

PROFESSIONAL TOOLS

CATALOGUE

edition 2



PROFESSIONAL TOOLS
SALES & SERVICE





INTERNET APPLICATION

the new technology for tool and machine management

TOOLCLOUD 4.0



Simplicity!

Easy interface with which handle even inexperienced users.



Mobility!

Access is possible from any device with web browser.



Flexibility

We can tightly reflect company structure in your company.



Complexity!

In one place we can check our tool stocks, what is happening with our tools in resharpening centre and 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 withdrawals by employees or service shipping will take just a moment.



Toolcloud

has been developed according to INDUSTRY 4.0



DataMatrix

gives the fast way for search by QR Code.



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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 150 workers.

We offer a wide range of tools for woodworking industry, furniture production and processing composite materials.

PRODUCTS

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

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.

PRODUCTION & SERVICE CENTER

Full range tools services!

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



Here you can find video presentation about our company.



Our company has obtained ISO certificate by meeting the following standards:

PN-EN ISO 9001:2015 – Quality Management System
PN-EN ISO 14001:2015 – Environmental Management
PN-EN ISO 45001:2018-06 – Management BHP

WORLD WIDE EXPORT



The ITA TOOLS team comprise about 150 employees serving our customers from all over the world every day.

PRODUCTION AND SERVICE

PCD and HM Tools

ITA TOOLS company is supplier of professional industrial cutting tools and solutions for business. Our production center is one of the biggest and modern machinery park's in Central Europe. Our products are distinguished by high tolerance and best precision. We are proud of our production center and tools, therefore we invite you for an individual visit or live video presentation.

Our 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. 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 and 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
- Dynamic balancing with a tolerance of G2.5 thanks to HAIMER machines

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



15 000 m²

Production Centre in Mielec: Brand new facility of tool manufacturing and sharpening service center.

Brand new and advanced CNC machines from DMG MORI, Walter, Vollmer and Anca in combination with professional team of operators and engineers create the NEW quality level of products and services.

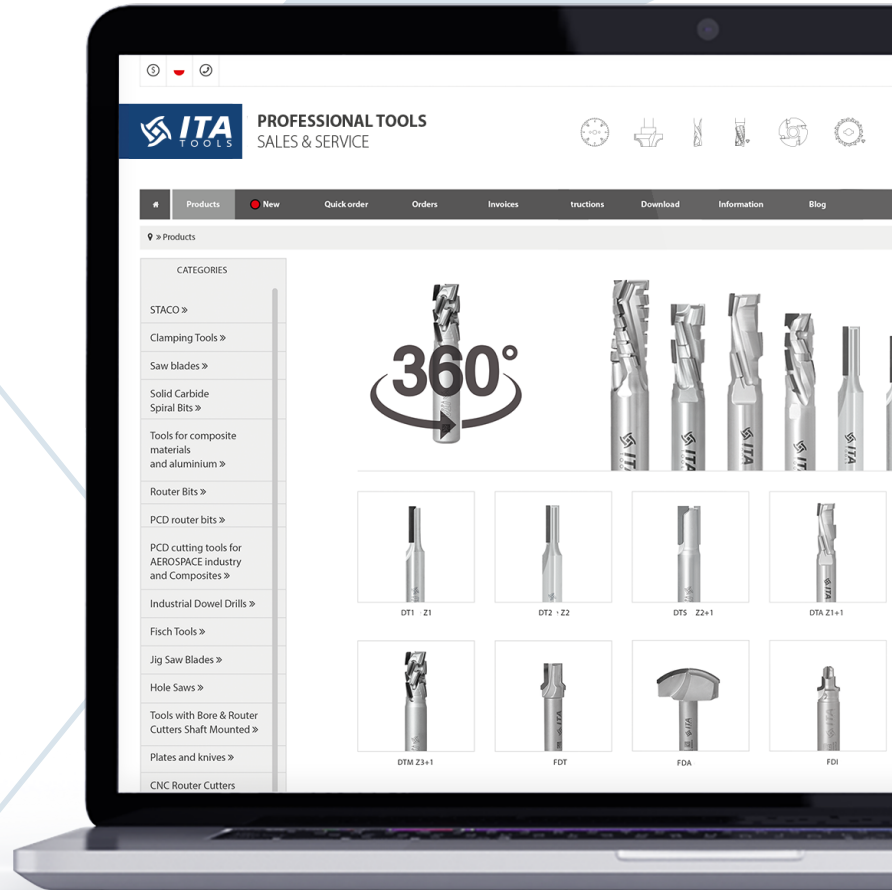


B2B SALES SYSTEM

Your personal account with order center
& useful information

INTUITIVE PROCESS OF PRODUCT ORDERING

Simple way for placing
orders independently.



ORDER STATUS MONITORING

The ability to check order
status on your own.

ACCESS TO THE ORDER HISTORY AND INVOICES

Full history track of your offers,
orders, invoices in one place

SIMPLE PRODUCT SEARCHING SYSTEM

Wide range of filters enabling the selection of appropriate tools

ACCESS TO STOCK

Access to actual product stock 24/7

INTUITIVE AND USER FRIENDLY SYSTEM

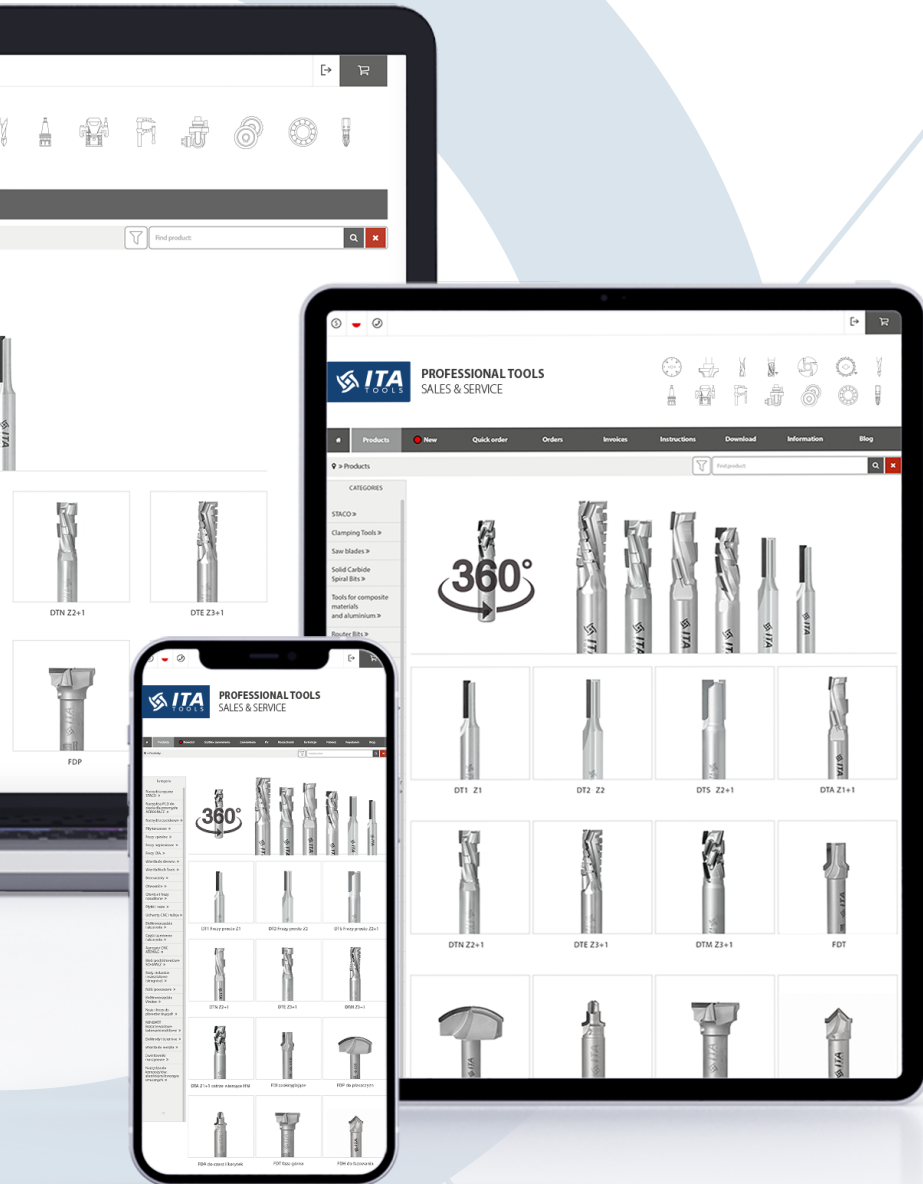
System based on the most common customer requirements and is constantly being developed

ACCESS TO ACTUAL PROMOTIONS

Instant information about all current promotions.

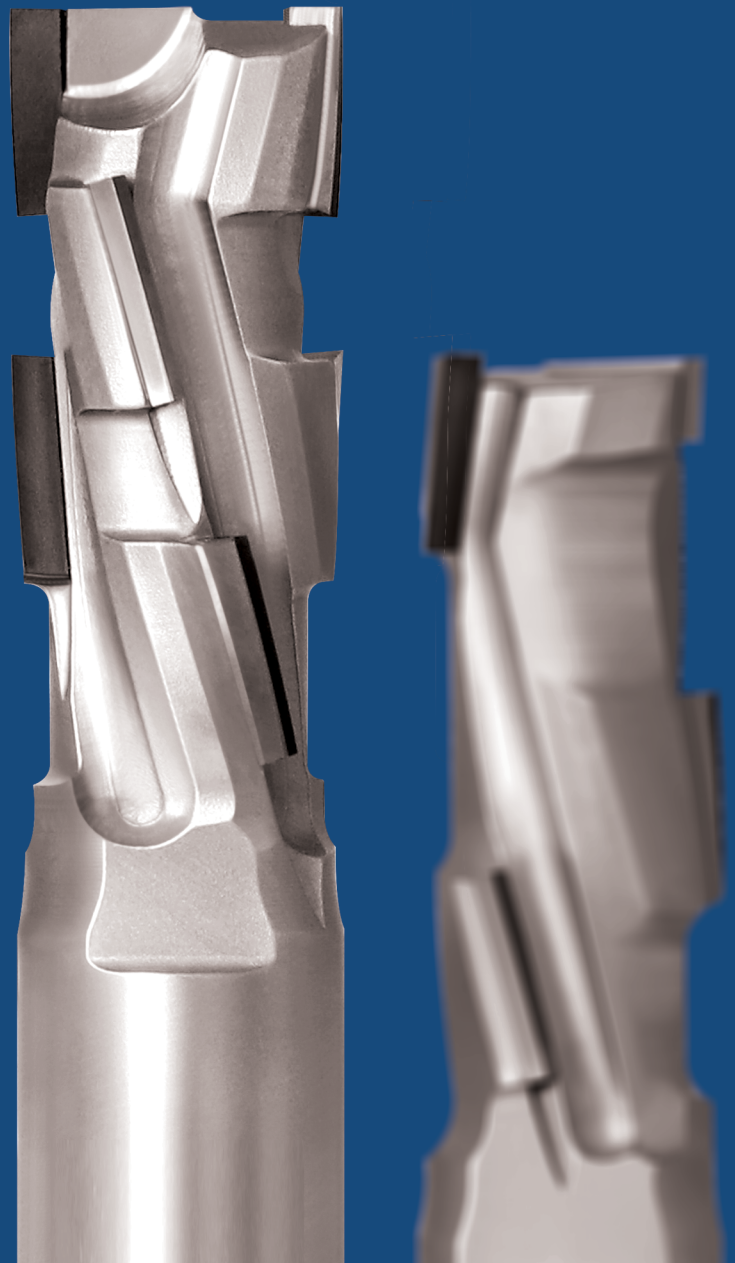
ACCESS TO INVOICES AND PAYMENTS

Download invoices directly from your account.





DIAMOND ROUTER BITS



TBOX

Darbagaldi & Instrumenti

Diamond Router Bits Z1

DIA CNC Düz Freze Bicaklari Z1, DT1 dizi
Brocas de PCD Z1, serie DT1



DT1
negative



Z1

RH



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.

D mm	I 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

PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES

Diamond Router Bits Z2

DIA CNC Negatif Freze Bicaklari Z2, DT2 dizi
Brocas de PCD Z2, serie DT2



PCD TOOLS

DT2
negative



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.

ADVANTAGES:

Perfect chip ejection, excellent finish of the working edge and quiet work. Doesn't leave smudges on the working material.



D mm	I 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	22	12	2	Neg.	HM	DT2.10.022.12.0MR
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
12	20	12	2	Neg.	HM	DT2.12.020.12.0MR
16	35	20	2+1	Neg.	STAL	DT2.16.035.20.1SR



Other dimensions
are available on order

SOLID CARBIDE
SPIRALS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES

Diamond Router Bits Z2+1

DIA CNC Negatif&Pozitif Freze Bicaklari Z2, DTS dizi
Brocas de PCD Pos. / Neg, serie DTS



DTS
positive-negative



Z2+1

RH



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:

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

D mm	I mm	S mm	Z	α	BODY	ARTICLE RH
8	15	12	2+1	Pos.-Neg.	Densimet	DTS.08.015.12.0DR
8	20	12	2+1	Pos.-Neg.	Densimet	DTS.08.020.12.0DR
10	15	12	2+1	Pos.-Neg.	Densimet	DTS.10.015.12.0DR
10	20	12	2+1	Pos.-Neg.	Densimet	DTS.10.020.12.0DR
12	15	12	2+1	Pos.-Neg.	Densimet	DTS.12.015.12.0DR
12	20	12	2+1	Pos.-Neg.	Densimet	DTS.12.020.12.0DR
12	25	12	2+1	Pos.-Neg.	Densimet	DTS.12.025.12.0DR
20	25	20	2+1	Pos.-Neg.	Densimet	DTS.20.025.20.0SR



Other dimensions
are available on order

PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES

Diamond Router Bits Z1+1 ECO

DIA CNC Freze Bicaklari Z1+1, DTA dizi - ECO
Brocas de PCD Z1+1, serie DTA ECO



PCD TOOLS

DTA



Z1+1

RH

LH

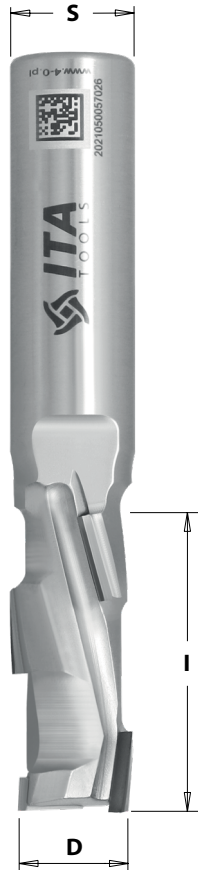
SOLID CARBIDE SPIRALS

SPIRAL BITS FOR COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS & CHUCKS

PLATES AND KNIVES

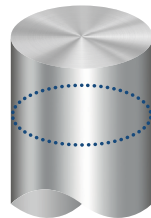


TECHNICAL DETAILS:

- 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.



Tolerance of shank **H6**



Surface roughness of shank **Ra ≤ 0,3 μm**



Dynamic balancing class **G2.5**

HM MONOLITH BODY

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
6	16	8	1+1	DTA.06.016.08.0MR	
8	21	8	1+1	DTA.08.021.08.0MR	
8	21	12	1+1	DTA.08.021.12.0MR	
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
10	27	10	1+1	DTA.10.027.10.0MR	
12	27	12	1+1	DTA.12.027.12.0MR	



Other dimensions are available on order



Diamond Router Bits Z1+1 ECO

DIA CNC Freze Bicaklari Z1+1, DTA dizi - ECO
Brocas de PCD Z1+1, serie DTA ECO



STEEL BODY

D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
10	15	12	1+1	DTA.10.015.12.0SR	
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	21	12	1+1	DTA.12.021.12.0SR	
12	25	12	1+1	DTA.12.025.12.0SR	DTA.12.025.12.0SL
12	25	12	1+1	DTA.12.025.12.SSR-A*	
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	16	1+1	DTA.16.055.16.0SR	DTA.16.055.16.0SL
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	72	20	1+1	DTA.20.072.20.0SR	
20	80	20	1+1	DTA.20.080.20.0SR	DTA.20.080.20.0SL

STEEL BODY

D inch	I inch	S inch	Z	ARTICLE RH	ARTICLE LH
12,7 - 1/2"	25	12,7 - 1/2"	1+1	DTA.12.025.12.5SR	
12,7 - 1/2"	35	12,7 - 1/2"	1+1	DTA.12.035.12.5SR	
12,7 - 1/2"	45	12,7 - 1/2"	1+1	DTA.12.045.12.5SR	
15,87 - 5/8"	35	15,87 - 5/8"	1+1	DTA.15.035.12.5SR	
15,87 - 5/8"	45	15,87 - 5/8"	1+1	DTA.15.045.12.5SR	
19,05 - 3/4"	25	19,05 - 3/4"	1+1	DTA.19.025.12.5SR	
19,05 - 3/4"	45	19,05 - 3/4"	1+1	DTA.19.045.12.5SR	

* special version dedicated to nesting and cutting of plywood and wood-based materials.



Diamond Router Bits Z2+1 ECO Nesting

DIA CNC Freze Bicaklari Z2+1, DTN dizi - ECO NESTING
 Brocas de PCD Z2+1, serie DTN ECO NESTING



PCD TOOLS

DTN



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 $Ra \leq 0,3 \mu m$
- 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.

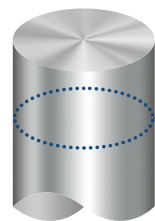
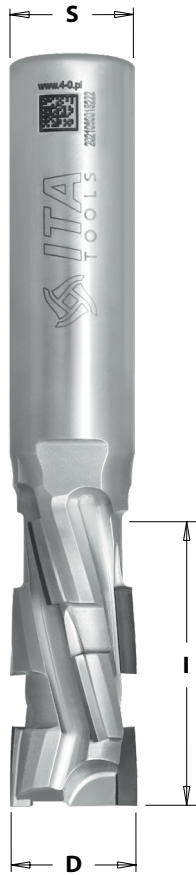
SOLID CARBIDE SPIRALS

SPIRAL BITS FOR COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS & CHUCKS

PLATES AND KNIVES



Tolerance of shank **H6**



Surface roughness of shank **$Ra \leq 0,3 \mu m$**



Dynamic balancing class **G2.5**

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	25	20	2+1	DTN.12.025.20.2SR*	
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
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

* special version with blade geometry for 18 mm material nesting



Diamond Router Bits Z2+1 ECO Nesting

DIA CNC Freze Bicaklari Z2+1, DTN dizi - ECO NESTING
Brocas de PCD Z2+1, serie DTN ECO NESTING



D mm	I mm	S mm	Z	ARTICLE RH	ARTICLE LH
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
20	65	20	2+1	DTN.20.065.20.0SR	
25	25	25	2+1	DTN.25.025.25.0SR	DTN.25.025.25.0SL

D inch	I inch	S inch	Z	ARTICLE RH	ARTICLE LH
12,7 - 1/2"	25	12,7 - 1/2"	2+1	DTN.12.025.12.5SR	
12,7 - 1/2"	35	12,7 - 1/2"	2+1	DTN.12.035.12.5SR	
15,87 - 5/8"	35	15,87 - 5/8"	2+1	DTN.15.035.15.5SR	
15,87 - 5/8"	45	15,87 - 5/8"	2+1	DTN.15.045.15.5SR	
19,05 - 3,4"	35	19,05 - 3,4"	2+1	DTN.19.035.19.5SR	
19,05 - 3,4"	45	19,05 - 3,4"	2+1	DTN.19.045.19.5SR	



Other dimensions
are available on order

Diamond Router Bits Z3+1 TURBO

DIA CNC Freze Bicaklari Z2+1, DTE dizi TURBO
Brocas de PCD Z3+1, serie DTE TURBO



PCD TOOLS

DTE



Z3+1

RH

LH

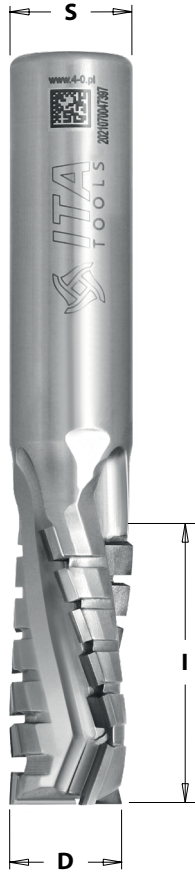
SOLID CARBIDE SPIRALS

SPIRAL BITS FOR COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS & CHUCKS

PLATES AND KNIVES

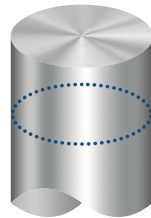


TECHNICAL DETAILS:

- 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.



