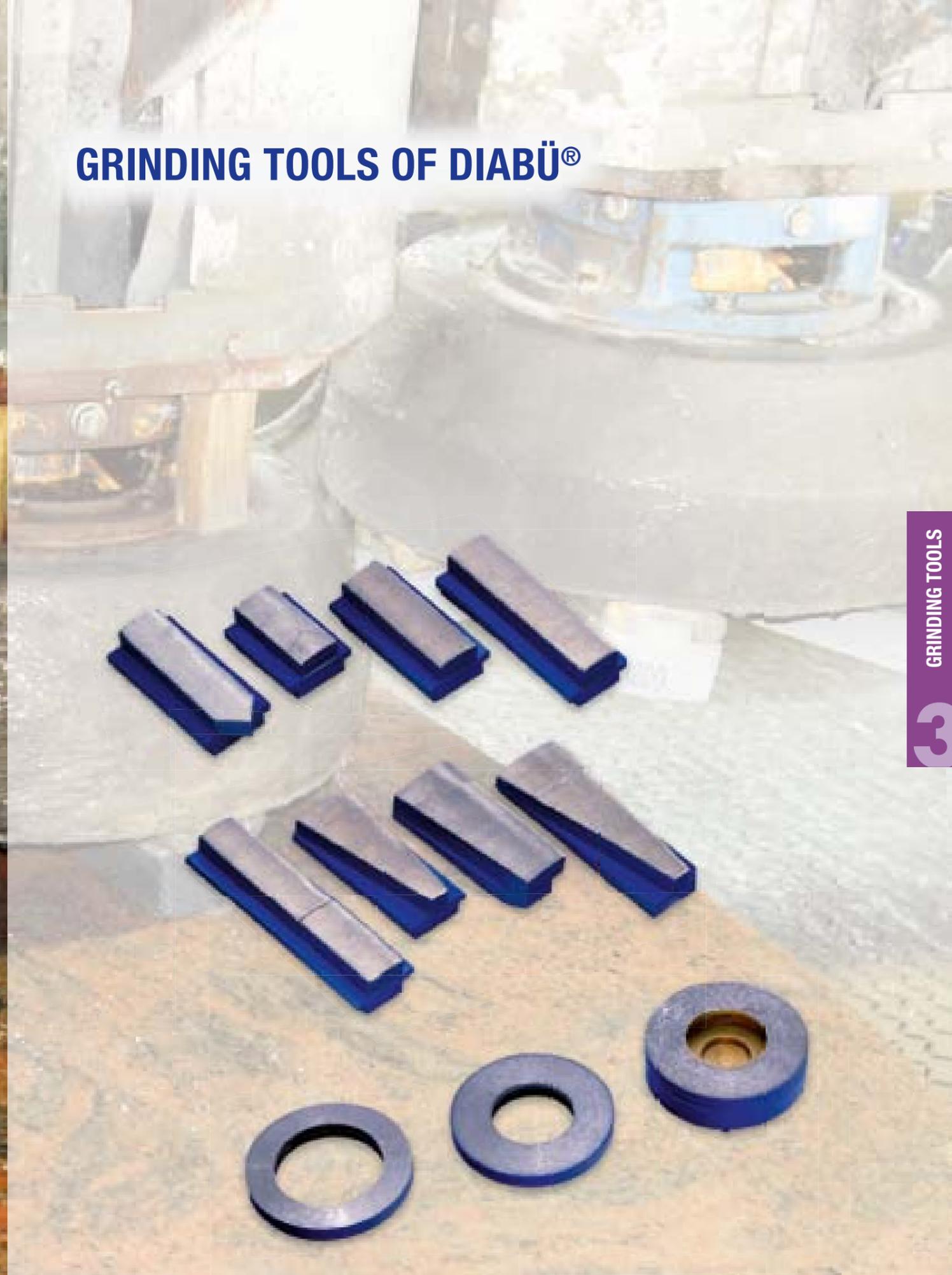




GRINDING TOOLS OF DIABÜ®



GRINDING TOOLS



Diamond Grinding Bricks for grinding lines and grinding machines

Rough and medium grit

Grinding Brick			
Length (mm)	Width (mm)	Height (mm)	Used on
80	36	6; 10; 15; 20	Fickert
120	36	6; 10; 15; 20	Fickert
140	36	6; 10; 15; 20	Fickert, F&W, Thibaut
160	36	6; 10; 15; 20	Fickert, Meyer
200	36	6; 10; 15; 20	Fickert
130	55	6; 10; 15; 20	Universal
135	58 / 18	6; 10; 15; 20	Universal
140	60 / 45	6; 10; 15; 20	Universal
175	70 / 18	6; 10; 15; 20	Thibaut, F&W
175	70 / 45	6; 10; 15; 20	Thibaut, F&W

Other tool bodies on request.



Grit table

DIABÜ®	SIC	Colour Code
DIAFIX 16	16	White
DIAFIX 20	16 – 20	Black
DIAFIX 30	24 – 30	DIABÜ®-Blue
DIAFIX 40	30 – 36	Brown
DIAFIX 50	36 – 45	Redbrown
DIAFIX 60	46 – 52	Light Blue
DIAFIX 70	80 – 100	Grey
DIAFIX 85	90 – 110	Red
DIAFIX 100	100 – 120	Orange
DIAFIX 120	120	Yellow
DIAFIX 140	140	Green

Diamond Grinding Planets for grinding machines

Surface- and edge polishing machines, express heads

Rough and medium grit

Grinding Ring			
Ø Outside (mm)	Ø Inside (mm)	Height (mm)	Tool Bodies
100	50	4; 6; 8; 10	Bloc, M30, SF, FRF, Terzago
100	65	4; 6; 8; 10	Bloc, M30, SF, FRF, Terzago
120	30	4; 6; 8; 10	Bloc, M30, SF, FRF, Terzago
125	75	4; 6; 8; 10	Bloc, M30, SF, FRF, Terzago
130	30	4; 6; 8; 10	Bloc, M30, SF, FRF, Terzago
130	80	4; 6; 8; 10	Bloc, M30, SF, FRF, Terzago
160	140	4; 6; 8; 10	Bloc, M30, SF, FRF, Terzago

Other tool bodies on request.

Grit table

DIABÜ®	SIC	Colour Code	Used on
DIAFIX 20-7	16 – 20	Black	rough grit - surface polishing on single head polishers and grinding lines
