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Product overview

## The product groups at a glance

With this catalogue, Klingspor makes it quick and easy to select the products you need from our huge range of top quality abrasives. The clear and logical layout in fourteen product groups makes it easy for you to find what you are looking for.

State-of-the-art manufacturing techniques ensure that our coated abrasives fulfill the most demanding standards of surface finish, long life and stock removal.



#### Rolls

Klingspor rolls for hand sanding or use with handheld machines are available in a number of special grades designed for a wide variety of materials – from wood, to metal, to paint.



#### **Belts**

Klingspor abrasive belts are available in various sizes and grades to meet all sanding and grinding requirements for a wide range of materials and applications.



#### Fibre discs

Klingspor fibre discs are exceptionally suited for rough grinding work, derusting metal parts, deburring and working on welded seams.



#### **Quick Change Discs**

Klingspor Quick Change
Discs are designed for use on
pneumatic and electric die
grinders. The Quick Change
Discs allow a fast and safe tool
change.



## Abrasive strips, sheets and discs

Klingspor strips, sheets and discs are available in various qualities and designs.



#### **Abrasive mop wheels**

The abrasive mop wheel is particularly suitable for finishing where flexibility is a must. It matches the contours of any workpiece perfectly. Klingspor has the right abrasive mop wheel for virtually every application and for nearly all types of material.

#### **General** information

Product overview





#### **Non-woven products**

Klingspor offers a large variety of non-woven products. From rolled goods, belts and wheels to abrasive angle grinder mop discs and abrasive spindle mop varieties.



#### Wire brushes

Klingspor wire brushes for use on the most diverse cleaning and surface preparation applications on steel and stainless steel.



#### **Abrasive mop discs**

The performance of the Klingspor abrasive mop disc, with its fan-shaped radial arrangement of the cloth grinding flaps, far exceeds that of other abrasive products.



## Kronenflex grinding discs and cutting-off wheels

Continuous innovation and the development of specialised products for all application areas enables Klingspor to offer a range of grinding discs and cutting-off wheels to satisfy every need.



#### **Retail range**

The complete range available with relevant grit ranges and assortments in customised packing units. Uniform packing design with precise product identification for quick access.



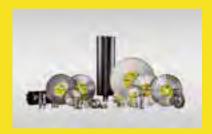
#### Flexible abrasives

Flexible abrasives which were developed by Klingspor for precision finishing and polishing work on all kinds of surfaces.



#### **Carbide burrs**

Klingspor carbide burrs are manufactured according to the highest quality standards and with utmost precision. The different cuts are adapted to meet the specific requirements of various materials and applications.



#### **Diamond tools**

Klingspor's comprehensive range of diamond tools makes it easy for any user to work faster and with greater precision and endurance. As they are made of carefully tested premium grade materials, the products included in each product line offer a wide range of possible applications and meet the highest safety standards.

### **General information**

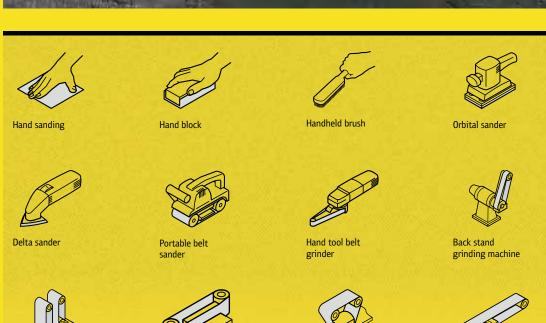
**Product overview** 



Random orbital sander

Centreless linishing

machine





### **General information**

**Product overview** 







Angle grinder



Stationary cutting machine ≤ 5kW



Right angle die grinder



Joint router



Variable speed angle grinder



Chop saw



Flexible shaft grinder



Stationary cutting machine > 5kW



Angle grinder with brush



Drilling machine



Petrol powered cutter with clamping device



Parquet sander



Angle grinder with cup grinding wheel



Joint cutter



Fillet weld grinder



Drill stand



Petrol powered cutter



Lifting beam with mottling points



Table saw

## Product guide Coated abrasives

_	Туре	Properties	Backing	Grain type
	PS 8 A	Waterproof	A-paper	SiC
	PS 8 C	Waterproof	C-paper	SiC
	PS 11 A	Waterproof	A-paper	SiC
	PS 11 C	Waterproof	C-paper	SiC
	PL 16 E		E-paper	Aluminium oxide
	PS 20 FW	Specially coated	F-paper	Aluminium oxide
	PS 21 F		F-paper	Zirconia alumina
	PS 22 F ACT	ANTISTATIC	F-paper	Aluminium oxide
	PS 24 F ACT	ANTISTATIC	F-paper	SiC
_	PL 28 C	ANTISTATIC	C-paper	Aluminium oxide
abe	PS 29 F ACT	ANTISTATIC	F-paper	Aluminium oxide
Abrasive paper	PS 30 D		D-paper	Aluminium oxide
lası	PL 31 B		B-paper	Aluminium oxide
¥	PS 33 B		B-paper	Aluminium oxide
	PS 33 C		C-paper	Aluminium oxide
	PS 44 E		E-paper	Aluminium oxide
	PS 46 E		E-paper	Aluminium oxide
	PS 48 D		D-paper	Aluminium oxide
	PS 524 E	ANTISTATIC	E-paper	SiC
	PS 529 F	KULEX	F-paper	SiC agglomerate
	PS 61 F		F-paper	Ceramic aluminium oxide
	PS 729 F		F-paper	Aluminium oxide-agglomerate
	PS 73 BW	Specially coated	B-paper	Aluminium oxide
Ī	PS 19 EK		E-paper	SiC
	PS 21 FK		F-paper	Zirconia alumina
	PS 22 K		E-paper	Aluminium oxide
	PS 33 BK		B-paper	Aluminium oxide
seir rastening	PS 33 CK		C-paper	Aluminium oxide
aste	PS 61 FK		F-paper	Ceramic aluminium oxide
T T	FP 73 WK	Specially coated	Film	Aluminium oxide
ň	PS 73 BWK	Specially coated	B-paper	Aluminium oxide
	PS 73 CWK	Specially coated	C-paper	Aluminium oxide
	PS 77 CK T-ACT	T-ACT coating	C-paper	Aluminium oxide
	FP 77 K T-ACT	T-ACT coating	Film	Aluminium oxide

Clo	Cloth					
JF	Cotton, light, highly flexible	Ī				
GX	Blended cloth, light, flexible					
]	Cotton, light					
XF	Cotton, heavy, flexible					
Χ	Cotton, heavy					
Υ	Polyester, heavy, highly firm					
Z	Polyester, heavy, highly firm,					
	can be divided into segments					

Pap	Paper					
Α	approx. 95 g/m <sup>2</sup>					
В	approx. 105 g/m <sup>2</sup>					
C	approx. 110 g/m <sup>2</sup>					
D	approx. 130 g/m <sup>2</sup>					
E	approx. 250 g/m <sup>2</sup>					
F	approx. 300 g/m <sup>2</sup>					
G	approx. 400 g/m <sup>2</sup>					

## **Product guide**Coated abrasives



									Pa	ge					
	Туре	Coating	Bonding agent	Waterproof	Available grits	Rolls	File belts	Belts for handheld grinders	Short and long belts	Spirabands	Wide belts	Fibre discs	Strips	Sheets	Discs
	PS 8 A	•	K	<b>√</b>	180-2500									81	
	PS 8 C	•	K	<b>√</b>	60–150									81	
	PS 11 A	•	K	V	220–2000	18								83	
	PS 11 C	•	K	V	60-400, 600, 1000									82	
	PL 16 E	•	K/L		40, 60, 80, 100	18							88		
	PS 20 FW	•	K		80,120-180				38		52				
	PS 21 F	•	K		40, 60–320, 400				38		52				
	PS 22 F ACT	•	K		40, 60–400	19			38		53				
	PS 24 F ACT	•	K		80, 120-800				39		54				
<u>_</u>	PL 28 C	0	K/L		36, 40, 60–240									84	
Abrasive paper	PS 29 F ACT	0	K		40–320, 400	20			39		54				
ive	PS 30 D	•	K		40, 60–240, 320	20									
bras	PL 31 B	•	L		40–320, 400	21								84	
•	PS 33 B	•	K		150–320, 400–600	22								86	
	PS 33 C	•	K		40, 60–120	22								85	
	PS 44 E	•	K		36	23									
	PS 46 E	•	K		60	23									
	PS 48 D	•	K		80	24									
	PS 524 E	•	K		40, 60-800				39		53				
	PS 529 F		K		120, 180, 240, 320, 400				40		55				
	PS 61 F	•	K		60, 80, 120–320, 400				40		55				
	PS 729 F		K		180, 240, 320, 400				40		56				
	PS 73 BW	•	K		150-1500									86	
	PS 19 EK	•	K		36, 40, 60-120, 220, 320, 400, 600, 800, 1200										100
	PS 21 FK	•	K		40, 60–180, 240, 320, 400										101
	PS 22 K	•	K		24, 40, 60–240, 320, 400								88		101
b0	PS 33 BK	•	K		150-320, 400-600								89		105
ing	PS 33 CK	•	K		40, 60–120								89		104
Self fastening	PS 61 FK	•	K		60, 80, 120–180, 240										106
Self	FP 73 WK	•	K		80-180, 240, 320, 400, 600-1500								88		107
U1	PS 73 BWK	•	K		150-1500								88		108
	PS 73 CWK	•	K		40, 60–120										108
	PS 77 CK T-ACT	•	K		60–220								90		111
	FP 77 K T-ACT	•	K		240–2000								90		110

K Resin L Glue

Туре	Properties		Backing	Grain type
CS 308 Y			Y-polyester	Aluminium oxide
LS 309 JF			JF-cotton	Aluminium oxide
LS 309 XI	1		X-cotton	Aluminium oxide
CS 310 X			X-cotton	Aluminium oxide
CS 310 X			XF-cotton	Aluminium oxide
CS 311 Y	ACT ANTISTATIC		Y-polyester	Aluminium oxide
LS 312 JF			JF-cotton	Aluminium oxide
CS 320 Y	Waterproof		Y-polyester	SiC
CS 321 X	Waterproof		X-cotton	SiC
CS 322 X	Waterproof		X-cotton	Cork
CS 326 Y	KULEX, waterproo	ıf	Y-polyester	Aluminium oxide-agglomerate
CS 329 Y	KULEX		Y-polyester	Aluminium oxide-agglomerate
CS 330 X	Waterproof		X-cotton	SiC / cork
KL 361 JH			JF-cotton	Aluminium oxide
KL 371 X			X-cotton	Aluminium oxide
CS 409 Y	Multibond		Y-polyester	Zirconia alumina
CS 411 Y	Waterproof		Y-polyester	Zirconia alumina
CS 412 Y	Waterproof		Y-polyester	Aluminium oxide
CS 420 Y	Waterproof, NOPP	FX	Y-polyester	Aluminium oxide
GX 533 JI		LA.	JF-blended cloth	SiC
CS 538 Z			Z-polyester	SiC
CS 729 X	Waterproof		X-cotton	Aluminium oxide-agglomerate
CS 920 Y			Y-polyester	Ceramic aluminium oxide
CS 922 Y			Y-polyester	Ceramic aluminium oxide
CS 561	waterproof		Fibre	Aluminium oxide
			Fibre	Zirconia alumina
CS 570	Multibond		Fibre	Zirconia alumina
FS 964 A			Fibre	Ceramic aluminium oxide
FS 966 A			Fibre Abrasive screen	Ceramic aluminium oxide
AN 400 NRO 400	Waterproof		Non-woven web	Aluminium oxide  Aluminium oxide
			Non-woven web	SiC
NRO 500 NPA 400			Non-woven web	Aluminium oxide
			Non-woven web	SiC
NPA 500			Surface conditioning material	Aluminium oxide
SV 484			Surface conditioning material	
NDS 800	Watawayaaf		, and the second	Aluminium oxide  Aluminium oxide
NBS 800	Waterproof	-l. flerible wetermers	Surface conditioning material	
SK 500		ck, flexible, waterproof	Sponge	Aluminium oxide
SK 700 A	Abrasive hand blo		Sponge	Aluminium oxide
SW 501 T		tear resistant, waterproof	Sponge	Aluminium oxide
SW 510	Abrasive sponge,		Sponge	Aluminium oxide
SW 502	Abrasive sponge,		Sponge	SiC
CS 395 X	Graphite-coated o	anvas	X-cloth	Graphite
thFD 500		aper of a/m²	Foam core	Aluminium oxide / SiC
Blended clot	highly flexible A , light, flexible E	approx. 105 g/m <sup>2</sup>		
Cotton, light				
Cotton, heav				
Cotton, heav	/ avy, highly firm E			

## Product guide Coated abrasives



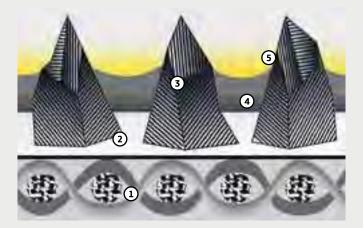
				Page											
	Туре	Coating	Bonding agent	Waterproof	Available grits	Rolls	File belts	Belts for handheld grinders	Short and long belts	Spirabands	Wide belts	Fibre discs	Strips	Sheets	Discs
	CS 308 Y	•	К	<u> </u>	40, 60-180, 240		<u> </u>	ш ш	41	- 0,	57	<u> </u>			<del>-</del>
	LS 309 JF		K		60-400, 600, 800	24			41		3,				
	LS 309 XH		K		40–180, 240	25		36							
	CS 310 X	•	K		16–24, 36–320, 400–600				41		57				
	CS 310 XF	•	K		40–180, 240				42						
	CS 311 Y ACT	0	K		36–220				42		58				
	LS 312 JF	•	K		60–320, 400				42						
	CS 320 Y	•	K	V	24, 40, 60–120, 180				43		58				
	CS 321 X	•	K	<b>√</b>	80–320, 400, 500, 800				43						
	CS 322 X	•	K	V	Polishing fineness				43						
	CS 326 Y		K	<b>√</b>	60, 80, 120, 180, 240, 320, 400, 600, 800				44		59				
	CS 329 Y		K		80, 120, 180, 240, 320, 400, 600				44		59				
	CS 330 X	•	K	<b>√</b>	220, 400, 600, 800				44						
	KL 361 JF	•	K		30, 40–600	25							93		
	KL 371 X	•	L		30-320, 400									93	
듔	CS 409 Y	•	K		36–120				45		60				
- C	CS 411 Y	•	K	<b>√</b>	24, 36–120				45		60				
Abrasive cloth	CS 412 Y	•	K	V	24, 36–180, 240				45		61				
Abr	CS 420 Y		K	<b>√</b>	120, 180, 240, 320, 400				46						
	GX 533 JF	•	K		80-180, 240-400, 600				46						
	CS 538 Z ACT	•	K		36–180						61				
	CS 729 X		K		120, 180, 240, 320, 400				46		62				
	CS 920 Y ACT	•	K		24, 36, 40, 50, 60, 80				47		62				
	CS 922 Y ACT	•	K	V	36–180				47		63				
	CS 561	•	K		16–240, 320							68			
SCS	CS 565	•	K		24, 36–100							69			
re discs	CS 570	•	K		24, 36–120							70			
	FS 964 ACT	•	K		24, 36–80, 120							71			
	FS 966 ACT	•	K		24, 36–60, 80, 120							72			
	AN 400	0	K	<b>√</b>	80-800	27							91		112
	NRO 400		K		medium, fine, very fine	154									
<u>e</u>	NRO 500		K		medium, ultra fine	154									
Non-woven web	NPA 400		K		coarse, medium, very fine									155	
Vove	NPA 500		K		medium, ultra fine, without grain									155	
- 0	SV 484		K		coarse, medium, very fine										15
Z	NDS 800				coarse, medium, very fine										15
	NBS 800		K	✓	coarse, medium, very fine				156						
	SK 500	•	K	V	60, 80, 100, 120, 180, 220, 280									94	
	SK 700 A	•	K	V	60, 80, 100, 120									94	
	SW 501 TR	•	K	V	100–220									95	
	SW 510	•	K	V	120, 180, 280, 400, 600									96	
	SW 502	•	K	V	120, 220									96	
	CS 395 X			✓		27									
	FD 500	•	K	V	1000, 1500, 2000, 3000										113

K Resin L Glue

#### Applications guide

Coated abrasives are abrasive products that are made out of more or less flexible backing material upon which grit is anchored with a bonding agent. The product family "coated abrasives" includes abrasive belts, rolls, sheets, strips and discs. They comprise of the following four, optionally also five, components (please refer to the illustration on the right):

- ▶ 1. Backing
- ▶ 2. Base coat
- ► 3. Grit
- ▶ 4. Topsize coat
- ▶ 5. Optional: additional coating



#### **Structure**

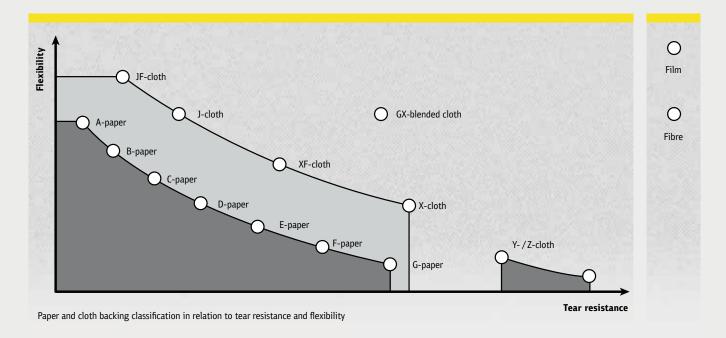
### 1. Coated abrasive backing

The backing is coated with grit and transfers stock removal forces onto the workpiece. The following backings are primarily used in the manufacture of coated abrasives:

- ► Paper
- ► Cotton cloth
- ► Polyester cloth

In addition, at Klingspor the following backings are used exclusively for individual products and/or for specific requirements/applications:

- ► Fibre (is used exclusively for fibre discs on portable angle grinders)
- ► Film (is used exclusively for the products FP 73 W and FP 73 WK) GX-blended cloth (special cotton/polyester blend for flexible yet highly tear resistant belts)



#### Applications guide



Backing	Description	Application examples
A – paper	approx. 95 g/m²	profile + surface grinding (hand)
B – paper	approx. 105 g/m²	profile + surface grinding (hand)
C – paper	approx. 110 g/m²	surface grinding (hand)
D – paper	approx. 130 g/m²	surface grinding (hand and machine)
E – paper	approx. 250 g/m²	surface grinding (machine)
F – paper	approx. 300 g/m <sup>2</sup>	surface grinding (machine)
G – paper	approx. 400 g/m <sup>2</sup>	surface grinding (machine)
JF – cloth	light, highly flexible	high profiled workpieces (hand and machine)
GX – blended cloth	light, flexible	profiled workpieces (machine)
J – cloth	light, flexible	profiled workpieces (hand and machine)
XF – cloth	heavy, flexible	hand tool belt grinder
X – cloth	heavy, firm	surfaces, edges, rotation bodies (machine)
Y – cloth	heavy, highly firm	surfaces, edges, rotation bodies (machine)
Z – cloth	heavy, highly firm, can be segmented	surface grinding (machine)
Film	polyester film	finish grinding
Fibre	vulcanised fibre	rough and finish grinding

#### 2. Base coat

In the base coat step the grit in anchored. The basic bond is the connection between the grit and the backing. It is primarily formed using resin, this provides it with its consistent high quality properties. Glue is only added to a few abrasive papers that are used with hand operated machines and applications.

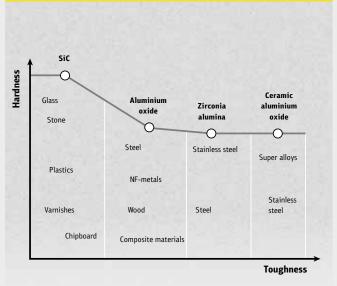
#### 3. Grit

Grit is responsible for stock removal. When selecting the correct grit two properties are particularly important:

- ► Bond
- ► Toughness

All Klingspor grit types are produced synthetically. This ensures a consistently high quality product. Four different grit types are used with coated abrasives:

- ► Silicon carbide
- ► Aluminium oxide
- ► Zirconia alumina
- ► Ceramic aluminium oxide



Grit classification in relation to bond, toughness and their primary applications

#### Applications guide

Grain type	Bond / toughness	Structure	Properties / wear properties
Silicon carbide (SiC)	very hard / less tough	crystalline	sharp-edged, brittle, highly friable / micro-wear
Aluminium oxide	hard / tough	crystalline, irregular	wedge-shaped, block grain, even wear
Zirconia alumina	hard / very tough	crystalline, even	wedge-shaped, block grain / micro-wear, self-sharpening
Ceramic aluminium oxide	hard / very tough	micro-crystalline	sharp-edged, pointed grit / micro-wear, self-sharpening

Grit type properties and their specific wear properties



Definition	Description
Close coating	The entire surface of the backing is coated with grit
Semi-open coating	Approx. 75% of the backing surface is coated with grit
Open coating	Approx. 50% of the backing surface is coated with grit

In addition, there are also so-called grit agglomerates. This is not an independent grit type, rather it is a grit agglomeration, which is comprised of many individual aluminium-oxide or SIC-grits mixed with a resin bonding agent, which together form a large grit. Agglomerates are used almost exclusively on abrasive belts.

The advantage of agglomerates is that they provide an even finish from the first use to the last. Dull grit breaks off from the agglomerate and creates space for new, sharp grit. The objective is to attain an even finish through continual stock removal and an extremely long service life.

#### **Coating**

Moreover, the coated abrasives are coated with different grit coverage densities. The term "grit density" describes the grit coverage density distributed on the backing.

One differentiates between:

- ► close coating
- ▶ semi-open coating
- ► open coating

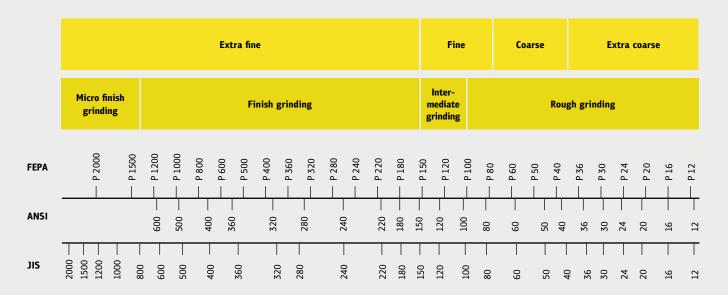
Open coated grit has a large space between the individual grits, such that the stock removal and the grinding dust can be extracted more easily from the grinding surface. This prevents premature clogging when working on long-chipping materials, such as wood.

The decision as to which grit density to use is primarily dependent upon how great the likelihood is that the grinding dust will clog the space between the grits.

Applications guide



#### Grit size chart



### 4. Size coat

The size coat supports the base coat in the anchoring of the grit on the backing and against forces which affect the grit during grinding. The cover bonds are produced exclusively from resin and also provide the product with its typical colour (exceptions are coated abrasives with additional coatings).

### 5. Special coatings

Special coatings with grinding aids provide the grinding tool properties that positively affect the grinding process and extends the service life of the coated abrasive. Special coatings are applied as an additional layer.

#### **Stearate coating:**

The stearate on a coated abrasive prevents the clogging and loading of the belt and is specifically suited for high quality varnish surface applications. Paints, varnishes and plastics can become soft and sticky through the heat generated from grinding, this can result in the premature clogging and loading of the belt. The dust clogs the space between the grits and this can result in additional "negative bond". This clogs the grits and the sharp edges are no longer effective. To prevent this from happening or to slow the process down, the coated abrasives can be coated with a non-stick material, so-called stearates.

#### **Multibond:**

The multibond, like the stearate coating, is applied in an additional production step to the cover bond layer. This allows the cool grinding of stainless steel and high alloy steels, which in turn increases the stock removal rate and service life.

#### **ACT-Advanced Coating Technology:**

Klingspor uses this technology to improve the properties of the coated abrasives. When working on metal, ACT provides significantly higher grit adhesion, e.g. for aggressive belt grinding of the edges of punched parts and castings. This significantly increases the life of the grinding belt. For belts that are used for wood and varnish grinding, ACT prevents the premature clogging of the coated abrasives and significantly increases the service life.

#### **Antistatic:**

Electrode migration is the result of friction i.e. grinding between different materials, and in turn causes charge separation, which in the case of non-conductive materials, such as wood, results in the load differences not being balanced. In these cases, the coated abrasive is equipped with antistatic properties that ground the electrical charge through the coated abrasive and the machine. This prevents the grinding dust from adhering to the workpiece, belt and machine.



## Rolls



A1:+:	Tomas	Comition	<del></del>		Is with paper backing	Desa					
Application	Туре	Grain	Backing	Coating	Characteristics	Page					
	<b>PS 22 F ACT</b>	Aluminium oxide	F-paper	•	Close coating for maximum stock removal and uniform scratch pattern regarding surface treat- ment of hard, low-content woods. ACT and antistatic properties prevent premature clogging	19					
	PS 22 N	Aluminium oxide	E-paper	•	Abrasive paper with semi-open coating for high stock removal capacity for the processing of wood						
	PS 29 F ACT	Aluminium oxide	F-paper	0	Abrasive with outstanding service life. Open coat, antistatic properties as well as ACT preven premature clogging. The abrasive paper is particularly suitable for processing soft and high resin woods						
	PS 30 D	Aluminium oxide	D-paper	•	Economical abrasive paper for universal applications in the processing of wood and paints						
M	PL 16 E	Aluminium oxide	E-paper	•	niversal product for hand sanding or machine sanding of wood and other materials	18					
Wood	PL 31 B	Aluminium oxide	B-paper	•	Flexible finishing paper with an optimal price-performance ratio for a wide range of applications for the processing of wood, paint and varnish. Provides a smooth surface finish	21					
	LS 309 X	Aluminium oxide	X-cotton	•	Multi-purpose abrasive cloth for metal and wood processing, good price-performance ratio	available or request					
	LS 309 XH	Aluminium oxide	X-cloth	•	Standard quality especially suited for the processing of metal, wood, paint and varnish	25					
	LS 309 JF	Aluminium oxide	JF-cotton	•	Highly flexible abrasive cloth for strongly profiled workpieces, for smooth surfaces in the metal and wood processing	24					
	LS 309 JF slashed	Aluminium oxide	JF-cotton	•	Slashed, highly flexible abrasive cloth for strongly profiled workpieces, for smooth surfaces in wood processing, also suitable for light deburring work on metals	available or request					
	PS 11 A	SiC	A-paper	•	High quality, highly flexible, waterproof abrasive paper for working on paint, varnish and filler especially in the car repair sector	18					
	PS 30 D	Aluminium oxide	D-paper	•	Economical abrasive paper for universal applications in the processing of wood and paints	20					
	PL 31 B	Aluminium oxide	B-paper	•	Flexible finishing paper with an optimal price-performance ratio for a wide range of applications for the processing of wood, paint and varnish. Provides a smooth surface finish	21					
	PS 33 B	Aluminium oxide	B-paper	•	Flexible finishing paper with an optimal price-performance ratio for a wide range of applica- tions for the processing of wood, paint and varnish. Provides a smooth surface finish	22					
	PS 33 C	Aluminium oxide	C-paper	•	Flexible finishing paper with an optimal price-performance ratio for a wide range of applica- tions for the processing of wood, paint and varnish. Provides a smooth surface finish	22					
Paint	PS 73 BWF	Aluminium oxide	B-paper + foam core	•	Abrasive pads on rolls for de-nibbing and finishing of surfaces, moulded parts and contours. Foam backing for better pressure distribution and a very fine surface finish. The pads are supplied in a convenient dispenser that allows individual pads to be separated by tearing along the perforation	available or request					
	PS 73 CWF	Aluminium oxide	C-paper + foam core	•	Abrasive pads on rolls for de-nibbing and finishing of surfaces, moulded parts and contours. Foam backing for better pressure distribution and a very fine surface finish. The pads are supplied in a convenient dispenser that allows individual pads to be separated by tearing along the perforation	available or request					
	PS 44 E	Aluminium oxide	E-paper	•	Economical abrasive paper for universal applications in the processing of wood and paints						
	PS 46 E	Aluminium oxide	E-paper	•	Economical abrasive paper for universal applications in the processing of wood and paints	23					
	PS 48 D	Aluminium oxide	D-paper	•	Economical abrasive paper for universal applications in the processing of wood and paints	24					
	LS 309 X	Aluminium oxide	X-cotton	•	Multi-purpose abrasive cloth for metal and wood processing, good price-performance ratio	available or request					
	LS 309 XH	Aluminium oxide	X-cloth	•	Standard quality especially suited for the processing of metal, wood, paint and varnish	25					
Metals	KL 361 JF	Aluminium oxide	JF-cotton	•	High quality, highly flexible abrasive cloth for versatile applications in the metal processing industry, also suitable for stainless steel	25					
	KL 385 JF	Aluminium oxide	JF-cotton	•	Highly flexible universal abrasive cloth for the metal processing industry, good price-performance ratio	available or request					
omposites, gel oats, paints and oatings, plaster nd plasterboard, rood fillers and arnish  AN 400  Aluminium oxide Abrasive screen – Effective high extraction dust removal thanks to open grid structure  Effective high extraction dust removal thanks to open grid structure						27					

Туре	Grit range
PS 22 F ACT	40-150
PS 28 F	60-150
PS 29 F ACT	60-150
CS 308 Y	40-80, 120
LS 309 X	40-360
LS 309 J	60-320
LS 309 JF	60-400
CS 310 X	24-400
CS 310 XF	40-280
LS 312 JF	60-320, 400
CS 321 X	80-400
CS 333 X	60, 80, 120, 150
CS 341 X	50-320
KL 361 JF	40-600
KL 385 JF	40-600
CS 410 X	60-120
CS 411 X	24–120
CS 411 Y	36-80

Paper							
В	approx. 105 g/m²						
С	approx. 110 g/m²						
D	approx. 130 g/m²						
Е	approx. 250 g/m <sup>2</sup>						
_	approx. 300 g/m <sup>2</sup>						
F	арргох. 300 g/пг						
Clot							
Clot	th						
Clot	th Cotton, heavy						
Clot X	th Cotton, heavy Cotton, light						

#### Minimum order quantities for made to order items

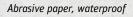
Width	Minimum order quantities	Width	Minimum order quantities
10 mm	29 pieces	80 mm	3 pieces
15 mm	19 pieces	95 mm	3 pieces
20 mm	14 pieces	100 mm	2 pieces
25 mm	11 pieces	120 mm	2 pieces
28 mm	10 pieces	125 mm	2 pieces
30 mm	9 pieces	140 mm	2 pieces
35 mm	8 pieces	150 mm	1 piece
40 mm	7 pieces	250 mm	1 pieces
50 mm	5 pieces	300 mm	1 pieces
60 mm	4 pieces		



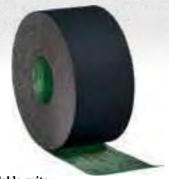
The standard length for production rolls is 50M. We reserve the right to over-deliver or under-deliver made to order items.

Other sizes and grits available on request.

Coated abrasives



PS 11 A





# Properties Bonding agent Resin

Bonding agen	t Resin	
Grain	SiC	
Coating	Close	
Backing	A-paper	

#### **Applications:**

Paint/Varnish/Filler	•
Plastic	•
Glass/Stone	•
Metals	•

**Advantages:** Special product for auto repair and painting - For hard and tough surfaces - Good adaptation and high stability - Wet and dry sanding

#### **Available grits:**

16	24		40		60	100	120	150	180	220	240	280	320	400	600	1000	1200	1500	2000	2500	3000
		W	/idth x	Lengi	th				Grit					cking t/pcs.				Cat. numbe	r		
_			70 x 5	50000					400					1				36606	4		
			70 x 5	50000					1500					1				36605	6		

Abrasive paper

PL 16 E





#### **Properties**

Bonding age	ent Glue/resin
Grain	Aluminium oxide
Coating	Close
Backing	E-paper

**Applications:** 

Paint/Varnish/Filler	•
Wood	•
Plastic	•

Advantages: Universal product for hand sanding or machine sanding of wood and other materials

#### Available grits:

Avu	iiubic	P. 163	•																						
16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000	2500	3000
_			1		x Leng	gth					Grit					Pacl unit,	king /pcs.				ı	Cat. numbe			_
_				300 >	5000	0					40					:	1					26762	8		_
				300 x	5000	0					60					:	1					26763	8		
				300 x	5000	0					80					:	1					26764	6		
				300 x	5000	0					100					:	1					26765	3		

Coated abrasives





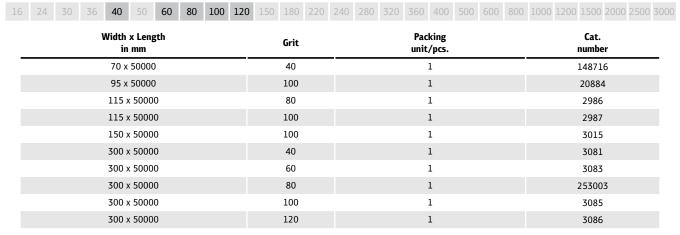




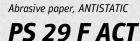
Properties		Applications:			
Bonding ag	ent Resin	Wood	•	NF metals	0
Grain	Aluminium oxide	Metals	0	Allen Miller	en-
Coating	Close	Plastic	•		
Backing	F-paper	Steel	•		

**Advantages:** High abrasive performance - Uniform, fine surface scratch pattern - Premium product for use on hardwood, varnish, filler - Long service life and minimal clogging due to ACT recipe - High edge stability

#### Available grits:



Coated abrasives







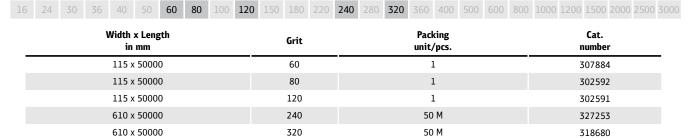
Properties	
Bonding age	ent Resin
Grain	Aluminium oxide
Coating	0pen
Backing	F-paper

**Applications:** 

Wood ●
Paint/Varnish/Filler ●

**Advantages:** High aggressiveness and long service life when used on wood (especially softwood) due to ACT recipe - High edge stability - Premium product for wood in general, varnish and filler

#### **Available grits:**



Abrasive paper







Properties	
Bonding agent	t Resin
Grain	Aluminium oxide
Coating	Semi-open
Backing	D-paper

#### **Applications:**

Paint/Varnish/Filler

Wood

Metals

**Advantages:** Sharp grit and high aggressiveness for use on wood, varnish, fillers - Flexible and tear resistant, easy folding - Product with good price-performance ratio

#### **Available grits:**

16 24 30 <b>36 40</b> 50 <b>60 80 100</b> :	120 150 180 220 2	<b>240</b> 280 <b>320</b> 360 400 500 600 800	1000 1200 1500 2000 2500 3000
Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
70 x 50000	36	1	364354
70 x 50000	40	1	266071
70 x 50000	60	1	266072
70 x 50000	120	1	259029
70 x 50000	150	1	259030
115 x 50000	40	1	174086
115 x 50000	60	1	174088
115 x 50000	80	1	174089

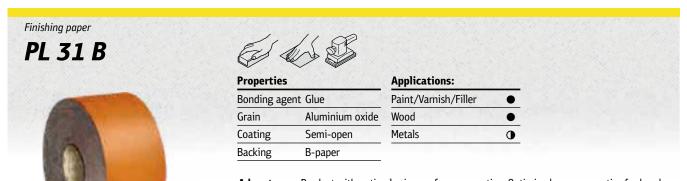
**Continuation** →

Coated abrasives



#### → Continuation of PS 30 D, Abrasive paper

Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
115 x 50000	100	1	174090
115 x 50000	120	1	174091
115 x 50000	150	1	174092
115 x 50000	180	1	174093
115 x 50000	220	1	267088
115 x 50000	240	1	182418
115 x 50000	320	1	182419

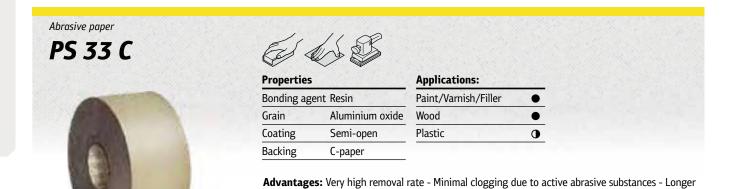


**Advantages:** Product with optimal price-performance ratio - Optimized wear properties for hand sanding and handheld machine sanding

#### Available grits:

16	24	30	36	40		60		100	120	150	180	220	240	280	320	360	400	600	1000 1	1200 1	1500	2000	2500	3000
	Width x Length in mm							Grit					Pacl unit,	king /pcs.				Cat. umbe	r					
	115 x 50000										400					:	1				3233			

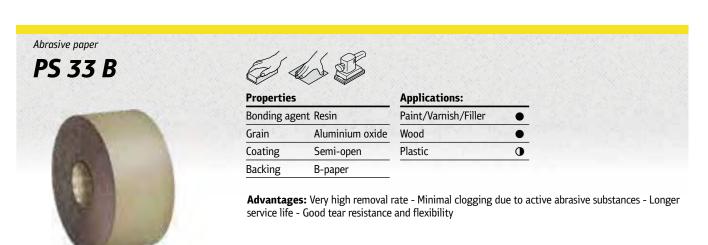
Coated abrasives



service life - Good tear resistance and flexibility

Available grits:

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000	2500	3000
			١		x Leng	gth				Grit					Pac unit	king /pcs.					Cat. numbe	er		
_				115	x 5000	0				60						1					15581	.5		_
				115	x 5000	0				120						1					15339	8		



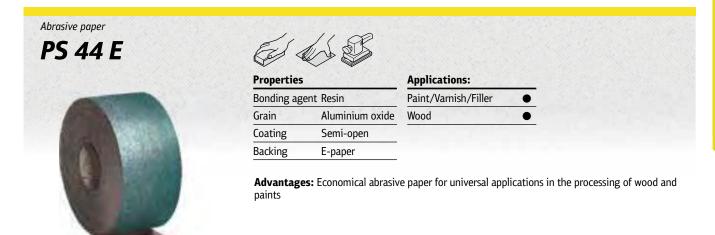
Available grits:

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000 2	500 3	3000
			,	Width in	x Leng mm	gth				Grit					Pacl unit						Cat. numbe	r		
_				115 x	5000	0				150					1	L					15317	7		'
				115 x	5000	0				180					1	L					14948	)		
				115 x	5000	0				220					1						14969	3		
				115 x	5000	0				320					1	L					14889	l		
				115 x	5000	0				400					1						14552	)		

70 x 50000

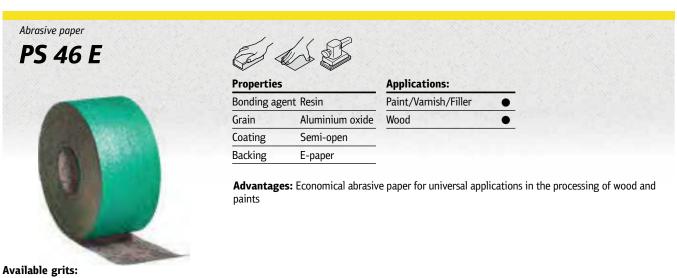
Coated abrasives





**Available grits:** 

	70 x 50000									36						1				27819				
	Width x Length in mm								Grit						king /pcs.				Cat. numbe	ır				
16	24	30	36	40		60		100	120	150	180	220	240	280	320	360	400	600	1000	1200	1500	2000	2500	3000

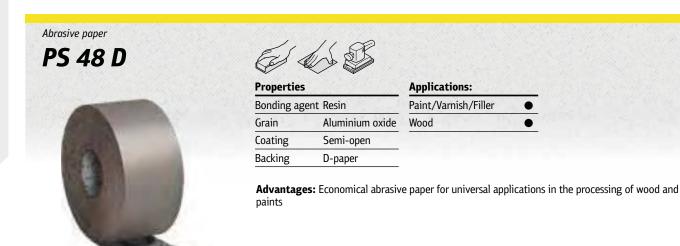


			,		x Leng	gth				Grit					Pacl unit,	king /pcs.			r	Cat. numbe	r		
16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400	600	1000	1200	1500	2000	2500	3000
		_																					

278194

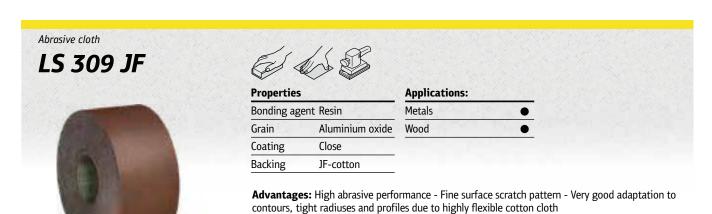
## Rolls with paper / cloth backing

Coated abrasives



Available grits:

			70 x	50000	0					80						1			:	27819	1		
		١		x Leng	gth					Grit					Pac unit	king /pcs.			ı	Cat.	r		
16	24		40		60	80	T00	120	150	180	220	240	280	320	360	400	600	T000	1200	1500	2000	2500	3000



Available grits:

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	200	0 250	0 30	00
			'	Nidth :	x Leng mm	gth				Grit					Pack unit/						Cat. numb				
				150 x	50000	0				100					]	L					5185	5			
				150 x	50000	0				180					1	L					5188	3			
				150 x	50000	0				220					1	L					5189	)			
				150 x	50000	0				400					1	L					12292	21			

## Rolls with cloth backing

Coated abrasives







16 24 30 36 40 50 **60** 



<b>Properties</b>		Applications:	
Bonding age	ent Resin	Wood	•
Grain	Aluminium oxide	Metals	•
Coating	Close	NF metals	•
Backing	X-cloth	Paint/Varnish/Filler	•

Advantages: Special type for portable belt sanders - For universal use on wood, metal, paint and

80 **100 120 150** 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

#### Available grits:

Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
150 x 50000	60	1	253499
300 x 50000	60	1	215817
300 x 50000	100	1	215819
300 x 50000	120	1	215820
300 x 50000	150	1	215821





Properties	
Bonding age	ent Resin
Grain	Aluminium oxide
Coating	Close
Backing	JF-cotton

Applications:	SELECTION
Stainless steel	•
Steel	•
Metals	•
NF metals	•

illiess steel		wood	
el	•	Plastic	•
als	•		
metals	•		

**Advantages:** High-quality universal abrasive cloth - Optimal adaptation to workpiece contours - Tears off cleanly and easily from the roll

#### **Available grits:**

16         24         30         36         40         50         60         80         100         120	150 180 220	<b>240</b> 280 <b>320</b> 360 <b>400</b> 500 <b>600</b> 800	1000 1200 1500 2000 2500 3000
Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
25 x 50000	40	1	3769
25 x 50000	60	1	3771
25 x 50000	80 1		3772
25 x 50000	100	1	3773
25 x 50000	120	1	3774
25 x 50000	150	1	3775
25 x 50000	180	1	3776
25 x 50000	240	1	3778

**Continuation** →

## Rolls with cloth backing

Coated abrasives

#### ightarrow Continuation of KL 361 JF, Abrasive cloth, brown

Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
40 x 25000	240	1	4210
40 x 50000	40	1	3833
40 x 50000	60	1	3835
40 x 50000	80	1	3836
40 x 50000	100	1	3837
40 x 50000	120	1	3838
40 x 50000	150	1	3839
40 x 50000	180	1	3840
40 x 50000	240	1	3842
40 x 50000	320	1	3844
40 x 50000	400	1	3846
40 x 50000	600	1	64830
50 x 25000	400	1	4230
50 x 50000	40	1	3849
50 x 50000	50	1	3850
50 x 50000	60	1	3851
50 x 50000	80	1	3852
50 x 50000	100	1	3853
50 x 50000	120	1	3854
50 x 50000	150	1	3855
50 x 50000	180	1	3856
50 x 50000	220	1	3857
50 x 50000	240	1	3858
50 x 50000	320	1	3860
50 x 50000	400	1	3862

## Abrasive screen / Graphite coated canvas



Abrasive screen, self-fastening, waterproof

AN 400





**Advantages:** Effective and full-surface dust extraction thanks to open grid structure - Dust-free grinding extends the service life of the abrasive - At the same time, improved health and safety thanks to reduced dust formation at the work station - Independent of existing extraction hole patterns - Waterproof

Available grits:

16 24 30 36 40 50 60 <b>80 100 12</b>	0 150 180 220 2	240 280 <b>320</b> 360 <b>400</b> 500 600 800	1000 1200 1500 2000 2500 3000
Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
115 x 10000	80	1	348458
115 x 10000	100	1	353063
115 x 10000	120	1	348418
115 x 10000	150	1	349059
115 x 10000	180	1	353062
115 x 10000	240	1	349058
115 x 10000	320	1	353061
115 x 10000	400	1	353060





#### **Properties**

Grain	Graphite
Coating	Lamellar
Backing	X-cloth
Thickness	1,5 mm

**Advantages:** Reduces friction between the back side of the belt and the contact element - Reduces heat generation during the grinding process - Enables a smooth and constant grinding

No self-fastening support

All sizes and minimum purchasing quantities available on request



## **Abrasive belts**



## **About the product**

#### **Applications guide**

- ► Suitable for all sanding and grinding operations: with unsupported belt, sander pad and contact wheel
- ► Special designs for customised applications, e.g. for furniture production to enable fast and clean preparation of large surfaces ready for painting
- ► Wide range of sizes
- ► Backings made of paper, cloth and film
- ► Superior tear resistance of all products

Application	Туре	Grain	Backing	Coating	Characteristics	Page
	LS 309 J	Al. oxide	J-cotton	•	Flexible abrasive cloth for processing slightly profiled workpieces, high stock removal rate, particularly suited for metal	available on request
Steel Stainless steel	LS 309 JF	Al. oxide	JF-cotton	•	Highly flexible abrasive cloth for highly profiled workpieces for the manufacture of fine surfaces in metal and woodworking	41
	LS 309 X	Al. oxide	X-cotton	•	Universal abrasive cloth for metal and woodworking, good price-performance ratio	available on request
	LS 309 J Al. oxide JF-cotton    Bleast Processing slightly profiled workpieces, high stock in particularly susted for metal and woodworking.  LS 309 JF Al. oxide JF-cotton    Blighty flexible abselves cloth for highly profiled workpieces for the manufacture in metal and woodworking.  LS 309 XH Al. oxide X-cotton    Universal abrasive cloth for metal and woodworking, good price-performance in particularly for portable belt sanders, especially suited for the processing of particularly for grotable belt sanders, especially suited for the processing of standard quality for portable belt sanders, especially suited for the processing of standard damanty.  CS 310 X Al. oxide X-cotton    Abrasive cloth for metal and woodworking with stable cloth backing, multibond for long service life, especially suited for the processing of standard woodworking with stable cloth backing, multibond for long service life, especially save metal with stable cloth backing, multibond for long service life, especially save metal with stable cloth backing, multibond for long service life, especially save metal with stable cloth backing, multibond for long service life, especially save metal with stable cloth backing, multibond for long service life, especially save metal with stable cloth backing, multibond for long service life, especially save metal with stable cloth backing, multibond for long service life, especially save metal with stable cloth backing, multibond for long service life, especially save metal with stable cloth backing, multibond for long service life, especially save metal with stable cloth save in several save processing of standard save service life, especially save metal with several profiled profiled save service life, especially save metal with several service sets unlarges sets unlarges sets unlarges sets unlarges sets unlarges. Sets larges sets larges sets larges sets larges sets larges sets sets and sets larges sets and service life.  LS 313 JF Al. oxide    GE 329 JF Al. oxide    GE 329 JF Al. oxide    GE 329 JF A	Standard quality for portable belt sanders, especially suited for the processing of metal, wood, paint and varnish	36			
Steel	CS 310 X	Al. oxide	X-cotton	•	Abrasive cloth for metal and woodworking with stable cloth backing, for heavy duty with particularly long service life	41, 57
	CS 410 X	Al. oxide	X-cotton	•	Abrasive material with stable cloth backing, multibond for long service life, especially suited for stainless steel processing	available on request
	CS 341 X	Al. oxide		•	Waterproof abrasive cloth for wet grinding on steel and stainless steel, particularly suited for centreless and surface grinding	available on request
L5 309 J Al. oxide J-cotton   Flexible abrasive cloth for processing slightly profiled workpieces, high is particularly suited for metal. Place and the processing slightly profiled workpieces for the manual in metal and woodworking. L5 309 X Al. oxide X-cotton   Universal abrasive cloth for highly profiled workpieces for the manual in metal and woodworking. Bod price-perform the processing slightly profiled workpieces for the manual in metal and woodworking. Bod price-perform the processing slightly profiled workpieces for the manual in metal and woodworking. Bod price-perform the processing slightly profiled workpieces for the manual in metal and woodworking. Bod price-perform the processing slightly profiled workpieces for the manual in metal and woodworking. Bod price-perform the processing slightly profiled workpieces for the manual in metal and woodworking with stable cloth backing, for particularly long service life.  L5 310 X Al. oxide X-cotton   Abrasive cloth for metal and woodworking with stable cloth backing, for particularly long service life.  Abrasive cloth for metal and woodworking with stable cloth backing, for statiness steel processing.  X-cotton   Abrasive cloth for metal and woodworking with stable cloth backing, for statiness steel processing.  X-cotton   Abrasive cloth for metal and woodworking with stable cloth backing, for statiness steel processing.  X-cotton   Abrasive cloth for metal and woodworking with stable cloth backing, for statiness steel and statiness steel.  X-cotton   Abrasive cloth for metal and woodworking with stable cloth backing multiple statiness steel processing.  X-cotton   Abrasive cloth for metal and woodworking with stable cloth backing drafter statiness steel and statiness steel and statiness steel and statiness steel and contant statiness ste	Polyester abrasive cloth with close coating for working with metal and surface grinding of hardwood	41, 57				
	PS 61 F		F-paper	•	Close coating, tear resistant backing and continuously self-sharpening cermic grain, the perfect product for users with highest demands on service life, high stock removal rate and process reliability, for the processing of stainless steel surfaces	40, 55
	LS 312 JF	Al. oxide	JF-cotton	•	Highly versatile and flexible premium product for stainless steel components such as fixtures, fittings and surgical instruments	42
	LS 313 JF	Al. oxide	JF-cotton	•	Highly flexible high quality product for stainless steel shaped parts, additional multibond for cool grinding and long service life	available on request
	CS 931 JF		JF-cotton	0	Special product with highly flexible backing for use on stainless steel and high alloy steels.  Continuously aggressive abrasive performance with a long service life due to semi-open coated self-sharpening ceramic grit. Multibond for "cool grinding" with no discolouration	available on request
	GX 931 JF		JF-blended cloth	•	Special highly flexible tear resistant polyester / cotton backed product for stainless steel and high alloy steels; ideal for robot applications. Micro-crystalline ceramic grit with multibond for "cool grinding" and continuously aggressive abrasive performance	available on request
Stainless steel	GX 712 JF	Al. oxide	JF-blended cloth	•	High performance belt with highly flexible, but nonetheless equipped with extremely tear resistant blended cloth backing, tempered aluminium oxide and coated materials	available on request
	CS 329 JF		JF-cotton		Long life belt with particular long service life and constant scratch pattern. Special product for the dry grinding of slightly and strongly profiled parts in the stainless steel processing industry	available on request
Stainless steel	CS 631 XF		XF-cotton	0	Flexible highly efficient belt for best grinding preformance, long service life through self-sharpening ceramic grain for rough and intermediate grinding of contours, profiles and fittings, with multibond for cool grinding	available on request
	CS 411 X		X-cotton	•	High performance belt with high stock removal rate for rough grinding and deburring of steel and stainless steel	available on request
	CS 411 Y		Y-polyester	•	Particularly tear resistant high performance belt with high stock removal rate for rough grinding and deburring of stainless steel and steel	45, 60
Stainless steel	CS 416 Y		Y-polyester	0	Extra tear resistant abrasive belt with high stock removal rates for grinding steel and stainless steel with a semi-open coating	available on request
	CS 409 Y	Zirconia alumina	Y-polyester	•	Extremely tear resistant high performance belt with high stock removal efficiency and long service life due to additional multibond, for stainless steel and high alloy steels, cool grinding	45, 60