Tolerance of shank **H6**



Surface roughness of shank **Ra ≤ 0,3 μm**



Dynamic balancing **class G2.5**

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
12	35	12	3+1	DTE.12.035.12.0DR	



Diamond Router Bits Z3+1 TURBO

DIA CNC Freze Bicaklari Z2+1, DTE dizi TURBO
Brocas de PCD Z3+1, serie DTE TURBO



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
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

PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES



Other dimensions
are available on order



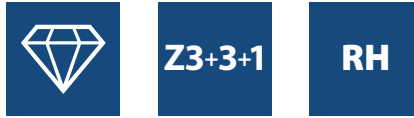
Diamond Router Bits Z3+3+1 Nesting

DIA CNC Freze Bicaklari Z3+3+1, DTM dizi NESTING
 Brocas de PCD Z3+3+1, serie DTM NESTING



PCDTOOLS

DTM



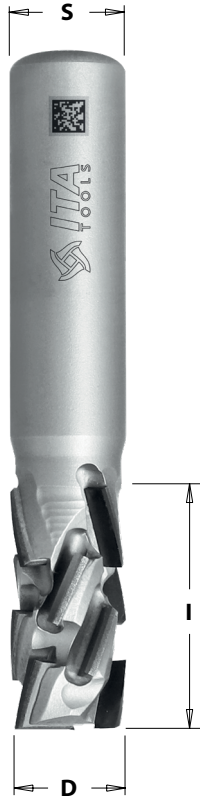
SOLID CARBIDE SPIRALS

SPIRAL BITS FOR COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS & CHUCKS

PLATES AND KNIVES



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.



Other dimensions are available on order



POSITIVE

D mm	I mm	S mm	MATERIAL HEIGHT mm	ARTICLE DENSIMET BODY
12	19	12	16-18	DTM.12.019.12.1DRP
12	21	12	18-20	DTM.12.021.12.1DRP
12	24	12	19-22	DTM.12.024.12.1DRP
16	24	16	19-22	DTM.16.024.16.1DRP
16	35	16	30-33	DTM.16.035.16.1DRP

NEGATIVE

D mm	I mm	S mm	MATERIAL HEIGHT mm	ARTICLE DENSIMET BODY
12	19	12	10-19	DTM.12.019.12.1DRN
12	21	12	10-20	DTM.12.021.12.1DRN
12	24	12	10-22	DTM.12.024.12.1DRN
16	24	16	10-22	DTM.16.024.16.1DRN
16	35	16	10-33	DTM.16.035.16.1DRN



Diamond Profile Cutters

DIA Profil Yönlendirici Bitleri 24 Saatte Mevcuttur
Brocas de PCD perfiladas disponibles en 24 h



AVAILABLE
24h/7



Other dimensions
are available on order



PCD TOOLS
SOLID CARBIDE
SPIRAL BITS
SPIRAL BITS FOR
COMPOSITE CUTTING
SAW BLADES
CNC ROUTER CUTTERS
& CHUCKS
PLATES AND KNIVES

Premill DIA Cutter Heads with Brazed Plates

Kenar Bantlama Makineleri İçin DIA Elmas Kenar Temizleme Kesiciler
Cabezales de cortador de diámetro PREILL con placas soldadas



PCD TOOLS

SOLID CARBIDE SPIRALS

SPIRAL BITS FOR COMPOSITE CUTTING

SAW BLADES

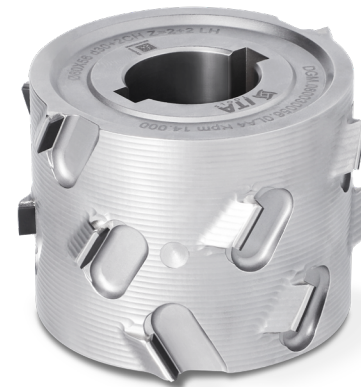
CNC ROUTER CUTTERS & CHUCKS

PLATES AND KNIVES

DGM



SYMMETRICAL ROTATION



ASYMMETRICAL ROTATION

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. Easy selection for a specific machine model.



Specially designed verse stainless steel body significantly lowers noise level.



Teeth extended above the body and separate channel for each blade for better facilitate chip evacuation.

HOLE IN TOLERANCE

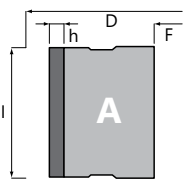
H7

Eliminating the run-out effects favourable for the service life of the machine.

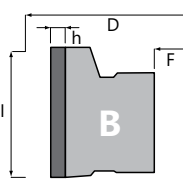
BALANCING CLASS

G2,5

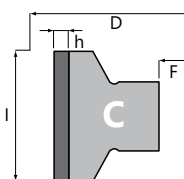
Cutter works evenly, without vibrations, even at maximum speed.



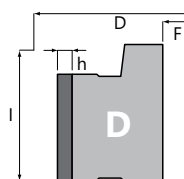
TYPE A



TYPE B



TYPE C



TYPE D

D mm	F mm	I mm	Z	TYPE	ARTICLE RH	ARTICLE LH	ARTICLE SYMMETRICAL
60	20	55	2+2	B	DGM.060020055.0RB4	DGM.060020055.0LB4	
60	25	48	2+2	A	DGM.060025048.0RA4	DGM.060025048.0LA4	
60	25	48	2+2	D	DGM.060025048.1RA4	DGM.060025048.1LA4	
60	25	56	2+2	A	DGM.060025056.0RA4	DGM.060025056.0LA4	
60	25	64	2+2	A	DGM.060025064.0RA4	DGM.060025064.0LA4	
70	20	50	2+2	C	DGM.070020050.0RC2	DGM.070020050.0LC2	

Premill DIA Cutter Heads with Brazed Plates

Kenar Bantlama Makineleri İçin DIA Elmas Kenar Temizleme Kesiciler
Cabezales de cortador de diámetro PREILL con placas soldadas



D mm	F mm	I mm	Z	TYPE	ARTICLE RH	ARTICLE LH	ARTICLE SYMMETRICAL
70	25	48	2+2	D	DGM.070025048.0RA4	DGM.070025048.0LA4	
70	30	64	2+2	C	DGM.070030064.4RC4	DGM.070030064.4LC4	
80	25	48	3+3	A	DGM.080025048.1RA4	DGM.080025048.1LA4	
80	25	48	2+2	A	DGM.080025048.3RA4	DGM.080025048.3LA4	
80	25	64	3+3	A	DGM.080025064.1RA4	DGM.080025064.1LA4	
80	30	45	2+2	A			DGM.080030045.SSA4
80	30	56	3+3	A	DGM.080030056.0RA4	DGM.080030056.0LA4	
80	30	65	2+2	C			DGM.080030065.1SC4
100	20	65	3+3	C	DGM.100020065.0RC4	DGM.100020065.0LC4	
100	30	43	2+2	B	DGM.100030043.0RB4	DGM.100030043.0LB4	
100	30	48	3+3	A	DGM.100030048.0RA4	DGM.100030048.0LA4	
100	30	48	3+3	B	DGM.100030048.0RB4	DGM.100030048.0LB4	
100	30	48	3+3	C	DGM.100030048.0RC4	DGM.100030048.0LC4	
100	30	48	3+3	D	DGM.100030048.2RA4	DGM.100030048.2LA4	
100	30	51	3+3	D	DGM.100030051.0RA4	DGM.100030051.0LA4	
100	30	64	3+3	B	DGM.100030064.0RB4	DGM.100030064.0LB4	
125	30	34	3+3	A	DGM.125030034.0RA4	DGM.125030034.0LA4	
125	30	43	3+3	B	DGM.125030043.1RB4	DGM.125030043.1LB4	
125	30	43	3+3	B	DGM.125030043.2RB4	DGM.125030043.2LB4	
125	30	45	3+3	C	DGM.125030045.0RC4	DGM.125030045.0LC4	
125	30	45	3+3	C			DGM.125030045.0SC4
125	30	64	3+3	B	DGM.125030064.0RB4	DGM.125030064.0LB4	
125	30	64	3+3	C			DGM.125030064.0SC4

PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES



Other dimensions
are available on order



Database of dedicated tools for Edgebanders.
Ask about Your model export@itertools.pl

Premill DIA Cutter Heads with Replaceable Plates

Kenar Bantlama Makineleri İçin Değiştirilebilir DIA Elmas Kenar Temizleme Kesiciler
Cabezales de cortador de diámetro PREILL con placas reemplazables



PCD TOOLS

SOLID CARBIDE SPIRALS

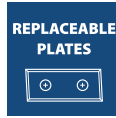
SPIRAL BITS FOR COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS & CHUCKS

PLATES AND KNIVES

DGL

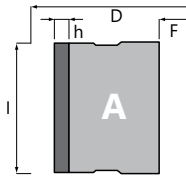


TECHNICAL DETAILS:

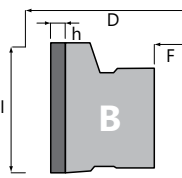
- Lightweight construction material, reduces vibrations, which translates into less wear of the bearings in the machine
- Blades ensuring a smooth surface of the processed edge
- The ability to customize the arrangement of the blades on the head, for example a symmetrical or asymmetrical arrangement
- The possibility of replacing DIA blades
- Noise reduction due to the particular geometry of the structure
- Possibility of segment use of DIA boards (see figure below)
- Body milled on both sides

APPLICATION:

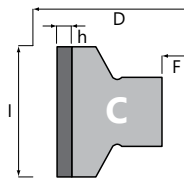
Diamond cutter heads intended for edge profiling for edge banding machines with mechanical feed. Suitable for MDF and chipboard panels.



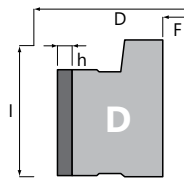
TYPE A



TYPE B

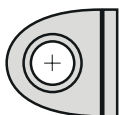


TYPE C



TYPE D

D mm	F mm	I mm	Z	NR OF PLATES	A	TYPE	ARTICLE RH	ARTICLE LH	ARTICLE symmetrical
70	20 DKN	54	2+2	10	30°	C	DGL.070020054.0RC3	DGL.070020054.0LC3	
80	30 DKN	65	3+3	18	30°	B	DGL.080025065.0RA3	DGL.080025065.0LA3	
80	30 DKN	44	3+3	12	30°	A			DGL.080030044.0SA3
80	30 DKN	54	3+3	10	30°	A	DGL.080030054.0RA3	DGL.080030054.0LA3	
80	30 DKN	60	3+3	18	30°	C			DGL.080030065.2SC3
80	30 DKN	48	3+3	18	30°	C	DGL.085030048.0RC3	DGL.085030048.0LC3	
100	30 DKN	44	3+3	12	30°	B	DGL.100030044.1RB3	DGL.100030044.1LB3	
100	30 DKN	44	3+3	12	30°	C	DGL.100030044.1RC3	DGL.100030044.1LC3	
100	30 DKN	65	3+3	21	45°	B	DGL.100030065.4RB3	DGL.100030065.4LB3	
100	30 DKN	47	3+3	15	45°	B	DGL.100030047.1RB3	DGL.100030047.1LB3	
100	30 DKN	65	3+3	21	45°	B	DGL.100030065.1RB3	DGL.100030065.1LB3	
100	30 DKN	65	3+3	18	30°	B	DGL.100030065.3RB3	DGL.100030065.3LB3	
125	30 DKN	65	3+3	18	30°	B	DGL.125030065.0RB3	DGL.125030065.0LB3	
125	30 DKN	65	3+3	18	30°	D	DGL.125030065.KR03	DGL.125030065.KL03	



PCD insert for Premill Cutters

H mm	L mm	L1 mm	ARTICLE
3	14	14,7	PCD14,0x2,76ALU



Profiling DIA Heads for Edgebanding Machines

Kenar Bantlama Makineleri için Profil DIA Kafaları
Perfiladores de cabezales DIA para canteadoras



DGB

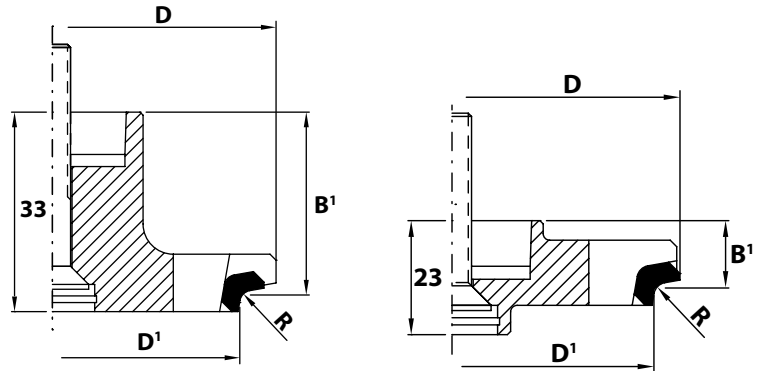


TECHNICAL DETAILS:

- 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	D' mm	MOUNTING mm	B' 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	D' mm	MOUNTING mm	B' 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



Compact Hoggers for Long and Cross Side Cut

Uzun ve Çapraz Taraflı Kesim İçin Kompakt Hogger
Hoggers compactos para corte largo y transversal



HOG Compact



RH

LH



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

APPLICATION:

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

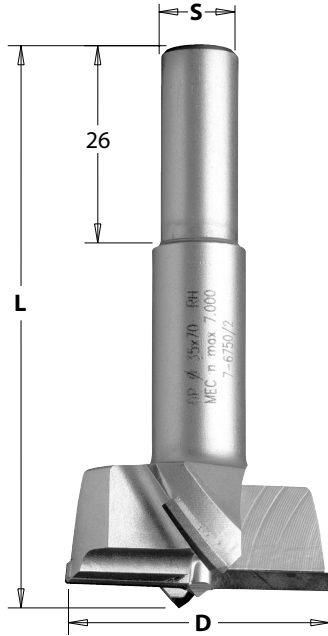
D mm	F mm	I mm	Z	ARTICLE RH	ARTICLE LH
250	60	12	42/6	HOG.250060012.CR26	HOG.250060012.CL26
250	80	12	42/6	HOG.250080012.CR36	HOG.250080012.CL36
250	100	12	42/6	HOG.250100012.CR16	HOG.250100012.CL16
250	60	12	48/6	HOG.250060012.CR56	HOG.250060012.CL56
250	80	12	48/6	HOG.250080012.CR46	HOG.250080012.CL46
250	100	12	48/6	HOG.250100012.CR26	HOG.250100012.CL26

DIA Hinge Boring Bits

DIA Menteşe Delme Uçları
Brocas de PCD aburridas de bisagra



DWA | DWB



TECHNICAL DETAILS:

- Body made of durable steel
- Diamond blades with a precisely centered central point
- 2 PCD cutting edges (Z2)
- 2 PCD scoring blades (V2)
- Cylindrical shank with milling for easier assembly in the holder

APPLICATION:

Perfect for drilling hinge holes on multi-spindles drilling machines with suitable quick couplings. For making sockets in hardwood, wood-based materials, plastic and laminated materials. Thanks to the use of PCD blades, the service life of these drill bits is several dozen times greater than conventional drill bits with HM blades.

NOTE: Other dimensions on order.

DWA

D mm	L mm	S mm	ARTICLE RH	ARTICLE LH
12	57,5	10	DWA.012RH	DWA.012LH
14	57,5	10	DWA.014RH	DWA.014LH
15	57,5	10	DWA.015RH	DWA.015LH
20	57,5	10	DWA.020RH	DWA.020LH
25	57,5	10	DWA.025RH	DWA.025LH
26	57,5	10	DWA.026RH	DWA.026LH
30	57,5	10	DWA.030RH	DWA.030LH
35	57,5	10	DWA.035RH	DWA.035LH
40	57,5	10	DWA.040RH	DWA.040LH

DWB

D mm	L mm	S mm	ARTICLE RH	ARTICLE LH
12	70	10	DWB.012RH	DWB.012LH
14	70	10	DWB.014RH	DWB.014LH
15	70	10	DWB.015RH	DWB.015LH
20	70	10	DWB.020RH	DWB.020LH
25	70	10	DWB.025RH	DWB.025LH
26	70	10	DWB.026RH	DWB.026LH
30	70	10	DWB.030RH	DWB.030LH
35	70	10	DWB.035RH	DWB.035LH
40	70	10	DWB.040RH	DWB.040LH

SPARE PARTS DWA / DWB:

990.003.00	990.088.00 (optional)



SOLID CARBIDE SPIRAL BITS

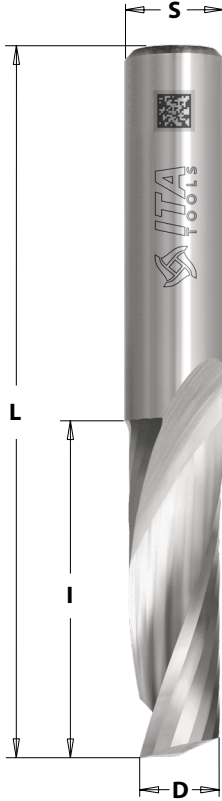


Solid Carbide Finishing Upcut Spiral Bits Z1

Yüzey Frezesi Yonde Yukari Kesim Z1
Brocas helicoidales Z1 - corte ascendente



198
positive



TECHNICAL DETAILS:

- 1 spiral cutting edge
- Upward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.
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

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/2	2	1/4	198.32.127.508.64R
3/16	5/8	2	1/4	198.48.159.508.64R
1/4	3/4	2	1/4	198.64.191.508.64R
1/4	1	2-1/2	1/4	198.64.254.635.64R
3/8	1-1/8	3	3/8	198.95.286.762.95R



Other dimensions
are available on order



Solid Carbide Finishing Upcut Spiral Bits Z2

Yüzey Frezesi Yonde Yukari Kesim Z2
Brocas helicoidales Z2 - corte ascendente



191
positive

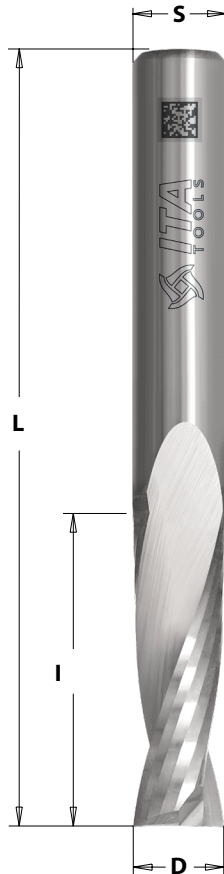


TECHNICAL DETAILS:

- 2 spiral cutting edges
- Upward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.
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 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
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



Solid Carbide Finishing Upcut Spiral Bits Z2

Yüzey Frezesi Yonde Yukari Kesim Z2
Brocas helicoidales Z2 - corte ascendente



D inch	I inch	L inch	S inch	ARTICLE RH	ARTICLE LH
1/8	1/2	2	1/4	191.32.127.508.64R	191.32.127.508.64L
5/32	1/2	2	1/4	191.39.127.508.64R	191.39.127.508.64L
1/4	3/4	2	1/4	191.64.191.508.64R	191.64.191.508.64L
1/4	1	2-1/2	1/4	191.64.254.635.64R	191.64.254.635.64L
5/16	1	3	1/2	191.79.254.762.13R	191.79.254.762.13L
3/8	1-1/4	3-1/4	1/2	191.95.318.826.13R	191.95.318.826.13L
1/2	1-1/4	3	1/2	191.13.318.762.13R	191.13.318.762.13L
1/2	1-1/2	3-1/2	1/2	191.13.381.889.13R	191.13.381.889.13L
1/2	1-1/2	4	1/2	191.13.381.102.13R	191.13.381.102.13L
5/8	2-1/8	4-5/16	5/8	191.16.540.110.16R	191.16.540.110.16L
3/4	2-1/8	4-5/16	3/4	191.19.540.110.19R	191.19.540.110.19L



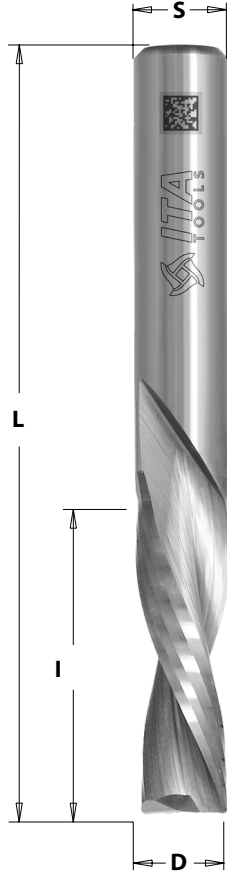
Other dimensions
are available on order

Solid Carbide Finishing Downcut Spiral Bits Z2

Yüzey Frezesi Tarafı Aşağı Kesim Z2
Brocas helicoidales Z2 - corte descendente



192
negative



TECHNICAL DETAILS:

