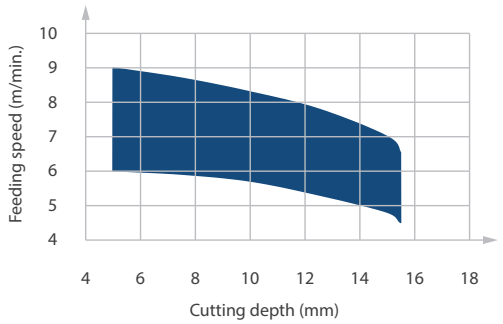
TECHNICAL DETAILS:
- 3 spiral cutting edges [Z3R]
- Upward chip ejection

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.

D mm	I mm	L mm	S mm	ARTICLE RH	ARTICLE LH
8	32	80	8	193.08.032.080.08R	193.08.032.080.08L
10	32	80	10	193.10.032.080.10R	193.10.032.080.10L
10	42	90	10	193.10.042.100.10R	193.10.042.100.10L
12	35	83	12	193.12.035.080.10R	193.12.035.080.10L
12	42	90	12	193.12.042.090.12R	193.12.042.090.12L
12	52	100	12	193.12.052.100.12R	193.12.052.100.12L
16	35	90	16	193.16.035.090.16R	193.16.035.090.16L
16	55	110	16	193.16.055.110.16R	193.16.055.110.16L
16	72	120	16	193.16.072.120.16R	193.16.072.120.16L
18	55	110	18	193.18.055.110.18R	193.18.055.110.18L
20	60	120	20	193.20.060.120.20R	193.20.060.120.20L
20	70	120	20	193.20.070.120.20R	193.20.070.120.20L
20	102	165	20	193.20.102.165.20R	193.20.102.165.20R

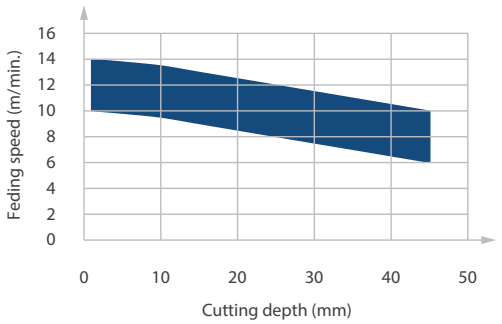
Other dimensions are available on order

Ø 12-14 mm | Plastic



RPM: 14000-18000
Results shown in this diagram are purely empirical, based merely on informative and hypothetical calculation.
Each application may require different parameters in consideration of materials in use and machining conditions.

Ø 12-20 mm | Soft wood



RPM: 18000
Correction factor:
- Hardwood = 0,9
- Milling across of fiber = 1,3

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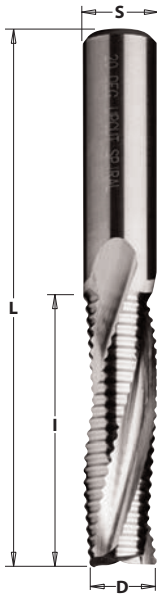
VHM **Z3** **RH** **LH**



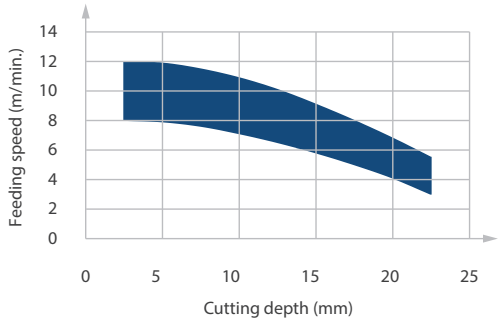
TECHNICAL DETAILS:
- 3 spiral cutting edges [Z3R]
- Upward chip ejection

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.

D mm	I mm	L mm	S mm	ARTICLE RH	ARTICLE LH
6	32	70	6	195.06.032.070.06R	195.06.032.070.06L
8	22	63	8	195.08.022.063.08R	195.08.022.063.08L
8	32	80	8	195.08.032.080.08R	195.08.032.080.08L
10	32	80	10	195.10.022.070.10R	195.10.022.070.10L
10	42	90	10	195.10.032.070.10R	195.10.032.070.10L
12	35	83	12	195.12.035.083.12R	195.12.035.083.12L
12	42	90	12	195.12.042.090.12R	195.12.042.090.12L
12	52	100	12	195.12.052.100.12R	195.12.052.100.12L
14	58	110	14	195.14.058.110.14R	195.14.058.110.14L
16	35	90	16	195.16.035.090.16R	195.16.035.090.16L
16	42	90	16	195.16.042.090.16R	195.16.042.090.16L
16	55	110	16	195.16.055.110.16R	195.16.055.110.16L
16	72	120	16	195.16.072.120.16R	195.16.072.120.16L
18	55	110	18	195.18.055.110.18R	195.18.055.110.18L
20	60	120	20	195.20.060.120.20R	195.20.060.120.20L
20	102	165	20	195.20.102.165.20R	195.20.102.165.20L

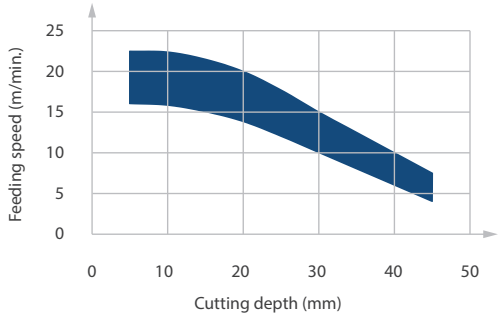
Other dimensions are available on order

Ø 8-10 mm | Soft wood



RPM: 18000
Correction factor:
- Hardwood = 0,8
- Chipboard without coating = 1,3

Ø 12-20 mm | Soft wood



RPM: 18000
Correction factor:
- Hardwood = 0.8
- Chipboard without coating = 1,3

Results shown in this diagram are purely empirical, based merely on informative and hypothetical calculation. Each application may require different parameters in consideration of materials in use and machining conditions.

Solid Carbide Up & Downcut Spiral Bits

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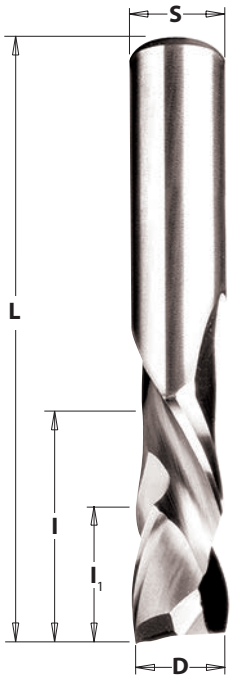


VHM **Z1+1** **Z2+2** **RH**

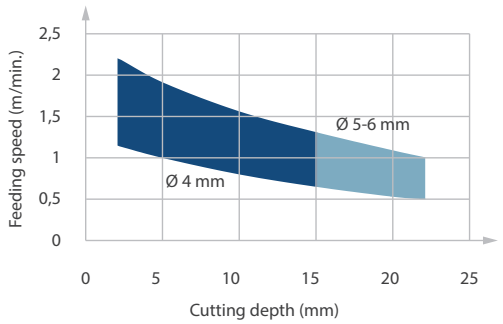
TECHNICAL DETAILS:
- 1+1 spiral cutting edges [Z1+1]
- 2+2 spiral cutting edges [Z2+2]

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.

