



TOOLS FOR WINDOW, DOOR JOINERY & FACADES

edition 2024



PROFESSIONAL TOOLS

PRODUCTION | SALES | SERVICE



Chapter 01

Tools for production of window and door joinery PVC, ALU & Wood

Circular Saw Blades HM

PVC and Aluminum Profiles



Circular Saw Blades HM

Wood, Wood Derivatives and Laminates



Solid Carbide Router Bits Z1

Aluminum, Plastics



Solid Carbide Router Bits Z2

Aluminum, Plastics



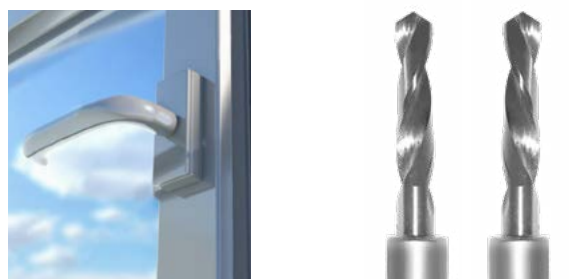
Solid Carbide Router Bits Z3 - Special

PVC Profiles



HSS Drill Bits

Handles in PVC Profiles



Solid Carbide Spiral Bits Z3 & Z3 with Chipbreaker

Wood, Wood Derivatives and Laminates

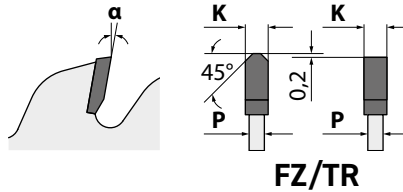


HM Drill Bits

Wood, Wood Derivatives and Laminates



PA1



Technical details:

Circular saw blade with triple chip flat grinded carbide teeth (HW). With negative hook angle and reinforced body for higher resistance to side hits and reduce vibrations. Suited for cutting from above. Blades are silenced.

Application:

Circular saw blade for cutting of non-ferrous profiles, plastic profiles (ex. PVC), etc., with wall thickness up to 7 mm.

The material must always be well clamped to avoid vibration.

Narrow toothed saw blades for sawing thin walled non-ferrous and plastic profiles.



Machines:

For double cross cutting machines, CNC machines, mitre cutting machines, etc. Negative hook angle suited for cutting above.

Materials:

For cutting of non-ferrous profiles, plastic profiles (ex. PVC), etc., with wall thickness till 7 mm

HM saw blades for processing non-ferrous & PVC profiles - with a positive rake angle 5°

D mm	F mm	PH	Z	K mm	P mm	α	ARTICLE
300	30	PH03	96	3,2	2,6	5°	PA1.300030096.P00
330	30	PH03	102	3,6	3,0	5°	PA1.330030102.P00

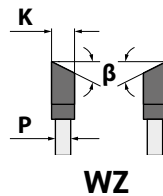
Saw Blades for Processing Non-ferrous & PVC Profiles

D mm	F mm	PH	Z	K mm	P mm	α	ARTICLE
350	30	PH03	108	3,6	3,0	5°	PA1.350030108.P00
350	32	2/11/63	108	3,6	3,0	5°	PA1.350032108.P00
400	30	PH03	120	4,0	3,2	5°	PA1.400030120.P00
400	32	2/11/63	120	4,0	3,2	5°	PA1.400032120.P00
450	30	PH03	128	4,0	3,2	5°	PA1.450030128.P00
450	32	2/11/63	128	4,0	3,2	5°	PA1.450032128.P00
500	30	2/10,5/70	140	4,2	3,4	5°	PA1.500030140.P00
550	32	2/11/63	140	4,2	3,4	5°	PA1.500032140.P00
550	30	2/10,5/70	140	4,2	3,4	5°	PA1.550030140.P00
550	30	2/10,5/70	168	4,2	3,4	5°	PA1.550030168.P00
550	32	2/11/63	140	4,2	3,4	5°	PA1.550032140.P00
600	32	2/11/63	144	4,6	4,0	5°	PA1.600032144.P00
600	40	2/11/63	140	4,6	4,0	5°	PA1.600040140.P00

HM saw blades for processing non-ferrous & PVC profiles - with a negative rake angle -5°

D mm	F mm	PH	Z	K mm	P mm	α	ARTICLE
300	30	PH03	96	3,2	2,6	-5°	PA1.300030096.N00
330	30	PH03	102	3,6	3,0	-5°	PA1.330030102.N00
350	30	PH03	108	3,6	3,0	-5°	PA1.350030108.N00
350	32	4/11/63	108	3,6	3,0	-5°	PA1.350032108.N00
400	30	PH03	120	4,0	3,2	-5°	PA1.400030120.N00
400	32	2/11/63	120	4,0	3,2	-5°	PA1.400032120.N00
450	30	PH03	128	4,0	3,2	-5°	PA1.450030128.N00
450	32	2/11/63	128	4,0	3,2	-5°	PA1.450032128.N00
500	30	2/10,5/70	140	4,2	3,4	-5°	PA1.500030140.N00
500	32	2/11/63	140	4,2	3,4	-5°	PA1.500032140.N00

P01 cross-cutting



Application:

For cross-cutting while maintaining optimum material quality.
The saws have laser cutting silencing to improve the comfort of work.