- 2 spiral cutting edges
- Downward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.
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 RH
3	12	50	3	192.03.012.050.03R
3	12	60	6	192.03.012.060.06R
3	12	60	8	192.03.012.060.08R
4	15	50	4	192.04.015.050.04R
4	15	60	6	192.04.015.060.06R
4	15	60	8	192.04.015.060.08R
5	17	50	5	192.05.017.050.05R
5	17	60	8	192.05.017.060.08R
5	17	60	6	192.05.017.060.06R
6	27	70	6	192.06.027.070.06R
6	27	70	8	192.06.027.070.08R
8	22	70	8	192.08.022.070.08R
8	32	80	8	192.08.032.080.08R
8	42	90	8	192.08.042.090.08R
10	32	80	10	192.10.032.080.10R
12	35	83	12	192.12.035.083.12R

D inch	I inch	L inch	S inch	ARTICLE RH
1/8	1/2	2	1/4	192.32.127.508.64R
5/32	1/2	2	1/4	192.32.127.508.64R
3/16	3/4	2	1/4	192.48.191.508.64R
1/4	3/4	2	1/4	192.64.191.508.64R
1/4	1	2-1/2	1/4	192.64.254.635.64R
5/16	1	3	1/2	192.79.254.762.13R
3/8	1-1/4	3-1/4	1/2	192.95.318.826.13R
1/2	1-1/4	3	1/2	192.13.318.762.13R
1/2	1-1/2	3-1/2	1/2	192.13.381.889.13R
1/2	1-1/2	4	1/2	192.13.381.102.13R



Other dimensions are available on order



PCD TOOLS

SOLID CARBIDE SPIRAL BITS

SPIRAL BITS FOR COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS & CHUCKS

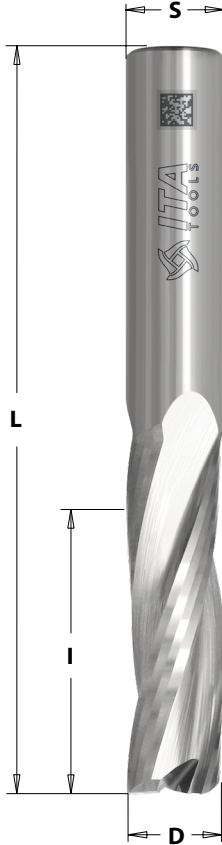
PLATES AND KNIVES

Solid Carbide Finishing Upcut Spiral Bits Z3

Yüzey Frezesi Yonde Yukari Kesim Z3
Brocas helicoidales Z3 - corte ascendente



193
positive



TECHNICAL DETAILS:

- 3 spiral cutting edges
- Upward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.
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 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	193.10.042.090.10R	193.10.042.090.10L
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

D inch	I inch	L inch	S inch	ARTICLE RH	ARTICLE LH
5/16	1	3	1/2	193.79.254.762.13R	193.79.254.762.13L
3/8	1-1/4	3-1/4	1/2	193.95.318.826.13R	193.95.318.826.13L
1/2	1-1/4	3	1/2	193.13.318.762.13R	193.13.318.762.13L
1/2	1-1/2	3-1/2	1/2	193.13.381.889.13R	193.13.381.889.13L
5/8	2-1/8	4-5/16	5/8	193.16.540.110.16R	193.16.540.110.16L
3/4	2-1/8	4-5/16	3/4	193.19.540.110.19R	193.19.540.110.19L



Other dimensions are available on order



Solid Carbide Finishing Upcut Spiral Bits Z3 with Chipbreaker

Kaba İşleme Frezesi Yonde Yukari Kesim Z3

Brocas de HW integrales helicoidales con rompevirutas Z3R corte ascendente



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

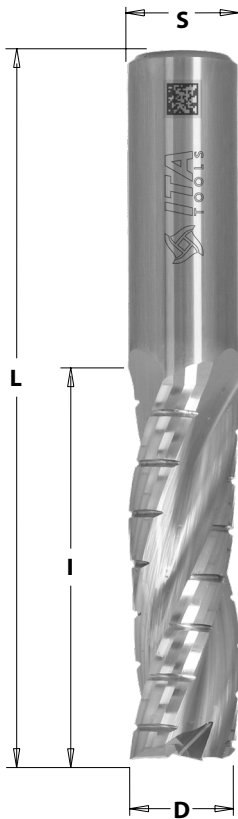
SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUKS

PLATES AND KNIVES

193Rn
positive



TECHNICAL DETAILS:

- 3 spiral cutting edges
- Upward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.
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 RH
6	22	60	6	193.06.022.060.06Rn
8	32	72	8	193.08.032.072.08Rn
10	32	72	10	193.10.032.072.10Rn
10	42	90	10	193.10.042.090.10Rn
10	52	100	10	193.10.052.100.10Rn
12	42	90	12	193.12.042.090.12Rn
12	52	100	12	193.12.052.100.12Rn
14	42	100	14	193.14.042.100.14Rn
16	42	90	16	193.16.042.090.16Rn
16	52	100	16	193.16.052.100.16Rn
16	62	110	16	193.16.062.110.16Rn
16	72	130	16	193.16.072.130.16Rn
18	55	110	18	193.18.055.110.18Rn
20	60	120	20	193.20.060.120.20Rn
20	102	165	20	193.20.102.165.20Rn

D inch	I inch	L inch	S inch	ARTICLE
1/2	1-1/4	3	1/2	193.13.318.762.13Rn
5/8	2-1/8	4-5/16	5/8	193.16.540.110.16Rn
3/4	4	6-1/2	3/4	193.19.102.165.19Rn



Other dimensions are available on order



Solid Carbide Finishing Downcut Spiral Bits Z3

Yüzey Frezesi Tarafı Aşağı Kesim Z3

Brocas de HW integrales helicoidales Z3 corte descendente



194
negative

VHM

Z3

RH



TECHNICAL DETAILS:

- 3 spiral cutting edges
- Downward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.

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 RH
10	32	80	10	194.10.032.080.10R
10	42	90	20	194.10.042.090.10R
12	35	83	12	194.12.035.083.12R
14	50	110	10	194.14.050.110.14R
16	55	110	10	194.16.055.110.16R
16	35	90	10	194.16.035.090.16R
18	55	110	10	194.18.055.110.18R
20	60	120	20	194.20.060.120.20R
20	72	120	10	194.20.072.120.20R

D inch	I inch	L inch	S inch	ARTICLE RH
3/8	1-1/4	3-1/4	1/2	194.95.318.826.13R
1/2	1-1/4	3	1/2	194.13.318.762.13R
1/2	1-1/2	3-1/2	1/2	194.13.381.889.13R
5/8	2-1/8	4-5/16	5/8	194.16.540.110.16R
3/4	2-1/8	4-5/16	3/4	194.19.540.110.19R



Other dimensions are available on order



Solid Carbide Roughing Upcut Spiral Bits Z3

Kaba İşleme Frezesi Yonde Yukari Kesim Z3

Brocas de HW integral helicoidales con rompevirutas Z3R corte ascendente



195
positive

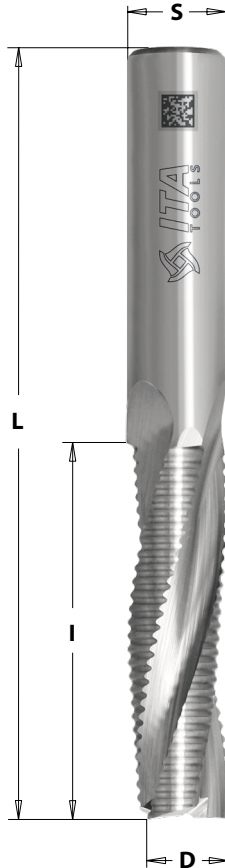


TECHNICAL DETAILS:

- 3 spiral cutting edges
- Upward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.
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 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

D inch	I inch	L inch	S inch	ARTICLE RH	ARTICLE LH
3/8	1-1/4	3-1/4	1/2	195.95.318.826.13R	195.95.318.826.13L
1/2	1-1/4	3	1/2	195.13.318.762.13R	195.13.318.762.13L
5/8	2-1/8	4-5/16	5/8	195.16.540.110.16R	195.16.540.110.16L
3/4	4	6-1/2	3/4	195.19.102.165.19R	195.19.102.165.19L



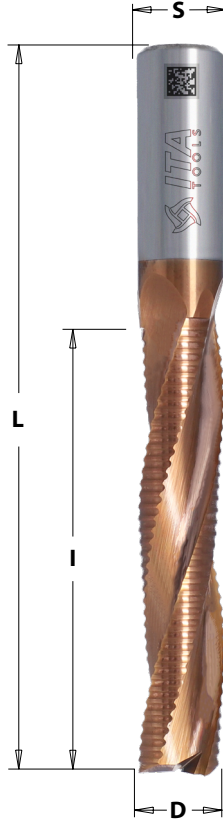
Solid Carbide Roughing Upcut Spiral Bits Z3

Kaba İşleme Frezesi Yonde Yukari Kesim Z3

Brocas de HW integrales helicoidales con rompevirutas Z3R corte ascendente



195
positive



VHM

Z3

RH

TECHNICAL DETAILS:

- 3 spiral cutting edges
- Upward chip ejection
- With TiSiN coating

APPLICATION:

For cutting and milling in solid wood and wood-based materials.
Use a high feed speed on well-clamped workpieces.
Can be used on machining centres, point to point machines, CNC routers.

ADVANTAGES:

High wear resistance during processing in hard materials.
Extended tool life and higher machining quality.

CUTTER WITH TiSiN COATING

D mm	I mm	L mm	S mm	ARTICLE RH
10	22	70	10	195.10.022.070.10TSR
10	35	70	10	195.10.035.070.10TSR
12	22	70	12	195.12.022.070.12TSR
12	25	70	12	195.12.025.070.12TSR
12	35	80	12	195.12.035.080.12TSR



Other dimensions
are available on order



Solid Carbide Roughing Routers for Door-Locks

Frezezi Donanim Oluk Kesici

Brocas de HW integral helicoidales para cerraduras de las puertas



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

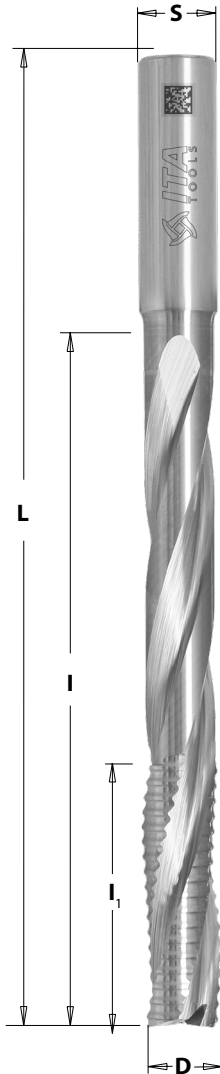
SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUKS

PLATES AND KNIVES

195
positive



TECHNICAL DETAILS:

- 3 spiral cutting edges
- Upward chip ejection

APPLICATION:

For milling pockets for a lock in solid wood and wood-like materials designed for use on CNC machines.

D mm	I mm	I ₁ mm	L mm	S mm	ARTICLE RH
12	45	95	150	12	195.12.095.150.12R
14	45	95	150	14	195.14.095.150.14R
16	45	95	150	16	195.16.095.150.16R
18	45	95	150	18	195.18.095.150.18R
20	45	95	150	20	195.20.095.150.20R

SPIRAL BITS CHIP-BREAKER FOR 60° V-POINT LOCKSETS

D mm	I mm	L mm	S mm	ARTICLE RH
14	58	110	14	195.14.058.110.14Rv
16	55	110	16	195.16.055.110.16Rv



Other dimensions
are available on order



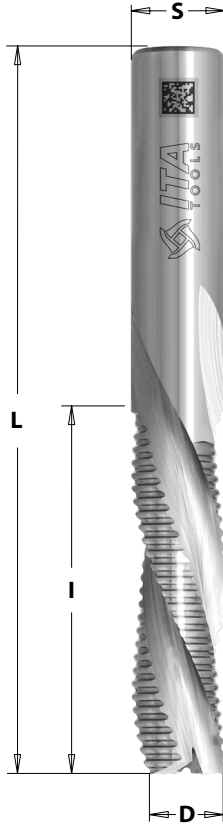
Solid Carbide Roughing Downcut Spiral Bits Z3

Yüzey Frezesi Tarafı Aşağı Kesim Z3

Brocas de HW integral helicoidales Z3 corte descendente



196
negative



VHM

Z3R

RH

TECHNICAL DETAILS:

- 3 spiral cutting edges
- Downward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.

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 RH
8	32	80	8	196.08.032.080.08R
10	42	90	10	196.10.042.090.10R
12	35	83	12	196.12.035.083.12R
12	42	90	12	196.12.042.090.12R
12	52	100	12	196.12.052.100.12R
14	50	110	14	196.14.050.110.14R
16	55	110	16	196.16.055.110.16R
18	55	110	18	196.18.055.110.18R
20	60	120	20	196.20.060.120.20R
20	72	120	20	196.20.072.120.20R
20	102	165	20	196.20.102.165.20R

D inch	I inch	L inch	S inch	ARTICLE RH
1/2	1-1/4	3	1/2	196.13.318.762.13R
5/8	2-1/8	4-5/16	5/8	196.16.540.110.16R
3/4	4	6-1/2	3/4	196.19.102.165.19R



Other dimensions
are available on order



Solid Carbide Finishing & Roughing Upcut Spiral Bits Z4

Yüzey Frezes Z4 Kaba İşleme + Yüzey

Brocas de HW integral helicoidales Z4 - Acabado + Desbaste corte ascendente



PCD TOOLS

197
positive

VHM

Z4

RH

TECHNICAL DETAILS:

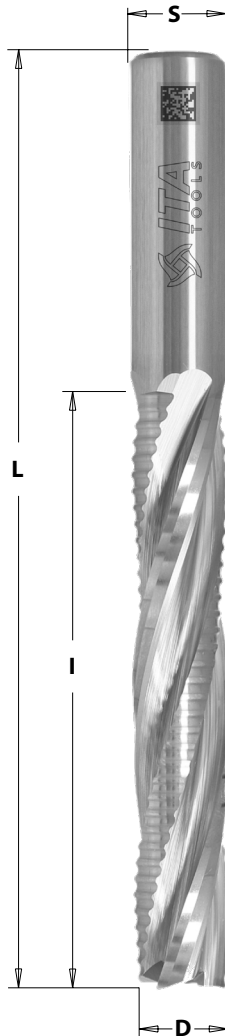
- 2 finishing spiral cutting edges
- 2 roughing spiral cutting edges
- Upward chip ejection

APPLICATION:

For cutting and milling in solid wood and wood-based materials.

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 RH
8	32	70	8	197.08.032.070.08R
10	32	70	10	197.10.032.070.10R
12	32	70	12	197.12.032.070.12R
12	42	90	12	197.12.042.090.12R
14	32	90	14	197.14.032.090.14R
16	35	90	16	197.16.035.090.16R
16	42	100	16	197.16.042.100.16R
16	55	110	16	197.16.055.110.16R
18	55	110	18	197.18.055.110.18R
20	60	120	20	197.20.060.120.20R



Other dimensions
are available on order

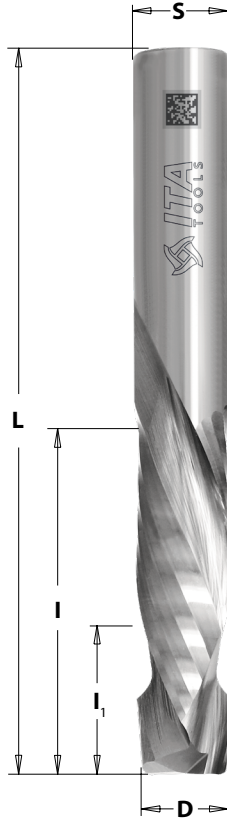


Solid Carbide Finishing Up & Downcut Spiral Bits

Yüzey Frezesi Sıkıştırma Aşağı&Yukarı
Brocas de HW integral de fresado de compresión



190
positive-negative



TECHNICAL DETAILS:

- 1+1 spiral cutting edges
- 2+2 spiral cutting edges
- 3+3 spiral cutting edges

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	I ₁ mm	L mm	S mm	Z	ARTICLE RH
3	5	20	60	3	1+1	190.03.020.060.03R
4	5	21	60	4	1+1	190.04.021.060.04R
5	8	22	60	5	2+2	190.05.022.060.05R
6	5	22	60	6	1+1	190.06.022.060.06R
6	5	22	60	6	2+2	190.06.022.060.06Rs
8	8	22	70	8	2+2	190.08.022.070.08R
10	8	22	70	8	2+2	190.10.022.070.10R
10	5	32	80	8	2+2	190.10.032.080.10R
10	7	42	90	10	2+2	190.10.042.090.10R
12	9	25	83	12	3+3	190.12.025.083.12R
12	9	35	90	12	3+3	190.12.035.090.12R
12	7	42	90	12	2+2	190.12.042.090.12R
12	7	52	100	12	2+2	190.12.052.100.12R
16	18	42	100	16	2+2	190.16.042.100.16R
16	21	55	110	16	2+2	190.16.055.110.16R
18	24	55	110	18	2+2	190.18.055.110.18R

D inch	I inch	I ₁ inch	L inch	S inch	Z	ARTICLE RH
1/4	9/32	7/8	2-1/2	1/4	2+2	190.64.222.635.64R
3/8	3/16	7/8	3	3/8	2+2	190.95.222.762.95R
1/2	15/32	1	3	1/2	2+2	190.13.254.762.13R
1/2	1/4	1-1/8	3	1/2	3+3	190.13.286.762.13R
1/2	13/64	7/8	3	1/2	2+2	190.13.222.762.13R



Other dimensions are available on order



Solid Carbide Finishing Up & Downcut Spiral Bits

Yüzey Frezesi Sıkıştırma Aşağı & Yukarı
Brocas de HW integral de fresado de compresión



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

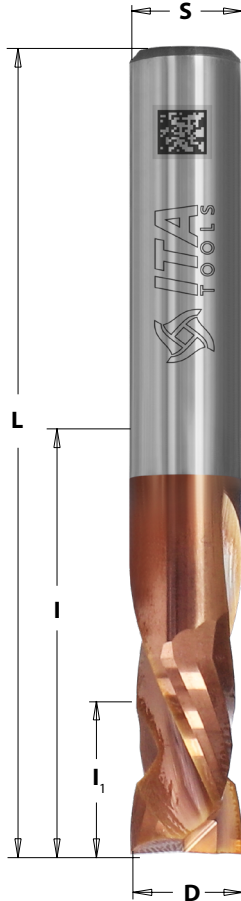
SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES

190 positive-negative



TECHNICAL DETAILS:

- 1+1 spiral cutting edges
- 2+2 spiral cutting edges
- 3+3 spiral cutting edges

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.

ROUTER WITH TiSiN COATING:

High wear resistance during processing in hard materials. Extended tool life and higher machining quality.

D mm	I mm	I ₁ mm	L mm	S mm	Z	ARTICLE RH
6	2	12	60	6	2+2	190.06.012.060.06TSR
6	8	22	60	6	1+1	190.06.022.060.06TSR
8	3	18	70	8	2+2	190.08.018.070.08TSR
8	8	22	70	8	2+2	190.08.022.070.08TSR
10	5	18	70	10	2+2	190.10.018.070.10TSR
10	8	22	70	10	2+2	190.10.022.070.10TSR
10	6	25	80	10	2+2	190.10.025.080.10TSR
12	5	18	70	12	2+2	190.12.018.070.12TSR
12	6	25	83	12	3+3	190.12.025.083.12TSR



Other dimensions
are available on order

TBOX

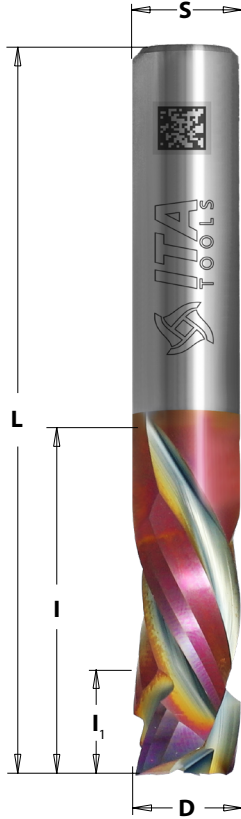
Darbagaldi & Instrumenti

Solid Carbide Finishing Up & Downcut Spiral Bits

Yüzey Frezesi Sıkıştırma Aşağı & Yukarı
Brocas de HW integral de fresado de compresión



X90
positive-negative



TECHNICAL DETAILS:

- Longlife solid carbide finishing up & downcut spiral bits
- 2+2 spiral cutting edges
- 3+3 spiral cutting edges

APPLICATION:

Used for cutting, copying, panel sizing and routing applications in chipboard, MDF and plywood. Coating maintain a sharp cutting edge, eliminate chip sticking on the cutting edge making the longer tool life and high quality of machining in the hardest materials. Can be used on machining centres, point to point machines and CNC routers.