D mm	l mm	l_1 mm	L mm	S mm	Z	ARTICLE
5	22	8	60	5	1+1	190.05.022.060.05R
6	22	8	60	6	1+1	190.06.022.060.06R
8	32	7	80	8	2+2	190.08.032.080.08R
10	32	7	80	10	2+2	190.10.032.080.10R
10	42	7	90	10	2+2	190.10.042.090.10R
12	25	5,2	83	12	3+3	190.12.025.083.12R
12	42	7	90	12	2+2	190.12.042.090.12R
12	52	7	100	12	2+2	190.12.052.100.12R
16	55	24	110	16	2+2	190.16.055.110.16R
18	55	30	110	18	2+2	190.18.055.110.18R
20	47	18	120	20	2+2	190.20.047.120.20R

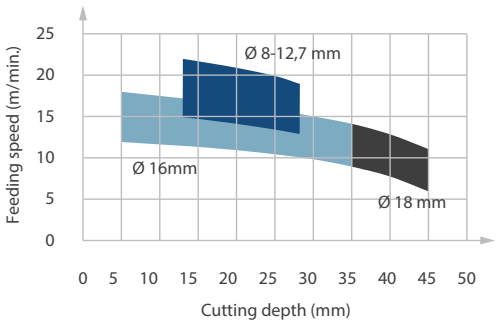
Other dimensions are available on order

Ø 4-6 mm | Chipboard without coating



RPM: 24000 Correction factor: MDF=0,8

Ø 8-18 mm | Chipboard without coating



RPM: 18000 Correction factor: MDF=0,8

Results shown in this diagram are purely empirical, based merely on informative and hypothetical calculation.
Each application may require different parameters in consideration of materials in use and machining conditions.

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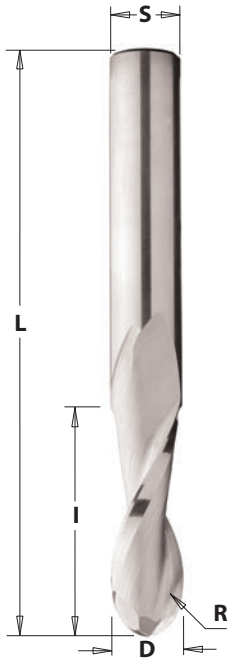


VHM **Z2** **RH**

TECHNICAL DETAILS:

- 2 upcut spiral cutting edges
- Upward chip ejection

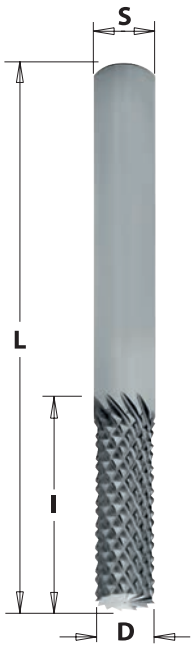
APPLICATION:

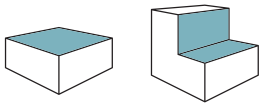
Used for ripping, template routing, panel sizing and any routing application on solid wood, wood composites, plastic materials and laminates. Can be used at a high feed speed on well-clamped workpieces. For use on machining centers, point-to-point boring machines, CNC routers.

D mm	R mm	I mm	L mm	S mm	Z	ARTICLE RH
6	3	27	70	6	2	199.06.027.070.06R
8	4	32	80	8	2	199.08.032.080.08R
10	5	32	80	10	2	199.10.032.080.10R
12	6	35	80	12	2	199.12.035.080.12R
16	8	55	110	16	2	199.16.055.110.16R

Other dimensions are available on order

Solid Carbide Spiral Bits for Fiberglass and Composite Cutting



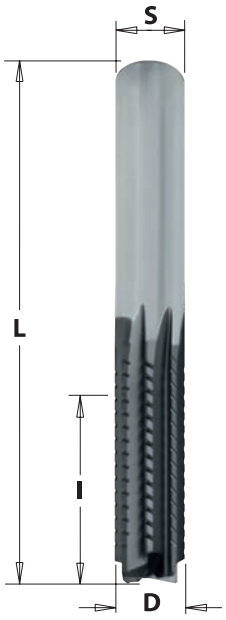


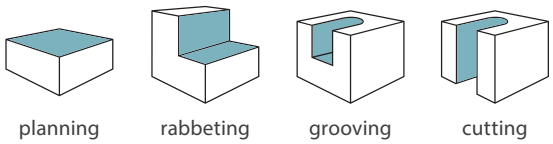
VHM

CNS

FOR MATERIALS:
CARBON FIBER (CFK),
GLASS FIBER (GFK),
COMPOSITE MATERIALS,
HONEYCOMB CORE

D mm	I mm	L mm	S mm	ARTICLE
3	10	45	3	CNS.03.010.045.03R
4	18	60	4	CNS.04.018.060.04R
5	16	50	5	CNS.05.016.050.05R
6	25	70	6	CNS.06.025.070.06R
8	25	80	8	CNS.08.025.080.08R
10	30	90	10	CNS.10.030.090.10R
12	30	90	12	CNS.12.030.090.12R



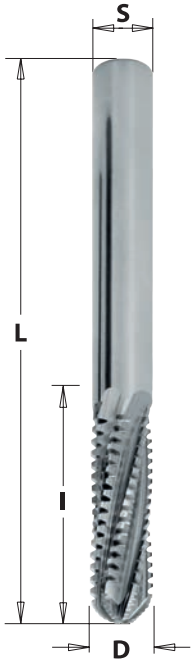


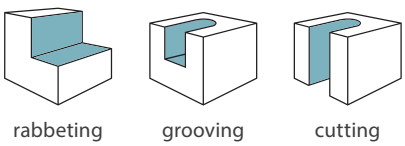
VHM

CSS

FOR MATERIALS:
CARBON FIBER (CFK),
GLASS FIBER (GFK),
COMPOSITE MATERIALS,
HONEYCOMB CORE

D mm	I mm	L mm	S mm	ARTICLE
6	20	60	6	CSS.06.020.060.06R
8	30	80	8	CSS.08.030.080.08R
10	35	80	10	CSS.10.035.080.10R
12	40	90	12	CSS.12.040.090.12R





VHM

CPU

FOR MATERIALS:
CARBON FIBER (CFK),
GLASS FIBER (GFK),
COMPOSITE MATERIALS,
HONEYCOMB CORE

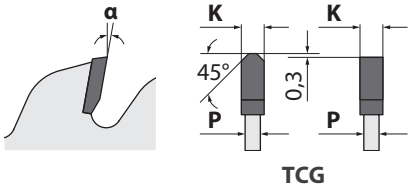
D mm	I mm	L mm	S mm	ARTICLE
6	20	60	6	CPU.06.020.060.06R
8	30	80	8	CPU.08.030.080.08R
10	35	80	10	CPU.10.035.080.10R
12	40	90	12	CPU.12.040.090.12R

SAW BLADES

P28

HM

NOISE REDUCTION



TCG

APPLICATION:
For sizing single sheets and multiple panels.

MACHINES:
Horizontal panel sizing machines.

MATERIALS:
Single or double-sided plastic-laminated panels, MDF.