Machines:

Table saws and mitre saws.

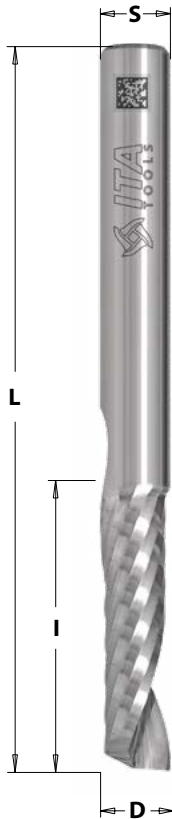
Materials:

Soft, hard and exotic wood, plywood.

D mm	F mm	PH	Z	K mm	P mm	ARTICLE
250	30	PH03	48	3,2	2,2	P01.250030048.00W
250	30	PH03	60	3,2	2,2	P01.250030060.00W
250	30	PH03	80	3,2	2,2	P01.250030080.00W
300	30	PH03	48	3,2	2,2	P01.300030048.00W
300	30	PH03	72	3,2	2,2	P01.300030072.00W
300	30	PH03	96	3,2	2,2	P01.300030096.00W
315	30	PH03	72	3,2	2,2	P01.315030072.00W
350	30	PH03	54	3,5	2,5	P01.350030054.00W
350	30	PH03	84	3,5	2,5	P01.350030084.00W
350	30	PH03	108	3,5	2,5	P01.350030108.00W
400	30	PH03	60	3,5	2,5	P01.400030060.00W
450	30	PH03	66	3,8	2,8	P01.450030066.00W
500	30	PH03	72	4,0	2,8	P01.500030072.00W



SP01
positive



Technical details:

- Single blade cutter, positive,
- Perfect finishing of cutting edge - the polished chip groove and blade
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings
- Cutting, grooving
- Spiral angle 30°

Application:

For cutting and milling in aluminum, PVC profiles, DIBOND® composites, an alternative to plastics processing. Designed for use on CNC machines.



ALUMINUM
Work parameters:

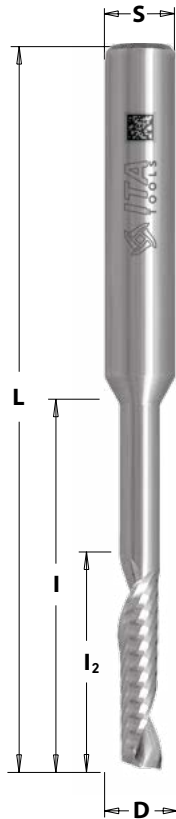
- RPM 16 000 - 24 000
- feed 0,8 - 2 m/min

PLASTICS, COMPOSITE BOARDS
Work parameters:

- RPM 16 000 - 24 000
- feed 2 - 6 m/min

D mm	I mm	L mm	S mm	Z	ARTICLE
3	6	60	6	1	SP01.03.006.060.06R
3	12	60	6	1	SP01.03.012.060.06R
4	8	60	6	1	SP01.04.008.060.06R
4	12	60	6	1	SP01.04.012.060.06R
5	15	60	6	1	SP01.05.015.060.06R
6	12	60	6	1	SP01.06.012.060.06R
6	22	60	6	1	SP01.06.022.060.06R
8	12	60	8	1	SP01.08.012.060.08R
8	22	60	8	1	SP01.08.022.060.08R
10	15	60	10	1	SP01.10.015.060.10R
10	35	80	10	1	SP01.10.035.080.10R

SP02
positive



Technical details:

- Single blade cutter, positive with lowering
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings
- Cutting, grooving
- Spiral angle 30°

Application:

For cutting and milling in aluminum, PVC profiles. Designed for use on CNC machines.



ALUMINUM
Work parameters:

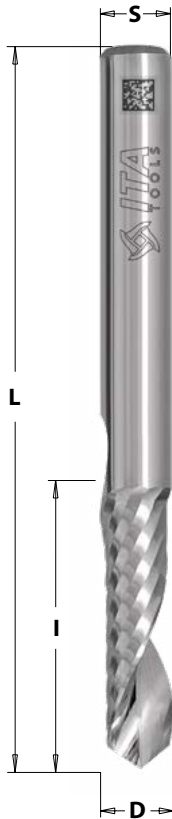
- RPM 10 000 - 18 000
- feed 0,8 - 2 m/min

PLASTICS
Work parameters:

- RPM 12 000 - 20 000
- feed 2 - 6 m/min

D mm	I mm	I ₂ mm	L mm	S mm	Z	ARTICLE
3	16	40	80	8	1	SP02.03.016.080.08R
4	16	40	80	8	1	SP02.04.016.080.08R
5	20	40	80	8	1	SP02.05.020.080.08R
6	22	40	80	8	1	SP02.06.022.080.08R
8	25	45	100	8	1	SP02.08.025.100.08R
10	20	40	80	10	1	SP02.10.020.080.10R
10	15	60	100	10	1	SP02.10.015.100.10R
10	22	80	120	10	1	SP02.10.022.120.10R

SP15
positive



Technical details:

- Single blade cutter, positive withdrilling V-point 90°
- Perfect finishing of cutting edge - the polished chip groove and blade
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings

Application:

For cutting and milling in aluminum, PVC profiles. Designed for use on CNC machines.



