



WINTER

Diamond  
and CBN Tools  
for Internal  
Grinding

## Contents

**This catalogue contains the standard programme of grinding pins and wheels of various bonds, grit sizes and concentrations. Make your choice according to your individual requirements.**

	Page
Introduction	3
Survey and recommendations for different applications	4-5
Important hints for use of mounted pins	6-7
Diamond and CBN grinding pins - electroplated bond	8-12
for jig grinders	13-14
Diamond and CBN wheels - electroplated bond	15
Diamond grinding pins - sintered metal bond	16
Diamond grinding pins - resin bond - for circular tooth sawblades and grooving milling cutters	17
Diamond grinding pins - resin bond	18-21
CBN grinding pins - resin bond - for circular tooth sawblades and grooving milling cutters	22
CBN grinding pins - resin bond	23-24
Diamond grinding wheels - resin bond	25-26
CBN grinding wheels - resin bond	27

## Introduction

### Bonds

The properties of a bond influence the grinding characteristics of grinding pins and wheels, i.e. under all circumstances the bond has to hold the diamond or cubic boron nitride grits in a way to resist to the forces and temperatures resulting from the grinding operation until optimal results are achieved. On the other hand the bond has also to leave open space to transport the chips. In order to solve various grinding tasks, a number of different types of bonds is available.

### Resin Bonds

Mounted pins and grinding wheels with resin bonds are used for dry and wet grinding as well as for off hand and automatic grinding as this type of bond can be very well adapted to the grinding parameters.

Due to extensive research and development bonds have been found, which due to the characteristics of phenolic and polyimide resins, can be used for far more than 50% of all diamond and cubic boron nitride tools.

### Metal Bonds

Metal bonds are especially suitable for long-life tools, in general their cutting efficiency (stock removal/time unit) is lower than that of resin bonded tools.

### Electroplated Metal Bond

WINTER codes are as follows:

-for diamond: S  
-for CBN: GSS

In case of a single layer coating the layer of grit is electroplated to the carrier. Depending on the "thickness" of the galvanic metal bond the grits project from the bond by 30% to 50% of their diameter..

Because of the single layer it is possible to produce galvanic mounted pins of very small diameters.

In case of a grit size of D46 or B46 the smallest possible diameter is 0,3 mm.

### Wear of Bond during Use Self Dressing Effect

In case of proper selection of the specification (grit size-bond-concentration) and well adapted grinding conditions abrasive grits and bonds wear in the same way and the tool always is well cutting. This is called self dressing effect. It means that the tool is constantly self regenerating and dull grits are released from the bond. The reason for this self sharpening is the abrasion caused by the particles of the component to the bond in the so called "chip space", which also causes the wear of the bond.

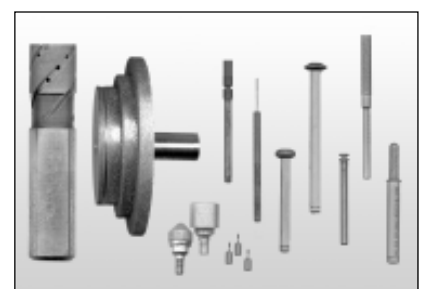
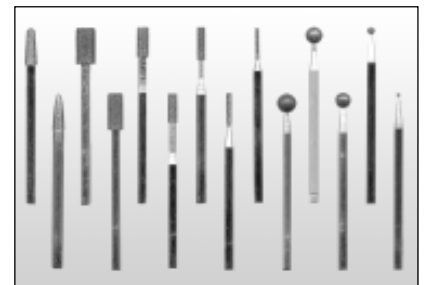
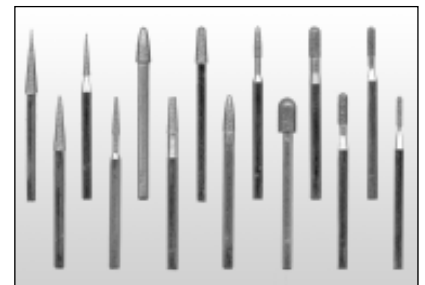
Exception:

Single layer electroplated tools.

In case of single layer electro coated tools the grits project in different ways from the carrier in dependence of their shape and position. Consequently the tools are acting very aggressive when new, this aggressiveness decreases during use due to natural wear. As no new grits are

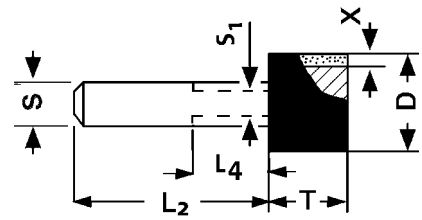
available a self dressing effect of these tools is not possible.

### Special Shapes of Electroplated Tools





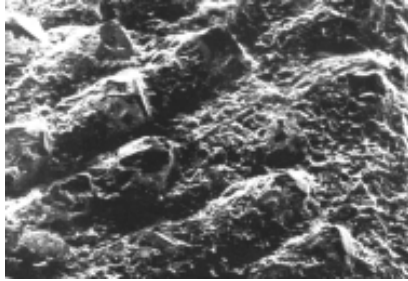
Coating of a single layer electroplated diamond grinding wheel (new).



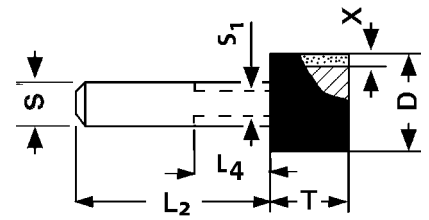
X = Single layer, consequently dependant on chosen grit size

## Grinding pins / Grinding wheels Overview and Application recommendations

Bond type	Electroplated metal bond	
Abrasive	Diamond	CBN
Bond designation	<b>WINTER-S</b> for grinding pins <b>1A1W</b> for grinding wheels <b>1A1</b>	<b>WINTER-GSS</b> for grinding pins <b>1A1W</b> for grinding wheels <b>1A1</b>
Characteristics	High material removal rate, workpiece surface quality depending on wear conditions. Special shapes possible. Dry or wet grinding.	High material removal rate, uniform workpiece surface quality after a certain break-in period. Special shapes possible. Only dry or with straight oil.
Applications	Carbide, hard short-chipping materials (e.g. oxide ceramics), presintered carbide. On internal and jig grinding machines.	HSS and high-alloy hardened steels. On internal and jig grinding machines
Recommended parameters		
Shape (order no.)	<b>1A1W and 1A1</b>	<b>1A1W and 1A1</b>
Grit size $d_k$	D91 - D126 - D181	B91 - B126 - B151
Bond	<b>WINTER-S</b>	<b>WINTER-GSS</b>
Concentration	S 33	S 33
Peripheral speed		
$v_c$ wet	(m/s) ...20   Please note	(m/s) ...30   Please note
$v_c$ dry	(m/s) ...15   MOS.	(m/s) ...20   MOS.
Table feed rate $v_f$	(m/min) 0.5...5	(m/min) 0.5...5
Workpiece speed $n_w$	(1/min) 100...1000	(1/min) 100...1000
Feed $s$ ( $=v_f \cdot 10^3 : n_w$ )	(mm) 1...5	(mm) 1...5
Infeed per double stroke $a_e$ per double stroke $\emptyset$	20 % of $d_k$	20 % of $d_k$
Coolant	Emulsion or synthetic coolant	Dry or straight oil



New Resin Bonded Cubic Boron Nitride Grinding wheel



X = variable, due to multi layer coating

Bond type	Sintered metal bond		Resin bond	
Abrasive	Diamond		Diamond	CBN
Bond designation	<b>Bz 351</b> for grinding pins <b>1A1W</b>		<b>K-plus 888 RY</b> for grinding pins <b>1A1W</b> <b>K-plus 888RY</b> for grinding wheels <b>1A1</b>	<b>KSS RY</b> for grinding pins <b>1A1W</b> <b>KSS RY</b> for grinding wheels <b>1A1</b>
Characteristics	Long life, normal material removal rate, good shape retention, workpiece surface quality depends on grit size and operating parameters. Suitable for wet or dry grinding, preferably wet grinding.		Uniformly good material removal rate, normal life, cool and soft grinding behaviour, workpiece surface quality depending on grit size and operating parameters. Dry or wet grinding.	Uniformly good material removal rate, normal life, cool and soft grinding behaviour, workpiece surface quality depending on operating parameters. Dry or wet grinding. Wet grinding preferred.
Applications	Carbide, hard short-chipping materials (e.g. oxide ceramics), sheet glass and hollow glass. On internal and jig grinding machines. On high-speed manual machines.		Carbide. Including carbide tipped sawblades, production of wire drawing dies and press dies. On internal and jig grinding machines.	HSS and hardened chromium steels. Case-hardening steels up to bore diameter approx. 20 mm. On internal and jig grinding machines.
Recommended parameters				
Shape (order no.)	<b>1A1W</b>		<b>1A1W and 1A1</b>	<b>1A1W and 1A1</b>
Grit size $d_k$	D64 - D91 - D126 - D151		D46 - D64 - D91 - D126	B91 - B126 - B151
Bond	<b>Bz 351</b>		<b>K-plus 888RY</b>	<b>KSS RY</b>
Concentration	C100		C100	V240 V180
Peripheral speed $v_c$ wet $v_c$ dry	(m/s) 15...20   Please note (m/s) 12...18   MOS.		(m/s) 15...25   Please note (m/s) 10...20   MOS.	(m/s) ...30   Please note (m/s) ...20   MOS.
Table feed rate $v_f$	(m/min) 0.5...5		(m/min) 0.5...5	(m/min) 0.5...5
Workpiece speed $n_w$	(1/min) 30...400		(1/min) 100...1000	(1/min) 100...1000
Feed $s$ ( $=v_f \cdot 10^3 : n_w$ )	(mm) 1...10		(mm) 1...5	(mm) 1...5
Infeed $a_e$ per double stroke $\phi$	2...5 % of $d_k$		2...5 % of $d_k$	2...5 % of $d_k$
Coolant	Emulsion Mist or compressed air		Oil and Emulsion	Oil and Emulsion



## Important Instructions for the Use of Mounted Pins

Using mounted pins the max. permissible numbers of revolutions, depending on the clamping length of the spindle

$L_3 (L_{3\min} / L_{3\max})$  must **not** be exceeded.

Minimum and maximum clamping lengths and the corresponding permissible numbers of revolutions can be seen from the tables on

revolutions to the chosen clamping length.