DIAFIX 20-8	16 – 20	Light Blue	rough grit - radial arm polishers - single head polishers
DIAFIX 20-9	16 – 20	DIABÜ®-Blue	rough grit - soft type, especially for edge polishing with low grinding pressure
DIAFIX 40	30 – 36	Brown	rough grit
DIAFIX 85	90 – 110	Red	medium grit

Please give the following details on your order:

Material	for example: Granite
Segment Height	for example: 10 mm
Grit	for example: DIAFIX 20
Type of the grinding head	for example: Breton
Tool body	for example: Bloc



Diamond Grinding Rolls for CNC contour grinding machines and radial arm polishers

Grinding and polishing with diamond to final gloss

Grinding Ring			
Ø Outside (mm)	Type	Grit (mm)	Height (mm)
100; 80	Segmented	Nr. 1	80; 160; 200; 240
100; 80	Sintered	Nr. 2	80; 160; 200; 240
100; 80	Ceravex	200	80; 160; 200; 240
100; 80	Ceravex	400	80; 160; 200; 240
100; 80	AG-Sheet	800	80; 160; 200; 240
100; 80	AG-Sheet	1500	80; 160; 200; 240
100; 80	AG-Sheet	3000	80; 160; 200; 240
100; 80	AG-Sheet	Polierer	80; 160; 200; 240

Special heights on request.
As an option galvanized rolls are available for No. 2 and No. 3



Advantages

- Complex contour grinding and polishing after the contour wire cut
- Efficient monument manufacturing
- Automated production is possible
- Re-tipping of the roll base bodies is possible
- Cost-efficient grinding procedure

Alternatively DIABÜ® reduced extremely the weight of the segmented pre-grinding rolls for the machining of profiled work pieces. This great weight reduction is possible by using now high grade construction plastic (Polyamid) as carrier material instead of conventional steel.

