



# HIGH PERFORMANCE SAW BLADES OF DIABÜ®



SAW BLADES  
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## DIABÜ® High Performance Saw Blades

DIABÜ® produces the optimal tool individually for customers and for every use. That's why we have corresponding qualities for the different materials. Please inform us about your used materials, so we will produce the corresponding high performance tool for you.

### Quality overview DIABÜ® High Performance Saw Blades

Materials	Subgroup	Qualities	Features	Cutting Performance	Cutting	Running Time	
Granite	all granites	Premium Line	use on strong machines for all the granites good peripheral speed clean cutting quality	Feed: 2,5 – 3,5 m/min Lowering: 2 – 4 cm	+++	++++	
	all granites	Blue Line	use on strong machines for all the granites good peripheral speed clean cutting quality	Feed: 2,5 – 3,5 m/min Lowering: 2 – 6 cm	++++	+++	
	all granites	Red Line	very easy cutting to be used universally on all the machines	Feed: 2,5 – 4 m/min Lowering: 2 – 4 cm	+++++	++	
	all granites	Axis	reinforced core, CNC bridge cutting saws angle- and curve cuts	Feed: 2,5 – 5 m/min Lowering: 2 – 6 cm	+++++	+++	
Engineered Stone		Axis	reinforced core CNC bridge cutting saws angle- and curve cuts	Feed: 2,5 – 5 m/min Lowering: 2 – 3 cm	++++	+++	
		Engineered Line	especially developed for engineered stone very clean cut rough grinding cutting surface	Feed: 2,5 – 4 m/min Lowering: 2 – 3 cm	++++	++	
Sintered Ceramic	Neolith	Kera Line	especially developed for large format ceramic	Feed 0,7 – 3,6 m/min	++++	+++	
Quarzit		Q Line	high cutting performance very good peripheral speed	Feed: 2,5 – 4 m/min Lowering: 2 – 4 cm	++++	+++	
Sandstone	hard sandstone abrasive sandstone	S Line	maximum productivity full cutting with high peripheral speed	++++ +++++	+++++	++++	
	Volcano stone	Basalt, Basalt Lava, Tuff Andesit Porphy	V Line	maximum productivity very good peripheral speed high cutting performance	+++++ +++++ +++++	+++++	++++
Marble	Jura Beij	M Line	maximum productivity full cutting with high peripheral speed	++++ +++++	++++ +++++	++++ ++++	
	Lime Rock Travertin		clean and easy cutting full cutting with high peripheral speed	+++++ +++++	+++++ +++++	++++ ++++	
	hard Marble		high peripheral speed and easy cutting	+++++	+++++	++++	
					++++	++++	++++
Fireproof Materials and Ceramic	Chrome stones Korund	X Line	very good material removal very good peripheral speed	+++ +++	++++ ++++	++++ ++++	
	Magnesia stones Chamotte		high cutting performance	+++ ++++	++++ ++++	++++ ++++	
	Silka stones Carbon silicide			+++ +++	++++ ++++	++++ ++++	
	Cast basalt ZAC			+++ +++	++++ ++++	++++ ++++	
	Glass ceramic Stone ware			+++ +++	++++ ++++	++++ ++++	
					+++	++++	++++
					+++	++++	++++
					+++	++++	++++
					+++	++++	++++

## Saw Blades Short Tooth

Available with silent core and normal core

Type	Core			No. of Segments (pcs.)	Segment		
	Ø (mm)	Bore (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
SO	350	60	2,2	30	25	3,5	12,5; 20
SO	350	60	2,2	34	25	3,5	12,5; 20
SO	400	60	2,5	35	25	3,5	12,5; 20
SO	400	60	2,5	40	25	3,5	12,5; 20
SO	450	60	2,8	39	25	3,8	12,5; 20
SO	450	60	2,8	44	25	3,8	12,5; 20
SO	500	60	2,8	44	25	3,8	12,5; 20
SO	500	60	2,8	50	25	3,8	12,5; 20
SO	550	60	3,5	54	25	4,6	12,5; 20
SO	600	60	3,5	54	25	4,6	12,5; 20
SO	600	60	3,5	60	25	4,6	12,5; 20
SO	625	60	3,5	62	25	4,6	12,5; 20
SO	650	60	4,0	64	25	5,0	12,5; 20
SO	700	60	4,0	60	25	5,0	12,5; 20
SO	700	60	4,0	66	25	5,0	12,5; 20
SO	800	60	4,5	70	25	5,6	12,5; 20
SO	800	60	4,5	76	25	5,6	12,5; 20
N	900	60	5,0	64	25	7,0	12,5; 14; 20
N	1000	100	5,0	70	25	7,0	12,5; 14; 20
N	1100	100	5,5	74	25	7,5	12,5; 14; 20
N	1150	100	5,5	74	25	7,5	12,5; 14; 20
N	1200	100	5,5	80	25	7,5	12,5; 14; 20
N	1300	100	6,0	88	25	8,0	12,5; 14; 20
N	1400	100	6,5	92	25	8,5	12,5; 14; 20
N	1500	100	6,5	100	25	8,5	12,5; 14; 20
N	1600	100	7,0	104	25	9,0	12,5; 14; 20

The segment widths for marble and sandstone are deviating.

■ lasered saw blades ■ brazed saw blades

Type	Core			No. of Segments (pcs.)	Segment		
	Ø (mm)	Bore (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
SO	350	60	2,2	42	20	3,5	12,5; 20
SO	400	60	2,5	48	20	3,5	12,5; 20
SO	450	60	2,8	52	20	3,8	12,5; 20
SO	500	60	2,8	60	20	3,8	12,5; 20
SO	550	60	3,5	64	20	4,6	12,5; 20
SO	600	60	3,5	72	20	4,6	12,5; 20
SO	625	60	3,5	72	20	4,6	12,5; 20
SO	650	60	4,0	78	20	5,0	12,5; 20
SO	700	60	4,0	80	20	5,0	12,5; 20
SO	800	60	4,5	92	20	5,6	12,5; 20

■ lasered saw blades ■ brazed saw blades

### AXIS

Type	Core			No. of Segments (pcs.)	Segment		
	Ø (mm)	Bore (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
SO	350	60	2,3	28	30	3,6	20
SO	400	60	2,6	32	30	3,6	20
SO	450	60	2,9	36	30	3,9	20
SO	500	60	2,9	40	30	3,9	20
SO	550	60	3,6	42	30	4,7	20
SO	600	60	3,6	48	30	4,7	20

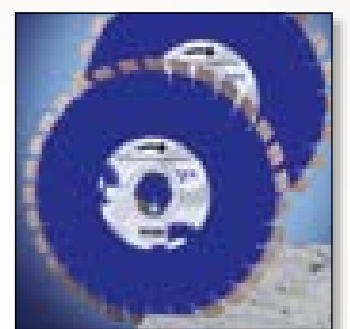
■ lasered saw blades

Please give the following details on your order:

Material for example: Granite  
 Segment height for example: 20 mm  
 Normal core or low core for example: low  
 Bore for example: 80 mm  
 Mounting holes for example: 3 pcs. Ø 10 mm on pitch circle Ø 110 mm



For different diameters special toothings are possible on request.