D mm	I mm	I ₂ mm	L mm	S mm	Z	ARTICLE
5	25	35	80	8	1	SP15.05.025.080.08R
5	25	45	100	8	1	SP15.05.025.100.08R
5	35	55	100	8	1	SP15.05.035.100.08R
6	25	45	80	8	1	SP15.06.025.080.08R

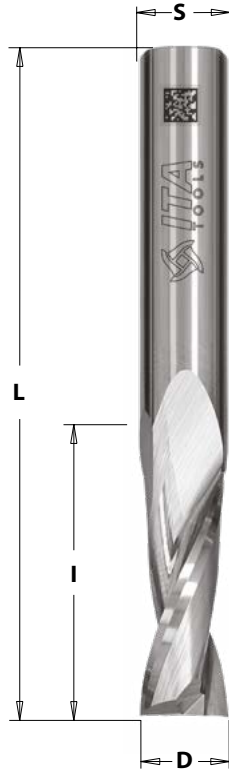
ALUMINUM
Work parameters:

- RPM 16 000 - 24 000
- feed 0,8 - 2 m/min

PLASTICS
Work parameters:

- RPM 16 000 - 24 000
- feed 2 - 6 m/min

SQ01
positive



Technical details:

- Two edge blade cutter, positive,
- Perfect finishing of cutting edge - the polished chip groove and blade
- Chip discharge upward
- Special type of carbide - increased tool life
- Possibility of using variety coatings
- Cutting, grooving
- Spiral angle 30°

Application:

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



ALUMINUM
Work parameters:

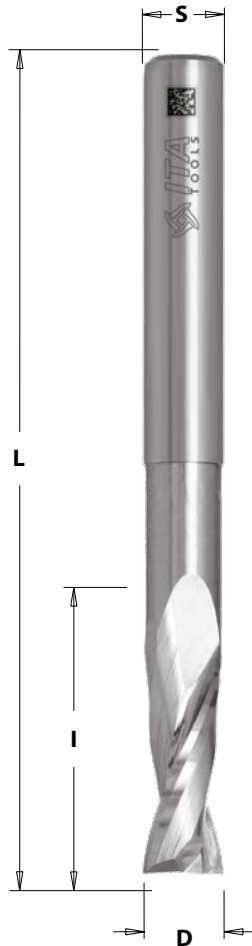
- RPM 16 000 - 24 000
- feed 0,8 - 2 m/min

PLASTICS
Work parameters:

- RPM 16 000 - 24 000
- feed 2 - 6 m/min

D mm	I mm	L mm	S mm	Z	ARTICLE
3	12	60	6	2	SQ01.03.012.060.06R
4	12	60	6	2	SQ01.04.012.060.06R
5	22	60	6	2	SQ01.05.022.060.06R
6	12	60	6	2	SQ01.06.012.060.06R
6	22	60	6	2	SQ01.06.022.060.06R
8	22	60	8	2	SQ01.08.022.060.08R
8	35	80	8	2	SQ01.08.035.080.08R
10	22	60	10	2	SQ01.10.022.060.10R
10	45	100	10	2	SQ01.10.045.100.10R
12	25	70	12	2	SQ01.12.025.070.12R
16	55	110	16	2	SQ01.16.055.110.16R

SQ02
positive



Technical details:

- Two edge blade cutter, positive with lowering
- Perfect finishing of cutting edge - the polished chip groove and blade
- 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.



ALUMINUM
Work parameters:

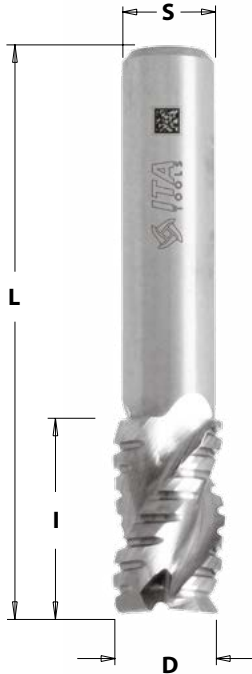
- RPM 10 000 - 18 000
- feed 0,8 - 2 m/min

PLASTICS
Work parameters:

- RPM 16 000 - 24 000
- feed 2 - 6 m/min

D mm	I mm	L mm	S mm	I ₂ mm	Z	ARTICLE
6	22	80	6	45	2	SQ02.06.022.080.06R
7	22	100	8	42	2	SQ02.07.022.100.08R
8	20	80	8	45	2	SQ02.08.020.080.08R
8	22	105	8	65	2	SQ02.08.022.105.08R
10	25	90	10	50	2	SQ02.10.025.090.10R
10	25	100	10	80	2	SQ02.10.025.100.10R
11	15	110	12	65	2	SQ02.11.015.110.12R
12	25	105	12	65	2	SQ02.12.025.105.12R
12	25	120	12	85	2	SQ02.12.025.120.12R

SW03
positive



Technical details:

- Three flute router bit with chip breaker
- Right and left rotating cutter
- Polished chip flute prevents material sticking
- Upward chip ejection
- Special type of carbide with increased tool life
- Coating possible

Application:

For milling cross-sections of PVC profiles in machines for shaped, flashless joining of profiles. Designed for use on GRAF SYNERGY® machines V-perfect technology.