D mm	I mm	I ₁ mm	L mm	S mm	Z	TYPE	ARTICLE RH
12	7,5	25	80	12	2+2	Finishing	X90.12.025.080.12PR
12	8	25	80	12	3+3	Finishing	X90.12.025.080.12PR3
12	8	35	80	12	2+2	Finishing	X90.12.035.080.12PR
12	8	35	80	12	3+3	Finishing	X90.12.035.080.12PR3
12	8	35	80	12	2+2	Chipbreaker	X90.12.035.080.12PRz



Round Nose Solid Carbide Finishing Upcut Spiral Bits

Yüzey Frezesi Yuvarlak Burun Yonde Yukari Kesim

Brocas de HW integral helicoidales corte ascendente cabeza redondeada



199
positive

VHM

Z2

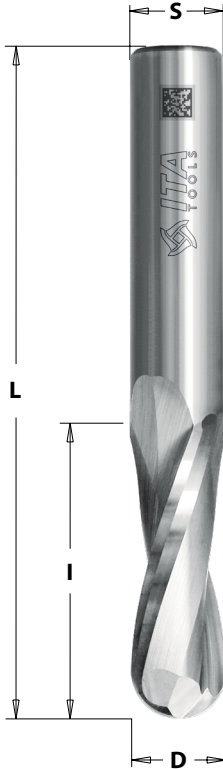
RH

TECHNICAL DETAILS:

- 2 spiral cutting edges
- Upward chip ejection

APPLICATION:

Used for milling, 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

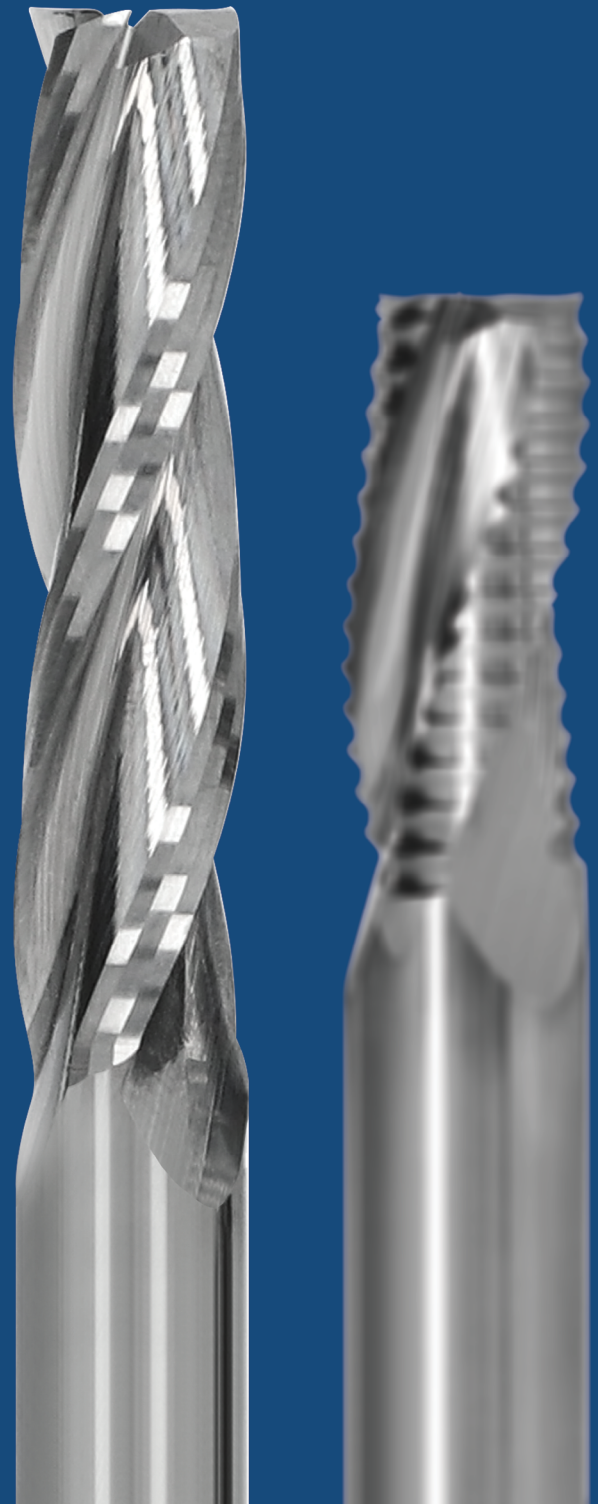


Other dimensions
are available on order





**SOLID CARBIDE
SPIRAL BITS
FOR COMPOSITES**



Solid Carbide Finishing Upcut Spiral Bits Z1 for Plastics

Yüzey Frezesi Yukarı Kesim Z1 Plastik İçin

Brocas de HW integral helicoidales Z1 corte ascendente para Plásticos



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

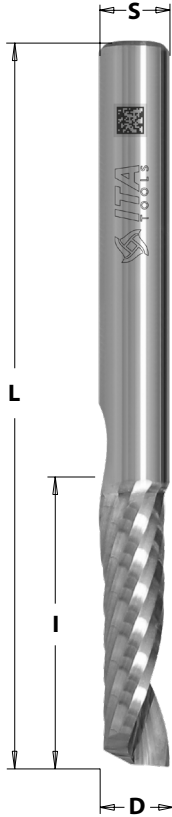
SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES

198 RP
positive

VHM **Z1** **RH**



TECHNICAL DETAILS:

- Single blade cutter, positive
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upwards
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in plastics. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
2	6	60	6	198.02.006.060.06RP
3	6	60	3	198.03.006.060.03RP
3	6	60	6	198.03.006.060.06RP
3	12	60	3	198.03.012.060.03RP
3	12	60	6	198.03.012.060.06RP
4	8	60	4	198.04.008.060.04RP
4	8	60	6	198.04.008.060.06RP
4	12	60	4	198.04.012.060.04RP
4	12	60	6	198.04.012.060.06RP
4	22	60	6	198.04.022.060.06RP
5	15	60	5	198.05.015.060.05RP
5	15	60	6	198.05.015.060.06RP
6	12	60	6	198.06.012.060.06RP
6	22	60	6	198.06.022.060.06RP
8	22	60	8	198.08.022.060.08RP
8	32	80	8	198.08.032.080.08RP
10	35	80	10	198.10.035.080.10RP
10	42	80	10	198.10.042.080.10RP
12	35	80	12	198.12.035.080.12RP
12	42	90	12	198.12.042.090.12RP

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/4	2 1/2	1/8	198.32.635.635.32RP
1/8	1/2	2 1/2	1/8	198.32.127.635.32RP
3/16	5/16	2 1/2	3/16	198.48.794.635.48RP
3/16	5/8	2 1/2	3/16	198.48.159.635.48RP
1/4	1/2	2 1/2	1/4	198.64.127.635.64RP
1/4	1	2 1/2	1/4	198.64.254.635.64RP
3/8	1	2 1/2	3/8	198.95.254.635.95RP
1/2	1 1/2	3 1/2	1/2	198.13.381.889.13RP



Other dimensions
are available on order



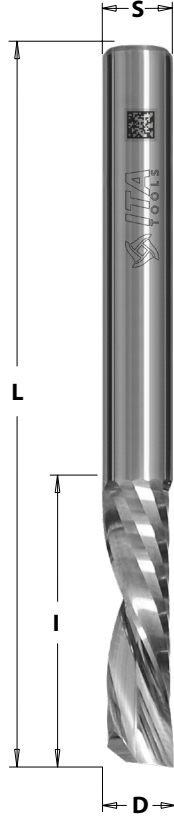
Solid Carbide Finishing Downcut Spiral Bits Z1 for Plastics

Yüzey Frezesi Tarafı Aşağı Kesim Z1 Plastik İçin

Brocas de HW integral helicoidales Z1 corte descendente para Plásticos



198 RPn
negative



TECHNICAL DETAILS:

- Single blade cutter, negative
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge downwards
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in plastics. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
2	6	60	6	198.02.006.060.06RPn
3	6	60	3	198.03.006.060.03RPn
3	6	60	6	198.03.006.060.06RPn
3	12	60	3	198.03.012.060.03RPn
3	12	60	6	198.03.012.060.06RPn
4	8	60	4	198.04.008.060.04RPn
4	8	60	6	198.04.008.060.06RPn
4	12	60	4	198.04.012.060.04RPn
4	12	60	6	198.04.012.060.06RPn
5	15	60	5	198.05.015.060.05RPn
5	15	60	6	198.05.015.060.06RPn
6	12	60	6	198.06.012.060.06RPn

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/4	2 1/2	1/8	198.32.635.635.32RPn
1/8	1/2	2 1/2	1/8	198.32.127.635.32RPn
3/16	5/16	2 1/2	3/16	198.48.794.635.48RPn
3/16	5/8	2 1/2	3/16	198.48.159.635.48RPn
1/4	1/2	2 1/2	1/4	198.64.127.635.64RPn
1/4	1	2 1/2	1/4	198.64.254.635.64RPn



Other dimensions
are available on order

Solid Carbide Finishing Upcut Spiral Bits Z1 for Plastics

Yüzey Frezesi Yukar Kesim Z1 Plastik İçin

Brocas de HW integral helicoidales Z1 corte ascendente para Plásticos

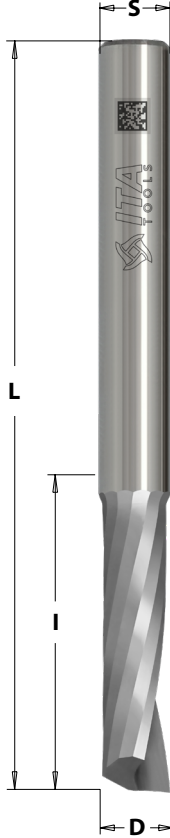


198 RPs
positive

VHM

Z1

RH



TECHNICAL DETAILS:

- Single blade cutter with a minimum spiral angle, positive
- For thin materials from 1mm to 8mm
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upwards
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in plastics. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
2	6	60	6	198.02.006.060.06RPs
3	8	60	3	198.03.008.060.03RPs
3	12	60	3	198.03.012.060.03RPs
3	12	60	6	198.03.012.060.06RPs
4	8	60	4	198.04.008.060.04RPs
4	12	60	4	198.04.012.060.04RPs
4	12	60	6	198.04.012.060.06RPs
5	8	60	5	198.05.008.060.05RPs
5	12	60	6	198.05.012.060.06RPs
6	12	60	6	198.06.012.060.06RPs
6	22	60	6	198.06.022.060.06RPs
8	12	60	8	198.08.012.060.08RPs
10	22	60	10	198.10.022.060.10RPs

D inch	I inch	L inch	S inch	ARTICLE
1/8	5/16	2 1/2	1/8	198.32.794.635.32RPs
3/16	5/16	2 1/2	3/16	198.48.794.635.48RPs
3/16	5/8	2 1/2	3/16	198.48.159.635.48RPs
1/4	1/2	2 1/2	1/4	198.64.127.635.64RPs
1/4	1	2 1/2	1/4	198.64.254.635.64RPs
3/8	1	2 1/2	3/8	198.95.254.635.95RPs



Other dimensions
are available on order

Solid Carbide Finishing Upcut Spiral Bits Z1 for Aluminum

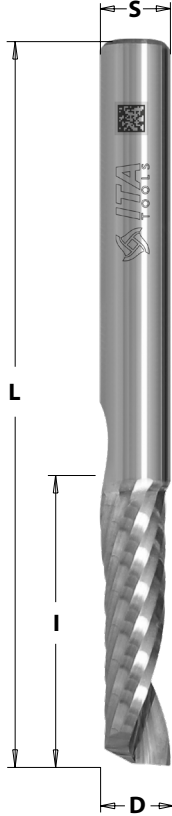
Yüzey Frezesi Yukar Kesim Z1 Alüminyum için

Brocas de HW integral helicoidales Z1 corte ascendente para Aluminio



198 Ra

positive



TECHNICAL DETAILS:

- Single blade cutter, positive
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in aluminum, dibond composite, an alternative to plastics processing. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	6	60	3	198.03.006.060.03Ra
3	6	60	6	198.03.006.060.06Ra
3	12	60	3	198.03.012.060.03Ra
3	12	60	6	198.03.012.060.06Ra
4	8	60	4	198.04.008.060.04Ra
4	8	60	6	198.04.008.060.06Ra
4	12	60	4	198.04.012.060.04Ra
4	12	60	6	198.04.012.060.06Ra
4	22	60	6	198.04.022.060.06Ra
5	15	60	5	198.05.015.060.05Ra
5	15	60	6	198.05.015.060.06Ra
6	12	60	6	198.06.012.060.06Ra
6	22	60	6	198.06.022.060.06Ra
8	22	60	8	198.08.022.060.08Ra
8	32	80	8	198.08.032.080.08Ra
10	35	80	10	198.10.035.080.08Ra
10	42	80	10	198.10.042.080.08Ra
12	35	80	12	198.12.035.080.08Ra
12	42	90	12	198.12.042.090.12Ra

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/4	2 1/2	1/8	198.32.635.635.32Ra
1/8	1/2	2 1/2	1/8	198.32.127.635.32Ra
3/16	5/16	2 1/2	3/16	198.48.794.635.48Ra
3/16	5/8	2 1/2	3/16	198.48.159.635.48Ra
1/4	1/2	2 1/2	1/4	198.64.127.635.64Ra
1/4	1	2 1/2	1/4	198.64.254.635.64Ra
3/8	1	2 1/2	3/8	198.95.254.635.95Ra
1/2	1 1/2	3 1/2	1/2	198.13.381.889.13Ra



Other dimensions
are available on order



Solid Carbide Finishing Downcut Spiral Bits Z1 for Plastics

Yüzey Frezesi Tarafı Aşağı Kesim Z1 Plastik İçin

Brocas de HW integral helicoidales Z1 corte descendente para Plásticos

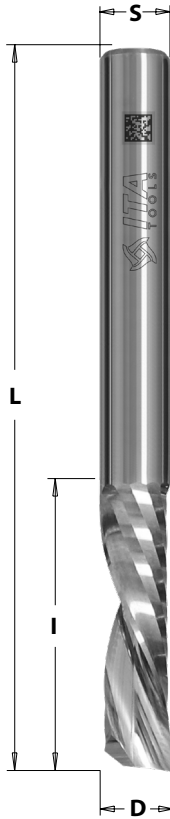


198 Ran negative

VHM

Z1

RH



TECHNICAL DETAILS:

- Single blade cutter, negative
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge downwards
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in plastics, dibond composite. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	6	60	3	198.03.006.060.03Ran
3	6	60	6	198.03.006.060.06Ran
3	12	60	3	198.03.012.060.03Ran
3	12	60	6	198.03.012.060.06Ran
4	8	60	4	198.04.008.060.04Ran
4	8	60	6	198.04.008.060.06Ran
4	12	60	4	198.04.012.060.04Ran
4	12	60	6	198.04.012.060.06Ran
5	15	60	5	198.05.015.060.05Ran
5	15	60	6	198.05.015.060.06Ran
6	12	60	6	198.06.012.060.06Ran

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/4	2 1/2	1/8	198.32.635.635.32Ran
1/8	1/2	2 1/2	1/8	198.32.127.635.32Ran
3/16	5/16	2 1/2	3/16	198.48.794.635.48Ran
3/16	5/8	2 1/2	3/16	198.48.159.635.48Ran
1/4	1/2	2 1/2	1/4	198.64.127.635.64Ran



Other dimensions
are available on order



Solid Carbide Finishing Upcut Spiral Bits Z2 for Aluminum and Plastics

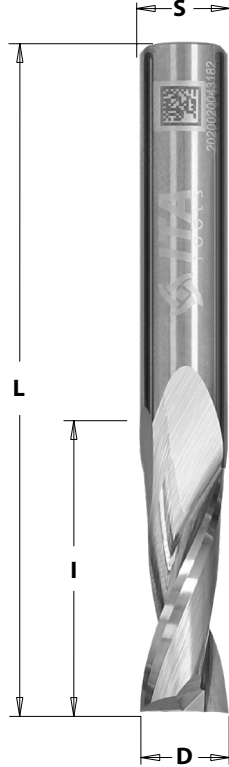
Yüzey Frezesi Yukari Kesim Z2 Alüminyum Ve Plastik İçin

Brocas de HW integral helicoidales Z2 corte ascendente para Aluminio, Plásticos



186 Ra

positive



VHM

Z2

RH

TECHNICAL DETAILS:

- Two edge blade cutter, positive
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in aluminum and plastics. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	10	60	3	186.03.010.060.03Ra
3	12	60	6	186.03.012.060.06Ra
4	10	60	4	186.04.010.060.04Ra
4	12	60	6	186.04.012.060.06Ra
5	12	60	5	186.05.012.060.05Ra
5	22	60	5	186.05.022.060.05Ra
5	22	60	6	186.05.022.060.06Ra
6	12	60	6	186.06.012.060.06Ra
6	22	60	6	186.06.022.060.06Ra
8	22	60	8	186.08.022.060.08Ra
8	35	80	8	186.08.035.080.08Ra
10	22	60	10	186.10.022.060.10Ra
10	45	100	10	186.10.045.100.10Ra
12	25	70	12	186.12.025.070.12Ra
12	42	90	12	186.12.042.090.12Ra
16	35	80	16	186.16.035.080.16Ra
16	55	110	16	186.16.055.110.16Ra
20	45	90	20	186.20.045.090.20Ra

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/2	2 1/2	1/8	186.32.127.635.32Ra
3/16	5/8	2 1/2	3/16	186.48.159.635.48Ra
1/4	1	2 1/2	1/4	186.64.254.635.64Ra
3/8	1	2 1/2	3/8	186.95.254.635.95Ra
1/2	1 1/2	3 1/4	1/2	186.13.381.826.13Ra
5/8	1 1/2	3 1/2	5/8	186.16.381.889.16Ra
3/4	1 3/4	3 1/2	3/4	186.19.445.889.19Ra



Other dimensions are available on order

Round Nose Solid Carbide Finishing Upcut Spiral Bits Z2 Aluminum and Plastics

Yüzey Frezesi Yuvarlak Burun Yonde Yukari Kesim Z2 Alüminyum Ve Plastik İçin
Brocas de HW integral helicoidales Z2 corte ascendente radial para Aluminio, Plásticos

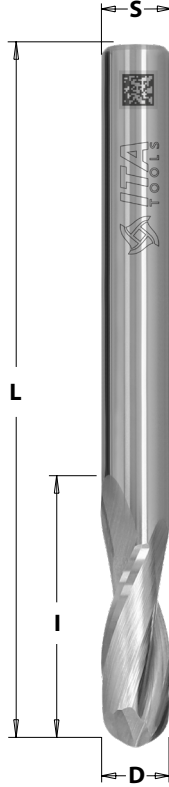


199 Ra
positive

VHM

Z2

RH



TECHNICAL DETAILS:

- Spherical double-edge cutter, positive
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in aluminum and plastics. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	10	60	3	199.03.010.060.03Ra
3	10	60	6	199.03.010.060.06Ra
4	10	60	4	199.04.010.060.04Ra
4	12	60	6	199.04.012.060.06Ra
5	12	60	5	199.05.012.060.05Ra
6	22	60	6	199.06.022.060.06Ra
8	22	60	8	199.08.022.060.08Ra
10	22	60	10	199.10.022.060.10Ra
10	45	100	10	199.10.045.100.10Ra
12	25	70	12	199.12.025.070.12Ra
12	42	90	12	199.12.042.090.12Ra
16	35	90	16	199.16.035.090.16Ra