## Saw Blades Long Tooth

Available with silent core and normal core



Type	Core			No. of Segments (pcs.)	Length (mm)	Segment	
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)
SO	300	60	1,8	18	40	2,8	10; 12; 15; 20
SO	300	60	1,8	21	40	2,8	10; 12; 15; 20
SO	350	60	2,2	21	40	3,2	10; 12; 15; 20
SO	350	60	2,2	25	40	3,2	10; 12; 15; 20
SO	400	60	2,5	24	40	3,5	10; 12; 15; 20
SO	400	60	2,5	28	40	3,5	10; 12; 15; 20
SO	450	60	2,8	26	40	3,8	10; 12; 15; 20
SO	450	60	2,8	32	40	3,8	10; 12; 15; 20
SO	500	60	2,8	30	40	3,8	10; 12; 15; 20
SO	500	60	2,8	36	40	3,8	10; 12; 15; 20
SO	550	60	3,5	32	40	4,6	10; 12; 15; 20
SO	550	60	3,5	40	40	4,6	10; 12; 15; 20
SO	600	60	3,5	36	40	4,6	10; 12; 15; 20
SO	600	60	3,5	42	40	4,6	10; 12; 15; 20
SO	625	60	3,5	36	40	4,6	10; 12; 15; 20
SO	625	60	3,5	42	40	4,6	10; 12; 15; 20
SO	650	60	4,0	39	40	5,0	10; 12; 15; 20
SO	650	60	4,0	46	40	5,0	10; 12; 15; 20
SO	700	60	4,0	40	40	5,0	10; 12; 15; 20
SO	700	60	4,0	50	40	5,0	10; 12; 15; 20
SO	725	60	4,0	40	40	5,0	10; 12; 15; 20
SO	725	60	4,0	50	40	5,0	10; 12; 15; 20
SO	800	60	4,5	46	40	5,5	10; 12; 15; 20
SO	800	60	4,5	57	40	5,5	10; 12; 15; 20
N	900	60	5,0	46	40	6,5	10; 12; 15; 20
N	1000	100	5,0	70	40	6,5	10; 12; 15; 20
N	1100	100	5,5	74	40	7,5	10; 12; 15; 20
N	1200	100	5,5	80	40	7,5	10; 12; 15; 20
N	1300	100	5,5	84	40	7,5	10; 12; 15; 20
N	1400	100	6,0	92	40	8,0	10; 12; 15; 20; 30
N	1500	100	6,5	100	40	8,5	10; 12; 15; 20; 30
N	1600	100	7,0	104	40	9,0	10; 12; 15; 20; 30

The segment widths for marble and sandstone are deviating.

■ lasered saw blades ■ brazed saw blades



Please give the following details on your order:

Material for example: Granite  
 Segment height for example: 20 mm  
 Normal core or low core for example: low  
 Bore for example: 80 mm  
 Mounting holes for example: 3 pcs. Ø 10 mm on pitch circle Ø 110 mm

## Saw Blades for Cross Cut- and Longitudinal Cut

Available with silent core and normal core

Type	Core			No. of Segments (pcs.)	Length (mm)	Segment	
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)
SO	300	60	1,8	18	40	2,8	10; 12
SO	300	60	1,8	21	40	2,8	10; 12
SO	350	60	2,2	21	40	3,2	10; 12
SO	350	60	2,2	25	40	3,2	10; 12
SO	400	60	2,5	24	40	3,5	10; 12
SO	400	60	2,5	28	40	3,5	10; 12
SO	450	60	2,8	26	40	3,8	10; 12
SO	450	60	2,8	32	40	3,8	10; 12
SO	500	60	2,8	30	40	3,8	10; 12
SO	500	60	2,8	36	40	3,8	10; 12
SO	550	60	3,5	32	40	4,6	10; 12
SO	550	60	3,5	40	40	4,6	10; 12
SO	300	60	1,8	36	20	2,8	12,5; 20
SO	350	60	2,2	42	20	3,2	12,5; 20
SO	400	60	2,5	48	20	3,5	12,5; 20
SO	450	60	2,8	52	20	3,8	12,5; 20
SO	500	60	2,8	60	20	3,8	12,5; 20
SO	550	60	3,5	64	20	4,6	12,5; 20

■ lasered saw blades ■ brazed saw blades

## Saw Blades for Splitting Saws

Type	Core			No. of Segments (pcs.)	Length (mm)	Segment	
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)
N/ SO	350	60	3,5	21	40	5,0	10
SO	350	60	3,5	25	40	5,0	10
N/ SO	400	60	3,5	24	40	5,0	10
SO	400	60	3,5	28	40	5,0	10
N/ SO	450	60	3,5	26	40	5,0	10
SO	450	60	3,5	32	40	5,0	10
N/ SO	500	60	3,5	30	40	5,5	10
SO	500	60	3,5	36	40	5,5	10
N/ SO	550	60	4,0	32	40	6,0	10
SO	550	60	4,0	40	40	6,0	10
N/ SO	600	60	4,5	36	40	6,0	10
SO	600	60	4,5	42	40	6,0	10
N/ SO	625	60	4,5	36	40	6,0	10
SO	625	60	4,5	42	40	6,0	10
N/ SO	650	60	4,5	39	40	6,5	10
SO	650	60	4,5	46	40	6,5	10
N/ SO	700	60	4,5	40	40	6,5	10
SO	700	60	4,5	50	40	6,5	10
N/ SO	725	60	4,5	40	40	6,5	10
SO	725	60	4,5	50	40	6,5	10
SO	800	60	4,5	46	40	6,5	10
N	900	60	4,5	46	40	7,0	10
N/ SO	600	60	4,5	42	25	6,0	12,5; 14
N/ SO	650	60	4,5	46	25	6,5	12,5; 14
N/ SO	700	60	4,5	56	25	6,5	12,5; 14

■ brazed saw blades

## Saw Blades Segmented – Continuous Rim

Type	Core			No. of Segments (pcs.)	Length (mm)	Segment	
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)
KSO	300	60	1,8	21	40	2,8	8; 10
KSO	350	60	2,5	27	40	3,5	8; 10
KSO	400	60	2,5	31	40	3,5	8; 10

■ brazed saw blades





## Block Saw Blades

Available with silent core and normal core



Type	Core			No. of Segments (pcs.)	Length (mm)	Segment	
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)
N	1700	100	6,50	112	25	9,5 / 8,5	12,5; 14; 20; 30
N	1750	100	7,00	112	25	9,5 / 8,5	12,5; 14; 20; 30
N	1800	100	7,00	120	25	9,5 / 8,5	12,5; 14; 20; 30
N	2000	150	7,50	128	25	11 / 10	12,5; 14; 20; 30
N	2000	150	8,00	128	25	11 / 10	12,5; 14; 20; 30
N	2200	150	8,00	132	25	11 / 10	12,5; 14; 20; 30
N	2300	150	8,00	138	25	11 / 10	12,5; 14; 20; 30
N	2500	150	9,00	140	25	12 / 11	12,5; 14; 20; 30
N	2700	150	9,00	140	25	12 / 11	12,5; 14; 20; 30
N	3000	150	9,25	160	25	12 / 11	12,5; 14; 20; 30
N	3200	150	9,25	170	25	12,5 / 11,5	12,5; 14; 20; 30
N	3500	150	9,50	180	25	13 / 12	12,5; 14; 20; 30
N	1700	100	6,50	112	25	9,5	12,5; 14; 20
N	1750	100	7,00	112	25	10,5	12,5; 14; 20
N	1800	100	7,00	120	25	10,5	12,5; 14; 20
N	2000	150	7,50	128	25	11	12,5; 14; 20
N	2000	150	8,00	128	25	11,5	12,5; 14; 20
N	2200	150	8,00	132	25	11,5	12,5; 14; 20
N	2300	150	8,00	138	25	11,5	12,5; 14; 20
N	2500	150	9,00	140	25	12,5	12,5; 14; 20
N	2700	150	9,00	140	25	12,5	12,5; 14; 20
N	3000	150	9,25	160	25	12,5	12,5; 14; 20
N	3200	150	9,25	170	25	12,5	12,5; 14; 20
N	3500	150	9,50	180	25	13	12,5; 14; 20

The segment widths for marble and sandstone are deviating.