D mm	F mm	PH	Z	K mm	P mm	α	TOOTH CONF.	ARTICLE silenced	MACHINES
300	30	2/10/60	72	4,4	3,0	13°	TCG	P28.300030072.00W	PANHANS, FELDER
300	60	PH04	72	4,4	3,2	12°	TCG	P28.300060072.00W	HOMAG
300	80	PH01	72	4,4	3,2	12°	TCG	P28.300080072.02W	SCM
310	60	PH04	72	4,4	3,2	12°	TCG	P28.310060072.00W	HOMAG
320	30	2/10/60	60	4,4	3,0	16°	TCG	P28.320030060.00W	FELDER
320	80	2/14/110	60	4,4	3,0	16°	TCG	P28.320080060.00W	SCM
320	65	PH05	60	4,4	3,0	16°	TCG	P28.320065060.00W	SELCO
320	30	2/10/60	72	4,4	3,2	16°	TCG	P28.320030072.00W	FELDER
320	65	PH05	72	4,4	3,2	16°	TCG	P28.320065072.00W	SELCO
320	80	PH01	72	4,4	3,2	16°	TCG	P28.320080072.00W	SCM
350	30	PH03	72	4,4	3,0	14°	TCG	P28.350030072.00W	HOFER, LANGZAUNER, PANHANS, SCHELLING, SCM, MAYER, HOLZ-HER, PAOLONI
350	60	PH04	72	4,4	3,0	14°	TCG	P28.350060072.00W	HOLZMA, HPP
350	75	PH02	72	4,4	3,0	14°	TCG	P28.350075072.00W	HOLZMA, PUTSCH-MENICONI
350	80	PH01	72	4,4	3,0	14°	TCG	P28.350080072.00W	GABBIANI, SCM
360	65	PH05	72	4,4	3,0	14°	TCG	P28.360065072.00W	SELCO
380	30	PH03 +2/13/94	72	4,4	3,2	14°	TCG	P28.380030072.01W	HOLZ-HER
380	60	PH04	72	4,4	3,2	14°	TCG	P28.380060072.01W	HOLZMA
380	60	PH04	72	4,8	3,5	15°	TCG	P28.380060072.00W	HOLZMA
380	65	2/9/110	72	4,4	3,0	14°	TCG	P28.380065072.00W	SELCO
380	80	PH01	72	4,4	3,2	14°	TCG	P28.380080072.00W	SCM

Panel Sizing Saw Blades

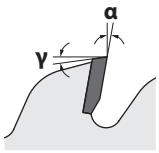
D mm	F mm	PH	Z	K mm	P mm	α	TOOTH CONF.	ARTICLE silenced	MACHINES
400	30	PH03	72	4,4	3,2	15°	TCG	P28.400030072.00W	HOFER, PANHANS, SCHEER, SCHELLING, MAYER, IRION, HOLZ-HER
400	65	PH05	72	4,4	3,2	15°	TCG	P28.400065072.01W	SELCO
400	75	PH02	72	4,4	3,2	15°	TCG	P28.400075072.00W	GIBEN, HOMAG
400	80	PH01	72	4,4	3,2	15°	TCG	P28.400080072.00W	SELCO, GABBIANI
420	80	PH01	72	4,4	3,2	16°	TCG	P28.420080072.00W	SCM
430	65	2/9/110+2/9/100	72	4,4	3,2	16°	TCG	P28.430065072.00W	SELCO
430	80	PH01	72	4,4	3,2	16°	TCG	P28.430080072.00W	SELCO
450	30	PH03	72	4,4	3,2	16°	TCG	P28.450030072.00W	DIVERSE, IRION, SCHELLING, MAYER
450	60	PH04	72	4,8	3,5	16°	TCG	P28.450060072.00W	HOLZMA
450	60	PH: 2/14/125	72	4,8	3,5	16°	TCG	P28.450060072.03W	HOLZMA
450	80	PH01	72	4,4	3,2	16°	TCG	P28.450080072.00W	GABBIANI
450	80	PH01	72	4,8	3,2	16°	TCG	P28.450080072.01W	GABBIANI
460	30	2/13/94	72	4,4	3,2	16°	TCG	P28.460030072.00W	SCHELLING
460	75	2/7/110 +2/13/94	72	4,4	3,2	16°	TCG	P28.460075072.00W	GIBEN
480	30	PH03 + 2/13/94	72	4,4	3,2	16°	TCG	P28.480030072.01W	SCHELLING
480	60	PH04	72	4,8	3,5	16°	TCG	P28.480060072.00W	HOLZMA
480	60	2/19/120	72	4,8	3,5	16°	TCG	P28.480060072.01W	HOLZMA
480	80	PH04 + 2/9/130 + 2/14/110	72	4,8	3,5	16°	TCG	P28.480080072.00W	GABBIANI

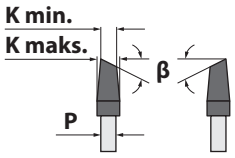
Information about addition holes you can find on the page 61.

More sizes available on special order

P36
Conical

HM





CONICAL + ATB

APPLICATION:
For chip-free scoring on plastic-laminated panels.

MACHINES:
Horizontal sizing machines.

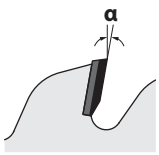
MATERIALS:
Single or double-sided plastic-laminated panels, MDF.

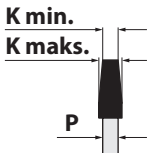
D mm	F mm	PH	Z	K mm	P mm	α	TOOTH CONF.	ARTICLE	MACHINES
150	30	–	36	4,4-5,6	3,2	6°	CONICAL+ATB	P36.150030036.003	SCM, STETON, FELDER
150	45	2/9/58+2/11/70	36	4,4-5,6	3,2	6°	CONICAL+ATB	P36.150045036.000	EUROMAC
160	55	3/11/70	36	4,4-5,6	3,2	6°	CONICAL+ATB	P36.160055036.000	GABBIANI, MACMAZZA, SCM
180	30	2/10/60	36	4,4-5,6	3,2	6°	CONICAL+ATB	P36.180030036.000	PANHANS, HOLZHER
180	45	2/10/60	36	4,8-6,0	3,5	6°	CONICAL+ATB	P36.180045036.010	HOLZMA
200	20	2/11/66	36	4,4-5,6	3,2	6°	CONICAL+ATB	P36.200020036.005	SCHELLING
200	65	PH05	36	4,4-5,6	3,2	6°	CONICAL+ATB	P36.200065036.000	SELCO
200	80	2/14/110	36	4,4-5,6	3,2	6°	CONICAL+ATB	P36.200080036.000	GABBIANI
200	45	2/10/60	36	4,4-5,6	3,2	6°	CONICAL+ATB	P36.200045036.000	HOLZMA
200	45	2/10/60	36	4,8-6,0	3,5	6°	CONICAL+ATB	P36.200045036.010	HOLZMA
215	50	3/15/80	42	4,4-5,6	3,2	6°	CONICAL+ATB	P36.215050042.000	GIBEN
300	80	2/14/110	48	4,4-5,9	3,2	6°	CONICAL+ATB	P36.300080048.000	GABBIANI

Information about addition holes you can find on the page 61.

More sizes available on special order

DSB
Conical





CONICAL

APPLICATION:
For chip-free scoring of plastic-laminated panels; increased tool life up to 50 times longer than HW blades thanks to a special polycrystalline 50 diamond formula. The best quality/price ratio!

MACHINES:
Horizontal and vertical sizing machines equipped with scoring device.

MATERIALS:
Single or double-sided plastic-laminated panels, MDF and HDF.

D mm	F mm	PH	Z	P mm	α	TOOTH CONF.	K-H4 mm	ARTICLE H=4	K-H6 mm	ARTICLE H=6
150	30	–	36	3,2	5°	CONICAL	4,4-5,2	DSB.150030036.004	4,4-5,5	DSB.150030036.006
160	55	3/7/66	36	3,2	5°	CONICAL	4,4-5,2	DSB.160055036.004	4,4-5,5	DSB.160055036.006
160	55	3/7/66+3/6/84	36	3,5	5°	CONICAL	4,8-5,6	DSB.160055036.014	4,8-5,8	DSB.160055036.016
180	30	2/10/60	36	3,2	5°	CONICAL	4,4-5,2	DSB.180030036.004	4,4-5,5	DSB.180030036.006
180	45	2/10/60	36	3,2	5°	CONICAL	4,4-5,2	DSB.180045036.004	4,4-5,5	DSB.180045036.006
180	45	2/10/60	36	3,5	5°	CONICAL	4,8-5,6	DSB.180045036.014	4,8-5,8	DSB.180045036.016
200	20	2/11/66	36	3,2	5°	CONICAL	4,4-5,2	DSB.200020036.004	4,4-5,5	DSB.200020036.006
200	30	2/10/60+2/14/110	36	3,2	5°	CONICAL	4,4-5,2	DSB.200030036.004	4,4-5,5	DSB.200030036.006
200	45	2/10/60	36	3,2	5°	CONICAL	4,4-5,2	DSB.200045036.004	4,4-5,5	DSB.200045036.006
200	45	2/10/60	36	3,5	5°	CONICAL	4,8-5,6	DSB.200045036.014	4,8-5,8	DSB.200045036.016
200	65	2/8/100+2/9/110	36	3,2	5°	CONICAL	4,4-5,2	DSB.200065036.004	4,4-5,5	DSB.200065036.006
200	80	2/14/110	36	3,2	5°	CONICAL	4,4-5,2	DSB.200080036.004	4,4-5,5	DSB.200080036.006
300	30	2/10/60+2/14/110	48	3,2	5°	CONICAL	4,4-5,2	DSB.300030048.004	4,4-5,5	DSB.300030048.006

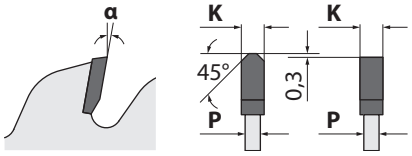
Information about addition holes you can find on the page 61.