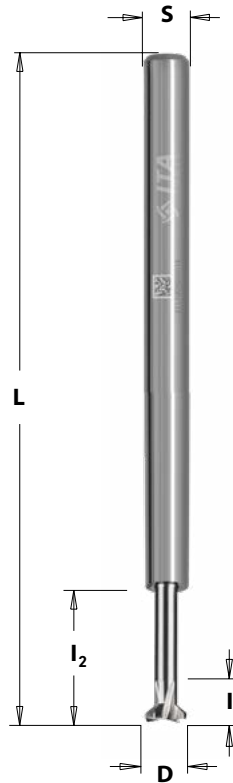


D mm	I mm	L mm	S mm	Z	ARTICLE
6	10	30	5	3	SW03.06.010.030.05R
6	10	30	5	3	SW03.06.010.030.05L

HC Coating

D mm	I mm	L mm	S mm	Z	ARTICLE
6	10	30	5	3	SW03.06.010.030.05HR
6	10	30	5	3	SW03.06.010.030.05HL

FVH.Rc
T-slot



Technical details:

- Tree flute router bit with T-slots
- Polished chip flute and blade
- Special type of carbide with increased tool life

Application:

For inside corner cleaning, for machining aluminium and PVC profiles.

Work parameters:

- RPM 8 000 - 18 000
- feed 2 - 12 m/min



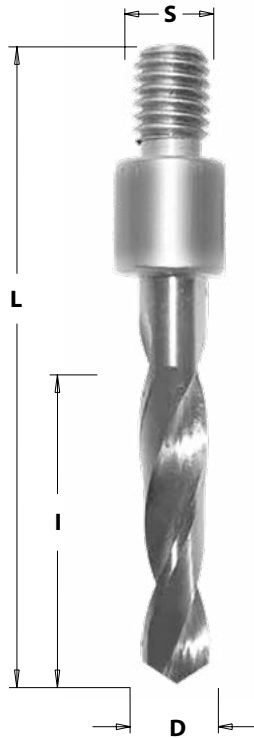
D mm	I mm	I ₂ mm	L mm	S mm	Z	ARTICLE
8	1,5	20	100	8	3	FVH.08.001.100.08Rc1
8	1,5	20	100	8	3	FVH.08.001.100.08Rc2

On order

HSS

RH

LH

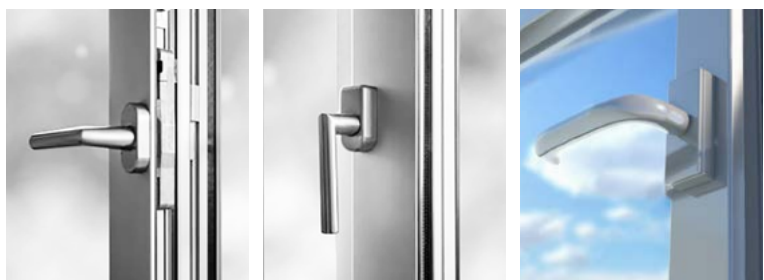


Technical details:

- Right or left rotating drill bits with external thread
- Available with pilot drill bit - reduces the cutting resistance, and makes it possible to achieve a better quality of the processed surface

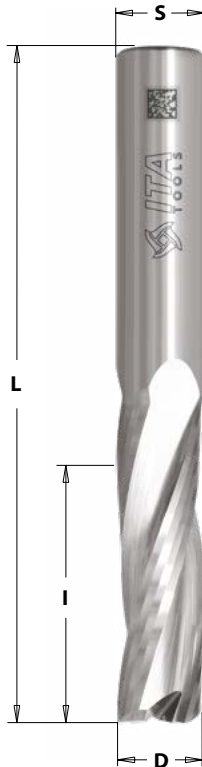
Application:

For drilling holes for handles in PVC profiles. Drilling in aluminum profiles with or without steel reinforcement installed.