## Multi Blade Saws

Normal Multi

Type	Core			No. of Segments (pcs.)	Length (mm)	Segment	
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)
NM	1000	120	5,0	70	25	6,8 / 6,2	12,5; 14
NM	1200	120	5,5	80	25	7,3 / 6,7	12,5; 14
NM	1300	120	5,5	88	25	7,3 / 6,7	12,5; 14
NM	1600	120	5,5	104	25	7,3 / 6,7	12,5; 14

Scaletta

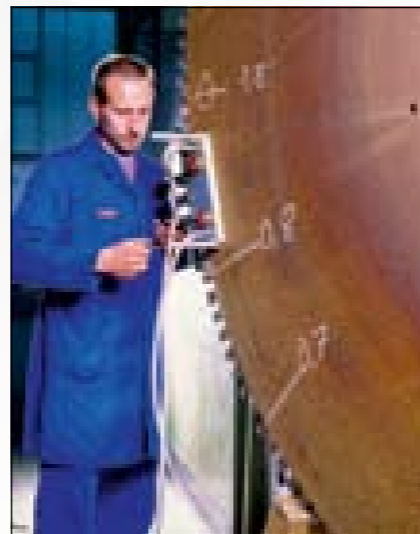
Type	Core			No. of Segments (pcs.)	Length (mm)	Segment	
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)
NDM	800	120	5,5	64	25	7,3 / 6,7	12,5; 14
NDM	1200	120	5,5	80	25	7,3 / 6,7	12,5; 14
NDM	850	120	5,5	70	25	7,3 / 6,7	12,5; 14
NDM	1300	120	5,5	88	25	7,3 / 6,7	12,5; 14
NDM	1000	120	5,5	70	25	7,3 / 6,7	12,5; 14
NDM	1600	120	5,5	104	25	7,3 / 6,7	12,5; 14

Single Blade Block Tailor

Type	Core			No. of Segments (pcs.)	Length (mm)	Segment	
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)
N	1000	120	5,0	70	25	8,0	12,5; 14
N	1200	120	5,5	80	25	8,5	12,5; 14
N	1300	120	5,5	88	25	9,0	12,5; 14
N	1600	120	5,5	104	25	9,5	12,5; 14

The segment widths for marble and sandstone are deviating.

Our service for retipping will be available for you on call.



Please give the following details on your order:

Material for example: Granite  
 Segment height for example: 20 mm  
 Normal core or low core for example: low  
 Bore for example: 80 mm  
 Mounting holes for example: 3 pcs. Ø 10 mm on pitch circle Ø 110 mm

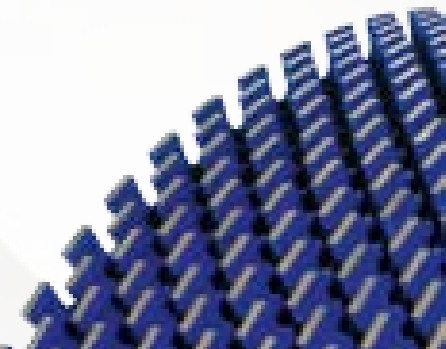
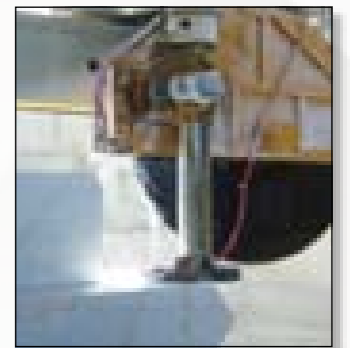
Please give the following details on your order:

Material for example: Granite  
 Segment height for example: 20 mm  
 Normal core or low core for example: low  
 Bore for example: 80 mm  
 Mounting holes for example: 3 pcs. Ø 10 mm on pitch circle Ø 110 mm



SAW BLADES

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## Diamond Foxtail Saw Blades

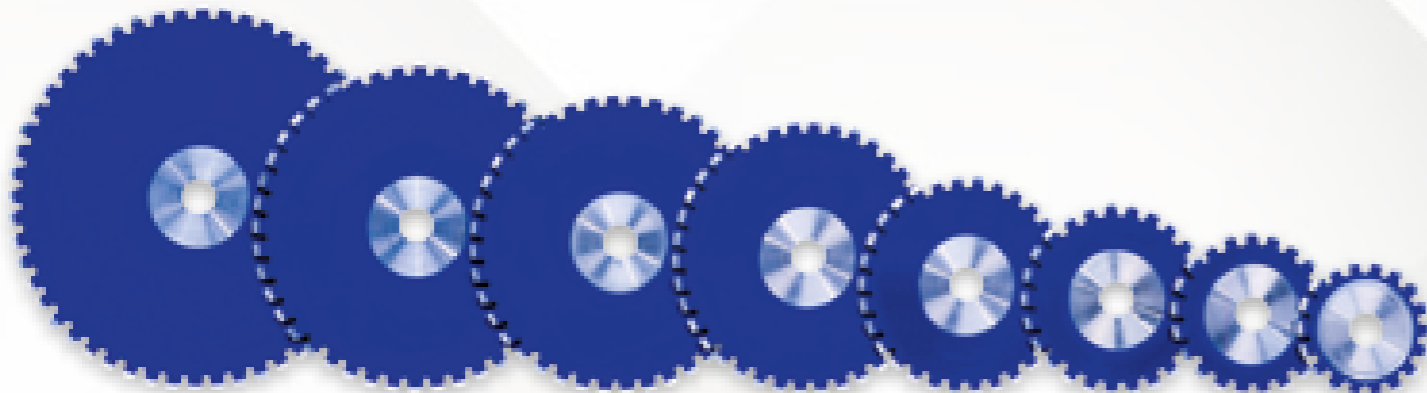
Type	Core			No. of Segments (pcs.)	Length (mm)	Segment		Height (mm)
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)	
NF	250	60	3,5; 4,5	18	25	4,6; 6	12,5	
NF	300	60	3,5; 4,5	21	25	4,6; 6	12,5	
NF	350	60	3,5; 4,5	25	25	4,6; 6	12,5	
NF	400	60	3,5; 4,5	28	25	4,6; 6	12,5	
NF	450	60	3,5; 4,5	32	25	4,6; 6	12,5	
NF	500	60	3,5; 4,5	36	25	4,6; 6	12,5	
NF	550	60	3,5; 4,5	38	25	4,6; 6	12,5	
NF	600	60	3,5; 4,5	42	25	4,6; 6	12,5	
NF	700	60	3,5; 4,5	48	25	4,6; 6	12,5	
NF	750	60	3,5; 4,5	52	25	4,6; 6	12,5	
NF	800	60	3,5; 4,5	56	25	4,6; 6	12,5	
NF	900	60	3,5; 4,5	62	25	4,6; 6	12,5	
NF	950	60	3,5; 4,5	66	25	4,6; 6	12,5	
NF	1000	60	3,5; 4,5	70	25	4,6; 6	12,5	
NF	1050	60	3,5; 4,5	72	25	4,6; 6	12,5	
NF	1100	60	3,5; 4,5	76	25	4,6; 6	12,5	
NF	1150	60	3,5; 4,5	76	25	4,6; 6	12,5	