Our production demands a great deal on the concentric runout of the grinding rolls, so that we can achieve the highest standard of polishing quality. Furthermore we have a great reduced strain of the fixtures as well as the control rod. So your product quality will be increased and protect also your capital expenditures.

Arbors and clamping discs are available for all current and established roll grinding machines. Special sizes and special lengths are possible on request.

Please get in contact with us for a special quote as per your machine.





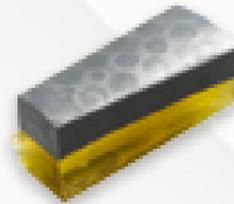
Ceravex Grinding Tools

Ceravex grinding tools have been developed, in order to replace conventional grinding tools by diamond tools with high durability regarding fine grit. These individual grits will be adapted to customers' request.



Ceravex Grinding Bricks

Grinding Brick			
Length (mm)	Width (mm)	Height (mm)	Used on
130	60 / 40	10; 20; 30	CO.MES.S, Breton, Thibaut, F&W
135	60 / 40	10; 20; 30	CO.MES.S, Breton, Thibaut, F&W
175	70 / 25	10; 20; 30	CO.MES.S, Breton, Thibaut, F&W



Ceravex Grinding Planets

Used for: Edging machines and external grinding

Grinding Ring			
Ø Outside (mm)	Ø Inside (mm)	Height (mm)	Tool Bodies
100	50	5; 10; 20	SF, Klett, Tornado, SF+IG M24
120	30	5; 10; 20	SF, Klett, Tornado, SF+IG M24
120	50	5; 10; 20	SF, Klett, Tornado, SF+IG M24
150	50	5; 10; 20	SF, Klett, Tornado, SF+IG M24



Ceravex Type „Frankfurt“ for Surface Grinding

Grinding Ring		
Length (mm)	Width (mm)	Height (mm)
105	108 / 80	10; 20; 30



Grit table

Grit available for all types
K60
K80
K120
K180
K220
K280
K320
K400
K800
K1000
Further grits on request

Please give the following details on your order:

Material for example: Granite
 Segment Height for example: 20 mm
 Grit for example: K120
 Tool for example: grinding planet
 Tool body for example: SF



Dry/Wet Diamond Grinding Cups

Type	Grinding Ring			
	Ø Outside (mm)	Ø Inside (mm)	Height (mm)	Radius (mm)
HT-Turbo	100	60	4	flat
	130	90	4	flat
	150	110	4	flat
HT-continuous ring (slot types see picture below)	100	50	3	flat
HT-Poly	100	50	3	flat
HT-Steel	100	50	3	flat
HT-Pyramid Cup	100	50	3	flat
HT-closed ring with radius	100	50	2	r=15
	100	50	2	r=30



Grit table

Nr.	Mesh	Colour Code
0++	25 / 30	Brown
0+	30 / 40	Black
0	40 / 50	Light Blue
1	60 / 80	DIABÜ®-Blue
2	140 / 170	Yellow
3	230 / 270	Green

Available Tool Bodies
Thread M14
Thread M24
SF-fastener
Tornado
Bore 22,2
SF - M14 Kombi



NEW: Diamond Grinding Cup in Light Construction

- The grinding cups are very slim and screwed with the corresponding tool body, very easy handling



Please give the following details on your order:

Material for example: Granite
 Type for example: HT-Turbo
 Grit for example: Nr 0++
 Tool body for example: M14