D mm	I mm	L mm	S mm	LH / RH	INFO
10	50	87	M10	LH	
10	50	87	M10	RH	
10	50	87	M10	LH	Pilot drill bit
10	50	87	M10	RH	Pilot drill bit
12	50	87	M10	RH	
12	50	87	M10	LH	
12	50	87	M10	LH	Pilot drill bit
12	50	87	M10	RH	Pilot drill bit
10	65	115	M10	LH	
10	65	115	M10	RH	
12	65	115	M10	RH	
12	65	115	M10	LH	

SC01 positive



Technical details:

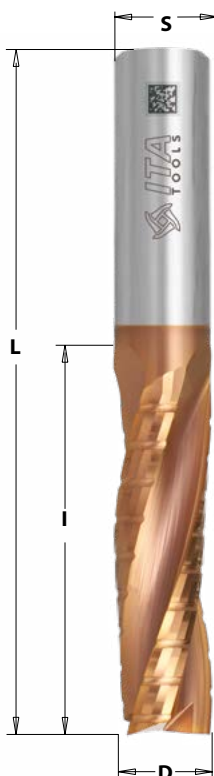
- 3 spiral cutting edges
- Upward chip ejection
- Right-hand / Left-hand rotation
- Premium quality solid carbide
- Excellent finish

Application:

For cutting and milling in solid wood and wood-based materials.
Can be used on machining centres, point to point machines, CNC routers.

D mm	I mm	L mm	S mm	Z	ARTICLE RH
10	42	90	10	3	SC01.10.042.090.10R
12	42	90	12	3	SC01.12.042.090.12R
16	35	90	16	3	SC01.16.035.090.16R
16	55	110	16	3	SC01.16.055.110.16R
20	60	120	20	3	SC01.20.060.120.20R

SC23 positive



Technical details:

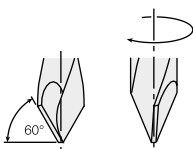
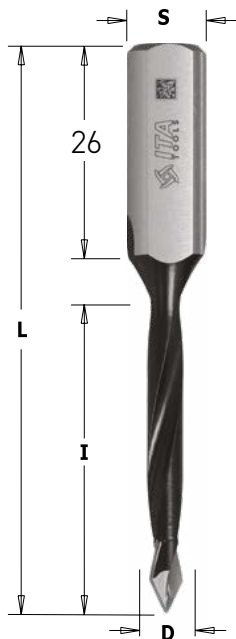
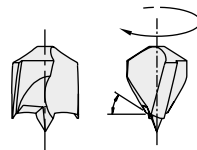
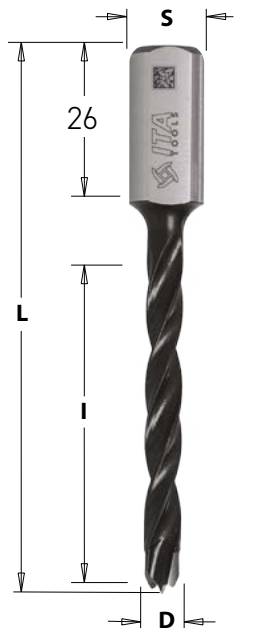
- 3 spiral cutting edges
- Upward chip ejection
- Premium quality solid carbide
- Excellent finish with TiSiN coating

Application:

For cutting and milling in solid wood, chipboard, plywood and hard materials. Can be used on machining centres, point to point machines, CNC routers.

D mm	I mm	L mm	S mm	ARTICLE RH
8	22	60	8	SC23.08.022.060.08TR
10	25	70	10	SC23.10.025.070.10TR
12	35	80	12	SC23.12.035.080.12TR
16	55	110	16	SC23.16.055.110.16TR
20	60	120	20	SC23.20.060.120.20TR

BBH4 | TBH1 | TBH2



Technical details:

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

Application:

Used on boring machines equipped with adapters or chucks.
Used to drill blind holes (BBH4) and trough holes (TBH1, TBH2) in solid wood, wood composites, plastic and laminated materials.

BBH4

D mm	l mm	L mm	S mm	ARTICLE RH	ARTICLE LH
5	43	70	10x20	BBH4.050.043.070.00R	BBH4.050.043.070.00L
8	43	70	10x20	BBH4.080.043.070.00R	BBH4.080.043.070.00L
10	43	70	10x20	BBH4.100.043.070.00R	BBH4.100.043.070.00L
12	43	70	10x20	BBH4.120.043.070.00R	BBH4.120.043.070.00L
14	43	70	10x20	BBH4.140.043.070.00R	BBH4.140.043.070.00L
15	43	70	10x20	BBH4.150.043.070.00R	BBH4.150.043.070.00L

TBH1 for panels with maximum 20 mm in thickness

D mm	l mm	L mm	S mm	ARTICLE RH	ARTICLE LH
5	27	57,5	10x26	TBH1.050.027.057.01R	TBH1.050.027.057.01L
8	27	57,5	10x26	TBH1.080.027.057.01R	TBH1.080.027.057.01L
10	27	57,5	10x26	TBH1.100.027.057.01R	TBH1.100.027.057.01L

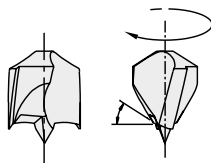
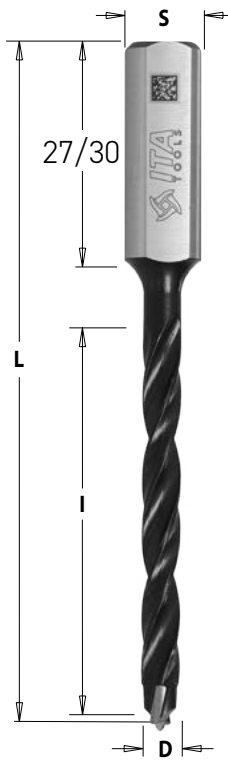
TBH2 for panels with maximum 25-30 mm in thickness