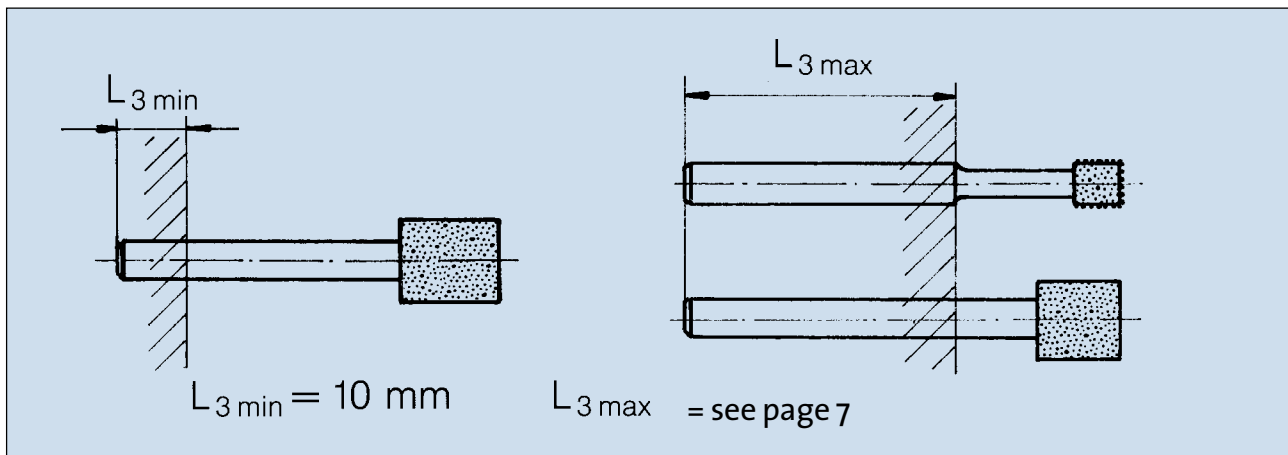
The relation is not proportional. The max. security can be achieved by using the information relating to  $L_{3\min} = 10\text{ mm}$ .

In case the stated permissible numbers of revolutions are lower than

of revolutions has to be checked and adjusted.

The number of revolutions engraved on the spindle of the tools is always the one valid for a clamping length of  $L_{3\min} = 10\text{ mm}$ .

In case the clamping length is in between the stated dimensions  $L_{3\min}$  and  $L_{3\max}$



pages 4 and 5 of this documentation.

The numbers of revolution mentioned in the tables page 7 refer to the min. and max. clamping lengths  $L_{3\min}$  . resp.  $L_{3\max}$

It is absolutely necessary to adapt the number of

the lowest number of revolutions of the spindle an other technical solution has to be found.

Before using mounted pins the max. permissible number

the permissible number of revolutions has to be recalculated.

Please bear in mind the numbers of revolutions recommended on pages 4 and 5.

## Important Instructions for the Use of Mounted Pins.

### 1A1W Grinding pins in electroplated metal bond

Prod. Gr. 1230/1262			Clamping length		Clamping length	
Shape	D	T	$L_{3min}$	MOS rpm	$L_{3max}$	MOS rpm
1A1W	- 0.4	- 4.0				
1A1W	- 0.5	- 2.0	10.0	12000	33.0	27000
1A1W	- 0.6	- 2.0	10.0	18000	33.0	41000
1A1W	- 0.6	- 4.0	10.0	18000	33.0	45000
1A1W	- 0.7	- 2.0	10.0	23000	33.0	57000
1A1W	- 0.7	- 4.0	10.0	24000	33.0	62000
1A1W	- 0.8	- 2.0	10.0	24000	31.0	50000
1A1W	- 0.8	- 4.0	10.0	30000	31.0	70000
1A1W	- 0.9	- 2.0	10.0	30000	31.0	66000
1A1W	- 0.9	- 4.0	10.0	30000	31.0	70000
1A1W	- 1.0	- 2.0	10.0	35000	31.0	82000
1A1W	- 1.0	- 4.0	10.0	36000	31.0	88000
1A1W	- 1.1	- 4.0	10.0	42000	28.0	91000
1A1W	- 1.2	- 4.0	10.0	45000	28.0	106000
1A1W	- 1.3	- 4.0	10.0	48000	28.0	120000
1A1W	- 1.4	- 4.0	10.0	50000	28.0	134000
1A1W	- 1.5	- 4.0	10.0	50000	28.0	134000
1A1W	- 1.6	- 4.0	10.0	52000	28.0	147000
1A1W	- 1.7	- 4.0	10.0	53000	28.0	150000

### WINTER-S (Diamond) WINTER-GSS (CBN) MOS (rpm) depending on clamping length $L_3$

Prod. Gr. 1230/1262			Clamping length		Clamping length	
Shape	D	T	$L_{3min}$	MOS rpm	$L_{3max}$	MOS rpm
1A1W	- 1.8	- 4.0	10.0	54000	28.0	150000
1A1W	- 1.9	- 4.0	10.0	54000	28.0	150000
1A1W	- 2.0	- 4.0	10.0	57000	24.0	138000
1A1W	- 2.2	- 4.0	10.0	57000	24.0	143000
1A1W	- 2.4	- 4.0	10.0	56000	24.0	145000
1A1W	- 2.5	- 4.0	10.0	56000	24.0	146000
1A1W	- 2.6	- 4.0	10.0	55000	24.0	146000
1A1W	- 2.8	- 4.0	10.0	54000	24.0	145000
1A1W	- 3.0	- 5.0	10.0	55000	20.0	106000
1A1W	- 3.5	- 5.0	10.0	51000	20.0	96000
1A1W	- 4.0	- 5.0	10.0	29000	35.0	132000
1A1W	- 4.5	- 5.0	10.0	28000	30.0	83000
1A1W	- 5.0	- 7.0	10.0	28000	40.0	85000
1A1W	- 6.0	- 7.0	10.0	39000	40.0	150000
1A1W	- 7.0	- 8.0	10.0	39000	40.0	136000
1A1W	- 8.0	- 10.0	10.0	38000	40.0	120000
1A1W	- 10.0	- 10.0	10.0	36000	40.0	96000
1A1W	- 12.0	- 10.0	10.0	33000	40.0	80000
1A1W	- 15.0	- 10.0	10.0	30000	40.0	64000

### 1A1W Grinding pins in sintered metal bond

Prod. Gr. 1210			Clamping length		Clamping length	
Shape	D	T	$L_{3min}$	MOS rpm	$L_{3max}$	MOS rpm
1A1W	- 3.0	- 6.0	10.0	16000	52.0	130000
1A1W	- 4.0	- 6.0	10.0	15000	52.0	138000
1A1W	- 5.0	- 6.0	10.0	14000	52.0	141000
1A1W	- 6.0	- 6.0	10.0	32000	52.0	150000
1A1W	- 6.0	- 8.0	10.0	30000	50.0	150000
1A1W	- 8.0	- 6.0	10.0	30000	52.0	120000
1A1W	- 8.0	- 10.0	10.0	27000	48.0	120000
1A1W	- 10.0	- 6.0	10.0	29000	52.0	96000

### WINTER-Bz351 (Diamond) MOS (rpm) depending on clamping length $L_3$

Prod. Gr. 1210			Clamping length		Clamping length	
Shape	D	T	$L_{3min}$	MOS rpm	$L_{3max}$	MOS rpm
1A1W	- 10.0	- 10.0	10.0	25000	48.0	96000
1A1W	- 12.0	- 6.0	10.0	27000	52.0	80000
1A1W	- 12.0	- 12.0	10.0	22000	46.0	80000
1A1W	- 15.0	- 6.0	10.0	25000	52.0	64000
1A1W	- 15.0	- 15.0	10.0	18000	43.0	62000
1A1W	- 20.0	- 6.0	10.0	22000	52.0	48000
1A1W	- 24.0	- 6.0	10.0	20000	52.0	40000

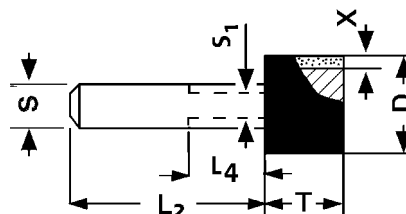
### 1A1W Grinding pins in resin bond

Prod. Gr. 1220/1260			Clamping length		Clamping length	
Shape	D	T	$L_{3min}$	MOS rpm	$L_{3max}$	MOS rpm
1A1W	- 3.0	- 6.0	10.0	16000	52.0	139000
1A1W	- 4.0	- 6.0	10.0	16000	52.0	137000
1A1W	- 5.0	- 6.0	10.0	16000	52.0	144000
1A1W	- 6.0	- 6.0	10.0	32000	52.0	150000
1A1W	- 6.0	- 8.0	10.0	32000	50.0	150000
1A1W	- 7.0	- 6.0	10.0	32000	52.0	136000
1A1W	- 7.0	- 8.0	10.0	31000	50.0	136000
1A1W	- 8.0	- 6.0	10.0	32000	52.0	120000
1A1W	- 8.0	- 10.0	10.0	30000	48.0	120000
1A1W	- 9.0	- 6.0	10.0	31000	48.0	106000
1A1W	- 10.0	- 6.0	10.0	30000	52.0	96000

### WINTER-K-plus 888RY (Diamond) WINTER-KSSRY (CBN) MOS (rpm) depending on clamping length $L_3$

Prod. Gr. 1220/1260			Clamping length		Clamping length	
Shape	D	T	$L_{3min}$	MOS rpm	$L_{3max}$	MOS rpm
1A1W	- 10.0	- 10.0	10.0	27000	48.0	96000
1A1W	- 12.0	- 6.0	10.0	29000	52.0	80000
1A1W	- 12.0	- 12.0	10.0	25000	46.0	80000
1A1W	- 14.0	- 6.0	10.0	28000	52.0	68000
1A1W	- 15.0	- 6.0	10.0	27000	52.0	64000
1A1W	- 15.0	- 15.0	10.0	20000	43.0	64000
1A1W	- 16.0	- 6.0	10.0	27000	52.0	60000
1A1W	- 18.0	- 6.0	10.0	25000	52.0	53000
1A1W	- 20.0	- 6.0	10.0	24000	52.0	48000
1A1W	- 24.0	- 6.0	10.0	22000	52.0	40000