More sizes available on special order

P15

HM

NOISE REDUCTION



TCG

APPLICATION:
For sizing cuts, perfect finishing by using scoring blades.

MACHINES:
Table saws, horizontal and vertical sizing machines.

MATERIAL:
Single or double-sided plastic-laminated panels.

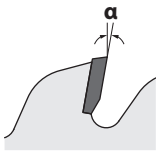
D mm	F mm	PH	Z	K mm	P mm	α	TOOTH CONF.	ARTICLE
250	30	PH03	80	3,2	2,2	10°	TCG	P15.250030080.000
300	30	PH03	96	3,2	2,2	10°	TCG	P15.300030096.00W
300	30	PH03	96	3,2	2,2	10°	TCG	P15.300030096.01W*
350	30	PH03	108	3,5	2,5	10°	TCG	P15.350030108.001
350	30	PH03	108	3,2	2,2	10°	TCG	P15.350030108.00W
350	30	PH03	108	3,2	2,2	10°	TCG	P15.350030108.01W*

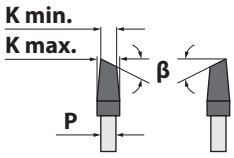
* Tips with hardness type of HM.
Information about addition holes you can find on the page 61.

More sizes available on special order

P36
Conical

HM





CONICAL + ATB

APPLICATION:
For chip-free scoring on plastic-laminated panels.

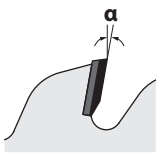
MACHINES:
Horizontal and vertical sizing machines equipped with scoring device for vertical adjustment.

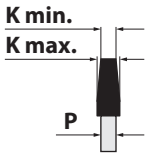
MATERIAL: Single or double-sided plastic-laminated panels, MDF.

D mm	F mm	Z	K mm	P mm	α	TOOTH CONF.	ARTICLE
100	20	20	3,2-4,4	2.2	6°	CONICAL+ATB	P36.100020020.000
100	22	20	3,2-4,4	2.2	6°	CONICAL+ATB	P36.100022020.000
120	20	24	3,2-4,4	2.2	6°	CONICAL+ATB	P36.120020024.000
120	22	24	3,2-4,4	2.2	6°	CONICAL+ATB	P36.120022024.000
125	20	24	3,2-4,4	2.2	6°	CONICAL+ATB	P36.125020024.000
125	22	24	3,2-4,4	2.2	6°	CONICAL+ATB	P36.125022024.000

More sizes available on special order

DSB
Conical





CONICAL

APPLICATION:
For chip-free scoring of plastic-laminated panels; increased tool life up to 50 times longer than HW blades thanks to a special polycrystalline 50 diamond formula. The best quality/price ratio!

MACHINES:
Horizontal and vertical sizing machines equipped with scoring device.

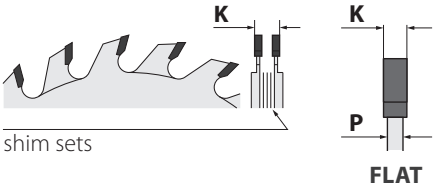
MATERIALS:
Single or double-sided plastic-laminated panels, MDF and HDF.

D mm	F mm	Z	P mm	α	TOOTH CONF.	K-H4 mm	ARTICLE H=4	K-H6 mm	ARTICLE H=6
80	20	12	2,2	5°	CONICAL	3,0-4,0	DSB.080020012.004	3,0-4,0	DSB.080020012.006
100	20	20	2,5	5°	CONICAL	3,0-4,0	DSB.100020020.004	3,0-4,0	DSB.100020020.006
100	22	20	2,5	5°	CONICAL	3,0-4,0	DSB.100022020.004	3,0-4,0	DSB.100022020.006
120	20	24	2,5	5°	CONICAL	3,0-4,0	DSB.120020024.004	3,0-4,0	DSB.120020024.006
120	22	24	2,5	5°	CONICAL	3,0-4,0	DSB.120022024.004	3,0-4,0	DSB.120022024.006
125	20	24	2,5	5°	CONICAL	3,0-4,0	DSB.125020024.004	3,0-4,0	DSB.125020024.006
125	22	24	2,5	5°	CONICAL	3,0-4,0	DSB.125022024.004	3,0-4,0	DSB.125022024.006

More sizes available on special order

P37
Adjustable

HM



APPLICATION:
For chip-free scoring on plastic-laminated panels. .

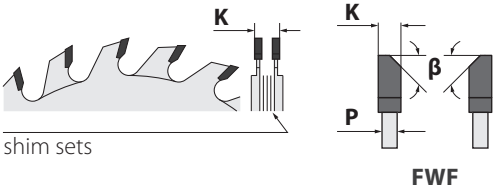
MACHINES:
Horizontal and vertical sizing machines equipped with scoring device not allowing for cutting.

MATERIAL:
Single or double-sided plastic-laminated panels, MDF.

D mm	F mm	Z	K mm	α	TOOTH CONF.	ARTICLE
120	20	12+12	2,8-3,6	12°	FLAT	P37.120020024.000
120	22	12+12	2,8-3,6	12°	FLAT	P37.120022024.000
125	20	12+12	2,8-3,6	12°	FLAT	P37.125020024.000
125	22	12+12	2,8-3,6	12°	FLAT	P37.125022024.000

More sizes available on special order

DSC
Adjastable



APPLICATION:
For chip-free scoring on plastic-laminated panels. .

MACHINES:
Horizontal and vertical sizing machines equipped with scoring device.

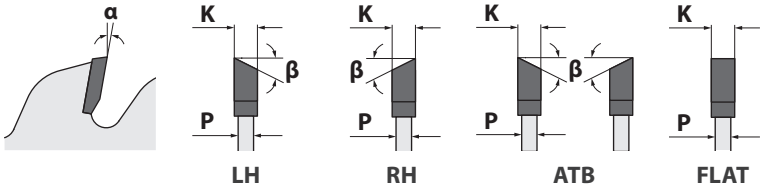
MATERIALS:
Single or double-sided plastic-laminated panels, MDF.

D mm	F mm	Z	K mm	P mm	α	TOOTH CONF.	ARTICLE H=4	ARTICLE H=6
70	20	8+8	2,8-3,6	2,2	10°	FWF	DSC.070020016.004	DSC.070020016.006
80	20	10+10	2,8-3,6	2,2	10°	FWF	DSC.080020020.004	DSC.080020020.006
100	20	10+10	2,8-3,6	2,2	10°	FWF	DSC.100020020.004	DSC.100020020.006
100	22	10+10	2,8-3,6	2,2	10°	FWF	DSC.100022020.004	DSC.100022020.006
120	20	12+12	2,8-3,6	2,2	10°	FWF	DSC.120020024.004	DSC.120020024.006
120	22	12+12	2,8-3,6	2,2	10°	FWF	DSC.120022024.004	DSC.120022024.006
125	20	12+12	2,8-3,6	2,2	10°	FWF	DSC.125020024.004	DSC.125020024.006
125	22	12+12	2,8-3,6	2,2	10°	FWF	DSC.125022024.004	DSC.125022024.006

More sizes available on special order

PKA

HM



APPLICATIONS:
For trimming and chamfering of plastic, veneer and solid wood edges.