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/2	2 1/2	1/8	199.32.953.635.32Ra
3/16	5/8	2 1/2	3/16	199.48.159.635.48Ra
1/4	1	2 1/2	1/4	199.64.254.635.64Ra
3/8	1	2 1/2	3/8	199.95.254.635.95Ra
1/2	1	3 1/4	1/2	199.13.254.826.13Ra
5/8	1 1/2	3 1/2	5/8	199.16.381.889.16Ra
3/4	1 3/4	3 1/2	3/4	193.19.445.889.19Ra



Other dimensions
are available on order



Solid Carbide Finishing Upcut Spiral Bits Z3 for Aluminum and Plastics

Yüzey Frezesi Yukari Kesim Z3 Alüminyum Ve Plastik İçin

Brocas de HW integral helicoidales Z3 corte ascendente para Aluminio, Plásticos

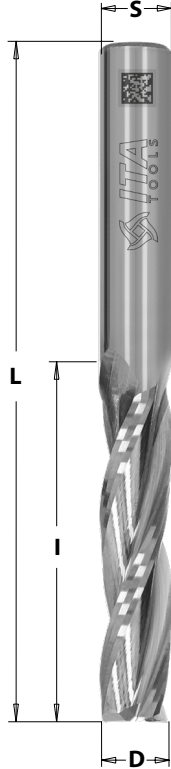


193Ra
positive

VHM

Z3

RH



TECHNICAL DETAILS:

- Three edge blade cutter, positive
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in aluminum and plastics. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	8	60	3	193.03.008.060.03Ra
3	8	60	6	193.03.008.060.06Ra
4	12	60	4	193.04.012.060.04Ra
4	12	60	6	193.04.012.060.06Ra
5	12	60	5	193.05.012.060.05Ra
6	22	60	6	193.06.022.060.06Ra
8	35	80	8	193.08.035.080.08Ra
10	32	80	10	193.10.032.080.10Ra
12	32	90	12	193.12.032.090.12Ra
16	35	90	16	193.16.035.090.16Ra
16	55	110	16	193.16.055.110.16Ra
20	32	80	20	193.20.032.080.20Ra
20	60	120	20	193.20.060.120.20Ra

D inch	I inch	L inch	S inch	ARTICLE
1/8	3/8	2 1/2	1/8	193.32.953.635.32Ra
3/16	5/8	2 1/2	3/16	193.48.159.635.48Ra
1/4	1	2 1/2	1/4	193.64.254.635.64Ra
3/8	1 1/4	3 1/4	3/8	193.95.318.826.95Ra
1/2	1 1/4	3 1/4	1/2	193.13.318.826.13Ra
5/8	1 1/2	3 1/2	5/8	193.16.381.889.16Ra
3/4	1 3/4	3 1/2	3/4	193.19.445.889.19Ra



Other dimensions
are available on order



Solid Carbide Roughing Upcut Spiral Bits Z3 for Aluminum and Plastics

Kaba İşleme Frezesi Yukarı Kesim Z3 Alüminyum İçin
Brocas de HW integral helicoidales con rompevirutas Z3 para Aluminio, Plásticos

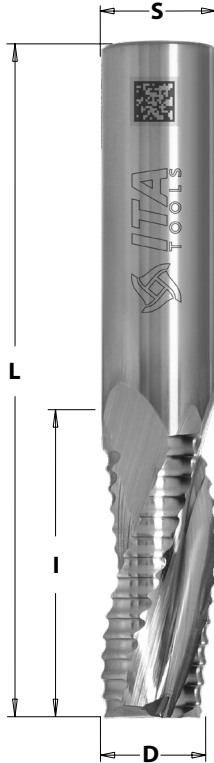


195Ra
positive

VHM

Z3

RH



TECHNICAL DETAILS:

- Three edge blade cutter, positive
- Perfect roughing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in aluminum and plastics. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
6	22	60	6	195.06.022.060.06Ra
8	32	70	8	195.08.032.070.08Ra
10	32	80	10	195.10.032.080.10Ra
12	32	80	12	195.12.032.080.12Ra
16	32	90	16	195.16.032.090.16Ra
16	55	110	16	195.16.055.110.16Ra
20	32	80	20	195.20.032.080.20Ra
20	60	120	20	195.20.060.120.20Ra
25	35	80	25	195.25.035.080.20Ra

D inch	I inch	L inch	S inch	ARTICLE
1/4	1	2 1/2	1/4	195.64.254.635.64Ra
3/8	1 1/4	3 1/4	3/8	195.95.318.826.95Ra
1/2	1 1/4	3 1/4	1/2	195.13.318.826.13Ra
5/8	1 1/2	3 1/2	5/8	195.16.381.889.16Ra
3/4	1 3/4	3 1/2	3/4	195.19.445.889.19Ra



Other dimensions
are available on order

TBOX

Darbagaldi & Instrumenti

Solid Carbide Finishing Upcut Multi-edge Spiral Bits for Composites

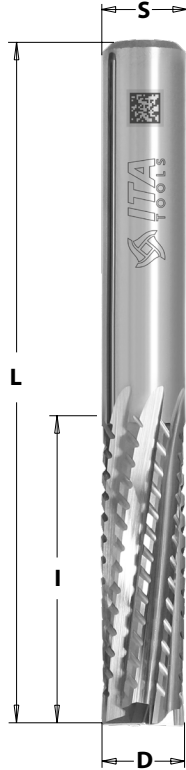
Bitirme kompozit frezeleme takımları
Fresas de acabado para fresado



CPS
positive

VHM

RH



TECHNICAL DETAILS:

- Multi-edge geometry, positive
- Perfect finishing of cutting edge
- Chip discharge upwards
- Geometry adapted to the processing of composites preventing delamination and drawing of glass and carbon fibers
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in composite materials GFK, CFK, textolite, composite matrix, HPL, honeycomb. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	10	45	3	CPS.03.010.045.03R
3	10	60	6	CPS.03.010.060.06R
4	15	60	4	CPS.04.015.060.04R
4	15	60	6	CPS.04.015.060.06R
5	15	60	5	CPS.05.015.060.05R
6	25	70	6	CPS.06.025.070.06R
8	30	80	8	CPS.08.030.080.08R
10	35	80	10	CPS.10.035.080.10R
12	40	90	12	CPS.12.040.090.12R
16	45	100	16	CPS.16.045.100.16R
20	45	100	20	CPS.20.045.100.20R

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/2	2	1/8	CPS.32.127.508.32R
3/16	3/4	2 1/2	3/16	CPS.48.191.635.48R
1/4	1	3	1/4	CPS.64.254.762.64R
3/8	1 1/4	3 1/2	3/8	CPS.95.318.889.95R
1/2	1 3/8	3 1/2	1/2	CPS.13.349.889.13R



Other dimensions
are available on order



Solid Carbide Finishing Straight Multi-edge Spiral Bits for Composites

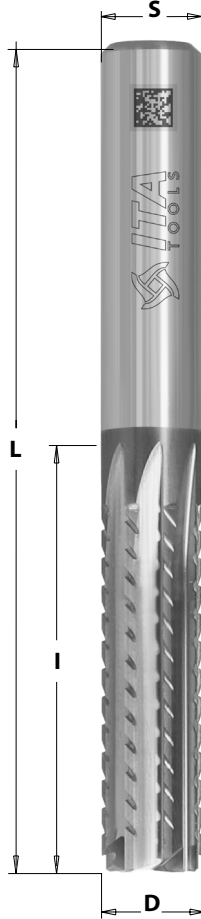
Bitirme kompozit frezeleme takımları
Fresas de acabado para fresado



CSS
straight

VHM

RH



TECHNICAL DETAILS:

- Multi-edge geometry, straight
- Perfect finishing of cutting edge
- Chip discharge sideways
- Geometry adapted to the processing of composites preventing delamination and drawing of glass and carbon fibers
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in composite materials GFK, CFK, textolite, composite matrix, HPL, honeycomb. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	10	45	3	CSS.03.010.045.03R
3	10	60	6	CSS.03.010.060.06R
4	15	60	4	CSS.04.015.060.04R
4	15	60	6	CSS.04.015.060.06R
5	15	60	5	CSS.05.015.060.05R
6	25	70	6	CSS.06.025.070.06R
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
16	45	100	16	CSS.16.045.100.16R
20	45	100	20	CSS.20.045.100.20R

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/2	2	1/8	CSS.32.127.508.32R
3/16	3/4	2 1/2	3/16	CSS.48.191.635.48R
1/4	1	3	1/4	CSS.64.254.762.64R
3/8	1 1/4	3 1/2	3/8	CSS.95.318.889.95R
1/2	1 3/8	3 1/2	1/2	CSS.13.349.889.13R



Other dimensions
are available on order



Solid Carbide Finishing Downcut Multi-edge Spiral Bits for Composites

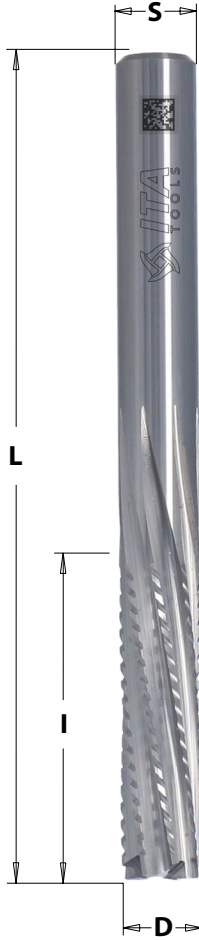
Bitirme kompozit frezeleme takımları
Fresas de acabado para fresado



CVS
negative

VHM

RH



TECHNICAL DETAILS:

- Multi-edge geometry, negative
- Perfect finishing of cutting edge
- Chip discharge downwards
- Geometry adapted to the processing of composites preventing delamination and drawing of glass and carbon fibers
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in composite materials GFK, CFK, textolite, composite matrix, HPL, honeycomb. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	10	45	3	CVS.03.010.045.03R
3	10	60	6	CVS.03.010.060.06R
4	15	60	4	CVS.04.015.060.04R
4	15	60	6	CVS.04.015.060.06R
5	15	60	5	CVS.05.015.060.05R
6	20	70	6	CVS.06.020.070.06R
8	30	80	8	CVS.08.030.080.08R
10	35	80	10	CVS.10.035.080.10R
12	40	90	12	CVS.12.040.090.12R
16	45	100	16	CVS.16.045.100.16R
20	45	100	20	CVS.20.045.100.20R

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/2	2	1/8	CVS.32.127.508.32R
3/16	3/4	2 1/2	3/16	CVS.48.191.635.48R
1/4	1	3	1/4	CVS.64.254.762.64R
3/8	1 1/4	3 1/2	3/8	CVS.95.318.889.95R
1/2	1 3/8	3 1/2	1/2	CVS.13.349.889.13R



Other dimensions
are available on order

Round Nose Solid Carbide Finishing Upcut Multi-edge Spiral Bits for Composites

Bitirme kompozit frezeleme takımları
Fresas de acabado para fresado



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

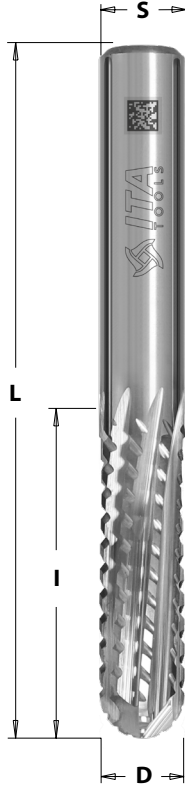
CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES

CPU
positive

VHM

RH



TECHNICAL DETAILS:

- Spherical multi-edge geometry, positive
- Perfect finishing of cutting edge
- Chip discharge upwards
- Geometry adapted to the processing of composites preventing delamination and drawing of glass and carbon fibers
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in composite materials GFK, CFK, textolite, composite matrix, HPL, honeycomb. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	10	45	3	CPU.03.010.045.03R
3	10	60	6	CPU.03.010.060.06R
4	15	60	4	CPU.04.015.060.04R
4	15	60	6	CPU.04.015.060.06R
5	15	60	5	CPU.05.015.060.05R
6	20	70	6	CPU.06.020.070.06R
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
16	45	100	16	CPU.16.045.100.16R
20	45	100	20	CPU.20.045.100.20R

D inch	I inch	L inch	S inch	ARTICLE
1/8	1/2	2	1/8	CPU.32.127.508.32R
3/16	3/4	2 1/2	3/16	CPU.48.191.635.48R
1/4	1	3	1/4	CPU.64.254.762.64R
3/8	1 1/4	3 1/2	3/8	CPU.95.318.889.95R
1/2	1 3/8	3 1/2	1/2	CPU.13.349.889.13R



Other dimensions are available on order



Solid Carbide Roughing Multi-edge Spiral Bits for Composites

İnce Tip Biçaklara Sahip Kaba Kompozit Frezeleme Takımları
Fresas de desbaste compuesto con cucchillas finas



CNS / CNV / CNR
positive-negative



TECHNICAL DETAILS:

- Spherical multi-edge geometry, positive-negative
- Perfect roughing of cutting edge
- Chip discharge sideways
- 3 versions of the tip:
 - CNS - standard
 - CNR - rosette
 - CNV - drilling
- Geometry adapted to the processing of composites, preventing delamination and pulling out of glass and carbon fibers
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in composite materials GFK, CFK, textolite, composite matrix, HPL. Designed for use on CNC machines.



Other dimensions are available on order

D mm	I mm	L mm	S mm	ARTICLE	ARTICLE	ARTICLE
3	10	45	3	CNS.03.010.045.03R	CNR.03.010.045.03R	CNV.03.010.045.03R
3	10	60	6	CNS.03.010.060.06R	CNR.03.010.060.06R	CNV.03.010.060.06R
4	18	60	4	CNS.04.018.060.04R	CNR.04.018.060.04R	CNV.04.018.060.04R
4	22	60	6	CNS.04.022.060.06R	CNR.04.022.060.06R	CNV.04.022.060.06R
5	16	50	5	CNS.05.016.050.05R	CNR.05.016.050.05R	CNV.05.016.050.05R
6	25	70	6	CNS.06.025.070.06R	CNR.06.025.070.06R	CNV.06.025.070.06R
8	30	80	8	CNS.08.030.080.08R	CNR.08.030.080.08R	CNV.08.030.080.08R
10	30	90	10	CNS.10.030.090.10R	CNR.10.030.090.10R	CNV.10.030.090.10R
12	30	90	12	CNS.12.030.090.12R	CNR.12.030.090.12R	CNV.12.030.090.12R
16	45	100	16	CNS.16.045.100.16R	CNR.16.045.100.16R	CNV.16.045.100.16R
20	40	90	20	CNS.20.040.090.20R	CNR.20.040.090.20R	CNV.20.040.090.20R

D inch	I inch	L inch	S inch	ARTICLE	ARTICLE	ARTICLE
1/8	1/2	2	1/8	CNS.32.127.508.32R	CNR.32.127.508.32R	CNV.32.127.508.32R
3/16	3/4	2 1/2	3/16	CNS.48.191.635.48R	CNR.48.191.635.48R	CNV.48.191.635.48R
1/4	1	3	1/4	CNS.64.254.762.64R	CNR.64.254.762.64R	CNV.64.254.762.64R
3/8	1 1/4	3 1/2	3/8	CNS.95.318.889.95R	CNR.95.318.889.95R	CNV.95.318.889.95R
1/2	1 3/8	3 1/2	1/2	CNS.13.349.889.13R	CNR.13.349.889.13R	CNV.13.349.889.13R

Round Nose Solid Carbide Finishing Upcut Spiral Bits with Lowering for 3D Models

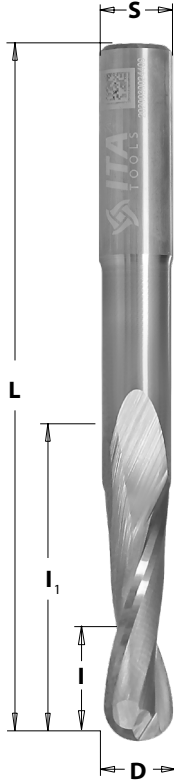
Yüzey Frezesi Yuvarlak Burun Yonde Yukari Kesim 3D Modeller İçin Frezeleme
Brocas de HW integral helicoidales radial para modelos 3D



199Rm
positive

VHM

RH



TECHNICAL DETAILS:

- Spherical cutter with lowering, positive
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in model boards, MDF, aluminum. Designed for use on CNC machines.

D mm	I mm	I ₁ mm	L mm	S mm	ARTICLE
4	10	25	60	6	199.04.010.060.06Rm
6	22	45	80	6	199.06.022.080.06Rm
8	22	65	100	8	199.08.022.100.08Rm
8	22	85	120	8	199.08.022.120.08Rm
10	20	75	110	10	199.10.020.110.10Rm
10	30	100	150	10	199.10.030.150.10Rm
12	30	80	120	12	199.12.030.120.12Rm
12	30	120	160	12	199.12.030.160.12Rm
16	40	100	150	16	199.16.040.150.16Rm
16	40	150	200	16	199.16.040.200.16Rm
20	40	100	150	20	199.20.040.150.20Rm
20	40	150	200	20	199.20.040.200.20Rm
20	40	200	250	20	199.20.040.250.20Rm

D inch	I inch	I ₁ inch	L inch	S inch	ARTICLE
3/16	5/8	1	2 1/2	3/16	199.48.159.635.48Rm
1/4	1	1 3/4	3 1/4	1/4	199.64.254.826.64Rm
3/8	1	2 1/2	4	3/8	199.95.254.102.95Rm
1/2	1 1/4	3 1/4	5	1/2	199.13.318.127.13Rm
5/8	1 3/4	4	6	5/8	199.16.445.152.16Rm
3/4	1 3/4	6	8	3/4	199.19.445.203.19Rm



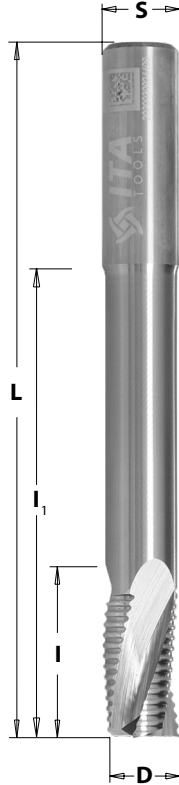
Other dimensions
are available on order

Solid Carbide Roughing Upcut Spiral Bits Z3 for 3D Models

Kaba İşleme Frezesi Yonde Yukari Kesim Z3 3D modeller için
Brocas de HW integral helicoidales con rompevirutas para modelos 3D



195Rm
positive



TECHNICAL DETAILS:

- Three edge blade cutter with lowering, positive
- Perfect roughing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in model boards, MDF, aluminum. Designed for use on CNC machines.

D mm	I mm	I ₁ mm	L mm	S mm	ARTICLE
16	40	100	150	16	195.16.040.150.16Rm
16	40	150	200	16	195.16.040.200.16Ram
20	40	150	200	20	195.20.040.200.20Ram
20	40	200	250	20	195.20.040.250.20Rm
25	40	200	250	25	195.25.040.250.25Rm

D inch	I inch	I ₁ inch	L inch	S inch	ARTICLE
5/8	1 3/4	4	6	5/8	195.16.445.152.16Rm
3/4	1 3/4	6	8	3/4	195.19.445.203.19Rm



Other dimensions are available on order

Solid Carbide Finishing Upcut Spiral Bits Z3 with Lowering for 3D Models

Yüzey Frezesi Yukari Kesim Z3 3D modeller için

Brocas de HW integral helicoidales radial para modelos 3D



193Rm
positive

VHM

RH

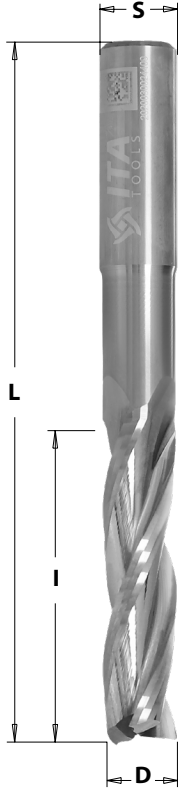
Z3

TECHNICAL DETAILS:

- Three edge cutter with lowering, positive
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling in model boards, MDF, aluminum. Designed for use on CNC machines.