 $\bullet = close$   $\bullet = semi-open$  O = open

## **Abrasive belts**

## Applications guide

Application	Туре	Grain	Backing	Coating	Characteristics	Page
	CS 922 Y ACT	Ceramic al. oxide	Y-polyester	•	Extremely tear resistant high performance belt with self-sharpening ceramic grain for high stock removal efficiency and long service life for processing high alloy steels	47, 63
Steel / Stainless steel  NF metals  Wood	CS 920 Y ACT	Ceramic al. oxide	Y-polyester	•	Extremely tear resistant high performance belt with self-sharpening ceramic grain for high stock removal efficiency and long service life for processing high alloy steels, multibond for cool grinding	47, 62
	CS 330 X	SiC/Kork	X-cotton waterproof	•	Special belt for steel and stainless steel on surface belt grinders and circular grinding machines, particularly suitable for satin polishing and finishing	44
Stainless steel	ACT 22.7 Y Ceranic all coulder V-polyricary all country and country grant for high control of the country grant for high country and country grant for high country for the country grant for high country for the country grant for high country for more different and grant for high country for more different and grant for high country for more different and grant for such and country grant for high country for more different and grant for finding and grant for such and country grant for high country for more different and grant for such and country grant for high country for the country	44, 59				
	CS 329 Y		Y-polyester			44, 59
	CS 420 Y		Y-polyester		Special product with cylindrical-shaped structured abrasive grain for the centreless finishing of stainless steel. Very long service life and uniform scratch pattern	46
	CS 325 Y		Y-polyester		Long life belt with very long service life and constant surface finish for centreless finishing	available on reque
C 5 22 Y Cearric ACT    C 920 V Cearric AL code    C 920 V Cearric AL		available on reque				
	PS 20 F	Al. oxide	F-paper	•		available on reques
	PS 21 F		F-paper	•		38, 52
	PS 529 F		F-paper		long service life at consistent surface roughness. Ideal for dry sanding applications performed	39, 52
	PS 729 F		F-paper			40, 56
	CS 412 Y	Al. oxide	Y-polyester	•		45, 60
Steel / Stainless steel	CS 310 XF	Al. oxide	XF-cotton	•		42
	CS 411 X		X-cotton	•		available on reque
	CS 411 Y		Y-polyester	•		45, 60
	CS 416 Y		Y-polyester	•		available on reque
	CS 330 X	SiC/Kork		•		44
	CS 710 XF	Al. oxide	XF-cotton	•	Flexible abrasive belt for working on surfaces and mouldings	available on reque
Stainless steel  Stainless steel	CS 729 X		X-cotton		developed for surface grinding at medium contact pressure - Optimum workpiece adaptation	46, 62
Stainless steel  CS 326 Y Al. oxide-agglomerate CS 329 Y Al. oxide-agglomerate CS 420 Y Al. oxide-agglomerate CS 420 Y Al. oxide-agglomerate CS 420 Y Al. oxide-agglomerate CS 451 X Irronia alumina CS 451 X Irronia Alumina PS 21 F Al. oxide-agglomerate PS 22 F Al. oxide Alloxide-agglomerate CS 451 X Irronia Alumina PS 22 F Al. oxide Alloxide Agglomerate PS 24 F Al. oxide Agglomerate PS 25 F Al. oxide Agglomerate PS 26 F Al. oxide Agglomerate PS 27 F Al. oxide Agglomerate Alloxide Agglomerate Agglomerate Alloxide Agglomerate Agglo	duty during rough grinding and deburring of steel and stainless steel. High quality zirconia	available on reques				
	CS 333 JF	SiC	JF-cotton	•	Highly flexible abrasive belt for metal shaped parts, particularly suited for NF metals	available on reques
CS 922 V   Ceramic   Acr   A	CS 333 XF	SiC	XF-cotton	•	Flexible abrasive belt for metal shaped parts, particularly for NF metals	available on reques
		46				
	GX 712 JF	Al. oxide	JF-blended cloth	•		available on reques
	PS 20 FW	Al. oxide	F-paper	•		38, 52
	LS 314 JF	Al. oxide	JF-cotton	•	Special product with stearate coating for working on slightly profiled and profiled workpieces	available on reque
	PS 22 F ACT	Al. oxide	F-paper	•	treatment of hard, low content woods. Advanced Coating Technology (ACT) and antistatic	38, 53
Mond	PS 28 F	Al. oxide	F-paper	0	dust, sturdy, tear resistant backing, for all kinds of wood, particularly soft and high resin	available on reques
wood	PS 29 F ACT	Al. oxide	F-paper	0	Advanced Coating Technology (ACT) prevent premature clogging. The abrasive paper is	39, 54
/ood	PS 38 G ACT	SiC	G-paper	•	Special product with very strong and robust G-weight paper backing, excellent antistatic properties and sharp-edged silicon carbide grain, for finishing of particle boards and fibre-	available on reques

Continuation  $\rightarrow$ 

### **Abrasive belts**

## Applications guide



Application	Туре	Grain	Backing	Coating	Characteristics	Page
	LS 309 X	Al. oxide	X-cotton	•	Universal abrasive cloth for metal and woodworking, good price-performance ratio	available on request
	LS 309 XH	Al. oxide	X-cotton	•	Standard quality for portable belt sanders, especially suited for the processing of metal, wood, paint and varnish	36
Paint / Varnish / Filler  Plastic Glass	CS 311 Y ACT	Al. oxide	Y-polyester	0	Aluminium oxide quality with an open coating on tear resistant polyester backing for calibration and intermediate grinding when working with wood	42, 58
	CS 308 Y	Al. oxide	Y-polyester	•	Polyester abrasive cloth with close coating for working with metal and surface grinding of hardwood	41, 57
Wood	LS 309 X Al. oxide X-cotton    LS 309 XH Al. oxide X-cotton    Standard quality for portable belt sanders, especially suited for the processing of meta wood, paint and varnish  Al. oxide Y-polyester    CS 311 Y ACT Al. oxide Y-polyester    CS 308 Y Al. oxide Y-polyester    CS 308 Y Al. oxide Y-polyester    All oxide Y-polyester    Polyester abrasive cloth with close coating for working with wood real intermediate grinding when working with wood Highly flexible 3-Flex backing for intermediate sanding and finishing of highly profiled curved wooden parts. Advanced Coating Technology (ACT) and antistatic properties propremature dogging  CS 538 Z ACT SiC Z-polyester   (can be segmented)    CS 536 Y SiC Y-polyester   (can be segmented)    Special product for the timber products industry. A close coating and antistatic techno ensure an optimal service life. The sharp silicon carbide easily penetrates high density material surfaces  CP 540 Z SiC Kombi    Special product for calibrating and grinding of chipboard  CP 540 Z SiC Kombi    Special product with a combination of paper and blended cloth. Extremely tear resistant stacks. Removal in the timber and especially the furniture industry  PS 24 F ACT SiC F-paper    Close coating, a stable backing with hard silicon carbide grin for painted and coated su in the timber and especially the furniture industry U varnish PS 524 E SiC E-paper    Close coating, a stable backing with hard silicon carbide grin for painted and filled surfaces in the woor furniture industry  PS 524 E SiC E-paper    Close coating and a special servate coating prevent premature dogging and loading of the Special product for high quality IU varnish PS 524 E SiC E-paper    Close coating with hard silicon carbide grin for painted and folled surfaces in the woor furniture industry  PS 524 E SiC E-paper    Close coating with hard silicon carbide grin for painted and folled surfaces in the woor furniture industry  PS 524 E SiC E-paper    Close coating with hard silicon carbide grin for painted and coated sur	available on request				
	CS 538 Z ACT	SiC	(can be	•		61
	CS 336 Y	SiC	Y-polyester	•	Special product for calibrating and grinding of chipboard	available on request
	CP 540 Z	SiC	Kombi	•	Special product with a combination of paper and blended cloth. Extremely tear resistant and stable. Best results in respect to service life and finish with constant stock removal	available on request
	PS 24 F ACT	SiC	F-paper	•	Close coating, a stable backing with hard silicon carbide grit for painted and coated surfaces in the timber and especially the furniture industry	39, 54
Paint / Varnish /	PS 27 DW	SiC	D-paper	0	Open coating and a special stearate coating prevent premature clogging and loading of the belt. Special product for high quality varnish surfaces, particularly UV varnish	available on request
Filler	PS 524 E	SiC	E-paper	•	Close coating with hard silicon carbide grain for painted and filled surfaces in the wood and furniture industry	40, 55
Paint / Varnish / Filler Plastic	FP 73 W	Al. oxide	Film	•	Special product with very tear resistant film backing for the processing of paint, varnish and filler with high service life through additional special coating	available on request
Plastic	GX 533 JF	SiC	JF-blended cloth	•	Flexible belt with aggressive, hard SiC grit and flexible blended cloth backing for grinding profiles, contours and formed/shaped parts, e.g. fittings	46
Glass	CS 322 X	(Cork)			Special belt for polishing glass	43
	CS 333 X	SiC	X-cotton	•		available on request
Plastic Glass Plastic / Glass	CS 320 Y	SiC	Y-polyester	•	Highly tear resistant special belt for high demands for wet and dry grinding of glass, ceramic and plastic	43, 58
	CS 321 X	SiC	X-cotton	•	Special belt for wet and dry grinding of glass, ceramic and plastic	43

#### Minimum order quantities for made to order items

Width	Minimum order quantities
3 – 50 mm	30 pieces
51 – 60 mm	25 pieces
61 – 75 mm	20 pieces
76 – 100 mm	15 pieces
101 – 150 mm	10 pieces
151 – 300 mm	10 pieces
301-399 mm	30 pieces
400 mm and wider	10 pieces



We reserve the right to over-deliver or under-deliver made to order items.

The minimum length of production belts is 281 mm (cloth and paper backing)

Other sizes and grits available on request.

### **Short and long belts**

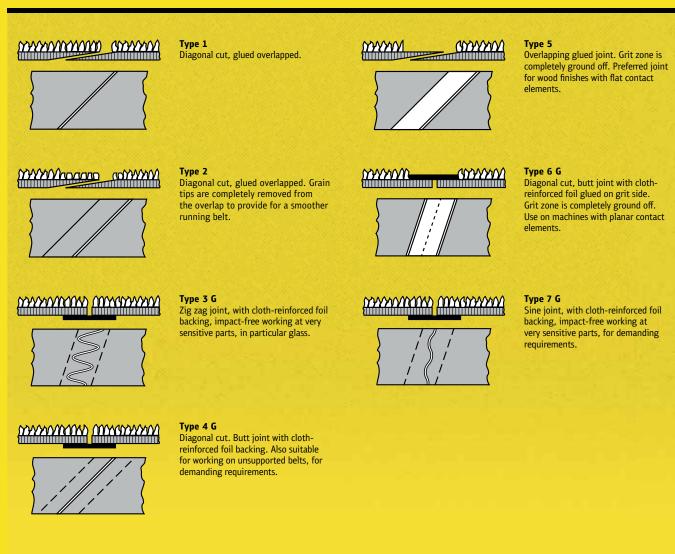
Applications guide

### **Belt joints for long and short belts**

Klingspor supplies belts with various types of joints. The type of joint you require depends on the work involved and the machine you are using. The following illustrations show the usual types of joint.

The available types of joint are listed in the product charts on the following product pages.

If the product you require is not in stock, we will manufacture it for you subject to a minimum order quantity.



The chart alongside contains all the standard types of machines. Please contact us if you cannot find the machine used by you on this list. We will be pleased to assist you further.

# **Short and long belts** Applications guide



#### Pad/stroke, edge and profile sanding machines

		Abrasive	belt size			Abrasive	e belt size
Manufacturer	Туре	Width in mm	Length in mm	Manufacturer	Туре	Width in mm	Length in mm
Bütfering	E-Line 113	370	1900		MSM 75	75	2000
	KL 150	150	1900	100	915		
CMC	KL 150 0S	150	2400		MSM 100 L	100	1220
CMC	CL 260	120/150	7050		MSM 150, KS 2000	150	2000
	CL 300	120/150	7850		BT 1220	150	1220
	GX 75/75 2H, GXC, GI 75/75 2H, GIS 75	75	2000	11-1			2260
	GXR	75	2250	Holzmann			2510
	GICS	75					2600
Fein	GIM, GIC	75/150					2740
	GI 100	100				150	6000
	GI 150/150 2 H, GIL, GIS 150	150				150	6800
	GIR	150	2250		KOS 3000 P	200	3000
	TBSM 75	75	1000		BTS 200	152	1219
	BSM 75, BSM E1, BSM 75 A,	75	2000		Unilev 150	150	2170
	BSM 75 A/POL		2000		KSM 801, KSO 150	150	2200
Flott	BSM 150, BSM 150 A, BSM 150 A/pol	150	2000		KS0 81	150	2250
	KSM 150, KSM 250, KOS 150	150	2250		KS0 1500	150	2280
	KOS 250	250	2250	Holzkraft	LBSM 2505	150	6400
Bütfering  CMC  Fein  Greif  Heesemann	S 40	max. 100			LBSM 2505 ESE	150	7000
	D30 HFS 100	max. 100			LBSM LS 2500	150	7100
	D30 HFS 100/150	100/150			LBSM 3005 ESE	150	8000
Greif	R 40 HFS 150/200	200	3500		LBSM LS 3000	150	8100
	D 20-2-2	30-50	1250		KS0 200	200	2200
	D 30-2-2	50-100	2500		T 47	max. 150	2800
	D 40-2-2	50-100	3500		T 48	200	3000
	SZ 2	60	2300	Johannsen	T 93 Start	150	7400
	UKP 20	80	2300	Johannisen	T 94 Standard, T 94 Super, T 85, T 95 Profi, T 95 Exclusiv	150	7800
	HG-U	220	2000		T 98	150	8200
Hoosomann	FPA 8	130	1900	Kündig	Uniq, Basiq, Uniq S	150/200	2000
	KFA, MFA 10	150	5400		ZBS 2, PBM 3	100	9000
	MFA 10	150	7000		ZBS 3	100	11200
	MFA 10	1400	2620/3250		PBM 4	100	11000
	BA 2-2300	150	8500		ZBS 4	100	13200
	HWS 200	20	1810		GS 2 -6000	300	16300
	KB 202	20	2040	Kuhlmeyer	GS 2 - 9000	300	22300
EBütfering  CMC  Fein  Greif  Heesemann	BB 315/S+P	25	2220	Rummeyer	GS 2 - 12000	300	28300
	BB 315/3+3P	25	3150		BKK 1/2, BKK 2	120	2240
Hema	SR 400	25	3320		FF 1, UKF 1.1, FF 3.1	120	2300
	SR 500	25	4080		UKF 2	120	2500
	SR 600/UH 630	25	4500		KFS	150	2500
	TBS 3000	120	1200		BS 75/-A/-W	100	950
	PSM 300	25/50	2360	Löser	HSF/HSDSF	100-200	500-5500
Uses	Junior, Expert	200	1850	LUSEI	BS 200/-W	200	1500
ness	Gloria	200	1600		DJ 200/-W	200	1300

# **Short and long belts** Applications guide

### Portable sanding belt

Manufacturer	Туре	Abrasive belt size				
		Width in mm	Length in mm	Manufacturer	Туре	Dimensions in mm
Löser	RPS 336, RP+S 377, SP 377,	150	3500	AEG powertools	HBS 65, HBSE 65	65×410
	HSRG 377, ZSP 377				HBSE 600, HBS 1000 E	75 × 533
	RP+S 374	150	2500/3500		RBSE 75 AE, RBSE 75 S	75 × 533
	TP 80/TP 80S	30	740		HBS 100	100×560
	KS 100	5-100	3500/4000		HBSE 100	100×560
	KS 360	5–75	2500		BBS 1100	100×560
	KS 350	5–75	3500/4000		BBSE 1100	100×560
	KS 363	6–50	2500	Atlas Copco	HBSE 75 S	75×533
	EB 2	50	2000		HBSE 75	75×533
	EB 3-S	max. 100	3500		MBSE 705	75×533
	FS 384/150-G1, SP 337, SP 374, HSD	150	2500		BBS 100	100×620
	SP 352	150	3000		BBSE 100	100×620
	SP 380, RPS 376	150	3500		KA 290, KA 900 E	13×451
	KS 225	150	2250	Black & Decker	KA 292	13×451
	KSM 1	150	2580		KA 293 E	13×451
	KSM 2	150	2630		KA 83	65×410
	SmartGrinder SG 150/300	150/300	3000		KA 83 E	65×410
Löwer	LS 200, DSM 1000	200	1600		BS650	65×410
	DSM 2000, DSM 2004	200	1800		BD 83	65×410
	DSM 3000, DSM 3004, HBS				BD 83 E	65×410
	300, HBS 302, LS 300, Multi 300, HBS VR	300	1800		DN83	65×410
	HBS 400/HBS 400u/HBS 4000,	400	1800		DN83E	65×410
	Multi 400, HBS 4000 BB	400	1800		KA 85 EK	75 × 457
	Combi Queen	500	1800		KA 85, KA 86	75 × 457
	P2/P5	50–200	2500		P 61-03	75×508
Niederberger	P4	100-420	2500		BD 75	75×508
	P6	320-420	2500		BD 85	75×508
Quick Wood	Elicoid	40	1780		SR 500 E	75×508
	BGS 700	50	686		KA 75, KA 75 E, KA 88, XTA80EK	75 × 533
	CSM 405	77	2400	Bosch	GVS 350 AE	40×303
	BTS 900x	100	915		PVS 300 AE	40×303
cheppach	ISE 600	150	1500		PBS 60	60×400
	BSM 2010, KSM 2000	150	2000		PBS 60 E	60×400
	KSM 2500	150	2515		GBS 75 AE	75×533
	SLIK 7	150	2740		PBS 75	75×533
5514	TecnoMax UNILEV 150	150	2170		PBS 75 A	75×533
SCM	TecnoMax LS	150	7100		PBS 75 AE	75×533
Stähle	Saturn E, Saturn Quattro	200	1800		PBS 75 E	75×533
	Saturn Duo Comfort	200-320	1800		PBS 7 A, PBS 7 AE	75 × 457
Vobhag	ERS 25, EFS25, VFS 25	250	2500		GBS 100 A	100×620
	VFS 42, DSM 42	420	2500		GBS 100 AE	100×620
	DSM 46	460	2500		D26480	64×356
	VFS 52	520	2500	DeWalt	MHB158	75×480
	DSM 46/600	600	2500		MHB158 E	75×480
Wegoma	KS2250/P	150	2250		MHB 157	
	KS2400	150	2400			75 × 480
	KS2600, KS2600FU	200	2600		MHB 157 E	75×480
	KJZUUU, KJZUUUFU	200	2000		DW430, DW431	75 × 533

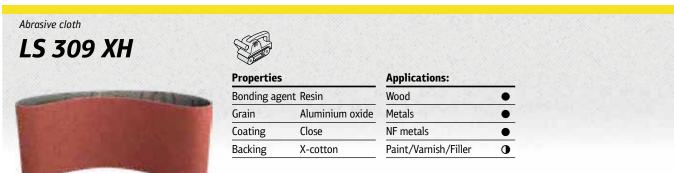
# **Short and long belts** Applications guide



Manufacturer	Туре	Dimensions in mm	Manufacturer	Туре	Dimensions in mr
	DW 432/ DW 433	75×533		9032	9×533
	MHB90	100×560		9031	30×533
	MHB90 E	100×560		9910/9911	75×457
DeWalt	MHB90K	100×560		9901	75×533
	DW650	100×560		9902/9903	75×533
	DW650E	100×560		9900	75×533
	BBS 240, BBS 240/1	50×686	Makita	9924 DB	75×610
	BBS 720, BBS 850 E, BT-BS	75×457		9920	75×610
Einhell	850 E			9402	100×610
	RT-BS 75, BT - BS 850/1 E	75 × 533		9403	100×610
	BBS 1200	100×610		9404	100×610
_	BF1	6/12/16/19×520		9924 DB	100×610
Festool	BS 75, BS 75E, BS 75E-Set	75 × 533		BFE 9-90 SET	6-19×457
	BS 105, BS 105E, BS 105E-Set	105×620		12-180 SET	40×760
Fein	RS 12-70 E	20×815	Metabo	Ba 0775, BAE 75, Ba E 1075	75×533
	RS 10-70 E	30×533		Ba E 0876 Signal	75×533
Felisatti	TP 411, BSF 76/900	75×533, 76×533		Ba 6100	100×620
	BSF 100/1200E	100×610		HBSE 75 S	75×533
	LBS 1105 VE	4/9/30×520/533	Milwaukee	BS 100 LE	100×620
	LBS 1105 VE Set	4/9/30×520/533		PB 600	75×457
Flex	LBR 1506 VRA	40×618	Peugeot	PAB 75	75×533
	LRP 1503 VR	40×675	-	B 850 F	75×533
	LRP 1503 VRA	40/20×760		BE-321	75×533
	SB-75, SB8V2	75×533		EBS 9576V, EBS 8021 V, EBS	
	9924 DB	75×610		800 V	75×533
Hitachi	SB 10 T, SB 10 V	100×610	Ryobi	B-7075, B-7076, BE-7075	75×533
	SB 10 V2, SB 10 S2	100×610		B-7100	75×610
	SB 110	110×620		B 422, BE 422, BE-1056	100×560
	2405	65×410		B-7200 A, BE-422, B/BE 424	100×610
	2406	65×410		BE-4240, EBS 1310 VF HG	100×610
UOL 7 UED	2410, 2411, 2420	75 × 533		1100, 1200, 1205, 1200 H, 1205	
HOLZ HER	2422	105×620		H, 1210, 1210 AA 7600, 7610 AD, 7610 AA, 7620 AA, 7675,	75 × 457
	2423	105×620		1220 MA, 7630	
	2424	105×620	EVII	5903	75×508
Kress	CBS 6800 E	65×410	SKIL	594 U, 595 U, 7640MA	75×533
	15003	3,6/13×305		7650 AA, 7650 AE, 4640 MA	75×533
		_ / / /		1400	100×552
	14000, 14021, 14021 F	3/6,5/13 x 610/ 863/1118		7660 MA	100×610/620
	40320	6/12×305/457		2 N 75	75×457
	11475, 11476, 11476 EL,		Staven	LEN 751 E	75×533
Löser	11486, 11486 EL	25×760	Stayer	LEN 610	100×610
	11477, 11477 EL, 11450, 11450 EL	50×760		LEN 690	100×690
	14300, 14303	50×863		UBC 10-R	3/6/12/16/
	14306	50×663			19×520
	52900	75×610	Suhner	UBK 6-R	35×450
	J2300	73 × 010		UTC 7-R	30×533
				UTG 9-R	30×610

## Short belts for hand held machines

Coated abrasives



**Advantages:** Special type for portable belt sanders - For universal use on wood, metal, paint and varnish - Large product mix of belts for all standard machines

#### Available grits:

16         24         30         36         40         50         60         80         100	<b>120 150</b> 180	220 240 280 320	360 400 500 600 800 100	00 1200 1500 2000 2500 3000
Width x Length in mm	Grit	Belt joint	Packing unit/pcs.	Cat. number
60 x 400	60	F5	10	4100
60 x 400	80	F5	10	4104
65 x 410	40	F5	10	4106
65 x 410	60	F5	10	4114
65 x 410	80	F5	10	4120
65 x 410	100	F5	10	4124
65 x 410	120	F5	10	4128
75 x 457	40	F5	10	37269
75 x 457	60	F5	10	38825
75 x 457	80	F5	10	40345
75 x 457	100	F5	10	41560
75 x 457	120	F5	10	42627
75 x 480	40	F5	10	4098
75 x 480	60	F5	10	4107
75 x 480	80	F5	10	4115
75 x 480	100	F5	10	4121
75 x 480	120	F5	10	4125
75 x 508	40	F5	10	4099
75 x 508	60	F5	10	4103
75 x 508	80	F5	10	4117
75 x 508	100	F5	10	4118
75 x 533	40	F5	10	4137
75 x 533	60	F5	10	4139
75 x 533	80	F5	10	4140
75 x 533	100	F5	10	4141
75 x 533	120	F5	10	4142
75 x 533	150	F5	10	4143
75 x 575	40	F5	10	4145
75 x 575	60	F5	10	4146
75 x 575	80	F5	10	4147
75 x 575	120	F5	10	4149
75 x 610	40	F5	10	37285
75 x 610	60	F5	10	38842
75 x 610	80	F5	10	40365
75 x 610	100	F5	10	41576
75 x 610	120	F5	10	42642
100 x 533	60	F5	10	282937

**Continuation** →

# **Short belts for hand held machines**

Coated abrasives



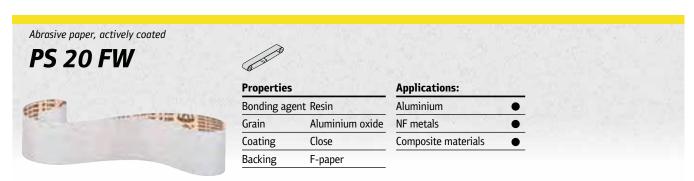
#### → Continuation of LS 309 XH, Abrasive cloth

Width x Length in mm	Grit	Belt joint	Packing unit/pcs.	Cat. number
100 x 560	40	F5	10	4151
100 x 560	60	F5	10	4473
100 x 560	80	F5	10	4474
100 x 560	100	F5	10	4475
100 x 560	120	F5	10	4476
100 x 610	40	F5	10	4478
100 x 610	60	F5	10	4480
100 x 610	80	F5	10	4481
100 x 610	100	F5	10	4482
100 x 610	120	F5	10	4483
100 x 610	150	F5	10	4484
100 x 620	40	F5	10	6272
100 x 620	60	F5	10	6278
100 x 620	80	F5	10	6283
100 x 620	100	F5	10	6284
110 x 620	40	F5	10	6290
110 x 620	60	F5	10	6292
110 x 620	80	F5	10	6294
110 x 620	100	F5	10	6295
110 x 620	120	F5	10	6296

## **Belts with paper backing**

Coated abrasives





**Advantages:** Special product with improved clogging behaviour and significantly increased service life due to additional stearate coating - Specially for grinding aluminium and non-ferrous metals

#### **Available grits:**



All sizes and minimum purchasing quantities available on request. All available grits see page 9.



**Advantages:** High removal rate, fine surface scratch pattern - Specially developed for finish grinding of hardwood - Reduced clogging and longer service life due to ACT recipe and antistatic properties

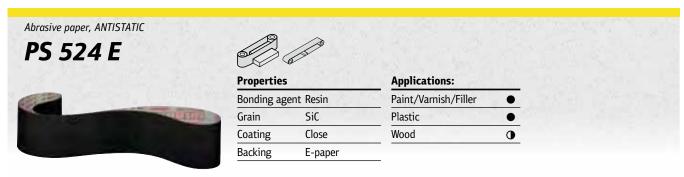
#### **Available grits:**

16 24 30 36 **40** 50 **60 80 100 120 150 180** 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

## **Belts with paper backing**

Coated abrasives



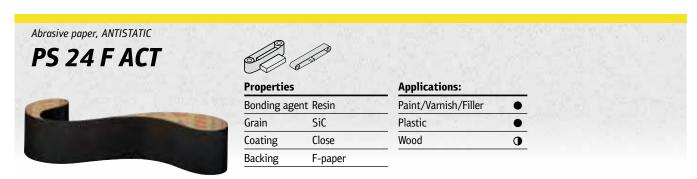


**Advantages:** Universal belt for hard and tough workpiece surfaces - Fine sanding pattern in the wood and furniture industry - Long service life due to antistatic equipment - Very good price-performance ratio

#### **Available grits:**

16 24 30 36 **40** 50 **60 80 100 120 150 180 220 240 280 320 360 400 500 600 800** 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 9.



**Advantages:** For hard and tough surfaces - Finely sanded and varnish surfaces in the wood and furniture industry - Long service life due to ACT recipe and antistatic properties

#### **Available grits:**

16 24 30 36 40 50 60 80 100 **120 150 180 220 240 280 320 360 400 500 600** 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 9.



**Advantages:** High-quality universal belt for general woodworking, especially softwood - Reduced clogging and longer service life due to ACT recipe and antistatic properties

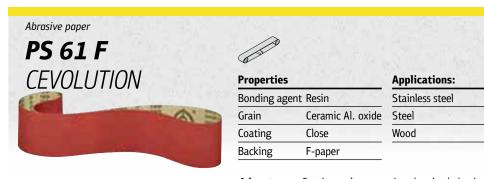
#### **Available grits:**

16 24 30 36 **40 50 60 80 100 120 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000** 

### **Belts with paper backing**

Coated abrasives



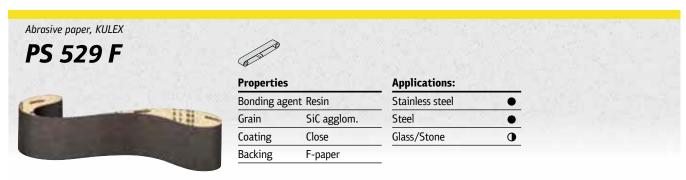


**Advantages:** Continuously aggressive abrasive behaviour due to micro-crystalline and self-sharpening ceramic grit - High-performance abrasive belt for stainless steel finish grinding - The PS 61 F belt includes the new CEVOLUTION technology. CEVOLUTION stands for holistically optimized, ceramic abrasives. Klingspor products with CEVOLUTION technology contain, among others, an optimized grit mix, grit sizes and formulation in order to offer the maximum performance in every application.

#### **Available grits:**

16 24 30 36 40 50 **60 80** 100 **120 150 180** 220 **240** 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 9.

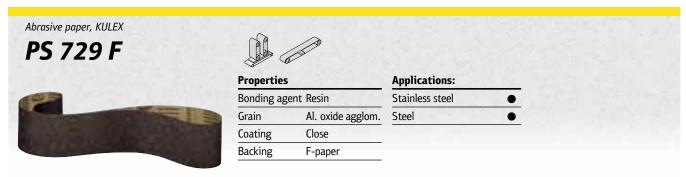


**Advantages:** Long life belt for a brilliant and shiny finish, with low and medium contact pressure - Very long service life, with constant surface roughness - Ideal for dry sanding on wide and long belt machines

#### Available grits:

16 24 30 36 40 50 60 80 100 120 150 180 220 **240** 280 **320** 360 **400** 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 9.



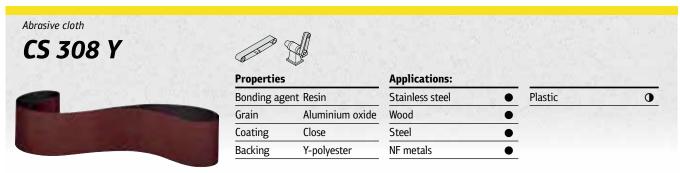
**Advantages:** Long life belt for dry grinding applications - Extremely high service life - Constant surface quality for pre-grinding until finishing - Especially developed for grinding with intermediate contact pressure

#### **Available grits:**

16 24 30 36 40 50 60 80 100 120 150 **180** 220 **240** 280 **320** 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Coated abrasives



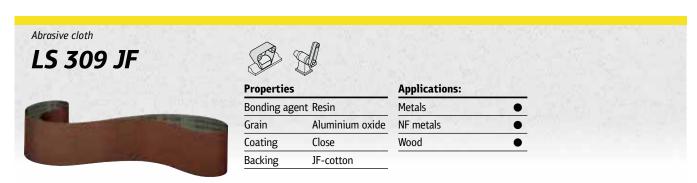


**Advantages:** Tear-resistant universal abrasive cloth for metalworking and for hardwood finish grinding - Excellent removal rate under high stress

#### **Available grits:**



All sizes and minimum purchasing quantities available on request. All available grits see page 11.

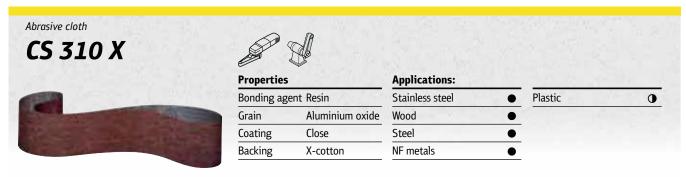


**Advantages:** High removal rate in metalworking and woodworking - Very good adaptation to radiuses and contours due to highly flexible cotton backing

#### Available grits:



All sizes and minimum purchasing quantities available on request. All available grits see page 11.

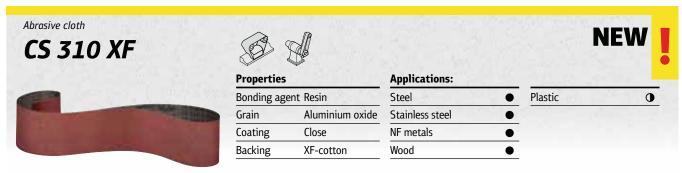


**Advantages:** High-quality universal type for metalworking and woodworking - Good removal rate under high stress

#### **Available grits:**

16	24	30	36	40		60		100	120	150	180	220	240	280	320	360	400		600		1000	1200	1500	2000	2500	3000
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Coated abrasives

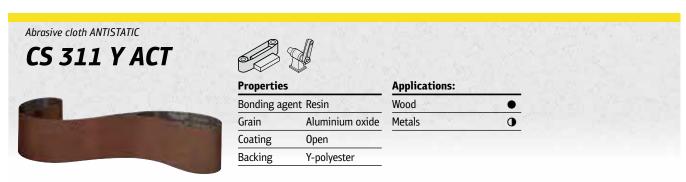


**Advantages:** Flexible, tear-resistant universal product for processing lightly profiled or shaped metal parts

#### **Available grits:**

16 24 30 36 **40** 50 **60 80 100 120 150 180** 220 **240** 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 11.

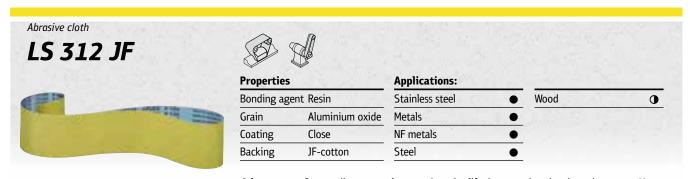


**Advantages:** Good removal rate for working on wood under high stress - Minimal clogging and long service life due to ACT recipe and antistatic properties

#### Available grits:

16 24 30 36 **40** 50 **60 80 100 120 150 180 220** 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 11.



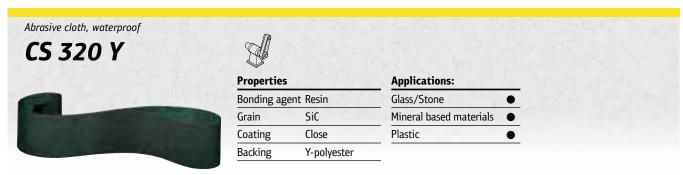
**Advantages:** Outstanding removal rate and service life due to active abrasive substances - Very good adaptation to radiuses and contours due to highly flexible cotton backing

#### **Available grits:**

16 24 30 36 40 50 60 80 **100 120 150 180 220 240 280 320 360 400 5**00 600 800 1000 1200 1500 2000 2500 3000

Coated abrasives



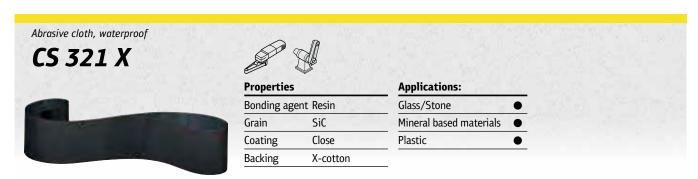


**Advantages:** Outstanding abrasive performance on hard and difficult-to-machine materials - Ideal for high stress - Can be used wet or dry

#### **Available grits:**



All sizes and minimum purchasing quantities available on request. All available grits see page 11.

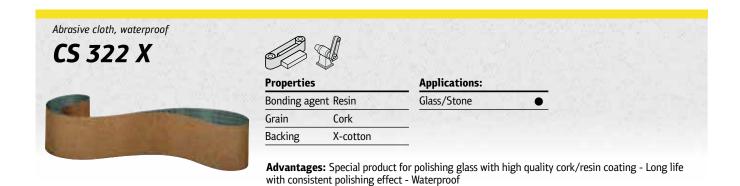


**Advantages:** Outstanding abrasive performance on hard and difficult-to-machine materials - Ideal for wet grinding, but also suitable for dry grinding

#### Available grits:

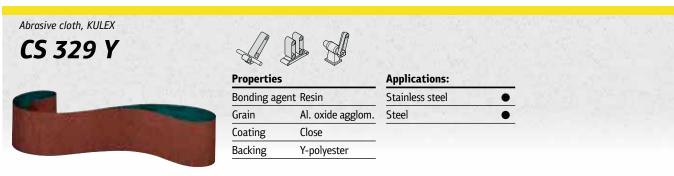
16 24 30 36 40 50 60 **80 100 120 150 180 220 240** 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 11.



Coated abrasives



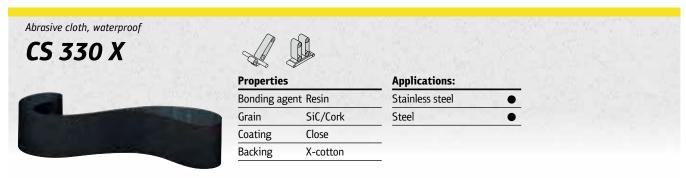


**Advantages:** Long-life abrasive belt for a satin surface scratch pattern, under low to medium grinding pressure - Especially suitable for dry grinding

#### **Available grits:**

16 24 30 36 40 50 60 80 100 **120** 150 180 220 240 280 **320** 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 11.



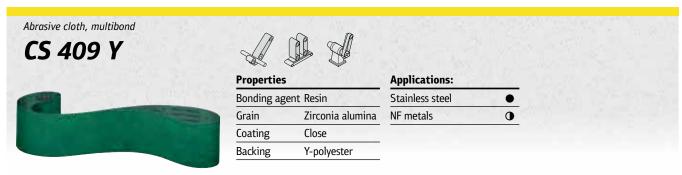
**Advantages:** Soft, very fine grinding with low surface roughness, polishable - Special belt for satin final finishing of stainless steel and steel surfaces with cork granulate with SiC/resin coating

#### **Available grits:**

16 24 30 36 40 50 60 80 100 120 150 180 **220** 240 280 320 360 **400** 500 **600 800** 1000 1200 1500 2000 2500 3000

Coated abrasives



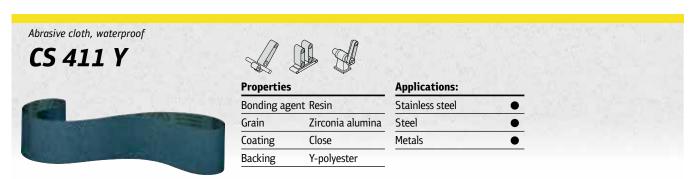


**Advantages:** Aggressive abrasive behaviour - Cool grinding and increased grinding performance on stainless steel and high-alloy steels due to additional multibond - Very long service life also when used for grinding of non-ferrous metals

#### **Available grits:**

16 24 30 **36** 40 50 **60 80 100 120** 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 11.

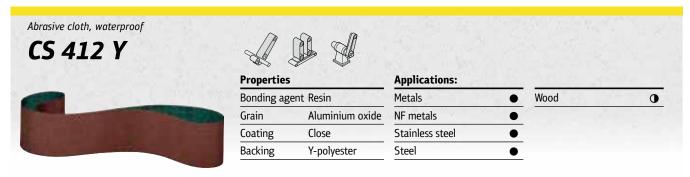


**Advantages:** Tear-resistant high-performance belt - Especially high aggressiveness and abrasive performance due to active abrasive substances - Especially for stainless steel, but also for steel and metal in general

#### **Available grits:**

16 **24** 30 **36 40** 50 **60 80 100 120** 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 11.

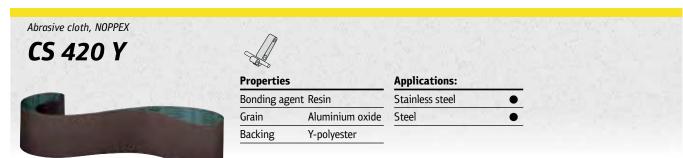


**Advantages:** High-quality universal type for wet and dry grinding of stainless steel, steel and other metal surfaces

#### **Available grits:**

16 24 30 **36 40** 50 **60 80 100 120 150** 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

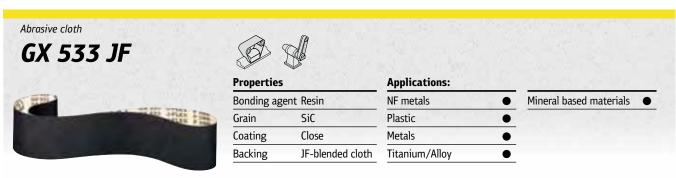
Coated abrasives



**Advantages:** Long-life abrasive belt with knob structure for a satin surface scratch pattern, under high to medium grinding pressure - Very suitable for centreless circular and surface grinding - Suitable for dry and wet grinding

#### **Available grits:**

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
			Wic	lth x L in mi	_			(	Grit			Belt joint					Packin nit/po	_			Ca <sup>r</sup>			
			7	75 x 35	500			1	L20			F4G					10				3183	59		1



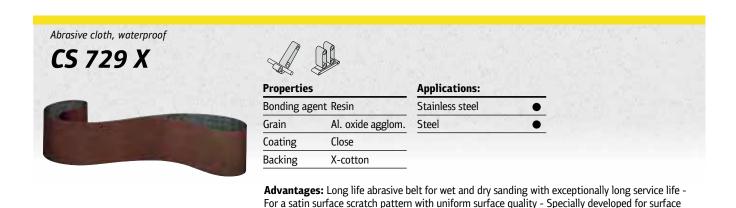
**Advantages:** Special product for use on brass (sanitary fittings) and titanium (surgical instruments) - Good adaptation to radiuses and contours - High process reliability in robot applications or working with unsupported belts due to highly tear resistant blended fabric backing

grinding at medium contact pressure - Optimum workpiece adaptation due to semi-flexible and

#### **Available grits:**

16 24 30 36 40 50 60 **80 100 120 150 180 220 240 280 320 360 400 5**00 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 11.



#### Available grits:

16 24 30 36 40 50 60 80 100 **120** 150 **180** 220 **240** 280 **320** 360 **400** 500 600 800 1000 1200 1500 2000 2500 3000

tear-resistant cotton backing

Coated abrasives







# Bonding agent Resin Grain Ceramic Al. oxide Coating Close Backing Y-polyester

#### **Applications:**

•

**Advantages:** Special product with Advanced Coating-Technology (ACT) - Excellent grit adhesion - Highly tear-restistant polyester backing and self sharpening ceramic grain for rough, and intermediate grinding of stainless steel and high alloyed steel at high loads - Higher service life and cool grinding due to special coating with active multibond - The CS 920 Y belt includes the new CEVOLUTION technology. CEVOLUTION stands for holistically optimized, ceramic abrasives. Klingspor products with CEVOLUTION technology contain, among others, an optimized grit mix, grit sizes and formulation in order to offer the maximum performance in every application.

#### **Available grits:**

16 **24** 30 **36 40 50 60 80** 100 120 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request. All available grits see page 11.







#### Properties

Bonding agent Resin							
Grain	Ceramic Al. oxide						
Coating	Close						
Backing	Y-polyester						

#### **Applications:**

Stainless steel	•
Steel	•

**Advantages:** Continuously aggressive grinding behaviour - Long service life due to self-sharpening ceramic grit - Very high grain adhesion thanks to Advanced Coating Technology and highly tearresistant polyester backing - The CS 922 Y belt includes the new CEVOLUTION technology. CEVOLUTION stands for holistically optimized, ceramic abrasives. Klingspor products with CEVOLUTION technology contain, among others, an optimized grit mix, grit sizes and formulation in order to offer the maximum performance in every application.

#### **Available grits:**

16 24 30 **36 40 50 60 80 100 120 150 180** 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Applications guide

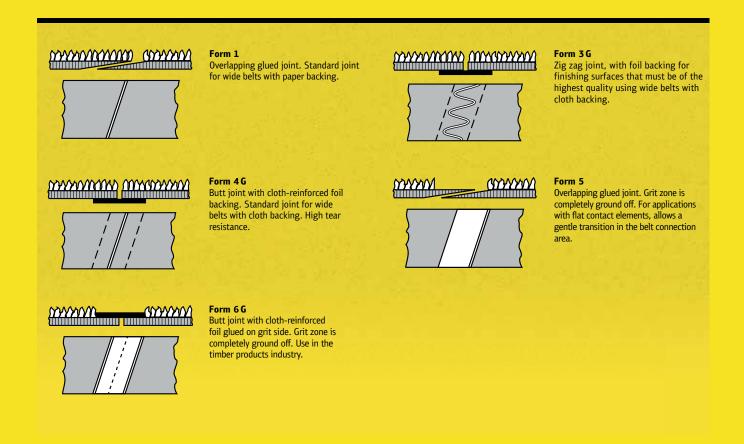
# **Belt joints for wide belts**

Klingspor supplies belts with various types of joint. The type of joint you require depends on the work involved and the machine you are using.

The following illustrations show the usual types of joints. The available types of joints are listed in the product charts on the following pages.

The chart alongside contains all the standard types of machines for wide belts. Please contact us if you cannot find the machine used by you on this list. We will be pleased to assist you further.

If the product you require is not in stock, we will manufacture it for you subject to a minimum order quantity.