MACHINES: Edgebanders.
MATERIALS: Plastic, veneer and solid wood edges.

D mm	F mm	PH	Z	K mm	α	TOOTH CONF.	ARTICLE	MACHINES
80	30	-	12	2,4	10°	RH	PKA.080030012.P0R	BIMATIC
80	30	-	12	2,4	10°	LH	PKA.080030012.P0L	BIMATIC
85	30	-	12	3,2	10°	RH	PKA.085030012.P0R	BIMATIC
85	30	-	12	3,2	10°	LH	PKA.085030012.P0L	BIMATIC
100	22	2/4/30	20	2,4	Neg.	ATB	PKA.100022020.N0A	EBM
100	22	-	20	3,2	5°	ATB	PKA.100022020.P1A	FELDER
100	30	-	20	3,2	5°	ATB	PKA.100030020.P1A	Felder G400 / G460 / G500 / G560
100	30	-	30	2,6	5°	RH	PKA.100030030.P0R	SREFANI
100	30	-	30	2,6	5°	LH	PKA.100030030.P0L	STEFANI
100	32	-	30	2,6	5°	ATB	PKA.100032030.P0A	BRANDT
100	32	-	30	2,6	5°	RH	PKA.100032030.P1R	BRANDT
100	32	-	30	2,6	5°	LH	PKA.100032030.P1L	BRANDT
100	32	-	30	3,0	1,5°	RH	PKA.100032030.P3R	BRANDT
100	32	-	30	3,0	1,5°	LH	PKA.100032030.P3L	BRANDT
110	22	-	20	3,6	5°	RH	PKA.110022020.P1R	-
110	22	-	20	3,6	5°	LH	PKA.110022020.P1L	-
115	30	-	30	3,2	5°	ATB	PKA.115030030.A00	PCV SCM K800
115	30	-	30	3,2	5°	ATB	PKA.115030030.P0A	SCM STEFANI
115	52	-	30	3,2	5°	RH	PKA.115052030.P0R	BIESSE
115	52	-	30	3,2	5°	LH	PKA.115052030.P0L	BIESSE
115	56	-	30	3,2	5°	RH	PKA.115056030.P0R	BIESSE
115	56	-	30	3,2	5°	LH	PKA.115056030.P0L	BIESSE

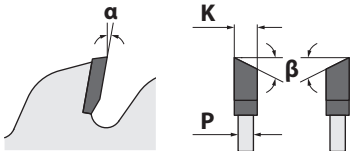
D mm	F mm	PH	Z	K mm	α	TOOTH CONF.	ARTICLE	MACHINES
115	56	-	30	3,2	5°	ATB	PKA.115056030.P0A	BIESSE AKRON
115	30	-	24	2,6	Neg.	ATB	PKA.115030024.N0A	-
116	30	-	20	3,4	5°	RH	PKA.116030020.P0R	-
116	30	-	20	3,4	5°	LH	PKA.116030020.P0L	-
125	30	-	24	2,6	5°	RH	PKA.125030024.P0R	-
125	30	-	24	2,6	5°	LH	PKA.125030024.P0L	-
125	30	-	36	3,2	5°	ATB	PKA.125030036.P1A	SCM K360 K560
140		-	36	3,6	5°	ATB	PKA.140030030.000	BIESSE ARKON
150	30	-	48	3,2	5°	RH	PKA.150030048.P0R	-
150	30	-	48	3,2	5°	LH	PKA.150030048.P0L	-
150	35	4/6,5/50 RH	24+6	3,8	5°	RH	PKA.150035030.P0R	SCM
150	35	4/6,5/50 LH	24+6	3,8	5°	LH	PKA.150035030.P0L	SCM

Information about addition holes you can find on the page 61.

More sizes available on special order

PDA

HM



ATB

APPLICATIONS:
For different kinds of operation performed by aggregates, such us: grooving, sawing.

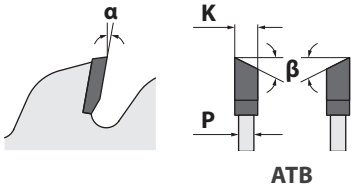
MACHINES:
CNC machines having sawing aggregate.

MATERIALS:
Soft, hard wood and wood-based materials.

D mm	F mm	PH	Z	K mm	P mm	TOOTH CONF.	ARTICLE	MACHINES
100	20	-	24	3,2	2,2	ATB	PDA.100020024.A00	VITAP POINT
100	30	4/5,5/48 + 4/5,5/48 chamfer	20	3,4	2,2	ATB	PDA.100030020.A00	HOMAG, WEEKE, BHX
120	20	3/4,5/35	12	3,2	2,2	ATB	PDA.120020012.P00	SCM
120	20	3/4,5/35 chamfer 45°	24	3,2	2,2	ATB	PDA.120020024.P01	SCM, CYFLEX
120	20	3/M4/35+3/M4/35	24	3,2	2,2	ATB	PDA.120020024.P0R	SCM, CYFLEX
120	20	3/4,5/35 + 3/4,5/35 chamfer	36	4,0	2,8	ATB	PDA.120020036.A01	SCM, CYFLEX
120	35	4/5,5/50 + 4/5,5/50 chamfer	16	4,0	2,8	ATB	PDA.120035016.P00	BIESSE, ROVER, FELDER
120	35	4/5,5/50 chamfer	30	4,0	4,0	ATB	PDA.120035030.002	BIESSE, ROVER, FELDER COSMEC
120	35	4/5,5/50 + 4/5,5/50 chamfer 45°	36	3,2	3,2	ATB	PDA.120035036.A00	BIESSE, ROVER, FELDER
120	35	4/5,5/50 + 4/5,5/50 chamfer	36	4,0	4,0	ATB	PDA.120035036.A01	BIESSE, ROVER, FELDER
125	20	3/4,5/8/35 + 3/4,5/8/35 chamfer 45°	36	3,2	3,2	ATB	PDA.125020036.A00	SCM
125	20	3/4,5/35 + 3/4,5/35 chamfer 45°	36	4,0	2,8	ATB	PDA.125020036.A01	SCM
125	30	4/5,5/48/RH + 4/5,5/48	36	3,2	3,2	ATB	PDA.125030036.A00	HOMAG, WEEKE, BHX
125	30	4/5,5/48 + 4/5,5/48 chamfer	36	4,0	2,8	ATB	PDA.125030036.A01	HOMAG, WEEKE, BHX
125	30	4/5,3/9,7/48 + 4/5,3/9,7/48	36	3,4	3,4	ATB	PDA.125030036.A05	HOMAG WEEKE BHX
125	30	4/M5/45 + 4/M5x10/45	36	3,2	2,2	ATB	PDA.125030036.A09	-
150	35	4/6,5/48 + 4/6,5/48 chamfer	30	4,0	3,0	ATB	PDA.150035030.A00	-
150	35	4/5,5/50 + 4/5,5/50	30	4,0	3,0	ATB	PDA.150035030.P03	BIESSE SKIPPER
150	35	1/6/23	30	4,0	2,8	ATB	PDA.150035030.P04	BIESSE SKIPPER 100
150	35	2/6,5/48	36	4		ATB	PDA.150035036.A03	SKIPPER

P06

HM



ATB

APPLICATION:
For cross cutting and cutting out defects for high-speed feed.

MACHINES:
Optimizing saw.