D mm	I mm	I ₁ mm	L mm	S mm	ARTICLE
16	40	100	150	16	193.16.040.150.16Rm
16	40	150	200	16	193.16.040.200.16Rm
20	40	150	200	20	193.20.040.200.20Rm

D inch	I inch	I ₁ inch	L inch	S inch	ARTICLE
5/8	1 3/4	4	6	5/8	193.16.445.152.16Rm
3/4	1 3/4	6	8	3/4	193.19.445.203.19Rm



Other dimensions
are available on order

Solid Carbide Bending Bits for Dibond Alucobond

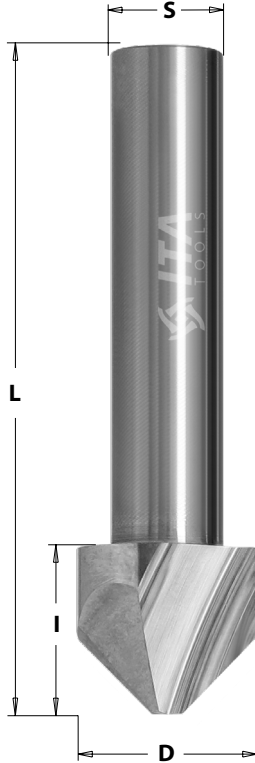
Yüzey Frezesi Yukari Kesim Alucobond Dibond kıvrımları
Brocas de HW integral helicoidales para Dibond Alucobond



915Ra

VHM

RH



TECHNICAL DETAILS:

- Dibond bend cutter, 3 different types: V-90°, V-108°, V-135°
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For making bends in composite material of the Dibond type.
Designed for use on CNC machines.

D mm	I mm	L mm	S mm	A	ARTICLE
16	15	60	10	90	915.16.015.060.10Ra1
16	15	60	12	90	915.16.015.060.12Ra1
16	15	60	12	108	915.16.015.060.12Ra2
18	15	60	12	135	915.18.015.060.12Ra3

D inch	I inch	L inch	S inch	A	ARTICLE
5/8	9/16	2 1/2	3/8	90	915.16.015.060.10Ra1
5/8	9/16	2 1/2	1/2	90	915.16.015.060.12Ra1
5/8	9/16	2 1/2	1/2	108	915.16.015.060.12Ra2
3/4	9/16	2 1/2	1/2	135	915.18.015.060.12Ra3



Other dimensions
are available on order

Solid Carbide Finishing Straight Spiral Bits Z2 for Foam and Plastics

Yüzey Frezesi düz Kesim Z2 Köpük Ve Plastik İçin

Brocas de HW integral helicoidales Z2 para material de espuma, Plásticos



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

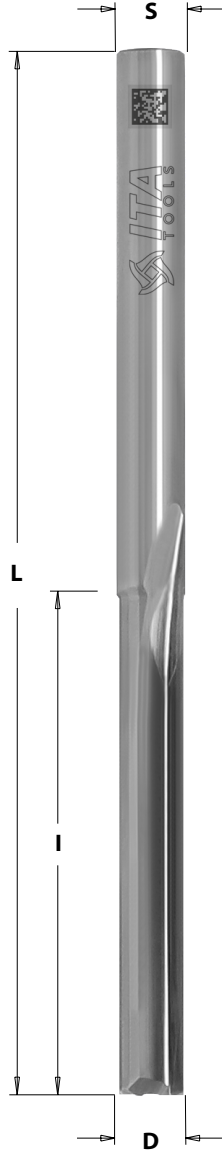
SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUKS

PLATES AND KNIVES

912RPI straight



TECHNICAL DETAILS:

- Two edge blade cutter, straight
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge sideways
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling foam, alternatively for plastics processing. Designed for use on CNC machines.

D mm	I mm	L mm	S mm	ARTICLE
3	15	60	3	912.03.015.060.03RPI
4	15	60	4	912.04.015.060.04RPI
4	15	75	4	912.04.015.075.04RPI
5	15	75	5	912.05.015.075.05RPI
6	20	70	6	912.06.020.070.06RPI
6	25	60	6	912.06.025.060.06RPI
6	42	90	6	912.06.042.090.06RPI
8	70	120	8	912.08.070.120.08.RPI
12	20	100	12	912.12.020.100.12RPI
12	50	140	12	912.12.050.140.12RPI
16	40	160	16	912.16.040.160.16RPI
20	30	273	20	912.20.030.273.20RPI

D inch	I inch	L inch	S inch	ARTICLE
1/8	3/4	2 1/2	1/8	912.32.191.635.32RPI
3/16	3/4	2 1/2	3/16	912.48.191.635.48RPI
3/16	3/4	3	3/16	912.48.191.762.48RPI
1/4	1	2 3/4	1/4	912.64.254.699.64RPI
1/4	1 3/4	3 1/2	1/4	912.64.445.889.64RPI
3/8	2 3/4	5	3/8	912.95.699.127.95RPI
1/2	1	4	1/2	912.13.254.102.13RPI
1/2	2	5 1/2	1/2	912.13.508.140.13RPI



Other dimensions are available on order



Solid Carbide Finishing Straight Spiral Bits Z2 for HPL

Yüzey Frezesi düz Kesim Z2 HPL İçin
Brocas de HW integral helicoidales Z2 para HPL



912XRi straight



VHM

RH

Z2

TECHNICAL DETAILS:

- Two edge blade cutter, straight
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge sideways
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For cutting and milling HPL alternatively for plastics processing. Designed for use on CNC machines.

ADVANTAGES:

High wear resistance during processing in hard materials.
Extended tool life and higher machining quality.

D mm	I mm	L mm	S mm	ARTICLE
6	15	60	6	912.06.015.060.06XRi
8	15	60	8	912.08.015.060.08XRi
10	15	60	10	912.10.015.060.10XRi

D inch	I inch	L inch	S inch	ARTICLE
1/4	3/4	2 1/2	1/4	912.64.191.635.64XRi
3/8	3/4	2 1/2	3/8	912.95.191.635.95XRi



Other dimensions
are available on order



Solid Carbide Chamfering Bits Z2 for Plastics

Yüzey Frezesi Yukari Kesim Z2 Pah Kirma Plastik
Brocas rectas integrales HW para biselado de plástico



957R

VHM

RH

Z2



TECHNICAL DETAILS:

- Chamfer cutter, 3 different types: V-22,5°, V-30°, V-45°
- Special type of carbide - increased tool life
- Possibility of using variety coatings

APPLICATION:

For chamfering plastics.
Designed for use on CNC machines.

D mm	I mm	L mm	S mm	A	ARTICLE
5,7	10	55	14	22,5	957.14.010.055.14R
4,5	10	70	16	30	957.16.010.070.16R
5	7,5	70	20	45	957.20.007.070.20R



Other dimensions
are available on order



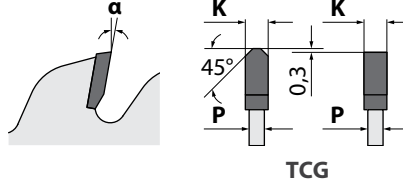
SAW BLADES



Panel Sizing Saw Blades

Panel Ebatlama Testereleri Bıçakları
Sierra circulares para seccionadora

P28



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

Panel Sizing Saw Blades

Panel Ebatlama Testereleri Bıçakları
Sierra circulares para seccionadora



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

Information about addition holes you can find at the end of this catalogue.



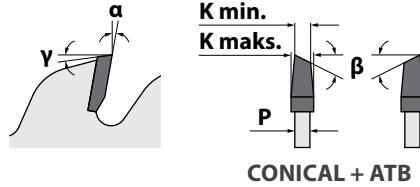
More sizes available on special order

Scoring Blades for Panel Sizing Machines

Panel Ebatlama Çizici Testere Bıçakları
Sierra circulares Incisores para seccionadora



P36 Conical



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



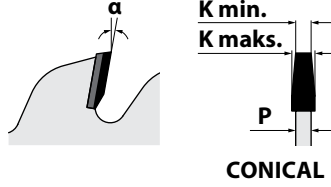
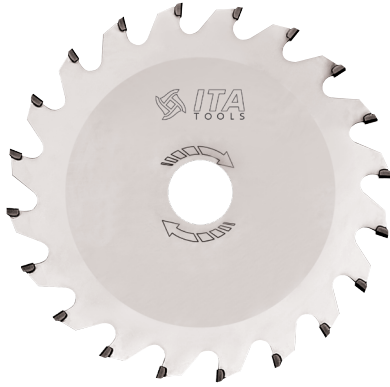
More sizes available on special order

PCD Scoring Blades

DIA Çizici Testere Bıçaklar
Sierra circulares Incisores de PCD



DSB 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	K-H4 mm	ARTICLE H=4	K-H6 mm	ARTICLE H=6
150	30	-	36	3,2	5°	4,4-5,2	DSB.150030036.004	4,4-5,5	DSB.150030036.006
160	55	3/7/66	36	3,2	5°	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°	4,8-5,6	DSB.160055036.014	4,8-5,8	DSB.160055036.016
180	30	2/10/60	36	3,2	5°	4,4-5,2	DSB.180030036.004	4,4-5,5	DSB.180030036.006
180	45	2/10/60	36	3,2	5°	4,4-5,2	DSB.180045036.004	4,4-5,5	DSB.180045036.006
180	45	2/10/60	36	3,5	5°	4,8-5,6	DSB.180045036.014	4,8-5,8	DSB.180045036.016
200	20	2/11/66	36	3,2	5°	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°	4,4-5,2	DSB.200030036.004	4,4-5,5	DSB.200030036.006
200	45	2/10/60	36	3,2	5°	4,4-5,2	DSB.200045036.004	4,4-5,5	DSB.200045036.006
200	45	2/10/60	36	3,5	5°	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°	4,4-5,2	DSB.200065036.004	4,4-5,5	DSB.200065036.006
200	80	2/14/110	36	3,2	5°	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°	4,4-5,2	DSB.300030048.004	4,4-5,5	DSB.300030048.006



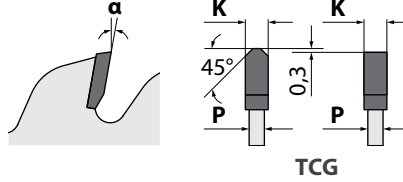
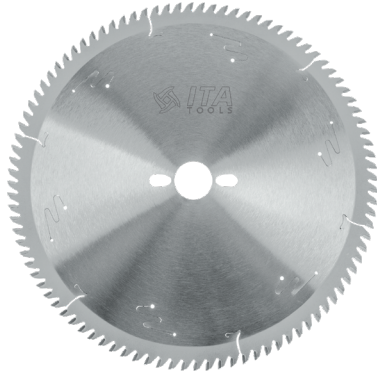
More sizes available on special order

Laminated and Chipboard Circular Saw Blades

Lamine ve Sunta Daire Testere Bıçakları
Sierra circulares para melamina y aglomerado de madera



P15



APPLICATION:

For sizing cuts, perfect finishing by using scoring blades.

MACHINES:

Table saws, horizontal and vertical sizing machines.

MATERIALS:

Single or double-sided plastic-laminated panels.

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

* Tips with hardness type of HM.



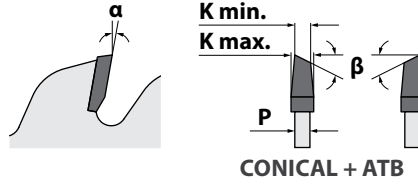
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Conical Scoring Blades

Konik Çizici Testere Bıçakları
Sierra circulares Incisores conico



P36 Conical



APPLICATION:

For chip-free scoring on plastic-laminated panels.

MACHINES:

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

MATERIALS:

Jedno lub dwustronnie laminowane płyty, MDF.

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



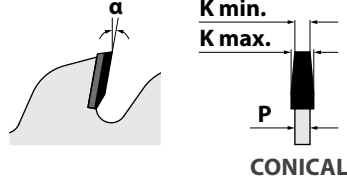
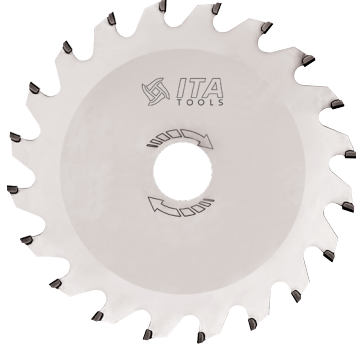
More sizes available on special order

PCD Scoring Blades

DIA Çizici Testere Bıçaklar
Sierra circulares Incisores de PCD



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



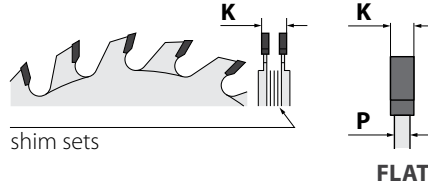
More sizes available on special order

Adjustable Scoring Blades

Ayarlanabilir Çizici Testere Bıçakları
Sierra circulares Incisores extensible



P37 Adjustable



APPLICATION:

For chip-free scoring on plastic-laminated panels.

MACHINES:

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

MATERIALS:

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

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



More sizes available on special order

PCD Adjustable Scoring Blades

DIA Ayarlanabilir Çizici Testere Bıçakları
Sierra circulares Incisores extensible de PCD



PCD TOOLS

DSC Adjustable

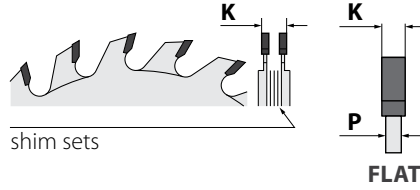


SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAWBLADES

CNC ROUTER CUTTERS
& CHUCKS



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	ARTICLE H=4	ARTICLE H=6
70	20	8+8	2,8-3,6	2,2	10°	DSC.070020016.004	DSC.070020016.006
80	20	10+10	2,8-3,6	2,2	10°	DSC.080020020.004	DSC.080020020.006
100	20	10+10	2,8-3,6	2,2	10°	DSC.100020020.004	DSC.100020020.006
100	22	10+10	2,8-3,6	2,2	10°	DSC.100022020.004	DSC.100022020.006
120	20	12+12	2,8-3,6	2,2	10°	DSC.120020024.004	DSC.120020024.006
120	22	12+12	2,8-3,6	2,2	10°	DSC.120022024.004	DSC.120022024.006
125	20	12+12	2,8-3,6	2,2	10°	DSC.125020024.004	DSC.125020024.006
125	22	12+12	2,8-3,6	2,2	10°	DSC.125022024.004	DSC.125022024.006



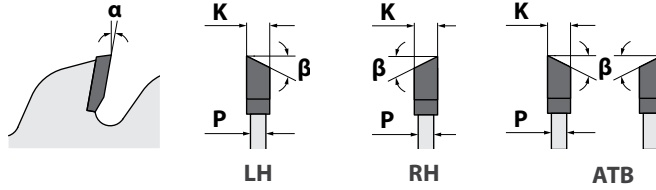
More sizes available on special order

Clipping Saw Blades for Edge Trimming

Kenar Düzeltme için Kırma Testere Bıçakları
Sierra circulares para chapeadoras de cantos



PKA



APPLICATION:

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.POR	BIMATIC
80	30	-	12	2,4	10°	LH	PKA.080030012.POL	BIMATIC
85	30	-	12	3,2	10°	RH	PKA.085030012.POR	BIMATIC
85	30	-	12	3,2	10°	LH	PKA.085030012.POL	BIMATIC
100	22	2/4/30	20	2,4	Neg.	ATB	PKA.100022020.NOA	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.POR	SREFANI
100	30	-	30	2,6	5°	LH	PKA.100030030.POL	STEFANI
100	32	-	30	2,6	5°	ATB	PKA.100032030.POA	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

Clipping Saw Blades for Edge Trimming

Kenar Düzeltme için Kırpma Testere Bıçakları
Sierra circulares para chapeadoras de cantos



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAWBLADES

CNC ROUTER CUTTERS
& CHUCKS

D mm	F mm	PH	Z	K mm	α	TOOTH CONF.	ARTICLE	MACHINES
115	56	-	30	3,2	5°	RH	PKA.115056030.POR	BIESSE
115	56	-	30	3,2	5°	LH	PKA.115056030.POL	BIESSE
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.POR	-
116	30	-	20	3,4	5°	LH	PKA.116030020.POL	-
125	30	-	24	2,6	5°	RH	PKA.125030024.POR	-
125	30	-	24	2,6	5°	LH	PKA.125030024.POL	-
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.POR	-
150	30	-	48	3,2	5°	LH	PKA.150030048.POL	-
150	35	4/6,5/50 RH	24+6	3,8	5°	RH	PKA.150035030.POR	SCM
150	35	4/6,5/50 LH	24+6	3,8	5°	LH	PKA.150035030.POL	SCM



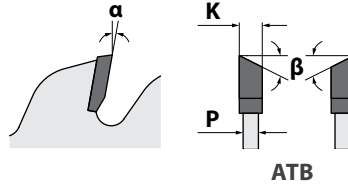
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Saws for Aggregates

Agregalar İçin Testere Bıçakları
Sierra circulares para agregados

PDA

HM



APPLICATION:

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

Saw Blades for Optimizing Saw

Optimize Testereleeri Bıçakları
Sierra circulares para agregados



PCD TOOLS

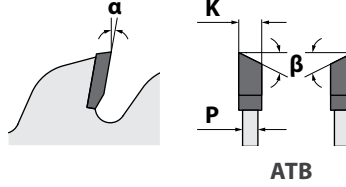
SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAWBLADES

CNC ROUTER CUTTERS
& CHUCKS

P06



APPLICATION:

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

MACHINES:

Optimizing saw.

MATERIALS:

Soft and hardwood.

D mm	F mm	PH	Z	K mm	P mm	TOOTH CONF.	ARTICLE	MACHINES
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



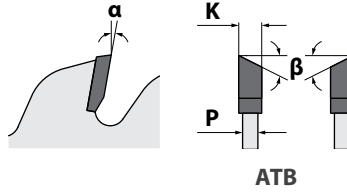
More sizes available on special order

Multi-Rip Saw Blades for Solid Wood

Çoklu Dilme Testeresi Bıçakları
Discos para sierra multiple



279



APPLICATION:

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	WPUSTY	Z	K mm	P mm	α	ARTICLE
250	50	4/20x5	20+4	2,7	1,8	20	279.250050020.401
250	70	4/20x5	16+2	3,5	2,2	20	279.250070016.401
300	50	4/20x5	20+4	3,7	2,5	20	279.300050020.401
300	70	4x20/5	18+4	3,7	2,5	20	279.300070018.000
300	80	4x20/5	18+4	3,7	2,5	20	279.300080018.000
300	80	4/20x5	18+4	3,5	2,2	20	279.300080018.401
350	70	4/20x5	18+4	4,2	2,8	20	279.350070018.000
350	70	4/20x5	18+4	3,9	2,6	20	279.350070018.401
350	70	4/20x5	18+4	4,0	2,7	20	279.350070018.402
350	80	4/20x5	18+4	4,2	2,8	20	279.350080018.002
350	80	4/20x5	18+4	3,9	2,6	20	279.350080018.401
350	80	4/20x5	18+4	4,0	2,7	20	279.350080018.501
400	70	4x20/5	18+6	4,2	2,8	20	279.400070018.600
400	80	4x20/5	18+6	4,2	2,8	20	279.400080018.600



More sizes available on special order



CNC ROUTER CUTTERS & CHUCKS



TBOX

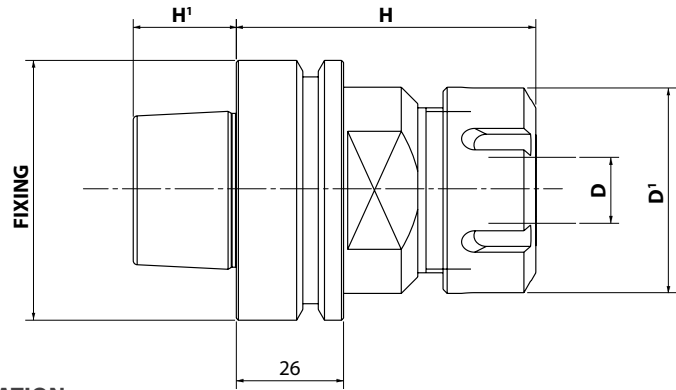
Darbagaldi & Instrumenti

Chuck HSK-63 for CNC machines

HSK-63 CNC Adaptörleri
Portaherramientas de pinzas HSK-63 para maquina CNC



HSK63F DIN 69893



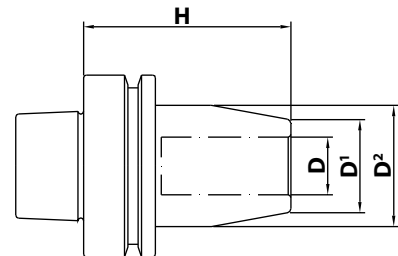
APPLICATION:

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

FIXING	SLEEVES	D mm		D ¹ mm	H mm	H ¹ 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



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.

