

Polycrystalline Diamond Tools (PCD) New - DIMAR PCD Diamond Tools

Dimar now offers a great variety of diamond cutting tools (PCD) for a variety of materials and applications:
Saw blades | CNC | Cutters

- Higher cutting quality
- Higher speed rate
- Ideal for automation and serial production
- Longer tool life and reduction in setup times
- Reduction of machine idle time

Diamond is one of the hardest natural materials on earth; much harder than corundum and silicon carbide. Diamond also has high strength, good wear resistance, and a low friction coefficient. **Polycrystalline Diamond (PCD)** consists of varying sized synthetic diamond particles sintered together under extreme heat and pressure. The result is an incredibly hard, wear resistant material with exceptional thermal capabilities. What this means for you is exceptional tool life when used in the proper applications.

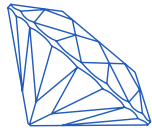
Diamond Tools (PCD): A selection of quality PCD tools for CNC operations. High durability, long-life cutting quality and reliability. on man-made wood boards, plastic, solid surfaces, hard and soft wood.



PCD will not work in all applications. One of the weaknesses of PCD is that it is more brittle than other materials. Although advancements have been made in PCD production methods and much more impact resistant grades are available, careful considerations must be taken into account before using PCD.

The diamond cutting edges make them last for extended periods before replacement is needed. High volume processes, tight tolerances, and highly abrasive processes are ideal for diamond tooling.

Polycrystalline Diamond (PCD) Tools are known for their fracture toughness and thermal stability. The tips or edges of machining and cutting tools are bonded with synthetic diamond micrograins to create tools with cutting tips harder and tougher than natural diamonds. Ideal for applications where there are high volume processes, tight tolerances and highly abrasive processes.



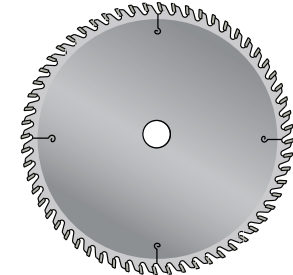
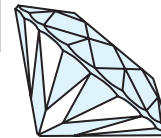
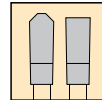
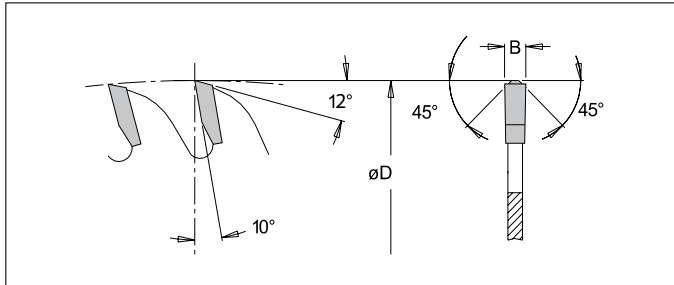
Saw Blades

PCD - Saw Blades TCG (Metric)

NEW

Properties: High efficiency cutting saw blade. Diamond height H=4.0mm. For stationary, portable and CNC machines.

Application: Suitable for homogeneous, abrasive materials such as Trespa, Max, Corian, plastics, MDF, chipboard, etc.



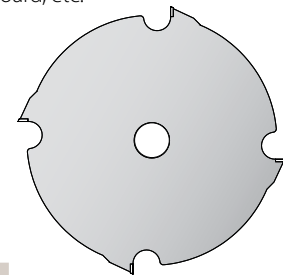
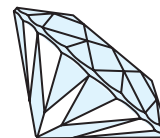
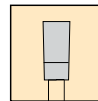
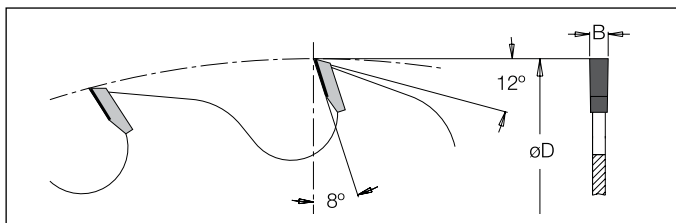
Tool no.	Dia.	Teeth	Kerf	H	Bore	Form
2715.251.30	250mm	60	.126" (3.2mm)	4mm	30mm	TCG
2715.301.31	300mm	60	.126" (3.2mm)	4mm	30mm	TCG
2715.301.30	300mm	72	.126" (3.2mm)	4mm	30mm	TCG
2715.303.30	300mm	96	.126" (3.2mm)	4mm	30mm	TCG
2715.350.30	350mm	84	.138" (3.5mm)	4mm	30mm	TCG
2715.351.30	350mm	108	.138" (3.5mm)	4mm	30mm	TCG

PCD - Saw Blades for Portable Machines (Metric)

NEW

Properties: High efficiency saw blade. Diamond height H=4.0mm. For portable machines.

Application: Suitable for homogeneous, abrasive materials such as Trespa, Max, Corian, plastics, MDF, chipboard, etc.