# Grinding pins in electroplated metal bond



n<sub>zul</sub>: see page 7, L<sub>3 min</sub> = 10 mm

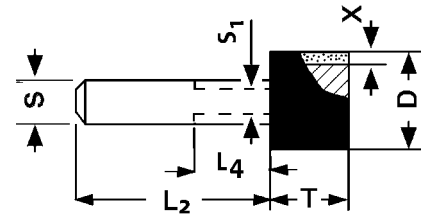
## S1A1W

Shape	D	T	Y	L <sub>2</sub>	L <sub>4</sub>	DIAMOND grit size	Order No.	CBN grit size	Order No.
S1A1W	0.3	2	3	28	7			B46	80707505
S1A1W	0.4	2	3	38	7	D46	82055157		
S1A1W	0.4	2	3	38	7			B64	82100000
S1A1W	0.4	4	3	36	7	D46	82067925		
S1A1W	0.5	2	3	38	7	D46	80706971		
S1A1W	0.5	2	3	38	7	D64	82057475		
S1A1W	0.5	2	3	38	7	<b>D91</b>	<b>80700011</b>	<b>B91</b>	<b>80701340</b>
S1A1W	0.6	2	3	38	7	D64	82051254		
S1A1W	0.6	2	3	38	7	D91	82132600	<b>B91</b>	<b>80701365</b>
S1A1W	0.6	4	3	36		D46	82105968		
S1A1W	0.6	4	3	36	7	<b>D91</b>	<b>80700036</b>	<b>B91</b>	<b>80701381</b>
S1A1W	0.7	2	3	38	7	D64	82169416		
S1A1W	0.7	2	3	38	7	D91	82051342	<b>B91</b>	<b>80701405</b>
S1A1W	0.7	4	3	36	7	D46	82174350		
S1A1W	0.7	4	3	36				B64	82151958
S1A1W	0.7	4	3	36	7	<b>D91</b>	<b>80700052</b>	<b>B91</b>	<b>80701438</b>
S1A1W	0.8	2	3	38	9	D46	82059673		
S1A1W	0.8	2	3	38	9	<b>D91</b>	<b>80700077</b>	<b>B91</b>	<b>80701462</b>
S1A1W	0.8	2	3	38	9			B126	82099460
S1A1W	0.8	4	3	36	9	D46	82054813		
S1A1W	0.8	4	3	36	9	D64	80703293		
S1A1W	0.8	4	3	36	9	<b>D91</b>	<b>80700093</b>	<b>B91</b>	<b>80701495</b>
S1A1W	0.8	4	3	36	9	<b>D126</b>	<b>80700100</b>	<b>B126</b>	<b>80701470</b>
S1A1W	0.8	4	3	36	9	D181	82123821		
S1A1W	0.9	2	3	38	9	D64	82136770		
S1A1W	0.9	2	3	38	9			<b>B91</b>	<b>80701527</b>
S1A1W	0.9	4	3	36	9	D46	82060847		
S1A1W	0.9	4	3	36	9	<b>D91</b>	<b>80700141</b>	B91	82051960
S1A1W	0.9	4	3	36	9	D126	82107357	<b>B126</b>	<b>80701535</b>
S1A1W	1	2	3	38	9	D46	82051257		
S1A1W	1	2	3	38	9	D64	82068367		
S1A1W	1	2	3	38	9	D91	82062885	<b>B91</b>	<b>80701584</b>
S1A1W	1	2	3	38	9	D126	82106353	<b>B126</b>	<b>80701568</b>
S1A1W	1	2	3	38				B151	82162503
S1A1W	1	2	3	38		D46	80709052		
S1A1W	1	4	3	36	9	D64	82125639	B64	82052460
S1A1W	1	4	3	36	9	<b>D91</b>	<b>80700190</b>	<b>B91</b>	<b>80701624</b>
S1A1W	1	4	3	36	9	<b>D126</b>	<b>80700206</b>	<b>B126</b>	<b>80701608</b>
S1A1W	1	4	3	36	9			B151	82162505
S1A1W	1	4	3	36	15	D151	82102799		

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 5 pieces.



# Grinding pins in electroplated metal bond



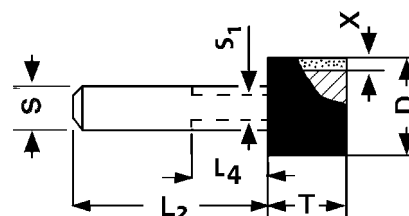
$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## S1A1W

Shape	D	T	Y	L <sub>2</sub>	L <sub>4</sub>	DIAMOND grit size	Order No.	CBN grit size	Order No.
S1A1W	1.1	4	3	36	12			B91	82170101
S1A1W	1.1	4	3	36	12	<b>D126</b>	<b>80700230</b>	<b>B126</b>	<b>80701632</b>
S1A1W	1.2	4	3	36	12	D46	80707010		
S1A1W	1.2	4	3	36	12	<b>D91</b>	<b>80700247</b>	<b>B91</b>	<b>80701698</b>
S1A1W	1.2	4	3	36	12	<b>D126</b>	<b>80700255</b>	<b>B126</b>	<b>80701673</b>
S1A1W	1.2	4	3	36	9			B151	82106178
S1A1W	1.2	4	3	36	12	D151	82065945		
S1A1W	1.3	4	3	36	12	<b>D91</b>	<b>80700271</b>	<b>B91</b>	<b>80701721</b>
S1A1W	1.3	4	3	36	12	<b>D126</b>	<b>80700288</b>	B126	82053018
S1A1W	1.4	4	3	36	12	D46	80707676	B46	82067845
S1A1W	1.4	4	3	36	12	D91	82048616	B91	82054046
S1A1W	1.4	4	3	36	12	D126	82048502	<b>B126</b>	<b>80701738</b>
S1A1W	1.5	4	3	36	12	D46	80707684		
S1A1W	1.5	4	3	36	12	D64	82051256		
S1A1W	1.5	4	3	36	12	<b>D91</b>	<b>80700336</b>	<b>B91</b>	<b>80701795</b>
S1A1W	1.5	4	3	36	12	<b>D126</b>	<b>80700344</b>	<b>B126</b>	<b>80701770</b>
S1A1W	1.5	4	3	36	12			B151	82162506
S1A1W	1.5	4	3		12	D181	80700352		
S1A1W	1.6	4	3	36		D46	82148146		
S1A1W	1.6	4	3	36	12	D91	82048617	<b>B91</b>	<b>80701835</b>
S1A1W	1.6	4	3	36	12	D126	82052477	<b>B126</b>	<b>80701810</b>
S1A1W	1.6	4	3	36	12	D181	82055632		
S1A1W	1.7	4	3	36	12	<b>D91</b>	<b>80700393</b>	B91	82049682
S1A1W	1.7	4	3	36	12	<b>D126</b>	<b>80700400</b>	<b>B126</b>	<b>80701851</b>
S1A1W	1.7	4	3	36	12	D181	80700417		
S1A1W	1.8	4	3	36	12	D46	80707708	B46	82105983
S1A1W	1.8	4	3	36	12	<b>D91</b>	<b>80700425</b>	<b>B91</b>	<b>80701916</b>
S1A1W	1.8	4	3	36	12	<b>D126</b>	<b>80700433</b>	<b>B126</b>	<b>80701892</b>
S1A1W	1.8	4	3	36	12			B151	80701884
S1A1W	1.8	4	3	36	12	D181	82143356		
S1A1W	1.9	4	3	36	12	D91	82092095	B91	82022582
S1A1W	1.9	4	3	36	12	D126	82104723	B126	82122785
S1A1W	2	4	3	36	16	<b>D46</b>	<b>80707716</b>	B46	82117774
S1A1W	2	4	3	36	16	<b>D91</b>	<b>80700482</b>	<b>B91</b>	<b>80701981</b>
S1A1W	2	4	3	36	16	<b>D126</b>	<b>80700490</b>	<b>B126</b>	<b>80701965</b>
S1A1W	2	4	3	36	16	<b>D181</b>	<b>80700506</b>	<b>B151</b>	<b>80701957</b>

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in electroplated metal bond



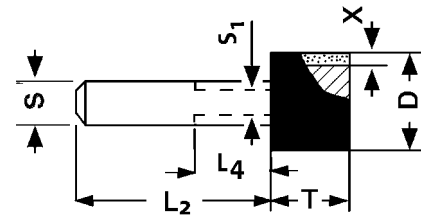
$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## S1A1W

Shape	D	T	Y	$L_2$	$L_4$	DIAMOND grit size	Order No.	CBN grit size	Order No.
S1A1W	2.2	4	3	36	16	<b>D91</b>	<b>80700514</b>	B91	82159695
S1A1W	2.2	4	3	36	16	<b>D126</b>	<b>80700522</b>	<b>B126</b>	<b>80702004</b>
S1A1W	2.2	4	3	36	16			B151	82054670
S1A1W	2.2	4	3	36	16	D181	80700530		
S1A1W	2.4	4	3	36	16	D91	82116123		
S1A1W	2.4	4	3	36	16	D126	82053015	<b>B126</b>	<b>80702045</b>
S1A1W	2.4	4	3	36	16			<b>B151</b>	<b>80702037</b>
S1A1W	2.5	4	3	36	16	<b>D46</b>	<b>80707724</b>	B46	82140446
S1A1W	2.5	4	3	36	16	<b>D91</b>	<b>80700571</b>	<b>B91</b>	<b>80702101</b>
S1A1W	2.5	4	3	36	16	<b>D126</b>	<b>80700588</b>	<b>B126</b>	<b>80702086</b>
S1A1W	2.5	4	3	36	9			B151	82093479
S1A1W	2.5	4	3	36	16	<b>D181</b>	<b>80700596</b>		
S1A1W	2.6	4	3	36	16	D91	82116125	B91	82175446
S1A1W	2.6	4	3	36	16	D126	82049251	<b>B126</b>	<b>80702126</b>
S1A1W	2.6	4	3	36	16			B151	82091920
S1A1W	2.8	4	3	36	16	<b>D91</b>	<b>80700636</b>	<b>B91</b>	<b>80702183</b>
S1A1W	2.8	4	3	36	16	<b>D126</b>	<b>80700644</b>	<b>B126</b>	<b>80702167</b>
S1A1W	2.8	4	3	36	16			B151	82049780
S1A1W	3	5	3	35	20	<b>D46</b>	<b>80707732</b>		
S1A1W	3	5	3	35	20	D64	82052480		
S1A1W	3	5	3	35	20	<b>D91</b>	<b>80700660</b>	<b>B91</b>	<b>80702223</b>
S1A1W	3	5	3	35	20	<b>D126</b>	<b>80700677</b>	<b>B126</b>	<b>80702207</b>
S1A1W	3	5	3	35	20			<b>B151</b>	<b>80702191</b>
S1A1W	3	5	3	35	20	<b>D181</b>	<b>80700685</b>	B252	82051006
S1A1W	3.5	5	3	35		<b>D91</b>	<b>80700700</b>	<b>B91</b>	<b>80702264</b>
S1A1W	3.5	5	3	35		<b>D126</b>	<b>80700717</b>	<b>B126</b>	<b>80702248</b>
S1A1W	3.5	5	3	35				<b>B151</b>	<b>80702231</b>
S1A1W	3.5	5	3	35		D181	80700725		
S1A1W	3.5	5	3	35				B252	82051007
S1A1W	4	5	3	45		D46	82127163	B46	82065754
S1A1W	4	5	3	45		<b>D91</b>	<b>80700733</b>	<b>B91</b>	<b>80702304</b>
S1A1W	4	5	3	45		<b>D126</b>	<b>80700741</b>	<b>B126</b>	<b>80702280</b>
S1A1W	4	5	3	45				<b>B151</b>	<b>80702272</b>
S1A1W	4	5	3	45				B252	82056265
S1A1W	4	5	3	45		<b>D181</b>	<b>80700758</b>		