### 6NL/ Ø14 / TK 150

Type	Core			No. of Segments (pcs.)	Length (mm)	Segment		Height (mm)
	Ø (mm)	Bore (mm)	Thickness (mm)			Width (mm)	Height (mm)	
NF	1200	100	4,5	80	25	6	12,5	
NF	1250	100	4,5	84	25	6	12,5	
NF	1300	100	4,5	88	25	6	12,5	
NF	1350	100	4,5	88	25	6	12,5	
NF	1400	100	4,5	92	25	6	12,5	
NF	1450	100	4,5	96	25	6	12,5	
NF	1500	100	4,5	100	25	6	12,5	
NF	1550	100	4,5	102	25	6	12,5	

**Please give the following details on your order:**

Material for example: Granite  
 Segment height for example: 20 mm  
 Normal core or low core for example: low  
 Bore for example: 80 mm  
 Mounting holes for example: 3 pcs. Ø 10 mm on pitch circle Ø 110 mm



## Saw Blades for Portable Table Saws Wet-Cutting

### ALLSTAR

Type	Core		No. of Segments (pcs.)	Segment		
	Ø (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
SO	250	1,6	17	40	2,4	10
SO	300	1,8	21	40	2,6	10
SO	350	2,2	25	40	3,2	10
SO	400	2,5	28	40	3,5	10
SO	450	2,8	32	40	3,5	10
SO	500	2,8	36	40	3,8	10
SO	600	3,5	40	40	4,6	10
SO	650	4,0	46	40	5,0	10

### ULTRA

Type	Core		No. of Segments (pcs.)	Segment		
	Ø (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
SO	250	1,6	17	40	2,4	10
SO	300	1,8	21	40	2,6	10
SO	350	2,2	25	40	3,2	10
SO	400	2,5	28	40	3,5	10
SO	450	2,8	32	40	3,5	10
SO	500	2,8	36	40	3,8	10
SO	600	3,5	40	40	4,6	10
SO	650	4,0	46	40	5,0	10

### STRATO H2

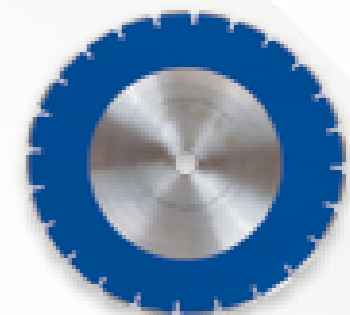
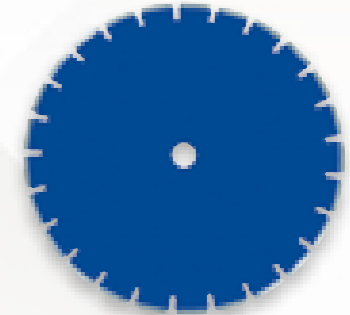
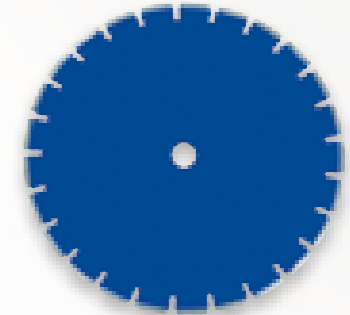
Type	Core		No. of Segments (pcs.)	Segment		
	Ø (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
SO	250	1,6	17	40	2,4	10
SO	300	1,8	21	40	2,6	10
SO	350	2,2	25	40	3,2	10
SO	400	2,5	24	40	3,5	10
SO	400	2,5	28	40	3,5	10
SO	450	2,8	32	40	3,5	10
SO	500	2,8	36	40	3,8	10
SO	600	3,5	40	40	4,6	10
SO	650	4,0	46	40	5,0	10

### Fields of application

Type	Material																								
	Abrasive cement	Asphalt	Cement, cement stones	Cement reinforced	Cement strong reinforced without hard additives	Blims	Roof tiles	Floor pavement, finery	Floor tiles, glazed tiles	Ceramic	Gas cement	Granite	Lime sand stone	Clinker brick	Clinker doubled broken	Marble	Sandstone, fine grained	Sandstone, coarse grained	Fire brick	Clay brick	Interlocking pavement	Washed-out cement	Brick, Poroton	Terrazzo	Porphyr
ALLSTAR	+	+	++	+	+	++	+	+	+	++	++	+	+	+	+	+	+	+	++	++	++	+	++	++	++
ULTRA	++	+	++	+	+	++	++	++	++	++	+	++	++	++	++	++	++	++	++	++	++	++	++	++	++
STRATO H2	+	+	+	+	+	+	+	++	++	+	++	++	++	++	+	+	+	+	++	++	++	+	++	++	++

**Please give the following details on your order:**

Material for example: Granite  
 Normal core or low core for example: low  
 Bore for example: 80 mm  
 Mounting holes for example: 3 pcs. Ø 10 mm on pitch circle Ø 110 mm



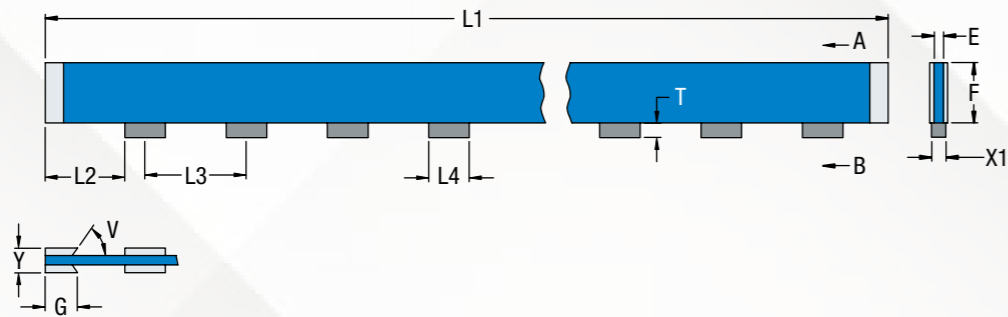


## Gang Saw Blades



Type	Core			No. of Segments (pcs.)	Segment		
	Length L1 (mm)	Width F (mm)	Thickness E (mm)		Length (mm)	Width (mm)	Height (mm)
G	depending on type of machine	180	3,5	depending on type of machine	20; 25; 40	5,5 / 5,1	7,5; 10
G		180	2,0		20; 25; 40	3,5	7,5; 10
G		180	2,5; 2,8		20; 25; 40	4; 4,3	7,5; 10
G		180	3,0		20; 25; 40	4,6	7,5; 10

Blades are available in normal steel and high-grade steel.



- L1 ... Blade length
- L2 ... Distance to the first segments
- L3 ... Segment distance
- L4 ... Segment length
- E ... Blade thickness
- F ... Blade height
- Y ... Total width
- G ... Length
- V ... Connecting angle
- X1 ... Segment width
- T ... Segment height



**Please give the following details on your order:**

Materials (% each material)	for example: Beij 40%; hard marble 60%
Segment height + number of segments	for example: 10 mm + 32 segments
Blade length + blade thickness	for example: 4150 mm + 3.5 mm
Effective cutting length	for example: 3000 mm
No. of blades	for example: 45 pcs.





## Dry-Cutting Saw Blades

We have been specialized in a diameter range of 230 – 350 mm in the dry-cutting sector as per your request.

No bulk goods but high performance tool made in Germany.

Also available with low noise cores.