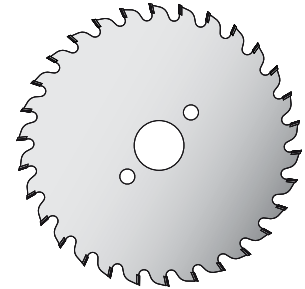
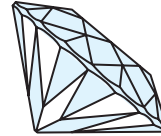
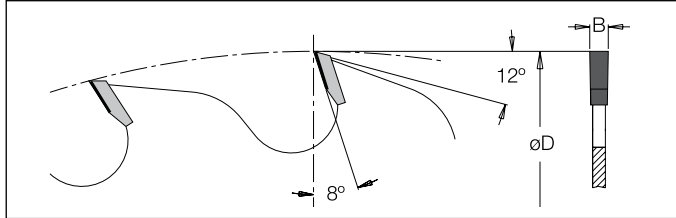
Tool no.	Dia.	Teeth	Kerf	H	Bore	Form
2814.160.20	160	4	.094" (2.4mm)	4	20	Flat
2814.160.21	160	8	.094" (2.4mm)	4	20	Flat
2814.190.20	190	4	.094" (2.4mm)	4	20	Flat
2814.190.30	190	4	.094" (2.4mm)	4	30	Flat
2814.190.21	190	8	.094" (2.4mm)	4	20	Flat
2814.190.31	190	8	.094" (2.4mm)	4	30	Flat
2814.216.31	216	8	.094" (2.4mm)	4	30	Flat
2814.250.30	250	6	.094" (2.4mm)	4	30	Flat
2814.250.31	250	12	.094" (2.4mm)	4	30	Flat

PCD - Scoring Saw Blades

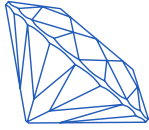
NEW

Properties: Scoring saw blade. Diamond height H=4.0mm. For stationary sawing machines with scoring unit.

Application: Suitable for homogeneous, abrasive coatings such as HPL, CPL, etc.



Tool no.	Dia.	Teeth	Kerf	H	Bore	Form
2833.120.22	120	18	3.35	4	22	Flat
2833.125.22	125	18	3.35	4	22	Flat
2833.120.20	120	24	3,1/4,3	4	20	Conical
2833.125.20	125	24	3,1/4,3	4	20	Conical
2832.120.20	120	12+12	2,8/3,6	4	20	ATB
2832.125.22	125	12+12	2,8/3,6	4	22	ATB
2833.125.45	125	24	4,4/5,2	4	45	Conical
2833.180.30	180	24	4,4-5,2	4	30	Conical
2833.180.45	180	36	4,8-5,6	4	45	Conical
2833.200.20	200	36	4,4/5,2	4	20	Conical
2833.200.45	200	36	4,4/5,2	4	45	Conical
2833.201.45	200	36	4,8/5,6	4	45	Conical
2833.202.45	200	36	5,8/6,6	4	45	Conical



Router Bit for CNC

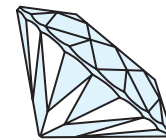
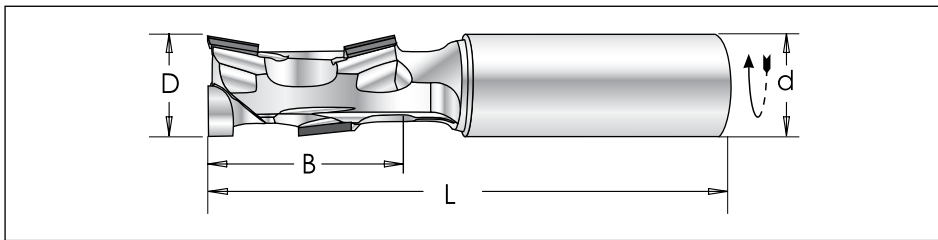


PCD - Eco Z1+1

NEW

Properties: Economical diamond router. Diamond height H=2.5 mm. 3 helicoidal wings, positive and negative cutters. Can be resharpened up to 2-3 times.

Application: Suitable for panels made of chipboard, coated, laminated and MDF.



Tool No..		Dia.	B	Tips	Plunge	Length	Shank
Right Hand Rotation	Left Hand Rotation						
6830.038.01	6830.138.01	3/8"	1"	3	HW	3"	3/8"
6830.012.01	6830.112.01	1/2"	1"	3	HW	3"	1/2"
6830.012114	6830.112114	1/2"	1-1/4"	4	HW	3-1/2"	1/2"
6830.058.01	6830.158.01	5/8"	1"	3	HW	3"	5/8"
6830.058158	6830.158158	5/8"	1-5/8"	5	HW	4"	5/8"
6830.034.01	6830.134.01	3/4"	1"	3	HW	3"	3/4"
6830.034158	6830.134158	3/4"	1-5/8"	5	HW	4"	3/4"

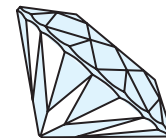
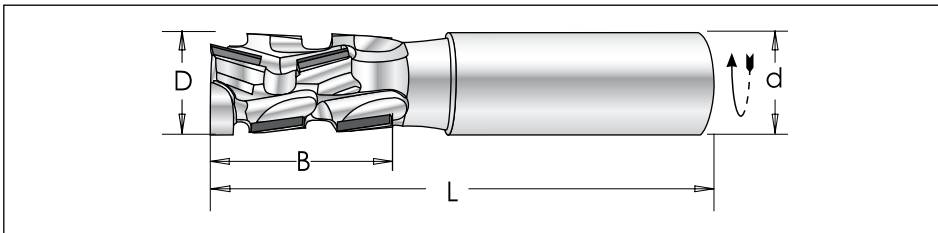


PCD - Eco Z2+1

NEW

Properties: Economical diamond router. Diamond height H=2.5 mm. 4 wings, 2 cutters engaged on all cutting points, positive and negative cutters. Can be resharpened up to 2-3 times.