Dry/Wet DIAPADS

Type	Grinding Ring			Material
	Ø Outside (mm)	Strength (mm)	Application	
Premium (Pads also available in white for light materials)	75	3	Wet	Granite, Marble
	100	3	Wet	Granite, Marble
	125	3	Wet	Granite, Marble
	100	5	Wet	Granite, Marble
	125	5	Wet	Granite, Marble
Premium Dry	150	5	Wet	Granite, Marble
	200	10	Wet	Granite, Marble
	75	2,5	Dry	Granite, Marble
Premium Hybrid	100	2,5	Dry	Granite, Marble
	125	2,5	Dry	Granite, Marble
	100	3	Wet + Dry	Granite, Marble
Premium Engin	125	5	Wet + Dry	Granite, Marble
	100	3	Wet	Engineered Stone



Available Grits
#50
#100
#200
#400
#800
#1500
#3000

Available Tool Bodies
Inflexible hook-and-loop fastener
Flexible hook-and-loop fastener
Quick fastener



Perfect polishing also in only 4 steps

Type	Ø Outside (mm)	Application
Premium 4step wet	100	Wet
Premium 4step dry	100	Dry

Please give the following details on your order:

Material for example: Granite
 Type for example: Premium
 Diameter for example: 100 mm
 Grit for example: 1 set completely # 50-3000+Buff
 Tool Body for example: hook-and-loop fastener

Diamond Tools for processing on kitchen tops and bathroom basins – edges

Drain Board Milling Tools, usable on both sides

Ø Outside (mm)	Grinding Ring		Tool Bodies
	Ø Inside (mm)	Height (mm)	
53	40	10; 20	R 1/2"
60	47	10; 20	R 1/2"
100	85	10; 20	R 1/2"
150	135	10; 20	R 1/2"

Other tool bodies on request.



Drain Board Milling Tools, segmented, usable on both sides

Ø Outside (mm)	Segmented		Tool Bodies
	No. of Segments	Height (mm)	
80	12 + 12	7	R 1/2" / IG M14
87	12 + 12	7	R 1/2" / IG M14
95	14 + 14	7	R 1/2" / IG M14
120	16 + 16	7	R 1/2" / IG M14
150	16 + 16	7	R 1/2" / IG M14

Other tool bodies on request.



45° Drain Board Miller

Ø Outside (mm)	Finish	Height (mm)	Tool Bodies
100	Segmented	7	R 1/2" / IG M14 / Tornado
100	Sintered	7	R 1/2" / IG M14 / Tornado
100	Sintered	7	R 1/2" / IG M14 / Tornado
100	400	7	R 1/2" / IG M14 / Tornado
100	800	7	R 1/2" / IG M14 / Tornado
100	1500	7	R 1/2" / IG M14 / Tornado
100	3000	7	R 1/2" / IG M14 / Tornado
100	Burnisher	7	R 1/2" / IG M14 / Tornado

Other tool bodies on request.





Diamond Tools for the insides of kitchen tops and bathroom basins – outer edges

Profile milling- and grinding tools G3000

Type	Radius (mm)	Bore (mm)	Tool Piece (mm)	Grit	Colour
Rod	R 10	22,22	20	K1	Metallic
Rod	R 10	22,22	20	K2	Metallic
Rod	R 10	22,22	20	K2-3	Red
Rod	R 10	22,22	20	K3	Yellow
Rod	R 10	22,22	20	K4	White
Rod	R 10	22,22	20	K5	Blue
Rod	R 10	22,22	20	K6	Orange
Rod	R 15	22,22	30	K1	Metallic
Rod	R 15	22,22	30	K2	Metallic
Rod	R 15	22,22	30	K2-3	Red
Rod	R 15	22,22	30	K3	Yellow
Rod	R 15	22,22	30	K4	White
Rod	R 15	22,22	30	K5	Blue
Rod	R 15	22,22	30	K6	Orange
Rod	R 20	22,22	40	K1	Metallic
Rod	R 20	22,22	40	K2	Metallic
Rod	R 20	22,22	40	K2-3	Red
Rod	R 20	22,22	40	K3	Yellow
Rod	R 20	22,22	40	K4	White
Rod	R 20	22,22	40	K5	Blue
Rod	R 20	22,22	40	K6	Orange
1/4 Rod	R 10	22,22	20	K1	Metallic
1/4 Rod	R 10	22,22	20	K2	Metallic
1/4 Rod	R 10	22,22	20	K2-3	Red
1/4 Rod	R 10	22,22	20	K3	Yellow
1/4 Rod	R 10	22,22	20	K4	White
1/4 Rod	R 10	22,22	20	K5	Blue
1/4 Rod	R 10	22,22	20	K6	Orange
1/4 Rod	R 15	22,22	30	K1	Metallic
1/4 Rod	R 15	22,22	30	K2	Metallic
1/4 Rod	R 15	22,22	30	K2-3	Red
1/4 Rod	R 15	22,22	30	K3	Yellow
1/4 Rod	R 15	22,22	30	K4	White
1/4 Rod	R 15	22,22	30	K5	Blue
1/4 Rod	R 15	22,22	30	K6	Orange
1/4 Rod	R 20	22,22	40	K1	Metallic
1/4 Rod	R 20	22,22	40	K2	Metallic
1/4 Rod	R 20	22,22	40	K2-3	Red
1/4 Rod	R 20	22,22	40	K3	Yellow
1/4 Rod	R 20	22,22	40	K4	White
1/4 Rod	R 20	22,22	40	K5	Blue
1/4 Rod	R 20	22,22	40	K6	Orange