# Applications guide

# MINGSPOR

## Wide belt machines

		Abrasive	belt size			Abrasive	belt size
Manufacturer	1 · · · · · · · · · · · · · · · · · · ·	Width in mm	Length in mm	Manufacturer	Туре	Width in mm	Length in mm
Anthon	Saphir Combi 1100/1300, Saphir WS 1100/1300, Saphir WWS 1100/1300, Saphir 110/130, Saphir L,	1120/1320	1900		Super RRF/RRL 311/313, Super RLF 311/313, Super MRL 311/313 SWO 313 RRF	1120/1370 1370	1900 2620
	Saphir L-series	000 /1100 /1700	2500		SWT 113 K	970	1900
	CMOWKS		2500		SWT 142 RK, SWT 124 MK,		
	Levia 95	970	1900		SWT 124 RC, SWT 134 RCC, SWT 134 RRK	1120	1900
	Levia 110	1120	2150		SWT 315 C, SWT 325 RL, SWT		
	Levia 110R Levia 135, Levia 135R 2,	1115 1370	2620 2150		325 RC, SWT 325 RH, SWT 325 CC, SWT ww 325 CH, SWT 325		2522
Biesse	Levia 135R 3 Levia 210, Levia 220	970	1900		QC, SWT 335 RQE, SWT 335 RQH, SWT 335 QCE, SWT 335	1370	2620
	Levia 310, Levia 320, Levia 330	1120/1370	2150	Büftering	RRL, SWT 335 RRC		
	Regal 135 2, Regal 135 3, Regal 520, Regal 530	1370	2620		SWT 515 C SWT 525 CC, SWT 525 CH,	1370	2150
	Regal 320, Regal 330	1120/1370	2620		SWT 525 QC, SWT 525 QH,	1370	2620
	·	610/810/910/			SWT 535 RQE, SWT 535 RQH, SWT 535 QCE, SWT 535 QCH		
	B, Kombi, Sandonomic C, Sandonomic KC	1010/1110/ 1310	1900		SWT 700	1350/1650	2620/3250
	Elite B	610/910/ 1100/1310	1900		SWT 900	1350/1650/ 2200	2620/3250
	Elite B/T	610/910	1900		Vega 111, Vega 211 C-E, Vega 311	1120	2150
	Elite B/T	1110/1310/ 1660	2620		Vega 113, Vega 213 C-E, Vega 313	1370	2150
Boere	Elite-LAC K, Elite-LAC KK Elite-T	1100/1300 610/910/1110/	2620 1900		Libra 1 (TC 95, RR 95, RT 95, RTC 95)	970	2200
	Elite TP	1310 910/1110/1310	1900		Libra 2 (TC 110, RR 110, RT 110, RTC 110)	1120	2200
	Merite C, Merite KC	1010	1900		Libra 3 (110 RRT, 110 RRR, 110 RRTC)	1120	2200
	MT C, MT KS/KK, MT KKS/KKK Sandrite C, Sandrite KC	410/610/940 1110/1310	1525 1900		Libra 4/2 (RR 135, RT 135, RTC 135, TCTC 135, TCT 135,	1380	2620
	Select C, Select K, Select KC, Select KK, Select KS, Select KKC, Select KKK, Select KKS, Select CB, Select KSB	910/1110/1310	1900		TT 135) Libra 4/3 (RRR 135, RRT 135, RTCTC 135, RRTC 135, RTT 135, RTCT 135)	1380	2620
	Select +plus+	1370	2620	Casadei	Libra 6 (RT 115, RR 115,	1180/1380	2620
	AF 2, AF 3	1110/1360	2620		RT 135, RR 135) Libra 10	970	1525
	AL-E	1360	2620		Libra 30 (RTC 95, TC 110,	970	1525
	AWS 2, AWS 3, AWS Combi	1110/1360	1900		RTC 110)	970/1115	1900
	Optimat SBC 111/113/Classic, Optimat SBC 211/312/Classic, Optimat SBC 311/313/Classic	1120/1370	1900		Libra 40, Libra 40/3 (RR110, RTC 110, RRR 110, RRTC 110, TC 135, RR 135, RTC 135, RRR 135, RRTC 135)	1115/1370	2200
	Optimat SBC 213/QC/Classic, Optimat SBC 313/QCE/Classic, Optimat SBC 313/RQE/Classic	1370	1900/2620		Libra 50 (RR 135, RTC 135, RRR 135, RRTC 135)	1370	2620
	E-Line 111, E-Line 211, E-Line 311 E-Line 113, E-Line 213,	1120	1900		Libra 60 (RR135, RTC 135, RRR 135, RRTC 135)	1370	2620
	E-Line 313 ECO 1100, ECO 2 K, ECO 2 KC,	1370	1900	СМС	LEV 95 RT/RR/R+T	970	1900
Bütfering	ECO 2 KK, ECO 2 C-E, ECO 2 K-E	1120	1900		LEV 115 RT/RR/R+T	1180	1900
- aciel ing	PRO 111, PRO 211	1120	1900		A, A1, AK, AF, AKF, AW1 K, KA, KB, KH, KK, KP, KBA,	1180/1380	2620
	SB0 109	970	1900		KBH, KHV, KKA, KKH, KKP, KPH	1350/1650	2620/3250
	SCO 213 CC, SCO 213 CH, SCO 213 QC, SCO 213 QH	1370	2620		Elite CK, C/400, CT, CC, C/CK, CK/T	1150/1350	2620
	SGO 109 K	970	1900		S, SA, SP	1150/1350	2620
	SGO 211 K, SGO 211 RK, SGO 211 MK, SGO 311 RKK	1120	1900		54	1380/1680	4600
	SKO 111 C	1120	1900	Costa	SN	1380/1680	2620/3250
	SKO 113 C, SKO 213 RC, SKO 213 CC	1370	1900		SK (Serie 4)	1380 1150	2620/3250 2200
	STO 111 L, STO 211 RL	1120	1900		SK (Serie 5, Serie 6)	1380	2620
	STO 113 L, STO 213 RL,				K (Serie 7)	350 - 1650	2620/3250
	STO 313 RRL	1370	1900		K (Serie 8)	1350 - 2200	2620/3250
	Super 109 L, Super 209 RL	970	1900		K (Serie 9)	1650 - 3000	3250/4600
	Super 111 L, Super 211 RL	1120	1900		, ,		49
	Super 113 L, Super 213 RL	1370	1900				77

# Applications guide

## Wide belt machines

			belt size			Abrasive	belt size
Manufacturer	Туре	Width in mm	Length in mm	Manufacturer		Width in mm	Length in mm
	Chronosand	1115/1315	2620		SPB 300R, SPB 300C, SPB 300RR, SPB 300RC	320	1900
	Eurosand L	1115/1370	2620		SPB 400R, SPB 400C,	420	1000
	Mastersand 110, Mastersand 135	1115/1370	2620		SPB 400RR, SPB 400RC	420	1900
	Polisand	1130/1330	2200/2620		SPB 430R, SPB 430C	450	1600
	System 1350 RK	1370	2620		SPB 630R, SPB 630C	650	1600
	System T2 1350, System T3 1350, System T5 1350,	1370	2620	Holzmann	SPB 630R, SPB 630 RR, SPB 630RC SPB 910R. SPB 910C.	650	1900/2200
	System T7 1350				SPB 910RC, SPB 910RR	930	1900/2200
DMC	System BT44 1350	1370	2620		RP 950B	980	1900
	System BT22 2200	2220	2620		RRP 650 B	680	1900
	System T10	1370	2620		RRP 1000B	1030	2200
	Technosand K	1115/1370	2620		Aerostat	1130/1330	2200
	Technosand L	1115 1370/1670/	2620		Aerostat I 1K	1050/1130/	1900
	Topsand 2000	1920/2270	3250		Aerostat I 2 RS	1350 1050/1130	1900
	Unisand 2000	1370	2620	Johannsen	Aerostat II 2 RS, Aerostat II 2 RK,	1030/1130	1900
	Unisand K	1115/1370	2620	Jonannisen	Aerostat 2 KS, Aerostat 2 KK	1130/1350	1900
	Linea Unisand K	1115/1370	1900		Compact 1K	1050	1900
	Explorer	670/970/1120	1900		Compact 2 RS, Compact 2 RK	1050/1130	1900
	Explorer Super	670/970/1120	2200		MT 2/1100	1150	1900
FMC	Giant	1370	2620		Primo, Triplex, Magiq, Topiq	1120/1350	2000
EMC	Under-Top	1120	1900		Enorm DUO 1100	1120	1900
Ernst	Venus	1120/1370	2200	Kündig/	Duplex	670/1120/	2000
	Venus Super	1120/1370	2620	Enorm	.,	1350/1620 420/670/1120/	
	820 (SIMPLEX, DUPLEX, KOMBI)	1400	2150		Premium, Brilliant, Technic	1350/1620/	2000
	Economic 520 (SIMPLEX, DUPLEX)	1400	2620			1920/2220	
	LKKB(B)/K, LKB(B)/K, KBB/K	1400	2620/3150		Alpha, Alphatronic	1120/1380	2150
	EG 3 M/1400	1400	1540		Comet 1	1120/1380	1900
	EM 5N 900	900	1540		Comet 2, Comet 3	1100/1360	1900
	EM 3N 1400, EGM 3M 1400	1400	1690	D	Delta	1400	2150
	510, 530, 810, 830, 850	1400	2620		Deltatronic	1120/1380	2150
	FW 650	670	1900	ОТТ	Euro	1120/1380	1900
Felder	FW 950 classic	970	1700		Euro 95 WS	970	1900
i ciuci	FW 952	970	1900		Lambda, Lambda KSE 2	1360	2620
	FW 1100, FW 1102	1110	1900		Megatronic	1120/1380	1900
Format	finish 1102, finish 1302	1110/1310	2200		Omega, Omegatronic	1120/1380	2150
4 (Felder Group)	Giant 1350	1350	4550		RSK-0	1120	1900
	GC65, GC95, GC110	670/970/1120	2150		CSB-400	430	1600
Griggio	GI 1000 RR/RRT, GI 1300 RR/RRT	1120/1370	2620		CSB-600, CSB-900, SCSB-1100, SCSB-1300	1130/1330	1900
	MFA 10	1400	2620/3250		CSB-1600, CSB-1950 CSB 2-600, CSB 2-900,	1630/1980 630/930/	2620
	EH 31.11	1120	1900		SCSB 2-1100, SCSB 2-1300	1130/1330	1900
	EH 51.11, EH 52.11	1120	2150		CSB 2-1050, CSB 2-1300,	1080/1330/	2620
	EH 51.13, 52.13	1370	2150		CSB 2-1600, CSB 2-1950	1630/1980	
	FBA 8	700/1400	2620		CSB 3-600, CSB 3-900, SCSB 3-1100, SCSB 3-1300	630/930/ 1130/1330	1900
	KSA 4	1350	3250	Sand-	CSB 3-1050, CSB 3-1300,	1080/1330/	2620
Heesemann	KSA 8	1650/2050/ 2350/2650	2620/3250	ing-master / Timesavers	CSB 3-1600, CSB 3-1950 KCSB-U	1630/1980 930/1130/1330	1900
	LSM 4-U, LSM 8	1350	2620/3250		SA 2100 W, SA 2100 C,	600/900/	1900
	LSM 6, KSM 8	1350	2620		SA 2100 K	1100/1350	1500
	LAZ 2	1400	2100		SA 2200 WW, SA 2200 WS, SA 2200 WC	600/900/ 1100/1350	1900
	MFA 6, MFA 6 Impression, MFA 8, MFA Impression	1400	2150/2620		SA 2200 WK, SA 2200 WG	1100/1350	1900
	BBS 430 C	450	1600		SA 2200 KG	1100	1900
	BBS 630 C	650	1600	S S	SA 2300 WWW, SA 2300 WWS	600/900/1100	1900
Holzkraft	BSH 650 HP	650	1900		SA 3100 W, SA 3100 C, SA 3100 K	900/1100/1350	1900
		1100	1900				

# Applications guide



## Wide belt machines

		Abrasive	belt size			Abrasive	belt size
Manufacturer	Туре	Width in mm	Length in mm	Manufacturer	Туре	Width in mm	Length in m
	SA 3200 WW, SA 3200 WS,				Sandya 5	1115	1900
	SA 3200 WC, SA 3200 PW, SA 3200 PC, SA 3200 WK, SA 3200 WG, SA 3200 KG	900/1100/1350	1900		Sandya 5 S, Sandya 600, Sandya 7S	1115/1370	2150
	SA 3100 W, SA 3100 C,	900/1100/1350	1900		Sandya 10/2, Sandya 10/3	1115/1320	2150
	SA 3100 K SA 3200 WW, SA 3200 WS,	700/1100/1330	1300		Sandya 10S, Sandya 15S, Sandya 16S	1115/1370	2620
	SA 3200 WC, SA 3200 WS,	000/1100/1750	1000		Sandya 20, Sandya 9S	1115/1370	2620
	SA 3200 PC, SA 3200 WK, SA 3200 WG, SA 3200 KG	900/1100/1350	1900		Sandya 30 CS	1315	2300
	SA 3300 WWW, SA 3300 WWS,				Sandya 30 CLK, Sandya 7	1115	2150
	SA 3300 WWC, SA 3300 PWS,	900/1100/1350	1900		Sandya 30 CL	1315	2150
	SA 3300 PWC, SA 3300 WWK, SA 3300 WWG	300/1100/1330	1500		Sandya 30/2, Sandya 30/3	930/1115/1315	2620
	SA 3400 WWW, SA 3400				Sandya 40	1370	2620
	WWWS, SA 3400 WWWC	900/1100/1350	1900		Sandya 50	1115/1315	1900
	SA 4100 W	1100/1350	2620		Sandya 60	1115	2620
	SA 4200 WW, SA 4200 WS,				Sandya L90	915	2150
	SA 4200 PW, SA 4200 WG, SA 4200 DW	1100/1350	2620		Sandya 90 CLX4G, Sandya 30 RRT130	1315	2620
	SA 4300 WWW, SA 4300 WWS,	1100/1750	2620		Sandya Win	640	1525
	SA 4300 PWS, SA 4300 WWG, SA 4300 DWG, SA 4300 DKG	1100/1350	2620		EuroSander 1350	1350 – 1400	2620/3250
	SA 4400 WWWW, SA 4400				EuroSander 1700	1650 – 1730	2620/3250
	WWWS, SA 4400 WWKG	1100/1350	2620	Taaliahua	TAG	1400	2620/3250
	SCSB	630/930/	1900	Tagliabue	TAG E	1400	2620
	3032	1130/1330	2500		TAG EU	1400	2620/3250
Sand-	SCSB2	630/930/ 1130/1330	1900		TAG L	430/630/830	2620
	SCSB3	630/930/ 1130/1330	1900		Challenge 111/113, Challenge 211/213, Challenge 221/223, Challenge 321/323,	1130/1380	2620
g-master / mesavers	Timesavers-Grindingmaster 2000 Serie	600/900/ 1100/1350	1900		Challenge 331/333 Challenge 111AK, Challenge		
	Timesavers-Grindingmaster 2100 Serie	600/900/ 1100/1350	1900		211A, Challenge 211AK, Challenge 221AK, Challenge 221A	1130	2200
	Timesavers-Grindingmaster 2200 Serie	900/1100	1900	Viet	Challenge 221B/223B	1130/1380	2620
	Timesavers-Grindingmaster	1700	2620		Rita 3/CC, Rita 4/CC	1400	3250
	2200 Serie	1300	2620		S1, S2	1130/1380	2200/2620
	Timesavers-Grindingmaster 3100 Serie	600/900	1525		S3	1130/1380/ 1630	2620
	Timesavers-Sandingmaster	900/1100/1350	1900/2150/		S4	1380	3250
	3300 Serie	300/1100/1330	2620		S211, S219	1000	1900
	Timesavers-Grindingmaster 4100 Serie	600/900/1350	1900		Valeria 1, 2, 3	1400	3250
	Timesavers-Grindingmaster 4200 Serie	600/900/1350	1900	-	KSF	1120/1370/ 1620	2150/2620
	Speedsander	930	1525		KSV	1120/1370/ 1620/1920/	2620
	137-1HDMW	940	1525		NO V	2270	2020
	137-1HD60	940	1525		KSL	1370/1620	2620
	137-1HPM	940	1905		OFZ-K1(o), -K2(o), -K3(o)	950/1150/1400	2050/2500
	143-1HD60	1090	1525		OFZ KS/Q	1400	2500
	CL 63TS, CL 110, CL 130	640/1115/1315	2150	Wohan	Weber 600	1120/1370	1900
	Sandya CL 110M	1115	2150	Weber	Weber 1000	1120/1370	2150
	CS92, CS110, CS130	930/1115/1315	2300		LCS	1100/1300	1900
	Sandya Uno				LCE compact	1100/1350	1900
	(CC, CS, CCS, RR, RCS) Sandya 1K, Sandya 1S	930 970	1525 1525		TT, MKS	600/1100/ 1350/1600	2150
	Sandya 3	970	1900			920/1120/	
	Sandya 3 S, Sandya 300	970/1115	1900		MK	1370/1620/ 2020	2620

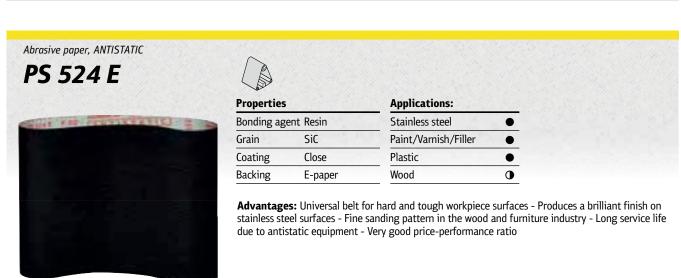
Coated abrasives



Coated abrasives







Available grits:

16 24 30 36 **40** 50 **60 80 100 120 150 180 220 240 280 320 360 400 500 600 800** 1000 1200 2500 3000

Coated abrasives



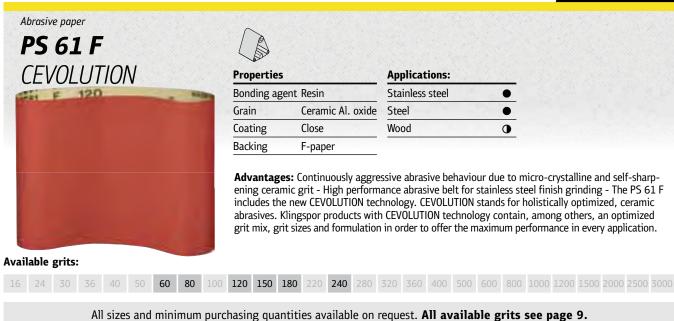
clogging and longer service life due to ACT recipe and antistatic properties

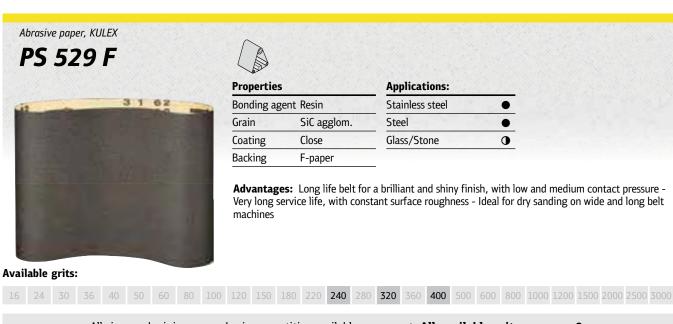


16 24 30 36 **40** 50 **60 80 100 120 150 180 220** 240 280 **320 3**60 **400** 500 600 800 1000 1200 1500 2000 2500 3000

Coated abrasives







Coated abrasives



Coated abrasives





Coated abrasives



Coated abrasives





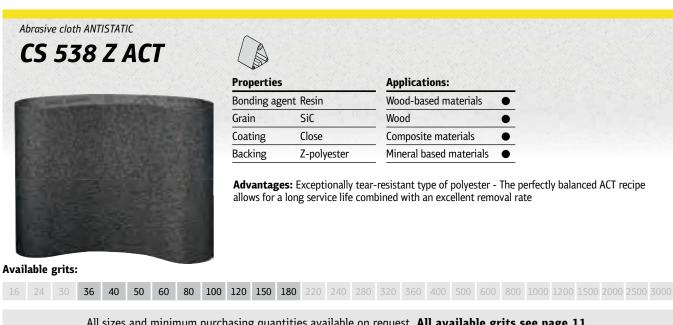
Coated abrasives



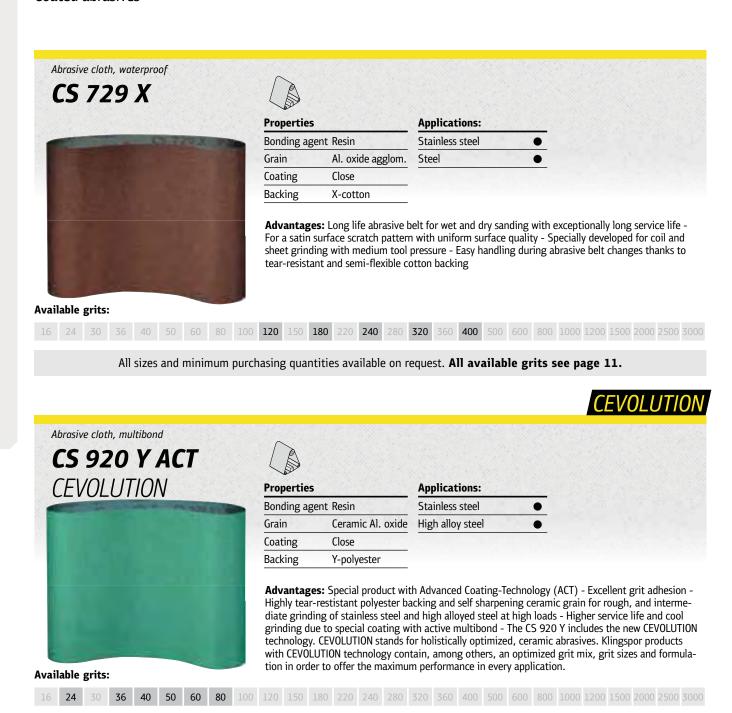
Coated abrasives







Coated abrasives



Coated abrasives









# **About the product**

Klingspor fibre discs have high material removal rates and service life, producing an optimal finish. Suitable backing plates complete the product range.

Areas of use are steel, stainless steel, non-ferrous metal and cast iron. The comprehensive grit range makes it possible to select the right tool for every application. Even the most difficult of surfaces can be worked on easily with the fibre discs.

Klingspor fibre discs are outstanding for rough grinding and sanding, de-rusting metal parts, deburring and grinding welded seams. These discs are also suitable for precision finishing work on metals.

The state-of-the-art laser cutting technology allows special shapes for specific applications.

# **Quality and performance**

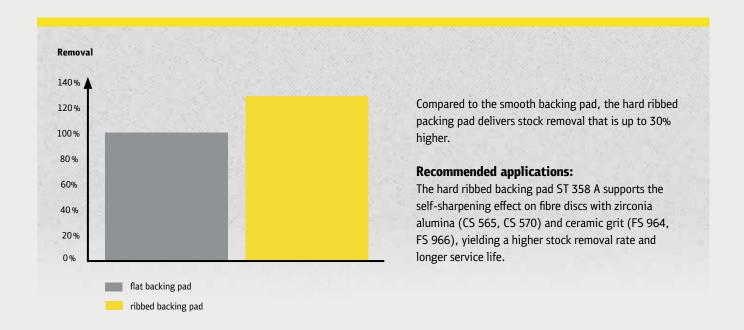
- ► Low clogging rate
- ► Market leading service life
- ► Even grinding finish
- ► Cool grinding

	Applications Fibre Discs									
Application	Туре	Grain	Backing	Coating	Characteristics	Page				
Steel / NF metals	CS 561	Aluminium oxide	Fibre	•	Abrasive fibre disc for working on steel and NF metals	68				
	FS 764 ACT	Aluminium oxide	Fibre	•	Abrasive fibre disc for processing steel and non-ferrous metals. High aggressiveness and long service life due to new Advanced Coating Technology	available on request				
Steel / Stainless steel	CS 565	Zirconia alumina	Fibre	•	Abrasive fibre disc with high stock removal rate for rough grinding and deburring of steel and stainless steel	69				
	FS 964 ACT	Ceramic aluminium oxide	Fibre	•	Premium fibre disc with microcrystalline, self-sharpening ceramic grit delivering superior aggressiveness and removal on construction steel and high-alloy steels. Outstanding grit adhesion and service life thanks to Advanced Coating Technology	71				
	CS 570	Zirconia alumina	Fibre	•	High performance fibre disc with additional multibond for high stock removal rate and long service life for cool grinding on stainless steel and high-alloy steel, especially for surface grinding	71				
Stainless steel	FS 966 ACT	Ceramic aluminium oxide	Fibre	•	High performance fibre disc with very high stock removal rate and extremely long service life, with self-sharpening ceramic grain for the processing of high-alloy steel, multibond for cool grinding. Improved grit adhesion due to Advanced Coating Technology	72				

Applications guide

# Technical information about the backing pad

The right be	acking pad
ST 358	ST 358 A
Medium hard, flat	Hard, ribbed
Even grinding finish, good adaptation to the workpiece	High material removal rates, high stability
	Additional benefit of our ribbed backing pad: increased aggression, cool grinding
Finish grinding (grit 50 and finer), edge rounding, contour grinding, surface grinding	Rough grinding (up to grit 40 and coarser), chamfering, deburring work, welded seam work
	ST 358  Medium hard, flat  Even grinding finish, good adaptation to the workpiece  Finish grinding (grit 50 and finer), edge rounding, contour



# The safe use of Klingspor abrasives

Klingspor fibre discs have been tested according to the guidelines of the oSa directives and are guaranteed to comply with European safety standard EN 13743



Wear safety goggles or glasses to protect the eyes



Wear a dust mask



Use ear muffs





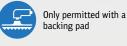
Observe safety instructions

Wear safety gloves to

protect hands



Do not use for wet grinding





Do not use if damaged

Applications guide



# Hole pattern for fibre discs









30 = star shaped hole

Additional special cutting shapes are available on request. Please ask for more information.

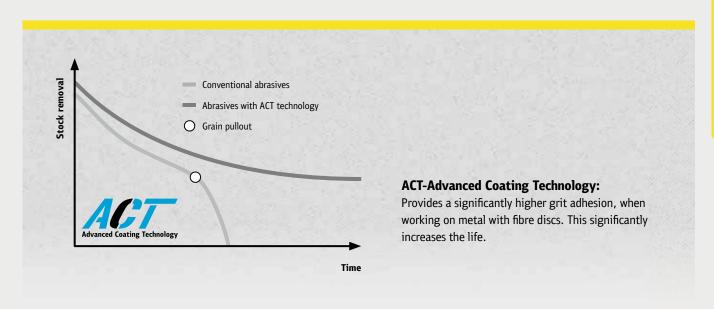
# Minimum order quantities for made to order items



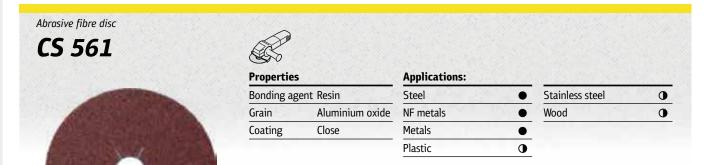
We reserve the right to over-deliver or under-deliver made to order items.

Disc diameter Minimum order quantities

up to 235 mm 1,000 pieces



Coated abrasives



16 24 30 36 40 50 60 80 100 120 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

**Advantages:** For universal use - Largest selection of diameters, grit sizes and hole patterns

Δvai	lahle	grits:
Avai	Iable	giits.

Diameter x Hole in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
100 x 16	16	⊙ 10	25	65708
100 x 16	24	⊙ 10	25	65713
100 x 16	36	⊙ 10	25	65718
100 x 16	60	⊙ 10	25	65730
100 x 16	80	⊙ 10	25	65735
100 x 16	100	⊙ 10	25	65739
115 x 22	24	⊙ 10	25	72298
115 x 22	36	⊙ 10	25	66308
115 x 22	60	⊙ 10	25	66318
115 x 22	80	⊙ 10	25	25472
115 x 22	16	⊛ 30	25	10977
115 x 22	24	⊛ 30	25	10978
115 x 22	36	⊛ 30	25	10980
115 x 22	40	⊛ 30	25	10981
115 x 22	60	⊛ 30	25	10983
115 x 22	80	⊛ 30	25	10984
115 x 22	100	⊛ 30	25	10985
115 x 22	120	⊛ 30	25	10986
125 x 22	16	⊛ 30	25	11009
125 x 22	24	⊛ 30	25	11010
125 x 22	36	⊛ 30	25	11012
125 x 22	60	⊛ 30	25	11015
125 x 22	80	⊛ 30	25	11016
125 x 22	100	⊛ 30	25	11017
125 x 22	120	⊛ 30	25	11018
150 x 22	100	⊙ 10	25	312255
150 x 22	120	⊙ 10	25	312256
180 x 22	36	⊙ 10	25	66459
180 x 22	80	⊙ 10	25	184517
180 x 22	16	⊛ 30	25	11057
180 x 22	24	⊛ 30	25	11058
180 x 22	36	⊛ 30	25	11060
180 x 22	50	⊛ 30	25	11062
180 x 22	60	⊛ 30	25	11063

**Continuation** →

#### Coated abrasives



#### → Continuation of CS 561, Abrasive fibre disc

Diameter x Hole in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
180 x 22	80	⊛ 30	25	11064
180 x 22	100	⊛ 30	25	11065
180 x 22	120	⊛ 30	25	11066
235 x 22	120	⊙ 10	25	66520

Backing pads see page 73.



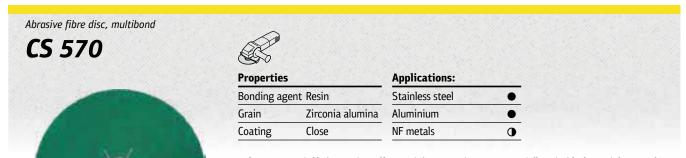
# PropertiesApplications:Bonding agent ResinStainless steelGrainZirconia aluminaSteelCoatingCloseMetals

**Advantages:** Self-sharpening effect - High aggressiveness on steel and stainless steel - Ideal for rough grinding work - Excellent price-performance ratio

**Available grits:** 

Diameter x Hole in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
115 x 22	24	⊛ 30	25	95335
115 x 22	36	⊛ 30	25	6686
115 x 22	40	⊛ 30	25	242801
115 x 22	50	⊛ 30	25	92066
115 x 22	60	⊛ 30	25	6687
115 x 22	80	⊛ 30	25	6688
115 x 22	100	⊛ 30	25	204609
125 x 22	40	⊛ 30	25	242803
180 x 22	24	⊛ 30	25	95993
180 x 22	36	⊛ 30	25	65703
180 x 22	40	⊛ 30	25	242807
180 x 22	50	⊛ 30	25	93045
180 x 22	60	⊛ 30	25	6690

#### Coated abrasives



**Advantages:** Self-sharpening effect - High aggressiveness, especially suitable for stainless steel - Increase in performance due to low temperatures - Multibond prevents heat tinting - Especially suitable for use on aluminium

#### Available grits:

16         24         30         36         40         50         60         80	100 120 150 1	80 220 240 280 320 360	0 400 500 600 800 1000	1200 1500 2000 2500 300
Diameter x Hole in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
115 x 22	36	⊛ 30	25	204086
115 x 22	50	⊛ 30	25	204087
115 x 22	60	⊛ 30	25	204088
115 x 22	80	⊛ 30	25	204089
115 x 22	100	⊛ 30	25	204090
115 x 22	120	⊛ 30	25	204091
125 x 22	36	⊙ 10	25	204806
180 x 22	24	⊙ 10	25	204815
180 x 22	36	⊛ 30	25	204100
180 x 22	50	⊛ 30	25	204101
180 x 22	60	⊛ 30	25	204102
180 x 22	80	⊛ 30	25	204103

Coated abrasives





# PropertiesApplications:Bonding agent ResinSteelGrainCeramic Al. oxideStainless steelCoatingClose

**Advantages:** Premium product with excellent performance for working on steel - Micro-crystalline self-sharpening effect - High aggressiveness thanks to self-sharpening, aggressive ceramic grains throughout the service life - Outstanding grit adhesion - Advanced coating technology (ACT) for extraordinary grain adhesion and extended service life

#### Available grits:

16         24         30         36         40         50         60         80	100 <b>120</b> 150 1	180 220 240 280 320 360	400 500 600 800 1000	1200 1500 2000 2500 3000
Diameter x Hole in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
115 x 22	24	€ 30	25	330478
115 x 22	36	⊛ 30	25	330498
115 x 22	40	⊛ 30	25	330482
115 x 22	50	⊛ 30	25	330480
115 x 22	60	⊛ 30	25	330479
115 x 22	80	⊛ 30	25	330481
125 x 22	24	⊛ 30	25	330484
125 x 22	36	⊛ 30	25	330485
125 x 22	40	⊛ 30	25	330486
125 x 22	50	⊛ 30	25	330488
125 x 22	60	⊛ 30	25	330487
125 x 22	80	⊛ 30	25	330490
125 x 22	120	⊛ 30	25	330491
180 x 22	24	⊛ 30	25	330489
180 x 22	36	⊛ 30	25	330492
180 x 22	40	⊛ 30	25	330493
180 x 22	50	⊛ 30	25	330494
180 x 22	60	⊛ 30	25	330495
180 x 22	80	⊛ 30	25	330496
180 x 22	120	⊛ 30	25	330497

Coated abrasives



Bonding agent Resin Ceramic Al. oxide Close

**Applications:** Stainless steel

**Advantages:** Micro-crystalline self-sharpening effect - High aggressiveness throughout the service life - Outstanding grit adhesion - Long service life, especially suitable for heavy duty applications - Increase in performance due to low temperatures - Multibond prevents heat tinting

Available grits:

16         24         30         36         40         50         60         80	100 <b>120</b> 150	180 220 240 280 320 36	50 400 500 600 800 1000	1200 1500 2000 2500 300
Diameter x Hole in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
115 x 22	36	⊛ 30	25	316490
115 x 22	40	⊛ 30	25	316491
115 x 22	60	⊛ 30	25	316492
115 x 22	80	⊛ 30	25	316493
115 x 22	120	⊛ 30	25	324237
125 x 22	40	⊛ 30	25	316495
125 x 22	50	⊛ 30	25	318655
125 x 22	60	⊛ 30	25	316496
125 x 22	80	⊛ 30	25	316497
180 x 22	36	⊛ 30	25	316498
180 x 22	40	⊛ 30	25	316499
180 x 22	50	⊛ 30	25	316500
180 x 22	60	⊛ 30	25	316501
180 x 22	80	⊛ 30	25	316502
180 x 22	120	⊛ 30	25	324238

## **Backing pads**



Backing pad, plain/flexible

ST 358





**Advantages:** Medium-hard backing pad allows good adaptation to the workpiece - For universal use, especially for surface and finish grinding (grit 50 and finer) - High temperature resistance

Diameter in mm	Thread/Shaft	Suitable for	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
100	thread M10	Diameter 100 x 16	80 m/s	15300 rpm	1	305190
115	thread M14	Diameter 115 x 22	80 m/s	13300 rpm	1	14838
125	thread M14	Diameter 125 x 22	80 m/s	12200 rpm	1	14835
150	thread M14	Diameter 150 x 22	80 m/s	10200 rpm	1	14836
180	thread M14	Diameter 180 x 22	80 m/s	8500 rpm	1	14840

Backing pad, ribbed/hard

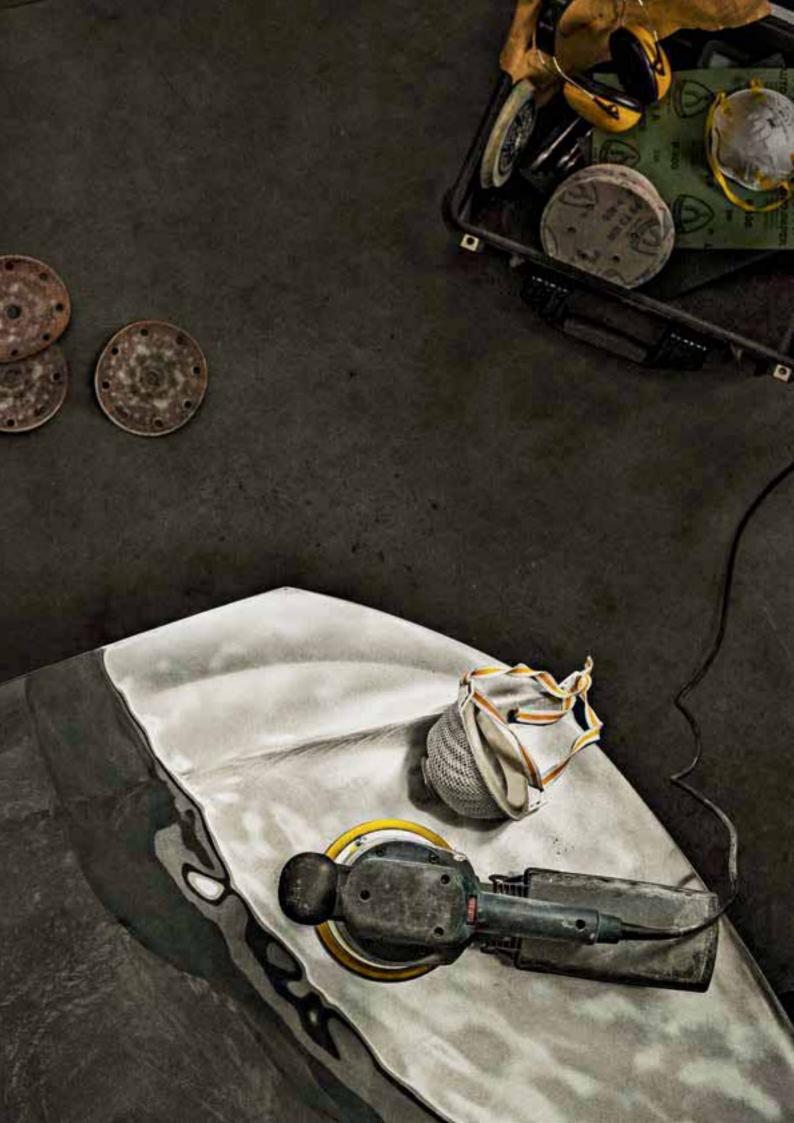
## ST 358 A





**Advantages:** For rough grinding - Cool grinding - Increased aggressiveness due to hard, ribbed abrasive surface - High temperature resistance and stability

Diameter in mm	Thread/Shaft	Suitable for	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115	thread M14	Diameter 115 x 22	80 m/s	13300 rpm	1	126346
125	thread M14	Diameter 125 x 22	80 m/s	12200 rpm	1	126347
180	thread M14	Diameter 180 x 22	80 m/s	8500 rpm	1	126348



## **Strips/Sheets/Discs**



## **About the product**

Klingspor manufactures a very large selection of high quality abrasive products for the strips, sheets and discs product sectors.

Application	Туре	Grain	Backing	Coating	Characteristics	Page
	NPA 400	Aluminium oxide	Non-woven web		Non-woven web hand pad, suited to deburring, cleaning and surface finishing	155
Stainless steel	NDS 800	Aluminium oxide	Surface conditioning material		Premium surface conditioning disc with extra strong edges for demanding applications. Suited to rough cleaning work, deburring and working on weld seams	157
	SV 484	Aluminium oxide	Surface conditioning material		Standard surface conditioning disc, superb value for money for finishing surfaces, slightly contoured surfaces	156
	PS 21 FK	Zirconia alumina	F-paper	•	Premium self-fastening disc for finish grinding stainless steel and other metal surfaces using hand-operated machines. Ultra high level of aggressiveness and outstanding service life thanks to self-sharpening zirconia alumina. Exceptional stability and excellent edge strength on the perimeter thanks to strong F-paper backing	101
stanness steer	PS 61 FK	Ceramic aluminium oxide	F-paper	•	Close coating, strong backing and micro-crystalline, self-sharpening ceramic grain provide an aggressive grinding behaviour on steel and stainless steel	106
	NDS 400 K	Aluminium oxide / SiC	Non-woven web with self-fastening		Non-woven disc for work on ultra-fine surfaces. The velour back lining makes the disc suitable for use on self-fastening backing pads	available on request
Steel / metals	KL 361 JF	Aluminium oxide	JF-cotton	•	High quality, highly flexible abrasive cloth for versatile applications in the metal processing industry, also suitable for stainless steel	93
	KL 371 X	Aluminium oxide	X-cotton	•	Economical universal product for surface grinding in metal processing	92
	KL 385 JF	Aluminium oxide	JF-cotton	•	Highly flexible universal product for the metal processing industry, good price-performance ratio	available on request
	CS 411 XK	Zirconia alumina	X-cotton	•	Product for universal use during the processing of metal and stainless steel that offers a robust, tear resistant cloth-reinforced backing. Unrivalled versatility and a high level of aggressiveness and grinding performance during rough grinding applications on steel and stainless steel	available on request
	PS 22 F ACT	Aluminium oxide	F-paper	•	Close coating for maximum stock removal and uniform scratch pattern regarding surface treatment of hard, low-content woods. Advanced Coating Technology (ACT) and antistatic properties prevent premature clogging	available on request
	PS 22 K	Aluminium oxide	E-paper	•	Abrasive paper with semi-open coating and exceptional machining performance to create a uniform scratch pattern when processing wood and metal	88, 101, 102
	PS 30 D	Aluminium oxide	D-paper	•	Economical abrasive paper for versatile applications in the processing of wood and paint	available on request
Wood	PS 19 EK	SiC	E-paper	•	Robust high performance product with stable E-paper backing for coarse, intermediate and finish sanding. Ideal for hard and difficult-to-machine materials due to the use of sharp-edged silicon carbide	100
	PL 16 E	Aluminium oxide	E-paper	•	Universal product for hand sanding or machine sanding of wood and other materials	88
	PL 28 C	Aluminium oxide	C-paper	•	Universal product suitable for hand sanding or power-tool grinding of wood and other materials	84
	PL 31 B	Aluminium oxide	B-paper	•	Flexible finishing paper with an optimal price-performance ratio for a wide range of applications for the processing of wood, paint and varnish. Provides a smooth surface finish	84
	SW 501 TR	Aluminium oxide	Sponge	•	Highly flexible abrasive sponge, coated on 2 sides, for hand sanding of profiles and contours, extremely resistant to creasing and tearing, washable and reusable, solvent-free bonding system with a colour scheme that varies with the grit size	95

Clo	Cloth						
JF	Cotton, light, highly flexible						
GX	Blended cloth, light, flexible						
J	Cotton, light						
XF	Cotton, heavy, flexible						
Χ	Cotton, heavy						
Υ	Polyester, heavy, highly firm						
Z	Polyester, heavy, highly firm, can be divided into segments						

Pap	Paper						
Α	approx. 95 g/m <sup>2</sup>						
В	approx. 105 g/m <sup>2</sup>						
C	approx. 110 g/m <sup>2</sup>						
D	approx. 130 g/m <sup>2</sup>						
Ε	approx. 250 g/m <sup>2</sup>						
F	approx. 300 g/m <sup>2</sup>						
G	ca. 400 g/m <sup>2</sup>						

# **Strips/Sheets/Discs**Applications guide

Application	Туре	Grain	Backing	Coating	Characteristics	Page
	PS 33 B	Aluminium oxide	B-paper	•	High quality abrasive paper, especially suited for paint, varnish and filler	86
	PS 33 BK	Aluminium oxide	B-paper	•	High quality abrasive paper for outstanding results - especially on paint, varnish and filler	89, 105
	PS 33 C	Aluminium oxide	C-paper	•	High quality abrasive paper, especially suited for paint, varnish and filler	85
	PS 33 CK	Aluminium oxide	C-paper	•	High quality abrasive paper for outstanding results - especially on paint, varnish and filler	89, 104
	PS 73 BW	Aluminium oxide	B-paper	•	High quality abrasive paper, especially suited for the processing of paint, varnish and filler, with a special coating for a long service life	86
	PS 73 BWK	Aluminium oxide	B-paper	•	High quality sanding disc for outstanding results - especially on paint, varnish and filler - with a long service life thanks to added active agent coating	108
	PS 73 CWK	Aluminium oxide	C-paper	•	High quality sanding disc for outstanding results - especially on paint, varnish and filler - with a long service life thanks to added active agent coating	109
	PS 77 CK T-ACT	Aluminium oxide	C-paper	•	High performance abrasive paper with new innovative coating technology that prevents premature clogging during the sanding of strongly adhesive materials. Coarse and intermediate sanding with premium latex C-paper	90, 111
	PS 19 EK	SiC	E-paper	•	Robust high performance product with stable F weight paper backing for coarse, intermediate and finish sanding. Ideal for hard and difficult-to-machine materials due to incredibly sharp silicon carbide grain	100
	FP 73 WK	Aluminium oxide	Film	•	Special product with very tear resisant film backing for the processing of paint, varnish and filler with high service life through additional special coating	107
Paint / Varnish / Filler	FP 77 K T-ACT	Aluminium oxide	Film	•	High performance abrasive paper with new innovative coating technology that prevents premature clogging during the sanding of strongly adhesive materials. Fine and finish sanding with an exceptionally level and tear resistant film backing	90, 110
	PL 28 C	Aluminium oxide	C-paper	•	Universal product suitable for hand sanding or power-tool grinding of wood and other materials	84
	PS 11 A	SiC	A-paper	•	High quality, highly flexible, waterproof abrasive paper for working on paint, varnish and filler especially in the car repair sector	83
	PS 11 C	SiC	C-paper	•	High quality, highly flexible, waterproof abrasive paper for working on paint, varnish and filler especially in the car repair sector	82
	PS 8 A	SiC	A-paper	•	Very flexible, waterproof abrasive paper for processing paint, varnish and filler predominantly in the sector of car repair and body paint	81
	PS 8 C	SiC	C-paper	•	Very flexible, waterproof abrasive paper for processing paint, varnish and filler predominantly in the sector of car repair and body paint	81
	NPA 500		Non-woven web		Non-woven web hand pad, excellently suited to deburring, cleaning and surface finishing	155
	FD 500	Aluminium oxide / SiC	Foam core		Foam-coated disc for finishing. Superior flexibility and adaptability on contours and profiles	113
	SK 500	Aluminium oxide	Sponge	•	Abrasive block coated on four sides for fine work on contoured and flat surfaces. The abrasive block is robust, can be washed and reused. It is suitable for wet and dry finishing	94
	SK 700 A	Aluminium oxide	Sponge	•	Suitable for flat or upright use on all four sides; the angled edge (approx. 45°) makes it an exceptional choice for narrow, tapering workpiece contours. Excellent contouring and pressure distribution thanks to flexible foam core. Robust, washable and reusable	94
	SW 501	Aluminium oxide	Sponge	•	Highly flexible hand finishing tool. Abrasive sponge coated on two sides with plastic foam core. Resistant to creases and breaks, can be washed and reused. Suitable for dry and wet finishing	available on request
	SW 501 TR	Aluminium oxide	Sponge	•	Extremely tear resistant version of the abrasive sponge SW 501. Extra long service life, solvent-free bonding system with a colour scheme that varies with the grit size	95
	SW 502	SiC	Sponge	•	Structure like SW 501, though with more aggressive SiC grit	96
	SW 510	Aluminium oxide	Sponge	•	Thin, ultra flexible sanding sponge for particularly hard-to-reach areas such as indentations, profiles and edges. Tight foam structure, allowing for exceptionally uniform pressure distribution and an extra fine finish. No bending, no creases. Can be used wet and dry	96
Composites, gel coats, paints and coatings, plaster and plasterboard, wood fillers and varnish	AN 400	Aluminium oxide	Abrasive screen	•	Effective high extraction dust removal thanks to open grid structure	91, 112

### Strips/Sheets/Discs

Applications guide



## **Minimum order quantities for made to order items**

	_	
Product	Dimensions	Minimum order quantities
Sheets	230 × 280 mm	250 pieces
	70 × 450 mm	500 pieces
Challen	115×140 mm	1,000 pieces
Strips	93 × 230 mm	500 pieces
	115 × 280 mm	500 pieces
Sheets exceeding 230 x 280 mm	Minimum quantities	on request
Large sheets	1400×1540 mm	10 pieces

Product	Dimensions	Minimum order quantities
	70×125 mm	1,000 pieces
	80×133 mm	1,000 pieces
Self-fastening products	93 × 230 mm	500 pieces
	100×115 mm	1,000 pieces
	115 × 280 mm	500 pieces

Other sizes available on request.

## **Strips/Sheets**

- ► for general use for freehand sanding and finishing and for use with handheld power tools
- ► specially designed for particular materials (e.g. wood, metal, etc.)
- ► special sizes available on request
- ► for wet and dry applications
- ▶ paper or cloth backed

## **Hole patterns for strips**

Klingspor offers a wide range of products with hole patterns for dust extraction. The hole pattern you require depends on the machine you are using. The chart alongside shows the most popular types of machines and the required hole pattern.

You will find the available hole patterns marked in the tables on the following product pages.

If the product you require is not in stock, we will manufacture it for you subject to a minimum order quantity.

Other hole patterns available on request.

#### **Discs**

- ▶ for general use with many types of machines
- ▶ special designs with a wide range of hole patterns
- ▶ various sizes on customer's request
- ► for wet and dry applications
- backings: paper, film, non-woven web and surface conditioning material
- ► self-fastening products
- ▶ suitable backing plate for angle grinder / orbital sander

0 0 0 0 0	GL 1	115 × 280 mm 10 holes Ø 10 mm
0 0 0 0 0 0	GL 3	93 × 230 mm 8 holes Ø 10 mm
0 0 0 0	GL 9	93 × 230 mm 8 holes Ø 10 mm
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	GL 11	115 × 280 mm 14 holes Ø 10 mm
0 0 0 0	GL 13	115 × 280 mm 8 holes Ø 10 mm
0 0 0 0 0	GL 15	115 × 230 mm 10 holes Ø 10 mm
0 0 0 0	GL 17	93 × 180 mm 8 holes Ø 10 mm
0 0 0 0	GL 18	80×133 mm 8 holes Ø 10 mm



We reserve the right to over-deliver or under-deliver made to order items.

## Strips/Sheets/Discs

Applications guide

## Klingspor strips for every tool

Please contact Klingspor if you cannot find the machine used by you on this list. We will be pleased to assist you further.