Application: Suitable for panels made of chipboard, coated, laminated and MDF. Good finishing, good feed rate and low noise.



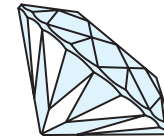
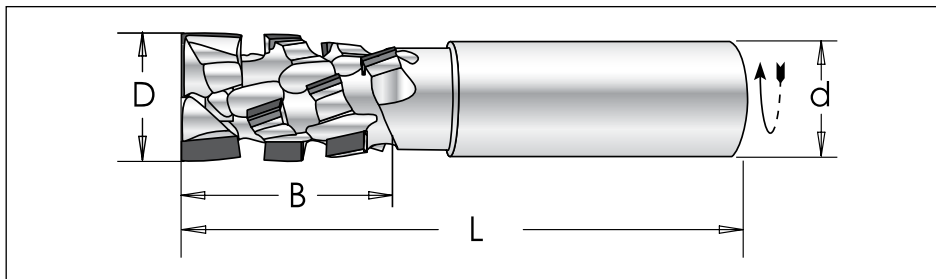
Tool No.		Dia.	B	Tips	Plunge	Length	Shank
Right Hand Rotation	Left Hand Rotation						
6832.012114	6832.112114	1/2"	1-1/4"	8	HW	3-1/2"	1/2"
6832.058.01	6832.158.01	5/8"	1"	6	HW	3"	5/8"
6832.058158	6832.158158	5/8"	1-5/8"	10	HW	4"	5/8"
6832.034.01	6832.134.01	3/4"	1"	6	HW	3"	3/4"
6832.034158	6832.134158	3/4"	1-5/8"	10	HW	4"	3/4"

PCD -Z2+1 Superior

NEW

Properties: Router with diamond height of $H=4.5\text{mm}$. 4 uninterrupted wings, 2 cutters engaged on all cutting points, positive and negative cutters. Can be resharpened up to 7-10 times.

Application: Suitable for panels made of chipboard, coated, laminated. Ideal for MDF. Good finishing, high feed rate and low noise, due to good chip removal.



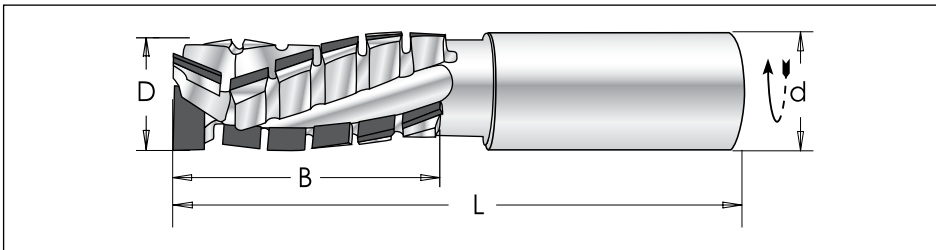
Tool No.		Dia.	B	Tips	Plunge	Length	Shank
Right Hand Rotation	Left Hand Rotation						
6833.222.32	6833.322.32	22mm	32mm	10	DP	92mm	20mm
6833.222.38	6833.322.38	22mm	38mm	12	DP	98mm	20mm
6833.222.43	6833.322.43	22mm	43.5mm	14	DP	103mm	20mm
6833.222.49	6833.322.49	22mm	49mm	16	DP	109mm	20mm
6833.222.54	6833.322.54	22mm	54mm	18	DP	115mm	20mm
6833.025.49	6833.125.49	25mm	49mm	16	DP	109mm	25mm
6833.025.55	6833.125.55	25mm	55mm	18	DP	115mm	25mm
6833.025.60	6833.125.60	25mm	60mm	20	DP	126mm	25mm
6833.025.65	6833.125.65	25mm	65mm	22	DP	126mm	25mm

PCD -Z3+1 Helical

NEW

Properties: Router with diamond height of $H=4.5\text{mm}$. 3 uninterrupted helical wings, 3 cutters engaged on all cutting points, positive and negative cutters. Can be resharpened up to 7-10 times.

Application: Suitable for panels made of chipboard, coated, laminated and MDF. Excellent finishing, high feed rate and low noise, due to good chip removal.