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in electroplated metal bond



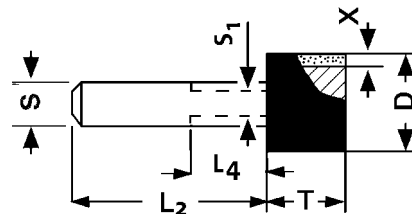
$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## S1A1W

Shape	D	T	Y	L <sub>2</sub>	L <sub>4</sub>	DIAMOND grit size	Order No.	CBN grit size	Order No.
S1A1W	4.5	5	3	45				B46	82149169
S1A1W	4.5	5	3	45		<b>D91</b>	<b>80700766</b>	B91	82155524
S1A1W	4.5	5	3	45		<b>D126</b>	<b>80700774</b>	<b>B126</b>	<b>80702320</b>
S1A1W	4.5	5	3	45				<b>B151</b>	<b>80702312</b>
S1A1W	4.5	5	3	45		D181	80700782		
S1A1W	5	7	3	43		<b>D91</b>	<b>80700790</b>	<b>B91</b>	<b>80702386</b>
S1A1W	5	7	3	43		<b>D126</b>	<b>80700806</b>	<b>B126</b>	<b>80702361</b>
S1A1W	5	7	3	43				<b>B151</b>	<b>80702353</b>
S1A1W	5	7	3	43		<b>D181</b>	<b>80700814</b>		
S1A1W	5	7	3	43				B252	82097462
S1A1W	6	7	6	53	20			B46	82127184
S1A1W	6	7	6	53	20	D64	82160550		
S1A1W	6	7	6	53	20	<b>D91</b>	<b>80700822</b>	<b>B91</b>	<b>80702426</b>
S1A1W	6	7	6	53	20	<b>D126</b>	<b>80700830</b>	<b>B126</b>	<b>80702401</b>
S1A1W	6	7	6	53	20			<b>B151</b>	<b>80702394</b>
S1A1W	6	7	6	53	20	<b>D181</b>	<b>80700847</b>		
S1A1W	6	7	6	53	20			B252	82097464
S1A1W	6	7	6	53	20	D427	82062887		
S1A1W	7	8	6	52		<b>D91</b>	<b>80700855</b>	<b>B91</b>	<b>80702467</b>
S1A1W	7	8	6	52		<b>D126</b>	<b>80700863</b>	<b>B126</b>	<b>80702442</b>
S1A1W	7	8	6	52				<b>B151</b>	<b>80702434</b>
S1A1W	7	8	6	52		<b>D181</b>	<b>80700871</b>		
S1A1W	8	10	6	50				B46	82127186
S1A1W	8	10	6	50		<b>D91</b>	<b>80700888</b>	<b>B91</b>	<b>80702507</b>
S1A1W	8	10	6	50		<b>D126</b>	<b>80700896</b>	<b>B126</b>	<b>80702483</b>
S1A1W	8	10	6	50				<b>B151</b>	<b>80702475</b>
S1A1W	8	10	6	50		<b>D181</b>	<b>80700903</b>		
S1A1W	8	10	6	50				B252	82113030
S1A1W	8	10	6	50		D301	82096099		
S1A1W	10	10	6	50		D46	82053007	B46	82127187
S1A1W	10	10	6	50		<b>D91</b>	<b>80700911</b>	<b>B91</b>	<b>80702548</b>
S1A1W	10	10	6	50		<b>D126</b>	<b>80700928</b>	<b>B126</b>	<b>80702523</b>
S1A1W	10	10	6	50				<b>B151</b>	<b>80702515</b>
S1A1W	10	10	6	50		<b>D181</b>	<b>80700936</b>		
S1A1W	10	10	6	50				B252	82115491

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in electroplated metal bond



$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## S1A1W

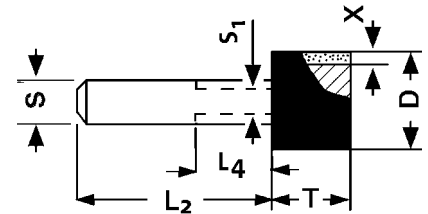
Shape	D	T	Y	L <sub>2</sub>	L <sub>4</sub>	DIAMOND grit size	Order No.	CBN grit size	Order No.
S1A1W	12	10	6	50				B46	82122637
S1A1W	12	10	6	50		<b>D91</b>	<b>80700944</b>	B91	82049783
S1A1W	12	10	6	50		<b>D126</b>	<b>80700952</b>	<b>B126</b>	<b>80702564</b>
S1A1W	12	10	6	50				<b>B151</b>	<b>80702556</b>
S1A1W	12	10	6	50		<b>D181</b>	<b>80700960</b>		
S1A1W	12	10	6	50				B252	82129827
S1A1W	15	10	6	50		D46	82097145		
S1A1W	15	10	6	50		D91	82113612	B91	82091738
S1A1W	15	10	6	50		<b>D126</b>	<b>80700985</b>	<b>B126</b>	<b>80702604</b>
S1A1W	15	10	6	50				<b>B151</b>	<b>80702597</b>
S1A1W	15	10	6	50				B252	82097463
S1A1W	15	10	6	50		<b>D181</b>	<b>80700993</b>		
S1A1W	15	10	6	50		D301	82141375		
S1A1W	16	10	6	50		D46	82151340		
S1A1W	16	10	6	50		D91	82142656		
S1A1W	16	10	6	50				B126	82153960
S1A1W	16	10	6	50		D181	82057489		
S1A1W	16	10	6	50				B252	82160033
S1A1W	18	10	6	50		D91	82053612		
S1A1W	18	10	6	50		D126	82154024		
S1A1W	18	10	6	50		D213	82096110		
S1A1W	20	10	6	50		D46	82127190	B46	82127188
S1A1W	20	10	6	50		D126	8206707	B126	82060566
S1A1W	20	10	6	50		D181	82053348		

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in electroplated metal bond

-for Jig Grinding Machines-

## S1A1W



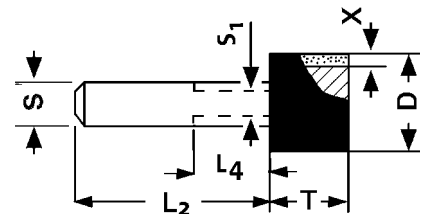
$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

Shape	D	T	Y	$L_2$	$L_4$	DIAMOND grit size	Order No.	CBN grit size	Order No.
S1A1W	0.6	4	3	36	9			B91	82167264
S1A1W	0.7	4	3	36	7	D46	82174350	B64	82151958
S1A1W	0.7	4	3	36	7	D126	80700466		
S1A1W	1.8	4	3	41	15			B91	82165458
S1A1W	2	4	3	41	17			B91	82165459
S1A1W	2.5	4	3	41	19			B91	82165460
S1A1W	3	5	3	40	22			B91	82165461
S1A1W	3.5	5	3	40				B91	82165462
S1A1W	3.5	5	3	45				B126	82159741
S1A1W	4	5	3	52				B91	82165463
S1A1W	4	5	3	60				B151	80710526
S1A1W	4.5	5	4	52				<b>B91</b>	<b>82165464</b>
S1A1W	5	6	4	51				B91	82165465
S1A1W	5	7	3	60				B151	80715018
S1A1W	5	7	3	43				B251	82097462
S1A1W	5.5	6	5	51				B91	82165466
S1A1W	5.5	6	5	64				B151	82144222
S1A1W	6	7	6	63	20			B91	82049472
S1A1W	6	7	5	63	20			B151	82118528
S1A1W	6	7	6	73	20	D91	82160553		
S1A1W	6	7	6	73	20	D181	82055633	B151	82058407
S1A1W	6	7	6	68	32			B251	80710964
S1A1W	6.5	7	6	63				B91	82049477
S1A1W	6.5	7	6	105				B126	82177394
S1A1W	6.5	7	6	105				B151	82177395
S1A1W	6.5	8	6	92				B126	82065346
S1A1W	6.5	10	6	100				B151	82051333
S1A1W	7	8	6	72		D91	82167265		
S1A1W	7	8	6	62				B91	82182902
S1A1W	7	8	6	62				B126	82182066
S1A1W	7	8	6	62				B151	82111858
S1A1W	7	8	6	105				B126	82177396
S1A1W	7	8	6	105				B151	82177398
S1A1W	8	10	6	80				B91	82133770
S1A1W	8	10	6	80		D181	82139630	B151	80710445
S1A1W	8	10	6	70				<b>B251</b>	<b>80709093</b>
S1A1W	8	10	8	105	20			B126	82177399
S1A1W	8	10	8	105	20			B151	82177400