### PERFECT CRYSTAL DISTRIBUTION (PCD)\*

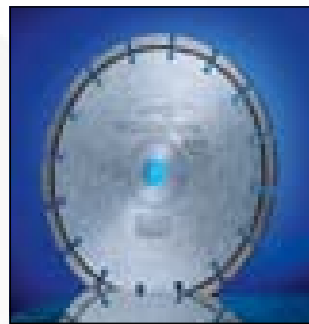
*Holds the segment width until the end for all types of granite and cement*



Type	Core			No. of Segments (Pcs.)	Segment			Flange
	Ø (mm)	Bore (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)	
PCD	230	22,2	1,8 (2,3)	15	40	2,8	12	
PCD	230	22,2	1,8	15	40	3,0	12	
PCD	230	22,2	1,8	16	40	2,8	12	
PCD	230	22,2	1,8	16	40	2,8	12	6/SK M5/64
PCD	300	30	1,8	18	40	3,0	10	
PCD	300	30	1,8	21	40	3,0	10	
PCD	350	30	2,2	24	40	3,2	10	

### SHARK\* *Fast cutting with perforated core for all types of granite*

Type	Core			No. of Segments (Pcs.)	Segment			Flange
	Ø (mm)	Bore (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)	
Shark	230	22,2	1,8	15	40	2,8	12	
Shark	230	22,2	2,3	15	40	3,2	12	
Shark	230	30	1,8	16	40	2,8	12	
Shark	230	50	2,3	15	40	3,2	12	
Shark	230	22,2	2,1	16	40	3,2	12	
Shark	230	22,2	1,8	16	40	2,8	12	
Shark	230	22,2	1,8	16	40	2,8	12	6/SK M5/64
Shark	300	30	1,8	18	40	3,0	12	
Shark	300	30	1,8	21	40	3,0	12	
Shark	350	30	2,2	24	40	3,2	12	



### PREMIUM\* *Universally usable for all types of granite and cement*

Type	Core			No. of Segments (Pcs.)	Segment			Flange
	Ø (mm)	Bore (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)	
Premium	230	22,2	1,8	16	40	2,8	10	
Premium	230	30	1,8	16	40	2,8	10	
Premium	230	35	1,8	16	40	2,8	10	
Premium	230	80	1,8	16	40	2,8	10	4/SK M5/140
Premium	300	30	1,8	21	40	3,0	12	
Premium	350	30	2,2	21	40	3,2	12	

### PREMIUM SHORT TOOTH\*

*Universally usable with short-tooth technic and reinforced core for all types of granite, cement and sandstone*



Type	Core			No. of Segments (Pcs.)	Segment			Flange
	Ø (mm)	Bore (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)	
Premium KZ	230	22,2	2,0	24	25	2,8	12,5	
Premium KZ	230	22,2	2,0	24	25	2,8	12,5	6/SK M5/64
Premium KZ	230	30	2,0	24	25	2,8	12,5	
Premium KZ	230	22,2	1,8	16	25	2,8	12,5	
Premium KZ	300	20	2,0	32	25	2,8	12,5	
Premium KZ	300	22,2	2,0	32	25	2,8	12,5	
Premium KZ	300	30	2,0	32	25	2,8	12,5	
Premium KZ	350	20	2,0	37	25	3,2	12,5	
Premium KZ	350	22,2	2,0	37	25	3,2	12,5	
Premium KZ	350	25,4	2,0	37	25	3,2	12,5	
Premium KZ	350	30	2,0	37	25	3,2	12,5	

\* Bore 22,2 mm (300 mm – bore 30 mm) - All the mentioned segment heights have a foot of 2 mm without any diamonds.

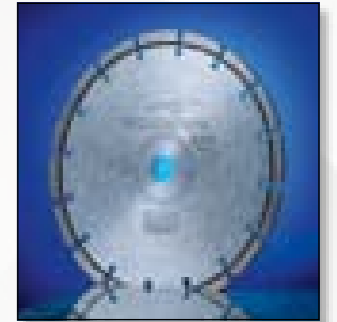
## Dry-Cutting abrasive

### GRANIT UNIVERSAL, Type GRU\*

Type	Core		No. of Segments (pcs.)	Segment		
	Ø (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
S	90	1,5	7	35	2,4	7y=5
S	115	1,5	8	35	2,4	7y=5
S	125	1,5	9	35	2,4	7y=5
S	150	1,5	11	35	2,4	7y=5
S	180	1,5	13	35	2,4	7y=5
S	200	1,5	13	40	2,6	7y=5
S	230	1,8	15	40	2,6	7y=5
S	230	1,8	16	40	2,6	7y=5
S	250	1,8	17	40	2,8	7y=5
S	300	1,8	18	40	2,8	7y=5
S	300	1,8	20	40	2,8	7y=5
S	350	1,8	21	40	2,8	7y=5
S	350	1,8	24	40	2,8	7y=5

Usage:

- Granite Universal

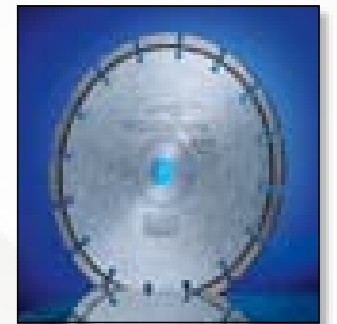


### STANDARD, Type BSK\*

Type	Core		No. of Segments (pcs.)	Segment		
	Ø (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
S	115	1,5	8	35	2,4	7y=5
S	125	1,5	9	35	2,4	7y=5
S	180	1,5	13	35	2,4	7y=5
S	230	1,8	15	40	2,6	7y=5
S	230	1,8	16	40	2,6	7y=5
S	300	1,8	18	40	2,8	7y=5
S	300	1,8	20	40	2,8	7y=5
S	350	2,2	21	40	3,2	7y=5
S	350	2,2	24	40	3,2	7y=5

Usage:

- Cement abrasive
- Chamotte
- Lime sandstone
- Sandstone



### STANDARD with reinforced core, Type BSK\*

Type	Core		No. of Segments (pcs.)	Segment		
	Ø (mm)	Thickness (mm)		Length (mm)	Width (mm)	Height (mm)
S	115	1,8	8	35	2,4	7y=5
S	125	1,8	9	35	2,4	7y=5
S	135	1,8	9	35	2,4	7y=5
S	150	1,8	11	35	2,4	7y=5
S	180	1,8	13	35	2,4	7y=5
S	230	2,2	16	40	3,2	7y=5

\* Bore 22,2 mm (300 mm – bore 30 mm)

Usage:

- Cement abrasive
- Chamotte
- Lime sandstone
- Sandstone



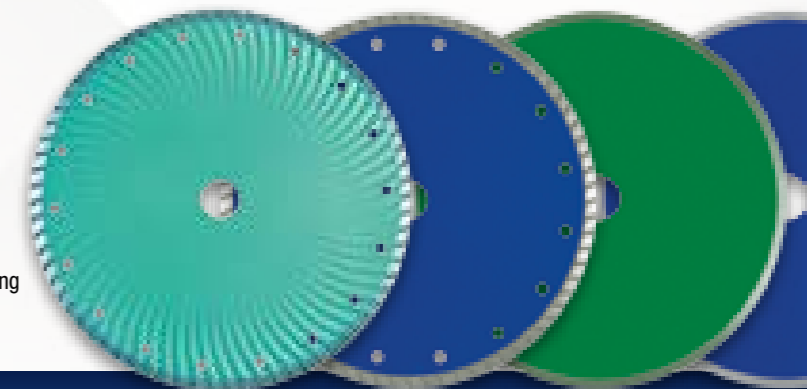
Different Aluminium flanges, available as single or mounted.

On request we will be pleased to quote various continuous rim saw blades with diameters of 115 – 350 mm:

To be used for:

- Floor tiles, glazed tiles, marble
- Floor tiles, glazed tiles with low core + reinforced flange
- Cement, granite, roof tiles with laterally inserted segment protection
- Combined disc with lateral protection segments for separating and grinding

Please ask for our special price list.