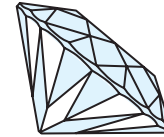
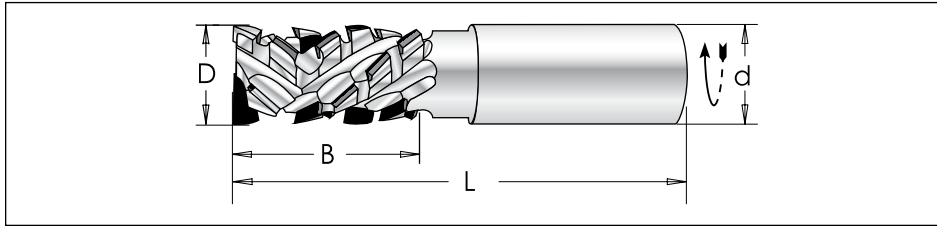
Tool No		Dia.	B	Tips	Plunge	Length	Shank
Right Hand Rotation	Left Hand Rotation						
6834.220.29	6834.320.29	20mm	29mm	11	PCD	95mm	20mm
6834.222.44	6834.322.44	20mm	44mm	17	PCD	105mm	20mm
6834.025.37	6834.125.37	25mm	37mm	14	PCD	100mm	25mm
6834.025.52	6834.125.52	25mm	52mm	20	PCD	115mm	25mm
6834.025.67	6834.125.67	25mm	67mm	26	PCD	130mm	25mm

PCD - 45° 4 Wings

NEW

Properties: Router with diamond height of H=4.5mm. 4 uninterrupted helical wings, 2 cutters engaged on all cutting points, axial cut 45°, plug PCD tip, positive and negative cutters.

Application: Ideal for panels made of chipboard and MDF, with coatings or thin paper coverage. Excellent finishing due to special design. High feed rate and low noise due to good chip removal.



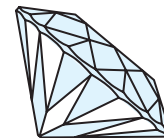
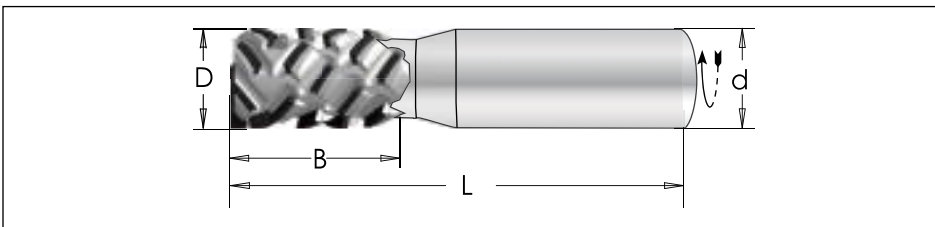
Tool No.		Dia.	B	Tips	Plunge	Length	Shank
Right Hand Rotation	Left Hand Rotation						
6835.222.38	6835.322.38	22mm	38mm	16+1	PCD	100mm	20mm
6835.025.38	6835.125.38	25mm	38mm	16+1	PCD	100mm	25mm
6835.025.46	6835.125.46	25mm	46mm	20+1	PCD	110mm	25mm
6835.025.54	6835.125.54	25mm	54mm	24+1	PCD	125mm	25mm
6835.025.63	6835.125.63	25mm	63mm	28+1	PCD	125mm	25mm
6835.025.71	6835.125.71	25mm	71mm	32+1	PCD	140mm	25mm

PCD - 54° 4 Wings

NEW

Properties: Router with diamond height of H=4.5 mm. 6 uninterrupted wings, 2 cutters engaged on all cutting points, axial cut 54°, plug PCD tip, positive and negative cutters.

Application: Ideal for various materials such as chipboard, MFD, HDF, with coatings or thin paper coverage. Excellent finishing due to special design. Very high feed rate and low noise due to good chip removal.



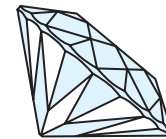
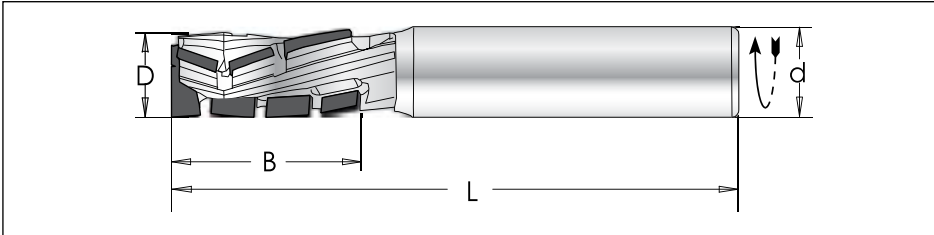
Tool No		Dia	B	Tips	Plunge	Length	Shank
Right Hand Rotation	Left Hand Rotation						
6837.225.30	6837.325.30	25mm	30mm	18+1	PCD	95mm	20mm
6837.025.30	6837.125.30	25mm	30mm	18+2	PCD	95mm	25mm
6837.225.40	6837.325.40	25mm	40mm	24+1	PCD	105mm	20mm
6837.025.40	6837.125.40	25mm	40mm	24+2	PCD	105mm	25mm
6837.225.49	6837.325.49	25mm	49.5mm	30+1	PCD	115mm	20mm
6837.025.49	6837.125.49	25mm	49.5mm	30+2	PCD	115mm	25mm
6837.225.59	6837.325.59	25mm	59mm	36+1	PCD	125mm	20mm
6837.025.59	6837.125.59	25mm	59mm	36+2	PCD	125mm	25mm

PCD - Nesting Heavy Steel - 2+1 Wings

NEW

Properties: Router bit for nesting with diamond height of H=3.0mm. 3 helicoidal wings. Can be resharpened up to 2-3 times. 2 engaged cutters, positive and negative. 3 engaged cutters on top and bottom.