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in electroplated metal bond

-for Jig Grinding Machines-  
**S1A1W**

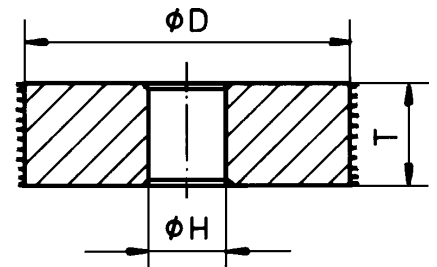


$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

Shape	D	T	Y	L	$L_4$	DIAMOND grit size	Order No.	CBN grit size	Order No.
S1A1W	8.5	10	8	90				B126	82053285
S1A1W	9	10	8	90				B91	82054685
S1A1W	9	10	8	90				B151	82106672
S1A1W	9	10	8	90				B252	82177402
S1A1W	10	10	6	90		D151	82265334		
S1A1W	10	10	6	90		D181	82049791	B151	82051381
S1A1W	10	10	8	70				B91	82165166
S1A1W	10	10	8	70				B151	82091655
S1A1W	10	10	8	70				B251	82071553
S1A1W	10	15	10	85				B91	82167790
S1A1W	11	10	10	90				B91	82055631
S1A1W	11	10	10	90				B151	82055630
S1A1W	11	10	10	90				B252	82183440
S1A1W	12	10	10	70				B91	82093308
S1A1W	12	10	10	100				B91	82144029
S1A1W	12	10	10	100				B151	82144031
S1A1W	12	10	10	70		D181	82049790	B251	82051909
S1A1W	12	10	10	80				B251	80711003
S1A1W	13	10	10	100				B151	82058404
S1A1W	15	10	10	92				B91	82144032
S1A1W	15	10	10	80				B151	82055227
S1A1W	15	10	10	90		D181	82051167	B151	82106685
S1A1W	15	10	10	80				<b>B251</b>	<b>80710980</b>
S1A1W	15	10	10	100				B151	81276000
S1A1W	16	10	10	90				B91	82063043
S1A1W	16	10	10	100				B126	82049785
S1A1W	16	10	10	100				B151	82050280
<b>Attention! The following items for jig grinding machines are in inch sizes</b>									
S1A1W	5	7	6.35	53	20			B151	82179224
S1A1W	5	7	6.35	73	20			B91	82145865
S1A1W	5.2	7	6.35	73	20			B91	82132828
S1A1W	6	8	9.52	120	35			B91	82152482
S1A1W	6.5	7	6.35	103				B91	82155736
S1A1W	7	7	9.52	75	22			B91	82116225
S1A1W	8.5	10	9.52	105	25			B91	82151329
S1A1W	10	10	9.52	105	25			B126	82151330
S1A1W	10	10	9.52	90				B151	82109234
S1A1W	12	10	9.52	80				B126	82067784
S1A1W	12	10	9.52	90		D126	82157665	B151	82162109
S1A1W	18	10	9.52	80				B252	82064412
S1A1W	20	5	9.52	95				B151	82070072
Items in heavy print are available ex stock. For all others the minimum ordering quantity is 5 pieces.									



# Grinding pins in electroplated metal bond

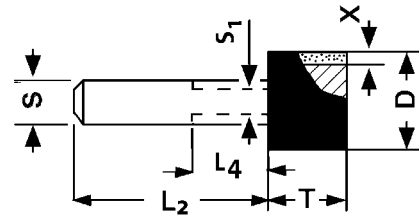


## S1A1

Shape	D	T	Y	L	L <sub>4</sub>	DIAMOND grit size	Order No.	CBN grit size	Order No.
S1A1	20	5	6			<b>D91</b>	<b>80106622</b>	B91	82100011
S1A1	20	5	6			<b>D126</b>	<b>80106630</b>	<b>B126</b>	<b>80106541</b>
S1A1	20	5	6					<b>B151</b>	<b>80106533</b>
S1A1	20	5	6			<b>D181</b>	<b>80106647</b>		
S1A1	20	5	8					B151	82100925
S1A1	20	5	8			D181	82146724		
S1A1	20	8	10					B126	82157529
S1A1	20	8	10					B151	82157530
S1A1	20	8	10			D181	82161378		
S1A1	25	8	6					B91	82100012
S1A1	25	8	6			<b>D126</b>	<b>80106663</b>	<b>B126</b>	<b>80106574</b>
S1A1	25	8	6					<b>B151</b>	<b>80106566</b>
S1A1	25	8	6			D301	82143507		
S1A1	25	8	8					B151	82058558
S1A1	25	8	8			D181	82146726		
S1A1	25	8	10			D181	82161384		
S1A1	25	8	13			D181	82161385		
S1A1	28	8	8					B151	82112275
S1A1	28	8	8					B252	82127683
S1A1	30	8	6			D91	80106688	B91	80106614
S1A1	30	8	6			<b>D126</b>	<b>80106696</b>	<b>B126</b>	<b>80106606</b>
S1A1	30	8	6					<b>B151</b>	<b>80106590</b>
S1A1	30	8	6			<b>D181</b>	<b>80106703</b>		
S1A1	30	8	13					B151	82067922
S1A1	30	8	13			D181	82146727		

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in sintered metal bond

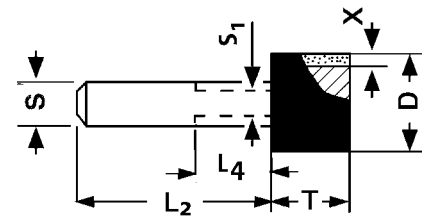


$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## ...BZ1A1W

Shape	D	T	X	S	$L_2$	$S_1$	$L_4$	DIAMOND				Order No.
								Bond BZ351 / Concentration C100				
1A1W	3	6	0.75	3	60	1.7	8	D46	D64	D91	D126	
1A1W	4	6	1	3	60	2.1	8	D46	D64	D91	D126	
1A1W	5	6	1	3	60	2.9	8	D46	D64	D91	D126	
1A1W	6	6	1	6	60	4.1	8	D46	D64	D91	D126	
1A1W	6	8	1	6	60	4.1	10	D46	D64	D91	D126	
1A1W	8	6	1	6	60			D46	D64	D91	D126	
1A1W	8	10	1	6	60			D46	D64	D91	D126	
1A1W	10	6	1	6	60			D46	D64	D91	D126	
1A1W	10	10	1	6	60			D46	D64	D91	D126	
1A1W	12	6	1	6	60			D46	D64	D91	D126	
1A1W	12	12	1	6	60			D46	D64	D91	D126	
1A1W	15	6	1	6	60			D46	D64	D91	D126	
1A1W	15	15	1	6	60			D46	D64	D91	D126	
1A1W	20	6	1	6	60			D46	D64	D91	D126	
1A1W	24	6	1	6	60			D46	D64	D91	D126	
<b>Stock program with short delivery times:</b>												
1A1W	3	6	0.75	3	60	1.7	8	-	-	-	D126	80702978
1A1W	4	6	1	3	60	2.1	8	-	-	D91	-	80703017
1A1W	4	6	1	3	60	2.1	8	-	-	-	D126	80703025
1A1W	5	6	1	3	60	2.9	8	-	-	D91	-	80703066
1A1W	5	6	1	3	60	2.9	8	-	-	-	D126	80703074
1A1W	6	6	1	6	60	4.1	8	-	-	D91	-	80703114
1A1W	6	6	1	6	60	4.1	8	-	-	-	D126	80703122
1A1W	8	6	1	6	60			-	-	D91	-	80703300
1A1W	10	10	1	6	60			-	-	D91	-	80703488
1A1W	10	10	1	6	60			-	-	-	D126	80703496
<b>Items in heavy print are available ex stock. For all others the minimum ordering quantity is 5 pieces.</b>												

# Grinding pins in resin bond

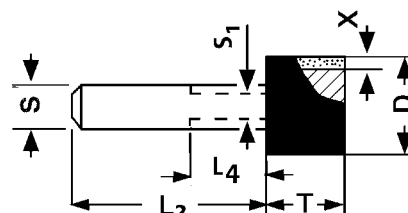


$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## ...K1A1W

Shape	D	T	X	S	L <sub>2</sub>	S <sub>1</sub>	L <sub>4</sub>	Grit size	Bond	DIAMOND Concentration	Order No.
System plunge grinding of circular tooth sawblades											
<b>3K1A1W</b>	<b>6</b>	<b>3</b>	<b>1.5</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D76</b>	<b>K-PLUS 921</b>	<b>C125</b>	<b>82034316</b>
<b>1K1A1W</b>	<b>6.5</b>	<b>3</b>	<b>1.75</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D76</b>	<b>K-PLUS 921</b>	<b>C125</b>	<b>80702620</b>
<b>8K1A1W</b>	<b>6.5</b>	<b>3</b>	<b>1.75</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D76</b>	<b>K-PLUS 921</b>	<b>C125</b>	<b>82171445</b>
<b>2K1A1W</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D76</b>	<b>K-PLUS 921</b>	<b>C125</b>	<b>80702686</b>
<b>2K1A1W</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D91</b>	<b>K-PLUS 921</b>	<b>C125</b>	<b>80701251</b>
<b>2K1A1W</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D91</b>	<b>K-PLUS 888TY</b>	<b>C150</b>	<b>80701657</b>
System oscillation grinding of circular tooth sawblades											
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C125</b>	<b>80704110</b>
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704143</b>
<b>K1A1W</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C125</b>	<b>80704232</b>
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C125</b>	<b>80704370</b>
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>8</b>	<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704402</b>
<b>K1A1W</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C125</b>	<b>80704573</b>
<b>K1A1W</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704605</b>
<b>K1A1W</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C125</b>	<b>80706500</b>
<b>K1A1W</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704735</b>
<b>K1A1W</b>	<b>16</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C125</b>	<b>80705034</b>
<b>K1A1W</b>	<b>16</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80705050</b>
<b>K1A1W</b>	<b>20</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C125</b>	<b>80706606</b>
<b>K1A1W</b>	<b>20</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80705107</b>
The items mentioned above can also be found in our catalogue „Diamond and CBN Tools for Grinding of Tools for Wood and Plastic Machining“.											
<p>Items in heavy print are available ex stock. For all others the minimum ordering quantity is 5 pieces.</p>											

# Grinding pins in resin bond



$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## ...K1A1W

Shape	D	T	X	S	L <sub>2</sub>	S <sub>1</sub>	L <sub>4</sub>	Grit size	Bond	DIAMOND Concentration	Order No.
<b>1K1A1W</b>	<b>2.8</b>	<b>2</b>	<b>0.55</b>	<b>3</b>	<b>25</b>	<b>1.8</b>	<b>5</b>	<b>D20B</b>	<b>K-PLUS 888RY</b>	<b>C125</b>	<b>80707262</b>
7K1A1W	3	5	0.65	3	60	2.5	9	D15C	K-PLUS 888RY	C100	82043673
K1A1W	3	6	0.65	3	60	1.7	8	D15C	K-PLUS 777R	C100	82067346
26K1A1W	3	6	0.65	3	60			D15C	K-PLUS 888RY	C100	82163004 <sup>1)</sup>
<b>K1A1W</b>	<b>3</b>	<b>6</b>	<b>0.65</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703885</b>
K1A1W	3	6	0.65	3	60	1.7	8	D25	K-PLUS 888RY	C100	82040248
26K1A1W	3	6	0.65	3	60			D46	K-PLUS 888RY	C100	82163005 <sup>1)</sup>
<b>K1A1W</b>	<b>3</b>	<b>6</b>	<b>0.65</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703893</b>
<b>K1A1W</b>	<b>3</b>	<b>6</b>	<b>0.65</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703900</b>
23K1A1W	3	6	0.65	3	44			D91	K-PLUS 888RY	C100	82054807
<b>K1A1W</b>	<b>3</b>	<b>6</b>	<b>0.65</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703917</b>
<b>K1A1W</b>	<b>3</b>	<b>6</b>	<b>0.65</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703925</b>
5K1A1W	4	3	1.15	3	63			D64	K-PLUS 888RY	C125	82051610 <sup>2)</sup>
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D15C</b>	<b>K-PLUS 777R</b>	<b>C100</b>	<b>80708883</b>
<b>5K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>			<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703958</b>
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80710583</b>
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703966</b>
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703974</b>
5K1A1W	4	6	1.15	3	60			D91	K-PLUS 888RY	C100	80710064
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703982</b>
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.7</b>	<b>8</b>	<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80703990</b>
4K1A1W	5	3	1.5	6	42	3.5	9	D76	K-PLUS 920	C125	82020026
<b>K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>D7</b>	<b>K-PLUS 777R</b>	<b>C100</b>	<b>80708891</b>
<b>10K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>			<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80708931</b>
K1A1W	5	6	1.5	3	60	2.1	8	D15C	K-PLUS 888RY	C100	82035441
<b>K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80706728</b>
<b>K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704038</b>
<b>10K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>			<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80709871</b>
<b>K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704046</b>
10K1A1W	5	6	1.5	3	60			D91	K-PLUS 888RY	C100	80708956
<b>K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704054</b>
<b>K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704062</b>
3K1A1W	5	7	1.5	4	60			D126	K-PLUS 888RY	C100	82026147 <sup>2)</sup>
<b>2K1A1W</b>	<b>5</b>	<b>12</b>	<b>1.5</b>	<b>4</b>	<b>60</b>			<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82120709</b>
1K1A1W	5.8	3	1.4	6	39	5.6	10	D76	K-PLUS 920	C125	82119059
1K1A1W	6	3	1.5	6	60	3.1	5	D64	K-PLUS 888RY	C125	82046939