Please get in contact with us for a corresponding quote especially for your machine.



Different CNC Tools

Diamond Milling Cutter

Ø Outside (mm)	Segment Length (mm)	Colour	Tool Bodies	Usage
20	45	Silver	R 1/2"	Universal
23	35	Silver	R 1/2"	Universal
23	50	Silver	R 1/2"	Universal
23	35	Red	R 1/2"	Granite soft
23	50	Red	R 1/2"	Granite soft
23	65	Red	R 1/2"	Granite soft
23	70	Red	R 1/2"	Granite soft
23	85	Red	R 1/2"	Granite soft
23	35	Blue	R 1/2"	Granite hard
23	50	Blue	R 1/2"	Granite hard
23	65	Blue	R 1/2"	Granite hard
23	70	Blue	R 1/2"	Granite hard
23	85	Blue	R 1/2"	Granite hard
23	35	Gold	R 1/2"	Engineered Stone
23	50	Gold	R 1/2"	Engineered Stone



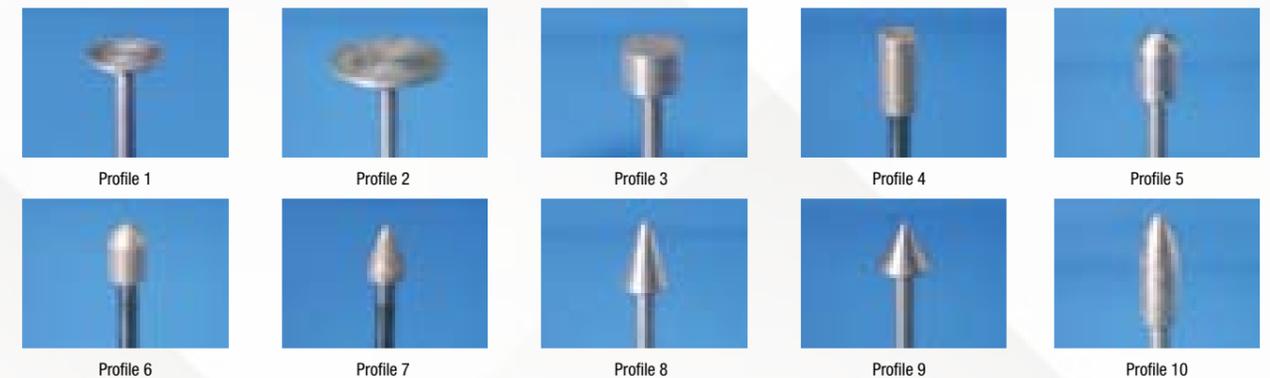
Diamond Milling Cutter with Ring Segment

Ø Outside (mm)	Height (mm)	Tool Bodies
20	20	R 1/2"
20	12	R 1/2"
20	20	Ravelli
20	12	Ravelli
20	20	Segment M12
20	12	Segment M12