Manufacturer	Туре	Size in mm	Hole pattern	Design
	FS 2	80×133	GL 18	self-fastening
	VS/E 230, VSS/E 260	93×180	GL 17	self-fastening
	VSSE 260, VSS 260	93 × 230	GL 9	for clamping
AFC	FDS 140	115×140	GL 38	for clamping
AEG powertools	FDS 140	115×140	GL 39	self-fastening
AEG powertoois	VSS 20, VSSE 230, VS 280, VSE 280, VSSE 280	115×230	GL 16	self-fastening
	VSS 20, VSSE 20, VS 280, VSSE 280	115×280	plain	for clamping
	VSS/E 20, VS/E 280, VSSE 280	115×280	GL 11	for clamping
	VS 11	80×133	GL 18	self-fastening
	VSS 20, VSSE 20	115×230	GL 16	self-fastening
Atlas Copco	VSS 20, VSSE 20	115×280	GL 11	self-fastening
	LS030 H070-3, LS030 S070-3	93×180	plain	for clamping
	LS031 H070-3, LS031 S070-3, LS032 H070-3, LS032 S070-3	93×180	GL 3	for clamping
	P 63-01	80×133	GL 18	self-fastening
	KA 330 EKA	90×190	GL 4	self-fastening
	KA 175, KA 186, KA 186 E	93×180	GL 17	self-fastening
	KA 320 EKA	93×190	GL 4	self-fastening
	KA 320 EKA, KA 300	93×230	GL 3	for clamping
	BD 175, BD 180 E, DN 41 AE, DN 180 E, KA 185, KA 185 E, KC 185 E	93×230	GL 9	for clamping
Black & Decker	KC 962, VB 135 A, CD 400, BN 41 AE	93×230	GL 9	for clamping
	KA 185, KA 185 E	93×230	plain	for clamping
	KA 273	115×230	GL 16	self-fastening
	P 63-03, P 63-04, P 63-05, BD 273, SR 410	115×280	plain	for clamping
	P 63-03, P 63-04, P 63-05, KA 273, SR 410 E, BD 273, DN 41, BD 175, BD 180E	115×280	GL 11	for clamping
	VB 135A, DN 180E, KA 185E, KC 962, DN 49, DN 273, VB 250 E, KA274EKA	115×280	GL 11	for clamping
	PSS 240 A, PSS 240 AE, GSS 16 A	80×133	GL 18	self-fastening
	GSS 23 AE, GSS 230 A, GSS 230 AE, PSS 22, PSS 23, PSS 23 AE	93×180	GL 17	self-fastening
	PSS 23 A, PSS 180, PSS 240, PSS 180 A, PSS 240 A, PSS 240 AE	93×180	GL 17	self-fastening
	GSS 230 AVE Professional	93×185	GL 10	self-fastening
	PSS 250 AE, PSS 200 A	93×190	GL 10	self-fastening
	PSS 240 A, PSS 240 AE, GSS 23, GSS 23 AE, GSS 230 AE, GSS 230 AVE Professional	93×230	GL 9	for clamping
	PSS 22, PSS 23 A, PSS 230, PSS 23, PSS 23 AE, PSS 250 AE,	93×230	GL 9	for clamping
Bosch	GSS 23, GSS 23 AE, GSS 230 AE, PSS 22, PSS 23, PSS 23 A, PSS 23 AE, PSS 230	93×230	plain	for clamping
	GSS 140 A	115×107	GL 37	self-fastening
	1289 D	115×115	plain	self-fastening
	GSS 140 A	115×140	GL 38	for clamping
	GSS 28/A, GSS 280 A/AE, PSS 28 AE/280 AE, PSS 300 AE, GSS 280 AVE Professional	115×230	GL 16	self-fastening
	GSS 28, PSS 28 AE, PSS 280 AE, GSS 280 AE	115×280	plain	for clamping
	GSS 28, PSS 28 AE, PSS 280 AE, GSS 280 AE, PSS 300 AE, GSS 280 AVE Professional	115×280	GL 11	for clamping

# **Strips/Sheets/Discs**Applications guide



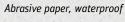
Manufacturer	Туре	Size in mm	Hole pattern	Design
	KLR 210, VLR 210, BLR 170	93×180	GL 17	self-fastening
Casals	BLR 250, VLR 300	115×230	GL 16	self-fastening
	LN 216, LR 228	115×280	plain	for clamping
	D26423, D 26422	93×230	GL 3	self-fastening
	D26441	108×115	GL 20	self-fastening
	DW634, DW636, VS 41, VS 71	115×230	GL 16	self-fastening
DeWalt, ELU	VS 71	115×280	plain	for clamping
	DW634, DW636, VS 41, VS 71	115×280	GL 1	for clamping
	D26420, D26421	115×280	GL 1	self-fastening
	D26441	140×115	GL 33	for clamping
	EST 170	93×180	GL 17	self-fastening
	BSS 150, BT-0S 150	93×230	GL 3	for clamping
Ffb -11	RT-0S 30, BT-0S 280 E	115×230	GL 15	self-fastening
Einhell	ERU 270	115×230	GL 16	self-fastening
	RT-0S 30, BT-0S 280 E	115×280	GL 1	for clamping
	SS-G 270, BSS 250	115×280	GL 13	for clamping
Fein	MSs 641 a, MSs 641 b	115×230	GL 16	self-fastening
	MSs 641 a, MSs 641 b	115×280	GL 11	for clamping
	MSs 641 a, MSs 641 b	115×280	GL 11	self-fastening
Felisatti	TP 31 E	80×133	GL 18	self-fastening
rensatti	TP 115/350 VE, TP 517/AS	115×280	plain	for clamping
	RS 4, RS 4 E, RS 4 - STF, RS 4 E - STF, RS 400, RS 400 Plus, RTS 400 (EQ-Plus, EQ, Q-Plus, Q)	80×133	GL 18	self-fastening
	RS 3 - STF, RS 4 E - STF, RS 4, RS 4 E	80×165	GL 8	for clamping
	RS 3, RS 3 Plus, RS 3 E, RS 3 E Plus, RS 3 - STF, RS 3 E - STF, RS 300, RS 300 Q/EQ	93×180	GL 17	self-fastening
	RS 3 - SFE, RS 3 E - SFE, LRS 93	93×180	GL 17	self-fastening
Festool	RS 3 - STF, RS 3 E - STF	93×230	plain	for clamping
	RS 3 - STF, RS 3 E - STF	93×230	GL 9	for clamping
	RS 1, RS 2, RS 2 E, LRB - IAS, RS 200, RS 100C, RS 100 CQ, RS 200 Q/EQ	115×230	GL 15	self-fastening
	RS 2 - STF, RS 2 E - STF, RS 1 - STF, RS 2, RS 2 E	115×230	GL 16	self-fastening
	RS 2 - STF, RS 2 E - STF, RS 1 - STF	115×280	plain	for clamping
	RS 2 - STF, RS 2 E - STF, RS 1 - STF	115×280	GL 11	for clamping
Flex	0S 80-2, 0SE 80-2	80×133	GL 18	self-fastening
r iex	MS 713	115×105	GL 43	self-fastening
HILTI	WF0 280	115×280	GL 1	for clamping
nicii	WF0 280	115×230	GL 15	self-fastening

# **Strips/Sheets/Discs**Applications guide

Manufacturer	Туре	Size in mm	Hole pattern	Design
	SV 8 SA	80×133	GL 18	self-fastening
Hitachi	FS 10 SB	93×180	GL 17	self-fastening
	SV 12 SG	114×104	GL 19	self-fastening
	SV 12 SF	115×115	GL 20	self-fastening
	SV 12 SD, SV 12 V	115×230	GL 16	self-fastening
	2436, 2437	93×180	GL 6	self-fastening
HOLZ HER	2440	115×230	GL 15	self-fastening
	2441	115×230	GL 16	self-fastening
Vuoss	CRS 6165 A, CRS 6175 EA, 250 RSE Set, 300 RSE	115×230	GL 16	self-fastening
Kress	CRS 6165 A, CRS 6175 EA, 250 RSE Set, 300 RSE	115×280	GL 11	for clamping
Mafell	UVA 115 E	115×230	GL 11	self-fastening
	U 115E, UK 115/ 115 E	115×230	GL 15	self-fastening
матен	U 115, U 115 E	115×230	GL 16	self-fastening
	U 115E, UK 115/115 E	115×280	GL 1	for clamping
	B0 3700, B0 3711	93×230	GL 9	for clamping
	BO 4554, BO 4556, BO 4565, BO 4555, BO 4566	115×103	GL 19	self-fastening
Malaka	9045 B, 9045 N, 9046, B0 4900V	115×230	GL 16	self-fastening
Makita	BO 4556, BO 4558, BO 4555	115×140	GL 38	for clamping
	B0 4901, 9046	115×280	plain	for clamping
	9046, B0 4900V	115×280	GL 11	for clamping
	SR 4350	93×180	GL 17	self-fastening
	SRE 4350 TURBOTEC	93×185	GL 10	self-fastening
	SR 221, SR 321, SR 4320, SFE 227, SF 226	93×230	plain	for clamping
	SR 226, SRE 227, SR 180 INTEC, SRE 4350 TURBOTEC	93×230	GL 9	for clamping
Madalia	SRE 357, SR 356, SR 10-23, SR 10-23 Intec, SR 20-23	93×230	plain	for clamping
Metabo	SR 216, SRE 217, SRA 60	115×115	GL 20	self-fastening
	FSR 200 INTEC	115×103	GL 19	self-fastening
	SR 358, SRE 359, SR 4351, SRE 4351 TURBOTEC	115×230	GL 16	self-fastening
	SR 328, SRE 329, SR 4321, SR 358, SRE 359	115×280	plain	for clamping
	SR 328, SRE 329, SR 4321, SR 358, SRE 359, SRE 4351 TURBOTEC	115×280	GL 11	for clamping
Milwaukee	POS 13	80×133	GL 18	self-fastening
D	PV 240 A, TV 4102	93×180	GL 17	self-fastening
Peugeot	TV 4003, TV 4103	115×230	GL 16	self-fastening
	ESS 2590	93×180	GL 17	self-fastening
	ESS 200 RS	93×185	GL 10	self-fastening
	ESS 1890 C	93×190	GL 10	self-fastening
	S 35, NS 40, NS 40 I, NS-801	93×230	plain	for clamping
Ryobi	S 35, NS-40I, NS 801, NS 40, ESS 1890 C, ESS 2590, ESS 200 RS, ESS 280 RV	93×230	GL 9	for clamping
	EOS 2410	115×110	GL 29	self-fastening
	NS-6200, NS 6300 A, ESS 3215 V	115×230	GL 16	self-fastening
	NS 6300 A	115×280	plain	for clamping
	ESS 3215 VHG	115×280	GL 11	for clamping
	7300, 7300 S, 7330, 7390, 7395, 7365 AA	93×180	GL 17	self-fastening
	7366 AA, 7351 AA, 7346 AA, 7346, 7361 AB	93×190	GL 10	self-fastening
	7315, 7320, 7330, 7365 AA, 7366 AA, 7351 AA, 7346 AA, 7346, 7361 AB	93×230	GL 9	for clamping
SKIL	7314 MA	115×110	GL 29	self-fastening
	7312 AA, 7314 MA	115×140	GL 38	for clamping
	666, 7381 MA	115×230	GL 16	self-fastening
	7381 MA	115×280	GL 11	for clamping

Coated abrasives





PS8C

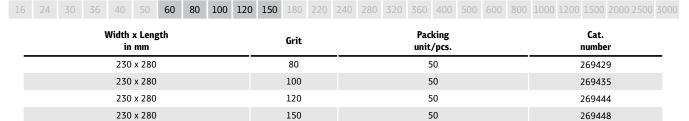




<b>Properties</b>		Applications:				
Bonding ag	ent Resin	Paint/Varnish/Filler	•			
Grain	SiC	Plastic	•			
Coating	Close	Glass/Stone	J			
Backing	C-paper	Metals	0			

**Advantages:** Ideal for hard and tough surfaces - Very flexible latex paper allows excellent adaptation - Can be used for wet and dry grinding

#### Available grits:



Abrasive paper, waterproof

PS 8 A





<b>Properties</b>		Applications:				
Bonding ag	ent Resin	Paint/Varnish/Filler				
Grain	SiC	Plastic				
Coating	Close	Glass/Stone	(			
Backing	A-paper	Metals	(			

**Advantages:** Ideal for hard and tough surfaces - Very flexible latex paper allows excellent adaptation - Can be used for wet and dry grinding

#### Available grits:

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400	500	600	800	1000	1200	1500	2000	2500	3000
			W		c Leng	th				Grit						cking t/pcs.					1	Cat. numbe	r		
_				230	x 280					180						50						26926	9		-
				230	x 280					220						50						26927	5		
				230	x 280					280						50						26928	5		
				230	x 280					320						50						26928	9		
				230	x 280					360						50						26929	4		
				230	x 280					400						50						26929	9		
				230	x 280					600						50						26931	4		
				230	x 280					800						50						26932	3		
				230	x 280					1000						50						26932	8		

**Continuation** →

Coated abrasives

#### → Continuation of PS 8 A, Abrasive paper, waterproof

Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
230 x 280	1200	50	269334
230 x 280	1500	50	269340
230 x 280	2000	50	269344
230 x 280	2500	50	269352

Abrasive paper, waterproof

PS 11 C





Properties		
Bonding age	ent Resin	
Grain	SiC	
Coating	Close	
Backing	C-paper	

Applications:	
Paint/Varnish/F	ille

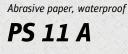
raint, varinsii, riilci	
Plastic	•
Glass/Stone	•
Metals	•

**Advantages:** Special product for auto repair and painting - For hard and tough surfaces - Good adaptation and high stability - Wet and dry sanding

16 24 30 36 40 50 <b>60 80 100 120</b>	0 150 180 220 2	240 280 <b>320 360</b> 400 500 600 800	1000 1200 1500 2000 2500 3000
Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
230 x 280	60	50	2022
230 x 280	80	50	2023
230 x 280	100	50	2117
230 x 280	120	50	2116
230 x 280	150	50	2011
230 x 280	180	50	2012
230 x 280	320	50	2016
230 x 280	360	50	2017

Coated abrasives









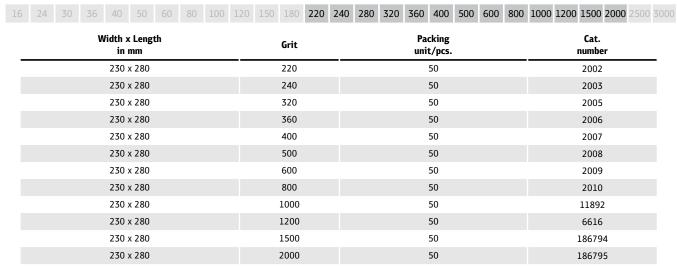
Properties						
Bonding age	ent Resin					
Grain	SiC					
Coating	Close					
Backing	A-paper					

Applications:	
Paint/Varnish/Filler	•
Plastic	•
Glass/Stone	•

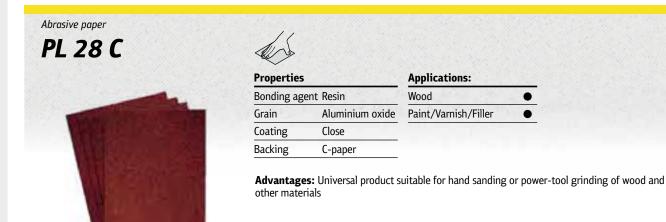
•

**Advantages:** Special product for auto repair and painting - For hard and tough surfaces - Good adaptation and high stability - Wet and dry sanding

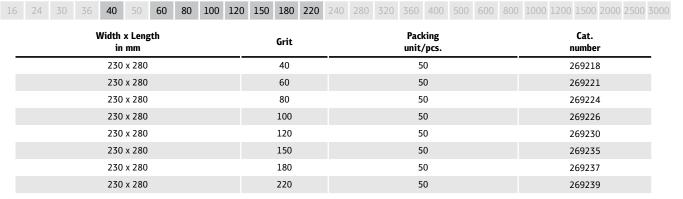
Metals

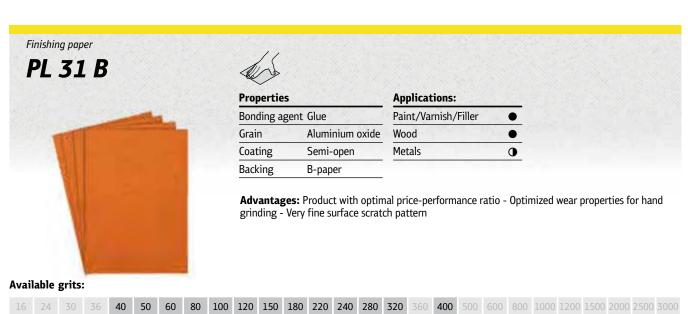


Coated abrasives



#### **Available grits:**





Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
230 x 280	40	50	2059
230 x 280	60	50	2061
230 x 280	80	50	2062
230 x 280	100	50	2048
230 x 280	120	50	2049

**Continuation** →

Coated abrasives



#### → Continuation of PL 31 B, Finishing paper

Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
230 x 280	150	50	2050
230 x 280	180	50	2051
230 x 280	220	50	2052
230 x 280	240	50	2053
230 x 280	280	50	2054
230 x 280	320	50	2055
230 x 280	400	50	2057





<b>Properties</b>	
Bonding ag	ent Resin
Grain	Aluminium oxide
Coating	Semi-open
Packing	Cnaper

### **Applications:**

•
•
•

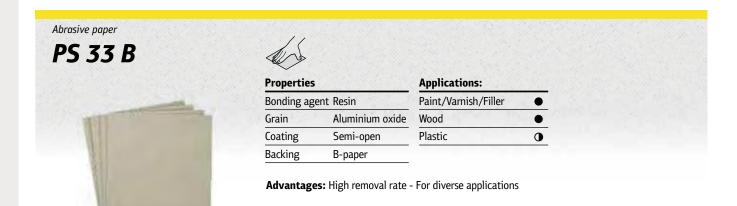
Advantages: High removal rate - For diverse applications

#### Available grits:

Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
230 x 280	40	50	147849
230 x 280	60	50	147850
230 x 280	80	50	147851
230 x 280	100	50	149719
230 x 280	120	50	147852

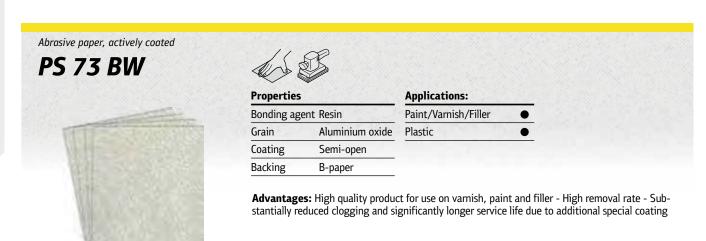
16 24 30 36 **40** 50 **60 80 100 120** 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Coated abrasives



#### Available grits:

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400	500	600		1000	1200	150	00 200	0 2500	3000						
			١		x Leng	gth				Grit					Pacl unit,							Cat num									
				230	x 280					150					5	0						1495	28		_						
				230	x 280					180					5	0						1478	353								
				230	x 280					220					5	0						1495	29								
				230	x 280					240					5	50 1						1478	354								
				230	x 280					280					5	0						1497	93								
				230	x 280					320		50								1495	30										
	230 x 280								400			50							50							1489	71				
				230	x 280					500 50					50							50					170667				
				230	x 280					600					5	0						1706	68								



16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400		600	800	1000	1200	1500	2000	2500	3000
			W	/idth x in ı		th				Grit					Pac unit	cking t/pcs.						Cat. numb			_
	230 x 280					150					50						301196								
	230 x 280					180			50							301197									
	230 x 280 2					220		50							301198										
				230 >	¢ 280					280			50					301200							

Coated abrasives



#### ightarrow Continuation of PS 73 BW, Abrasive paper, actively coated

Width x Length in mm	Grit	Packing unit/pcs.	Cat. number
230 x 280	320	50	301201
230 x 280	400	50	301202
230 x 280	600	50	301204
230 x 280	800	50	308410
230 x 280	1200	50	311188

## Strips with paper backing

Coated abrasives



Coated abrasives







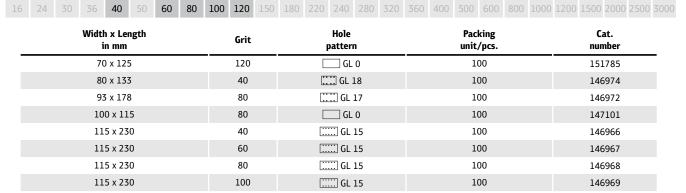
Properties	
Bonding age	ent Resin
Grain	Aluminium oxide
Coating	Semi-open
Backing	C-paper

#### **Applications:**

Paint/Varnish/Filler	•
Wood	•
Plastic	•

Advantages: Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

#### **Available grits:**



Abrasive paper, self-fastening

**PS 33 BK** 



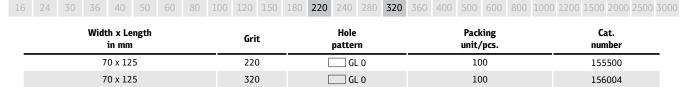


Properties	
Bonding age	nt Resin
Grain	Aluminium oxide
Coating	Semi-open
Backing	B-paper

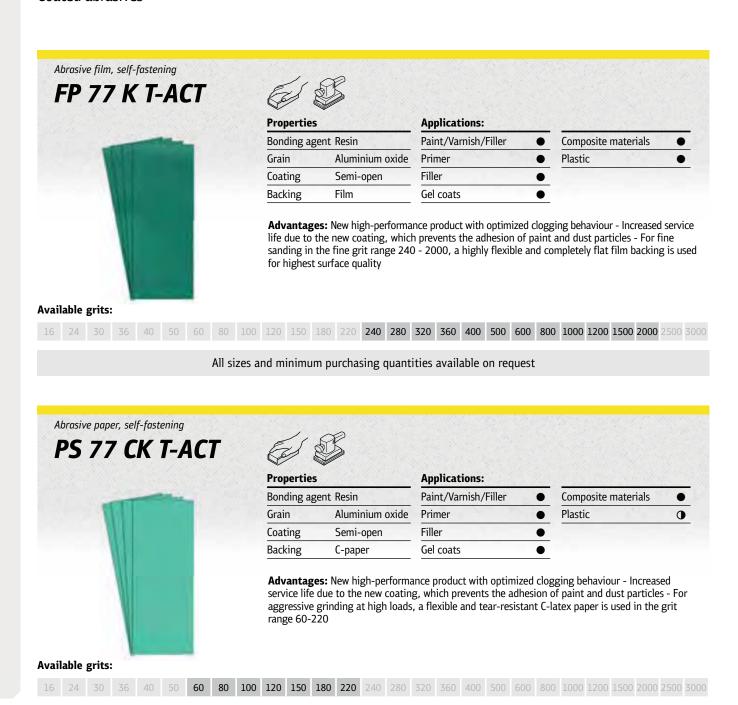
#### **Applications:**

Paint/Varnish/Filler	•
Wood	•
Plastic	0

Advantages: Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing



Coated abrasives



All sizes and minimum purchasing quantities available on request

#### **Abrasive screen**



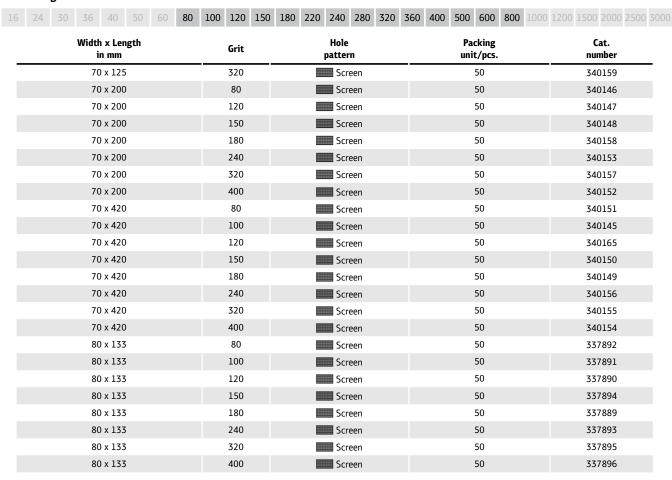
Abrasive screen, self-fastening, waterproof

### AN 400





**Advantages:** Effective and full-surface dust extraction thanks to open grid structure - Dust-free grinding extends the service life of the abrasive - At the same time, improved health and safety thanks to reduced dust formation at the work station - Independent of existing extraction hole patterns - Waterproof

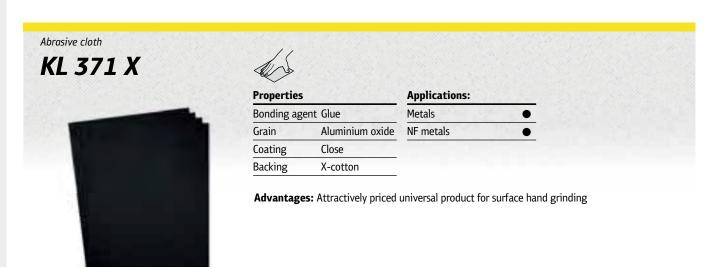


## Hand block / Sheets with cloth backing

Coated abrasives



Width x Length x Height	Packing	Cat.
in mm	unit/pcs.	number
68 x 118 x 40	1	185320

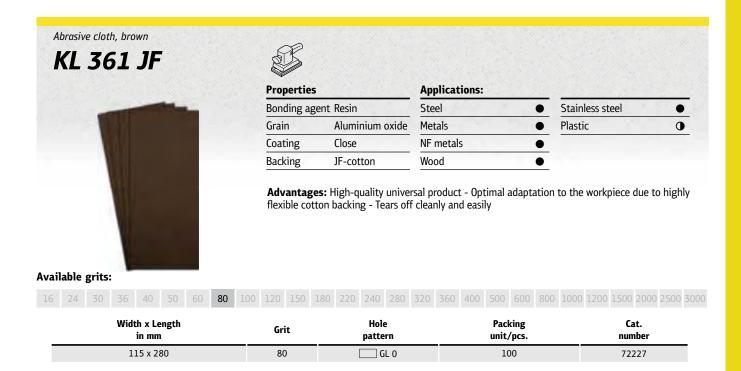


16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000 2	500 3	000
				Width in	x Len	gth					Grit	i					king /pcs.					Cat. numbe	r		
				230	x 280	)					40						50					2100			
				230	x 280	)					50						50					2101			
				230	x 280	)					60						50					2102			
				230	x 280	)					80						50					2103			
				230	x 280	)					100	)					50					2104			
				230	x 280	)					120	)					50					2105			
				230	x 280	)					150	)					50					2106			
				230	x 280	)					180	)					50					2107			
				230	x 280	)					220	1					50					2108			
				230	x 280	)					240	1					50					2109			
				230	x 280	)					320						50					19886	5		
				230	x 280	)					400	1					50				:	19888	3		

## Strips with cloth backing

Coated abrasives





### **Abrasive block**

Abrasive block, flexible, coated on 4 sides, waterproof

SK 500





## Properties

Grain	Aluminium oxide
Coating	Close

#### **Applications:**

Paint/Varnish/Filler	•
Wood	•
Plastic	•
Metals	•

**Advantages:** Can be used flat and upright (four usable sides) - For flat and profiled surfaces due to flexible foam core - Robust, washable and reusable

#### **Available grits:**



Abrasive block, flexible, coated on 4 sides, waterproof

SK 700 A





#### **Properties**

Grain	Aluminium oxide
Coating	Close

#### **Applications:**

Paint/Varnish/Filler	•
Wood	•
Plastic	•
Metals	•

**Advantages:** Can be used flat and upright (four usable sides) - The angled edge (approx. 45°) makes it an exceptional choice for narrow, tapering workpiece contours - Excellent contouring and pressure distribution thanks to flexible foam core - Robust, washable and reusable

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000	2500	3000
	V	Vidth :	x Leng in n		leight			Grit		Dens	ity		Grit c	olor		Foa	m colo	or		cking it/pcs.			Cat numb		
		8	9 x 12	5 x 25				60		har	d		brov	vn			gray			100			3378	46	
		8	9 x 12	5 x 25				60		har	d		brov	vn			gray			16			3595	67	
		8	9 x 12	5 x 25				80		har	d		brov	vn			gray			100			3378	47	
		8	9 x 12	5 x 25				80		har	d		brov	vn			gray			16			3595	78	

## **Abrasive block / Abrasive sponge**



#### ightarrow Continuation of SK 700 A, Abrasive block, flexible, coated on 4 sides, waterproof

Width x Length x Height in mm	Grit	Density	Grit color	Foam color	Packing unit/pcs.	Cat. number
89 x 125 x 25	100	hard	brown	gray	100	337848
89 x 125 x 25	100	hard	brown	gray	16	359573
89 x 125 x 25	120	hard	brown	gray	100	331019
89 x 125 x 25	120	hard	brown	gray	16	359576

Abrasive sponge, flexible, coated on 2 sides, tear-resistant, waterproof

## **SW 501 TR**





Properties	
Grain	Aluminium oxide
Coating	Close

Applications:	
Paint/Varnish/Filler	•
Wood	•
Plastic	•
Metals	

**Advantages:** Satin surface scratch pattern - For low and high profiled surfaces (two usable sides) - Crease and break-resistant - Washable and reusable - Extremely tear-resistant - Solvent free bonding with grit size dependent colouring

16	24	30	36	40		60		100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000 2500	300
	W	/idth x	Leng in m		eight		(	irit		Densit	ty		Grit c	olor		Fo	am co	lor		acking it/pcs			Cat. number	
		96	x 123	x 12,5	5			L00		soft			light b	rown			yellow			100			351573	_
		96	x 123	x 12,5	5		1	L00		soft			light b	rown			yellow			20			359802	
		96	x 123	x 12,5	5		1	L20		soft			gre	en			yellow			100			353264	
		96	x 123	x 12,5	5		1	L20		soft			gre	en			yellow			20			359801	
		96	x 123	x 12,5	5		1	L50		soft			re	d			yellow			100			353263	
		96	x 123	x 12,5	5		1	L50		soft			re	d			yellow			20			359800	
		96	x 123	x 12,5	5		1	L80		soft			blu	ie			yellow			100			351574	
		96	x 123	x 12,5	5		1	L80		soft			blu	ie			yellow			20			359798	
		96	x 123	x 12,5	5		2	220		soft			brov	wn			yellow			100			353262	
		96	x 123	x 12,5	5		2	220		soft			brov	wn			yellow			20			359799	

## **Abrasive sponge**

Abrasive sponge, flexible, coated on 2 sides, waterproof

SW 502

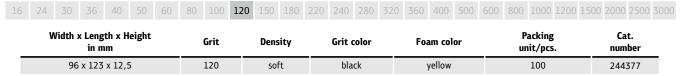




<b>Properties</b>		Applications:	
Grain	SiC	Paint/Varnish/Filler	•
Coating	Close	Plastic	•
		Wood	O
		Metal	J

**Advantages:** For low and high profiled surfaces (two usable sides) - Crease and break resistant - Washable and reusable

#### **Available grits:**



Abrasive sponge, flexible, coated on 1 side, waterproof **SW 510** 





<b>Properties</b>		Applications:
Grain	Aluminium oxide	Paint/Varnish/Filler
Coating Close	Close	Wood
		Plastic
		Metals

**Advantages:** Thin, ultra flexible sanding sponge for particularly hard-to-reach areas such as indentations, profiles and edges - Tight foam structure, allowing for exceptionally uniform pressure distribution and an extra fine finish - No bending, no creases - Can be used wet and dry

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
	V	/idth >	k Leng in m	th x H im	leight		Grit		Dens	ity		Grit c	olor		Foa	ım col	or		acking it/pcs			Cat numb		_
		11	5 x 14	0 x 4,8	3		120		har	ď		bla	ck			gray			30			3126	82	-
		11	5 x 14	0 x 4,8	3		180		har	rd		bla	ck			gray			30			3126	83	
		11	5 x 14	0 x 4,8	3		280		har	<sup>-</sup> d		bla	ck			gray			30			3126	84	
		11	5 x 14	0 x 4,8	3		400		har	d		bla	ck			gray			30			3126	85	
		11	5 x 14	0 x 4,8	3		600		har	<sup>-</sup> d		bla	ck			gray			30			3126	86	
		1	15 x 1	40 x 5			180		har	rd		whi	te			gray			100			3035	89	
		1	15 x 1	40 x 5			280		har	·d		whi	te			gray			100			3035	91	

## Notes



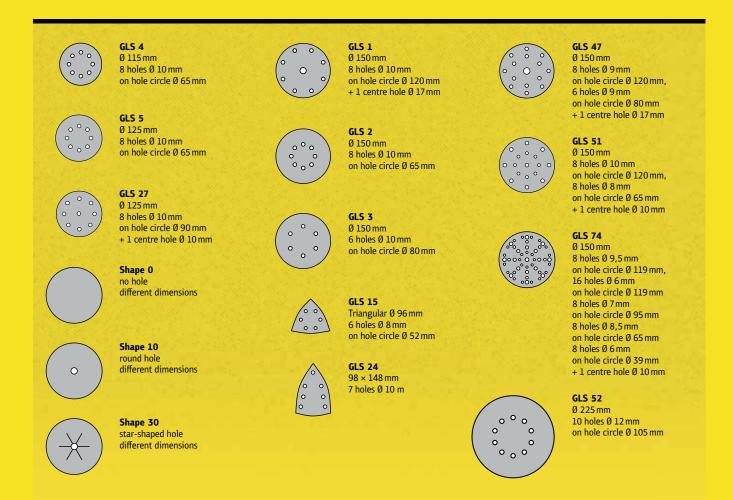
Strips / Sheets / Discs

## **Hole patterns for discs**

Klingspor offers a wide range of products with hole patterns for dust extraction.

You will find the available hole patterns marked in the table below.

The chart on the following product pages shows the most popular types of machines and the required hole pattern.



#### Other hole patterns available on request.

#### Minimum order quantities for made to order items

	quantities for i	made to order reems
Туре	Ø [mm]	Minimum order quantities
AN 400	up to 50 mm	5,000 pieces
CS 310 X	up to 90 mm	2,500 pieces
CS 321 X	up to 125 mm	1,000 pieces
CS 411 XK	up to 200 mm	500 pieces
FP 73 WK	up to 400 mm	200 pieces
PS 11 C	up to 600 mm	100 pieces
PS 19 EK	over 600 mm	25 pieces
PS 21 FK		
PS 22 F ACT		
PS 22 K		
PS 33 BK/CK		
PS 61 FK		
PS 73 RWK/CWK		

#### **Maximum disc diameter**

Ø 670 mm	Ø 770 mm	Ø 1,100 mm
PS 21 FK	PS 61 FK	PS 11 C
PS 22 K		PS 19 EK
		PS 33 BK/CK
		FP 73 WK
		PS 73 BWK/CWK
		AN 400
		CS 411 XK
		CS 310 X
		CS 321 X
		PS 77 CK
		ED 77 V



We reserve the right to over-deliver or under-deliver made to order items.

**PS 77 CK** 

FP 77 K

## **Discs**

## Applications guide



Hole

GLS 41

pattern

Size in mm

90

#### Orbital and delta sanders

Manufacturer	Туре	Size inmm	Hole pattern
	Delta DSE 260	105 × 105 × 105	GLS 17
	FS 2 D	98×148	GLS 24
	EX 400, EXE 400, EX 450, EXE 460-125, EX 125 E, EX 125 ES	125	GLS 5
AEG powertools	EXE 450	convertible to 125	GLS 5
	EXE 450	150	GLS 2 (7)
	EXE 460 - 150, ROS 150 E, EX 150 E	150	GLS 3
	EX/E 450	150	GLS 7
	LST 21 R350, LST 22 R350, LST 22 R325, LST 20 R350	90	GLS 41
	VS 11 D	98×148	GLS 24
	LST 30 H90-11	115	plain
	LST 20 R525, LST 20 R550	125	plain
	LST 21 R525, LST 21 R550, LST 22 R525, LST 22 R550	125	GLS 5
	TXE 150	convertible to 125	GLS 5
	LST 20 R625, LST 20 R650, LST 30 H090-15, LST 30 S090-15	150	plain
Atlas Copco	ROS 150 E, LST 21 R625, LST 21 R650, LST 22 R625, LST 22 R650, LST31 H90-15, LST31 S90-15, LST32 H090-15, LST32 S090-15, LST 22 R625-9, G2438-6.5N Pro, G2438-6.5I Pro, G2438-6.3I Pro, G2438-6.10I Pro, G2438-6.3C Pro, G2438-6.3N Pro, G2438-6.3C Pro, G2438-6.10N Pro, G2438-6.10C Pro, G2438-10 self-fastening 6 Pro, LST 22 R650-9	150	GLS 3
	TXE 150	150	GLS 7
	VP510	96×96×96	GLS 15
	KA 510	94×94×94	GLS 15
	KA 165 GT (mouse)		GLS 25
Black & Decker	KA 230 E		GLS 34
	BD190, BD190 E, BD1905, BD190D, XTA90EK, KS 191 EK, KA 198, KA 190, KA 190 E, KA 190 S, KA 198GT, KA220, KA220G, KA191EK	125	GLS 5
	Delta GDA 280 E, Delta PDA 100, PDA 10-92, Delta PDA 120 E, Delta PDA 240 E, PDA 180, PDA 180 E	96 × 96 × 96	GLS 15
	PEX 11 A, PEX 115, PEX 11 AE	115	GLS 4
Bosch	PEX 300 A/AE, GEX 125-150 AVE Professional, PEX 400 AE, PEX 12 A, PEX 12 AE, PEX 125 A-1, PEX 125 AE, PEX 270 A/AE, GEX 125 A, GEX 125 AC, GEX 125-1 AE, PEX 220 A	125	GLS 5
	PEX 15 AE, GEX 150 AE, GEX 150 AC/E, GEX 150 Turbo, PEX 420 AE	150	GLS 3
DeWalt	ES 55 E , DW423, D26453	125	GLS 5
DeWalt	ES 56 E, ES 56 EK, DW443, D 26410	150	GLS 3
	DE-G 200 E	94×94×94	GLS 15
	EX 115	115	GLS 4
Einhell	EX-G 125 E, BES 125, EX-G 125, BT-RS 420 E, BES 125 E, BRS 380 E	125	GLS 5
	LL 107 VEA	115	plain
	MSf 636-1, M 10000-5, XS 712	125	GLS 5
	MSf 636-1	150	GLS 26
ein	MSf 649-2 a/b, M 10000-6	150	GLS 2 (7)
	ROT 14-200 E	150	GLS 2
	X 1107 VE	150	GLS 3
	ROT 14-200 E	200	GLS 9
Felisatti	TP 521/AS, TP 521/E, TP 522 AS/CE, RGF 150/600 E	150	GLS 3

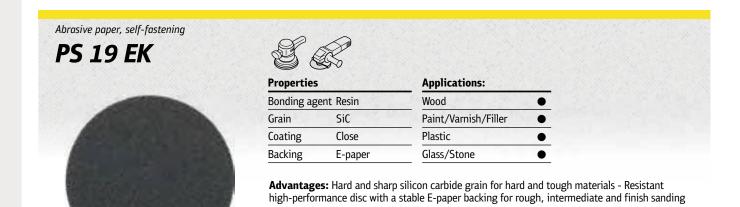
	DS 400, DTS 400	98×148	GLS 24			
	DX 93	94×94×94	GLS 16			
	ES 125, ES 125 E, ES 125 E-PLUS, ES 125 PLUS	125	GLS 5			
	ES 125 EQ-Plus; ES 125 EQ, ES 125 Q-Plus, ES 125 Q, ETS 125, LEX 2 125/3, LEX 1 125/7, LEX 3 125/3, LEX 3 125/5	125	GLS 27			
Festool	RO 125 FEQ-Plus	125	GLS 27			
	ET 2 E	150	GLS 2			
	ET 2 E - Plus, RO 150, RO 150 E, RO 2 E-Plus, LEX 3 150/3 , LEX 150, ETS 150/3, ETS 150/5, WTS 150/7 E, WTS 150/7 E-Plus, ETS 150/5 EQ, ETS 150/5 EQ-E, ETS 150/5 EQ-Plus	150	GLS 1			
	Multi-Jetstream (8+8+1)	150	GLS 51			
	LHS 225 EQ-Plus	225	GLS 38			
	OD 100-2, ODE 100-2	98×148	GLS 24			
	XS 712, XS 713	125	GLS 5			
	X 1107 VE, XS 1107 VE	150	GLS 3			
	ORE 125-2	125	GLS 27			
Flex	GE 5, GE 5 R, GE 7, GSE 5 R, WST 700VV, WST 700 VV Plus	225	GLS 52			
	GE 7	225	GLS 55			
	GE 7, WST 700 VV Plus	285	GLS 60			
Hilti	WFE 150, WFE 380, WFE 450 E	150	GLS 3			
	FSV 13 Y, TSV 13 Y, SV 13 YA	125	GLS 5			
Hitachi	SAY 150 A	150	GLS 3			
HOLZ HER	2445	150	GLS 7 (1)			
	CDS 6425, CDS 6420, CDS 6422 E	105	GLS 17			
	CPS 6115-1, 6115 E	115	GLS 4			
Kress	CPS 6125-1, CPS 6125 E, CPS 6125 E SET, HEX 1385 E, HEX 6385 E, 300 EXE	125	GLS 5			
	900 MPS, 900 HEX /2	150	GLS 3			
Mafell	UT 150 E, UX 150 E	150	GLS 1, 3, 47			
	B0 4561, B0 4565	96×96×96	GLS 15			
Makita	B0 5000, B0 5010, B0 5041, B0 5031 K, B0 5021, B0 5021 K, B0 5041 K	125	GLS 5			
	B0 6030, B0 6040 J	150	GLS 1			
	DS E 130, DS E 170, DS E 180	96 × 96 × 96	GLS 15			
	DSE 300, DSE 300 Intec, DSE 280 INTEC	94×94×94	GLS 15			
	SXE 400	80	GLS 13			
Metabo	SX E 125, FSX 200 INTEC, SXE 425 TURBOTEC, SX E 425, SXE 325 INTEC	125	GLS 5			
	10ND01EC, 3X E 423, 3XE 323 INTEC					
	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC,	150	GLS 3			
	SX E 425 XL, SX E 450 Duo,	150 98×148	GLS 3			
Milwaukee	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC,					
Milwaukee	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D	98×148	GLS 24			
	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D PRS 125 E	98×148 125	GLS 24 GLS 5			
	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D PRS 125 E ROS 150 E	98×148 125 150	GLS 24 GLS 5 GLS 3			
Peugeot	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D PRS 125 E ROS 150 E PAE 115	98×148 125 150 115	GLS 24 GLS 5 GLS 3 GLS 4			
Peugeot Pro Tool	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D PRS 125 E ROS 150 E PAE 115 PRX 150 E ESP 150 E ERO 2412V, CRO 180M, ROS 300 A, CRO 180 MHG	98×148 125 150 115 150	GLS 24 GLS 5 GLS 3 GLS 4 GLS 3 GLS 3			
Peugeot Pro Tool	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC,  PDS 13, FS 2 D  PRS 125 E  ROS 150 E  PAE 115  PRX 150 E  ESP 150 E  ERO 2412V, CRO 180M,	98×148 125 150 115 150	GLS 24 GLS 5 GLS 3 GLS 4 GLS 3 GLS 3 GLS 5			
Peugeot Pro Tool Ryobi	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D PRS 125 E ROS 150 E PAE 115 PRX 150 E ESP 150 E ERO 2412V, CRO 180M, ROS 300 A, CRO 180 MHG 7110 AA, 7115 AA 7415	98×148 125 150 115 150 150	GLS 24 GLS 5 GLS 3 GLS 4 GLS 3 GLS 3			
Milwaukee Peugeot Pro Tool Ryobi	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D PRS 125 E ROS 150 E PAE 115 PRX 150 E ESP 150 E ERO 2412V, CRO 180M, ROS 300 A, CRO 180 MHG 7110 AA, 7115 AA 7415 7400, 7425, 7430, 7435, 7440 AA, 7460 AA, 7470 MA	98×148 125 150 115 150 150 125 96×96×96	GLS 24 GLS 5 GLS 3 GLS 4 GLS 3 GLS 3 GLS 5 GLS 5			
Peugeot Pro Tool Ryobi	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D PRS 125 E ROS 150 E PAE 115 PRX 150 E ESP 150 E ERO 2412V, CRO 180M, ROS 300 A, CRO 180 MHG 7110 AA, 7115 AA 7415 7400, 7425, 7430, 7435,	98×148 125 150 115 150 150 125 96×96×96 115	GLS 24 GLS 5 GLS 3 GLS 4 GLS 3 GLS 3 GLS 5 GLS 3			
Peugeot Pro Tool Ryobi SKIL	SX E 425 XL, SX E 450 Duo, SXE 450 TURBOTEC, PDS 13, FS 2 D PRS 125 E ROS 150 E PAE 115 PRX 150 E ESP 150 E ERO 2412V, CRO 180M, ROS 300 A, CRO 180 MHG 7110 AA, 7115 AA 7415 7400, 7425, 7430, 7435, 7440 AA, 7460 AA, 7470 MA	98×148 125 150 115 150 150 125 96×96×96 115 125	GLS 24 GLS 5 GLS 3 GLS 4 GLS 3 GLS 3 GLS 5 GLS 5			

Manufacturer Type

RO 90 DX FEQ-Plus

Please contact Klingspor if you cannot find the machine used by you on this list. We will be pleased to assist you further. If the product you require is not in stock, we will manufacture it for you subject to a minimum order quantity.

Coated abrasives



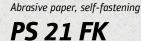
16	24	30	36	40	60	80	100	120	150	180	220	240	280	320	360	400	600	1000	1200	1500	2000	2500	3000
			amete n mm	r		Gri	ŧ			Hol patte						Pack unit/				Ca num			
			150			40				0	0					50				311	)93		
			150			60				$\circ$	0					50				3110	)94		
			150			80				0	0					50				270	527		
			150			100	)			$\bigcirc$	0					50				280	595		
			150			120	)			0	0					50				270	539		
			150			220	)			$\bigcirc$	0					50				316	534		
			150			320	)			0	0					50				318	949		
			150			400	)			$\circ$	0					50				327	086		
			150			600	)			0	0					50				327	)87		
			180			80				$\bigcirc$	0					50				329	321		

•

## Discs with paper backing, self-fastening

Coated abrasives









Properties	Applic	
Bonding agen	Steel	
Grain	Zirconia alumina	Stainle
Coating	Close	Metals
Backing	F-paper	

Applications:

Steel	•
Stainless steel	•
Metals	•

**Advantages:** Aggressive abrasive behavior due to self-sharpening zirconia alumina - Optimal recipe for rough grinding and finish grinding of stainless steel - Long service life

50 **60 80** 100 **120 150** 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

#### Available grits:

 16
 24
 30
 36
 40

Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
125	80	O 0	50	237781
125	120	O 0	50	237782
150	40	O 0	50	230312
150	60	O 0	50	230313
150	80	O 0	50	230314
150	150	O 0	50	239244







Properties		Applications:						
Bonding agen	t Resin	Wood	•					
Grain	Aluminium oxide	Metals	•					
Coating	Semi-open	Stainless steel	0					
Backing	E-paper	Paint/Varnish/Filler	0					

Plastic

**Advantages:** Universal abrasive disc for metalworking and woodworking - Uniform surface scratch pattern - Available in many grit sizes and dimensions

#### **Available grits:**

16	24	30	36	40	60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	300
			meter mm			Grit				Hole patte						Pacl unit,	king /pcs.				Cat numl			
_			96			40			E	û GLS	15					5	0				1421	.34		_
			96			60			E	û GLS	15					5	0				1421	.35		
			96			80			6	∆ GLS	15					5	0				1421	.36		
			96			100			E	∆ GLS	15					5	0				1450	55		

**Continuation** →

Coated abrasives

#### → Continuation of PS 22 K, Abrasive paper, self-fastening

Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
96	120	△ GLS 15	50	142137
96	150	△ GLS 15	50	146336
96	180	△ GLS 15	50	142138
96	240	△ GLS 15	50	142139



Properties

Bonding agent Resin

Grain Aluminium oxide

Coating Semi-open

Backing E-paper

Applications:

Wood

Metals

Stainless steel

Paint/Varnish/Filler

Plastic •

**Advantages:** Universal abrasive disc for metalworking and woodworking - Uniform surface scratch pattern - Available in many grit sizes and dimensions

#### Available grits:

16 <b>24</b> 30 36 <b>40</b> 50	60 80 100	120 150 180 220 240 2	80 320 360 400 500 600 800 10	000 1200 1500 2000 2500 3000
Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
115	40	O 0	50	2785
115	60	O 0	50	2786
125	40	O 0	50	2294
125	60	O 0	50	2295
125	80	O 0	50	6774
125	100	O 0	50	2296
125	120	O 0	50	6775
125	150	O 0	50	78163
125	180	O 0	50	62107
125	220	O 0	50	97176
125	320	O 0	50	93284
125	400	O 0	50	130114
125	40		50	89486
125	60		50	89488
125	80		50	89489
125	100		50	89491
125	120		50	89493
125	150		50	89494
125	180		50	89495
125	220		50	90758
125	320		50	89496
125	400		50	104778
150	40	O 0	50	20207
150	60	O 0	50	6649
150	80	O 0	50	6936
150	100	O 0	50	6697

**Continuation** →

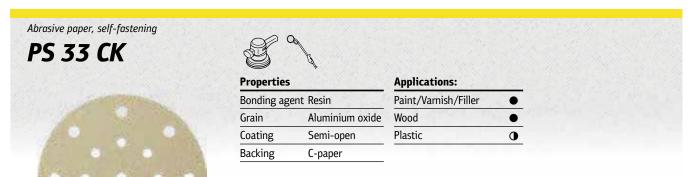
Coated abrasives



#### → Continuation of PS 22 K, Abrasive paper, self-fastening

Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
150	120	O 0	50	6937
150	150	O 0	50	71140
150	180	O 0	50	4022
150	220	O 0	50	93324
150	240	O 0	50	91605
150	320	O 0	50	91721
150	400	O 0	50	129092
150	40	⊕ GLS 1	50	6520
150	60	⊙ GLS 1	50	6523
150	80	⊕ GLS 1	50	6524
150	100	⊕ GLS 1	50	6525
150	120	⊕ GLS 1	50	6526
150	150	⊙ GLS 1	50	80722
150	180	⊕ GLS 1	50	6611
150	220	⊙ GLS 1	50	98990
150	320	⊕ GLS 1	50	89450
150	400	⊙ GLS 1	50	129389
150	40		50	89181
150	60		50	86634
150	80		50	86635
150	100	⊕ GLS 3	50	97072
150	120	⊕ GLS 3	50	86636
150	150	⊕ GLS 3	50	86637
150	180	⊕ GLS 3	50	87528
150	220		50	100157
150	320		50	97779
150	400		50	128356
180	40	O 0	50	2476
180	60	O 0	50	2477
180	80	O 0	50	6914
180	100	O 0	50	2783
180	120	O 0	50	6915
180	180	O 0	50	2784
200	40	O 0	50	77659
200	60	O 0	50	77660
200	80	O 0	50	77656
200	100	O 0	50	77658
200	120	O 0	50	77661

Coated abrasives



**Advantages:** Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

16     24     30     36     40     50	60 80 100	<b>120</b> 150 180 220 240 28	0 320 360 400 500 600 800 10	000 1200 1500 2000 2500 3000		
Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number		
125	40	O 0	100	154113		
125	60	○ 0	100	147604		
125	80	$\bigcirc$ 0	100	149055		
125	100	○ 0	100	150431		
125	120	$\bigcirc$ 0	100	150433		
125	40	© GLS 5	100	146954		
125	60	© GLS 5	100	147642		
125	80		100	147643		
125	100		100	147977		
125	120		100	147170		
150	40	$\bigcirc$ 0	100	147922		
150	60	○ 0	100	147107		
150	80	$\bigcirc$ 0	100	146739		
150	100	○ 0	100	147106		
150	120	$\bigcirc$ 0	100	146740		
150	40		100	146978		
150	60		100	146979		
150	80		100	143130		
150	100		100	143131		
150	120		100	147093		
150	40		100	147647		
150	60	⊕ GLS 3	100	147124		
150	80		100	146946		
150	100		100	143694		
150	120	⊕ GLS 3	100	146947		
150	120		100	301927		
150	40	<b>⊗</b> GLS 74	100	340853		
150	60	<b>⊗</b> GLS 74	100	340370		
150	80	<b>⊗</b> GLS 74	100	340371		
150	100	<b>⊗</b> GLS 74	100	342046		
150	120	<b>⊗</b> GLS 74	100	340375		

Coated abrasives





Bonding agent Resin
Grain Aluminium oxide
Coating Semi-open
Backing B-paper

Applications:

**Advantages:** Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

Ava	ilab	le g	rits

16 24 30 36 40 50	60 80 100	120 150 180 220 240 280	<b>320</b> 360 <b>400</b> 500 600 800 10	000 1200 1500 2000 2500 300		
Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number		
125	150	O 0	100	153152		
125	180	O 0	100	150435		
125	220	$\bigcirc$ 0	100	155143		
125	320	○0	100	150461		
125	400	$\bigcirc$ 0	100	150462		
125	500	O 0	100	243413		
125	150	◎ GLS 5	100	150760		
125	180	◎ GLS 5	100	147837		
125	220		100	150259		
125	240	⊚ GLS 5	100	147838		
125	320		100	147839		
125	500	◎ GLS 5	100	228590		
125	600		100	175988		
150	150	○0	100	148375		
150	180	$\bigcirc$ 0	100	146958		
150	220	○0	100	149916		
150	240	$\bigcirc$ 0	100	146959		
150	320	○0	100	146716		
150	400	$\bigcirc$ 0	100	147108		
150	500	O 0	100	169682		
150	600	$\bigcirc$ 0	100	169683		
150	150	⊙ GLS 1	100	148379		
150	180		100	147095		
150	220	⊙ GLS 1	100	149794		
150	240	⊙ GLS 1	100	147094		
150	320	⊙ GLS 1	100	147096		
150	400		100	147097		
150	500	⊙ GLS 1	100	217300		
150	600	⊙ GLS 1	100	172984		
150	150		100	149151		
150	180		100	146948		
150	220		100	149255		
150	240		100	146907		
150	320	③ GLS 3	100	147126		

**Continuation** →

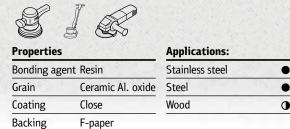
Coated abrasives

#### → Continuation of PS 33 BK, Abrasive paper, self-fastening

Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
150	400		100	147125
150	500		100	170113
150	600		100	172010
150	220		100	301929
150	320		100	301930
150	400		100	310898
150	150	<b>⊗</b> GLS 74	100	342045
150	180	<b>⊗</b> GLS 74	100	340598
150	220	<b>⊗</b> GLS 74	100	342044
150	240	<b>⊗</b> GLS 74	100	340599
150	320	<b>⊗</b> GLS 74	100	342043
150	400	<b>⊗</b> GLS 74	100	342042







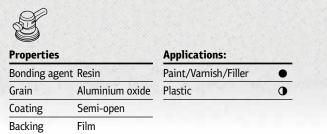
**Advantages:** Continuously aggressive abrasive performance - High-performance abrasive disc for stainless steel grinding - Also very good results in repair grinding of parquet flooring - The PS 61 FK includes the new CEVOLUTION technology. CEVOLUTION stands for holistically optimized, ceramic abrasives. Klingspor products with CEVOLUTION technology contain, among others, an optimized grit mix, grit sizes and formulation in order to offer the maximum performance in every application.