Application: Suitable for chipboard panels laminated, coated and MDF. High feed rate, good chip removal, excellent finishing and low noise.



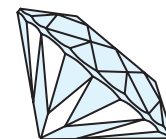
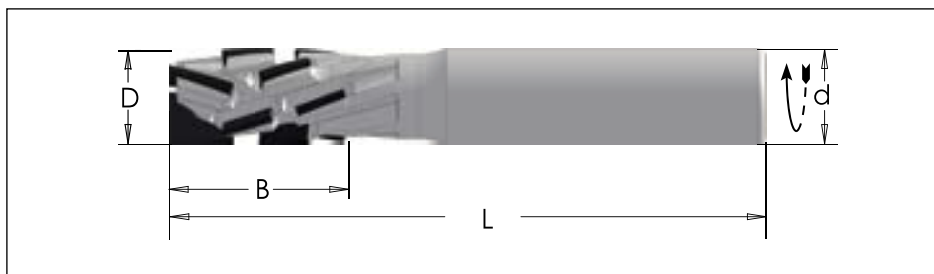
Tool No	Dia	B	Tips	Plunge	Length	Shank	n	m/min.
6838.012.01	1/2"	1"	9	PCD	3"	1/2"	24,000	6-8
6838.012114	1/2"	1-1/4"	12	PCD	3-1/2"	1/2"	24,000	6-8

PCD - Nesting Heavy Steel 3+3+1 Wings

NEW

Properties: Router bit for nesting with diamond height H=3.0mm. 6 helicoidal wings. Can be resharpened up to 2-3 times. 3 engaged cutters, mainly positive. 3 engaged cutters on top and bottom.

Application: Suitable for chipboard panels, laminated, coated and MDF. High feed rate, good chip removal, excellent finishing and low noise.



Tool No	Dia	B	Tips	Plunge	Length	Shank	n	m/min.
6842.012.01	1/2"	1"	12	PCD	3"	1/2"	24,000	10-12
6842.012114	1/2"	1-1/4"	18	PCD	3-1/2"	1/2"	24,000	10-12
6842.058114*	5/8"	1-1/4"	18	PCD	4"	5/8"	24,000	10-12

* steel

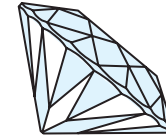
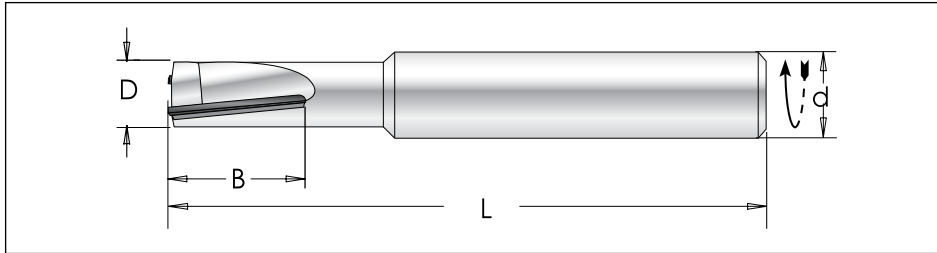


PCD - Grooving Router Cutter Z1

NEW

Properties: Cutter with single tip Z=1 working as grooving bit. Made with HW body ideal for making canals. Negative axial angle. Can be resharpened up to 2-3 times.

Application: Suitable for raw, coated and laminated chipboard, MDF and plywood, plastic, Corian and polymers.



Tool No.	Dia	B	Plunge	Length	Shank
6844.014.12	1/4"	1/2"	DP	2"	1/4"
6844.038.58	3/8"	5/8"	DP	2-1/2"	3/8"
6844.012.78	1/2"	7/8"	DP	3"	1/2"

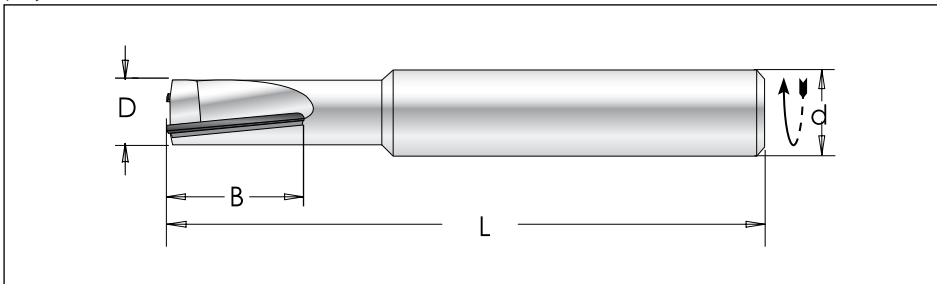


PCD - Grooving Router Cutter Z2

NEW

Properties: Cutter with Z=2 working as grooving bit. Made with HW body ideal for making canals. Negative axial angle. It can be resharpened up to 2-3 times.

Application: Suitable for raw, coated and laminated chipboard, MDF and plywood, plastic, Corian and polymers.