MATERIAL:
Soft and hardwood.

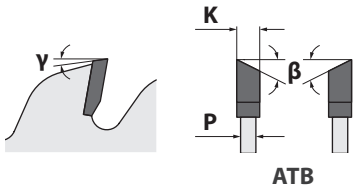
D mm	F mm	PH	Z	K mm	P mm	TOOTH CONF.	ARTICLE	MACHINE
450	30	–	138	4,8	3,5	ATB 35°	P06.450030138.01A	–
450	30	2/15/63	138	4,8	3,5	ATB	P06.450030138.02A	SALVADOR OMGA
500	30	2/10/60 + 2/15/63	144	4,8	3,5	ATB 35°	P06.500030144.01A	–
500	30	2/10/60 +2/15/63	144	4,8	3,5	ATB	P06.500030144.02A	METAL TECHNIKA OMGA
500	30	2/10/60 + 2/15/63 + 2/10/80	144	4,8	3,5	ATB	P06.500030144.04A	METAL TECHNIKA OMGA
500	35	2/10/60 + 2/15/63	120	4,4	3,2	ATB	P06.500035120.00A	SALVADOR CURSAL
500	35	2/10/60 + 2/15/63	120	4,4	3,2	ATB 35°	P06.500035120.02A	SALVADOR CURSAL
500	35	2/10/60 + 2/15/63	144	4,8	3,5	ATB	P06.500035144.01A	SALVADOR CURSAL

Information about addition holes you can find on the page 61.

More sizes available on special order

P16

HM



ATB

APPLICATION:
For cutting single pcs. of material or in packages.

MACHINES:
Horizontal panel sizing machines.

MATERIAL:
Soft and hardwood, plywood.

ATTENTION:
Not noiseless.

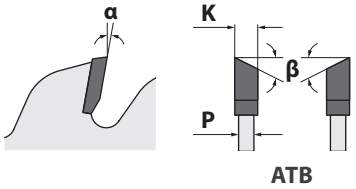
D mm	F mm	PH	Z	K mm	P mm	TOOTH CONF.	γ	ARTICLE
350	30	2/10/60	72	4,4	3,2	ATB 16°	10°	P16.350030072.000
350	60	2/14/100	72	4,4	3,2	ATB 16°	10°	P16.350060072.000
350	80	PH01	54	4,4	3,2	ATB 16°	10°	P16.350080054.000
460	30	2/13/94	72	4,4	3,2	ATB 16°	10°	P16.460030072.000
480	30	PH03 + 2/13/94	54	5,0	3,2	ATB 16°	10°	P16.480030054.000

Information about addition holes you can find on the page 61.

More sizes available on special order

279

HM



ATB

APPLICATIONS:
For solid dry and wet wood cutting.
Thin teeth guaranty less loss of material.

MACHINES:
Multi-rip machines with one or two shafts.

MATERIALS:
Solid wood (wet and dry).

D mm	F mm	KEYWAYS	Z	K mm	P mm	α	TOOTH CONF.	ARTICLE
250	50	4/20x5	20+4	2,7	1,8	20	ATB 10°	279.250050020.401
250	70	4/20x5	16+2	3,5	2,2	20	ATB 10°	279.250070016.401
300	50	4/20x5	20+4	3,7	2,5	20	ATB 10°	279.300050020.401
300	70	4x20/5	18+4	3,7	2,5	20	ATB 10°	279.300070018.000
300	80	4x20/5	18+4	3,7	2,5	20	ATB 10°	279.300080018.000
300	80	4/20x5	18+4	3,5	2,2	20	ATB 10°	279.300080018.401
350	70	4/20x5	18+4	4,2	2,8	20	ATB 10°	279.350070018.000
350	70	4/20x5	18+4	3,9	2,6	20	ATB 10°	279.350070018.401
350	70	4/20x5	18+4	4,0	2,7	20	ATB 10°	279.350070018.402
350	80	4/20x5	18+4	4,2	2,8	20	ATB 10°	279.350080018.002
350	80	4/20x5	18+4	3,9	2,6	20	ATB 10°	279.350080018.401
350	80	4/20x5	18+4	4,0	2,7	20	ATB 10°	279.350080018.501
400	70	4x20/5	18+6	4,2	2,8	20	ATB 10°	279.400070018.401
400	80	4x20/5	18+6	4,2	2,8	20	ATB 10°	279.400080018.401

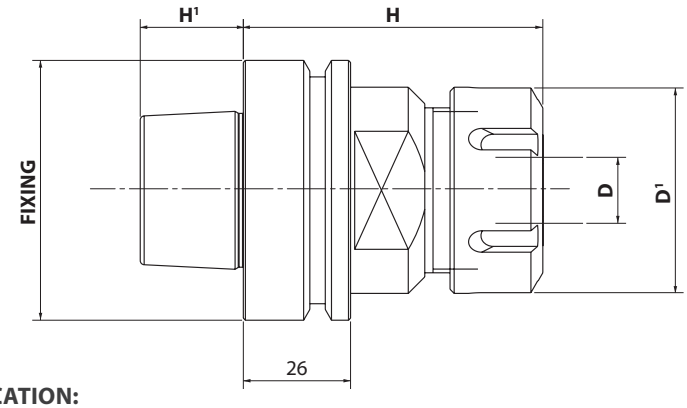
More sizes available on special order

CNC ROUTER CUTTERS & CHUCKS

Chuck HSK-63 for CNC machines

HSK63F
DIN 69893

RH



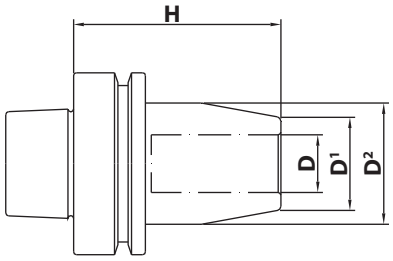
APPLICATION:
For machines type: Biesse, Eima, Homag, SCM, Ima(from 9/94), Weeke, Dubus, Busellato.

FIXING	SLEEVES	D mm		D¹ mm	H mm	H¹ mm	ROTATIONS	ARTICLE
		min.	maks.					
HSK63F	ER32	3	20	50	73	25	RH	H6FPDX20
HSK63F	ER32	3	20	50	73	25	RH	H6FPDX20SCM*
HSK63F	ER40	4	30	63	80	25	RH	H6FPDX26
HSK63F	EOC25	2	25	60	80	25	RH	H6FPDX25

*blind hole

HSK63F TERMO

RH
LH



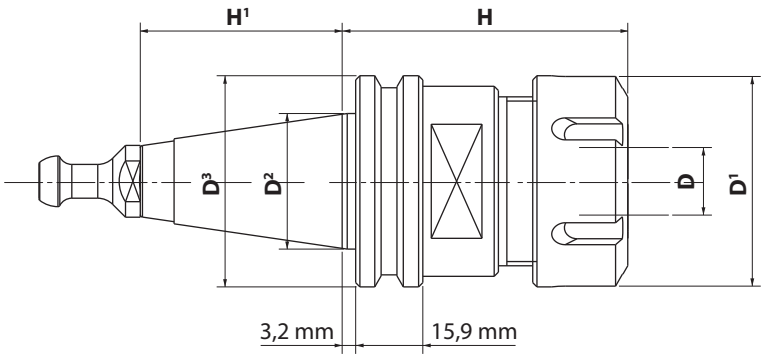
Advantages
- highest quality of fixing provides evenly work all knives together
- lack of collets and fixing nuts are minimizing vibrations
- the power of clamp around 1300 Nm

APPLICATION:
Precise THERMO chuck allows perfect connection the tool with chuck. Thermal clamping the shank in the chuck guarantee low vibration below 3µm. For self-assembly, the tool in the chuck is necessary additional instrumentation.