16 24 30 36 40 50	60 80 100 3	120 150 180 220 240	280 320 360 400 500 600 800 1	.000 1200 1500 2000 2500 3000		
Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number		
125	60	O 0	50	322468		
125	80	O 0	50	321597		
125	120	O 0	50	322469		
125	150	O 0	50	322470		
125	180	O 0	○ 0 50 32			
150	60	O 0	50	322036		
150	80	O 0	50	321325		
150	120	O 0	50	322472		
150	0 150			322473		
150	180	O 0	321797			

Coated abrasives



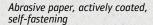




**Advantages:** Special product with highly tear-resistant film backing for use on paint, varnish and fillers - Very good adaptation of the discs with excellent grit adhesion also in the edge area - Substantially reduced clogging and significantly longer service life

Diameter in mm         Grit         Hole pattern         Packing unit/pcs.         Cat. number           150         600         ○ 0         100         316154           150         800         ○ 0         100         316175           150         1200         ○ 0         100         316177           150         80         ⊕ GLS 47         100         320641           150         100         ⊕ GLS 47         100         320642           150         120         ⊕ GLS 47         100         320643           150         150         ⊕ GLS 47         100         320644           150         180         ⊕ GLS 47         100         320725           150         240         ⊕ GLS 47         100         320726           150         320         ⊕ GLS 47         100         320727           150         400         ⊕ GLS 47         100         320728           150         600         ⊕ GLS 47         100         320728           150         800         ⊕ GLS 47         100         320730           150         1000         ⊕ GLS 47         100         320730           150	16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400		600	800	1000	1200	1500 2	2000 250	00 300
150 800 ○ 0 100 316175 150 1200 ○ 0 100 316177 150 80						Grit																				
150 1200 ○ 0 100 316177 150 80			1	L50				600				С	0 (					1	100					3161	54	
150       80       \$\mathref{GLS} 47\$       100       320641         150       100       \$\mathref{GLS} 47\$       100       320642         150       120       \$\mathref{GLS} 47\$       100       320643         150       150       \$\mathref{GLS} 47\$       100       320644         150       180       \$\mathref{GLS} 47\$       100       320725         150       240       \$\mathref{GLS} 47\$       100       320726         150       320       \$\mathref{GLS} 47\$       100       320727         150       400       \$\mathref{GLS} 47\$       100       320728         150       600       \$\mathref{GLS} 47\$       100       320729         150       800       \$\mathref{GLS} 47\$       100       320730         150       1000       \$\mathref{GLS} 47\$       100       320731         150       1200       \$\mathref{GLS} 47\$       100       320732			1	L50				800				C	0 (					1	100					3161	75	
150       100       ③ GLS 47       100       320642         150       120       ③ GLS 47       100       320643         150       150       ⑤ GLS 47       100       320644         150       180       ⑥ GLS 47       100       320725         150       240       ⑥ GLS 47       100       320726         150       320       ⑥ GLS 47       100       320727         150       400       ⑥ GLS 47       100       320728         150       600       ⑥ GLS 47       100       320729         150       800       ⑥ GLS 47       100       320730         150       1000       ⑥ GLS 47       100       320731         150       1200       ⑥ GLS 47       100       320732			1	L50				1200				C	0 (					1	100					3161	77	
150       120       ③ GLS 47       100       320643         150       150       ③ GLS 47       100       320644         150       180       ⑤ GLS 47       100       320725         150       240       ⑥ GLS 47       100       320726         150       320       ⑥ GLS 47       100       320727         150       400       ⑥ GLS 47       100       320728         150       600       ⑥ GLS 47       100       320729         150       800       ⑥ GLS 47       100       320730         150       1000       ⑥ GLS 47       100       320731         150       1200       ⑥ GLS 47       100       320732			1	L50				80				⊕ GI	LS 47					1	L00					32064	41	
150       150       ③ GLS 47       100       320644         150       180       ③ GLS 47       100       320725         150       240       ⑤ GLS 47       100       320726         150       320       ⑥ GLS 47       100       320727         150       400       ⑥ GLS 47       100       320728         150       600       ⑥ GLS 47       100       320729         150       800       ⑥ GLS 47       100       320730         150       1000       ⑥ GLS 47       100       320731         150       1200       ⑥ GLS 47       100       320732		150						100				⊕ Gl	LS 47					1	L00					32064	12	
150       180       \$\text{GLS 47}\$       100       320725         150       240       \$\text{GLS 47}\$       100       320726         150       320       \$\text{GLS 47}\$       100       320727         150       400       \$\text{GLS 47}\$       100       320728         150       600       \$\text{GLS 47}\$       100       320729         150       800       \$\text{GLS 47}\$       100       320730         150       1000       \$\text{GLS 47}\$       100       320731         150       1200       \$\text{GLS 47}\$       100       320732			150				120				⊕ GLS 47								100					32064	13	
150       240       ③ GLS 47       100       320726         150       320       ⑤ GLS 47       100       320727         150       400       ⑥ GLS 47       100       320728         150       600       ⑥ GLS 47       100       320729         150       800       ⑥ GLS 47       100       320730         150       1000       ⑥ GLS 47       100       320731         150       1200       ⑥ GLS 47       100       320732		150					150			⊕ GLS 47								100						32064	14	
150     320     \$\mathref{GLS 47}\$     100     320727       150     400     \$\mathref{GLS 47}\$     100     320728       150     600     \$\mathref{GLS 47}\$     100     320729       150     800     \$\mathref{GLS 47}\$     100     320730       150     1000     \$\mathref{GLS 47}\$     100     320731       150     1200     \$\mathref{GLS 47}\$     100     320732			150					180										1	L00					32072	25	
150     400     ⑤ GLS 47     100     320728       150     600     ⑥ GLS 47     100     320729       150     800     ⑥ GLS 47     100     320730       150     1000     ⑥ GLS 47     100     320731       150     1200     ⑥ GLS 47     100     320732		150				240											1	L00					32072	26		
150     600     \$\ext{GLS 47}\$     100     320729       150     800     \$\ext{GLS 47}\$     100     320730       150     1000     \$\ext{GLS 47}\$     100     320731       150     1200     \$\ext{GLS 47}\$     100     320732			150				320				⊕ GLS 47							1	L00					32072	27	
150     800     ③ GLS 47     100     320730       150     1000     ③ GLS 47     100     320731       150     1200     ④ GLS 47     100     320732			150				400				⊕ GLS 47							1	L00					32072	28	
150 1000			150					600				⊕ Gl	LS 47					1	L00					32072	29	
150 1200			1	L50				800			⊕ GL					100					3207	30				
<u> </u>			1	L50				1000				⊕ Gl	LS 47					1	L00					3207	31	
150 1500			1	L50			1200				⊕ GLS 47								L00					3207	32	
			1	L50				1500				⊕ GI	LS 47					1	L00					32073	33	

Coated abrasives



## **PS 73 CWK**





Properties	
Bonding age	ent Resin
Grain	Aluminium oxide
Coating	Semi-open
Backing	C-paper

**Applications:** 

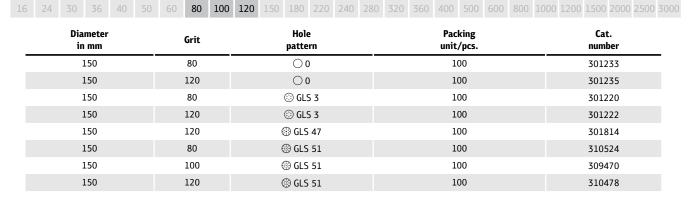
Paint/Varnish/Filler

Plastic

O

**Advantages:** High-quality product for use on varnish, paint and filler - High removal rate - Substantially reduced clogging and significantly longer service life due to additional special coating

#### **Available grits:**



Abrasive paper, actively coated, self-fastening

PS 73 BWK





Properties	
Bonding age	nt Resin
Grain	Aluminium oxide
Coating	Semi-open
Backing	B-paper

**Applications:** 

Paint/Varnish/Filler

Plastic

•

**Advantages:** High-quality product for use on varnish, paint and filler - High removal rate - Substantially reduced clogging and significantly longer service life due to additional special coating

#### **Available grits:**

Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
60	600	O 0	100	309745
65	800	O 0	100	309746
80	600	O 0	100	313085
80	800	O 0	100	313086
125	800	O 0	100	306613

16 24 30 36 40 50 60 80 100 120 **150 180 220** 240 280 **320 360 400 500 600 800 1000 1200 1500** 2000 2500 3000

**Continuation** →

## Discs with paper backing, self-fastening

Coated abrasives



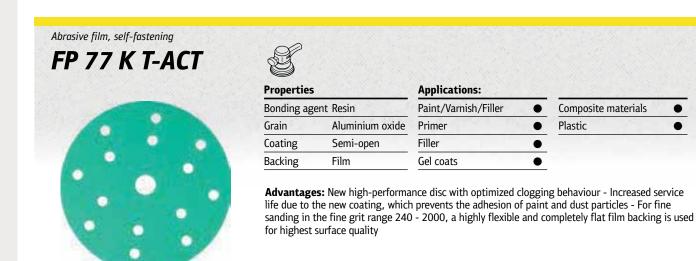
#### ightarrow Continuation of PS 73 BWK, Abrasive paper, actively coated, self-fastening

Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
125	1200	O 0	100	308979
150	150	$\bigcirc$ 0	100	301236
150	180	O 0	100	301237
150	220	$\bigcirc$ 0	100	301238
150	320	$\bigcirc$ 0	100	301240
150	400	$\bigcirc$ 0	100	301241
150	500	$\bigcirc$ 0	100	301937
150	800	O 0	100	301886
150	1000	O 0	100	301891
150	1200	$\bigcirc$ 0	100	306625
150	1500	$\bigcirc$ 0	100	306317
150	600	⊙ GLS 1	100	301217
150	150		100	301223
150	180		100	301224
150	220		100	301225
150	320		100	301227
150	400		100	301228
150	500		100	301229
150	600		100	301230
150	800		100	301889
150	1000		100	307115
150	1200		100	307116
150	1500		100	307117
150	150		100	301855
150	220	⊕ GLS 47	100	301857
150	320		100	301859
150	500	⊕ GLS 47	100	301861
150	150		100	310479
150	180		100	310525
150	220		100	310526
150	240		100	309093
150	320		100	309094
150	400		100	310527
150	500		100	310528
150	600		100	310529
150	1000	⊕ GLS 51	100	310615

## Discs with film backing, self-fastening

Coated abrasives

Available grits:

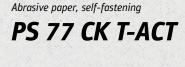


16	24 30	36	40	60		100	120	150	180	220	240	280	320	360	400	500	600	800	1000	1200	1500	<b>2000</b> 25	00 3000
		ameter in mm			Grit	:				Hole attern						acking nit/pcs					Cat numl		
		125			240					O 0						100					3531	.77	
		125			320					0 🔾						100					3531	75	
		125			400					$\bigcirc$ 0						100					3531	74	
		125			600					0 🔾						100					3531	72	
		125			240				0	GLS 5						100					3531	62	
		125			280				0	GLS 5						100					3531	61	
		125			320				0	GLS 5						100					3531	69	
		125			400				0	GLS 5						100					3531	60	
		125			600				0	GLS 5						100					3531	58	
		150			240				0	GLS 3						100					3531	46	
		150			320				(:	GLS 3						100					3531	45	
		150			400				0	GLS 3						100					3531	44	
		150			600				0	GLS 3						100					3531	42	
		150			800					GLS 4	7					100					3531	34	
		150			1000	)				GLS 4	7					100					3531	.33	
		150			1200	)			(1)	GLS 4	7					100					3531	.32	
		150			1500	)			(1)	GLS 4	7					100					3531	31	
		150			2000	)			<b>(</b>	GLS 4	7					100					3531	30	

## Discs with paper backing, self-fastening

Coated abrasives







Properties	
Bonding agent	Resin
Grain	Aluminium oxide
Coating	Semi-open
Backing	C-paper

Applications:

Paint/Varnish/Filler

Primer

Filler

Gel coats

Composite materials

Plastic

**Advantages:** New high-performance disc with optimized clogging behaviour - Increased service life due to the new coating, which prevents the adhesion of paint and dust particles - For aggressive grinding at high loads, a flexible and tear-resistant C-latex paper is used in the grit range 60-220

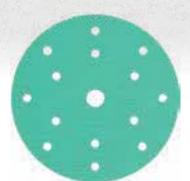
#### Available grits:

16 24 30 36 40 50 **60 80 100 120 150 180 220** 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

All sizes and minimum purchasing quantities available on request

## Abrasive paper, self-fastening PS 77 CK T-ACT





Properties		Applications:			
Bonding age	ent Resin	Paint/Varnish/Filler	•	Composite materials	•
Grain	Aluminium oxide	Primer	•	Plastic	•
Coating	Semi-open	Filler	•		
Backing	C-paper	Gel coats	•		

**Advantages:** New high-performance disc with optimized clogging behaviour - Increased service life due to the new coating, which prevents the adhesion of paint and dust particles - For aggressive grinding at high loads, a flexible and tear-resistant C-latex paper is used in the grit range 60-220

#### Available grits:

16 24 30 36 40 50	60 80 100	120 150 180 220 240 2	280 320 360 400 500 600 800 1	000 1200 1500 2000 2500 300
Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
125	60	O 0	100	353219
125	80	O 0	100	353224
125	100	O 0	100	353221
125	120	○0	100	353223
125	150	O 0	100	353225
125	180	○0	100	353222
125	220	O 0	100	353218
125	60	◎ GLS 5	100	353217
125	80	◎ GLS 5	100	353216
125	100	◎ GLS 5	100	353215
125	120	◎ GLS 5	100	353214
125	180	© GLS 5	100	353212
125	220	◎ GLS 5	100	353209

**Continuation** →

## Discs with paper backing, self-fastening / Abrasive Screen

Coated abrasives

#### → Continuation of PS 77 CK T-ACT, Abrasive paper, self-fastening

Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
150	60	O 0	100	353208
150	80	O 0	100	353207
150	120	O 0	100	353206
150	180	O 0	100	353204
150	220	O 0	100	353203
150	60		100	353195
150	80		100	353194
150	100		100	353193
150	120		100	353192
150	180		100	353190
150	220		100	353189

Abrasive screen, self-fastening, waterproof

## **AN 400**





Properties	
Bonding age	nt Resin
Grain	Aluminium oxide
Backing	Polyester screen

۱p	pl	ica	ıti	or	ıs:	

Paint/Varnish/Filler	•
Gel coats	•
Plaster	•
Plasterboard walls	•

Composite materials	•
Wood	•
Wood-based materials	•

**Advantages:** Effective and full-surface dust extraction thanks to open grid structure - Dust-free grinding extends the service life of the abrasive - At the same time, improved health and safety thanks to reduced dust formation at the work station - Independent of existing extraction hole patterns - Waterproof

#### Available grits:

16	24 30 36 40 50	60 80 100	120 150 180	220 240	280	320 360	400 500	600 800	1000 1200 1500 2000 2500 3000
_	Diameter in mm	Grit		lole ttern			Packing unit/pcs.		Cat. number
_	125	80	•	Screen			50		337898
	125	100	• :	Screen			50		337899
	125	120		Screen			50		337900
	125	150	•	Screen			50		337901
	125	180		Screen			50		337905
	125	240	•	Screen			50		337904
	125	320		Screen			50		337903
	125	400	• 9	Screen			50		337902
	150	80		Screen			50		337886
	150	100	•	Screen			50		337887
	150	120		Screen			50		337885
	150	150	• 9	Screen			50		337884
	150	180		Screen			50		337883
	150	240	• 9	Screen			50		337888
	150	320		Screen			50		337876
	150	400	• 9	Screen			50		337877
	225	80		Screen			25		337871
	225	100		Screen			25		337875

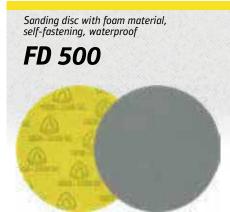
**Continuation** →

## **Abrasive Screen / Disc with foam material**



#### → Continuation of AN 400, Abrasive screen, self-fastening, waterproof

Diameter in mm	Grit	Hole pattern	Packing unit/pcs.	Cat. number
225	120	Screen	25	337873
225	150	Screen	25	337874
225	180	Screen	25	337872
225	240	Screen	25	337878





#### Properties

Bonding agent Resin

Grain

Aluminium

oxide/SiC

Backing Foam material/
velours

**Applications:** 

Paint/Varnish/Filler

Exceptionally well suited for finish grinding - Suitable for wet and dry use - Available in grit 1000, 1500 (Aluminium oxide) and 2000, 3000 (SiC)

Advantages: Uniform pressure distribution thanks to elastic foam coating - Soft grinding and extremely fine scratch pattern - Superior flexibility and adaptability on contours and profiles -

#### Available grits:

16	24	30	36	40	60		100	120	150	180	220	240	280	320	360	400		600		1000	12	200	L500 2	000 25	00 3	000
			ametei n mm	r		Gri	t			Ho pat	le tern					Pack unit/							Cat. numbe	r		
			125			100	0			С	0			10							342291					
			125			150	0		O 0					10							342290					
	125			2000				O 0					10							342289						
			125		3000				O 0					10						342288			3			
			150		1000				O 0					10							342294			4		
			150		1500				○ 0					10							342293			3		
			150			200	0		O 0					10							342295					
			150		3000				O 0					10							342292					

## **Backing pads**

Self-fastening multihole backing pad for random orbital sanders

**HST 555** 





**Advantages:** Very good adhesion for all velour-coated discs due to fine, heat resistant self-fastening coating - For all standard hole patterns, also for netlike and diverse multihole patterns - Compatible with all standard orbital sanders

Diameter in mm	Adaptor	Thread/Shaft	Density	Max. RPM	Packing unit/pcs.	Cat. number
150	Festool adaptor	thread M8/ 5/16"	soft	10200 rpm	1	320488
150	Festool adaptor	thread M8/ 5/16"	medium	10200 rpm	1	320489
150	Festool adaptor	thread M8/5/16"	hard	10200 rpm	1	320587

Self-fastening multihole backing pad for random orbital sanders

## **HST 555 A**





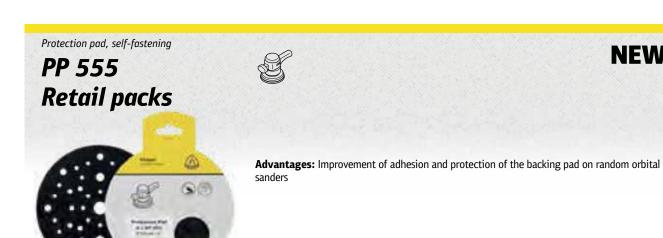
**Advantages:** Very good adhesion for all velour-coated discs due to fine, heat resistant self-fastening coating - For all standard hole patterns, also for netlike and diverse multihole patterns - Self-fastening backing pad compatible with BOSCH GEX-150 series

Diameter in mm	Adaptor	Thread/Shaft	Density	Max. RPM	Packing unit/pcs.	Cat. number
150	Bosch adaptor	thread M8	medium	10200 rpm	1	320490

## **Interface pads**



NEW



Diameter in mm	Suitable for	Packing unit/pcs.	Cat. number
125	Random orbital sander	2	370652
150	Random orbital sander	2	358148
225	Random orbital sander	2	370662

Packing unit (Minimum order quantity) = 1 packs of 2 pads





**Advantages:** Application between the backing pad and the abrasive disc for greater softness - Allows uniform grinding on all profiled, flat or difficult to access surfaces, with a better finish

Size	Cat.
in mm	number
150	283585

## **Self-fastening support / Backing pads**

Self-fastening support

CS 396 Y





#### **Properties**

Engaging elements	Mushroom heads
Thickness	1,5 mm
Temperature range	-30° to +80°

**Advantages:** Can be cut to size easily - Simple and safe fixing on smooth and even surfaces - Allows a quick change of the abrasive

Diameter in mm	Hole pattern	Packing unit/pcs.	Cat. number
125	O 0	1	116594
150	⊙ GLS 1	1	147607

Backing pad for self-fastening discs

**HST 359** 





**Advantages:** Good adhesion for all velour-coated abrasive discs - For medium-duty rough grinding and polishing

iameter in mm	Thread/Shaft	Max. RPM	Packing unit/pcs.	Cat. number
115	thread M14	13300 rpm	1	70433
125	thread M14	12200 rpm	1	70434
125	8 mm	4000 rpm	1	70435
150	thread M14	10200 rpm	1	70436
180	thread M14	8500 rpm	1	73066

## Notes



Strips / Sheets / Discs



# Onick Change Disc

## **Quick Change Discs**



## **About the product**

Klingspor Quick Change Discs are designed for use on pneumatic and electric die grinders. The Quick Change Discs allow a fast and safe tool change.

## **Applications**

- ► Tool design and construction
- ► Aviation industry
- ► Engine construction
- ► Turbine blade construction
- ► Mould construction
- ► Container and apparatus construction
- ► Model building / model making

#### **Advantages**

- ► Simple and fast disc changes reduce set-up times
- ► No clip or self-fastening device so no slipping or release caused by heat
- ► Disc stays centred
- ► Simple handling and smooth running characteristics
- ► Diverse applications thanks to different dimensions and backing plate hardnesses

Coated abrasive	Туре	Grain	Coating	Characteristics	Page
	QMC/QRC 412	Aluminium oxide	•	The versatile disc for coarse and intermediate grinding on metal	122, 126
	QMC/QRC 411	Zirconia alumina	•	High stock removal rate for rough grinding and deburring of stainless steel and steel	123, 127
	QMC/QRC 409	Zirconia alumina	•	Extremely high stock removal rate and long service life for stainless steel and high alloy steels with multibond for cool grinding	123, 127
<b>通常</b>	QMC/QRC 910	Ceramic aluminium oxide	•	Extremely sharp ceramic grain for highest aggressivity and multibond for cool grinding	124, 128

Applications guide

## Minimum order quantities for made to order items

QCD	Diameter	Minimum order quantities				
ORC/OMC 412	25 mm	1,700 pieces				
ORC/OMC 411	38 mm	1,200 pieces				
• • •	50 mm	900 pieces				
QRC/QMC 409	76	COO minera				
QRC/QMC 910	76 mm	600 pieces				



We reserve the right to over-deliver or under-deliver made to order items.

## The right choice of the backing pad

Backing pads for Quick Change Discs are available in grades according to the required application. The firmer the backing pad the higher the stock removal rate. Softer backing plates are suited to working on contoured surfaces and finish sanding.

The QCA 555 (cat. no. 308693) allows use on a regular angle grinder.

Please observe the max. RPM for the backing pads in the product chart.

Two fastening systems have prevailed on the market for the product group 'Quick Change Discs'. Klingspor can offer you both, Quick Metal Connect and Quick Roll Connect, for all available types.



Applications guide



## The system QMC (Quick Metal Connect)

The Quick Change Discs with metal locking are fixed on the backing pad by means of an internal thread.







## The system QRC (Quick Roll Connect)

Fix the Quick Change Disc to the backing plate using the plastic threaded bushing and secure by turning  $180^{\circ}$  clockwise.







## Installation on an angle grinder

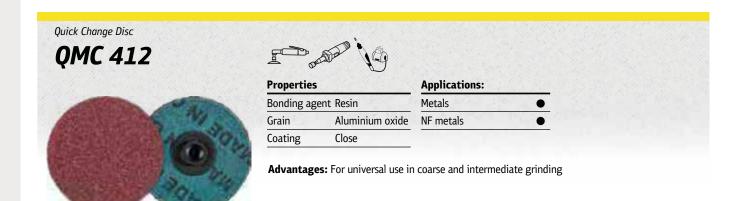
The QCA 555 adapter allows you to use the quick change discs on conventional angle grinders with an M14 receiving spindle.

- 1. Mount the QCA 555 adapter with the M14 thread onto your angle grinder. The lower clamping flange can remain on the machine.
- 2. Affix the backing pad QMC 555 or QRC 555 with the  $1/4^{\prime\prime}$  thread on top of the adapter.







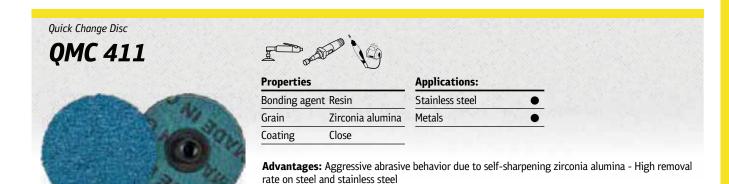


#### Available grits:

16 <b>24</b> 30 <b>36</b> 40 <b>50</b> 60	80 100 120 150 180	220 <b>240</b> 280 <b>320</b> 360 400 500 600	800 1000 1200 1500 2000 2500 3000
Diameter in mm	Grit	Packing unit/pcs.	Cat. number
25	60	100	295155
38	36	100	295174
38	40	100	295175
38	60	100	295177
38	80	100	295178
38	100	100	295179
38	120	100	295180
38	240	100	295183
50	36	100	295196
50	40	100	295197
50	50	100	295198
50	60	100	295199
50	80	100	295200
50	100	100	295201
50	120	100	295202
50	180	100	295204
50	240	100	295205
50	320	100	295206
76	36	50	295218
76	60	50	295221
76	80	50	295222
76	100	50	295223
76	120	50	295224
76	180	50	295226

Backing pad see page 125 / Adapter page 129.

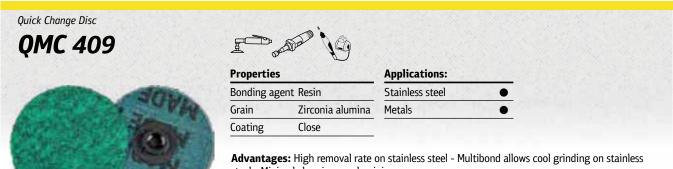




Available grits:

16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400		600		1000	1200	1500	2000 25	500 30	000
			Diam in I						Grit							king /pcs.							Cat. mber			
			2	5				40				100									295277					
			5	0			36					100									295300					
	50					40			100									295301								
	50			60				100							295303											
			5	0			80				100							295304								
			5	0					120			100								295305						
	76					36			50							295312										
			7	6					60			50					295315									
			7	6					80			50							295316							

Backing pad see page 125 / Adapter page 129.

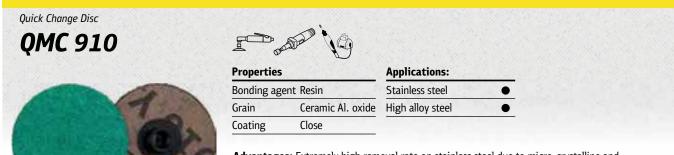


steel - Minimal clogging on aluminium

#### Available grits:

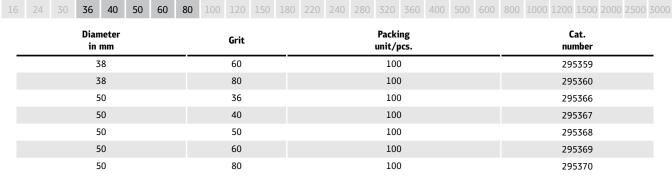
16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400	600	1000	1200	1500	2000	2500	300
				neter mm					Grit						Pack unit/	ing pcs.					at. nber			
			5	0					36						10	0				29	5334			
			5	0					40						10	0				29	5335			
			5	0					60						10	0				29	5337			
			5	0					80						10	0				29	5338			
			5	0					120						10	0				29	5339			

Backing pad see page 125 / Adapter page 129.



**Advantages:** Extremely high removal rate on stainless steel due to micro-crystalline and self-sharpening ceramic grit - Continuously aggressive abrasive properties - Multibond allows cool grinding on stainless steel

#### Available grits:



Backing pad see page 125 / Adapter page 129.

## **Backing pad**



Backing pad

**QMC 555** 

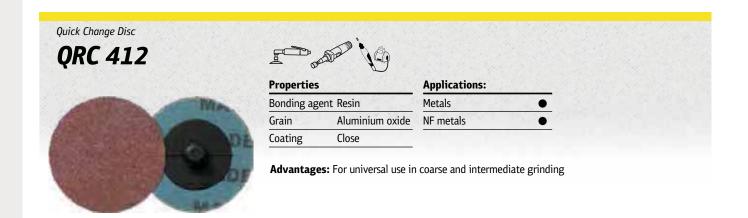




**Advantages:** For secure mounting of QMC discs - Optimized abrasive properties (aggressiveness, surface quality) due to three hardnesses - Easy differentiation of the hardnesses through coloured rings - Fixing spindle can be unscrewed, therefore the use on angle grinder or with adapter QCA 555 is possible via 1/4"-20 thread

Diameter in mm	Thread/Shaft	Density	Colour	Max. RPM	Packing unit/pcs.	Cat. number
25	Shaft 6 mm	soft	grey	30000 rpm	1	300056
25	Shaft 6 mm	medium	blue	30000 rpm	1	295422
38	Shaft 6 mm	soft	grey	30000 rpm	1	300058
38	Shaft 6 mm	medium	blue	30000 rpm	1	295424
38	Shaft 6 mm	firm	red	30000 rpm	1	300059
50	Shaft 6 mm	soft	grey	30000 rpm	1	300060
50	Shaft 6 mm	medium	blue	30000 rpm	1	295426
50	Shaft 6 mm	firm	red	30000 rpm	1	295427
76	Shaft 6 mm	soft	grey	20000 rpm	1	300061
76	Shaft 6 mm	medium	blue	20000 rpm	1	295430
76	Shaft 6 mm	firm	red	20000 rpm	1	295431

Quick Roll Connect



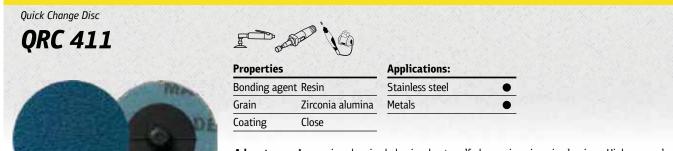
#### **Available grits:**

16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000 25	300	000
			Dian in I	neter mm					Grit						Packi unit/p							at. nber			
			2	5					120						100	)					295	169			
			5	0					36						100	)					295	5207			
			5	0					40						100	)					295	5208			
			5	0					60						100	)					295	5210			
			5	0					80						100	)					295	5211			
			5	0					120						100	)					295	5213			
			7	6					36						50						295	5229			
			7	6					40						50						295	5230			
			7	6					60						50						295	5232			
			7	6					80						50						295	5233			
			7	6					120						50						295	5235			

Backing pad see page 129 / Adapter page 129.

**Quick Roll Connect** 



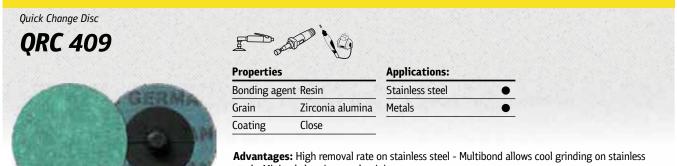


**Advantages:** Aggressive abrasive behavior due to self-sharpening zirconia alumina - High removal rate on steel and stainless steel

#### **Available grits:**

16	24	36	40	50	60	80	100	120	150	180	220	240	280	320		400	600		1000	1200	1500	2000 2	500 3	000
			neter mm					Grit						Packi unit/p							at. mber			
		5	0					36						100	)			-		29	5306			
		5	0					40						100	)					29	5307			
		5	0					60						100	)					29	5309			
		5	0					80						100	)					29	5310			
		5	0					120						100	)					29	5311			
		7	6					36						50						29	5318			
		7	6					60						50						29	5321			
		7	6					80						50						29	5322			
		7	6					120						50						29	5323			

Backing pad see page 129 / Adapter page 129.



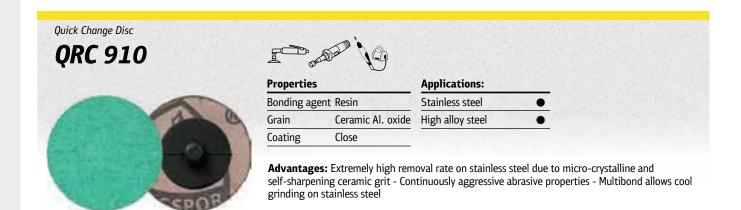
steel - Minimal clogging on aluminium

#### **Available grits:**

24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400		600		1000	1200	1500	2000	2500	3000
								Grit						Packi unit/p	ng cs.										
		5	0					36						100	)						29.	5340			
		5	0					60						100	)						29	5343			
		5	0					80						100	)						29	5344			
		7	6					36						50							29	5351			
	24	24 30	<b>Dian</b> in 5 5 5	24 30 36 40  Diameter in mm  50 50 50 76	Diameter in mm 50 50 50	Diameter in mm 50 50 50	Diameter in mm 50 50 50	Diameter in mm 50 50 50	Diameter in mm         Grit           50         36           50         60           50         80	Diameter in mm         Grit           50         36           50         60           50         80	Diameter in mm         Grit           50         36           50         60           50         80	Diameter in mm         Grit           50         36           50         60           50         80	Diameter in mm         Grit           50         36           50         60           50         80	Diameter in mm         Grit           50         36           50         60           50         80	Diameter in mm         Grit         Packi unit/p           50         36         100           50         60         100           50         80         100	Diameter in mm         Grit         Packing unit/pcs.           50         36         100           50         60         100           50         80         100	Diameter in mm         Grit         Packing unit/pcs.           50         36         100           50         60         100           50         80         100	Diameter in mm         Grit         Packing unit/pcs.           50         36         100           50         60         100           50         80         100	Diameter in mm         Grit         Packing unit/pcs.           50         36         100           50         60         100           50         80         100	Diameter in mm         Grit         Packing unit/pcs.           50         36         100           50         60         100           50         80         100	Diameter in mm         Grit         Packing unit/pcs.           50         36         100           50         60         100           50         80         100	Diameter in mm         Grit         Packing unit/pcs.         Control           50         36         100         29           50         60         100         29           50         80         100         29           100         29         29           100         29         29           100         29         29	Diameter in mm         Grit         Packing unit/pcs.         Cat. number           50         36         100         295340           50         60         100         295343           50         80         100         295344	Diameter in mm         Grit         Packing unit/pcs.         Cat. number           50         36         100         295340           50         60         100         295343           50         80         100         295344	Diameter in mm         Grit         Packing unit/pcs.         Cat. number           50         36         100         295340           50         60         100         295343           50         80         100         295344

Backing pad see page 129 / Adapter page 129.

Quick Roll Connect



#### **Available grits:**

16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000 2	500 3	000
				neter mm					Grit						Packi unit/p	ng ics.						Cat. mber			_
			5	50					40						100	)					29	5372			
			5	50					60						100	)					29	5374			
			5	0					80						100	)					29	5375			
			7	'6					36						50						29	5381			
			7	'6					50						50						29	5383			
			7	'6					80						50						29	5385			

Backing pad see page 129 / Adapter page 129.

Backing pad

## **QRC 555**





**Advantages:** For secure mounting of QRC discs - Optimized abrasive properties (aggressiveness, surface quality) due to two hardnesses - Easy differentiation of the hardnesses through coloured rings - Fixing spindle can be unscrewed, therefore the use on angle grinder or with adapter QCA 555 is possible via 1/4"-20 thread

Diameter in mm	Thread/Shaft	Density	Colour	Max. RPM	Packing unit/pcs.	Cat. number
25	Shaft 6 mm	medium	blue	30000 rpm	1	295423
38	Shaft 6 mm	medium	blue	30000 rpm	1	295425
50	Shaft 6 mm	medium	blue	30000 rpm	1	295428
50	Shaft 6 mm	firm	red	30000 rpm	1	295429
76	Shaft 6 mm	medium	blue	20000 rpm	1	295432
76	Shaft 6 mm	firm	red	20000 rpm	1	295433

Adapter for quick change disc backing pad

QCA 555





**Advantages:** Quick Change Disc Adapter with M14 female thread and 1/4"-20 male thread - Allows use of quick change discs on a regular angle grinder

Width x Length in mm	Thread/Shaft	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
20 x 30	thread M14	80 m/s	75400 rpm	1	308693





### **About the product**

Developed by Klingspor over 40 years ago the abrasive mop wheel has found many practical and economical uses in surface finishing work. The Klingspor abrasive mop wheel comprises of high quality grinding flaps coated with aluminium oxide. The fan-shaped radial arrangement is firmly anchored by a resign core at the centre of the abrasive mop wheel. The structure of the abrasive mop wheel provides for very soft, comfortable grinding behaviour and adapts optimally to the contours of the workpiece. Klingspor abrasive mop wheels are especially suited for achieving a very smooth surface finish.

Klingspor has the perfect abrasive mop wheel to suit every surface, ranging from even to profiled surfaces, and is suited for nearly every material.

#### **Machines**

Klingspor abrasive mop wheels can, depending on the dimensions, be used with the following machines:



Die grinders



Angle grinders



Flexible shafts



**Drilling machines** 



Floor stand grinders



Satin finishing machine

## Minimum order quantities for made to order items

Product	Diameter in mm	Minimum order quantities
SM 611	100-165	20 pieces
SM 611 W/H/S*	200-300	10 pieces
WSM 617 *	350-410	4 pieces

<sup>\*</sup> Available dimensions on request

Product	Diameter in mm	Minimum order quantities
	165	20 pieces
FSR 618	200-300	10 pieces
	350-400	4 pieces
	100-165	20 pieces
MM 650	200-300	10 pieces
	>300	4 pieces



We reserve the right to over-deliver or under-deliver made to order items.

								Mate	rial a	pplica	tions								M	achin	appl	icatio	ns	
Туре	Page	Metal	Apparatus / container engineering	Precision engineering	Mould making	Fittings	Pipes	Profiled sections	Tools	Mountings	Cutlery	Wood	Contoured wood	Model construction	Profiled sections	Paint/varnish/fillers	Plastics	Flexible shafts	Drilling machines	Die grinders	Automatic grinders	Floor stand grinders	Angle grinders	Satin finishing machine
SM 611	136	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•		
SM 611 W	137	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•		
SM 611 H		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•		
SM 611 S	139	•	•				•																	•
MM 630	138	•	•		•		•	•				•	•	•	•	•	•	•	•	•				
MM 650	138	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•		•		•		
WSM 617	139	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•					•	
FSR 618	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•			•	•		

Applications guide

### **Mounting**

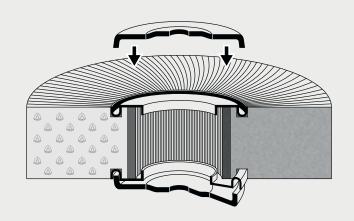
#### Abrasive mop wheels SM 611, MM 650,

These abrasive mop wheels are mounted to the machine spindle with two SMD 612 mounting plates.

#### **Correct mounting is important**

To ensure that the abrasive mop wheel runs smoothly, please check that the mounting plates are mounted evenly and fit tightly to the inner edge of the metal side mounting plate retaining groove. The mounting plates are equipped with mounting bore holes. Making bore hole adjustments to fit the respective shaft diameter easy and quick - by simply drilling the appropriate bore hole diameter. Please refer to product text SMD 612 for more information on maximum bore hole diameters.

The special abrasive mop varieties listed below are designed in such a way that they can be fitted on top of the respective machine shafts without any additional SMD 612 mounting plates:





#### Abrasive mop wheel SM 611 H

The abrasive mop wheel with a wooden core is preferred for work on floor stand grinders with cone-shaped mounting spindles. It can be mounted directly on the machine spindle without the use of a mounting plate. Abrasive mop wheel SM 611 H is equipped with a Ø 13 mm bore hole. Making bore hole adjustments to fit the respective shaft diameter easy and quick - by simply drilling the appropriate bore hole diameter.



#### Abrasive mop wheel **SM 611 W**

This abrasive mop wheel is equipped with a Ø 25.4 mm mounting bore hole and can be mounted to a machine without the use of a mounting plate.



#### **WSM 617**

The WSM 617, an abrasive mop wheel of the second generation with an integrated M14 or %" inside thread, can be mounted and released again without the need for any additional tools.



#### Abrasive flap drum SM 611 S

These drums come as standard with a 19 mm receiving hole and keyway standard satin finishing machines that are equipped with the corresponding machine spindle.



Applications guide



## The surface scratch pattern

The abrasive mop wheel's construction makes it perfect for achieving a smooth surface finish.

The abrasive mop wheel achieves a significantly smoother surface finish compared to that of a belt grinder. When choosing a grit size please select a grit size that is 2-3 sizes coarser than that used with a belt grinder.



#### Abrasive belt 40 grit

- ► short distinctive line pattern
- ► rough surface
- ► high contrast finish



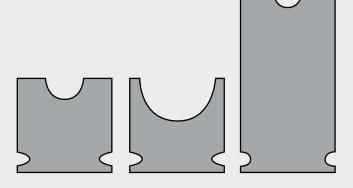
#### Abrasive mop wheel 40 grit

- ► long continuous line pattern
- ► minimum depression
- ► smooth finish

## **Common profilings**

Pre-profiled abrasive mop wheels are designed to adapt perfectly to the contours of your individual workpiece and provide excellent results from the very beginning. Time consuming pre-profiling of the abrasive mop is no longer needed.

If you require an individualised abrasive mop wheel, we would be pleased to assist you with this.



Applications guide

## Selection of the correct mop diameter

To be able to work at the optimal cutting rate (38-42 m/s) the selection of the abrasive mop diameter for machines, that are not equipped with RPM setting functionality, is based on the set RPM. Machines that are equipped with RPM setting functionality are to be set according to the abrasive mop wheel diameter settings.

## Before turning the machine on please check that the pre-set RPM does not exceed the maximum abrasive mop RPM setting.

Please refer to the adjoining table for the correct abrasive mop diameter settings for the optimal RPM range.

If the abrasive mop wheel is used at the optimal RPM setting, the grinding flaps stand up straight as result of the centrifugal forces around the core and provide optimum abrasive mop wheel grinding properties. Only the edges of the grinding flaps are subjected to wear and tear. This results in the use of new and sharper grits. This ensures uniform stock removal and surface finish – from the first to the last workpiece.

Suboptimal RPM settings (too low) result in the incorrect positioning of the grinding flap as a result of tool / grinding pressure. This results in wear and tear on the grit side of the grinding flaps, and the area the abrasive mop wheel grinds is too large, which in turn results in higher friction between the workpiece and the grinding flaps. Consequently the workpiece and abrasive mop wheel are subjected to a higher thermal load and a higher degree of wear and tear on the grinding flaps. Ultimately, this can result in the failure of the abrasive mop wheel and damaged grinding flaps.

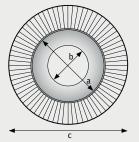
#### **Maximum RPM**

Klingspor SM 611 abrasive mop wheels are certified for widths of ≤ 100 mm and maximum revolutions per minute of 50 m/s.

#### **Optimal cutting rate**

The abrasive mop wheel's optimum performance range is a cutting rate between 38-42 m/s.

Mop-Ø [mm]	Recommended RPM range [min-1] (38 - 42 m/s)
100	7,300-8,000
140	5,200-5,700
165	4,400-4,800
200	3,650-4,000
250	2,900–3,200
300	2,400-2,650
350	2,100-2,300
380	1,900-2,100
410	1,750-1,950
480	1,500-1,650
510	1,400-1,550



- Outer diameter side cover
- **b** Hole side cover
- Outer diameter mop

## Mop side cover and hole relative to the outer mop diameter\*

	Mop wheel	Metal si	Matching clamping	
Туре	outer Ø [mm]	Outer Ø [mm]	Hole [mm]	flange SMD 612
	100 - 140	60	21,0	14821
	150 - 165	82	43,1	14823
	200 - 250	125	68,2	14824
SM 611	300	158	97,8	14826
	350	198	131,8	14827
	380 - 410	224	151,6	14829
	480 - 510	332	244,5	-
MM 650	250	82	43,1	14823

<sup>\*</sup> applies to standard versions (stock items)

Applications guide



## **Packet assembling**

Another way to influence the grinding result is packet assembling. During packet assembling an intermediate layer is stamped between the cloth flaps. This creates space between the individual flaps, which influences the grinding behaviour of the wheel. The higher the ratio of grinding flaps to intermediate layers, the harder the abrasive mop wheel.

The standard abrasive mop wheel is manufactured without packet assembling.

Exception: Starting at a diameter of  $\geq$  250 mm, a width of  $\geq$  50 mm, and and a grit size of 220 and finer, abrasive mop wheels are manufactured with a packet assembly ratio of 5:1.



5:1



3:1



1.1

## Factors influencing the grinding result

The surface finish is dependent upon a wide range of process parameters. The table below illustrates the different influencing factors and their affect on the grinding result.

			Grinding result									
Influencing factor		Stock removal*	Surface finish	Service life								
Cutting rate	high	increases	finer	shorter								
Luccing race	low	decreases	coarser	longer								
T1 /	high	increases	coarser	shorter								
Tool / grinding pressure	marginal	decreases	finer	longer								
Grit size	rough	increases	coarser	shorter								
Ji it Size	fine	decreases	finer	longer								
Grinding aids	without	increases	coarser	shorter								
oils, lubricants)	with	decreases	finer	longer								

<sup>\*</sup> Note: the essential parameters that affect the stock removal rate are the selection of a coarser (more stock removal) or finer (less stock removal) grit.

## The safe use of Klingspor abrasives

Klingspor abrasive mops are manufactured in accordance with the oSa and EN 13743 standards, this ensures the highest level of user safety.



Wear safety goggles or glasses to protect the eves



Wear safety gloves to protect hands



Wear a dust mask



Observe safety instructions



Use ear protectors

Abrasive mop



Advantages: Even surface scratch pattern due to continuously fresh, unused abrasive grit - For universal use on all materials - Adapts optimally to workpiece contour

Av	ailab	ole g	grits																								
16	5 2	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400	500	600		1000	1200	1500	2000	2500	
	Diameter x Width x Bore in mm  165 x 25 x 43,1				Grit	Grit Max. operat							Max RPM		Packing unit/pcs.				Cat. number		_						
165 x 25 x 43,1			40		50 m/s					5800 rpm				5				12075									
165 x 25 x 43,1					60		50 m/s					5800 rpm				5				12077							
165 x 25 x 43 1					80		50 m/s				5800 rnm				5				12078								

	Diameter x Width x Bore in mm	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
•	165 x 25 x 43,1	40	50 m/s	5800 rpm	5	12075
	165 x 25 x 43,1	60	50 m/s	5800 rpm	5	12077
	165 x 25 x 43,1	80	50 m/s	5800 rpm	5	12078
	165 x 25 x 43,1	120	50 m/s	5800 rpm	5	12080
	165 x 25 x 43,1	150	50 m/s	5800 rpm	5	12081
	165 x 25 x 43,1	180	50 m/s	5800 rpm	5	12082
	165 x 25 x 43,1	240	50 m/s	5800 rpm	5	12084
	165 x 30 x 43,1	40	50 m/s	5800 rpm	5	12090
	165 x 40 x 54	50	50 m/s	5800 rpm	3	286346
	165 x 50 x 43,1	40	50 m/s	5800 rpm	3	12105
	165 x 50 x 43,1	60	50 m/s	5800 rpm	3	12107
	165 x 50 x 43,1	80	50 m/s	5800 rpm	3	12108
	165 x 50 x 43,1	120	50 m/s	5800 rpm	3	12110
	165 x 50 x 43,1	150	50 m/s	5800 rpm	3	12111
	165 x 50 x 43,1	180	50 m/s	5800 rpm	3	12112
	165 x 50 x 43,1	240	50 m/s	5800 rpm	3	12114
	165 x 50 x 43,1	320	50 m/s	5800 rpm	3	12116
	200 x 25 x 68,2	120	50 m/s	4800 rpm	5	12140
	200 x 25 x 68,2	180	50 m/s	4800 rpm	5	12142
	200 x 50 x 68,2	60	50 m/s	4800 rpm	3	12167
	200 x 50 x 68,2	80	50 m/s	4800 rpm	3	12168
	200 x 50 x 68,2	120	50 m/s	4800 rpm	3	12170
	250 x 50 x 68,2	40	50 m/s	3800 rpm	1	12225
	250 x 50 x 68,2	120	50 m/s	3800 rpm	1	12230
	250 x 50 x 68,2	180	50 m/s	3800 rpm	1	12232
	250 x 50 x 68,2	320	50 m/s	3800 rpm	1	12236
	350 x 75 x 131,8	80	50 m/s	2700 rpm	2	12378
	350 x 75 x 131,8	320	50 m/s	2700 rpm	2	12386

Use only with mounting plate SMD 612 (page 137)!



Mounting plate

## **SMD 612**



Advantages: Ensures a smooth running and the safe mounting on the machine

Diameter x Bore in mm	Suitable for	Max. enlargement of bore Ø in mm	Packing unit/pcs.	Cat. number
79 x 12	SM 611/NCW/NFW 600 (Ø150+Ø165) + MM 650 (Ø250)	Ø 40 mm	2	14823
121 x 14	SM 611/NCW/NFW 600 (Ø200+Ø250)	Ø 50 mm	2	14824
155 x 20	SM 611 (Ø300)	Ø 50 mm	2	14826

Abrasive mop

## **SM 611 W**





Propertie	es .	Applications:							
Bonding a	gent Resin	Paint/Varnish/Filler	•						
Grain Aluminium oxide		Wood	•						
		Plastic	•						
		Metals	•						

**Advantages:** Even surface scratch pattern due to continuously fresh, unused abrasive grit - For universal use on all materials - Adapts optimally to workpiece contour - Can be used without mounting plate SMD 612

#### Available grits:

16         24         30         36         40         50         60	80 100 120	0 150 180 220 240 280	<b>320</b> 360 400 50	00 600 800 1000 1200	1500 2000 2500 300
Diameter x Width x Bore in mm	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
150 x 40 x 25,4	180	50 m/s	6300 rpm	4	340434
165 x 25 x 25,4	40	50 m/s	5800 rpm	5	221597
165 x 25 x 25,4	60	50 m/s	5800 rpm	5	221596
165 x 25 x 25,4	80	50 m/s	5800 rpm	5	221595
165 x 25 x 25,4	120	50 m/s	5800 rpm	5	221593
165 x 25 x 25,4	180	50 m/s	5800 rpm	5	221591
200 x 50 x 25,4	220	50 m/s	4800 rpm	3	189771

Abrasive mop







#### **Properties**

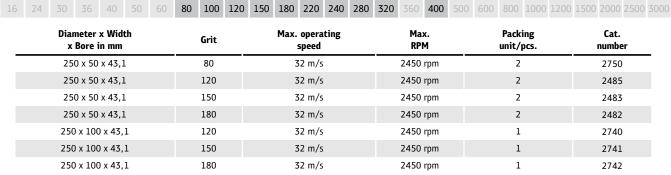
Bonding agent	Resin
Grain	Aluminium oxide

#### **Applications:**

Paint/Varnish/Filler	•
Wood	•
Metals	•
Plastic	•

**Advantages:** Very suitable for workpieces with high profiles due to grinding flaps with longitudinal slots - Produces a very fine surface

**Available grits:** 



Use only with mounting plate SMD 612 (Cat. number 14823)!