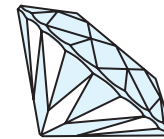
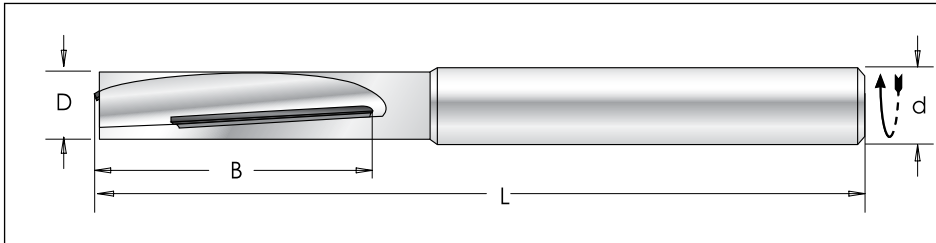
Tool No.	Dia	B	Plunge	Length	Shank	n
6845.014.12	1/4"	1/2"	DP	2"	1/4"	18,000
6845.038.58	3/8"	5/8"	DP	2-1/2"	3/8"	18,000
6845.012.78	1/2"	7/8"	DP	3"	1/2"	18,000

PCD - Grooving Positive & Negative Z1+1

NEW

Properties: Cutter with Z=1+1 positive and negative. Made with HW body ideal for making canals. Can be resharpened up to 2-3 times.

Application: Excellent finishing top and bottom for chipboard and MDF.



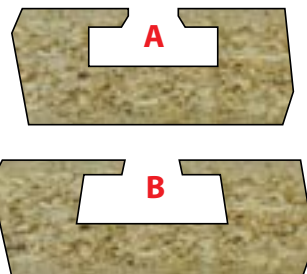
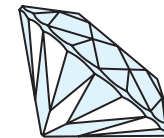
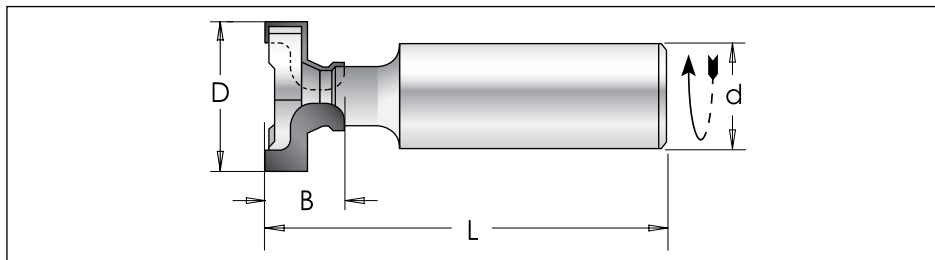
Tool No.	Dia	B	Plunge	Length	Shank
6846.080.28	8mm	28mm	DP	80mm	8mm
6846.010.28	10mm	28mm	DP	80mm	10mm
6846.012.28	12mm	28mm	DP	80mm	12mm

PCD - T-Slot Cutters for Aluminum Profile Grooving

NEW

Properties: T-slot cutter in diamond Z2+2. Can be resharpened up to 2-3 times.

Application: Ideal for aluminum profile grooving. Suitable for chipboard panels and MDF. Excellent finishing of the panel. Low noise.



Tool No.	Dia	B	Tips	Length	Shank
A 6850.114.34	1-1/4"	3/4"	2+2	2-1/2"	1/2"
A 6850.138.34	1-3/8"	3/4"	2+1	2-1/2"	1/2"
A 6850.138.78	1-3/8"	7/8"	2+2	2-1/2"	1/2"
B 6850.138.12	1-3/8"	1/2"	2+2	2-3/8"	1/2"
B 6850.114.12	1-1/4"	1/2"	2+1	2-3/8"	1/2"

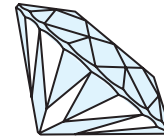
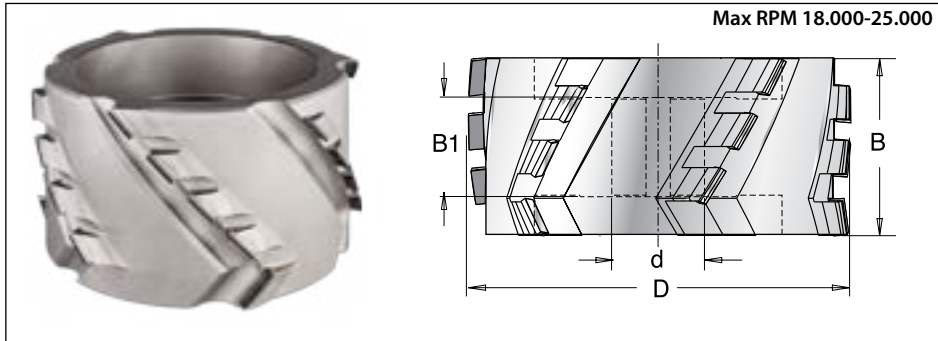


PCD - Jointing Cutterheads for Edge Bending Machines

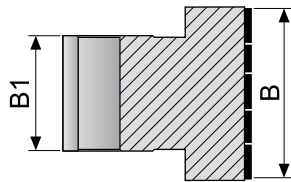
NEW

Properties: Anti-chipping cutter heads. Jointing cutter for edge bending machines or for squaring machines. Fits most common machines in the market. Diamond H3 Axial 30° design for better finishing and tool life. Feedwise and counter feed rotation.