D mm	l mm	L mm	S mm	ARTICLE RH	ARTICLE LH
5	35	70	10x26	TBH2.050.030.070.01R	TBH2.050.030.070.01L
8	35	70	10x26	TBH2.080.030.070.01R	TBH2.080.030.070.01L
10	35	70	10x26	TBH2.100.030.070.01R	TBH2.100.030.070.01L
12	35	70	10x26	TBH2.120.030.070.01R	TBH2.120.030.070.01L

Spare parts:

BBS1.M5.10	BBS1.M5.11

BBH8 | BBH9



Technical details:

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

Application:

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

BBH8

D mm	l mm	L mm	S mm	ARTICLE RH	ARTICLE LH
5	65	105	10x30	BBH8.050.065.105.12R	BBH8.050.065.105.12L
6	65	105	10x30	BBH8.060.065.105.12R	BBH8.060.065.105.12L
7	65	105	10x30	BBH8.070.065.105.12R	BBH8.070.065.105.12L
8	65	105	10x30	BBH8.080.065.105.12R	BBH8.080.065.105.12L
10	65	105	10x30	BBH8.100.065.105.12R	BBH8.100.065.105.12L
12	65	105	10x30	BBH8.120.065.105.12R	BBH8.120.065.105.12L

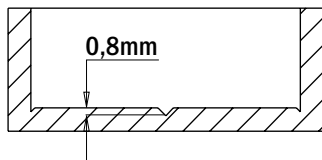
BBH9

D mm	l mm	L mm	S mm	ARTICLE RH	ARTICLE LH
5	50	85	10x27	BBH9.050.050.085.11R	BBH9.050.050.085.11L
6	50	85	10x27	BBH9.060.050.085.11R	BBH9.060.050.085.11L
7	50	85	10x27	BBH9.070.050.085.11R	BBH9.070.050.085.11L
8	50	85	10x27	BBH9.080.050.085.11R	BBH9.080.050.085.11L
10	50	85	10x27	BBH9.100.050.085.11R	BBH9.100.050.085.11L
12	50	85	10x27	BBH9.120.050.085.11R	BBH9.120.050.085.11L

Spare parts:

BBS1.M5.10	BBS1.M5.11

HBH1 | HBH2



Technical details:

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

Application:

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

HBH1

D mm	L mm	S mm	ARTICLE RH	ARTICLE LH
15	57,5	10x26	HBH1.150.057.1R	HBH1.150.057.1L
20	57,5	10x26	HBH1.200.057.1R	HBH1.200.057.1L
25	57,5	10x26	HBH1.250.057.1R	HBH1.250.057.1L
30	57,5	10x26	HBH1.300.057.1R	HBH1.300.057.1L
35	57,5	10x26	HBH1.350.057.1R	HBH1.350.057.1L
40	57,5	10x26	HBH1.400.057.1R	HBH1.400.057.1L

HBH2

D mm	L mm	S mm	ARTICLE RH	ARTICLE LH
15	70	10x26	HBH2.150.070.1R	HBH2.150.070.1L
20	70	10x26	HBH2.200.070.1R	HBH2.200.070.1L
25	70	10x26	HBH2.250.070.1R	HBH2.250.070.1L
30	70	10x26	HBH2.300.070.1R	HBH2.300.070.1L
35	70	10x26	HBH2.350.070.1R	HBH2.350.070.1L
40	70	10x26	HBH2.400.070.1R	HBH2.400.070.1L

Spare parts:

BBS1.M5.10	BBS1.M5.11

VHM and PCD Tools for Facades - Materials and Tools



Aluminum Plates

Material available in various sizes and thicknesses. Hot and cold rolled plates, which allows them to maintain their excellent parameters. Aluminum plates are characterized primarily by ease of processing.



Composite Board AL/PE/AL

Material characterized by lightness, stiffness and durability. They are made of two layers of aluminum with a thickness of 0.3 - 0.5 mm, connected by a core made of low-density polyethylene. Materials with names such as **ALUCOBOND®**, **DIBOND®**, **STACBOND®**, **PLABOND®**



Composite Board A2

Material characterized by lightness, stiffness and durability. They are made of two layers of aluminum with a thickness of 0.3 - 0.5 mm, connected by a non-flammable mineral core. Materials with names such as **ETALBOND®A2**, **QBOND®A2**



High Pressure Laminate

Laminate produced under high pressure. This type of boards are made of several or a dozen or so layers of paper impregnated with resin. Under great pressure and high temperature, an extremely resistant material with very good visual properties is created.