Abrasive mop

**MM 630** 





#### **Properties**

Bonding agent	Resin
Grain	Aluminium oxide

#### **Applications:**

Paint/Varnish/Filler	•
Wood	•
Metals	•
Plastic	

**Advantages:** Very suitable for workpieces with high profiles due to grinding flaps with longitudinal slots - For use on hand operated machines - Fine surface pattern

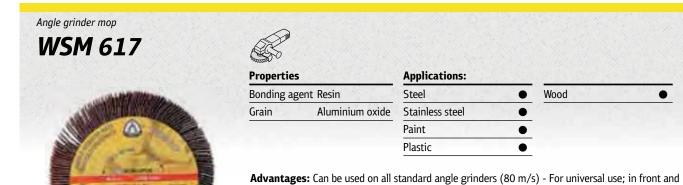
**Available grits:** 

16 24	30 36	40		60	80	100	120	150	180	220	240	280	320	360	400	500	600		1000	1200	1500	2000 250	0 3000
	Diameter x Shaft		n			Grit				opera speed	ting			Max RPM	-			Packi unit/p	-			Cat. number	
	180 x 2	5 x 6				80			4	0 m/s				4200 r	pm			2				262630	
	180 x 2	5 x 6				120		40 m/s				4200 rpm				2				262631			
	180 x 2	5 x 6				180		40 m/s				4200 rpm				2				262632			
	180 x 5	0 x 6				80		40 m/s				4200 rpm				2				262634			
	180 x 5	0 x 6				120		40 m/s				4200 rpm				2			262635		262635		
	180 x 5	0 x 6				180			4	0 m/s				4200 r	pm			2				262636	

## Abrasive mop wheels / Satin finishing drums

Abrasive mop

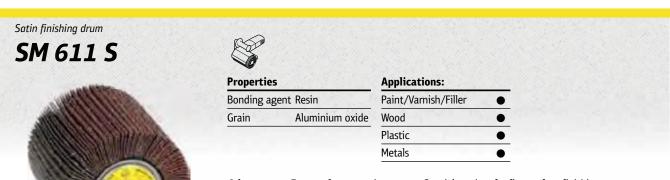




side position - Easy tool changing by hand without additional aids

Available grits:

16     24     30     36     40     50	60 80	100 120 150 180	220 240 280 320 360	<b>400</b> 500 600	800 1000 1200 1	2000 2500 300	
Diameter x Width in mm	Grit	Thread/Shaft	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number	
115 x 20	40	thread M14	80 m/s	13300 rpm	2	277014	
115 x 20	60	thread M14	80 m/s	13300 rpm	2	277015	
115 x 20	80	thread M14	80 m/s	13300 rpm	2	277016	
115 x 20	120	thread M14	80 m/s	13300 rpm	2	277017	
125 x 20	40	thread M14	80 m/s	12200 rpm	2	277018	
125 x 20	60	thread M14	80 m/s	80 m/s 12200 rpm 2			
125 x 20	80	thread M14	80 m/s	80 m/s 12200 rpm 2			
125 x 20	120	thread M14	80 m/s	80 m/s 12200 rpm 2			



**Advantages:** Even surface scratch pattern - Special product for fine surface finishing

		٠.
Avai	IIable	grits:

16 24 30 36 40 50 60	80 100	120 150 180 220 240 2	80 320 360 400	500         600         800         1000         1200	1500 2000 2500 300		
Diameter x Width x Bore in mm	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number		
100 x 100 x 19	40	19 m/s	3700 rpm	1	83167		
100 x 100 x 19	60	19 m/s	3700 rpm	1	7325		
100 x 100 x 19	80	19 m/s	3700 rpm	1	7326		
100 x 100 x 19	120	19 m/s	3700 rpm	1	93076		
100 x 100 x 19	180	19 m/s	3700 rpm	1	93021		
100 x 100 x 19	240	19 m/s	3700 rpm	1	104999		

### **About the product**

The small abrasive mop comprises of grinding flaps coated with aluminium oxide. The fan-shaped abrasive flaps are securely fixed to a central mounting spindle. The grinding flaps' fan-shaped radial arrangement adapts perfectly to the contours of the workpiece.

The wide range of grits (40 - 320) and top size coat additives (with and without multibonds) make the Klingspor small abrasive mop perfect for a wide range of applications.

The small abrasive mop is equipped with the following standard features: a 6 mm or 3 mm fixing spindle and a shaft length of 40 mm.

### **Application examples**

- ► Grinding work for tool and mould making
- ► Processing of profiled workpieces
- ► Processing of internal surfaces on pipework, fittings and difficult-to-reach areas
- ► Grinding work on small parts and casing

		Material applications											Machine applications						
Туре	Metal	Apparatus / container engineering	Precision engineering	Mould making	Fittings	Pipes	Profiled sections	Tools	Mountings	Cutlery	Wood	Contoured wood	Model construction	Profiled sections	Plastics	Flexible shafts	Drilling machines	Die grinders	Page
KM 613	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	142
KM 615	•	•	•	•	•	•	•	•	•	•			•	•		•	•	•	
KMT 614	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	144

## 

## Minimum order quantities for made to order items

Product	Grit	Minimum order quantities
Product	drit	Millimum order quantities
KM 613	40-320	250 pieces
KM 013	from 360	500 pieces
KM 615	40-180	250 pieces
KMT 614	40-320	250 pieces
KMI 014	from 360	500 pieces

Applications guide



### **Application recommendations**

- ► The small abrasive mop can be used with flexible shaft grinders, die grinders (pneumatic, electric) or drilling machines.
- ► The small abrasive mop's optimum performance is achieved at a cutting rate between 20 25 m/s. By observing these speeds, the product will perform at its most economical as regards tool wear, stock removal, surface finish and thermal load of the workpiece.

Fact	ors i	influ	encing
the g	grin	ding	result

#### Stock removal

An increase in stock removal should only occur as a result of using coarser grit and not as a result of increased tool / grinding pressure.

Steady increased tool / grinding pressure

- results in unnecessary tool wear and tear
- ▶ results in increased workpiece temperature load
- ► can result in tool failure

#### **Surface finish**

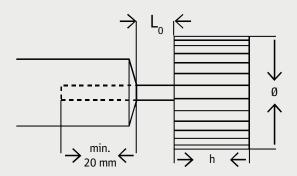
- ► The wear of the outer edge of the grinding flaps results in the presentation of new sharp abrasive grain, which results in a uniform surface finish
- ► The surface roughness decreases through an increase in the cutting rate
- An increase in the tool / grinding pressure results in a coarser surface finish
- ► The small abrasive mop achieves a significantly smoother surface finish compared to that of a belt grinder

#### **Temperature load**

► By reducing the tool / grinding pressure and the peripheral speeds the temperature load of the workpiece and the tool is reduced.

		Maximum		RPM [1/min]	
ø [mm]	Height h [mm]	operating speed [m/s]*	L <sub>0</sub> = 0 mm	L <sub>0</sub> = 10 mm	L <sub>0</sub> = 20 mm
10	≤ 15	40	76,300	55,000	35,000
15	≤ 25	40	50,500	37,000	28,000
20	≤ 20	40	38,150	28,600	21,900
25	≤ 15	40	30,500	22,900	17,500
30	≤ 15	40	25,400	19,000	14,600
40	≤ 20	40	19,000	14,300	10,900
50	≤ 30	40	15,200	11,400	8,700
60	≤ 40	40	12,700	9,500	7,300
60	50	32	10,150	7,900	6,300
00	≤ 40	40	9,500	7,100	5,400
80	50	32	7,650	6,000	4,800

<sup>\*</sup> for exposed shank length  $L_0 = 0 \text{ mm}$ 



#### Tool wear

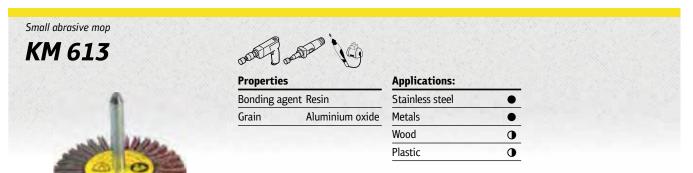
Tool wear is reduced by working with a lower grinding pressure.

To ensure the optimal and most efficient use of a tool

- ► the maximum revolutions per minute may not be exceeded
- ► the fixing spindle length of the small abrasive mop in the mounting device must be at least 20 mm
- ► the set revolutions per minute may not be exceeded when using an exposed shaft length LO (please refer to the table above)

For additional information please refer to the safety information provided with the product.

Abrasive mop



**Advantages:** Universal product for steel and stainless steel materials - Even removal rate - Suitable for use in hard-to-reach areas

#### Available grits:

5 2	4 30 36 40 50	60 80 100	120 150 180 220 2	40     280     320     360     400	<b>500</b> 600 800 1000 1200	1500 2000 2500 3		
	Diameter x Width x Shaft in mm	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number		
	10 x 10 x 3	60	40 m/s	76300 rpm	10	327993		
	10 x 10 x 3	80	40 m/s	76300 rpm	10	327994		
	10 x 10 x 3	120	40 m/s	76300 rpm	10	327995		
	20 x 15 x 6	80	40 m/s	38150 rpm	25	284738		
	20 x 15 x 6	120	40 m/s	38150 rpm	25	284739		
	20 x 20 x 6	60	40 m/s	38150 rpm	25	284744		
	20 x 20 x 6	80	40 m/s	38150 rpm	25	284745		
	20 x 20 x 6	120	40 m/s	38150 rpm	25	284746		
	25 x 10 x 6	60	40 m/s	30500 rpm	10	253591		
	25 x 15 x 6	60	40 m/s	30500 rpm	10	250985		
	25 x 15 x 6	80	40 m/s	30500 rpm	10	237496		
	25 x 15 x 6	120	40 m/s	30500 rpm	10	253606		
	25 x 20 x 6	80	40 m/s	30500 rpm	10	256138		
	30 x 5 x 6	80	40 m/s	25400 rpm	10	12791		
	30 x 5 x 6	120	40 m/s	25400 rpm	10	12793		
	30 x 5 x 6	150	40 m/s	25400 rpm	10	12794		
	30 x 10 x 3	60	40 m/s	25400 rpm	10	12808		
	30 x 10 x 6	40	40 m/s	25400 rpm	10	12816		
	30 x 10 x 6	60	40 m/s	25400 rpm	10	12817		
	30 x 10 x 6	80	40 m/s	25400 rpm	10	12818		
	30 x 10 x 6	100	40 m/s	25400 rpm	10	12819		
	30 x 10 x 6	120	40 m/s	25400 rpm	10	12820		
	30 x 10 x 6	150	40 m/s	25400 rpm	10	12821		
	30 x 10 x 6	240	40 m/s	25400 rpm	10	12823		
	30 x 10 x 6	320	40 m/s	25400 rpm	10	12824		
	30 x 15 x 6	40	40 m/s	25400 rpm	10	12843		
	30 x 15 x 6	60	40 m/s	25400 rpm	10	12844		
	30 x 15 x 6	80	40 m/s	25400 rpm	10	12845		
	30 x 15 x 6	100	40 m/s	25400 rpm	10	12846		
	30 x 15 x 6	120	40 m/s	25400 rpm	10	12847		
	30 x 15 x 6	150	40 m/s	25400 rpm	10	12848		
	30 x 15 x 6	240	40 m/s	25400 rpm	10	12850		
	30 x 20 x 6	80	40 m/s	25400 rpm	10	258294		
	40 x 10 x 6	120	40 m/s	19000 rpm	10	12874		

Continuation  $\rightarrow$ 

Abrasive mop



#### → Continuation of KM 613, Small abrasive mop

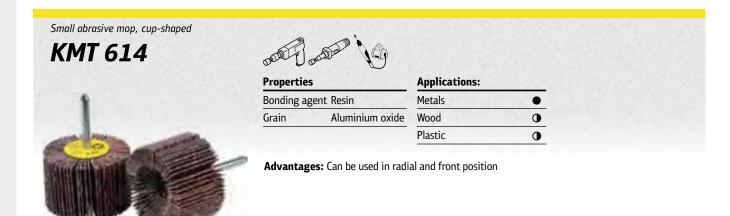
Diameter x Width x Shaft in mm	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
40 x 15 x 6	60	40 m/s	19000 rpm	10	12907
40 x 15 x 6	80	40 m/s	19000 rpm	10	12908
40 x 15 x 6	120	40 m/s	19000 rpm	10	12910
40 x 15 x 6	320	40 m/s	19000 rpm	10	12914
40 x 20 x 6	40	40 m/s	19000 rpm	10	12942
40 x 20 x 6	60	40 m/s	19000 rpm	10	12943
40 x 20 x 6	80	40 m/s	19000 rpm	10	12944
40 x 20 x 6	100	40 m/s	19000 rpm	10	12945
40 x 20 x 6	120	40 m/s	19000 rpm	10	12946
40 x 20 x 6	150	40 m/s	19000 rpm	10	12947
40 x 20 x 6	240	40 m/s	19000 rpm	10	12949
50 x 10 x 6	60	40 m/s	15200 rpm	10	12961
50 x 10 x 6	80	40 m/s	15200 rpm	10	12962
50 x 10 x 6	120	40 m/s	15200 rpm	10	12964
50 x 15 x 6	40	40 m/s	15200 rpm	10	12978
50 x 15 x 6	120	40 m/s	15200 rpm	10	12982
50 x 20 x 6	40	40 m/s	15200 rpm	10	12996
50 x 20 x 6	60	40 m/s	15200 rpm	10	12997
50 x 20 x 6	80	40 m/s	15200 rpm	10	12998
50 x 20 x 6	100	40 m/s	15200 rpm	10	12999
50 x 20 x 6	120	40 m/s	15200 rpm	10	13000
50 x 20 x 6	180	40 m/s	15200 rpm	10	13002
50 x 20 x 6	240	40 m/s	15200 rpm	10	13003
50 x 30 x 6	40	40 m/s	15200 rpm	10	61282
50 x 30 x 6	60	40 m/s	15200 rpm	10	61299
50 x 30 x 6	80	40 m/s	15200 rpm	10	61319
50 x 30 x 6	100	40 m/s	15200 rpm	10	61333
50 x 30 x 6	120	40 m/s	15200 rpm	10	61350
50 x 30 x 6	240	40 m/s	15200 rpm	10	71017
60 x 15 x 6	240	40 m/s	12700 rpm	10	13021
60 x 20 x 6	60	40 m/s	12700 rpm	10	13033
60 x 20 x 6	80	40 m/s	12700 rpm	10	13034
60 x 20 x 6	320	40 m/s	12700 rpm	10	13040
60 x 30 x 6	40	40 m/s	12700 rpm	10	13050
60 x 30 x 6	60	40 m/s	12700 rpm	10	13051
60 x 30 x 6	80	40 m/s	12700 rpm	10	13052
60 x 30 x 6	100	40 m/s	12700 rpm	10	13053
60 x 30 x 6	120	40 m/s	12700 rpm	10	13054
60 x 30 x 6	240	40 m/s	12700 rpm	10	13057
60 x 30 x 6	320	40 m/s	12700 rpm	10	13058
60 x 40 x 6	40	40 m/s	12700 rpm	10	13068
60 x 40 x 6	60	40 m/s	12700 rpm	10	13069
60 x 40 x 6	80	40 m/s	12700 rpm	10	13070
60 x 40 x 6	100	40 m/s	12700 rpm	10	13071
60 x 40 x 6	120	40 m/s	12700 rpm	10	13072
60 x 40 x 6	180	40 m/s	12700 rpm	10	13074
60 x 40 x 6	240	40 m/s	12700 rpm	10	13074
80 x 30 x 6	60	40 m/s	9500 rpm	10	13141
80 x 30 x 6	80	40 m/s	9500 rpm	10	13141
80 x 40 x 6	40	40 m/s	9500 rpm	10	13142
80 x 40 x 6	60	40 m/s	9500 rpm	10	13159
OU X 4U X 0	OU	40 111/5	11iqi ooce	10	13133

Continuation  $\rightarrow$ 

Abrasive mop

#### → Continuation of KM 613, Small abrasive mop

Diameter x Width x Shaft in mm	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
80 x 40 x 6	80	40 m/s	9500 rpm	10	13160
80 x 40 x 6	120	40 m/s	9500 rpm	10	13162
80 x 50 x 6	40	32 m/s	7650 rpm	10	13176
80 x 50 x 6	60	32 m/s	7650 rpm	10	13177
80 x 50 x 6	80	32 m/s	7650 rpm	10	13178
80 x 50 x 6	100	32 m/s	7650 rpm	10	13179
80 x 50 x 6	120	32 m/s	7650 rpm	10	13180
80 x 50 x 6	240	32 m/s	7650 rpm	10	13183



#### Available grits:

16	5 2	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400	500	600		1000	1200	1500	2000 250	0 30	00
	Diameter x Width x Shaft in mm					Grit Max. operating speed						Max. RPM				Packing unit/pcs.					Cat. number						
	60 x 40 x 6 80					0	40 m/s				12700 rpm						10				13196						

## Notes



Abrasive mop





## **About the product**

Thanks to its open, elastic structure, a non-woven abrasive web is capable of applying "soft" sanding to produce surfaces with a low scratch depth that are particularly fine. Fully and evenly interspersed with abrasive grain, a non-woven abrasive web can be used to produce a uniform and reproducible scratch pattern while also delivering a long service life.

Thanks to the great many beneficial properties of the material, the importance of non-woven products in the field of surface finishing is increasing steadily, especially for the work step of "finishing stainless steel surfaces".

Carrying an extensive variety of products with differences in fibre structure, grain, grit, bond and density, Klingspor offers the right abrasive tool for every processing step - from light deburring and stock removal to cleaning and creating satin finishes to the polishing of surfaces.

				Machines						Material applications												
Work step	Туре	Tool type	Angle grinderr	Drilling machine	Die grinder	Flexible shaft grinder	Back stand grinding machine	Hand tool belt grinder	Right angle die grinder	Orbital sander	Satin finishing machine	Floor standing grinder	Random orbital sander	Fillet weld grinder	G	Stainless Steel	Steel	NF metals	Varnish	Plastic	Wood	Page
	SMT 850 plus	Combi-abrasive mop disc	•			T									7		<u> </u>					167
	SMT 800	Non-woven mop disc	•														•	•				166
	SV 484	SCM non-woven web disc (universal)	•													•	•	•	•			156
Light sanding and	NDS 800	SCM non-woven web disc (hard, edge)	•													•	•	•	•			156
creating satin finishes	NBS 800	SCM non-woven web belt					•									•	•	•				156
	NBF 800	SCM non-woven file belt						•								•	•	•				*
	QMC/QRC 800	SCM Quick Change Disc							•							•	•	•				158, 160
	PW 2000	Power wheel		•	•	•									-	•	•	)	•			171
Coarse cleaning,	NCD 200	Coarse cleaning disc	•													•	•	•	•			170
removal of coatings	NCD 200 HD	Coarse cleaning disc HD	•													•	•	•	•			170
	QRC 200 HD	Coarse cleaning QCD							•								•	•	•			161
	NRO 400	Non-woven web roll, aluminium oxide								•				•	)	•	•	•	•	•	•	154
	NRO 500	Non-woven web roll, SiC								•				•			•	•	•	•	•	154
	NPA 400	Non-woven hand pad, aluminium oxide								•				•		•	•	•	•	•	•	155
	NPA 500	Non-woven hand pad, SiC								•				•		•	•	•	•	•	•	155
	NFW 600 S	Non-woven finishing wheel									•					•	•	•		•		164
Finishing and creating	NCW 600 S	Non-woven combi finishing wheel									•					•	•	•		•		164
matt finishes	NFW 600	Non-woven finishing wheel										•				•	•	•		•		163
	NCW 600	Non-woven combi finishing wheel										•				•	•	•		•		163
	NDS 400 K	Non-woven self-adhesive disc											•			•	•	•	•	•	•	*
	QMC/QRC 400	Non-woven QCD							•							•	•	•	•	•		158, 160
	NFS 600	Non-woven mounted wheel		•	•	•										•	•	•		•		166
	NCS 600	Combi non-woven mounted wheel		•	•	•										•	•	•		•		165
D 1 (I )	NUD 500	Unitised compact disc	•														•	•				168
Removal of heat tinting, pre-polishing	MFW 600	Unitised compact disc / wheel	•											•		•	•	•				167, 168
cinality pre polisiling	QRC 500	Unitised compact QCD							•							•	•	•				161
	NCO 700 DB	Non-woven convolute wheel														•	•	•		•		169
	NCO 710 DB	Non-woven convolute wheel														•	•	•		•		169

Applications guide

## Types of non-woven material

When trying to find the product that is right for your application, you will want to factor in the properties of the non-woven material.

Non-woven material is divided into four different categories:

- ► Soft non-woven material without fabric lining (clean and finish)
- ► Non-woven material with fabric lining (Surface Conditioning Material SCM)
- ► Highly compacted fleece (unitised and convolute)
- ► Coarse cleaning fleece (clean and strip)

#### General benefits of non-woven materials Wide range of applications for finishing

► The products are available with various grains and densities

#### **Exceptionally long service life**

- ► Continuous release of new abrasive grains
- ► Even finish throughout the entire service life
- ► No clogging thanks to open structure

#### **Uniform scratch pattern**

- ▶ Abrasive grains are distributed evenly in the material structure
- ► No excessive penetration into the workpiece surface

#### Perfect contouring to the workpiece

- ► The structure of non-woven materials is exceedingly flexible
- ► Shape and geometry of the base material remain unchanged

## Finishing processes, typical work steps



## Light sanding and creating satin finishes

Light stock removal combined with an excellent finish. The right choice: Non-woven tools made of SCM non-woven material with fabric lining (e.g. belts, discs) or combinations with non-woven and coated abrasives (e.g. SMT 850).



#### **Coarse cleaning**

Removal of rust, scale and varnish as well as coatings in general and effortless removal of heat tinting. The right choice: Non-woven tools made of coarse cleaning fleece with an extra open structure, relatively strong non-woven fibres and coarse abrasive grain.



## Finishing and creating matt finishes

Blending scratch patterns, cleaning surfaces and creating a final finish; no stock removal. The right choice: Tools, often including tools for off-hand sanding, made of soft, flexible non-woven material.



## Removal of heat tinting and pre-polishing

Removal of hint tinting and/ or creation of surfaces with a low scratch depth that are particularly fine. The right choice: Tools made of highly compacted fleece. Depending on its density and degree of fineness, the non-woven material may even allow for light stock removal or light deburring.

Applications guide



## Non-woven nylon material in four different shapes

#### Non-woven material without fabric lining



#### Non-woven material with fabric lining



#### **Highly compacted fleece**



Applications guide

## **Rolls and sheets**

## Minimum order quantities for made to order items

Format/style	Product	Width	Minimum order quantity
Rolls	NRO 400 / 500	Dimensi	ons and quantities on request
Sheets	NPA 400 / 500	Dimensi	ons and quantities on request



## **Grit chart**



Applications guide



#### **Belts**

## Minimum order quantities for made to order items

Format/style	Product	Width	Minimum order quantity		
	NBF 800	6 – 13 mm	20 pieces		
B 1/	NDF 800	14-30 mm	10 pieces		
Belts	NBS 800	31 – 75 mm	5 pieces		
	NDS CON	76 – 320 mm	2 pieces		

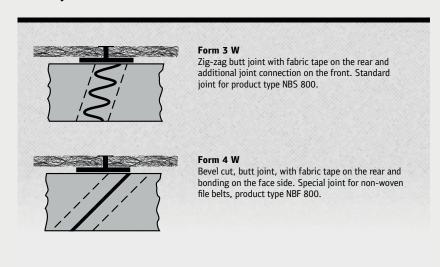
The minimum length for non-woven belts is 295 mm. We reserve the right to over-deliver or under-deliver production items.



#### **Grit chart**



## Belt joints for non-woven belts



Applications guide

## **Quick Change Discs**

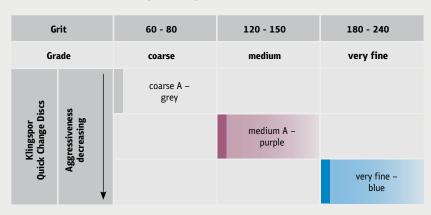
## Minimum order quantities for made to order items

Format/style	Product	Diameter	Minimum order quantity
	•	38 mm	400 pieces
	QRC/QMC 800	50 mm	350 pieces
Quick Change Discs		76 mm	350 pieces
Quick change Discs		38 mm	700 pieces
	QRC/QMC 400	50 mm	500 pieces
		76 mm	375 pieces



We reserve the right to over-deliver or under-deliver production items.

## Grit chart for QRC/QMC 800



## **Non-woven products** Applications guide

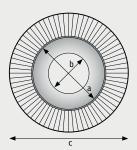


## **Abrasive mop**

## Minimum order quantities for made to order items

Format/style	Product	Diameter	Minimum order quantity	
	NFW 600 / NCW 600	100 – 165 mm	20 pieces	
Мор	NFW 600 / NCW 600	200 – 300 mm	10 pieces	
	NFW 600 S/ NCW 600 S	100 – 110 mm	20 pieces	
Small abracina man	NCC COO / NEC COO	30,40,50,60 mm	150 pieces	
Small abrasive mop	NCS 600 / NFS 600	80, 100 mm	100 pieces	





- Outer diameter side cover
- Hole side cover
- Outer diameter mop

#### Mop side cover and hole relative to the outer mop diameter\*

_	Mop wheel	Metal si	de cover	Matching
Туре	outer Ø [mm]	Outer Ø [mm]	Hole [mm]	clamping flange SMD 612
	165	82	43,1	14823
NCW/NFW 600	200-250	125	68,2	14824
	300	158	97,8	14826

<sup>\*</sup> applies to standard versions (stock items)

Rolls

Non-woven web roll, waterproof

## **NRO 400**





Properties	
Bonding agent	Resin
Grain	Aluminium oxide
Non-woven material type	Soft non-woven material

Applications:	
Stainless steel	•
Metals	•
Wood	•
Plastic	•

Paint/Varnish/Filler •

**Advantages:** Very good adaptation to surface contours - No clogging - Ideal for smoothing, cleaning, roughening and for general surface finishing - Can be used wet and dry

Width x Length in mm	Colour	Grade	Packing unit/pcs.	Cat. number
100 x 10000	maroon	medium	1	284286
100 x 10000	maroon	very fine	1	284285
100 x 10000	dark green	very fine general purpose	1	284289
150 x 10000	maroon	medium	1	284280
150 x 10000	maroon	fine	1	284340
150 x 10000	dark green	very fine general purpose	1	284281
150 x 10000	maroon	very fine	1	284283

Non-woven web roll, waterproof

## **NRO 500**





1 Toper ties					
Bonding agent Resin					
Grain	SiC				
Non-woven material type	Soft non-woven material				

Applications:	
Stainless steel	•
Plastic	•
Paint/Varnish/Filler	•
Metals	•

Advantages: Very good adaptation to surface contours - No clogging - Ideal for smoothing, cleaning, roughening and for general surface finishing - Can be used wet and dry

•

Wood

	Width x Length in mm	Colour	Grade	Packing unit/pcs.	Cat. number
•	100 x 10000	grey	ultra fine	1	284284
	150 x 10000	grey	ultra fine	1	284282



Non-woven web hand pad, waterproof

## **NPA 400**





Properties		Applications:			
Bonding agent	Resin	Stainless steel	•	Plastic	•
Grain	Aluminium oxide	Metals	•	A	
Non-woven	Soft non-woven	Wood	•		
material type	material	Paint/Varnish	•		

**Advantages:** Outstanding for surface finishing, e.g. adaptation to an existing surface scratch pattern - Can be used wet and dry

Width x Length in mm	Colour	Grade	Packing unit/pcs.	Cat. number
152 x 229	maroon	medium	20	284290
152 x 229	maroon	fine	20	287115
152 x 229	dark green	very fine general purpose	20	284277
152 x 229	maroon	very fine	20	284278

Non-woven web hand pad, waterproof

## **NPA 500**





#### **Properties**

Bonding agent Resin					
Grain	SiC				
Non-woven material type	Soft non-woven material				

#### **Applications:**

Paint/Varnish	•
Plastic	•
Stainless steel	•
Metals	•

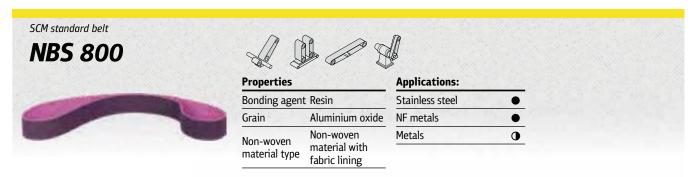
**Advantages:** Outstanding for surface finishing, e.g. adaptation to an existing surface scratch pattern - Can be used wet and dry

•

Wood

_	Width x Length in mm	Colour	Grade	Packing unit/pcs.	Cat. number
	152 x 229	grey	ultra fine	20	284279
	152 x 229	white	without grain	20	342850

Belts / Discs

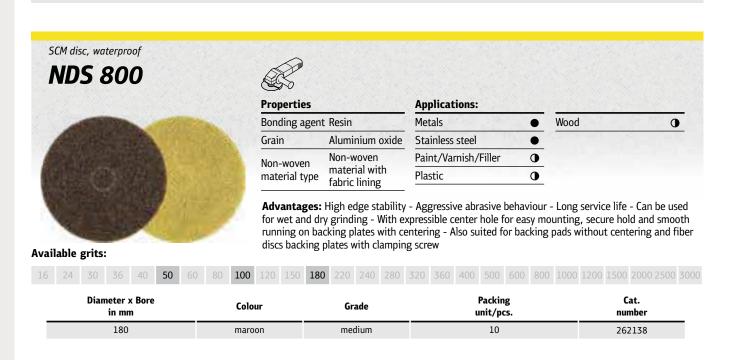


**Advantages:** Special product for surface finishing with hand-operated machines (except hand tool belt grinders) and stationary machines - Ideal for removal of discolorations, for light deburring, leveling, matte finishing and roughening - Minimal clogging - Long service life - Suitable for dry and wet grinding

All sizes and minimum purchasing quantities available on request



All sizes and minimum purchasing quantities available on request



Backing pads



Self-fastening backing pad for SCM discs

## NDS 555





Advantages: Good adhesion for non-woven web discs - For medium-duty grinding and polishing

Diameter in mm	Thread/Shaft	Max. RPM	Packing unit/pcs.	Cat. number
115	thread M14	13300 rpm	1	164100

Self-fastening backing pad for SCM discs with center hole

## NDS 555 C





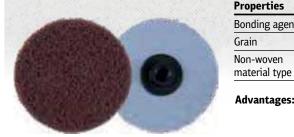
**Advantages:** Easy and always centric positioning of the non-woven web discs - Good adhesion due to special self-fastening hooks - Less vibrations, stable running - No loosening of the discs, even with decreasing adhesion - Adaptable, for surfaces and light contours

Diameter in mm	Thread/Shaft	Suitable for	Max. RPM	Packing unit/pcs.	Cat. number
115	thread M14	Diameter 115 x 22	13300 rpm	1	358126
125	thread M14	Diameter 125 x 22	12200 rpm	1	358127

**Quick Change Discs** 

Non-woven web quick change disc

**QMC 400** 





## Bonding agent Resin Grain Aluminium oxide Non-woven Soft non-woven

material

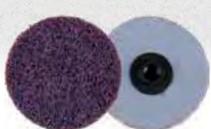
Applications:	
Paint/Varnish/Filler	
Stainless steel	
Metals	

**Advantages:** Suitable for surface finishing work - For cleaning work on metals and painted surfaces

Diameter in mm	Colour	Grade	Packing unit/pcs.	Cat. number
50	bordeaux	medium	50	295392
50	bordeaux	fine	50	295393
50	bordeaux	very fine	50	295394

SCM quick change disc

QMC 800





#### Properties

Bonding agent	t Resin
Grain	Aluminium oxide
Non-woven material type	Non-woven material with

#### **Applications:**

Metals	•
Stainless steel	•
Paint/Varnish/Filler	•

**Advantages:** For light deburring - For removal of rust and paint - Long life due to hard, stable quality of surface conditioning material

Diameter in mm	Colour	Grade	Packing unit/pcs.	Cat. number
50	grey	coarse	50	295410
50	violet	medium	50	295411
50	blue	very fine	50	295412
76	grey	coarse	25	295416
76	violet	medium	25	295417
76	blue	very fine	25	295418

Backing pads



Backing pad

**QMC 555** 

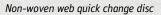




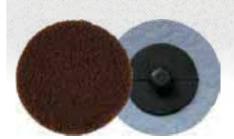
**Advantages:** For secure mounting of QMC discs - Optimized abrasive properties (aggressiveness, surface quality) due to three hardnesses - Easy differentiation of the hardnesses through coloured rings - Fixing spindle can be unscrewed, therefore the use on angle grinder or with adapter QCA 555 is possible via 1/4"-20 thread

Diameter in mm	Thread/Shaft	Density	Colour	Max. RPM	Packing unit/pcs.	Cat. number
25	Shaft 6 mm	soft	grey	30000 rpm	1	300056
25	Shaft 6 mm	medium	blue	30000 rpm	1	295422
38	Shaft 6 mm	soft	grey	30000 rpm	1	300058
38	Shaft 6 mm	medium	blue	30000 rpm	1	295424
38	Shaft 6 mm	firm	red	30000 rpm	1	300059
50	Shaft 6 mm	soft	grey	30000 rpm	1	300060
50	Shaft 6 mm	medium	blue	30000 rpm	1	295426
50	Shaft 6 mm	firm	red	30000 rpm	1	295427
76	Shaft 6 mm	soft	grey	20000 rpm	1	300061
76	Shaft 6 mm	medium	blue	20000 rpm	1	295430
76	Shaft 6 mm	firm	red	20000 rpm	1	295431

**Quick Change Discs** 



**QRC 400** 





#### **Properties**

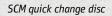
Bonding agent Resin				
Grain	Aluminium oxide			
Non-woven material type	Soft non-woven material			

#### **Applications:**

Paint/Varnish/Filler	•
Stainless steel	•
Metals	•

**Advantages:** Suitable for surface finishing work - For cleaning work on metals and painted surfaces

#### All sizes and minimum purchasing quantities available on request



**QRC 800** 





#### **Properties**

Bonding agent	t Resin
Grain	Aluminium oxide
Non-woven material type	Non-woven material with

#### **Applications:**

Metals	•
Stainless steel	•
Paint/Varnish/Filler	•

**Advantages:** For light deburring - For removal of rust and paint - Long life due to hard, stable quality of surface conditioning material

Diameter in mm	Colour	Grade	Packing unit/pcs.	Cat. number
50	grey	coarse	50	295413
50	violet	medium	50	295414
50	blue	very fine	50	295415
76	grey	coarse	25	295419
76	violet	medium	25	295420

Backing pads



Unitized Quick Change Discs

## **QRC** 500





Properties Bonding agent Resin		Applications:		
		Stainless steel	•	NF metals
Grain	Aluminium oxide/SiC	Titanium	•	Aluminium
		Steel	•	
Non-woven material type	Highly compacted material made of compressed non-woven web layers	High alloy steel	•	

**Advantages:** Very long service life - Very fine, constant and brilliant surface pattern - Versatile, depending on density and structure (removal to polishing) - Very suitable for hard-to-reach areas (e.g. inside corners) - Can be used on the face and surface - Free of metallic ingredients

Diameter in mm	Colour	Grade	Density	Packing unit/pcs.	Cat. number
51	grey	fine	2 SF soft	10	358978
51	grey	fine	3 SF medium soft	10	358981
51	grey	fine	6 SF hard	10	358979
51	maroon	coarse	8 AC very hard	10	358980
76	grey	fine	2 SF soft	5	358982
76	grey	fine	3 SF medium soft	5	358985
76	grey	fine	6 SF hard	5	358983
76	maroon	coarse	8 AC very hard	5	358984

Quick Change Disc, Clean and Strip

## **QRC 200 HD**





rroperties						
Bonding agent Resin						
Grain	Ceramic coated aluminium oxide					
Non-woven material type	Clean and strip material					

Applications:	
Stainless steel	•
Steel	•
NF metals	•
Paint/Varnish/Filler	•

**Advantages:** Hard, aggressive cleaning fleece for heavy-duty use - Open structure, no clogging and cool grinding - Fast work progress and long service life - No change in workpiece geometry in metal applications - Can be used on the face and surface

_	Diameter in mm	Colour	Grade	Packing unit/pcs.	Cat. number
	51	green	extra coarse	10	358993
	76	green	extra coarse	5	358994

Backing pads

Backing pad

**QRC 555** 





**Advantages:** For secure mounting of QRC discs - Optimized abrasive properties (aggressiveness, surface quality) due to two hardnesses - Easy differentiation of the hardnesses through coloured rings - Fixing spindle can be unscrewed, therefore the use on angle grinder or with adapter QCA 555 is possible via 1/4"-20 thread

Diameter in mm	Thread/Shaft	Density	Colour	Max. RPM	Packing unit/pcs.	Cat. number
25	Shaft 6 mm	medium	blue	30000 rpm	1	295423
38	Shaft 6 mm	medium	blue	30000 rpm	1	295425
50	Shaft 6 mm	medium	blue	30000 rpm	1	295428
50	Shaft 6 mm	firm	red	30000 rpm	1	295429
76	Shaft 6 mm	medium	blue	20000 rpm	1	295432
76	Shaft 6 mm	firm	red	20000 rpm	1	295433

Adapter for quick change disc backing pad

QCA 555



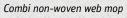


**Advantages:** Quick Change Disc Adapter with M14 female thread and 1/4"-20 male thread - Allows use of quick change discs on a regular angle grinder

Width x Length Thread/Shaft in mm		Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
20 x 30	thread M14	80 m/s	75400 rpm	1	308693

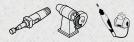
Abrasive mop





## **NCW 600**





Properties	
Bonding agent	t Resin
Grain	Aluminium oxide
Non-woven material type	Soft non-woven material + abrasive cloth flaps

#### **Applications:**

Stainless steel	•
Metals	•
Plastic	0

**Advantages:** Combination of non-woven and abrasive cloth flaps for a fine surface scratch pattern - Optimal wear properties - High removal rate - Long service life

Diameter x Width x Bore in mm	Grit	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
165 x 50 x 43,1	100	medium	maroon	32 m/s	3700 rpm	3	258910
165 x 50 x 43,1	180	very fine	maroon	32 m/s	3700 rpm	3	258912

Use only with mounting plate SMD 612 (page 137)!

Non-woven web mop

## **NFW 600**





#### **Properties**

Bonding agent	Resin
Grain	Aluminium oxide
Non-woven material type	Soft non-woven

**Applications:** 

Metals	•
Stainless steel	•

**Advantages:** Even finish throughout the entire service life - Optimal tool for creating a matt or satin finish

Diameter x Width x Bore in mm	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
200 x 50 x 68,2	coarse	maroon	32 m/s	3050 rpm	2	258901
200 x 50 x 68,2	medium	maroon	32 m/s	3050 rpm	2	258902
200 x 50 x 68,2	very fine	maroon	32 m/s	3050 rpm	2	258903

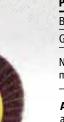
Use only with mounting plate SMD 612 (page 137)!

Abrasive mop

Combi non-woven web drum

## **NCW 600 S**





Properties	
Bonding agent	t Resin
Grain	Aluminium oxide
Non-woven material type	Soft non-woven material + abrasive cloth flaps

Applications:		
Stainless steel	380	•
Metals	-11/4	•
Plastic		•

**Advantages:** High removal rate and fine surface scratch pattern due to combination of non-woven and abrasive cloth flaps - Long service life

Diameter x Width x Bore in mm	Grit	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
100 x 50 x 19	80	coarse	maroon	19 m/s	3700 rpm	3	259896
100 x 50 x 19	100	medium	maroon	19 m/s	3700 rpm	3	259897
100 x 50 x 19	150	medium	maroon	19 m/s	3700 rpm	3	259898
100 x 50 x 19	180	very fine	maroon	19 m/s	3700 rpm	3	259899
100 x 100 x 19	80	coarse	maroon	19 m/s	3700 rpm	1	258905
100 x 100 x 19	100	medium	maroon	19 m/s	3700 rpm	1	258906
100 x 100 x 19	150	medium	maroon	19 m/s	3700 rpm	1	258907
100 x 100 x 19	180	very fine	maroon	19 m/s	3700 rpm	1	258908
110 x 100 x 19	80	coarse	maroon	19 m/s	3300 rpm	1	320246
110 x 100 x 19	100	medium	maroon	19 m/s	3300 rpm	1	320247
110 x 100 x 19	150	medium	maroon	19 m/s	3300 rpm	1	320248
110 x 100 x 19	180	very fine	maroon	19 m/s	3300 rpm	1	320249

Non-woven web drum

## **NFW 600 S**





Applications:	
Applications:	

**Advantages:** Even finish throughout the entire service life - Optimal tool with high quality non-woven flaps for creating a matt or satin finish

Diameter x Width x Bore in mm	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
100 x 50 x 19	coarse	maroon	19 m/s	3700 rpm	3	259853
100 x 50 x 19	medium	maroon	19 m/s	3700 rpm	3	259854
100 x 50 x 19	very fine	maroon	19 m/s	3700 rpm	3	259895
100 x 100 x 19	coarse	maroon	19 m/s	3700 rpm	1	258895
100 x 100 x 19	medium	maroon	19 m/s	3700 rpm	1	258896

Continuation  $\rightarrow$ 

#### Abrasive mop



#### ightarrow Continuation of NFW 600 S, Non-woven web drum

Diameter x Width x Bore in mm	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
100 x 100 x 19	very fine	maroon	19 m/s	3700 rpm	1	258897
110 x 100 x 19	coarse	maroon	19 m/s	3300 rpm	1	320253
110 x 100 x 19	medium	maroon	19 m/s	3300 rpm	1	320254
110 x 100 x 19	very fine	maroon	19 m/s	3300 rpm	1	320255

Combi non-woven web spindle mop

## **NCS** 600





## **Properties**

Bonding agent Resin								
Grain	Aluminium oxide							
Non-woven material type	Soft non-woven material + abrasive cloth flaps							

#### **Applications:**

Stainless steel	•
Metals	•
Plastic	•

**Advantages:** High removal rate and fine surface scratch pattern due to combination of non-woven and abrasive cloth flaps - Long service life

Diameter x Width x Shaft in mm	Grit	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
50 x 30 x 6	100	medium	maroon	32 m/s	12200 rpm	10	258933
50 x 30 x 6	240	very fine	maroon	32 m/s	12200 rpm	10	258935
60 x 50 x 6	100	medium	maroon	32 m/s	10200 rpm	10	258941
60 x 50 x 6	240	very fine	maroon	32 m/s	10200 rpm	10	258943
80 x 50 x 6	60	coarse	maroon	32 m/s	7600 rpm	10	258944
80 x 50 x 6	100	medium	maroon	32 m/s	7600 rpm	10	258945

Abrasive mop / Abrasive mop discs

Non-woven web spindle mop

## **NFS** 600





## Properties

Bonding agent Resin							
Grain	Aluminium oxide						
Non-woven material type	Soft non-woven material						

**Applications:** 

Metals	•
Stainless steel	•

**Advantages:** Even finish throughout the entire service life - Optimal tool with high quality non-woven flaps for creating a matt or satin finish

Diameter x Width x Shaft in mm	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number	
50 x 30 x 6	coarse	maroon	32 m/s	12200 rpm	10	258917	
80 x 50 x 6	coarse	maroon	32 m/s	7600 rpm	10	258926	
80 x 50 x 6	medium	maroon	32 m/s	7600 rpm	10	258927	
80 x 50 x 6	very fine	maroon	32 m/s	7600 rpm	10	258928	





## Properties

Grain	Aluminium oxide
Non-woven material type	Non-woven material with fabric lining
Backing plat	e Glass fibre
Design	Convex 12°



•
•

 $\begin{tabular}{ll} \bf Advantages: High quality non-woven mop disc for stainless steel finish work - Optimal results when used on variable speed angle grinders - Three grades \\ \end{tabular}$ 

Diameter x Bore in mm	Form	Grade	Colour	Max. operating speed	Max. RPM	Recommended operating speed	Recommended RPM	Packing unit/pcs.	Cat. number
115 x 22,23	4	coarse	brown	80 m/s	13300 rpm	42 m/s	7000 rpm	5	278495
115 x 22,23	4	medium	maroon	80 m/s	13300 rpm	42 m/s	7000 rpm	5	278496
115 x 22,23	4	very fine	green	80 m/s	13300 rpm	42 m/s	7000 rpm	5	278497

Abrasive mop discs / Unitized discs







## PropertiesApplications:GrainAluminium oxideStainless steel

Grain	Aluminium oxide
Non-woven material type	Non-woven material with fabric lining+ abrasive cloth flaps
Backing plate	Glass fibre
Design	Convex 12°

**Advantages:** High-quality combi surface conditioning mop disc - Specially suited for machining of WIG weld seams on stainless steel components - Even finish throughout the entire service life - Stock removal and finishing in one step

Diameter x Bore in mm	Form	Grit	Grade	Colour	Max. operating speed	Max. RPM	Recommended operating speed	Recommended RPM	Packing unit/pcs.	Cat. number
115 x 22,23	4	60	coarse	brown	80 m/s	13300 rpm	42 m/s	7000 rpm	5	312556
115 x 22,23	4	80	medium	maroon	80 m/s	13300 rpm	42 m/s	7000 rpm	5	312557
115 x 22,23	4	120	very fine	green	80 m/s	13300 rpm	42 m/s	7000 rpm	5	312558

Unitized disc

## **MFW 600**







i Toper ties	
Bonding agent	Resin
Grain	SiC
Non-woven material type	Highly compacted material made of compressed non-woven web

layers

Applications:
Steel

Stainless steel

NF metals

**Advantages:** Special product for finishing stainless steel weld seams - 4 different grades for material removal up to high gloss

Diameter x Width x Bore in mm	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
125 x 6 x 22	coarse	red	59 m/s	9000 rpm	5	342218
125 x 6 x 22	medium	grey	59 m/s	9000 rpm	5	342219
125 x 6 x 22	fine	grey	39 m/s	5900 rpm	5	342237
150 x 6 x 22	coarse	red	47 m/s	6000 rpm	5	311867
150 x 6 x 22	medium	grey	47 m/s	6000 rpm	5	311868
150 x 6 x 22	fine	grey	47 m/s	6000 rpm	5	311869

Unitized discs

High performance non-woven web wheels

## MFW 600 Set





Propertie	s	Applications
Bonding a	gent Resin	Steel
Grain	SiC	Stainless steel
		NF metals

**Advantages:** Special product for finishing stainless steel weld seams - 4 different grades for material removal up to high gloss - Set, all grades

Diameter x Width x Bore in mm	Packing unit/pcs.	Cat. number	
150 x 6 x 22	1	313884	

Unitized disc

## **NUD 500**





Properties	
Bonding agent	Resin
Grain	SiC
Non-woven material type	Highly compacted material made of compressed non-woven web layers
Backing plate	Glass fibre
Design	Flat

#### **Applications:**

Alloyed steels	•
High alloy steel	•
Non-ferrous metals	•
Light metals	•

Chrome and nickel steels	•
Steel	•
Titanium	•

**Advantages:** For cleaning and pre-polishing surfaces - For smoothing weld seams - Fewer work steps - Precise cleaning, clearing and finishing of surfaces - Achieves an ultra-low scratch depth on the processed material

Diameter x Width x Bore in mm	Grade	Colour	Max. operating speed	Max. RPM	Recommended RPM	Packing unit/pcs.	Cat. number
115 x 13 x 22,23	coarse	grey	63 m/s	10450 rpm	5800 rpm	5	337864
115 x 13 x 22,23	medium	grey	63 m/s	10450 rpm	5800 rpm	5	337865
115 x 13 x 22,23	very fine	grey	63 m/s	10450 rpm	5800 rpm	5	337866
125 x 13 x 22,23	coarse	grey	63 m/s	9600 rpm	5300 rpm	5	337861
125 x 13 x 22,23	medium	grey	63 m/s	9600 rpm	5300 rpm	5	337862
125 x 13 x 22,23	very fine	grey	63 m/s	9600 rpm	5300 rpm	5	337863

Convolute wheels



Non-woven convolute wheels

## **NCO 700 DB**





Properties	
Bonding agent	Resin
Grain	SiC
Non-woven material type	Highly com- pacted material made of wound non-woven web layers

Applications:		200
Stainless steel	100	•
Titanium/Alloy	113	•

Steel ● High alloy steel ●

NF metals	•
Aluminium	•
	•

**Advantages:** Open structure, no clogging - Excellent satin finish with very low surface roughness - Good service life, consistent, reproducible finish - Removal of medium (7SF) to heavy burrs (9SF) without secondary burr formation - Cost-effective version with excellent price/performance ratio for applications with lower rotational speeds

Diameter x Width x Bore in mm	Colour	Grade	Density	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
152,4 x 25,4 x 25,4	grey	fine	7 SF	47 m/s	6000 rpm	2	366498
152,4 x 25,4 x 25,4	grey	fine	8 SF	47 m/s	6000 rpm	2	366499
152,4 x 25,4 x 25,4	grey	fine	9 SF	47 m/s	6000 rpm	2	366500
203,2 x 51 x 76,2	grey	fine	7 SF	36 m/s	3450 rpm	1	367522
203,2 x 51 x 76,2	grey	fine	8 SF	36 m/s	3450 rpm	1	367523
203,2 x 51 x 76,2	grey	fine	9 SF	36 m/s	3450 rpm	1	367524

Non-woven convolute wheels

## **NCO 710 DB**





Pro	perf

Bonding agent	Resin
Grain	SiC
Non-woven material type	Highly com- pacted material made of wound non-woven web lavers

Α	DD	lic	ati	on	s:

Stainless steel	•		
Titanium/Alloy	•		
Steel	•		
High alloy steel	•		

NF metals	•
Aluminium	•
Plastic	0

**Advantages:** Open structure, no clogging - Produces an excellent satin finish with very low surface roughness - Long service life, consistent and reproducible finish - Removal of medium (7SF) to heavy burrs (9SF) without secondary burr formation - Premium version with excellent service life and performance

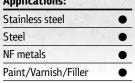
Diameter x Width x Bore in mm	Colour	Grade	Density	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
152,4 x 25,4 x 25,4	grey	fine	7 SF	47 m/s	6000 rpm	2	366877
152,4 x 25,4 x 25,4	grey	fine	8 SF	47 m/s	6000 rpm	2	366907
152,4 x 25,4 x 25,4	grey	fine	9 SF	47 m/s	6000 rpm	2	366909
203,2 x 51 x 76,2	grey	fine	7 SF	47 m/s	4500 rpm	1	367525
203,2 x 51 x 76,2	grey	fine	8 SF	47 m/s	4500 rpm	1	367526
203,2 x 51 x 76,2	grey	fine	9 SF	47 m/s	4500 rpm	1	367527

Clean and strip discs





Properties	
Bonding agent	Resin
Grain	SiC
Non-woven material type	Clean and strip material
Backing plate	Glass fibre
Design	Flat



blueing - No clogging due to open structure - For the removal of paint and rust

Design Flat

Advantages: Special SiC non-woven web for cleaning of surfaces and removal of heat tinting/

Diameter x Bore in mm	Form	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number	
115 x 22,23		black	63 m/s	10450 rpm	5	259043	

Clean and strip disc, heavy duty **NCD 200 HD Properties Applications:** Bonding agent Resin Stainless steel Steel Grain Ceramic coated aluminium oxide NF metals Non-woven Clean and strip Paint/Varnish/Filler material type material Backing plate Glass fibre

**Advantages:** Hard, aggressive non-woven version for higher loads - Open structure - No clogging - Cool grinding - Fast work progress and long service life - No change in workpiece contour

Diameter x Bore in mm	Form	Grade	Colour	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 22,23		extra coarse	green	63 m/s	10450 rpm	5	358003
125 x 22,23		extra coarse	green	63 m/s	9600 rpm	5	358004

Flat

Design

**Power Wheel** 



Clean and Strip Power Wheel, extra coarse

## PW 2000





and I ample	10
Properties	
	100

Bonding agent	Resin
Grain	SiC
Non-woven material type	Clean and strip material

<b>Applications:</b>
----------------------

Paint/Varnish/Filler	. •
Plastic	•
Metals	•
Stone	•

Advantages: Special non-woven web, ideal for removing heat tinting, oxide layers, rust and paint residue - For cleaning of weld seams - No clogging

Diameter x Width x Bore in mm	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
100 x 13 x 13	40 m/s	7600 rpm	10	194625
150 x 13 x 13	40 m/s	5000 rpm	10	194626

Fixing spindle

## SD 2000



 $\textbf{Advantages:} \ \text{For secure mounting on drilling machines, flexible shafts and stroke grinders and optimal true running of the grinding tool PW 2000$ 

Diameter in mm	Suitable for	Packing unit/pcs.	Cat. number
6	1 wheel Ø 100 - Ø 200	1	194629
8	1-2 wheels Ø 100 - Ø 200	1	194632





## **About the product**

Since their market launch, the Klingspor abrasive mop disc has successfully taken the place of the grinding disc in many areas of surface finishing.