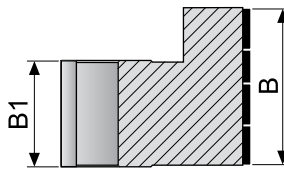
Application: Suitable for working on chipboard, laminated, veneered, coated and MDF. Optimized unloading for faster chip discharge. Excellent finishing of the panel. Low noise.



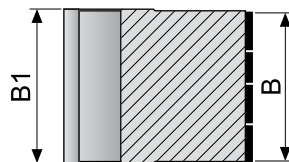
Tool No.		Dia.	B	B1	Teeth	Type	Axial	ød	Machine
Right Hand Rotation	Left Hand Rotation								
3831.100.34	3831.101.34	100mm	34mm	36mm	3+3	C	A2	30DKN	IMA, Brendt
3831.100.48	3831.101.48	100mm	48mm	40.6mm	3+3	B	A2	30DKN	IMA, Brendt
3831.125.43	3831.126.43	125mm	43mm	40mm	3+3	A	A1	30DKN	Homag
3831.125.63	3831.126.63	125mm	63mm	40mm	3+3	A	A1	30DKN	Homag
3831.125.45	3831.126.45	125mm	45mm	40mm	3+3	A	A2	30DKN	Biesse
3831.125.48	3831.126.48	125mm	48mm	42mm	3+3	A	A2	30DKN	IMA
3831.125.64	3831.126.64	125mm	64mm	40mm	3+3	A	A2	30DKN	IMA



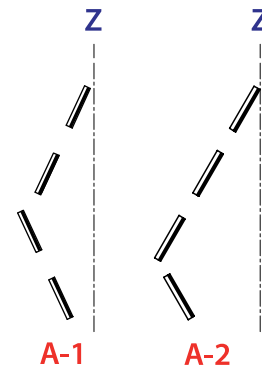
Type A



Type B



Type C



A-1

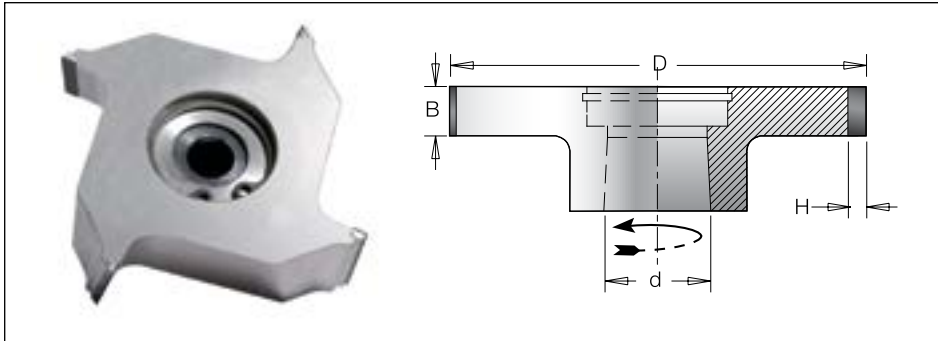
A-2

PCD - Straight Trimming Cutters

NEW

Properties: Edge bending / grooving cutter blocks for working on glue edges for flush trimming, chamfering and profiling. Diamond in H3. Fits most common machines in the market. Counter feed machining.

Application: Suitable for chipboard panels laminated, coated, veneered, MDF. Optimized unloading for faster chip removal. Excellent finishing due to HSK holders for a perfect fit with the drive shaft, achieving best quality.



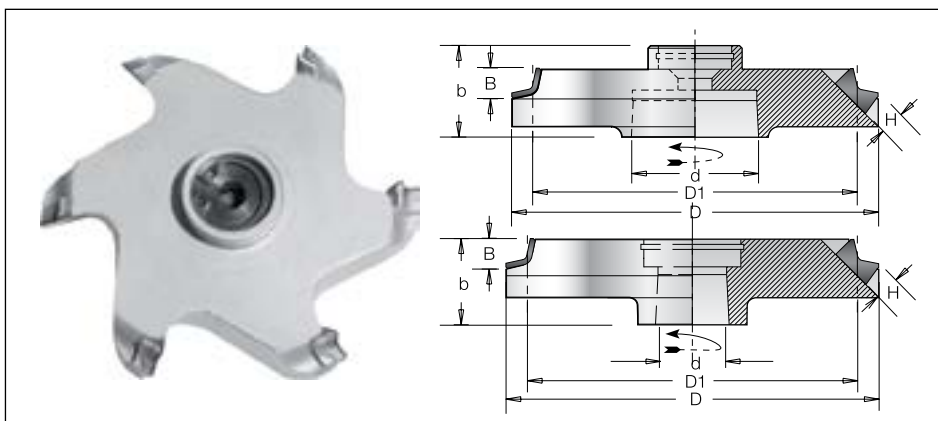
Tool No.		Dia.	B	Teeth	H	ød
Right Hand Rotation	Left Hand Rotation					
3810.074.08	3810.174.08	70mm	8mm	4	3mm	HSK25
3810.076.08	3810.176.08	70mm	8mm	6	3mm	HSK25
3810.074.15	3810.174.15	70mm	15mm	4	3mm	HSK25
3810.076.15	3810.176.15	70mm	15mm	6	3mm	HSK25
3810.074.06	3810.174.06	73mm	6mm	4	3mm	HSK25
3810.076.06	3810.176.06	73mm	6mm	6	3mm	HSK25

PCD - Radius Trimming Cutters

NEW

Properties: Radius trimming cutters for making radius edges. Diamond height H=3.0mm. Counter feed machining.