Sculpturing Tools

Profile No.	Ø Shaft (mm)	Ø Outside (mm)	Segment Height (mm)	Length (mm)
1	6	20	1	50
2	6	30	2	50
3	6	16	10	60
4	6	10	20	60
5	6	12	18	65
6	6	10	15	55
7	6	10	15	55
8	6	12	17	65
9	6	14	12	60
10	6	10	30	78



GRINDING TOOLS



Different CNC Tools

Profile milling tools for different uses



Ø Outside (mm)	Thickness of tile (mm)	Bore (mm)	Profile
120	20 – 40 (50 – 60)	35	A, B, D, E, EC,
	20 – 40 (50 – 60)	35	ES, F, FG, FGS, FS,
	20 – 40 (50 – 60)	35	FV, H, L, O, OG, PE,
	20 – 40 (50 – 60)	35	Q, T, TP, TS, TV,
	20 – 40 (50 – 60)	35	U, V, X, Z



Overview of all the profiles please see below mentioned.

Profile milling tools for different uses

Station	Type	Step	Finish
0	segmented	pre-profiling	metal bond
1	sintered	pre-milling	metal bond
2	sintered	profiling	metal bond
3	sintered	grinding	metal bond
4	Winner	precision-grinding	Winner synthetic resin
5	Winner	polish	Winner synthetic resin
6	Winner	final polish	Winner synthetic resin
4	White	precision-grinding	vulcanized
5	Blue	polish	vulcanized
6	Orange	final polish	vulcanized
IV	Rough	polish	synthetic resin
V	Fine	final polish	synthetic resin



Please get in contact with us for a corresponding quote especially for your machine.

A	A_{r15+3}	B	B_{r30+3}
D	E	EC	ES
F	FG	FG₃₃	FGS
FGS	FS	FS_{r3}	FV
H	L	O	OG
PE	Q	SK	T
TP_{20&30}	TP₄₀	TS	TV
U	V	X	X_{40/17}
Z			

Surfacing Wheels

For further processing of sawn or milled surfaces on radial arm polishers or grinding automats.

Further information about dimensions, specification and recommended parameters are available on request.

Rough grit, pre-grit, medium grit

Ø Outside (mm)	Finish	Height (mm)	Tool Bodies
130	Segmented	10; 15; 20	as per request
150	Segmented	10; 15; 20	as per request
175	Segmented	10; 15; 20	as per request
200	Segmented	10; 15; 20	as per request
250	Segmented	10; 15; 20	as per request
300	Segmented	10; 15; 20	as per request
350	Segmented	10; 15; 20	as per request
400	Segmented	10; 15; 20	as per request

Alternative diameters as well as single segments are available on request.

Grit table

DIABÜ®	SIC	Colour Code	Usage
DIAFIX 20	16 – 20	DIABÜ®-Blue	rough grit
DIAFIX 40	30 – 36	Brown	pre-grit
DIAFIX 85	90 – 110	Red	medium grit

Further grits available on request.



Grinding tool type „Frankfurt“

Length (mm)	Carrier body		No. of segments per carrier	Segment size		
	Width 1 (mm)	Width 2 (mm)		Length (mm)	Width (mm)	Height (mm)
105	108	80	7; 8; 9; 11; 12	25	8	12y10
105	108	80	5	40	10	10
105	108	80	8	Ø	14	10; 15



Half-moon segments

Length (mm)	Carrier body			No. of segments per carrier	Segment size		
	Width (mm)	Height (mm)	Length (mm)		Width (mm)	Height (mm)	
80	30	10	3	25	8	7; 12	
95	30	15	3	25	8	7; 12	
105	30	15	3	25	8	7; 12	
120	32	15	3	25	8	7; 12	



Please give the following details on your order:

Material for example: Granite
 Segment height for example: 10 mm
 Grit for example: Rough grit
 Tool Body for example: 2 stud bolts M12 TK175



Recommended parameters of different grinding tools

Grinding Cups

Diameter (mm)	Rotations (min ⁻¹)	Peripheral speed (m/s)	Generated power (kW)	Amount of coolant (l/min)
100	1800 – 2000	Pneumatic	0,6 – 14	5
125	1500 – 1800	3 – 7		
130	1500 – 1800	Electric		
150	1200 – 1500	8 – 12		

Pay attention to sufficient cooling.