The performance of the abrasive mop disc, with its fan-shaped radial arrangement of cloth grinding flaps, far exceeds that of other abrasive products.

Klingspor abrasive mop discs are made of zirconia alumina, ceramic, or aluminium oxide coated flaps fastened to glass fibre-reinforced or plastic backing plates.

The even arrangement of the flaps guarantees high flexibility, constant high grinding performance and low vibrations.

## Minimum order quantities for made to order items

Diameter	Minimum order quantities
up to 150 mm	320 pieces
180 mm	160 pieces

				Mat	erial		-	Applicatio	n			
Туре		Steel	Stainless steel	High alloy stainless steel	NF metals	Aluminium	Wood	Finish grinding	Welded seam work	Edge work; bevelling	Deburring, levelling	Page
SMT 314 EXTRA	4.	•			•	•	•		•	•		178
SMT 324 EXTRA		•	•	•				•				179
SMT 324 EXTRA	4	•	•	•					•	•		179
SMT 325 EXTRA		•	•	•				•				*
SMT 325 EXTRA	4-	•	•	•					•	•		*
SMT 624 SUPRA	4	•	•	•					•	•		179
SMT 626 SUPRA	4	•	•	•					•	•	•	181
SMT 628 SUPRA		•	•	•				•				180
SMT 636 SUPRA			•	•	•	•		•				*
SMT 636 SUPRA	4.		•	•	•	•			•	•		•
SMT 644 SUPRA		•	•	•				•				182
SMT 644 SUPRA	4.	•	•	•					•	•		182
SMT 645 SUPRA		•	•	•				•				•
SMT 674 SUPRA	4.	•	•						•			182
SMT 674 SUPRA		•	•					•				182
SMT 924 SPECIAL	4.	•	•						•	•	•	183
SMT 925 SPECIAL		•	•	•				•				•
SMT 925 SPECIAL	4.	•	•	•					•	•		•
SMT 926 SPECIAL	4.	•	•	•					•	•	•	185
SMT 974 SPECIAL	4.	•	•						•	•	•	184
SMT 975 SPECIAL	4.	•	•						•	•	•	184
SMT 976 SPECIAL	4.		•		•	•			•	•	•	186
SMT 996 SPECIAL			•	•				•				186
SMT 996 SPECIAL	4-		•	•					•	•	•	186
MST 624 SUPRA	4.	•	•								•	187
MST 924 SPECIAL	4-	•	•								•	187

<sup>=</sup> main application
• = possible application
\* available on request

## Applications guide

#### 1. Red bar

Label indicates the max. peripheral speed of 80 m/s

#### 2. Safety recommendations

oSa label

#### 3. Dimensions

Product dimensions in mm and inches

#### 4. Punch ring

Manufacturer information, no expiry date

- 5. Grit size
- 6. Cat. number

#### 7. Safety recommendations

Language neutral pictograms

#### 8. Product group Extra/Supra/Special

9. Product name

Type



## **Product groups**

Klingspor offers three integrated product groups. For each user and application we offer the right abrasive mop disc. All abrasive mop discs are manufactured according to the applicable standards and guarantee the highest degree of safety.





Ideal price-performance ratio for universal implementation. Excellent grinding results on different steel materials.





Professional products with excellent service life and high stock removal rate. Aggressive grinding and long service life



SPECIAL

High performance products for special industrial and trade applications. High performance and service life even when used intensively.

Applications guide



#### **Product structure**

The three abrasive mop disc components are perfectly integrated to achieve maximum performance.

#### 1. Grinding flaps

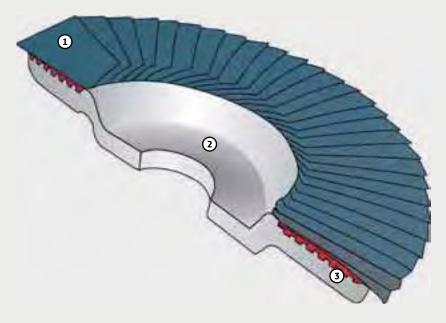
Klingspor has developed special coated abrasives for its abrasive mop discs. The grinding tool is perfect for use with high speed angle grinders (80 m/s) and corresponding applications. This ensures top grinding performance and long service life.

#### 2. Backing plate

Klingspor uses two different backing plate types to produce abrasive mop discs. The first one is the most popular on the market made of glass fibre; the second one is made of plastic.

#### 3. Glue

The glue (adhesive) is the joint between the backing plate and the grinding flaps. It ensures that the grinding flaps cannot come off the backing plate if used properly. It also ensures safety far above the guidelines of the oSa directives and the EN 13743 safety standard.



#### **Form**

The convex abrasive mop disc grinds a narrower surface than the flat abrasive mop disc. The more selective use of the convex disc achieves a greater stock removal rate per time unit as compared to the flat mop disc. The convex abrasive mop disc is particularly suited to working on edges and welded seams. The flat disc is primarily used for flat and surface grinding.



convex





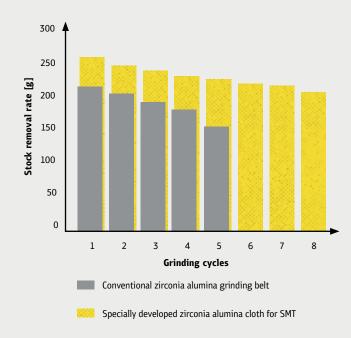
flat



Applications guide

#### **Coated abrasives**

Compared to belt applications the coated abrasives for abrasive mop discs withstand much higher loads. On the one hand, the cutting speed of abrasive mop discs is approximately 2 to 2.5 times faster than the cutting rate of a belt application, on the other hand the backing must wear down to ensure that new, unused grit is used. Klingspor has developed special coated abrasives specifically for this product group. These are developed specifically for high powered angle grinders (80 m/s) and ensures top grinding performance and long service life (see diagram).



#### 1. Zirconia alumina cloth

Zirconia alumina grit, heavy cotton polyester cloth, best performance with high power machines

#### 2. Zirconia alumina cloth

Aggressive zirconia alumina grit, cotton cloth, good stock removal with angle grinders of all performance classes

#### 3. Zirconia alumina + Multibond

Self-sharpening zirconia alumina grit, cotton backing, especially for cool grinding on stainless steel

#### 4. Aluminium oxide cloth

Durable grit aluminium oxide, cotton cloth, for use with metal and NF-metals

#### 5. Ceramic aluminium oxide + Multibond

Ceramic high performance grit, robust polyester backing high performance for stainless steel work, cool grinding on stainless steel surfaces

#### 6. Ceramic aluminium oxide

Ceramic high performance grit, robust polyester backing, high performance for steel work

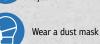


## The safe use of Klingspor abrasives

Klingspor abrasive mop discs are manufactured according to the oSa and EN13743 standards, this ensures the highest level of user safety.



Wear safety goggles or glasses to protect the





Use ear protectors



Observe safety instructions

Wear safety gloves to protect

hands



Do not use for wet grinding



Correctly mounted



Incorrectly mounted

## The Klingspor *CEVOLUTION*

The four new abrasive mop discs in the Klingspor range all have one thing in common – they all feature the new CEVOLUTION technology.

Klingspor products with CEVOLUTION technology are more powerful than comparable other ceramic abrasives. In most applications the new products offer more aggressiveness and an extended service life.

The extra performance of products with CEVOLUTION technology results from the combination of an aggressive, self-sharpening ceramic grit with the unique Klingspor know-how regarding grit mixture, grit sizes, grit quantities, formulation of pre- and postcoat, multi-bond as well as special manufacturing processes.

All of these individual elements are specifically matched by the Klingspor developers for each different mop disc variant/type. This results in optimised products that will meet the requirements of the metalworking professional.

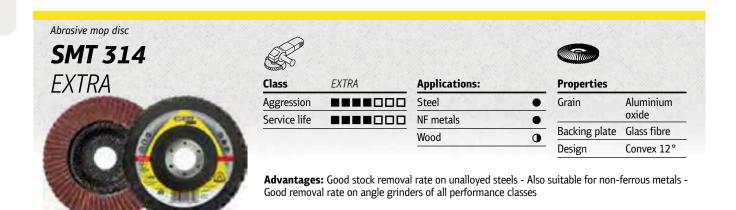
# Four newcomers for Klingspor

Klingspor expands the abrasive mop disc range

SMT 975 - SMT 674 - SMT 976 - SMT 974 - the durable one the efficient one the cool one the solid one

▼ Microscope image of one of the new abrasives with CEVOLUTION technology

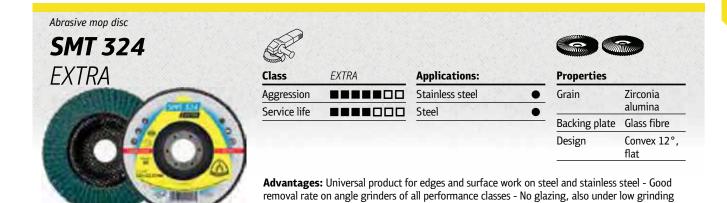




#### Available grits:

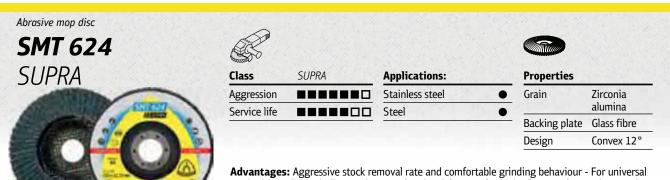
16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400		600		1000	1200	1500	2000 2500	3000	
		Diamet in	er x B mm	ore		F	orm		Gı	rit		Max	. oper	_			Max. RPM				acking nit/pcs			Cat. number		
		115 >	( 22,2	3		-			3	6			80 m/	S		1:	3300 r	pm			10			322808		
		115 >	(22,2	3		-			4	0			80 m/	S		13	3300 r	pm			10			322809		
		115 >	(22,2	3		-			6	0			80 m/	S		13	3300 r	pm			10			322811		
		115 >	(22,2	3		-			8	0			80 m/	S		13	3300 r	pm			10			322812		
		115 >	(22,2	3		-			12	20			80 m/	S		13	3300 r	pm			10			322813		
		125 >	(22,2	3		-			3	6			80 m/	S		13	2200 r	pm			10			322814		
		125 >	(22,2	3		-			4	0			80 m/	S		13	2200 r	pm			10			322815		
		125 >	(22,2	3		-			6	0			80 m/	S		13	2200 r	pm			10			322817		
		125 >	(22,2	3		-			8	0			80 m/	S		13	2200 r	pm			10			322818		
		125 >	(22,2	3		4			12	20			80 m/	S		13	2200 r	pm			10			322819		
		180 x 22,23							4	0	80 m/s				8500 rpm				10				322821			
	180 x 22,23 <b>■</b> ■								6	0	80 m/s						500 rp	om	n 10					322822		
		180 >	(22,2	3		-			8	0	80 m/s						8500 rpm				10					





#### Available grits:

16	24	30	36	40	50	0 60 80 100			60   80   100   120   150				150	0 180 220 240 280 320						0 360 400 500 6				1000	1200	1500	3000
	C	iamet in	er x B mm	ore		F	orm		Gr	it			. opera	_			Max. RPM				acking it/pcs	•		Cat numb			
		115	x 22,2	3		4			4	0			80 m/	S		1	3300 ı	pm			10			_			
		115	x 22,2	3		4	4		6	0			80 m/	S	13300 rpm						10		321511				
		115	x 22,2	3		4			8	0			80 m/	S		1	3300 ı	pm			10		321513				
		125	x 22,2	3	4				4	0			80 m/	S		12200 rpm				10				321510			
		125	x 22,2	3		4				60			80 m/s					12200 rpm				10					
		125 x 22,23						80			80 m/s					12200 rpm			10			321514					



**Advantages:** Aggressive stock removal rate and comfortable grinding behaviour - For universal use in demanding grinding work on steel and stainless steel - Optimal removal rate when used on high power angle grinders

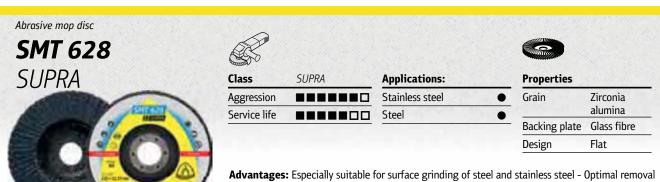
#### **Available grits:**

16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400		600		1000	1200	1500	2000	2500	3000	
		Diameto in	er x B mm	ore		F	orm		Gi	rit		Мах	. oper				Max RPM				acking	•		Cat numl			
_		100	x 16			-			3	6			80 m/	's		1	.5300	rpm			10			3227	58	_	
		100	x 16			4			4	0			80 m/	's		1	.5300	rpm			10			3227	'59		
		100	x 16			4			6	0			80 m/	's		1	.5300	rpm			10			3227	60		
		100	x 16			4			8	80			80 m/	's		1	.5300	rpm			10			3227	61		
		100	x 16			4	4			20			80 m/	's	15300 rpm					10			322762				
		115 x	22,23	3		4			36			80 m/s			13300 rpm				10			3227	64				
		115 x	22,23						40				80 m/s					13300 rpm				10			322765		

**Continuation** →

#### → Continuation of SMT 624 Supra, Abrasive mop disc

Diameter x Bore in mm	Form	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 22,23	4	50	80 m/s	13300 rpm	10	322766
115 x 22,23	4	60	80 m/s	13300 rpm	10	322767
115 x 22,23	4	80	80 m/s	13300 rpm	10	322768
115 x 22,23	4	120	80 m/s	13300 rpm	10	322769
125 x 22,23	4	36	80 m/s	12200 rpm	10	322771
125 x 22,23	4	40	80 m/s	12200 rpm	10	322772
125 x 22,23	4	50	80 m/s	12200 rpm	10	322773
125 x 22,23	4	60	80 m/s	12200 rpm	10	322774
125 x 22,23	4	80	80 m/s	12200 rpm	10	322775
125 x 22,23	4	120	80 m/s	12200 rpm	10	322776
150 x 22,23	4	40	80 m/s	10200 rpm	10	322778
150 x 22,23	4	60	80 m/s	10200 rpm	10	322779
150 x 22,23	4	80	80 m/s	10200 rpm	10	322780
180 x 22,23	4	36	80 m/s	8500 rpm	10	322782
180 x 22,23	4	40	80 m/s	8500 rpm	10	322783
180 x 22,23	4	50	80 m/s	8500 rpm	10	322784
180 x 22,23	4	60	80 m/s	8500 rpm	10	322785
180 x 22,23	4	80	80 m/s	8500 rpm	10	322786
180 x 22,23	4	120	80 m/s	8500 rpm	10	322787

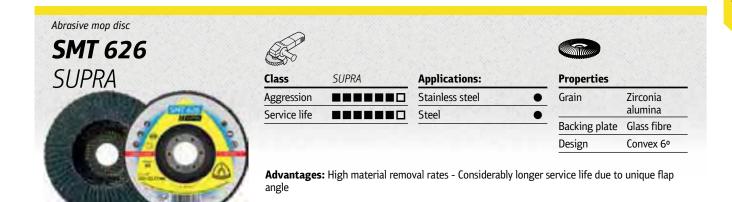


rate when used on high power angle grinders - Aggressive stock removal rate and comfortable grinding behaviour

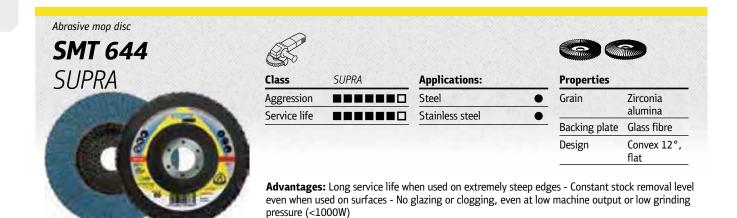
#### **Available grits:**

16	24	30	36	40	60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500 300		
	D	Diamet in	er x Bo mm	ore	 F	orm		G	rit		Max	c. opei spee				Max RPM			acking it/pcs	•	Cat. number				
		115 x	22,23	3	_			4	10			80 m	/s		:	13300	rpm		10			32279	90		
		115 x	22,23	3	_			6	0			80 m/s			:	13300	rpm		10			32279	92		
		115 x	22,23	3	_			8	80			80 m	0 m/s			13300	rpm		10			32279	93		
		115 x	22,23	3	_			1:	20			80 m	/s		:	13300	rpm		10			32279	94		
		180 x	22,23	3	_	-		36				80 m	/s		8500 rpm				10			32280	)2		
		180 x	22,23	3	_			4	10			80 m	/s	8500 rpm					10			)3			
		180 x	22,23	3	_	-		$\epsilon$	0		80 m/s				8500 rpm				10			)5			
		180 x	22,23	3	-	-		8	80		80 m		n/s			8500 r	pm		10			32280	06		



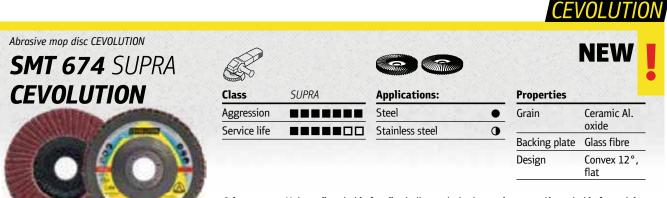


16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000 2500	3000
		Diamet in	er x B mm	ore		ı	orm		G	rit		Мах	. oper	_			Max RPM			acking nit/pcs			Cat. number	
		100	x 16			4	4			40			80 m/	S		1	5300 ו	rpm		10			321700	_
		100	x 16			4	4	•	6	50			80 m/	S		1	5300 ا	rpm		10			321681	
		100	x 16			4	4	•	3	30			80 m/	S		1	5300 ا	rpm		10			321682	
		115 >	22,23	3		4	4	•	3	36			80 m/	S		1	3300 ا	rpm		10			321686	
		115 >	22,23	3		4			2	40			80 m/	S		1	3300 ו	rpm		10			321689	
		115 >	22,23	3		4		•	5	50			80 m/	S		1	3300 ו	rpm		10			321692	
		115 >	22,23	3		4			6	50			80 m/	S		1	3300 ו	rpm		10			321694	
		115 >	22,23	3		4	4	•	8	30			80 m/	S		1	3300 ו	rpm		10			321697	
		115 >	22,23	3		4			1	20			80 m/	S		1	3300 ו	rpm		10			321683	
		125 >	22,23	3		4	4	•	3	36			80 m/	S		1	.2200	rpm		10			321687	
		125 >	22,23	3		4			2	40			80 m/	S		1	2200	rpm		10			321690	
		125 >	22,23	3		4	4	•	5	50			80 m/	S		1	.2200	rpm		10			321693	
		125 >	22,23	3		4			6	50			80 m/	S		1	2200	rpm		10			321695	
		125 >	22,23	3		4	4	•	8	30			80 m/	S		1	.2200	rpm		10			321698	
		125 >	22,23	3		4			1	20			80 m/	S		1	2200	rpm		10			321684	
		180 >	22,23	3		4	4	•	3	36			80 m/	S		:	8500 r	pm		10			321688	
		180 >	22,23	3		4	4		2	40			80 m/	s			8500 r	pm		10			321691	
		180 >	22,23	3		4	4		6	50			80 m/	s		;	8500 r	pm		10			321696	
		180 >	22,23	3		4			8	30			80 m/	5			8500 r	pm		10			321699	



#### Available grits:

16	24	30	36	40	60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
	D	iamet in	er x B mm	ore	F	orm		Gr	it			opera speed				Max. RPM			acking it/pcs			Cat numb		
		115 >	22,23	3	4	4		4	0			80 m/:	5		13	3300 r	pm		10			3299	93	
		115 >	22,23	3	4			6	0			80 m/s	5		13	3300 r	pm		10			3299	94	
		115 >	22,23	3	4			8	0			80 m/s	5		13	3300 r	pm		10			3299	95	
		115 >	22,23	3	4			12	20			80 m/s	5		1	3300 r	pm		10			3299	96	



**Advantages:** Universally suitable for all grinding tasks in the steel sector - Also suitable for stainless steel - Optimum price/performance ratio due to ceramic grain - The SMT 674 includes the new CEVOLUTION technology. CEVOLUTION stands for holistically optimized, ceramic abrasives. Klingspor products with CEVOLUTION technology contain, among others, an optimized grit mix, grit sizes and formulation in order to offer the maximum performance in every application.

#### **Available grits:**

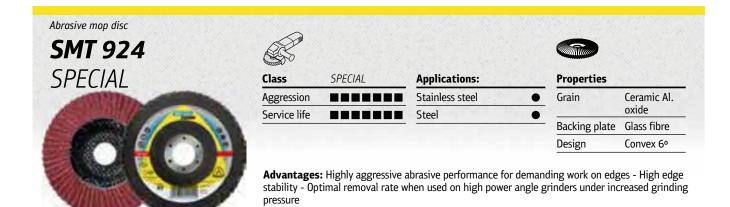
16	24	30	36	40	60	80	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000 2500	3000
	D	iamet in	er x B mm	ore	F	orm		Gri	it			opera speed	ting			Max. RPM			cking			Cat. number	_
		115 x	(22,23	3	4			40	)		8	0 m/s			13	300 rp	m		10			369262	
		115 x	(22,23	3	-			60	)		8	0 m/s			13	300 rp	m		10			369261	
		115 x	(22,23	3	4			80	)		8	0 m/s			13	300 rp	m		10			369260	
		115 x	(22,23	3	_	_		40	)		8	0 m/s			13	300 rp	m		10			369269	
		115 x	(22,23	3	_	_		60	)		8	0 m/s			13	300 rp	m		10			369265	
		115 x	(22,23	3	_	_		80	)		8	0 m/s			13	300 rp	m		10			369276	
		125 x	(22,23	3	4			40	)		8	0 m/s			12	200 rp	m		10			369259	
		125 x	(22,23	3	-			60	)		8	0 m/s			12	200 rp	m		10			369258	
		125 x	(22,23	3	4	<b>—</b>		80	)		8	80 m/s			12	200 rp	m		10			369257	

**Continuation** →



#### → Continuation of SMT 674 Supra CEVOLUTION, Abrasive mop disc CEVOLUTION

Diameter x Bore in mm	Form	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
125 x 22,23		40	80 m/s	12200 rpm	10	369275
125 x 22,23		60	80 m/s	12200 rpm	10	369274
125 x 22,23	-	80	80 m/s	12200 rpm	10	369273
180 x 22,23	4	40	80 m/s	8500 rpm	10	369268
180 x 22,23		60	80 m/s	8500 rpm	10	369267
180 x 22,23	4	80	80 m/s	8500 rpm	10	369266



							1000	1200	1300	2000 2	500 5	
Diameter x Bore Form	Grit	. operati speed	ing	 Max RPN			Packing nit/pc	-		Cat. numbe	r	_
115 x 22,23 <b>▲</b> ■	40	80 m/s		13300	rpm		10			32286	2	
115 x 22,23 <b>▲</b>	60	80 m/s		13300	rpm		10			32286	3	
115 x 22,23 <b>■</b> ■	80	80 m/s		13300	rpm		10			32286	4	
125 x 22,23 <b>▲</b>	40	80 m/s		12200	rpm		10			32286	7	
125 x 22,23 <b>■</b> ■	60	80 m/s		12200	rpm		10			32286	8	
125 x 22,23 <b>▲</b>	80	80 m/s		12200	rpm		10			32286	9	









NEV

Class SPECIAL Ap
Aggression Service life Sta

Applications:

Steel 
Stainless steel 

O

Properties

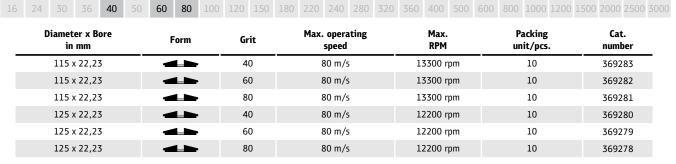
Grain
Ceramic Al. oxide

Backing plate
Glass fibre

Design
Convex 6°

**Advantages:** Newly developed abrasive for demanding grinding tasks in the steel sector - Optimal tool for edge and weld seam finishing - Highly economical on powerful angle grinders - The SMT 974 includes the new CEVOLUTION technology. CEVOLUTION stands for holistically optimized, ceramic abrasives. Klingspor products with CEVOLUTION technology contain, among others, an optimized grit mix, grit sizes and formulation in order to offer the maximum performance in every application.

#### Available grits:





Abrasive mop disc CEVOLUTION

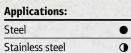
## SMT 975 SPECIAL CEVOLUTION













Properties

roperties	2011/00/00/2014 19:00
Grain	Ceramic Al. oxide
Backing plate	Plastic, glass-fibre reinforced
Design	Convex 6º

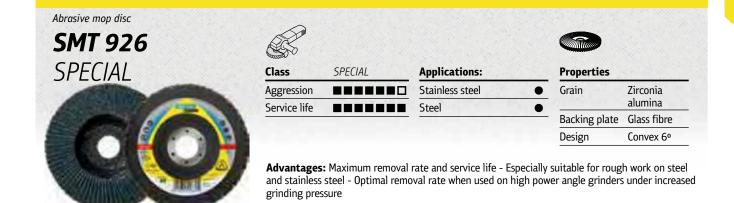
**Advantages:** High and fast stock removal due to newly developed abrasive with self-sharpening ceramic grain - Easy mounting due to integrated M14 thread - Very long tool life due to trimable backing plate - The SMT 975 includes the new CEVOLUTION technology. CEVOLUTION stands for holistically optimized, ceramic abrasives. Klingspor products with CEVOLUTION technology contain, among others, an optimized grit mix, grit sizes and formulation in order to offer the maximum performance in every application.

#### Available grits:

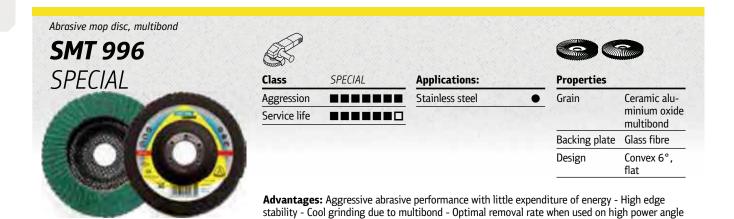
16     24     30     36     40     50	60 80 100	120 150 18	80 220 240 280 320	360 400 500 60	00 800 1000 1200 1	1500 2000 2500 300
Diameter x Bore in mm	Form	Grit	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115	4	40	80 m/s	13300 rpm	10	369295
115	4	60	80 m/s	13300 rpm	10	369296
115		80	80 m/s	13300 rpm	10	369297
125	4	40	80 m/s	12200 rpm	10	369301
125		60	80 m/s	12200 rpm	10	369303
125	4	80	80 m/s	12200 rpm	10	369304

**Continuation** →





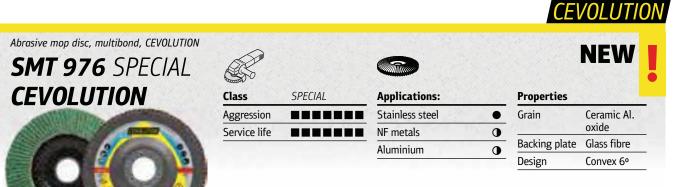
16	24	30	36	40	60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000 250	3000
		Diamet in	ter x B mm	ore	ı	orm			Grit		Max	. oper speed	-			Max RPM			Packin nit/po	_		Cat. number	
_		115	x 22,2	3	4				40			80 m/	's		1	.3300	rpm		10			321703	
		115	x 22,2	3	4	4	•		60			80 m/	's		1	.3300	rpm		10			321706	
		115	x 22,2	3	4				80			80 m/	's		1	.3300	rpm		10			321708	
		125	x 22,2	3	4	4			40			80 m/	's		1	.2200	rpm		10			321704	
		125	x 22,2	3	-		•		60			80 m/	's		1	.2200	rpm		10			321707	
		125	x 22,2	3	4	4	•		80			80 m/	's		1	.2200	rpm		10			321709	
		180	x 22,2	3	-		•		40			80 m/	's			8500 r	pm		10			321705	
		180	x 22,2	3	4				60			80 m/	's		:	8500 r	pm		10			321711	
		180	x 22,2	3	4				80			80 m/	's			8500 r	pm		10			321712	



grinders under increased grinding pressure

#### Available grits:

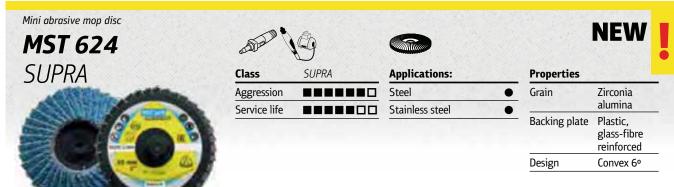
16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
	D	Diamet in	er x B mm	ore		F	orm		Gr	it			. opera	_			Max. RPM			acking it/pcs			Cat numl	-	
_		115 2	( 22,2	3		-			4	0			80 m/s	5		1	3300 r	pm		10			3228	49	_
		115	× 22,2	3		4			6	0		1	80 m/s	5		1	3300 r	pm		10			3228	50	
		115	( 22,2	3		-			8	0			80 m/s	5		1	3300 r	pm		10			3228	51	
		125	× 22,2	3		-			4	0			80 m/s	5		1	2200 r	pm		10			3228	52	
		125	( 22,2	3		-			6	0			80 m/s	5		1	2200 r	pm		10			3228	53	
		125	× 22,2	3		4			8	0			80 m/s	5		1	2200 r	pm		10			3228	54	



**Advantages:** Newly developed abrasive for highest stock removal rates for stainless steel grinding tasks - Reduced grinding temperature due to multibond - Well suited for soft, smearing materials such as non-ferrous metals and aluminium - The SMT 976 includes the new CEVOLUTION technology. CEVOLUTION stands for holistically optimized, ceramic abrasives. Klingspor products with CEVOLUTION technology contain, among others, an optimized grit mix, grit sizes and formulation in order to offer the maximum performance in every application.

16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000 2500 3
	D	iamet in	er x B mm	ore		F	orm		Gr	it			opera speed	ting			Max. RPM			acking it/pcs			Cat. number
		115	< 22,2	3		4	1		4	0			80 m/s	;		13	3300 r	om		10			369277
		115 >	< 22,2	3		4			6	0		;	80 m/s	;		13	3300 r	om		10			369272
		115 >	< 22,2	3		4			8	0		;	80 m/s	;		13	3300 r	om		10			369271
		125 >	< 22,2	3		4			4	0			80 m/s	;		12	2200 r	om		10			369270
		125 >	(22,2	3		4			6	0			80 m/s			12	2200 r	om		10			369264
		125 >	< 22,2	3		4			8	0		;	80 m/s	;		12	2200 r	om		10			369263

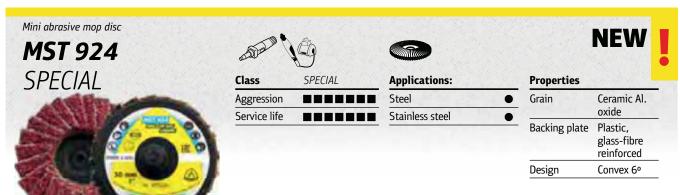




**Advantages:** Universally usable for demanding grinding tasks in the steel and stainless steel sector - Ideal for working in hard-to-reach areas - Highly economical thanks to fast tool changes

#### **Available grits:**

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000 250	0 3000
	Diam in I			Fori	n	(	Grit		Th	read/	Shaft		ı		perati eed	ng		Max RPM		Pacl unit,	-		Cat. number	
	5	0		4	_		40		Quic	k Roll	Connec	t		80	m/s		3	0000	rpm	1	0		365094	
	5	0		4	_		60		Quic	k Roll	Connec	t		80	m/s		3	0000	rpm	1	0		365147	
	5	0		4			80		Quic	k Roll	Connec	t		80	m/s		3	0000	rpm	1	0		365148	
	5	0		4	_		120		Quic	k Roll	Connec	t		80	m/s		3	0000	rpm	1	0		365149	
	7	5		4	_		40		Quic	k Roll	Connec	t		80	m/s		2	0000	rpm	1	0		365150	
	7	5		4	_		60		Quic	k Roll	Connec	t		80	m/s		2	0000	rpm	1	0		365151	
	7	5		4	_		80		Quic	k Roll	Connec	t		80	m/s		2	0000	rpm	1	0		365152	
	7	5		4	_		120		Quic	k Roll	Connec	t		80	m/s		2	0000	rpm	1	0		365153	



**Advantages:** Aggressive stock removal due to self-sharpening ceramic grain - Ideal for working on hard-to-reach areas - For coarse grinding tasks on high alloy steels and stainless steel materials

16 24 30	<b>36 40 50</b>	60 80	100 120 150 180 2	20 240 280 320 360	400 500 600	800 1000 1200 15	2000 2500 3
Diameter in mm	Form	Grit	Thread/Shaft	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
50		36	Quick Roll Connect	80 m/s	30000 rpm	10	365095
50	4	40	Quick Roll Connect	80 m/s	30000 rpm	10	365144
50	4	60	Quick Roll Connect	80 m/s	30000 rpm	10	365145
50	4	80	Quick Roll Connect	80 m/s	30000 rpm	10	365146
75	4	36	Quick Roll Connect	80 m/s	20000 rpm	10	365137
75	4	40	Quick Roll Connect	80 m/s	20000 rpm	10	365138
75	4	60	Quick Roll Connect	80 m/s	20000 rpm	10	365143
75	4	80	Quick Roll Connect	80 m/s	20000 rpm	10	365136





### **About the product**

As the inventor of the high speed cutting-off wheel, it is only natural that we strive to continually develop and improve our Kronenflex® products.

Kronenflex® cutting-off wheels and grinding discs feature an optimal combination of bonding agent and grain type for high aggressiveness, outstanding service life and consistently high quality. They comply with the highest safety standards, including the oSa regulations and the European safety standard EN 12413.

As a result of continuous innovations and the development of special products for diverse requirements, our Kronenflex® products offer the optimal solution for all standard materials and applications.

## **Typical materials for these products**

- ▶ Steel
- ► Stainless steel
- ► Construction steel
- ► NF metals
- ► Cast materials
- ► Stone
- ► Plastics
- ► Mineral materials

- ▶ Pipes
- ► Flat irons
- ► Tins
- ► Solid materials

## **Typical applications for these products**

- ▶ Bodywork
- ► Maintenance and repair work
- ▶ Locksmiths
- ► Steelwork
- ► Plant construction
- ► Container construction
- ▶ Upkeep
- ► Metal works
- ► Vehicle construction
- ▶ Foundries
- ► Shipyards

## **Kronenflex® cutting-off wheels**

Kronenflex® cutting-off wheels	Page
0,8-1,2 mm	202-205
Small cutting-off wheels	206
1,6-1,9 mm	207-208
2,0-3,2 mm	209-212
Large cutting-off wheels	213-216

## **Kronenflex®** grinding discs

Kronenflex® grinding discs	Page
Grinding discs	217-223

Applications guide

- 1. EAN code (EAN 13)
- 2. Safety pictograms
- 3. Max. operating speed
- 4. Klingspor cat. number
- 5. Specification of design, grade and bond according to EN 12413
- 6. Dimensions in mm and inches
- 7. Applications (see colour coding system)



- 8. Information about the manufacturer
- 9. Operating restrictions
- 10. Safety standard (oSa / EN 12413)
- 11. Max. RPM
- 12. Safety pictograms
- 13. Product group / type
- 14. Klingspor brand Kronenflex®

### **Performance classes**

Kronenflex® cutting-off wheels and grinding discs come in three performance classes with six colour codes for a quick overview of the most important material applications.





Products for universal application, offering a particularly attractive price-performance ratio.



SUPRA

Optimised products for different applications. Excellent service life and cutting performance.



SPECIAL

High performance products for special applications. Highest service life and cutting performance in the respective material application area.

Applications guide



#### 1. Label and cover sheet

The label includes all of the important information on the product, manufacturer and information on the proper use of the grinding tool

#### 2. Mixture

**The grit:** Today all grit types are only produced synthetically. Only grit produced synthetically can ensure continuously high wear and cutting disc quality.

Resins and fillers: Additional, important components for cutting and grinding discs are resins, (in liquid and dry form), and fillers. These components are key in determining the disc properties, such as stability, stock removal rate, sheer strength and can be adjusted to meet the needs of the specific application.



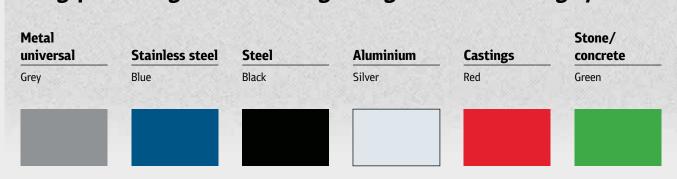
#### 3. Metal ring

Provides information on the expiry date of the disc.

#### 4. Glass fibre

Glass fibre is a reinforcing layer to ensure stability and increases the safety of the cutting-off wheel. The number and strength of the glass fibre layers is dependent upon the disc type and application. The higher the potential lateral load on a cutting-off wheel (it is greater during free cutting than during stationary cutting), the more glass fibre that the cutting disc must contain, or the contained glass fibre must be more stable. Particularly thin material is used for thin cutting discs, (0.8 mm to 1.0 mm), to ensure that a large grit ratio is achieved between the layers. Grinding discs are constructed with at least 3 glass fibre layers.

## Klingspor cutting-off wheel and grinding disc colour coding system



## Pictograms on the product pages



One glass fibre cloth



Two glass fibre cloths



Free of iron, sulphur and chloride



Packaged in units of 25 pcs each in the Kronenflex® tub for consistently high performance and protection from moisture

Applications guide





Quarter										
V 01	January-March									
V 04	April-June									
V 07	July-September									
V 10	October-December									

## Safety and storage

The shelf life of cutting-off wheels and grinding discs is primarily determined by their moisture content. Cutting-off wheels and grinding discs that are subjected to increased humidity after they were manufactured loose their original service life. Correct storage ensures a consistent long service life. Cutting-off wheels and grinding discs that are subjected to water or steam are a safety risk.

The user is obligated to use the product correctly. Cutting-off wheels and grinding discs should not be used past the expiry date.

## **Working safely**

#### By being careful and recognising risks

Please avoid the risks listed below when working with cutting-off wheels and grinding discs.

- ► contact with rotating abrasive discs
- ▶ abrasive disc breakage
- ▶ grinding dust and debris
- ▶ vibration
- ► noise

#### Through personal protective gear

Goggles, gloves, ear muffs and dust masks must be worn. When working on hard grinding applications additional protective gear is required, such as face protection, leather aprons and safety boots.

#### With protective machine guards

Machine guards are supplied with the grinding machine and may not be changed or removed. When using cup grinding wheels the outer surface must be completely enclosed. In addition, cup grinding wheels may only be used in combination with an adjustable wheel guard, to balance the wear on the disc and to keep the exposure of the disc at a minimum.

## Through visual inspection and performance of checks prior to mounting

Ensure the disc RPM matches the machine RPM setting and avoid exceeding the maximum admissible operating speed.

Carefully check the cutting-off wheel and grinding disc for damage.

If the cutting-off wheel or grinding disc is damaged, do not use the damaged product. Our cutting-off wheels and grinding discs are marked with the corresponding safety pictograms.

#### Through correct use

Ensure that the respective disc is being used correctly. Avoid damage to the mounting bore or to the disc through jerks, excessive force, or falls.

Ensure that the disc is correctly and securely mounted and use the correct mounting flange.

Prior to starting work, the abrasive disc should run at operating speed for at least 30 seconds.

Please observe the FEPA safety regulations and the European Standard 12413.

The peripheral speed and grinding pressure are important parameters for achieving optimal cutting-off and grinding disc results.

Applications guide



### The optimal speed

#### Too low

If the RPM of the machine is too low, the cutting-off wheel and grinding disc tend to "jump", and the disc edges wear down unevenly. Particularly with thin material cross sections, such as cutting tin or wire, this causes the grit to be separated from the bond and the disc wear speed is above average.

#### **Optimal**

Klingspor cutting-off wheels and grinding discs are high performance products and were developed such that best disc performance (measured according the stock removal volume to disc wear ratio) is achieved in the range right below the maximum peripheral speed. Keep the machine running at a consistently high RPM and, if needed, select a more powerful machine.

#### Too high

The maximum RPM and peripheral speed is printed on the label of each disc. For your own safety, please be sure not to exceed the recommended speeds when grinding.

### The correct grinding pressure

An important requirement for a satisfactory cutting result is the correct grinding pressure. A common mistake is to reduce the grinding pressure to preserve the disc and extend the cutting life of the wheel. If this is done, the material overheats (turns blue); the cutting-off wheel becomes clogged and "burns up". This is why the grinding pressure should always be set such that the cutting time is as short as possible. This is particularly true for heat sensitive material with large material cross sections.

### The proper hardness

#### **Cutting-off wheels**

Generally, the rule of thumb when selecting the correct cutting-off wheel is: the harder the material, the softer the abrasive bond. The reason: the service life of a cutting-off wheel is dependent on whether the cutting surface of the workpiece hardens or not. Overheating results in the disc "glazing" and the cutting properties are negatively affected. In this case, the hardness of the bond should be decreased and a softer cutting-off wheel should be used.

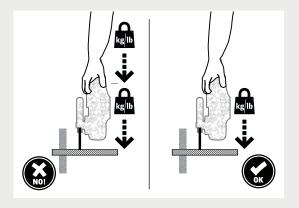
#### **Grinding discs**

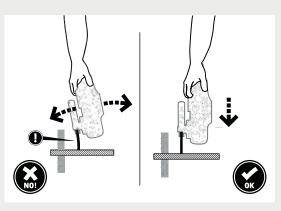
The rule of thumb also applies to grinding discs: the harder the material, the softer the grinding disc bond. In addition, the application plays a decisive role. Corner grinding and the grinding of burrs and sharp edges can cause grit to be removed from the bond. We suggest the selection of a hard bond. On the other hand, when working on surfaces or small weld seams a disc that is too hard would become dull and would no longer be effective. It would have a good service life, but would also have a low stock removal rate and high work costs. A medium or soft disc bond would be best for finish grinding.

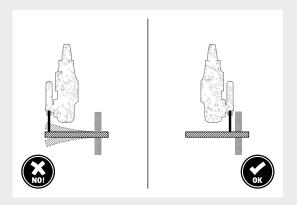
Applications guide

## Correct application/techniques for cutting-off

Pressure may only be placed on the cutting-off wheel from a radial direction. This is the only way to avoid wobbling, buckling and disc breakage, especially when applying a high level of cutting pressure. The workpiece that is to be cut-off should be properly affixed to the workbench to ensure that the disc does not slide off to the side. In addition, we recommend that the material is affixed as close to the cutting site as possible to ensure that it does not vibrate, flutter or slip to the side.

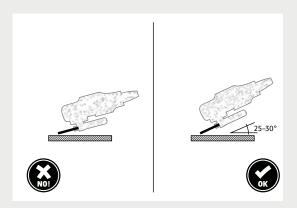






## Correct application/techniques for grinding

Grinding discs work best at 35 degree angle to the workpiece. This angle provides the best stock removal to disc wear ratio. If possible, always select this angle. When grinding and the angle is below 15° a very thin edge which levels off is formed around the circumference of the disc. Even minimal changes to the angle can result in a situation in which the grinding pressure can no longer be absorbed resulting in the grinding disc slipping to the side. Valuable grit is not used and an imbalance is created that results in having to replace the disc prematurely.



Applications guide



#### The correct mount

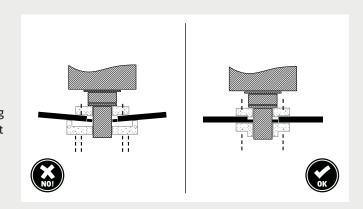
#### For better power transmission

Cutting-off wheels and grinding discs are mounted to the machine with side flanges. The flange elements are responsible for transferring power to the disc. For reasons of safety it is extremely important that defective or incorrect flanges are not used.

#### For more safety

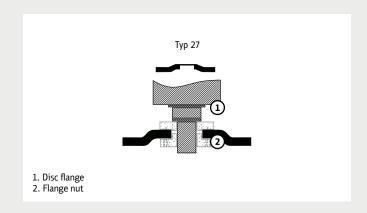
The use of wheel flange FL 76 provides increased lateral stability and user control, specifically when using thin cutting-off wheels with a flat form and diameter of 180 mm and 230 mm.

The applicable regulations and standards must be complied with when using the wheel flange. The contact surface and diameter of the wheel flange must match. Using wheel flanges with diameters that do not match is prohibited.



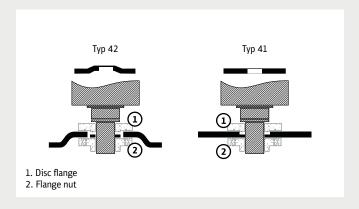
## **Depressed centre grinding discs**

#### 4 - 10 mm thickness



## Flat and depressed centre cutting-off wheels

0.8 - 4 mm thickness



Applications guide

## Cutting-off wheels for different types of machines

- ► Handheld machines 80m/s
- ► Handheld machines with a clamping device for vigonole rails 100m/s
- ► Transportable bench chop saws < 3KW
- ► Stationary saws / cutters up to 5KW
- ► Stationary saws / cutters > 5KW

Stationary cutting-off wheels may not be used with freehand machines.

#### **Products for handheld machines**

These products were developed for use with handheld machines (petrol, electric, high frequency).

Please note that it is very important that the maximum operating speed setting on the machines and the maximum operating speed setting on the products match. 80 m/s and 100 m/s machines are available on the market. Klingspor large cutting-off wheels for handheld machines are certified for 80 m/s handheld machines. Products for railway construction with a clamping device are certified up to 100 m/s.

## Products for transportable bench chop saws

Cutting-wheels for this product group are suitable for low power bench chop saws. These products may not be used with large stationary and / or handheld machines.

They are known for their high cutting rate, which ensures fast and cool cutting.

## Products for stationary saws / cutters

Stationary machines are best suited for economical and safe cutting of large cross sections and heavy workpieces.

Products in this segment with their outstanding performance and long service life fulfil the most demanding requirements of stationary cutting. Good aggressiveness ensures low thermal loads when working on large cross sections.

Applications guide



## Which cutting-off wheel is used with which machine?

Large cutting-off wheels for stationary machines and large cutting-off wheels for handheld machines are designed differently and their build is optimised for the respective machine type. For safety reasons large cutting-off wheels for stationary machines may never be used with handheld machines.

The bore diameter of a large cutting-off wheel does not indicate if it is a wheel that can be used with a stationary machine or if it is a wheel that can be used with a handheld machine.

A binding overview regarding which Klingspor wheel type is to be used with which machine type is provided in the table below.

		Thick-				Safety				
Туре	Ø [mm]	ness [mm]	Bore Ø [mm]	Machines	Max. operating speed	Application type (EN12413)				
A 24 EXTRA	300	3,5	20/22,23	general handheld machines (petrol, electric,	90 m /s	80 m/s freehand cutting				
C 24 EXTRA	300	3,5	20/22,23	high frequency)	80111/5	freehand cutting				
A 330 EXTRA	350	2,5	25,4							
	300	2,5	25,4							
A 630 N SUPRA	350	2,5	25,4	tuangnautahla handhahan sausa ahan saus	90 m /s	stationam, suidad suttina	-7 1/14			
	400	3,2	25,4	transportable bench chop saws, chop saws	80 m/s	stationary guided cutting	<3 KW			
A 930 N SPECIAL	300	2,5	25,4							
A 930 N SPECIAL	350	3,0	25,4							
<b>A 24 R</b> SUPRA	250	3	32				_			
	300	3	22,23/25,4/30/32	stationam save / suttors	100 m/s	stationam, suidad suttina	>3 KW			
A 24 K SUPKA	350	3,5	25,4/32	stationary saws / cutters	100111/5	stationary guided cutting	/3 KW			
	400	4,5	25,4/32/40							
A 924 R SPECIAL	300	3,5	20/22,23/25,4	general handheld machines, joint cutters	100 m/s	freehand cutting				
A 924 K SPECIAL	350	4	20/22,23/25,4	(petrol, electric, high frequency)	100 111/5	Treenand cutting				
	300	3,5	22,23							
A 624 SX SUPRA	350	4	22,23/25,4							
	400	4	25,4	Handheld grinders (petrol, electric, high	100 m/s	stationary guided sutting				
	300	3,5	22,23	frequency, hydraulic) in combination with a clamping device	100 111/5	stationary guided cutting				
A 924 SX SPECIAL	350	4	22,23/25,4							
	400	4	22,23/25,4							

Applications guide

## **Recognise and avoid errors**

	Issue	Possible cause	Solution					
		Cutting time is too long	Increase feed speed or grinding pressure					
		Drive power is too low	Use a more powerful machine					
(	Cutting surface is blue	Disc is too hard	Select a softer bond					
		Material cross section is too great for the disc diameter	Work with a saw cut / work with a smaller material diameter					
_		Cutting disc is too wide for the material/application	Use a thinner cutting disc					
		White cutting surface: disc hardness is too low	Select a harder bond					
- 1	Disc wear is too high	Peripheral speed is too low	Increase peripheral speed					
_		RPM decrease is too great	Reduce grinding pressure or use a more powerful machine					
		Workpiece is not mounted properly	Mount the material closer to the cutting site					
<u>s</u> ,	Crooked cut	Grinding pressure is too great	Reduce grinding pressure					
hee,	crooked cut	Disc width is too thin for the material/application	Increase disc width					
Cutting-off wheels _		Disc is completely worn down	Replace disc					
ng- 6-		Machine is operated incorrectly	Avoid lateral pressure on the disc					
Ī,	Dies brookage	Incorrect wheel flange diameter	Use wheel flange with identical diameters					
ات	Disc breakage	Cutting-off wheel is used for grinding	Cutting-off wheels may not be used for grinding					
		Material is not properly affixed	Mount the material closer to the cutting site					
	Disa navimban, is functed	Disc periphery is burned	Select a softer bond, decrease grinding pressure					
	Disc periphery is frayed	Material is not properly affixed	Mount the material closer to the cutting site					
		Wheel flange is dirty or worn out	Clean wheel flange or replace wheel flange					
- 1	Disc jumps	Bearing is defective	Replace machine or replace bearing					
		Bore dimension and mount do not match	Use proper bore dimension or use a reducer ring					
		Wheel flanges are of different sizes	Use wheel flanges that have the same diameters					
ı	Bore hole is broken	Machine is operated incorrectly	Reduce lateral pressure on the disc					
		Cutting-off wheel is used for grinding	Cutting-off wheels may not be used for grinding					
	Issue	Possible cause	Solution					
		Shiny contact surface: bond is too hard	Select a softer bond					
	Removal rate is too low	Grinding pressure is too low	Increase grinding pressure					
		Machine performance is too low	Use a more powerful machine					
		Bond is too hard	Select a softer bond					
	Disc is loaded/clogged	Loading/clogging with NF metals	Use softer bond or select a special cutting-off wheel for NF metals					
		Grinding pressure is too low	Increase grinding pressure					
SCS		Grinding pressure is too high	Reduce grinding pressure					
ig di	Wear is too high	Bond is too soft	Select a harder bond					
Grinding dis	Wear is too high	Machine RPM decreases too quickly	Reduce grinding pressure					
Ē		Machine performance is too low	Use a more powerful machine					
	Periphery is not rounded / breakage on	Disc angle is too flat	Increase disc angle (at least 25°)					
	the edge	Grinding pressure is too high	Reduce grinding pressure					
		The mount is not centred	Check bore diameter and mounting diameter and adjust accordingly					

Replace machine

Use a new disc

Replace / clean mounting flange / check dimensions

Mounting shaft is worn

Disc wobbles

Mounting flange is worn / dirty / incorrect

Disc wobbles

Applications guide

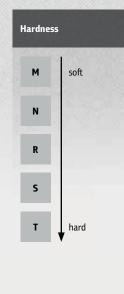


## What the type designation reveals about the design of cutting-off wheels and grinding discs

The type designation given on a cutting-off wheel or grinding disc divulges more than just the name of the product. It provides important information on the performance class and on the composition of the tool. The first letter indicates which abrasive grit is used. If this letter is followed by a three digit number, the first digit signifies the performance class (the performance class is also included below the name of the product). The last two digits point to the size of the grit that was used. The letters at the end of the type designation mark the hardness grade of a cutting-off wheel or grinding disc.