Application: Suitable for chipboard panels laminated, coated, veneered, MDF. Optimized unloading for faster chip removal. Excellent finishing due to HSK holders for a perfect fit with the drive shaft, achieving best quality.



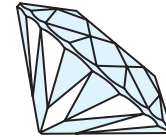
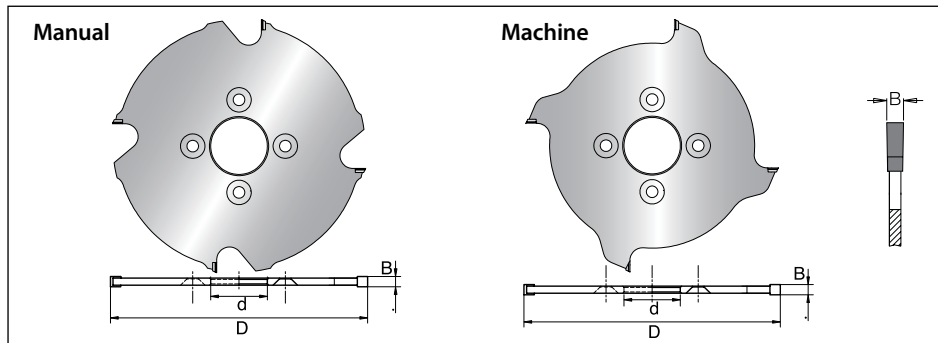
Tool No.		Dia.	b	B	Teeth	H	ød
Right Hand Rotation	Left Hand Rotation						
3910.078.20	3910.178.20	78mm	23mm	2mm	4	3mm	HSK25
3920.078.20	3920.178.20	78mm	23mm	2mm	6	3mm	HSK25
3910.079.20	3910.179.20	79mm	23mm	2mm	4	3mm	HSK25
3920.079.20	3920.179.20	79mm	23mm	2mm	6	3mm	HSK25
3910.070.20	3910.170.20	70mm	17.5mm	2mm	4	3mm	HSK25
3920.070.20	3920.170.20	70mm	17.5mm	2mm	6	3mm	HSK25
3910.070.30	3910.170.30	70mm	17.5mm	3mm	4	3mm	HSK25
3920.070.30	3920.170.30	70mm	17.5mm	3mm	6	3mm	HSK25

PCD - Biscuit Grooving Cutter for Lamello Machines

NEW

Properties: Grooving cutter to produce biscuit grooves. Diamond height of H=4.0mm.

Application: Suitable for portable biscuit grooving machines such as Lamello or Top 20.



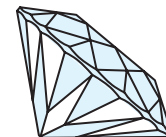
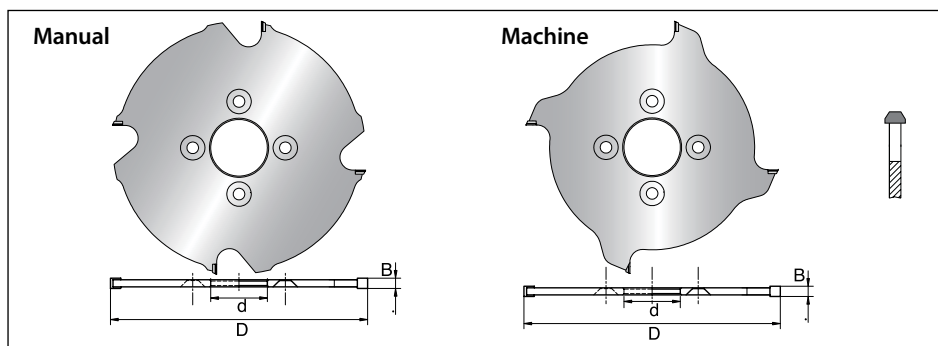
Tool No	Dia	B	Teeth	Form	H	d
3810.100.22	100mm	3.97mm	3	Flat	4mm	22+4
3810.101.22	100mm	3.97mm	4	Flat	4mm	22+4
3810.102.22	100mm	3.97mm	6	Flat	4mm	22+4

PCD - Profile Grooving Cutter for Lamello Profile Connectors

NEW

Properties: Profile grooving cutter to produce profile grooves. Diamond height H=3.0mm.

Application: Suitable for portable profile grooving machines such as Lamello P System and CNC machines.



Tool No	Dia.	B	Teeth	Form	H	d
3810.107.22	100,4 MAN	7mm	3	Lamello P System	3mm	22
3810.117.22	100,4 MAN	7mm	6	Lamello P System	3mm	22
3810.107.30	100,4 CNC	7mm	3	Lamello P System	3mm	30
3810.117.30	100,4 CNC	7mm	6	Lamello P System	3mm	30