FIXING	D mm	D¹ mm	D² mm	H mm	ROTATION	ARTICLE
HSK63F	12	24	32	76	RH / LH	H6FPDXTHERMO12
HSK63F	16	27	34	76	RH / LH	H6FPDXTHERMO16
HSK63F	20	33	42	76	RH / LH	H6FPDXTHERMO20
HSK63F	25	44	53	76	RH / LH	H6FPDXTHERMO25

ISO30
DIN 69871

RH **LH**



APPLICATION:
For CNC machines: Biesse, Cosmec, Masterwood.

FIXING	COLLET	D mm		D¹ mm	D² mm	D³ mm	H mm	H¹ mm	ROTATIONS	ARTICLE
		min.	maks.							
ISO 30	ER32	3	20	50	31,75	50	50	47,8	RH	B30PDX20
ISO 30	ER32	3	20	50	31,75	50	50	47,8	RH	B30PDX20N
ISO 30	ER40	4	30	63	31,75	50	57	47,8	RH	B30PDX26

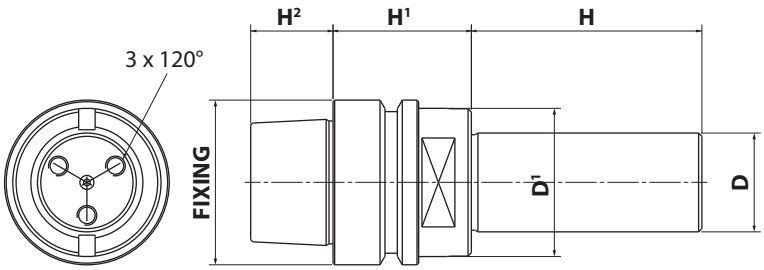
APPLICATION:
For CNC machines: Morbidelli, Eima, Dubus, Weeke.

FIXING	COLLET	D mm		D¹ mm	D² mm	D³ mm	H mm	H¹ mm	ROTATIONS	ARTICLE
		min.	maks.							
ISO 30	ER32	3	20	50	31,75	50	68	47,8	RH	I30PDX20
ISO 30	ER32	3	20	50	31,75	50	68	47,8	LH	I30PSX20
ISO 30	ER40	4	30	63	31,75	50	68	47,8	RH	I30PDX26
ISO 30	ER40	4	30	63	31,75	50	68	47,8	LH	I30PSX26
ISO 30	EOC25	2	25	60	31,75	50	70	47,8	RH	I30PDX25
ISO 30	EOC25	2	25	60	31,75	50	70	47,8	LH	I30PSX25

Others sizes available for special order

HSK63F
DIN 69893

RH
LH



APPLICATION:
For machines type: Biesse, Eima, Homag, SCM, Ima(from 9/94), Weeke, Dubus, Busellato, Masterwood.

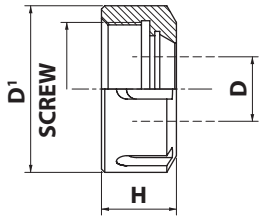
FIXING	D mm	D¹ mm	H mm	H¹ mm	H² mm	ARTICLE
HSK63F	30	45	70	42	25	H6FAPF30.70
HSK63F	30	45	80	42	25	H6FAPF30.80
HSK63F	30	45	100	42	25	H6FAPF30.100
HSK63F	30	45	150	42	25	H6FAPF30.150

RANGE SLEEVES

D mm	F mm	I mm	ARTICLE	D mm	F mm	I mm	ARTICLE
50	30	0,2	TUL.50.30.002	50	30	10	TUL.50.30.10
50	30	0,5	TUL.50.30.005	50	30	15	TUL.50.30.15
50	30	1	TUL.50.30.01	50	30	20	TUL.50.30.20
50	30	2	TUL.50.30.02	50	30	30	TUL.50.30.30
50	30	3	TUL.50.30.03	50	30	40	TUL.50.30.40
50	30	5	TUL.50.30.05	50	30	45	TUL.50.30.45
50	30	6	TUL.50.30.06	50	30	50	TUL.50.30.50

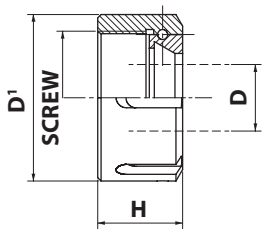
Others sizes available for special order

Standard
DIN 6499



COLLET	D mm		D¹ mm	H mm	SCREW	ROTATION	ARTICLE
	min.	max.					
ER32	3	20	50	22,5	M40x1,5	RH	932GHCOD
ER32	3	20	50	22,5	M40x1,5	LH	932GHCOS

Nuts
With bearing



COLLET	D mm		D¹ mm	H mm	SCREW	ROTATION	ARTICLE
	min.	max.					
ER32	3	3	50	26	M40x1,5	RH	932GHRSD
ER32	3	3	50	26	M40x1,5	LH	932GHRSS

Others sizes available for special order

Precision Collets

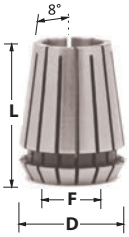
EOC16
DIN6388

L mm	D mm	F mm	ARTICLE
40	25,5	2	EOC16DO2
40	25,5	3	EOC16DO3
40	25,5	4	EOC16DO4
40	25,5	5	EOC16DO5
40	25,5	6	EOC16DO6
40	25,5	7	EOC16DO7
40	25,5	8	EOC16DO8
40	25,5	10	EOC16D10
40	25,5	12	EOC16D12
40	25,5	14	EOC16D14
40	25,5	16	EOC16D16

EOC25
DIN6388

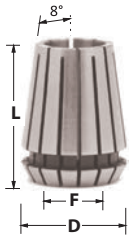
L mm	D mm	F mm	ARTICLE
52	35	3	EOC25D03
52	35	6	EOC25D06
52	35	8	EOC25D08
52	35	10	EOC25D10
52	35	12	EOC25D12
52	35	16	EOC25D16
52	35	20	EOC25D20
52	35	25	EOC25D25

ER11
DIN6499



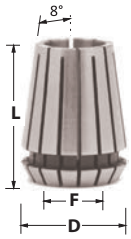
L mm	D mm	F mm	ARTICLE
18	11,5	2	ER11D02
18	11,5	3	ER11D03
18	11,5	4	ER11D04
18	11,5	5	ER11D05
18	11,5	6	ER11D06

ER16
DIN6499



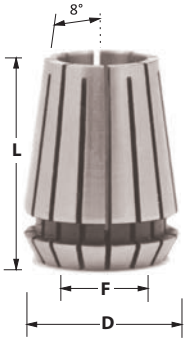
L mm	D mm	F mm	ARTICLE
28	17	2	ER16D02
28	17	3	ER16D03
28	17	4	ER16D04
28	17	5	ER16D05
28	17	6	ER16D06
28	17	7	ER16D07
28	17	8	ER16D08
28	17	9	ER16D09
28	17	10	ER16D10

ER20
DIN6499



L mm	D mm	F mm	ARTICLE
32	21	2	ER20D02
32	21	3	ER20D03
32	21	4	ER20D04
32	21	5	ER20D05
32	21	6	ER20D06
32	21	7	ER20D07
32	21	8	ER20D08
32	21	9	ER20D09
32	21	10	ER20D10
32	21	11	ER20D11
32	21	12	ER20D12
32	21	13	ER20D13

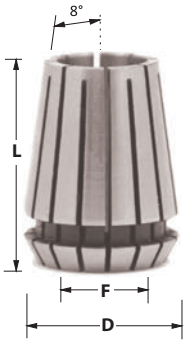
ER25
DIN6499



L mm	D mm	F mm	ARTICLE
34	26	10	ER25D10
34	26	12	ER25D12
34	26	16	ER25D16

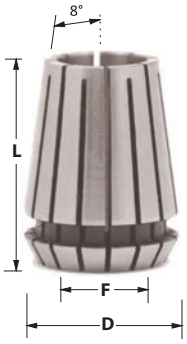
Precision Collets

ER32
DIN6499



L mm	D mm	F mm	ARTICLE
40	26	3	ER32D03
40	26	4	ER32D04
40	26	6	ER32D06
40	26	8	ER32D08
40	26	10	ER32D10
40	26	12	ER32D12
40	26	14	ER32D14
40	26	16	ER32D16
40	26	20	ER32D20