Use portable hand grinding machines with wet cutting equipment (isolating transformer).

A rubber coupling between machine and cup wheel should be used for damping of vibrations.

Recommendations for mounting and checking

- Clean thread and plane surface and check, if the plane surface fits closely. Slightly oil thread and plane surface.
- The water supply has to be effected by the diving shaft.
- If low removal rate, sharpen cup wheel in fine limestone with generous supply of water.
- If uneven wear of the diamond tool, check machine coupling.

Diamond Surfacing Wheels

Diameter (mm)	Peripheral speed (m/s)	Generated power		Amount of coolant	
		Automatic (kW)	Radial Arm Polisher (kW)	Automatic (l/min)	Radial Arm Polisher (l/min)
175	6 – 12	10 – 20	2 – 8	3 – 4	8 – 10
200				3 – 4	8 – 10
250				4 – 5	10 – 15
300				4 – 5	15 – 20
350				5 – 6	15 – 20
400				6 – 8	20 – 25
450				8 – 10	20 – 25
500				10 – 12	25 – 30

Cooling:

Should be proportionated that way that the working surface is sufficiently cleaned from abrasive muds. The supply of the coolant is effected by a hollow spindle.

Removal rate of material :

The material removal rate results from the contact pressure and the traverse speed of the surface grinder as well as the size of the diamond crystal and diamond concentration of the grinding tool. Highly uneven slabs have to be grinded in several passes with low traverse speed.

Grinding tool type „Frankfurt“

Peripheral speed (m/s)
4 – 7

Recommended parameters of different grinding tools

Profile grinding tools as per page 66, Ø 120 mm CNC machines for granite, cast stone

Station	Type	Step	Traverse speed (mm/min)			Abrasion (mm/min)	Rotations (min ⁻¹)
			1 – 3		4 – 5		
			Rough	Granite Cast Stone	Fine		
0	Segmented	Pre-profiling	500 – 600		400 – 500	max 0,5	4500 – 4600
1	Sintered	Pre-milling	800 – 1000		700 – 900	0,3 – 0,4	4500 – 4600
2	Sintered	Profiling	1300 – 1500		1200 – 1400	0,2 – 0,3	4500 – 4600
3	Sintered	Grinding	800 – 1000		800 – 1000	0,1 – 0,15	4500 – 4600
4	Winner	Precision-Grinding		1200		0,05 – 0,1 NULL	2500
5	Winner	Polishing		1200		compacting	2500
6	Winner	Final Polish		1200		pressure	2500
4	White	Precision-Grinding		700 – 800		0,05 NULL	2500 – 2600
5	Blue	Polishing		800 – 900		compacting	2700 – 2800
6	Orange	Final Polish		900 – 1000		pressure	3000
IV	Rough	Polishing		1200 – 1500		0,1 – 0,2	1200 – 1500
V	Fine	Final Polish		1200 – 1500			1200 – 1500

Profile grinding tools as per page 66, Ø 120 mm CNC machines for marble

Station	Type	Step	Traverse speed (mm/min)	Abrasion (mm/min)	Rotations (min ⁻¹)
1	Electroplated with slot	Pre-milling	1000	max 1 mm	5000 – 5500
2	Electroplated bond	Profiling	1500	0,2 – 0,4	5000 – 5500
3	Electroplated bond	Grinding	1500	0,1 – 0,2	5000 – 5500
5	Winner synthetic resin	Polishing	900	0,05 – 0,1 NULL	2800
6	Winner synthetic resin	Final Polishing	1000	compacting pressure	3000
IV	Synthetic resin polishing	Polishing	800 – 1000	0,1 – 0,2	1200 – 1500