All items with a drawing no. (like 26K1A1W...) do have a special geomtry - in these case please ask for a drwaing. In any case the grinding head is cylindrical.

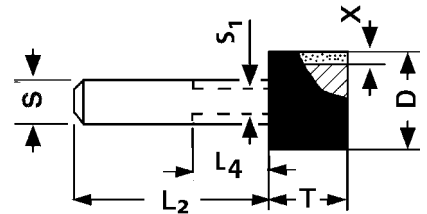
<sup>1)</sup> coated 2,5 mm on the face

<sup>2)</sup> coated 2,5 mm on the face

**Items in heavy print are available ex stock.**

For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in resin bond



$n_{zul}$ : see page 7,  $L_{3min} = 10$  mm

## ...K1A1W

Shape	D	T	X	S	L <sub>2</sub>	S <sub>1</sub>	L <sub>4</sub>	Grit size	Bond	DIAMOND Concentration	Order No.
K1A1W	6	6	1.5	6	60	3	8	D15C	K-PLUS 777R	C100	82095319
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>8</b>	<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704095</b>
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>8</b>	<b>D20B</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80706858</b>
1K1A1W	6	6	1.5	3	60			D46	K-PLUS 888RY	C100	82160155
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>8</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704102</b>
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704127</b>
K1A1W	6	6	1.5	6	60	3	8	D76	K-PLUS 921	C125	82051308
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>8</b>	<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704135</b>
<b>7K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82030448</b>
<b>8K1A1W</b>	<b>6</b>	<b>8</b>	<b>1.5</b>	<b>6</b>	<b>75</b>	<b>3.1</b>	<b>10</b>	<b>D7</b>	<b>K-PLUS 777R</b>	<b>C68</b>	<b>80709911</b> <sup>1)</sup>
<b>8K1A1W</b>	<b>6</b>	<b>8</b>	<b>1.5</b>	<b>6</b>	<b>75</b>	<b>3.1</b>	<b>10</b>	<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80701324</b> <sup>1)</sup>
K1A1W	6	8	1.5	6	60	3	10	D15C	K-PLUS 888RY	C100	82035440
<b>8K1A1W</b>	<b>6</b>	<b>8</b>	<b>1.5</b>	<b>6</b>	<b>75</b>	<b>3.1</b>	<b>10</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80709944</b> <sup>1)</sup>
<b>K1A1W</b>	<b>6</b>	<b>8</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>10</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704176</b>
K1A1W	6	8	1.5	6	60	3	10	D91	K-PLUS 888RY	C100	80704192
K1A1W	6	8	1.5	6	60	3	10	D126	K-PLUS 888RY	C100	80704208
<b>2K1A1W</b>	<b>6</b>	<b>12</b>	<b>1.5</b>	<b>5</b>	<b>60</b>			<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82120708</b>
1K1A1W	6.5	3	1.75	6	42	5.1	10	D46	K-PLUS 921	C125	82170744
<b>1K1A1W</b>	<b>6.5</b>	<b>3</b>	<b>1.75</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D54</b>	<b>K-PLUS 921</b>	<b>C125</b>	<b>82178166</b>
<b>1K1A1W</b>	<b>6.5</b>	<b>3</b>	<b>1.75</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D76</b>	<b>K-PLUS 920</b>	<b>C125</b>	<b>80709741</b>
6K1A1W	6.5	3	1.75	6	42	4	10	D76	K-PLUS 888RY	C125	82030188
<b>2K1A1W</b>	<b>6.5</b>	<b>3</b>	<b>1.75</b>	<b>6</b>	<b>42</b>	<b>3.1</b>	<b>10</b>	<b>D76</b>	<b>K-PLUS 921</b>	<b>C125</b>	<b>80701276</b>
<b>2K1A1W</b>	<b>6.5</b>	<b>3</b>	<b>1.75</b>	<b>6</b>	<b>42</b>	<b>3.1</b>	<b>10</b>	<b>D91</b>	<b>K-PLUS 888TY</b>	<b>C150</b>	<b>80706874</b>
6K1A1W	6.5	3	1.75	6	42	4	10	D91	K-PLUS 888TY	C150	82029862
<b>1K1A1W</b>	<b>6.5</b>	<b>6</b>	<b>1.75</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>D76</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82095044</b>
<b>2K1A1W</b>	<b>6.5</b>	<b>6</b>	<b>1.75</b>	<b>6</b>	<b>39</b>	<b>5.1</b>	<b>7</b>	<b>D76</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82050044</b>
2K1A1W	7	3	2	6	42	5.1	10	D54	K-PLUS 921	C100	82165027
2K1A1W	7	3	2	6	42	5.1	10	D54	K-PLUS 921	C125	82165028
2K1A1W	7	3	2	6	42	5.1	10	D76	K-PLUS 888TY	C150	80702580
<b>2K1A1W</b>	<b>7</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>42</b>	<b>5.1</b>	<b>10</b>	<b>D91</b>	<b>K-PLUS 920</b>	<b>C125</b>	<b>80710664</b>
2K1A1W	7	3	2	6	42	5.1	10	D151	K-PLUS 921	C125	80701284
K1A1W	7	6	2	6	60	3.1	8	D46	K-PLUS 888RY	C100	82024825
K1A1W	7	6	2	6	60	3.1	8	D46	K-PLUS 888RY	C125	82013763
K1A1W	7	6	2	6	60	3.1	8	D54	K-PLUS 921	C125	82173709
<b>K1A1W</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS RY</b>	<b>C100</b>	<b>80704240</b>
21K1A1W	7	6	2	6	60	5	8	D64	K-PLUS 888RY	C125	82172713
K1A1W	7	6	2	6	60	3.1	8	D91	K-PLUS 888TY	C125	82130976
<b>K1A1W</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>D91</b>	<b>K-PLUS TY</b>	<b>C150</b>	<b>80700296</b>
K1A1W	7	6	2	6	60	3.1	8	D126	K-PLUS 888RY	C100	82098806

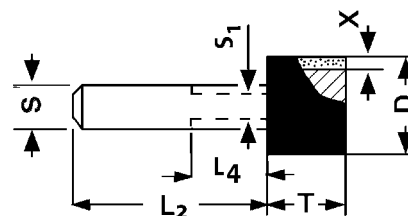
All items with a drawing no. (like 26K1A1W...) do have a special geomtry - in these case please ask for a drwaing. In any case the grinding head is cylindrical.

<sup>1)</sup> coated 2,5 mm on the face

Items in heavy print are available ex stock.

For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in resin bond



$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## ...K1A1W

Shape	D	T	X	S	$L_2$	$S_1$	$L_4$	Grit size	Bond	DIAMOND Concentration	Order No.
K1A1W	7	8	2	6	60	3	10	D15C	K-PLUS 888RY	C100	82012985
<b>K1A1W</b>	<b>7</b>	<b>8</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>10</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704298</b>
K1A1W	7	8	2	6	60	3	10	D126	K-PLUS 888RY	C100	82068201
1K1A1W	7.5	12	1.75	6	60			D91	K-PLUS 888RY	C100	82120710
30K1A1W	8	6	2	6	60	4.1	36	D7	K-PLUS 777R	C100	82144783
K1A1W	8	6	2	6	60	4.1	8	D7	K-PLUS 777R	C100	82012314
K1A1W	8	6	2	6	60	4.1	8	D15C	K-PLUS 777R	C100	82066302
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>8</b>	<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704354</b>
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>8</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704362</b>
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>8</b>	<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704387</b>
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>8</b>	<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704395</b>
<b>18K1A1W</b>	<b>8</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>75</b>	<b>4.1</b>	<b>12</b>	<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80710761 <sup>1)</sup></b>
K1A1W	8	10	2	6	60	4.1	12	D15C	K-PLUS 888RY	C100	82094289
<b>K1A1W</b>	<b>8</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>12</b>	<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704427</b>
<b>18K1A1W</b>	<b>8</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>75</b>	<b>4.1</b>	<b>12</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80709952 <sup>1)</sup></b>
<b>K1A1W</b>	<b>8</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>12</b>	<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704435</b>
K1A1W	8	10	2	6	60	4.1	12	D91	K-PLUS 888RY	C100	80704451
<b>K1A1W</b>	<b>8</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>12</b>	<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704468</b>
<b>K1A1W</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704565</b>
<b>K1A1W</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704581</b>
<b>K1A1W</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704598</b>
17K1A1W	10	6	2	3	26			D126	K-PLUS 888RY	C100	82146781
<b>22K1A1W</b>	<b>10</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>75</b>			<b>D7</b>	<b>K-PLUS 777R</b>	<b>C68</b>	<b>80706477 <sup>1)</sup></b>
<b>22K1A1W</b>	<b>10</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>75</b>			<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704621 <sup>1)</sup></b>
K1A1W	10	10	2	6	60			D15C	K-PLUS 888RY	C100	82013955
<b>22K1A1W</b>	<b>10</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>75</b>			<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80706485 <sup>1)</sup></b>
<b>K1A1W</b>	<b>10</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704638</b>
K1A1W	10	10	2	6	60			D91	K-PLUS 888RY	C100	80704654
<b>K1A1W</b>	<b>10</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704662</b>
6K1A1W	10	12	2	6	73			D20B	K-PLUS 888RY	C100	82170420 <sup>1)</sup>
K1A1W	12	6	2	6	60			D15A	K-PLUS 777R	C100	82136758
<b>K1A1W</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704702</b>
<b>K1A1W</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704710</b>
<b>K1A1W</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D91</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704727</b>
K1A1W	12	12	2	6	60			D7	K-PLUS 777R	C100	82027830

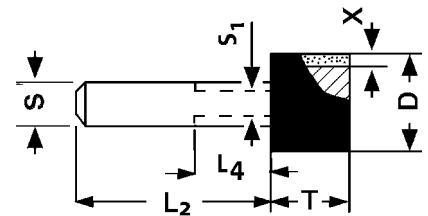
All items with a drawing no. (like 26K1A1W...) do have a special geomtry - in these case please ask for a drwaing. In any case the grinding head is cylindrical.