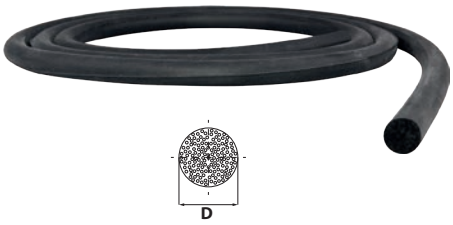
ER40
DIN6499



L mm	D mm	F mm	ARTICLE
46	41	6	ER40D06
46	41	10	ER40D10
46	41	12	ER40D12
46	41	20	ER40D20
46	41	25	ER40D25

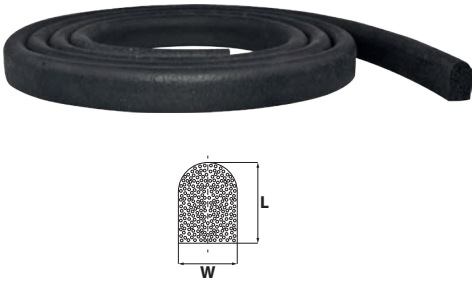
Others sizes available for special order

EPDM Rope of Cellular Rubber Round



APPLICATION:
For template production, sealing grid tables, seals in machines with console tables.

D mm	**ARTICLE**
3	EPDM03
6	EPDM06
7	EPDM07
8	EPDM08



W x **L** mm	**ARTICLE**
6 x 10	EPDM6X10
6 x 8	EPDM6X8
6 x 10	EPDM6X10

MORE PRODUCTS

You can find on the website www.**ita.tools**

CUTTER HEADS

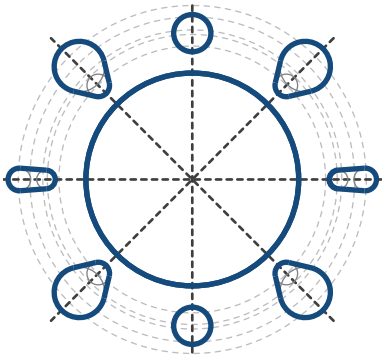
INDUSTRIAL DOWEL DRILLS

BLADES FOR DIGITAL CNC CUTTERS

PLATES AND KNIVES

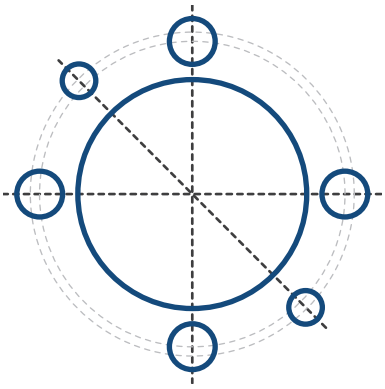
Notes

Notes



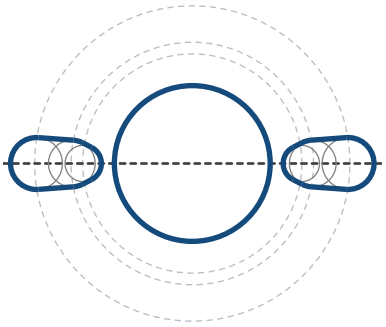
PH01 | ITA

2 / 14 / 110 mm
2 / 8,5 / 100 mm
4 / 19 / 120 mm
4 / 8,5 / 100 mm
4 / 7 / 110 mm
4 / 8,5 / 130 mm



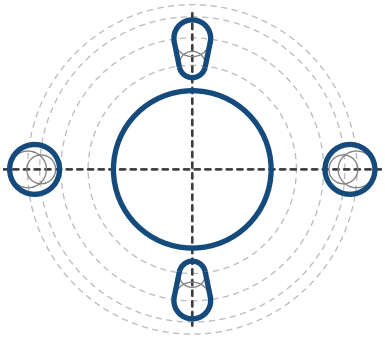
PH02 | ITA

4 / 15 / 105 mm
2 / 11 / 100 mm



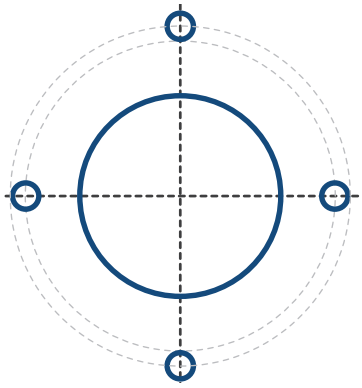
PH03 | ITA

2 / 7 / 42 mm
2 / 9 / 46,4 mm
2 / 10 / 60 mm



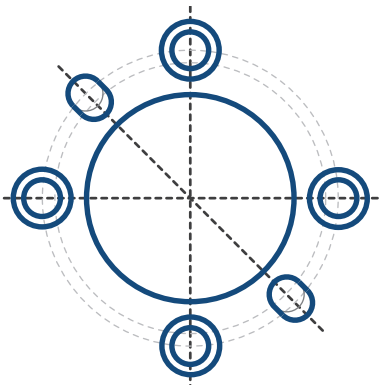
PH04 | ITA

2 / 10 / 80 mm
2 / 14 / 100 mm
2 / 14 /125 mm
2 / 11 / 115 mm
2 / 19 / 120 mm



PH05 | ITA

4 / 9 / 110 mm
4 / 9 / 100 mm



PH06 | ITA

2 / 5,9 / 50 mm
2 / 5,9 / 46 mm
4 / 5,5 / 50 mm
4 / 9 / 50 mm

Abbreviated Designations

α - Cutting angle

β - Upper rake

δ - Radial rake

γ - Axial-rake

λ - Rake angle of blade

<> - Special cut for easier fitting of saw blade

A - Cutting angle

ATB - Alternate top bevel

B - Thickness of the tool body at the bore hole

D - Cutting circle diameter

Densimet® - ultra durable metal with a high tungsten content

D maks. - Max. cutting circle diameter

D min. - Min. cutting circle diameter

DKN - Additional pins at the fixing hole 4x8mm

F - Bore diameter

G - Recommended depth

H - Cutting depth

HV10 - Shore hardness on the Vickers scale

I - Cutting length

I maks. - Max. height of cutting material

Lh - Top bevel, left

ISO - Quality of carbide

K - Cutting width

K maks. - Max. cutting width

L - length / width

LB - Adjusting length

LH - Left hand rotation

N - Pitch

P - Thickness of tool

PH - Additional pins (types and track)

PTFE - Non-stick industrial coating, black and orange

R - Radius

Rh - Top bevel, right

RH - Right hand rotation

RPM - Permissible RPM

S - Type of clamping

S (mm) - Diameter of shank

ShA - Shore hardness ont the Shore scale

ST - Leap clamp

T - Max. profile depth / cutting depth

TK - Pinhole demotions

TP - Triple-chip + flat

V - Number of spurs

Z - Number of teeth

W - Width

List of Symbols

Cross cut

Longitudinal cut

Cross and longitudinal cut

Saws for longitudinal cut
on Multi rip machines

Saw blades for grooving

Number of tooth

Aluminium body

Tungsten carbide tipped

High speed steel

Solid tungsten carbide

Manual feed

Noise-reduction

Right-hand rotation

Right-hand & Left-hand rotation

Sharpening by laser ablation

Steel body

Polycrystallinediamond

Tools with changeable knives

Monolit carbide tools

Alloyed tools steel

Mechanical feed

Accessories

Left-hand rotation

Symmetrical rotation

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