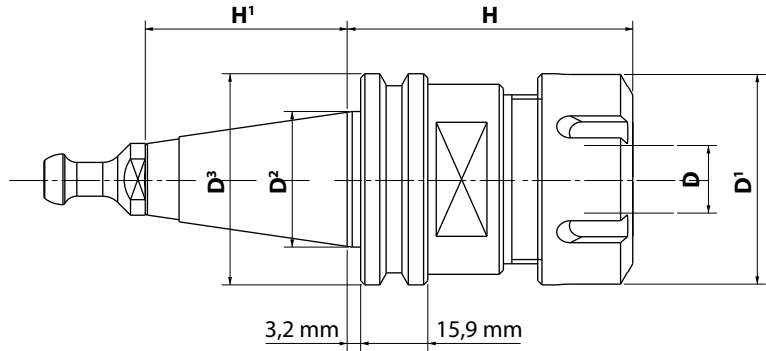
	FIXING	D mm	D ¹ mm	D ² mm	H mm	ROTATIONS	ARTICLE
NEW	HSK63F	6	21	29	76	RH/LH	H6FPDXTHERMO06
NEW	HSK63F	8	21	29	76	RH/LH	H6FPDXTHERMO08
NEW	HSK63F	10	24	32	76	RH/LH	H6FPDXTHERMO10
	HSK63F	12	24	32	76	RH / LH	H6FPDXTHERMO12
	HSK63F	16	27	34	76	RH / LH	H6FPDXTHERMO16
	HSK63F	20	33	42	76	RH / LH	H6FPDXTHERMO20
	HSK63F	25	44	53	76	RH / LH	H6FPDXTHERMO25

Chuck ISO-30 for CNC machines

ISO-30 CNC Adaptörleri
Portaherramientas de pinzas ISO-30 para maquina CNC



ISO30
DIN 69871



APPLICATION:

For CNC machines: Biesse, Cosmec, Masterwood.

FIXING	COLLET	D mm		D ¹ mm	D ² mm	D ³ mm	H mm	H ¹ 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		D ¹ mm	D ² mm	D ³ mm	H mm	H ¹ 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



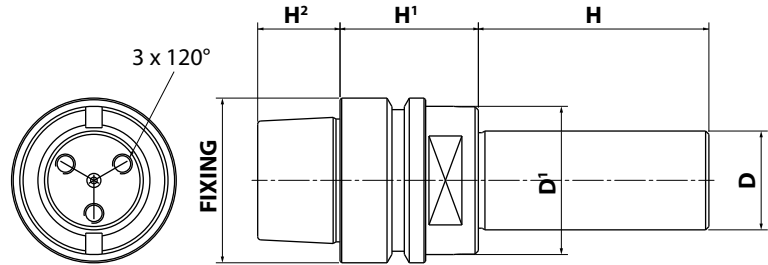
Chucks for CNC machines

CNC Adaptörleri
Portaherramientas para maquina CNC



HSK63F DIN 69893

RH
LH



APPLICATION:

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

FIXING	D mm	D' mm	H mm	H' mm	H ² 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



Chucks for CNC machines

CNC Adaptörleri
Portaherramientas para maquina CNC



HSK63E HYDRO

RH

LH



ADVANTAGES

- Highest quality of fixing provides evenly work all knives together
- Lack of collets and fixing nuts are minimizing vibrations

APPLICATION:

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

D ¹ mm	D ² mm	D ³ mm	H ¹ mm	H ² mm	H ³ mm	H ⁴ mm	ARTICLE
12	22	43,5	75	49	18	40	H6FPDXHYDRO12
16	26	48	75	49	28	50	H6FPDXHYDRO16
20	30	52	75	49	30	52	H6FPDXHYDRO20



Others sizes available for special order



Fixing Nuts for Chucks ISO/ HSK

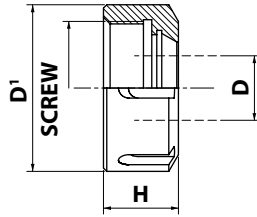
Adaptör İcin Sikma Somunu ISO/HSK

Tuercas de fijación para portaherramientas de pinzas ISO/HSK



Standard

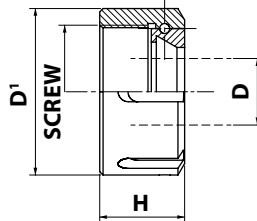
DIN 6499



COLLET	D mm		D ¹ 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		D ¹ 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



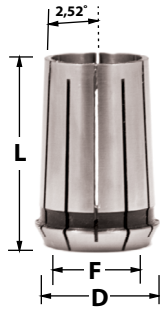
Others sizes available for special order

Precision Collets

CNC Hassas Pensler
Pinzas de precisión



EOC16 DIN6388



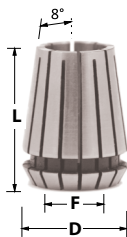
L mm	D mm	F mm	ARTICLE
40	25,5	2	EOC16D02
40	25,5	3	EOC16D03
40	25,5	4	EOC16D04
40	25,5	5	EOC16D05
40	25,5	6	EOC16D06
40	25,5	7	EOC16D07
40	25,5	8	EOC16D08
40	25,5	10	EOC16D10
40	25,5	12	EOC16D12
40	25,5	14	EOC16D14
40	25,5	16	EOC16D16

EOC25 DIN6388



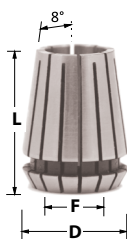
L mm	D mm	F mm	ARTICLE
52	35	3	EOC25D03
52	35	6	EOC25D06
52	35	8	EOC25D08
52	35	10	EOC25D10
52	35	12	EOC25D12
52	35	16	EOC25D16
52	35	20	EOC25D20
52	35	25	EOC25D25

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



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES

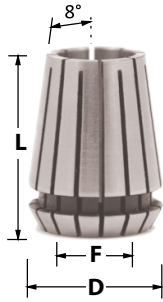
Precision Collets

CNC Hassas Pensler
Pinzas de precisión



ER20

DIN6499

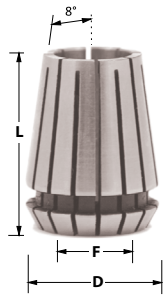


Others sizes available
for special order

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

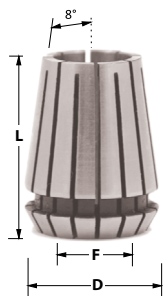
DIN6499



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

ER32

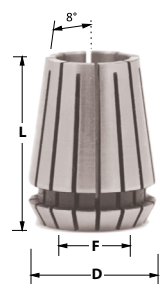
DIN6499



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



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

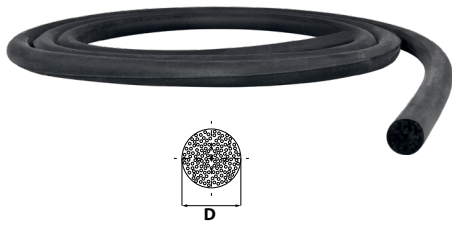
SAW BLADES

**CNC ROUTER CUTTERS
& CHUCKS**

PLATES AND KNIVES

EPDM

Rope of Cellular Rubber Round



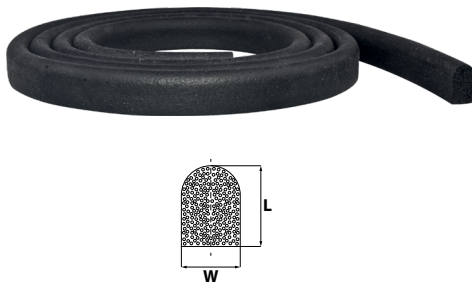
APPLICATION:

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

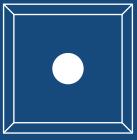
D mm	ARTICLE
3	EPDM03
6	EPDM06
7	EPDM07
8	EPDM08

EPDM

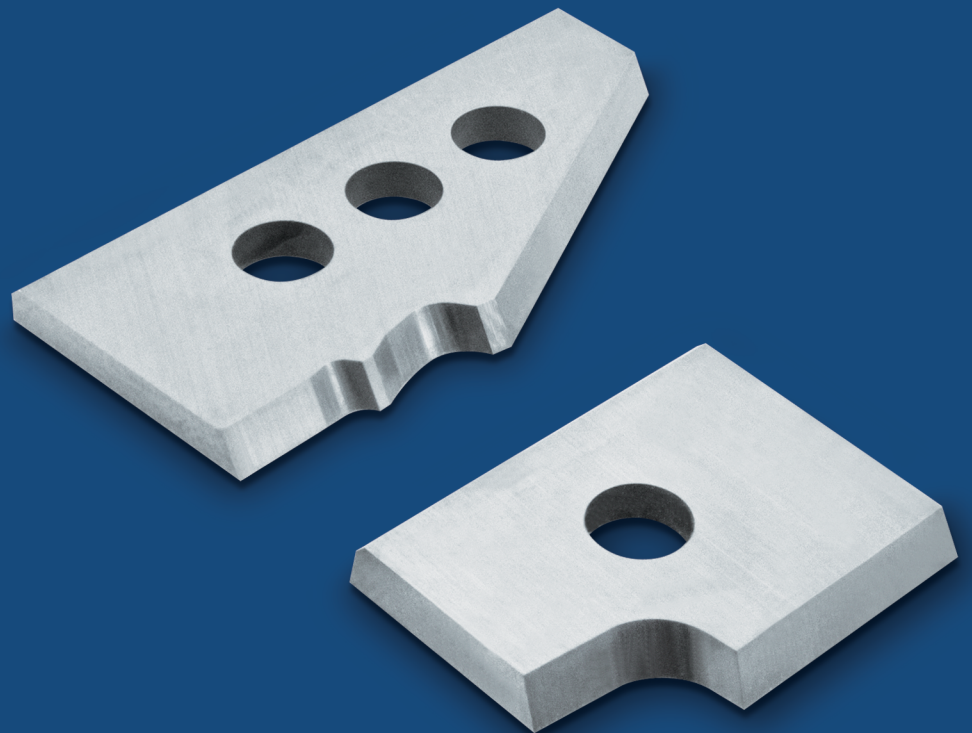
Rubber Cord Profile



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



PLATES AND KNIVES



Reversible HM Knives

Değiştirilebilir Jiletler HM
Cuchillas Reversibles HM



PCD TOOLS

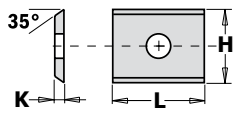
SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

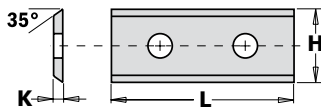
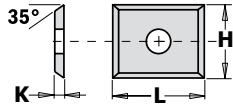
SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

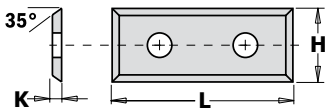
PLATES AND KNIVES



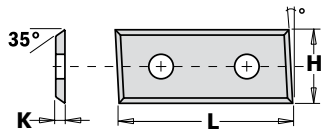
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
7,5	12	1,5	35°	75122	375122		
7,65	12	1,5	35°	76122			
9,6	12	1,5	35°	96122	396122	496122	
15	12	1,5	35°	15122	315122	415122	
19,5	12	1,5	4/35°	19122			
20	12	1,5	35°	20122	320122	420122	220122



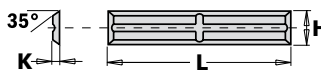
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
24,7	12	1,5	35°	125122			
30	12	1,5	35°	30122	330122	430122	230122
30	12	1,5	45°		630122		
40	12	1,5	35°	40122	340122	440122	240122
50	12	1,5	35°	50122	350122	450122	250122
60	12	1,5	35°	60122	360122	460122	



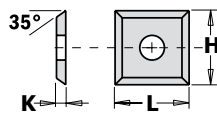
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
29,5	9	1,5	35°	3094	33094		
29,5	12	1,5	35°	30124	330124		
39,5	9	1,5	35°	4094			
49,5	9	1,5	35°	5094	35094		
49,5	12	1,5	35°	50124	350124	450124	250124



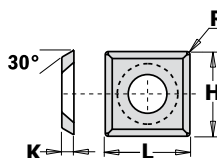
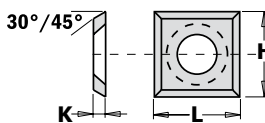
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
28,3	12	1,5	35°	283127			
48,3	12	1,5	35°	483127			



L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
20	4,1	1,1	35°	220414	520414		
30	5,5	1,1	35°	230554	530554		
50	5,5	1,1	35°	250554	550554		



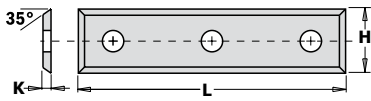
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
12	12	1,5	35°	12124	312124	412124	
13,6	13,6	2	30°	136204			
14	14	1,2	30°	14124			
14	14	2	30°	814204		414204	
14	14	2	45°		614204		



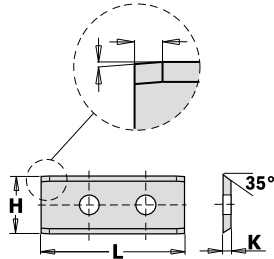
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
14	14	2	R/30°	14244			

Reversible HM Knives

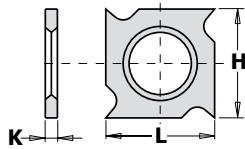
Değiştirilebilir Jiletler HM
Cuchillas Reversibles HM



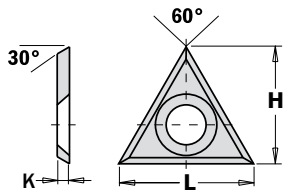
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
50	9	1,5	35°	5093			
50	12	1,7	35°	50123	150123	450123	



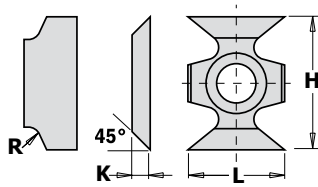
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
20	12	1,5	35°	20129			
30	12	1,5	35°	30129			
50	12	1,5	35°	50129			



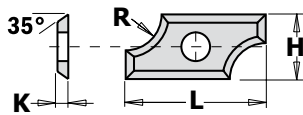
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
18	18	1,95		181954			
18	18	2,45		182454			



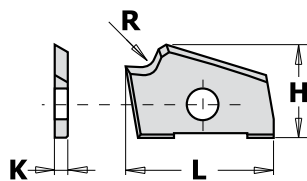
L mm	H mm	K mm	α	HC05	MG06	SMG02	UMG04
22	19	2	30°		220201		



L mm	H mm	K mm	R mm	α	HC05	MG06	SMG02	UMG04
16	22	5	1,5		162215			
16	22	5	2		162220			
16	22	5	3		162230			
16	22	5		45°	162245			



L mm	H mm	K mm	R mm	α	HC05	MG06	SMG02	UMG04
19,5	9	1,5	2	35°	219152			
19,5	9	1,5	3	35°	219153			
19,5	9	1,5	5	35°	219155			
24	12	1,5	6,4	35°	790.064.00			
24	12	1,5	8	35°	790.080.00			



BRANDT

L mm	H mm	K mm	R mm	F mm	HC05 RH	HC05 LH
22,32	14	2	2	5	K25.22142R02R	K25.22142R02L
22,32	14	2	2,5	5	K25.22142R02Rs	K25.22142R02Ls
22,32	14	2	3	5	K25.22142R03R	K25.22142R03L

Planner Knives

Planya Bıçakları HSS - HM
Cuchillas HSS - HM



PCD TOOLS

SOLID CARBIDE
SPIRAL BITS

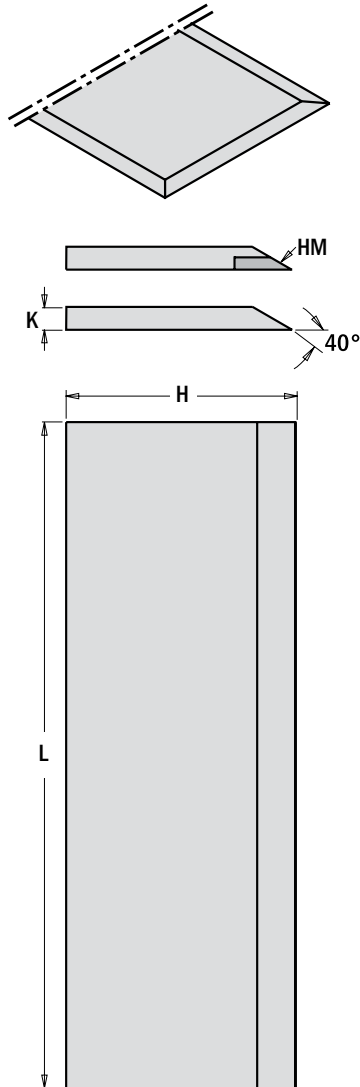
SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES

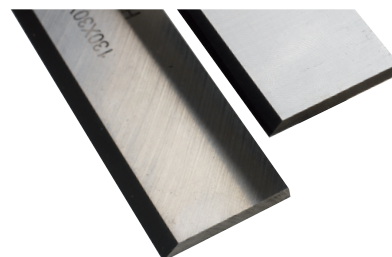
HSS-HM



L mm	H mm	K mm	SYMBOL	
			HSS	HM
80	30	3	HS1.080.303	HM1.080.303
100	30	3	HS1.100.303	HM1.100.303
120	30	3	HS1.120.303	HM1.120.303
130	30	3	HS1.130.303	HM1.130.303
140	30	3	HS1.140.303	HM1.140.303
150	30	3	HS1.150.303	HM1.150.303
160	30	3	HS1.160.303	HM1.160.303
180	30	3	HS1.180.303	HM1.180.303
190	30	3	HS1.190.303	HM1.190.303
200	30	3	HS1.200.303	HM1.200.303
210	30	3	HS1.210.303	HM1.210.303
230	30	3	HS1.230.303	HM1.230.303
240	30	3	HS1.240.303	HM1.240.303
250	30	3	HS1.250.303	HM1.250.303
260	30	3	HS1.260.303	HM1.260.303
300	30	3	HS1.300.303	HM1.300.303
310	30	3	HS1.310.303	HM1.310.303
350	30	3	HS1.350.303	HM1.350.303
400	30	3	HS1.400.303	HM1.400.303
410	30	3	HS1.410.303	HM1.410.303
430	30	3	HS1.430.303	HM1.430.303
450	30	3	HS1.450.303	HM1.450.303
500	30	3	HS1.500.303	HM1.500.303
510	30	3	HS1.510.303	HM1.510.303
520	30	3	HS1.520.303	HM1.520.303
530	30	3	HS1.530.303	HM1.530.303
600	30	3	HS1.600.303	HM1.600.303
610	30	3	HS1.610.303	HM1.610.303
630	30	3	HS1.630.303	HM1.630.303
640	30	3	HS1.640.303	HM1.640.303
710	30	3	HS1.710.303	HM1.710.303
810	30	3	HS1.810.303	HM1.810.303
1050	30	3	HS1.1050.303	HM1.1050.303

Material	HSS	HM
Soft wood, dry	★	
Soft wood, wet	☆	
Hard wood, dry	★	★
Hard wood, wet	★	☆
Chipboard		☆
MDF		☆
Plywood	☆	★

★ Excellent ☆ Good



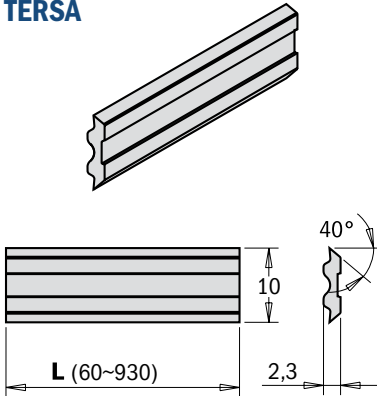
KS1-KS2-KS3

HSS

NOTE:

Other dimensions on request.