<sup>1)</sup> coated 3 mm on the face

**Items in heavy print are available ex stock.**  
For all others the minimum ordering quantity is 5 pieces.



# Grinding pins in resin bond



$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## ...K1A1W

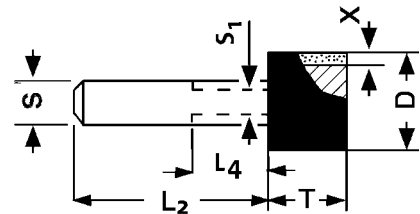
Shape	D	T	X	S	$L_2$	$S_1$	$L_4$	Grit size	Bond	DIAMOND Concentration	Order No.
<b>20K1A1W</b>	<b>12</b>	<b>12</b>	<b>2</b>	<b>6</b>	<b>58</b>			<b>D15C</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80709936<sup>1)</sup></b>
K1A1W	12	12	2	6	60			D46	K-PLUS 888RY	C100	82069866
K1A1W	12	12	2	6	60			D64	K-PLUS 888RY	C100	80704776
K1A1W	12	12	2	6	60			D91	K-PLUS 888RY	C100	80704784
K1A1W	12	12	2	6	60			D126	K-PLUS 888RY	C100	80704792
<b>K1A1W</b>	<b>14</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D64</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704832</b>
<b>K1A1W</b>	<b>14</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82071635</b>
K1A1W	15	6	2	6	60			D15C	K-PLUS 888RY	C100	80704873
<b>K1A1W</b>	<b>15</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D20B</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82042637</b>
K1A1W	15	6	2	6	60			D46	K-PLUS 888RY	C100	80704881
<b>K1A1W</b>	<b>15</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80704921</b>
K1A1W	16	6	2	6	60			D15A	K-PLUS 777R	C100	82011777
11K1A1W	16	6	2	6	60			D15C	K-PLUS 777R	C100	82065905
<b>K1A1W</b>	<b>16</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D46</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>80705026</b>
<b>2K1A1W</b>	<b>16</b>	<b>8</b>	<b>2</b>	<b>10</b>	<b>60</b>			<b>D7</b>	<b>K-PLUS 730</b>	<b>C100</b>	<b>80701040</b>
K1A1W	18	6	2	6	60			D91	K-PLUS 888RY	C100	80710218
<b>K1A1W</b>	<b>18</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82042220</b>
K1A1W	24	6	2	6	60			D46	K-PLUS 888RY	C100	82170795
K1A1W	24	6	2	6	60			D91	K-PLUS 888R	C100	80710161
<b>K1A1W</b>	<b>24</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>D126</b>	<b>K-PLUS 888RY</b>	<b>C100</b>	<b>82066303</b>

All items with a drawing no. (like 26K1A1W...) do have a special geometry - in these case please ask for a drawing. In any case the grinding head is cylindrical.

<sup>1)</sup> coated 3 mm on the face

**Items in heavy print are available ex stock.**  
For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in resin bond

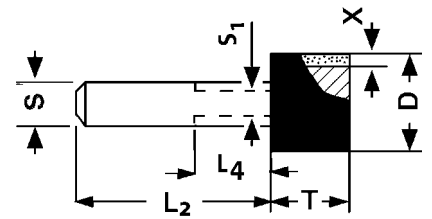


$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

## K1A1W

Shape	D	T	X	S	L <sub>2</sub>	S <sub>1</sub>	L <sub>4</sub>	Grit size	Bond	CBN Concentration	Order No.
System oscillation grinding of circular tooth sawblades											
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702807</b>
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4.1</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702053</b>
<b>K1A1W</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702831</b>
<b>K1A1W</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702378</b>
The items mentioned above can also be found in our catalogue „Diamond and CBN Tools for Grinding of Tools for Wood and Plastic Machining“.											
<p><b>Items in heavy print are available ex stock.</b> For all others the minimum ordering quantity is 5 pieces.</p>											

# Grinding pins in resin bond



$n_{zul}$ : see page 7,  $L_{3min} = 10$  mm

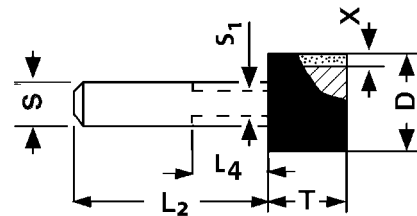
## ...K1A1W

Shape	D	T	X	S	$L_2$	$S_1$	$L_4$	Grit size	Bond	CBN Concentration	Order No.
K1A1W	3	6	0.65	3	60	1.8	8	B91	KSS RY	V240	80701454
<b>K1A1W</b>	<b>3</b>	<b>6</b>	<b>0.65</b>	<b>3</b>	<b>60</b>	<b>1.8</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701357</b>
K1A1W	3	6	0.65	3	60	1.8	8	B151	KSS RY	V240	80701332
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.8</b>	<b>8</b>	<b>B91</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701543</b>
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.8</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701510</b>
<b>K1A1W</b>	<b>4</b>	<b>6</b>	<b>1.15</b>	<b>3</b>	<b>60</b>	<b>1.8</b>	<b>8</b>	<b>B151</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701487</b>
<b>K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>B91</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701681</b>
<b>K1A1W</b>	<b>5</b>	<b>6</b>	<b>1.5</b>	<b>3</b>	<b>60</b>	<b>2.1</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701616</b>
K1A1W	5	6	1.5	3	60	2.1	8	B151	KSS RY	V240	80701576
K1A1W	6	6	1.5	6	60	3.1	8	B46	KSS RY	V240	82018101
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>B91</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702823</b>
10K1A1W	6	6	1.5	6	74	3.1	8	B126	KSS RY	V240	82154256
<b>K1A1W</b>	<b>6</b>	<b>6</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3.1</b>	<b>8</b>	<b>B151</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702791</b>
K1A1W	6	8	1.5	6	60	3	10	B91	KSS RY	V240	80701787
<b>K1A1W</b>	<b>6</b>	<b>8</b>	<b>1.5</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>10</b>	<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701746</b>
K1A1W	7	6	2	6	60	3	8	B91	KSS RY	V240	82027036
<b>K1A1W</b>	<b>7</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>3</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701868</b>
K1A1W	7	8	2	6	60	3	10	B126	KSS RY	V240	80701973
K1A1W	7	8	2	6	60	3	10	B151	KSS RY	V240	82147596
K1A1W	8	6	2	6	60	4	8	B46	KSS RY	V240	82015817
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4</b>	<b>8</b>	<b>B91</b>	<b>KSS RY</b>	<b>V240</b>	<b>80707570</b>
<b>K1A1W</b>	<b>8</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4</b>	<b>8</b>	<b>B151</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702012</b>
K1A1W	8	10	2	6	60	4	12	B46	KSS RY	V240	82021465
K1A1W	8	10	2	6	60	4	12	B91	KSS RY	V240	80708104
1K1A1W	8	10	2	6	60			B151	KSS RY	V240	82138207
<b>K1A1W</b>	<b>8</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>60</b>	<b>4</b>	<b>12</b>	<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702175</b>
K1A1W	9	6	2	6	60	5	8	B126	KSS RY	V240	80701398
K1A1W	10	6	2	6	60			B46	KSS RY	V240	82116049
<b>K1A1W</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B91</b>	<b>KSS RY</b>	<b>V240</b>	<b>80708348</b>
<b>K1A1W</b>	<b>10</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B151</b>	<b>KSS RY</b>	<b>V240</b>	<b>80701665</b>
<b>K1A1W</b>	<b>10</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702297</b>
<b>K1A1W</b>	<b>10</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B151</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702256</b>
K1A1W	12	6	2	6	60			B15	KSS RY	V240	82151820
<b>K1A1W</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B91</b>	<b>KSS RY</b>	<b>V240</b>	<b>82015002</b>
<b>K1A1W</b>	<b>12</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B151</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702337</b>

All items with a drawing no. (like 26K1A1W...) do have a special geometry - in these case please ask for a drawing. In any case the grinding head is cylindrical.

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 5 pieces.

# Grinding pins in resin bond



$n_{zul}$ : see page 7,  $L_{3min} = 10 \text{ mm}$

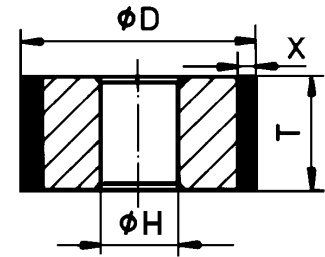
## ...K1A1W

Shape	D	T	X	S	$L_2$	$S_1$	$L_4$	Grit size	Bond	CBN Concentration	Order No.
K1A1W	12	12	2	6	60			B91	KSS RY	V240	82021621
<b>K1A1W</b>	<b>12</b>	<b>12</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702491</b>
K1A1W	12	12	2	6	60			B151	KSS RY	V240	80702450
K1A1W	14	6	2	6	60			B91	KSS RY	V240	82044063
<b>K1A1W</b>	<b>14</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80707587</b>
K1A1W	14	6	2	6	60			B151	KSS RY	V240	82070259
K1A1W	15	6	2	6	60			B15	KSS RY	V240	82151821
K1A1W	15	6	2	6	60			B91	KSS RY	V240	82034395
<b>K1A1W</b>	<b>15</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702612</b>
K1A1W	15	15	2	6	60			B91	KSS RY	V240	82141043
K1A1W	15	15	2	6	60			B126	KSS RY	V240	80708697
11K1A1W	15	15	2	6	90			B126	KSS RY	V240	82031488
<b>K1A1W</b>	<b>16</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80706785</b>
<b>K1A1W</b>	<b>18</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>60</b>			<b>B126</b>	<b>KSS RY</b>	<b>V240</b>	<b>80702880</b>
K1A1W	18	6	2	6	60			B151	KSS RY	V240	82145478
K1A1W	20	6	2	6	60			B15	KSS RY	V240	82151822
K1A1W	20	6	2	6	60			B46	KSS RY	V240	82167889
K1A1W	20	6	2	6	60			B91	KSS RY	V240	82043693
K1A1W	20	6	2	6	60			B126	KSS RY	V240	80702904
K1A1W	20	6	2	6	60			B151	KSS RY	V240	82070257
K1A1W	24	6	2	6	60			B91	KSS RY	V240	82031355
K1A1W	24	6	2	6	60			B126	KSS RY	V240	80702937
K1A1W	24	6	2	6	60			B151	KSS RY	V240	82044322

All items with a drawing no. (like 26K1A1W...) do have a special geomtry - in these case please ask for a drwaing. In any case the grinding head is cylindrical.