## Precautionary measures and working parameters

### Storing of saw blades

Saw blades, which are not used straight away, must never be leant against a wall for storing. Instead they should be hung up by its bore.

### Checking list for mounting saw blades

#### Before mounting

- Check cleanness of the spindle as well as the flange and, if necessary, remove existing remains of rust or old grease with a fine abrasive paper.
- Check condition of the flange edges and, if necessary, recondition with a fine file.
- Check the bore diameter; it is only allowed to deviate not more than 1/10 mm from the spindle diameter. Should the bore diameter be too big, an intermediate ring with the same thickness as the saw blade can be inserted. Is the bore diameter too small, then the tool has to be returned to DIABÜ® immediately.
- Under no circumstances enlarge an existing bore!
- Check the relief of the flange.
- Choose a flange which diameter matches the one of the saw blade (for flange sizes, please see table on the following pages).
- Choose the saw blade suitable for the material to be cut, since each material class has its own characteristics regarding hardness and abrasiveness. The wrong combination of saw blade and material can be fatal for the life and because of that the performance of the tool.

#### During and after mounting

- Mount the saw blade in the correct direction of rotation marked with an arrow on the saw blade.
- If it can be foreseen, that the saw blade has to be changed often, then the position of the tool as well as the flange to the spindle should be marked.
- Check the radial run-out of the spindle (please see table on the following pages for permissible tolerances).
- Check the vertical position of the spindle to the table.
- Check the radial run-out of the flange (please see table on the following pages for permissible tolerances).
- Check radial run-out of the saw blade (please see table on the following pages for permissible tolerances).
- Check parallelism of table and feed direction of the saw blade.

## Recommended Parameters Saw Blades Wet-Cutting

### 1. Peripheral speed

Dense, fine-grain and rich in quartz material	24 up to 28 m/s
Limestone and Marble	30 up to 40 m/s
Maximum	70 m/s

These details are indications, which can vary also outside the a.m. limits depending on the material being cut.

### 2. Traverse and vertical feed

- The deeper the cut is, the lower is the wear.
- High traverse feed and low down feed = flat cut ➤ increased wear of the diamond tool/segment.
- Low traverse feed and high down feed = deep cut ➤ increased danger, that the saw blade will get blunt.

### 3. Number of teeth

The lower the number of teeth with the same tool diameter is, the higher peripheral speeds can be carried out.

### 4. Cooling

The unrestricted supply of the coolant into the cutting slot has to be absolutely guaranteed. Clean cooling water reduces the wear of the tool. Therefore water treatment

equipment with mud drying should be used in closed cycles. For the amount of coolant required, please see tables on the following pages.

### 5. Material

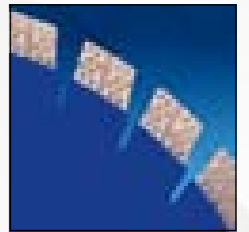
The stone has a crucial influence on performance and life of the saw blade. Since the tool is designed for the use on a certain material, a frequent change of the material to be cut leads to increased wear. Accordingly the life of the blades

decreases possibly quite drastically. The cut should always be made deepest possible. The setting of traverse speed and vertical feed have to be made correspondingly.

### 6. Accuracy of edges

Axial and radial runout tolerance of the saw blade have to be ensured. When cutting in steps, cut against the edge with reduced cutting speed during the last stage. Full cuts should also be worked contrarotating.

The recommended parameters are meant as guidance. They may vary on different machines, materials and other influencing factors.







## Recommended Parameters for Saw Blades Granite

Recommended parameters based on hardness class

Hardness class	Factor	Down feed (mm)	Traverse speed (m/min)	Peripheral speed (m/s)	Cutting rate (cm <sup>2</sup> /min)
1	1,0	10 – 30	2,0 – 3,5	30 – 40	500 – 800
2	1,4	8 – 25	2,0 – 3,5	30 – 40	500 – 700
3	1,8	7 – 20	2,0 – 3,5	25 – 35	375 – 500
4	2,5	5 – 12	2,0 – 3,5	25 – 35	375 – 500
5	4,0	4 – 10	2,0 – 3,5	20 – 35	200 – 300

Standard values as per diameter

Speed scale

Diameter Saw blade (mm)	Diameter Flange (mm)	Generated power (kW)	Amount of water (l/min)	RPM's at peripheral speed of						
				25 (m/s)	30 (m/s)	35 (m/s)	40 (m/s)	45 (m/s)	50 (m/s)	60 (m/s)
300	100	5,0 – 7,5	6 – 15	1590	1910	2230	2550	2860	3180	3820
350	120	5,0 – 7,5	10 – 15	1360	1640	1910	2180	2460	2730	3270
400	140	7,5 – 11	10 – 15	1190	1430	1670	1910	2150	2390	2860
450	140	7,5 – 11	15 – 20	1060	1270	1480	1700	1910	2120	2550
500	170	11 – 15	15 – 20	950	1150	1340	1530	1720	1910	2290
550	170	11 – 15	15 – 20	870	1040	1220	1390	1560	1740	2060
600	180	15 – 20	20 – 30	800	950	1110	1270	1430	1590	1910
625	180	15 – 20	20 – 30	760	920	1070	1220	1380	1530	1830
650	180	15 – 20	20 – 30	730	880	1030	1180	1320	1470	1760
700	200	20 – 30	30 – 40	680	820	950	1090	1230	1360	1640
725	200	20 – 30	30 – 40	660	790	920	1050	1190	1320	1580
800	230	25 – 35	30 – 40	600	720	840	950	1070	1190	1430
900	250	25 – 35	30 – 40	530	640	740	850	950	1060	1270
1000	250	30 – 40	40 – 50	480	570	670	760	860	950	1150
1100	250	30 – 40	40 – 50	430	520	610	690	780	870	1040
1150	300	25 – 40	40 – 50	420	500	580	660	750	830	1000
1200	300	30 – 40	50 – 60	400	480	560	640	720	800	950
1300	300	25 – 40	50 – 60	370	440	520	590	660	730	880
1350	300	30 – 40	50 – 60	350	420	500	570	640	710	850
1400	350	30 – 40	60 – 70	340	410	480	550	640	680	820
1500	350	35 – 45	60 – 70	320	380	460	510	570	640	760

Tolerances

Diameter (mm)	Axial run-out tolerance		Radial run-out tolerance		max. radial run-out		Parallelism Table guide (mm)
	Flange (mm)	Saw blade (mm)	Flange (mm)	Saw blade (mm)	Spindle (mm)	Saw (mm)	
300	0,03	0,15	0,04	0,15	0,02	0,20	0,02
350	0,03	0,15	0,04	0,15	0,02	0,20	0,03
400	0,03	0,15	0,04	0,15	0,02	0,20	0,03
450	0,03	0,20	0,04	0,20	0,03	0,25	0,05
500	0,03	0,20	0,04	0,20	0,03	0,25	0,05
550	0,03	0,20	0,04	0,20	0,03	0,25	0,05
600	0,03	0,20	0,04	0,20	0,03	0,25	0,06
625	0,03	0,25	0,04	0,20	0,03	0,25	0,06
650	0,03	0,25	0,04	0,20	0,03	0,25	0,06
700	0,03	0,25	0,04	0,20	0,03	0,25	0,07
725	0,03	0,25	0,04	0,20	0,03	0,25	0,07
800	0,03	0,25	0,04	0,20	0,03	0,25	0,07
900	0,03	0,25	0,04	0,20	0,03	0,25	0,09
1000	0,03	0,30	0,04	0,20	0,03	0,25	0,09
1100	0,03	0,30	0,04	0,20	0,03	0,25	0,10
1150	0,03	0,30	0,04	0,20	0,03	0,25	0,10
1200	0,03	0,50	0,04	0,25	0,03	0,25	0,10
1300	0,03	0,50	0,04	0,25	0,03	0,25	0,10
1350	0,03	0,50	0,04	0,25	0,03	0,25	0,10
1400	0,03	0,50	0,04	0,25	0,03	0,25	0,12
1500	0,03	0,50	0,04	0,25	0,03	0,25	0,15

All parameters are only to be considered as standard values and recommendations. They can vary depending on the machine type, material processed and other influencing parameters.