TERSA



TERSA

L mm	H mm	K mm	ARTICLE
60	10	2,3	KS1.060.01
80	10	2,3	KS1.080.01
100	10	2,3	KS1.100.01
110	10	2,3	KS1.110.01
120	10	2,3	KS1.120.01
130	10	2,3	KS1.130.01
140	10	2,3	KS1.140.01
150	10	2,3	KS1.150.01
160	10	2,3	KS1.160.01
170	10	2,3	KS1.170.01
180	10	2,3	KS1.180.01
190	10	2,3	KS1.190.01
200	10	2,3	KS1.200.01
210	10	2,3	KS1.210.01
220	10	2,3	KS1.220.01
230	10	2,3	KS1.230.01
235	10	2,3	KS1.235.01
240	10	2,3	KS1.240.01
250	10	2,3	KS1.250.01
260	10	2,3	KS1.260.01
270	10	2,3	KS1.270.01
280	10	2,3	KS1.280.01
300	10	2,3	KS1.300.01
310	10	2,3	KS1.310.01
330	10	2,3	KS1.330.01
350	10	2,3	KS1.350.01
360	10	2,3	KS1.360.01
400	10	2,3	KS1.400.01
410	10	2,3	KS1.410.01
420	10	2,3	KS1.420.01
430	10	2,3	KS1.430.01
450	10	2,3	KS1.450.01
460	10	2,3	KS1.460.01
480	10	2,3	KS1.480.01
500	10	2,3	KS1.500.01
510	10	2,3	KS1.510.01
520	10	2,3	KS1.520.01
530	10	2,3	KS1.530.01
540	10	2,3	KS1.540.01
610	10	2,3	KS1.610.01
620	10	2,3	KS1.620.01
630	10	2,3	KS1.630.01
635	10	2,3	KS1.635.01
640	10	2,3	KS1.640.01
650	10	2,3	KS1.650.01
710	10	2,3	KS1.710.01
810	10	2,3	KS1.810.01
860	10	2,3	KS1.860.01
910	10	2,3	KS1.910.01
930	10	2,3	KS1.930.01

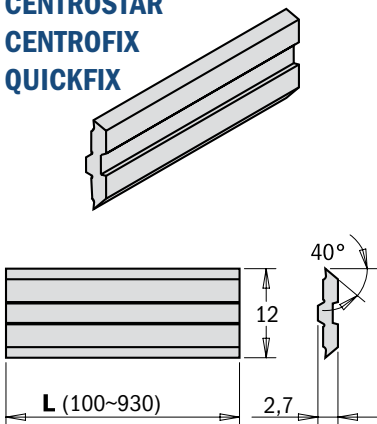
CENTROSTAR, CENTROFIX, QUICKFIX

L mm	H mm	K mm	ARTICLE
60	12	2,7	KS2.060.01
80	12	2,7	KS2.080.01
100	12	2,7	KS2.100.01
110	12	2,7	KS2.110.01
120	12	2,7	KS2.120.01
130	12	2,7	KS2.130.01
140	12	2,7	KS2.140.01
150	12	2,7	KS2.150.01
160	12	2,7	KS2.160.01
170	12	2,7	KS2.170.01
180	12	2,7	KS2.180.01
190	12	2,7	KS2.190.01
200	12	2,7	KS2.200.01
210	12	2,7	KS2.210.01
220	12	2,7	KS2.220.01
230	12	2,7	KS2.230.01
240	12	2,7	KS2.240.01
250	12	2,7	KS2.250.01
260	12	2,7	KS2.260.01
270	12	2,7	KS2.270.01
280	12	2,7	KS2.280.01
300	12	2,7	KS2.300.01
310	12	2,7	KS2.310.01
350	12	2,7	KS2.350.01
360	12	2,7	KS2.360.01
400	12	2,7	KS2.400.01
410	12	2,7	KS2.410.01
420	12	2,7	KS2.420.01
430	12	2,7	KS2.430.01
450	12	2,7	KS2.450.01
480	12	2,7	KS2.480.01
510	12	2,7	KS2.510.01
520	12	2,7	KS2.520.01
530	12	2,7	KS2.530.01
610	12	2,7	KS2.610.01
620	12	2,7	KS2.620.01
630	12	2,7	KS2.630.01
640	12	2,7	KS2.640.01
650	12	2,7	KS2.650.01
710	12	2,7	KS2.710.01
810	12	2,7	KS2.810.01
930	12	2,7	KS2.930.01

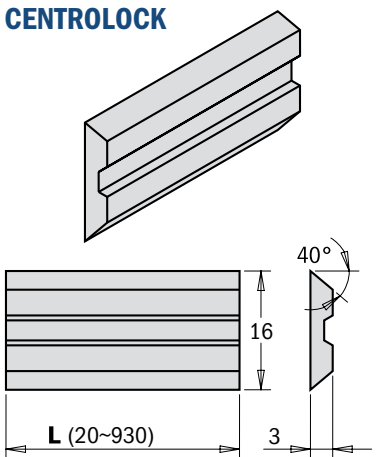
CENTROLOCK

L mm	H mm	K mm	ARTICLE
20	16	3	KS3.020.01
60	16	3	KS3.060.01
80	16	3	KS3.080.01
100	16	3	KS3.100.01
130	16	3	KS3.130.01
150	16	3	KS3.150.01
170	16	3	KS3.170.01
180	16	3	KS3.180.01
190	16	3	KS3.190.01
210	16	3	KS3.210.01
230	16	3	KS3.230.01
235	16	3	KS3.235.01
240	16	3	KS3.240.01
260	16	3	KS3.260.01
270	16	3	KS3.270.01
310	16	3	KS3.310.01
460	16	3	KS3.460.01
650	16	3	KS3.650.01
930	16	3	KS3.930.01

CENTROSTAR CENTROFIX QUICKFIX



CENTROLOCK



Knives for Cutting Plotters

Plotter Kesim Bıçakları
Cuchillas para plotters de corte



PCD TOOLS

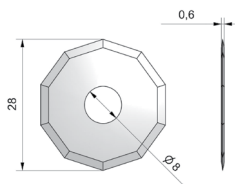
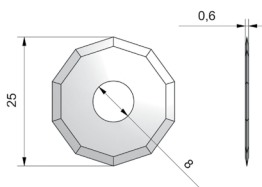
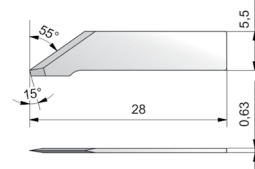
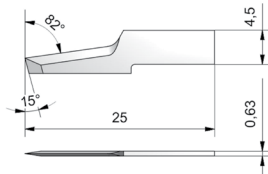
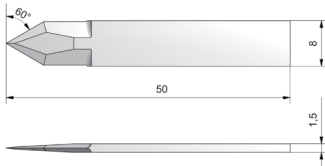
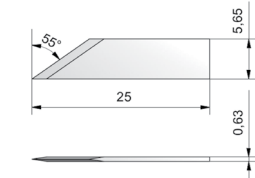
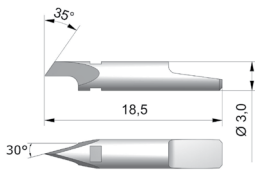
SOLID CARBIDE
SPIRAL BITS

SPIRAL BITS FOR
COMPOSITE CUTTING

SAW BLADES

CNC ROUTER CUTTERS
& CHUCKS

PLATES AND KNIVES



ARTICLE	MACHINE	TECHNICAL DETAILS	
ITA.2	Zünd Z2 Esko BLD-KC102 (i-102)	Typ*	R, Z, K
		Pre-cut	1,43 x Tm
		Post-cut	---
		Max. cut depth	1,00 mm

ARTICLE	MACHINE	TECHNICAL DETAILS	
ITA.16	Zünd Z16 Esko BLD-SF216 (i-216) Bullmer B16	Typ*	F, Z, O
		Pre-cut	0,73 x Tm
		Post-cut	---
		Max. cut depth	7,40 mm

ARTICLE	MACHINE	TECHNICAL DETAILS	
ITA.44	Zünd Z44	Typ*	F, Z
		Pre-cut	0,58 x Tm
		Post-cut	0,58 x Tm
		Max. cut depth	14,00 mm

ARTICLE	MACHINE	TECHNICAL DETAILS	
ITA.41	Zünd Z41	Typ*	F, O
		Pre-cut	0,8 + 0,18 x Tm
		Post-cut	1,20 mm
		Max. cut depth	11,30 mm

ARTICLE	MACHINE	TECHNICAL DETAILS	
ITA.42	Zünd Z42 Bullmer 107506	Typ*	F, O
		Pre-cut	0,05 + 0,7 x Tm
		Post-cut	0,80 mm
		Max. cut depth	7,80 mm

ARTICLE	MACHINE	TECHNICAL DETAILS	
ITA.50	Zünd Z50 Esko BLD-RC110	Typ*	Rot
		Max. cut depth	3,50 mm

ARTICLE	MACHINE	TECHNICAL DETAILS	
ITA.51	Zünd Z51	Typ*	Rot
		Max. cut depth	5,00 mm

LEGEND | Types of knives

F - Flat
R - Arbor
Z - Drag knife

O - Oscillating
Rot - Rotary
Round - Round

P - Passe-partout
K - Kiss-Cut
T - Tangent

MORE PRODUCTS

You can find on the website www.ita.tools

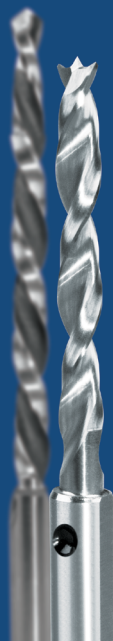
CUTTER HEADS



All parameters and
information available
on our website



INDUSTRIAL DOWEL DRILLS



All parameters and
information available
on our website





DIAMOND ROUTER BITS

DIA CNC Freze Bicaklari

Brocas de PCD

- Woodworking
- Furniture production
- Machining composite materials



Available in stock



H6 Tolerance of shank

less runout resulting in increased tool life..

Polished backside of the PCD tip

better chip ejection.

Surface roughness of shank $RA < 0,3 \mu m$

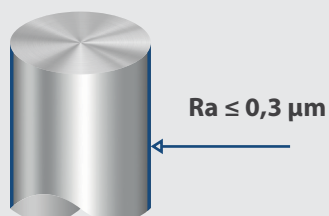
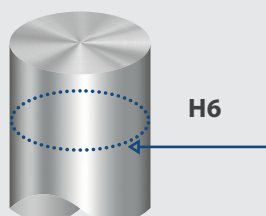
less wear of CNC spindle and longer service life of the tool.

Dynamic balancing class G2.5

minimize runout, better finishing of the processed material.



Laser Ablation is new and modern method of sharpening PCD plates. Is a much more efficient, reliable and cost-effective method.





SOLID CARBIDE SPIRAL BITS

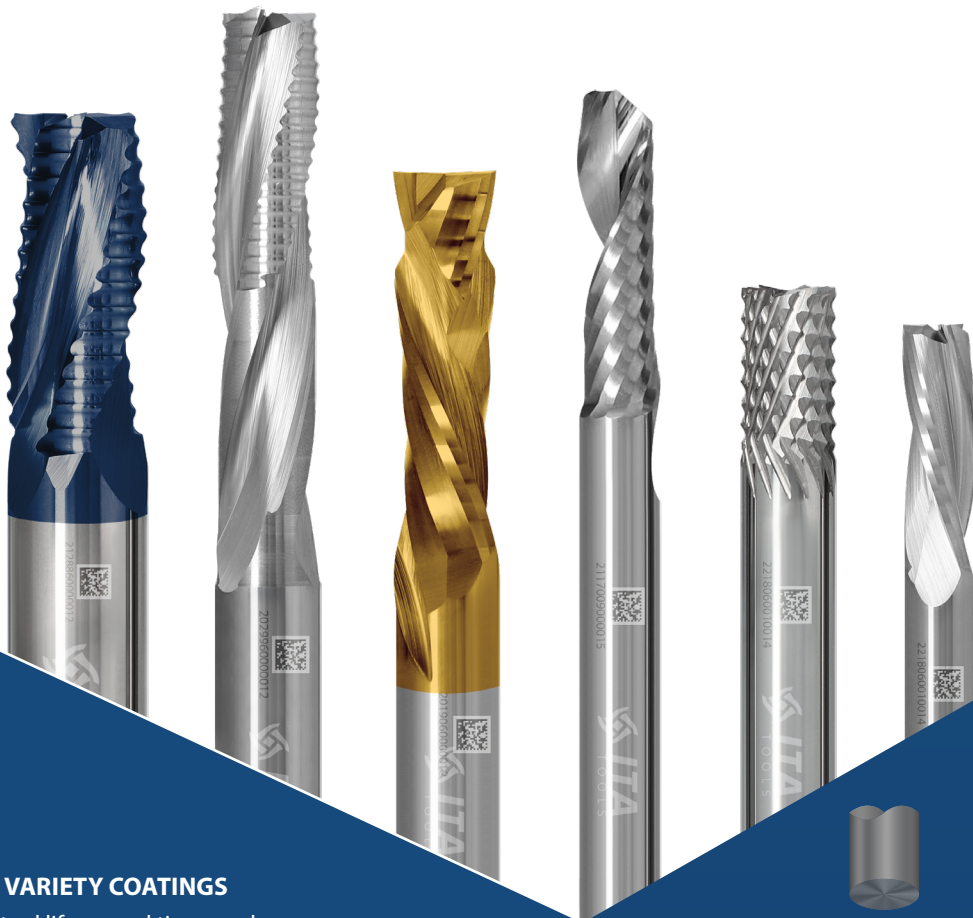
Katı Karbür Spiral Frezesi

Brocas helicoidales de HW integral

- Woodworking
- Furniture production
- Machining composite materials
- Processing aluminum and plastics

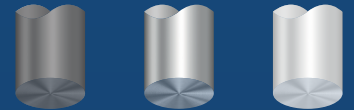


Available in stock



POSSIBILITY OF USING VARIETY COATINGS

The coating increases the tool life several times and also reduces friction, which significantly reduces heating of the tool during operation.



The variety of hardness of raw materials allows choosing the right tool depending on the processed material.



PREMIUM CLASS CARBIDE
Increased tool life



WIDE RANGE OF SIZES
Tool personalization



WIDE RANGE OF GEOMETRY
Alternative solutions



POLISHED SPIRAL
Perfect Chip Ejection





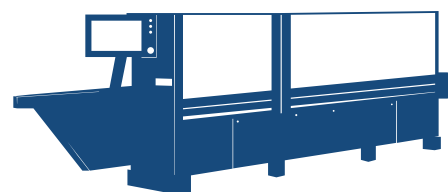
PRE-MILLING CUTTER HEADS

Dia Ön Freze Temizleme Topu
Cabezales de PCD

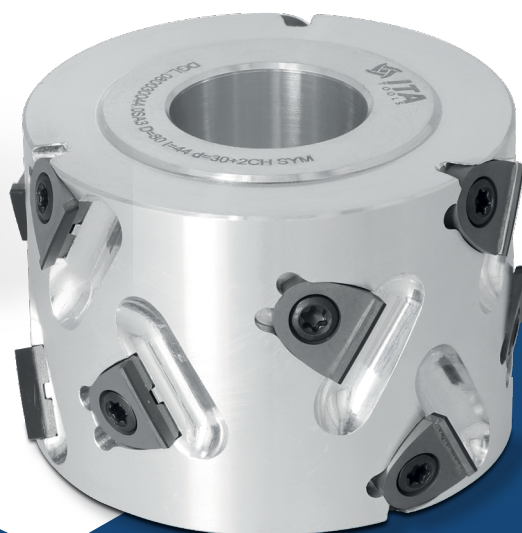
- Wide range of models
- Varied technical parameters
- Easy selection for a specific machine model



Available in stock



Database of dedicated tools for Edgebanders.
Ask about Your model export@itatools.pl



Specially designed verse stainless steel body significantly lowers noise level.

HOLE IN TOLERANCE

H7

Eliminating the run-out effects favourable for the service life of the machine.



More sizes on
www.ita.tools



Teeth extended above the body and separate channel for each blade for better facilitate chip evacuation.

BALANCING CLASS

G2,5

Cutter works evenly, without vibrations, even at maximum speed.

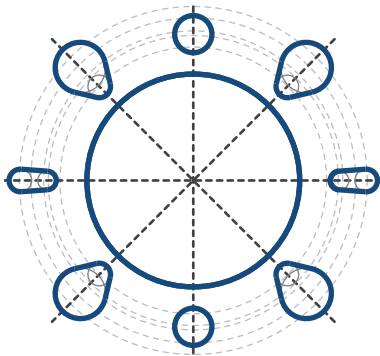
ALU

INOX

Corrosion resistant materials.

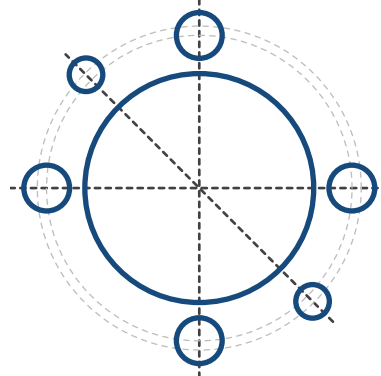
Additional holes

Ek delikler
Agujeros adicionales



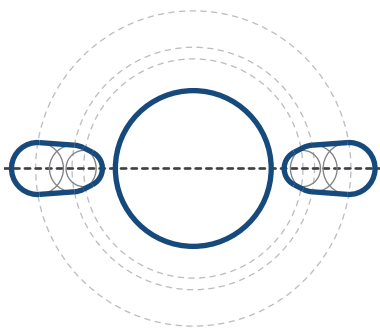
PH01 | ITA

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



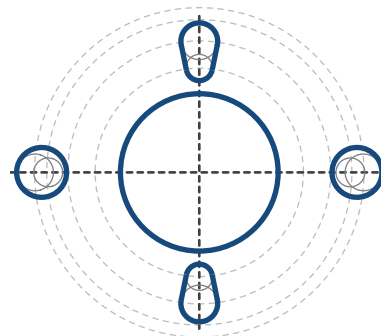
PH02 | ITA

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



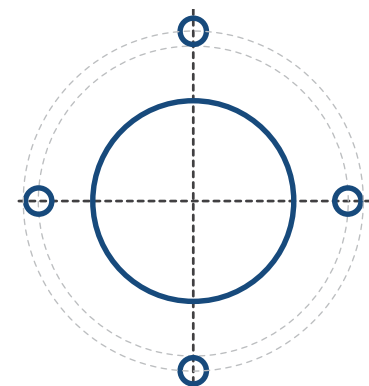
PH03 | ITA

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



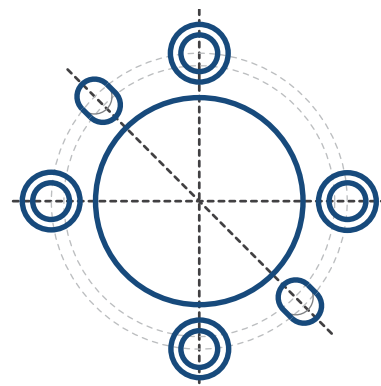
PH04 | ITA

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



PH05 | ITA

2 / 9 / 110 mm
2 / 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

Kısaltılmış Tanımlar
Designaciones abreviadas























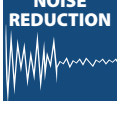


α	- Cutting angle	LB	- Adjusting length
β	- Upper rake	LH	- Left hand rotation
δ	- Radial rake	N	- Pitch
γ	- Axial-rake	P	- Thickness of tool
λ	- Rake angle of blade	PH	- Additional pins (types and track)
<>	- Special cut for easier fitting of saw blade	PTFE	- Non-stick industrial coating, black and orange
A	- Cutting angle	R	- Radius
ATB	- Alternate top bevel	Rh	- Top bevel, right
B	- Thickness of the tool body at the bore hole	RH	- Right hand rotation
D	- Cutting circle diameter	RPM	- Permissible RPM
Densimet®	- ultra durable metal with a high tungsten content	S	- Type of clamping
D maks.	- Max. cutting circle diameter	S (mm)	- Diameter of shank
D min.	- Min. cutting circle diameter	ShA	- Shore hardness on the Shore scale
DKN	- Additional pins at the fixing hole 4x8mm	ST	- Leap clamp
F	- Bore diameter	T	- Max. profile depth / cutting depth
G	- Recommended depth	TK	- Pinhole demotions
H	- Cutting depth	TP	- Triple-chip + flat
HV10	- Shore hardness on the Vickers scale	V	- Number of spurs
I	- Cutting length	Z	- Number of teeth
I maks.	- Max. height of cutting material	W	- Width
Lh	- Top bevel, left		
ISO	- Quality of carbide		
K	- Cutting width		
K maks.	- Max. cutting width		
L	- length / width		

List of Symbols

Sembol listesi



	Cross cut		Right-hand rotation
	Longitudinal cut		Right-hand & Left-hand rotation
	Cross and longitudinal cut		Sharpening by laser ablation
	Saws for longitudinal cut on Multi rip machines		Steel body
	Saw blades for grooving		Polycrystalline diamond
	Number of tooth		Tools with changeable knives
	Aluminium body		Monolit carbide tools
	Tungsten carbide tipped		Alloyed tools steel
	High speed steel		Mechanical feed
	Symmetrical rotation		Accessories
	Manual feed		Left-hand rotation
	Noise-reduction		



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