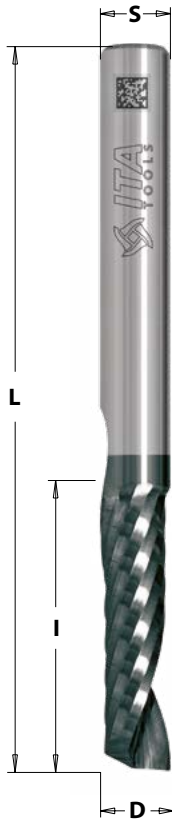


Fiber Cement Board

Fiber-cement boards are made of cement, minerals, cellulose fibers and fillers. During the production process, thin layers of material are placed on top of each other and then, after completing the slow hardening process, very tightly compressed.



SP01HR
HC Coating
 positive

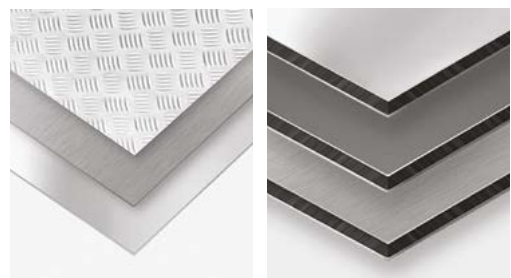


Technical details:

- Single blade cutter, positive,
- Perfect finishing of cutting edge - the polished chip groove
- Chip discharge upward
- Special type of carbide - increased tool life
- HC coating prevents the material from sticking and increases its tool service life
- Spiral angle 30°

Application:

For cutting, grooving and milling in aluminum, composite board AL/PE/AL, Dibond® composite, an alternative to plastics processing. Designed for use on CNC machines.



ALUMINUM
Work parameters:

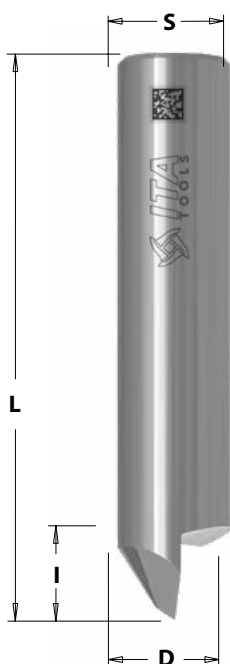
- RPM 16 000 - 24 000
- feed 0,8 - 2 m/min

COMPOSITE BOARDS
Work parameters:

- RPM 16 000 - 24 000
- feed 3 - 6 m/min

D mm	I mm	L mm	S mm	Z	ARTICLE
3	6	60	6	1	SP01.03.006.060.06HR
4	8	60	6	1	SP01.04.008.060.06HR
6	12	60	6	1	SP01.06.012.060.06HR
8	12	60	8	1	SP01.08.012.060.08HR

FVH



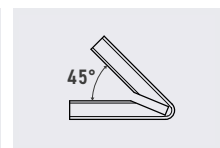
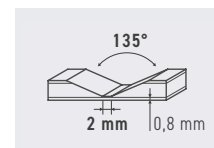
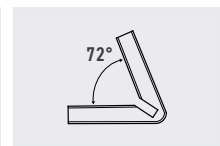
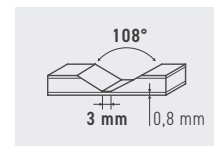
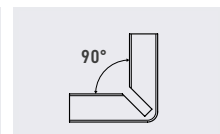
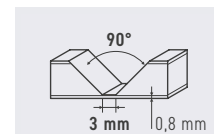
Technical details:

- Dibond bend cutter, 3 different types: V-90, V-90 (1,8mm), 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	D ₁ mm	I mm	L mm	S mm	α	ARTICLE
16	3	15	60	12	90°	FVH.16.015.060.12Ra1
16	3	15	60	12	108°	FVH.16.015.060.12Ra2
18	2	15	60	12	135°	FVH.18.015.060.12Ra3



Work parameters:

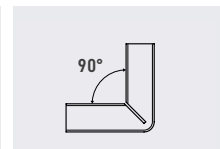
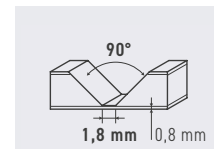
- RPM 20 000 - 22 000
- feed 4 - 8 m/min

Dibond bend cutter Z1, 1,8 mm:

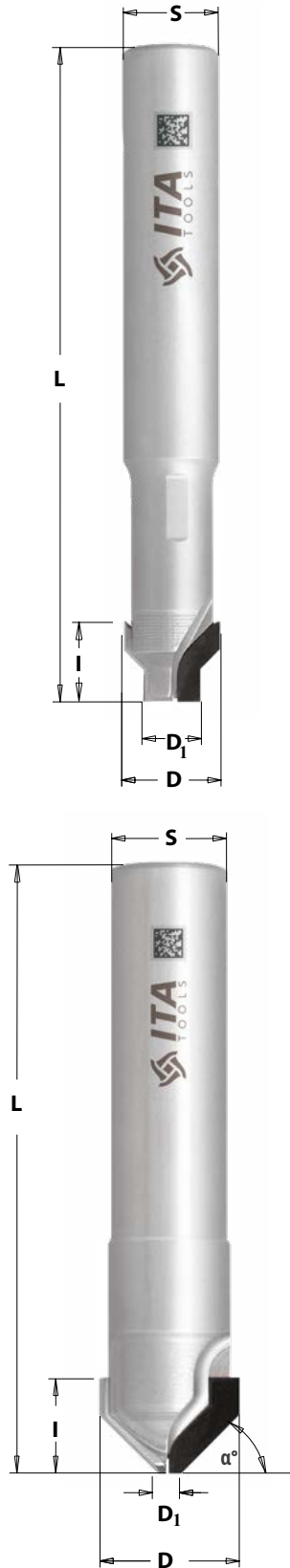
D mm	D ₁ mm	I mm	L mm	S mm	α	ARTICLE
10	1,8	4	50	10	90°	FVH.10.004.050.10Ra1

Work parameters:

- RPM 20 000 - 22 000
- feed 4 - 8 m/min



FDT | FDH



Technical details:

- Full double PCD tips,
- Body made from stainless steel > 28 HRC
- Approval class of shank H6
- The shank surface roughness Ra $\leq 0,3 \mu\text{m}$
- Height of PCD tip 4 mm
- Can be resharpened (3-4 times)

Application:

For cutting, grooving and milling in aluminum, composite board A2 Etalbond® A2 and for making bends in 90°. Designed for use on CNC machines.



Advantages:

Excellent finish of machining elements and quiet work.

FDT for Cutting:

D mm	D ₁ mm	I mm	L mm	S mm	α	Z	ARTICLE
12	6	6	80	12	45°	2	FDT.12.006.12.1SR
12	7	6,5	80	12	45°	2	FDT.12.006.12.0SR

Work parameters:

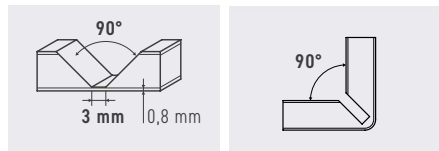
- RPM 18 000 - 22 000
- feed 4 - 6 m/min

FDH for Bending:

D mm	D ₁ mm	I mm	L mm	S mm	α	Z	ARTICLE
12	2	5	55	12	45°	2	FDH.12.005.12.1SR
18	3	7,75	50	16	45°	2	FDH.18.007.16.0SR

Work parameters:

- RPM 20 000 - 22 000
- feed 4 - 8 m/min



SY26XR 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
- NaDia coating prevents the material from sticking and increases durability of tools
- Cutting, grooving

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
4	15	60	4	SY26.04.015.060.04XR
6	15	60	6	SY26.06.015.060.06XR
8	15	60	8	SY26.08.015.060.08XR
10	15	60	10	SY26.10.015.060.10XR

Work parameters:

- RPM 16,000 - 18,000
- feed 2 - 4 m/min



DTS/DT3

positive-negative-straight



Technical details:

- Full double PCD tips or full triple PCD tips, positive-negative / positive-negative-straight
- Chip discharge sideways
- Body made from DENSIMET®
- PCD tip at the bottom to drill
- Approval class of shank H6
- The shank surface roughness Ra $\leq 0,3 \mu\text{m}$
- Height of PCD tip 3,5 mm
- Can be resharpened (3-4 times)

Application:

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

Advantages:

High wear resistance during processing in hard materials. Extended tool life and higher machining quality. Perfect chip ejection, excellent finish of the working edge and quiet work.

D mm	I mm	L mm	S mm	Z	ARTICLE
10	20	65	12	2	DTS.10.020.12.0DR
12	20	66	12	2	DTS.12.020.12.0DR
12	15	70	12	3	DT3.12.015.12.0DR

Work parameters:

- RPM 16 000 - 20 000
- feed 4 - 9 m/min



CNR
positive-negative



Technical details:

- Spherical multi-edge geometry, positive-negative
- Prefect roughing of cutting edge
- Chip discharge sideway
- Version of the tip - CNR - rosette
- 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, fiber cement board. Designed for use on CNC machines.

Work parameters:

- **RPM 6 000 - 16 000**
- **feed 0,8 - 3 m/min**



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

DT1/2/3/5



Technical details:

- PCD tips,
- Body made from stainless steel > 28 HRC
- Approval class of shank H6
- The shank surface roughness Ra $\leq 0,3 \mu\text{m}$
- Can be resharpened (3-4 times)

Application:

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

Work parameters:

- RPM 10 000 - 18 000
- feed 4 - 8 m/min



D mm	I mm	I ₂ mm	L mm	S mm	Z	PCD H mm	ARTICLE
6	11	-	50	6	1	3	DT1.06.011.06.0MR
12	5	-	56	12	2	2,5	DT2.12.005.12.0SR
12	15	35	85	12	3	3	DT3.12.015.12.0SR
16	10	90	130	16	5	3	DT5.16.010.16.2SR
18	22	-	100	20	5	3	DT5.18.022.20.0SR
20	25	50	90	20	5	3	DT5.20.025.20.0SR

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