## Recommended Parameters for Block Saws Granite

Recommended parameters based on hardness class

Hardness class	Factor	Down feed (mm)	Traverse speed (m/min)	Peripheral speed (m/s)	Cutting rate (cm <sup>2</sup> /min)
1	1,0	10 – 15	2,5 – 3,5	24 – 32	250 – 525
2	1,4	8 – 12	2,5 – 3,5	24 – 32	200 – 420
3	1,8	6 – 10	2,5 – 3,5	24 – 32	150 – 350
4	2,5	5 – 8	2,5 – 3,5	24 – 32	125 – 280
5	4,0	4 – 6	2,5 – 3,5	24 – 32	100 – 210

Standard values as per diameter

Speed scale

Diameter Saw blade (mm)	Diameter Flange (mm)	Generated power (kW)	Amount of water (l/min)	RPM's at peripheral speed of						
				25 (m/s)	30 (m/s)	35 (m/s)	40 (m/s)	45 (m/s)	50 (m/s)	60 (m/s)
1600	350	35 – 45	60 – 70	300	360	420	480	540	600	720
1700	400	40 – 50	60 – 70	280	340	395	450	505	560	675
1750	400	40 – 50	60 – 75	275	330	380	440	490	545	655
1800	400	40 – 50	70 – 80	270	320	370	420	480	530	640
2000	400	45 – 60	70 – 80	240	290	330	380	430	480	570
2200	400	45 – 60	70 – 80	220	270	305	350	390	435	520
2300	400	50 – 65	75 – 90	210	250	290	335	375	415	500
2500	400	55 – 75	80 – 100	190	230	270	310	340	380	460
2700	400	55 – 75	80 – 100	180	210	250	280	320	350	420
3000	400	75 – 100	80 – 120	160	190	220	250	290	320	380
3200	400	75 – 100	80 – 120	150	180	210	240	270	300	360
3500	400	75 – 100	80 – 120	140	160	190	220	250	270	330

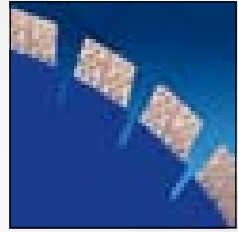
Tolerances

Diameter (mm)	Axial run-out tolerance		Radial run-out tolerance		Parallelism Table guide (mm)
	Flange (mm)	Saw blade (mm)	Flange (mm)	Saw blade (mm)	
1600	0,03	0,50	0,04	0,25	0,15
1700	0,03	0,80	0,04	0,25	0,20
1750	0,03	0,80	0,04	0,25	0,20
1800	0,03	0,80	0,04	0,25	0,20
2000	0,03	0,80	0,04	0,25	0,20
2200	0,03	1,10	0,04	0,25	0,25
2300	0,03	1,10	0,04	0,25	0,25
2500	0,03	1,10	0,04	0,25	0,25
2700	0,03	1,30	0,04	0,25	0,25
3000	0,03	1,30	0,04	0,25	0,30
3200	0,03	1,30	0,04	0,25	0,30
3500	0,03	1,30	0,04	0,25	0,30

All parameters are only to be considered as standard values and recommendations. They can vary depending on the machine type, material processed and other influencing parameters.

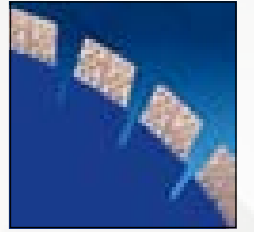


## Trouble Shooting Saw Blades



Problem	Checks / measures for solution
<b>Insufficient cutting speed, saw blades gets blunt</b>	Increase traverse speed
<b>When traverse speed is increased, the amperage increases excessively</b>	<ul style="list-style-type: none"> <li>Check peripheral speed</li> <li>Check if the machine power corresponds to the diameters of the saw blade</li> <li>Check cutting speed</li> <li>Increase traverse speed</li> <li>Sharpen saw blade in a soft, well-gripping material (soft Sandstone)</li> </ul>
<b>Cutting deviations</b>	<ul style="list-style-type: none"> <li>Check blade side run-out</li> <li>Check radial run-out of the spindle</li> <li>Check side run-out of the flange</li> <li>Check flange diameter</li> <li>Check fixing of the work piece</li> <li>Check tension of the saw blade</li> <li>Check condition of the segments</li> <li>Check vertical position of the flange</li> <li>Check, if the saw blade used is suitable for the material cut</li> <li>Check tension of the saw blade</li> <li>Check angularity of table and spindle as well as table and support</li> </ul>
<b>Inaccurate edges</b>	<ul style="list-style-type: none"> <li>Check the sawing method</li> <li>Check the tension of the saw blade</li> <li>Check blade side run-out</li> <li>Check radial run-out of the blade</li> <li>Check radial run-out of the spindle</li> <li>Check side run-out of the flange</li> <li>Check flange diameter</li> <li>Check vertical position of the flange</li> <li>Check tension of the saw blade</li> <li>Check angularity of table and spindle as well as table and support</li> </ul>
<b>Excessive wear of the diamond segments</b>	<ul style="list-style-type: none"> <li>Check cutting speed</li> <li>Check peripheral speed</li> <li>Check, if cooling is sufficient (see table on the previous page)</li> <li>Check flange diameter</li> <li>Check, if excessive vibrations do not develop inside the machine</li> <li>Check, if the saw blade used is suitable for the material sawn</li> <li>Check, if saw blade is hammering. If so, change to a deep cut with slow traverse to equalize immediately</li> </ul>

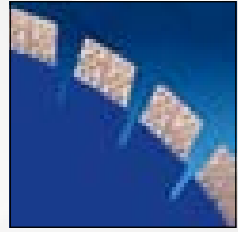
## Trouble Shooting Saw Blades



Problem	Checks / measures for solution
<b>Exceeding lateral abrasion</b>	<ul style="list-style-type: none"> <li>Check if the water cooling is sufficient</li> <li>Check lateral runout of the saw blade</li> <li>Check parallelism</li> <li>Check radial runout of the spindle</li> <li>Check lateral runout of the flange</li> <li>Check vertical position of the flange</li> <li>Check angularity of table and spindle as well as table support</li> </ul>
<b>Whistling of the Saw Blade</b>	<ul style="list-style-type: none"> <li>Check if saw blade is blunt, if it is under too much stress</li> <li>Check the cover, eventually damping</li> <li>Check the tension of the saw blade</li> </ul>
<b>Steel core is rubbing during cutting</b>	<ul style="list-style-type: none"> <li>Check parallelism of vertical guide to saw</li> <li>Check parallelism of table guide to saw blade</li> <li>Check vertical position of the flange</li> <li>Check side clearance of the segments</li> </ul>
<b>Crack in the steel core</b>	<ul style="list-style-type: none"> <li>Perforate the steel core at the end of the crack (3 – 4 mm Ø drill)</li> <li>Apply only on a single crack of the core. If core has more than 2 cracks exchange the core for a new one</li> </ul>
<b>Blunt saw blade</b>	Sharpening cut (low down feed, high traverse speed)
<b>Radial run-out / hammering saw blade</b>	Plain grinding (high down feed, low traverse speed)