**Items in heavy print are available ex stock.**  
For all others the minimum ordering quantity is 5 pieces.

# Grinding wheels in resin bond

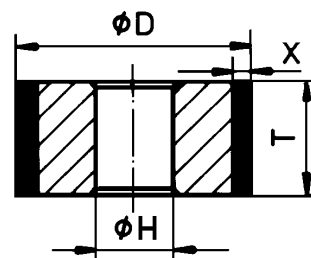


## ...K1A1

Shape	D	T	X	H	Grit size	Bond	DIAMOND Concentration	Order No.
1K1A1	15	6	2	8	D126	K-PLUS 888NY	C75 E	82150644
K1A1	15	10	2	6	D91	K-PLUS 888RY	C100 E	82006384
K1A1	18	6	2	6	D91	K-PLUS 888RY	C100 E	82043328
K1A1	20	6	4	8	D126	K-PLUS 888R	C100 E	82031894
K1A1	20	6	4	8	D46	K-PLUS 888R	C100 E	82008538
K1A1	20	6	4	8	D15C	K-PLUS 777R	C100 E	82008537
K1A1	20	8	4	6	D151	K-PLUS 8821NY	C100 E	82164330
K1A1	20	10	2	8	D91	K-PLUS 888RY	C100 E	82011470
K1A1	20	10	2	6	D126	K-PLUS 888RY	C100 E	82022441
K1A1	20	10	2	8	D126	K-PLUS 888NY	C75 E	82059698
K1A1	25	4	4	8	D126	K-PLUS 888RY	C100 E	82156899
K1A1	25	6	4	8	D46	K-PLUS 888R	C100 E	82026957
K1A1	25	6	4	8	D15C	K-PLUS 777R	C100 E	82008306
K1A1	25	6	4	8	D126	K-PLUS 888RY	C100 E	82014587
K1A1	25	8	4	10	D126	K-PLUS 888NY	C75 E	82150643
K1A1	25	10	2	10	D126	K-PLUS 888RY	C75 E	80118302
K1A1	25	10	2	10	D46	K-PLUS 888RY	C100 E	82066355
K1A1	25	10	4	8	D151	K-PLUS 888RY	C100 E	82164238
1K1A1	25	14	2	10	D64	K-PLUS 888N	C100 E	82027674
K1A1	30	8	4	13	D46	K-PLUS 888R	C100 E	82001676
K1A1	30	8	4	13	D126	K-PLUS 888R	C100 E	82031376
K1A1	30	8	2	8	D91	K-PLUS 888RY	C100 E	82128309
K1A1	30	10	4	13	D126	K-PLUS 888R	C100 E	82151924
K1A1	30	10	4	13	D46	K-PLUS 888R	C100 E	82151923
K1A1	30	10	2	10	D126	K-PLUS 888RY	C100 A	82068877
<b>K14A1</b>	<b>40</b>	<b>2</b>	<b>5</b>	<b>6</b>	<b>D91</b>	<b>K-PLUS 777R</b>	<b>C90 A</b>	<b>82129119</b>
<b>K14A1</b>	<b>40</b>	<b>2</b>	<b>5</b>	<b>10</b>	<b>D15C</b>	<b>K-PLUS 888R</b>	<b>C125 A</b>	<b>82160028</b>
1K1A1	40	3	8	6	D46	K-PLUS 777R	C75 E	82021135
<b>2K14A1</b>	<b>40</b>	<b>4</b>	<b>5</b>	<b>12</b>	<b>D91</b>	<b>K-PLUS 888R</b>	<b>C75 A</b>	<b>82159521</b>
K1A1	40	4	4	12.7	D91	K-PLUS 1414R	C100 A	82004571
K1A1	40	4	2	12	D91	K-PLUS 888R	C50 A	82020787
K1A1	40	8	2	8	D91	K-PLUS 888RY	C100 A	82134853
K1A1	40	8	3	13	D181	K-PLUS 1414N	C100 A	82155423
K1A1	40	10	4	20	D126	K-PLUS 888R	C100 A	82008311
K1A1	40	10	4	20	D46	K-PLUS 888R	C100 A	82005180
K1A1	40	10	2	10	D126	K-PLUS 1313NY	C75 A	82163355
K1A1	40	10	4	20	D15C	K-PLUS 777R	C100 A	82014438

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 2 pieces.

## Grinding wheels in resin bond



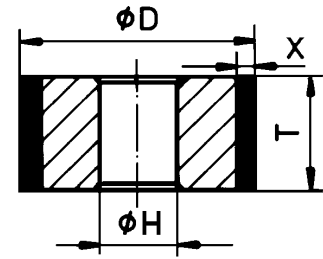
### ...K1A1

Shape	D	T	X	H	Grit size	Bond	DIAMOND Concentration	Order No.
K1A1	50	4	4	10	D126	K-PLUS 920	C100 A	82133372
<b>1K1A1</b>	<b>50</b>	<b>4</b>	<b>3</b>	<b>10</b>	<b>D64</b>	<b>K-PLUS 920</b>	<b>C75 A</b>	<b>80111733</b>
K1A1	50	6	3	10	D126	K-PLUS 888N	C100 A	82010657
K1A1	50	8	2	8	D91	K-PLUS 888RY	C100 A	82133384
K1A1	50	8	4	20	D46	K-PLUS 888R	C100 A	82004555
K1A1	50	8	2	10	D91	K-PLUS 888RY	C100 A	82155878
K1A1	50	8	4	20	D151	K-PLUS 888R	C75 A	82137845
<b>K1A1</b>	<b>50</b>	<b>10</b>	<b>4</b>	<b>20</b>	<b>D126</b>	<b>K-PLUS 1414N</b>	<b>C100</b>	<b>82146317</b>
1K1A1	50	12	4	20	D126	K-PLUS 888RY	C75 A	82043998
1K1A1	60	10	4	25	D46	K-PLUS 888NY	C50 H	82165112

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 2 pieces.



# Grinding wheels in resin bond



## ...K1A1

Shape	D	T	X	H	Grit size	Bond	CBN Concentration	Order No.
<b>K1A1</b>	<b>10</b>	<b>10</b>	<b>2</b>	<b>4</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80109377</b>
<b>K1A1</b>	<b>12</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80120992</b>
<b>K1A1</b>	<b>15</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80120984</b>
K1A1	15	10	2	6	B126	KSS RY	V240 E	80138926
<b>K1A1</b>	<b>16</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80109700</b>
<b>K1A1</b>	<b>18</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80107287</b>
K1A1	18	10	2	8	B126	KSS RY	V180 E	82122835
<b>K1A1</b>	<b>20</b>	<b>10</b>	<b>2</b>	<b>6</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80110250</b>
<b>K1A1</b>	<b>20</b>	<b>10</b>	<b>2</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80107140</b>
K1A1	20	10	2	10	B151	KSS RY	V180 E	82012257
<b>K1A1</b>	<b>20</b>	<b>15</b>	<b>2</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80120976</b>
1K1A1	20	20	2	10	B151	KSS RY-63	V180 E	82049958
<b>K1A1</b>	<b>25</b>	<b>10</b>	<b>2</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80132526</b>
<b>K1A1</b>	<b>25</b>	<b>10</b>	<b>2</b>	<b>10</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80126232</b>
<b>K1A1</b>	<b>25</b>	<b>15</b>	<b>2</b>	<b>8</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80134698</b>
K1A1	30	10	2	8	B151	KSS RY	V180 E	82023002
<b>K1A1</b>	<b>30</b>	<b>10</b>	<b>2</b>	<b>10</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80107181</b>
<b>K1A1</b>	<b>30</b>	<b>15</b>	<b>2</b>	<b>10</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80120951</b>
K1A1	32	15	2	10	B151	KSS RY	V180 E	82025025
<b>K1A1</b>	<b>38</b>	<b>20</b>	<b>2</b>	<b>15</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80121007</b>
K1A1	40	10	2	10	B126	KSS RY	V180 A	82007726
K1A1	40	15	2	10	B126	KSS NY	V240 A	82007035
2K1A1	50	6	6	20	B76	KSS RY	V300 A	82046442
K1A1	50	10	2	12	B151	KSS RY	V240 A	82040317
<b>K1A1</b>	<b>50</b>	<b>10</b>	<b>2</b>	<b>20</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80135183</b>
K1A1	60	6	10	20	B76	KSS RY	V300 A	82156209
<b>K1A1</b>	<b>60</b>	<b>15</b>	<b>2</b>	<b>20</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80110080</b>
<b>K1A1</b>	<b>100</b>	<b>10</b>	<b>2</b>	<b>20</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80129798</b>
<b>K1A1</b>	<b>125</b>	<b>10</b>	<b>2</b>	<b>20</b>	<b>B126</b>	<b>KSS RY</b>	<b>V180 E</b>	<b>80136171</b>

Items in heavy print are available ex stock.  
For all others the minimum ordering quantity is 2 pieces.



**SAINT-GOBAIN**  
**ABRASIVES**

**SAINT-GOBAIN**  
**Diamantwerkzeuge**  
**GmbH & Co. KG**  
Schützenwall 13-17,  
D-22844 Norderstedt  
P.O.Box 2049,  
D-22841 Norderstedt  
Tel.: +49 (0)40-52 58-0  
Fax: +49 (0)40-52 58-215  
Internet:  
<http://www.winter-dtcbn.de>  
E-mail:  
[info-winter@saint-gobain.com](mailto:info-winter@saint-gobain.com)



Certified acc. to  
DIN EN ISO 14001  
Certificate No.  
EM-2129 HH



Certified acc. to  
DIN EN ISO 9001  
Certificate No.  
QS-453 HH



Organization  
for the Safety  
of Abrasives (oSa)