## Recommended Parameters Diamond Gang Saw Blades



	Horizontal Gang Saw									Vertical Gang Saw	
	Slow-moving				High speed						
Length of stroke (mm)	360	400	500	600	500	540	700	750	800	400	500
Strokes/min	80	80	80	80	120	120	105	100 (105)	110	180	200
Blade velocity (m/s)	0,96	1,07	1,33	1,6	2	2,16	2,45	2,5 (2,63)	2,93	2,4	3,33
Generated power per blade (kW)	Segments/blade										
	20 – 30	30 – 45	1,0 – 1,5 kW				1,5 – 2,2 kW			2,0 – 3,0 kW	
Down feed (cm/h)	Marble		10 – 15 (10 – 18) [15 – 20]				15 – 25 (20 – 35)			35 – 60 (30 – 45) [50 – 70]	
	Limestone		12 – 20 (12 – 25)				20 – 30			40 – 90 (35 – 50) [60 – 100]	
	Agglomerate		10 – 18 (13 – 20)				22 – 30 (25 – 35)			60 – 100 (60 – 90)	
Amount of cooling water per blade (l/min)	7 – 8				9 – 10				9 – 10		
Deflection (mm)											
Soft stone	1,5 – 3,5				1,8 – 4,0				0,3 – 0,6		
Hard stone	1,5 – 3,5				1,8 – 4,0				0,5 – 0,8		
Tension (kN) [t]	(80 – 90) [8 – 9]				(90 – 100) [9 – 10]				(50 – 70) [5 – 7]		

When starting to saw please only use 2/3 – 3/4 of the normal down speed!  
Block lengths should correspond to the tipped length of the gang saw blade!

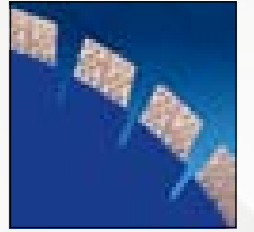
### Deflection tolerance at the centre of the blade

Length of blade (mm)	Soft stone (mm)	Hard stone (mm)
2600 – 2800	1,8 – 2,0	2,1 – 2,2
2800 – 3000	2,0 – 2,1	2,2 – 2,4
3000 – 3200	2,1 – 2,3	2,4 – 2,6
3200 – 3400	2,3 – 2,4	2,6 – 2,7
3400 – 3600	2,4 – 2,5	2,7 – 2,9
3600 – 3800	2,5 – 2,7	2,9 – 3,0
3800 – 4000	2,7 – 2,8	3,0 – 3,2
4000 – 4200	2,8 – 3,0	3,2 – 3,4
4200 – 4400	3,0 – 3,1	3,4 – 3,5
4400 – 4600	3,1 – 3,2	3,5 – 3,7
4600 – 4800	3,2 – 3,4	3,7 – 3,8
4800 – 5000	3,4 – 3,5	3,8 – 4,0

## Trouble Shooting Gang Saw Blades

### Defaults with sawn slabs

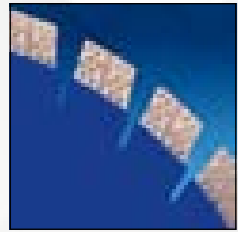
Problem	Checks / measures for solution
Cutting deviations	<ul style="list-style-type: none"> <li>Check verticality of the blades</li> <li>Check parallelism of the blades to stroke direction</li> <li>Check deflection of the blades</li> <li>Check tension of the blades</li> <li>Check condition of the segments</li> <li>Sharpen blades</li> <li>Increase down feed</li> <li>Check amount of water</li> </ul>
Chatter marks	<ul style="list-style-type: none"> <li>Check deflection of blades, possibly increase</li> <li>Check tension of the blades</li> <li>Increase down feed slightly, especially when starting with new blades</li> <li>Segment-spacing (change graduation)</li> </ul>



SAW BLADES  
2

### Defaults with the gang saw blades

Problem	Checks / measures for solution
Excessive wear at one end of the blade	Check horizontal fixing of the blades
Excessive wear at both ends of the blade	<ul style="list-style-type: none"> <li>Increase deflection</li> <li>Increase segmented length or reduce block lengths</li> </ul>
Excessive wear at the centre of the blade	<ul style="list-style-type: none"> <li>Reduce deflection</li> <li>Choose smaller segment-spacing or use longer blocks</li> <li>Increase water supply</li> </ul>
Insufficient output	<ul style="list-style-type: none"> <li>Increase water supply</li> <li>Use longer blocks</li> <li>Choose smaller segment-spacing</li> <li>Damaging machine vibrations (contact machine manufacturer)</li> <li>Check fixing of the block</li> </ul>



## Assembling Recommendations Gang Saw Blades

### Check if the blades are mounted correctly

- The blades should move in one level parallel to the saw level.

### Fixing of the pre-tension screw

- Fixing in order to achieve a power of 5-7 tons.
- Make sure that the pre-tensioned blades are vertical and parallel.

### Final tensioning

- As soon as each blade has been correctly mounted and controlled, so they have to be tensioned.

	Horizontal Frame	Vertical Frame
Soft stone	9 – 11 t	7 – 8 t
Hard stone	10 – 13 t	8 – 10 t
Blade Lateral Cut	180 x 3 oder 3,5 mm	180 x 3 mm

Hit softly with a hammer on the hangers, so that the final position can be achieved and the total tension will be transferred onto the blades!

### Control of the parallel assembly of the blades

- Arrange a dial gauge on the middle height at one of the blade ends.
- Move the frame carefully, in order to measure the blade displacement.
- Repeat this procedure at the other end of the blade.
- Both measuring values should not deviate more than 0,1 mm from each other.
- If the deviation is more than 0,1 mm, it can be corrected by moving of the blade hanger.

### Control if the blades are vertical

- Check with the water-level at the upper and lower point of the blade depth as well as at both ends of the blade.
- The measuring values should not deviate more than 0,03 m from each other.
- The blades have to be assembled such way that they have a positive deflection, as shown beside.

	Horizontal Frame	Vertical Frame
Soft stone	1,5 – 3,5 mm	0,3 – 0,6 mm
Hard stone	2,0 – 4,0 mm	0,5 – 0,8 mm

In case a blade shows a negative defelection, it has to be clamped again.

Finally the total width of the blade set has to be measured.

### Control of the hangers

- The rotary heads have to be free movable.
- Lubrication of the joint as well as the seats of the fixing screws with a rust resistant lubricant.
- The inner surfaces of the hangers and fixing screws have to be kept absolutely clean and free of dirt and rust.
- Some control points are welded at the hanger clamping fixtures, whose width has to be at least more than 2 mm than the casing of the blade holder.

### Control of the distance pieces

- Those have to be rust- and burr free.
- They have to be exactly 0,1 mm parallel.
- Mount only distance pieces of the same size on each blade.

### Control of the hydraulic clamping fixtures

- Considering of the instruction which has been delivered with the clamping fixtures.
- Check the cocks before assembling the blades.
- Release the cocks and tensioning wedges with pressure (2 tons).
- Clean the upper and lower surfaces of the wedges with a steel brush.
- Use lubricants carefully.

### Assembling of the blades

- Arrange the first blade on the side of the frame, at which the reference blade will be fixed.
- After having assembled the first blade, the blade and the frame have to be controlled correspondingly by a water-level, if they are horizontal.

### Adjustment of the blade position

- The hanger screw has to be adjusted such way that the blade axis is 9-10 mm above the hanger axis.
- After the adjustment of the first blade, assembling of the remaining blades the same way.
- Take care that the distance pieces and blades are clean.