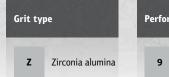
Grit ty	rpe	Perfor	nance class
A	Aluminium oxide	3	EXTRA
С	Silicon carbide	6	SUPRA
Z	Zirconia alumina	9	SPECIAL

	ze accor tandard	to	
16			
24			
30			
36			
46			
60			
80			





Explained by example of the Z 960 TX cutting-off wheel











## The safe use of Klingspor abrasives

Klingspor Kronenflex® cutting-off wheels and grinding discs are manufactured in accordance with the oSa and EN 12413 standards, this ensures the highest level of user safety.



Wear safety goggles or glasses to protect the eyes



Wear safety gloves to protect hands



Wear dust mask



Observe safety instructions



Use ear protectors



Do not use for wet grinding



Not permitted for grinding



Do not use if damaged

## Kronenflex® cutting-off wheels and grinding discs Applications guide

							М	aterial a	pplicatio	ns					
mm	Туре	Thickness [mm]	Steel	Hardened steel	Tool steel	Stainless steel	High alloy steel	Corrosion and acidproof steels	Aluminium	Bronze	Copper	Brass	Zinc die-casting	Cast iron	Page
1,2	A 980 TZ SPECIAL	0,8	•	•	•	•	•	•	•	•	•	•	•	•	202, 325
هر	A 60 EXTRA	1,0	•	•	•	•	•	•	•	•	•	•	•	•	•
ls 0	A 660 R SUPRA	1,0	•	•	•	•	•	•	•	•	•	•	•	•	324
wheels 0,8	A 60 TZ SPECIAL INOX	1,0	•	•	•	•	•	•	•	•	•	•	•	•	203, 324
off v	A 960 TZ SPECIAL	1,0	•	•	•	•	•	•	•	•	•	•	•	•	203, 325
cutting-off	A 60 N SUPRA	1,0	•	•	•	•	•	•	•	•	•	•	•	•	202
att	K 960 TX SPECIAL	1,0	•	•	•	•	•	•	•	•	•	•	•	•	204, 326
	<b>Z 960 TX</b> SPECIAL	1,0	•	•	•	•	•	•	•	•	•	•	•	•	204, 326
enfle	<b>EDGE</b> SPECIAL	1,2	•	•	•	•	•	•	•	•	•	•	•	•	205, 327
Kronemflex®	A 660 R SUPRA Small cutting-off wheel	1,0-1,6	•	•	•	•	•	•	•	•	•	•	•	•	206

		Material applications												
Type  A 346 EXTRA	Thickness [mm]	Steel	Hardened steel	Tool steel	Stainless steel	High alloy steels	Corrosion and acidproof steels	Aluminium	Bronze	Copper	Brass	Die-cast aluminium	Zinc die-casting	Page
	1,6	•	0	0	•	•	•	0	0	0	•	0	•	327
A 646 R SUPRA	1,6-1,9	•	•	•	•	•	•							207, 328
A 646 R SUPRA  A 46 TZ SPECIAL INOX  A 946 TZ SPECIAL	1,6-1,9	•	•	•	•	•	•	•	•	•	•		•	207, 328
A 946 TZ SPECIAL	1,6-1,9	•	•	•	•	•	•	•	•	•	•	•	•	208, 329

							Materi	al appli	cations						
шш 2' <u>5</u> Туре	Thickness [mm]	Steel	Hardened steels	Tool steel	Stainless steel	High alloy steels	Corrosion and acidproof steels	Aluminium	Bronze	Copper	Brass	Zinc die-casting	Cast iron	Stone / concrete	Page
A 24 EXTRA	2,0-3,2	•	•	•	•	•	•	•	•	•	•	•	•		209
A 24 R SUPRA	2,5-3,0	•	•	•	•	•	•					•	•		209
A 24 N SUPRA INOX	2,5-3,0	•	•	•	•	•	•	•	•	•	•				210
A 24 R SUPRA INOX  A 36 R SUPRA INOX  A 36 TZ SPECIAL INOX  A 24 R/36 SPECIAL INOX	2,0-2,5	•	•	•	•	•	•		•	•	•				•
A 36 TZ SPECIAL INOX	2,0	•	•	•	•	•	•						•		210
	2,5-3,0	•	•	•	•	•	•								•
A 24 TZ SPECIAL	2,5-3,0	•		•	•	•	•						•		211
A 24 TZ SPECIAL  A 46 N SUPRA  C 24 EXTRA	2,5-3,0							•	•	•	•	•			211
C 24 EXTRA	2,5-3,0													•	212
C 24 R SUPRA	2,5													•	212

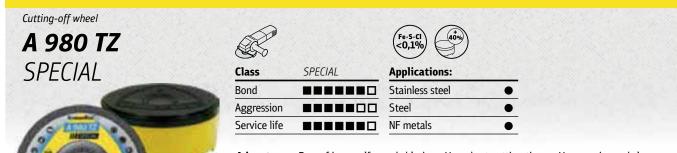
## Kronenflex® cutting-off wheels and grinding discs Applications guide



				Macl	nines					Ма	terial a	pplicati	ons					
	Туре	Thickness [mm]	Handheld machines 80m/s	Handheld machines 100m/s	Bench chop saws	Stationary < 5KW	Steel	Hardened steels	Tool steel	Stainless steel	High alloy steels	Corrosion and aacidproof steels	Aluminium	Cast iron	Stone / concrete	Asphalt	Page	
cutting-off wheels	A 24 EXTRA	3,5	•				•	•	•	•	•	•		•			*	
¥	C 24 EXTRA	3,5	•											•	•	•	•	
ig-o	A 624 SX SPECIAL	3,5-4,0		•			•	•									213	
ij	A 924 R SPECIAL	4,0		•			•	•	•	•	•	•		•			213	
	A 924 SX SPECIAL	3,5-4,0		•			•	•									214	
lar	A 330 EXTRA	2,5-3,0			•		•	•	•	•	•	•	•	•			215	
Пех®	A 630 N SUPRA	2,5-3,2			•		•	•	•	•	•	•	•	•			216	
Kronemflex® large	A 930 N SPECIAL	2,5-3,5			•		•	•	•	•	•	•	•	•			216	
Κro	A 24 R SUPRA	3,0-4,5				•	•	•	•	•	•	•		•			215	

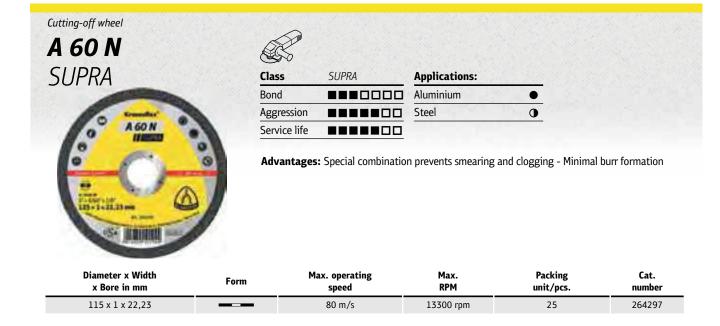
								Mater	ial applic	ations						
	Туре	Thickness [mm]	Steel	Hardened steels	Tool steel	Stainless steel	High alloy steels	Corrosion and acidproof steels	Aluminium	Bronze	Copper	Brass	Zinc die-casting	Cast iron	Stone / concrete	Page
	A 24 EXTRA	6,0-8,0	•	•	•	•	•	•					•	•		*
	A 24 EXTRA T	6,0-8,0	•	•	•	•	•	•						•		217
	A 24 R SUPRA	4,0-10	•	•	•	•	•	•						•		217
	A 24 R/O1 SPECIAL	4,0	•	•	•	•	•	•								•
	A 24 N SUPRA	6,0-8,0	•	•	•	•	•	•								218
	A 24 R/36 SPECIAL	6,0	•	•	•	•	•	•								218
	A 46 N SUPRA	6,0-8,0							•	•	•	•	•			219
	A 30 M SPECIAL	6,0	•	•	•	•	•	•								219
	A 46 VZ SPECIAL	2,0	•	•	•	•	•	•					•			220
	<b>A 624</b> SUPRA	7,0	•	•	•	•	•	•								•
iscs	A 624 T SUPRA	6,0	•	•	•	•	•	•					•	•		220
ng d	A 924 SPECIAL	7,0	•	•	•	•	•	•						•		•
grinding discs	C 24 R SUPRA	6,0												•	•	221
® gr	A 16 R SUPRA	55	•											•		222
Kronenflex®	A 30 R SUPRA	55	•													222
onen	C 16 R SUPRA	55												•	•	223
Kr	C 30 R SUPRA	55												•	•	223

for angle grinders



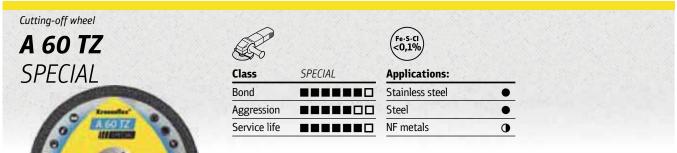
**Advantages:** Free of iron, sulfur and chlorine - Very short cutting times - Very precise and clean cuts - Low thermal load - Minimal burr formation, minimizing finish-machining - 25 pieces delivered in the Kronenflex® box for long-lasting high-performance and moisture protection

 Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 0,8 x 22,23		80 m/s	13300 rpm	25	322182
125 x 0,8 x 22,23	~~	80 m/s	12200 rpm	25	322183



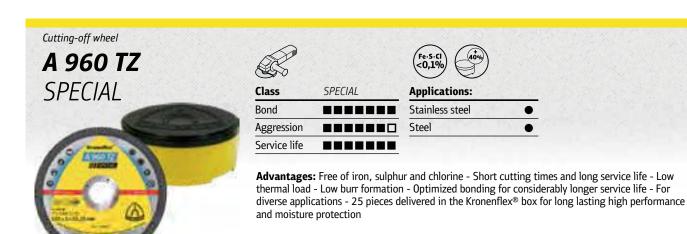
for angle grinders





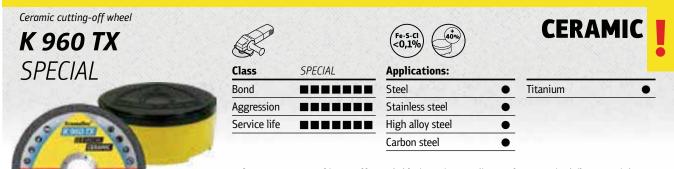
**Advantages:** Free of iron, sulfur and chlorine - Short cutting times - Minimal burr formation - Low thermal load

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 1 x 22,23		80 m/s	13300 rpm	25	202400
125 x 1 x 22,23		80 m/s	12200 rpm	25	202401



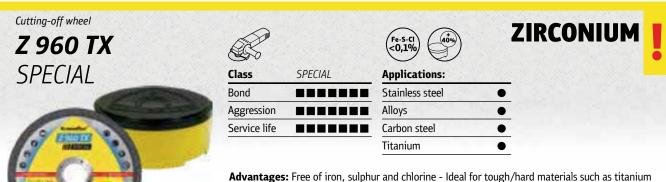
	Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
-	115 x 1 x 22,23		80 m/s	13300 rpm	25	322180
	125 x 1 x 22,23		80 m/s	12200 rpm	25	322181

for angle grinders



**Advantages:** Free of iron, sulfur and chlorine - Outstanding performance in daily use - Highest cutting performance, even with low grinding pressure - 25 pieces delivered in the Kronenflex® box for long lasting high performance and moisture protection

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 1 x 22,23		80 m/s	13300 rpm	25	328885
125 x 1 x 22,23		80 m/s	12200 rpm	25	328886

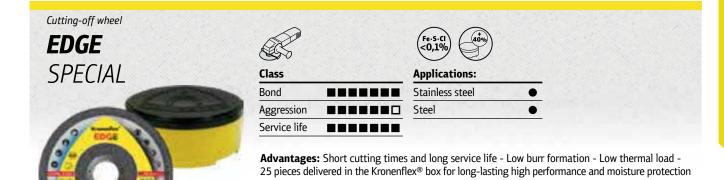


and high alloy steels - Short cutting times and long service life due to self-sharpening zirconia alumina - Low thermal load - Low burr formation - 25 pieces delivered in the Kronenflex® box for long lasting high performance and moisture protection

	Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
_	115 x 1 x 22,23		80 m/s	13300 rpm	25	322184
	125 x 1 x 22,23		80 m/s	12200 rpm	25	322185

for angle grinders



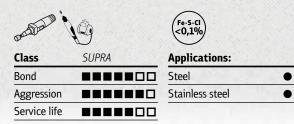


Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 1,2 x 22,23		80 m/s	13300 rpm	25	317818
125 x 1,2 x 22,23		80 m/s	12200 rpm	25	317820

## Kronenflex® small cutting-off wheel

for hand held machines



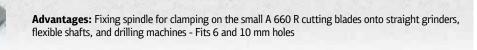


**Advantages:** Minimal burr formation - For universal use in hard-to-reach areas - For cutting tins, profiles and solid materials

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
50 x 1 x 6		100 m/s	38200 rpm	100	329096
50 x 1 x 10		100 m/s	38200 rpm	100	329097
76 x 1 x 6		100 m/s	25200 rpm	100	329098
76 x 1,6 x 6		100 m/s	25200 rpm	100	329100
76 x 1 x 10		100 m/s	25200 rpm	100	329099
76 x 1 x 10		80 m/s	20100 rpm	40	368879
100 x 1 x 6		100 m/s	19000 rpm	25	329102
100 x 1 x 10		100 m/s	19000 rpm	25	329103

Fixing spindle





Diameter	Suitable	Packing	Cat.
in mm	for	unit/pcs.	number
6	6 and 10 mm bore	1	

Fixing spindle

## Fixing spindle



Advantages: Secure clamping of the small cutting-off wheel A 660 R Supra

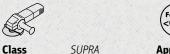
	Diameter	Packing	Cat.
	in mm	unit/pcs.	number
Ī	6	1	2790

for angle grinders



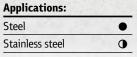






	301181
Bond	
Aggression	
Service life	





**Advantages:** Free of iron, sulphur and chlorine - Universal use on steel and stainless steel - Cutting disc made of self-sharpening, calcined aluminum oxide - Tremendous aggressiveness when used for cutting solid steel materials

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 1,6 x 22,23		80 m/s	13300 rpm	25	340947
125 x 1,6 x 22,23		80 m/s	12200 rpm	25	340946
180 x 1,6 x 22,23		80 m/s	8500 rpm	25	340944
230 x 1,9 x 22,23		80 m/s	6600 rpm	25	340943
230 x 1,9 x 22,23		80 m/s	6600 rpm	25	340942







Class	SPECIAL
Bond	
Aggression	
Service life	

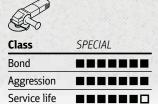
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**Advantages:** Free of iron, sulphur and chlorine - Universal use on steel and stainless steel - First choice for professional applications and fast cutting of demanding materials

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 1,6 x 22,23		80 m/s	13300 rpm	25	187170
115 x 1,6 x 22,23	-~	80 m/s	13300 rpm	25	235378
125 x 1,6 x 22,23		80 m/s	12200 rpm	25	187171
150 x 1,6 x 22,23		80 m/s	10200 rpm	25	241472
180 x 1,6 x 22,23		80 m/s	8500 rpm	25	221161
230 x 1,9 x 22,23		80 m/s	6600 rpm	25	224084
230 x 1,9 x 22,23		80 m/s	6600 rpm	25	265044

for angle grinders







•
•
•
0

**Advantages:** Free of iron, sulfur and chlorine - Extra long service life across all applications - For universal use in metal processing - Short cutting times - Low burr formation - Low thermal load - 25 pieces delivered in the Kronenflex® box for long lasting high performance and moisture protection

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
100 x 1,6 x 16		80 m/s	15300 rpm	25	339103
115 x 1,6 x 22,23		80 m/s	13300 rpm	25	339109
125 x 1,6 x 22,23		80 m/s	12200 rpm	25	339110
150 x 1,6 x 22,23		80 m/s	10200 rpm	25	339111
180 x 1,6 x 22,23		80 m/s	8500 rpm	25	339112
230 x 1,9 x 22,23		80 m/s	6600 rpm	25	339113
230 x 1,9 x 22,23		80 m/s	6600 rpm	25	339114

Wheel flange

FL 76

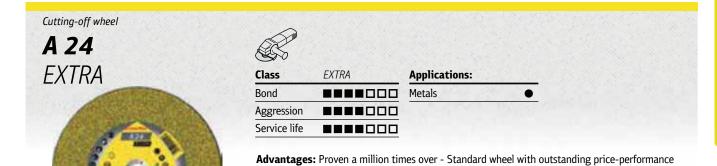


**Advantages:** Use of the wheel flange increases lateral stability with thin cutting-off wheels having a flat form and diameters of 180 and 230 mm - Two-piece set

Diameter	Suitable	Packing	Cat.
in mm	for	unit/pcs.	number
76	A 46 TZ + A 646 R + A 946 TZ	1	236130

for angle grinders





Diameter x Width Form Max. operating Max. Packing Cat. x Bore in mm speed RPM unit/pcs. number

x Bore in mm	 speed	RPM	unit/pcs.	number
115 x 2,5 x 22,23	 80 m/s	13300 rpm	25	242137
Cutting-off wheel				
A 24 R	*			

SUPRA

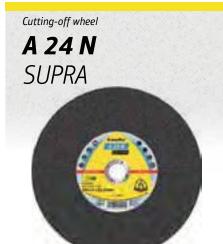
Class	SUPRA	Applications:	
Bond		Steel	•
Aggression		Stainless steel	•
Service life		Castings	•

ratio - For universal use in metalworking - Fast cutting off of solid material

**Advantages:** Optimized combination for use on steel - Can be used on stainless steel - Good cutting properties

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
100 x 2,5 x 16		80 m/s	15300 rpm	25	13754
115 x 2,5 x 22,23		80 m/s	13300 rpm	25	231859
115 x 2,5 x 22,23		80 m/s	13300 rpm	25	231868
125 x 2,5 x 22,23		80 m/s	12200 rpm	25	13295
150 x 2,5 x 22,23		80 m/s	10200 rpm	25	6667
180 x 3 x 22,23		80 m/s	8500 rpm	25	231864
230 x 3 x 22,23		80 m/s	6600 rpm	25	231866
230 x 3 x 22,23	-~	80 m/s	6600 rpm	25	231872

for angle grinders





Class	SUPRA
Bond	
Aggression	
Service life	



•

**Advantages:** Special recipe prevents smearing and clogging - High removal rate on stainless steel due to hardened aluminium oxide

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 2,5 x 22,23		80 m/s	13300 rpm	25	3020
150 x 2,5 x 22,23	-~	80 m/s	10200 rpm	25	235377
180 x 3 x 22,23		80 m/s	8500 rpm	25	13455
230 x 3 x 22,23		80 m/s	6600 rpm	25	13463





Class	SPECIAL
Bond	
Aggression	
Service life	

Applications:

Stainless steel

Steel

O

Advantages: Very good cutting performance, even with low grinding pressure

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 2 x 22,23		80 m/s	13300 rpm	25	136549
125 x 2 x 22,23		80 m/s	12200 rpm	25	136550
180 x 2 x 22,23		80 m/s	8500 rpm	25	136551
230 x 2 x 22,23		80 m/s	6600 rpm	25	136552

for angle grinders



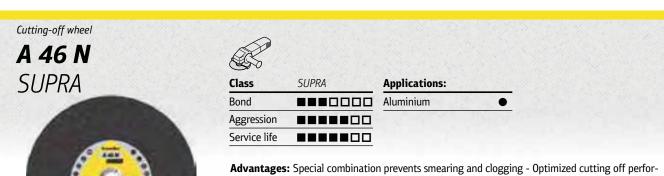




Class	SPECIAL	Applications:	
Bond		Stainless steel	•
Aggression		Steel	•
Service life		Castings	•

Advantages: Optimized combination for use on stainless steel - Excellent performance

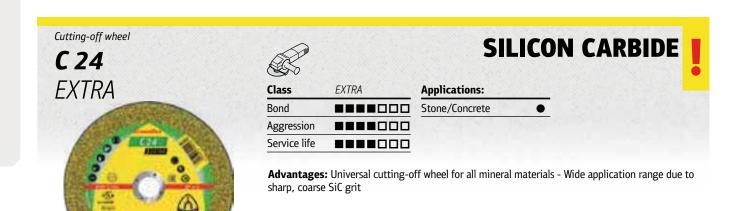
Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 2,5 x 22,23		80 m/s	13300 rpm	25	136554
125 x 2,5 x 22,23	-~	80 m/s	12200 rpm	25	136555
180 x 3 x 22,23		80 m/s	8500 rpm	25	136558
230 x 3 x 22,23		80 m/s	6600 rpm	25	136559



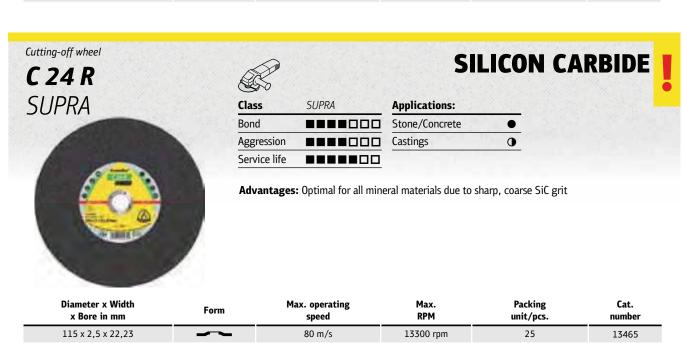
mance on non-ferrous metals

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
230 x 3 x 22,23		80 m/s	6600 rpm	25	170710

for angle grinders



Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 2,5 x 22,23		80 m/s	13300 rpm	25	242143
125 x 2,5 x 22,23		80 m/s	12200 rpm	25	242144
180 x 3 x 22,23		80 m/s	8500 rpm	25	13489
230 x 3 x 22,23		80 m/s	6600 rpm	25	13491



for petrol driven saw/cutter / with clamping device



A 924 R
SPECIAL





Class	SPECIAL	Applications:	
Bond		Steel	•
Aggression		Stainless steel	•
Service life			

**Advantages:** Optimised bond for use on steel, also can be used on stainless steel - For use on gas powered free-hand machines with a cutting speed of 100m/s - Free-hand cutting of pipes, rods, profiles and solid materials

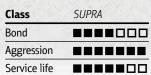
Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
305 x 4 x 20		100 m/s	6400 rpm	10	354419
305 x 4 x 22,23		100 m/s	6400 rpm	10	354418
305 x 4 x 25,4		100 m/s	6400 rpm	10	354417
356 x 4 x 20		100 m/s	5500 rpm	10	354416
356 x 4 x 22,23		100 m/s	5500 rpm	10	354415
356 x 4 x 25,4		100 m/s	5500 rpm	10	354414

Cutting-off wheel

**A 624 SX** SUPRA









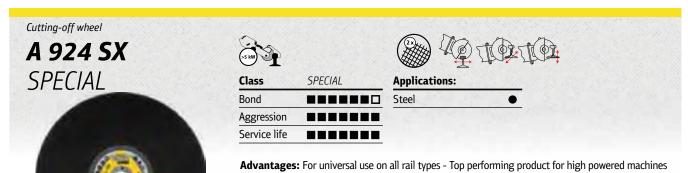


Applications:
Steel

**Advantages:** For universal use on all rail types - Top performing product for lower powered machines (<5kW) and hard rails - Fast cutting, due to softer bond - For use on gas powered cutting-off machines with a cutting speed of 100 m/s and clamping device

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
356 x 4 x 22,23		100 m/s	5500 rpm	10	351433
356 x 4 x 25,4		100 m/s	5500 rpm	10	340641
406 x 4 x 25,4		100 m/s	4800 rpm	10	351436

for petrol powered cutter with clamping device



(>5kW) and hard rails - For use on gas powered cutting-off machines with a cutting speed of 100 m/s and clamping device - Excellent service life

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
356 x 4 x 22,23		100 m/s	5500 rpm	10	352325
356 x 4 x 25,4		100 m/s	5500 rpm	10	353097

for stationary cutting / portable chop saws











Class	SUPRA	Applications:	
Bond		Steel	•
Aggression		Stainless steel	0
Service life		Castings	•

**Advantages:** Optimized combination for use on steel - Can be used on stainless steel - Good cutting properties - Optimal for stationary 3 - 5 kW cutting-off machine

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
300 x 3 x 25,4		100 m/s	6400 rpm	10	6793
350 x 3,5 x 25,4		100 m/s	5500 rpm	10	13528
350 x 3,5 x 32		100 m/s	5500 rpm	10	13536
400 x 4,5 x 25,4		100 m/s	4800 rpm	10	292933
400 x 4,5 x 40		100 m/s	4800 rpm	10	296567









Applications:				
Steel	•			
Stainless steel	•			
Aluminium	•			
Castings	•			

**Advantages:** More stability during cutting due to two glass fibre reinforcement mesh - Good cutting speed with a long service life - Recommended for various materials and different profiles - Usable on chop saws in craft and industry

	er x Width e in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
305 x 2	,5 x 25,4		80 m/s	5100 rpm	10	360976
356 x 2	,5 x 25,4		80 m/s	4400 rpm	10	353326
406 x	3 x 25,4		80 m/s	3800 rpm	10	353329

for portable chop saws







Class	SUPRA
Bond	
Aggression	
Service life	



Applications:	
Steel	•
Stainless steel	•
Aluminium	•
Castings	•

**Advantages:** Aggressive model with an outstanding service life - An exceptional choice for the cutting of solid material - Bond optimized for universal use - Low thermal load - Minimum burr formation

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
300 x 2,5 x 25,4		80 m/s	5100 rpm	10	353325
356 x 2,5 x 25,4		80 m/s	4400 rpm	10	353324
406 x 3,2 x 25,4		80 m/s	3800 rpm	10	353328











Applications:

Steel

Stainless steel

Aluminium

Castings

**Advantages:** Ultimate aggression and service life for universal use (pipes, profiles, solid material) - Low thermal load and minimum burr formation due to one glass fibre reinforcement mesh - An exceptional choice for 110 volt machines and the cutting of solid material

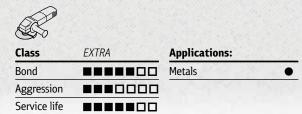
Diameter x Width x Bore in mm		Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
	350 x 3 x 25,4		80 m/s	4400 rpm	10	322628





A 24





Advantages: Extra hard grinding disc - Optimal for edge work and for removal of stubborn burrs

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 6 x 22,23		80 m/s	13300 rpm	10	325289
180 x 6 x 22,23		80 m/s	8500 rpm	10	13794
180 x 8 x 22,23		80 m/s	8500 rpm	10	13445
230 x 6 x 22,23	-	80 m/s	6600 rpm	10	277571

Grinding disc

A 24 R SUPRA





Class	SUPRA	Applications:	
Bond		Steel	•
Aggression		Stainless steel	•
Service life		Castings	•

**Advantages:** With optimised recipe for use on steel - Also suitable for use on stainless steel - Large product range

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
100 x 6 x 16		80 m/s	15300 rpm	10	6578
115 x 6 x 22,23	-~	80 m/s	13300 rpm	10	13401
125 x 6 x 22,23		80 m/s	12200 rpm	10	13402
150 x 6 x 22,23	-~	80 m/s	10200 rpm	10	13403
230 x 6 x 22,23		80 m/s	6600 rpm	10	13433

### Grinding disc INOX

A 24 N SUPRA





Class	SUPRA	Appl
Bond		Stair
Aggression		Alum
Service life		

Applications:

Stainless steel

Aluminium

**Advantages:** High removal rate on stainless steel - Optimal ratio between removal and wear

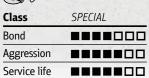
Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 6 x 22,23		80 m/s	13300 rpm	10	2923
180 x 6 x 22,23		80 m/s	8500 rpm	10	13412
230 x 6 x 22,23		80 m/s	6600 rpm	10	13432

Grinding disc

**A 24 R/36** SPECIAL









**Applications:** 

Stainless steel •

**Advantages:** Special wheel for the nuclear industry - Free of iron, sulfur and chlorine - Optimal ratio between removal and wear

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 6 x 22,23		80 m/s	13300 rpm	10	2488
125 x 6 x 22,23		80 m/s	12200 rpm	10	2830





A 30 M SPECIAL





Class	SPECIAL	Applications:
Bond		Stainless steel
Aggression		Steel
Service life		

Advantages: Special wheel for the nuclear industry - Optimal ratio between removal and wear

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 6 x 22,23		80 m/s	13300 rpm	10	310899

Grinding disc

**A 46 N** SUPRA





Class	SUPRA	Applications:		
Bond		Aluminium	•	
Aggression		NF metals	0	
Service life				

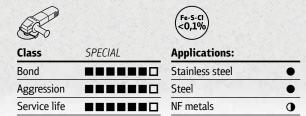
**Advantages:** No clogging when used on non-ferrous metals - Optimal ratio between removal and wear

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 6 x 22,23		80 m/s	13300 rpm	10	6622
125 x 6 x 22,23		80 m/s	12200 rpm	10	2226

Thin cutting-off wheel & grinding disc

**A 46 VZ** SPECIAL





**Advantages:** Long service life - Multi-purpose: cutting off and light rough grinding with one wheel - High aggressiveness in cutting - No change of wheel necessary

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 2 x 22,23		80 m/s	13300 rpm	25	298176
125 x 2 x 22,23	~~	80 m/s	12200 rpm	25	298177

Grinding disc

A 624 T



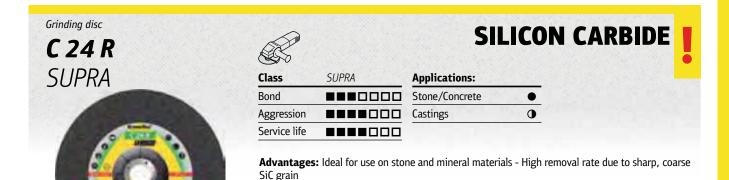


Class	SUPRA	Applications:		
Bond		Steel	•	
Aggression		Stainless steel	•	
Service life		Castings	•	

Advantages: Special recipe for use on various materials - Optimal ratio between removal and wear

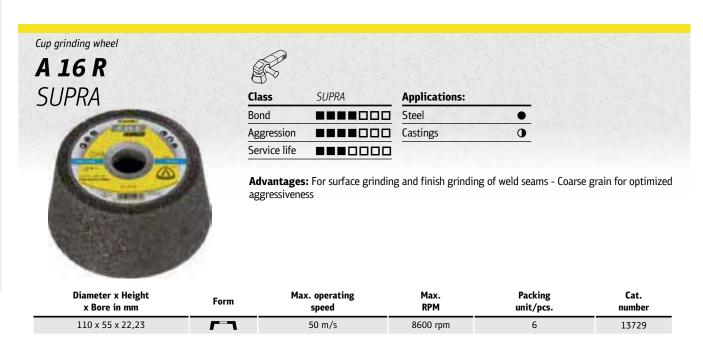
Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 6 x 22,23		80 m/s	13300 rpm	10	325215
125 x 6 x 22,23	~~	80 m/s	12200 rpm	10	325216
180 x 6 x 22,23		80 m/s	8500 rpm	10	325217
230 x 6 x 22,23		80 m/s	6600 rpm	10	325218

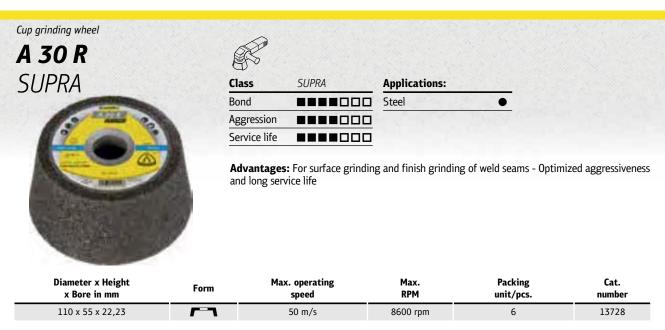




Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/pcs.	Cat. number
115 x 6 x 22.23	$\overline{}$	80 m/s	13300 rpm	10	6664

### Kronenflex® cup grinding wheels

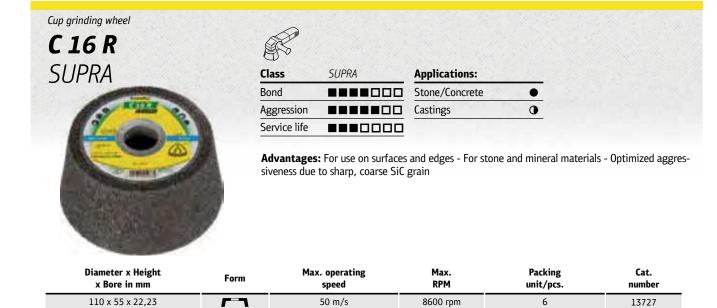


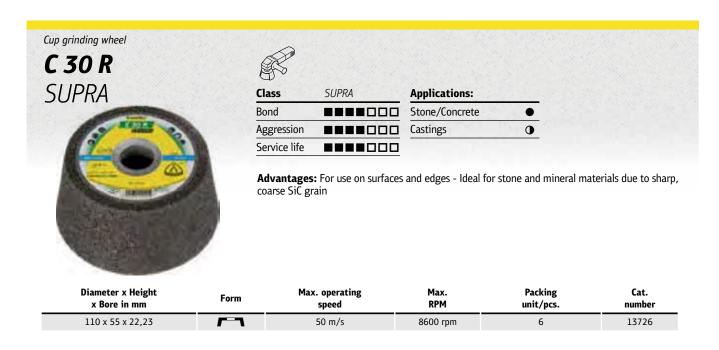


Please observe: Cup grinding wheels may only be used on angle grinders diameter 180mm with cup grinding wheel protection!

### Kronenflex® cup grinding wheels











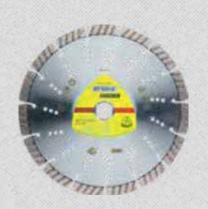
Remain in full control of all processes: staying true to this motto, Klingspor managed to rise to be one of the world's first manufacturers of grinding and cutting tools. The company is now applying their extensive experience in research and development and manufacturing, their global network of distributors and their highly efficient service and logistics structure to their diamond tools.

DT 650 PKD	Machine	Application - Material	SPECIAL	SUPRA	EXTRA	Page	
			DT 900 U	DT 600 U	DT 300 U		
				DT 612 UT	DT 350 U	270 274	
		Universal	DT 900 UD	DT 650 UD	DT 300 UT	230-234	
			DT 900 UT		DT 310 UT		
		DT 900 B		DT 350 B	274 275		
Sa		Concrete			DT 350 BT	234-235	
olado		Clinker	DT 900 K			236	
Diamond cutting blades Ø 100 - 230 mm		Lime sandstone, screed and abrasive		DT 600 AS		236	
1 cut	Angle grinder	materials	DT 000 Ct	DT coo C			
100 (		Granite	DT 900 G*	DT 600 G		237	
Dian			DT 000 F/	DT 600 GU	DT 700 F		
		Tiles	DT 900 FL	DT 600 F	DT 300 F	270 240	
		Tiles	DT 900 FT			238-240	
		All Cut Matal	DT 900 FP	DT COO ACM		240	
		All Cut Bessue	DT OOO ACD	DT 600 ACM		240	
		All Cut Rescue	DT 900 ACR	DN 600 U		241	
		Mortar rake			DC 700 D	241	
		Concrete		DS 600 B	DS 300 B	242-243	
els.		Lime conditions, caused and abunctive		DS 600 S			
Cup grinding wheels		Lime sandstone, screed and abrasive materials		DS 600 A		243	
ding	Angle grinder	Granite		DS 600 GC			
grin				DS 600 GM		245	
Cup				DS 600 GF			
		Epoxy resin, tile adhesive	DT 900 PKD	DT 650 PKD		244	
		Adapter M14			DZ 114	246	
			DT 900 U	DT 600 U	DT 300 U	247-249	
		Universal	DT 900 US	DT 612 UT*	DT 310 UT*	* available on	
			DT 900 UX*		DT 350 U	request	
		Tiles	DT 900 FL	DT 600 F	DT 300 F	249-250	
ades		Clinker	DT 900 K			256	
g bl.	Daturil mannered another	Refractory brick	DT 900 R			251	
Diamond cutting blades Ø 250 - 500 mm	Petrol powered cutter, Table saw,	All Cut Rescue	DT 900 ACR			251	
od cı	Joint cutter	Asphalt	DT 902 A	DT 602 A	DT 350 A	252-254	
mor Ø 2.			DT 910 A	DT 612 A		-02 -0 .	
Dia		Asphalt / Concrete		DT 612 AB	DT 350 AB	255	
			DT 900 B	DT 602 B	DT 350 B		
		Concrete	DT 902 B		DT 350 BT	256-258	
			DT 910 B				
		Reduction rings			DZ 100 RR	258	
		Concrete	DR 912 B	DK 612 B		259-261	
	Drill stand			DK 654 B			
		Individual segments, ring segments	DO 900 B	DE 600 B		262-263	
oits	Developing deill	Concrete		DD 600 U		263	
Drill bits	Percussion drill	Adapter kit			ADS 200	* available on request	
	Drilling machine	Tiles		DB 600 F		263-264	
		Tiles		DK 600 F		264-265	
	Angle grinder	Hole starting aid			ABH 80	* available on request	

Applications guide

### The three product lines

The right tool for every application: Klingspor diamond tools are available in three product lines that are colour-coded to provide the user with a quick overview of the most important materials for which the tools are suitable.





**Product line 900** – High performance tools offering outstanding cutting performance and service life. For users who need their tools to perform at peak output and reliability even if subjected to the most punishing applications.





**Product line 600** – Professional tools with an exceptional price-performance ratio. For users who require diamond tools that deliver reliable and powerful performance every day.

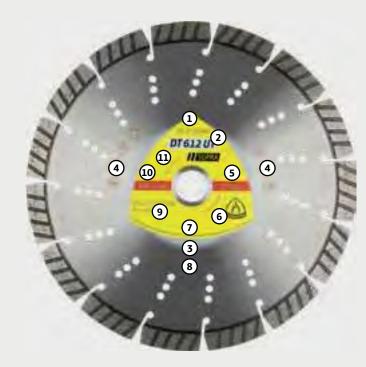




**Product line 300** – Brand name quality at an affordable price. For users who expect their tools to meet professional standards, but do not need to use them continuously.



- 1. Klingspor cat. number
- 2. Product group / type
- 3. Applications
- 4. Safety pictograms
- 5. Max. operating speed
- 6. Klingspor logo



- 7. Information about the manufacturer
- 8. Safety standard
- 9. Dimensions in mm and inches
- 10. Max. RPM
- 11. Rotational direction





Applications guide



1.

#### **Standard gullet**

- rapid feed rate
- exceptional cutting properties



2.

## Turbo continuous rim

- exceptionally smooth operation
- clean cutting edges



3.

#### **Continuous rim**

- ▶ clean cutting edges
- work with superior precision
- short cutting times



4.

#### **Turbo segments**

- exceptionally smooth operation
- clean cutting edges
- fast cutting speed
- ▶ long service life



5.

#### **Short segments**

- ▶ first-rate cutting performance
- clean cutting edges



6.

#### Wide gullet

▶ high feed rate



7.

#### Narrow gullet

- ▶ clean cut
- exceptionally smooth operation thanks to narrow segment spacings



8.

#### **Hammer segments**

- prevent rear grinding
- prevent segments tearing off
- optimal protection thanks to segments soldered in



9.

## Continuous rim with special geometry

- ▶ for extra clean cutting edges
- soft and comfortable cutting performance



10.

# Continuous rim with laser-cut slots

- for fine and clean cutting edges
- specially designed for ceramic and fine stoneware

Applications guide



### **Number of revolutions**

Diamond tools made by Klingspor are high performance products and have been engineered to reach their highest level of performance at a level immediately below their maximum peripheral surface speeds. The maximum permissible values for motor speed and operating speed are indicated on every diamond blade. The table below contains all permissible maximum speeds as a function of the diameter and the maximum permissible operating speed of the diamond tools.

					Maximum	operating sp	eed [m/s]				
		30	35	40	45	50	55	60	70	80	100
	200	2865	3342	3820	4297	4775	5252	5730	6685	7640	
	230	2491	2906	3322	3737	4152	4567	4982	5813	6643	
	250	2292	2674	3056	3438	3820	4202	4584	5348	6112	
	300	1910	2228	2547	2865	3183	3502	3820	4456	5093	6360
[mm]	350	1637	1910	2183	2456	2728	3001	3274	3820	4366	5450
	400	1432	1671	1910	2149	2387	2626	2865	3342	3820	4770
Ø	450	1273	1485	1698	1910	2122	2334	2547	2971	3395	4240
	500	1146	1337	1528	1719	1910	2101	2292	2674	3056	3810
	550	1042	1215	1389	1563	1736	1910	2084	2431	2778	
	600	955	1114	1273	1432	1592	1751	1910	2228	2547	

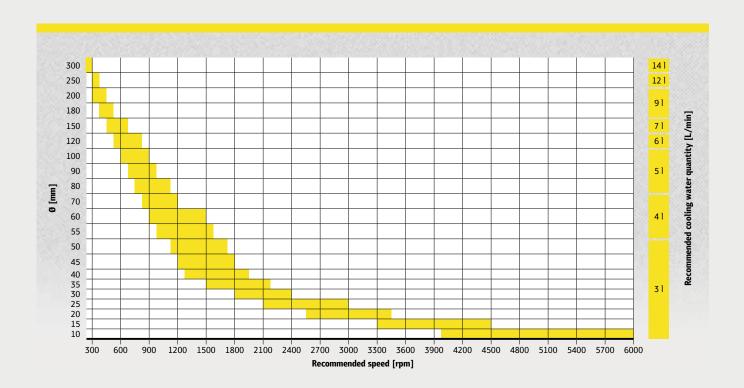
### Motor speeds and cooling water quantity

#### The recommended speed range

The chart illustrates the ideal speed range for drill bits as a function of the diameter and the maximum permissible operating speed.

#### **Recommended cooling water quantity**

Drill bits require cooling with water regardless of the material on which they are used. Refer to the right side of the table for the recommended quantity of cooling water.







### Dunanation

# Properties Design Sintered Segmentation Standard Aggression Service life



### Applications:

Construction materials	•
Concrete, universal	•

**Advantages:** Product for universal use on general construction materials - Excellent cutting performance - Great price-performance ratio

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 37,3 / 1,6 / 7	1	325345
125 x 22,23	80 m/s	12200 rpm	9 / 36,4 / 1,6 / 7	1	325346
180 x 22,23	80 m/s	8500 rpm	13 / 38,1 / 2 / 7	1	325347
230 x 22,23	80 m/s	6600 rpm	16 / 40,2 / 2,3 / 7	1	325348





### Properties

Service life

Design	Laser welded
Segmentation	Standard
Aggression	



#### **Applications:**

Construction materials

Concrete, universal

**Advantages:** Product with laser-welded standard segments for universal use on general construction material - Smooth, fast and low-vibration cutting with unmatched service life - Optimum price-performance ratio

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 33 / 2,4 / 10	1	336214
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,4 / 10	1	336215
180 x 22,23	80 m/s	8500 rpm	11 / 42 / 2,6 / 10	1	336216
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 10	1	336219









#### **Properties**

Design	Laser welded
Segmentation	Short segments
Aggression	
Service life	

#### **Applications:**

Construction materials	•
Concrete, universal	•
Cured concrete, reinforced	•
Chalky sandstone	•

**Advantages:** Suitable for a various range of applications - First-rate cutting performance - Exceptional service life thanks to the use of premium grade raw materials and diamonds - Clean cutting

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
100 x 16	80 m/s	15300 rpm	11 / 20 / 2,4 / 9	1	325025
115 x 22,23	80 m/s	13300 rpm	13 / 20 / 2,4 / 9	1	322630
125 x 22,23	80 m/s	12200 rpm	15 / 20 / 2,4 / 9	1	322631
140 x 22,23	80 m/s	10900 rpm	17 / 20 / 2,4 / 9	1	325046
150 x 22,23	80 m/s	10200 rpm	18 / 20 / 2,4 / 9	1	322632
180 x 22,23	80 m/s	8500 rpm	22 / 20 / 2,6 / 9	1	322633
230 x 22,23	80 m/s	6600 rpm	30 / 20 / 2,6 / 9	1	322634







Service life

Properties	
Design	Laser welded
Segmentation	Turbo
Aggression	

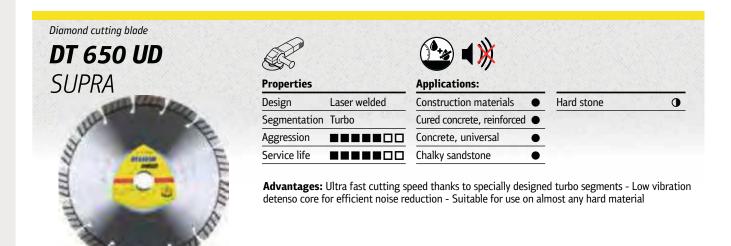


#### **Applications:**

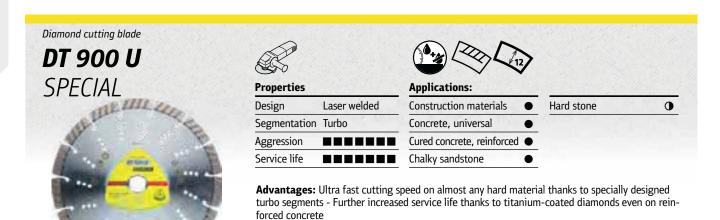
	0.00
Construction materials	•
Concrete, universal	•
Cured concrete, reinforced	•
Chalky sandstone	•

**Advantages:** Special turbo segments for an extremely high cutting speed on almost all hard materials - Excellent service life even on reinforced concrete

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 33 / 2,4 / 12	1	334044
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,4 / 12	1	334045
180 x 22,23	80 m/s	8500 rpm	11 / 42 / 2,6 / 12	1	334046
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 12	1	334047



Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 12	1	334061



Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 33 / 2,4 / 12	1	325206
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,4 / 12	1	325209
180 x 22,23	80 m/s	8500 rpm	11 / 42 / 2,6 / 12	1	325028
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 12	1	325045







Design

Segmentation Aggression

Service life





#### **Applications:**

Construction materials	•
Concrete, universal	•
Roof tiles	•

**Advantages:** Suitable for a various range of applications - Excellent cutting performance - Great price-performance ratio - Turbo segments for clean and nick-free edges - Ideal for roofers

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	CR / CR / 1,9 / 7	1	325353
125 x 22,23	80 m/s	12200 rpm	CR / CR / 1,9 / 7	1	325354
180 x 22,23	80 m/s	8500 rpm	CR / CR / 2,2 / 7	1	325355
230 x 22,23	80 m/s	6600 rpm	CR / CR / 2,5 / 7	1	325356

Sintered Turbo continuous









Construction materials

#### **Properties**

Design	Sintered
Segmentation	Turbo continuous rim

Aggression Service life 

Concrete, universal Roof tiles

Advantages: All-purpose - Excellent cutting performance, great price-performance ratio - Turbo segments for clean and nick-free edges - Ideal for roofers - For cutting clay and roof tiles

_	Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
	115 x 22,23	80 m/s	13300 rpm	CR / CR / 2 / 10	1	334088
	230 x 22,23	80 m/s	6600 rpm	CR / CR / 2,5 / 10	1	334091





Design



Segmentation Aggression

Service life





#### **Applications:**

Sintered	Concrete, universal	•
	Construction materials	•
rim	Roof tiles	•

Advantages: Wave-shaped steel core - Use on construction material - Clean cutting edges - High aggressiveness

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	CR / CR / 2,2 / 10	1	325364
125 x 22,23	80 m/s	12200 rpm	CR / CR / 2,2 / 10	1	325365
230 x 22,23	80 m/s	6600 rpm	CR / CR / 2,5 / 10	1	325367

Laser welded





Design

Aggression Service life

Segmentation Standard





#### **Applications:**

Concrete	•
Cured concrete, reinforced	•

**Advantages:** Diamond cutting disc with good price-performance ratio for working on concrete materials - Fast cutting with low vibration - Optimum service life

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,4 / 10	1	339828
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 10	1	339829







**Properties** 

Design

# 10.





#### Applications:

Laser welded	Concrete

Segmentation Turbo

Aggression

Aggression Service life

Cured concrete, reinforced ①

**Advantages:** Special turbo segments for an extremely high cutting speed on concrete and all concrete products - Fast and easy cutting with low vibration - Optimum service life - Optimum price-performance ratio

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 33 / 2,4 / 10	1	354790
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,4 / 10	1	354791
150 x 22,23	80 m/s	10200 rpm	11 / 33 / 2,4 / 10	1	354792
180 x 22,23	80 m/s	8500 rpm	11 / 42 / 2,6 / 10	1	354793
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 10	1	354794











#### Properties

Design	Laser welded
Segmentation	Standard
Aggression	
Service life	

**Applications:** 

Cured concrete, reinforce	d •
Concrete, universal	•
Chalky sandstone	•
Construction materials	•

**Advantages:** Titanium-coated diamonds for first-rate cutting performance - Fast cutting speed even on reinforced concrete - Unrivalled service life - Designed for professional applications on concrete

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 33 / 2,4 / 12	1	325205
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,4 / 12	1	325208
180 x 22,23	80 m/s	8500 rpm	11 / 42 / 2,6 / 12	1	325027
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 12	1	325034







Design	Laser welded
Segmentation	Standard
Aggression	
Service life	



#### **Applications:**

Clinker	•
Concrete products	•
Construction materials	•

**Advantages:** Exceptional cutting performance - Outstanding service life and clean cutting edges - Particularly well suited for clinker of all degrees of hardness

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 33 / 2,4 / 12	1	325204
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,4 / 12	1	325207
180 x 22,23	80 m/s	8500 rpm	11 / 42 / 2,6 / 12	1	325026
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 12	1	325033





#### **Properties** Design Laser welded Segmentation Standard Aggression Service life



Chalky sandstone

**Advantages:** The use of hard segments lets the blade achieve an outstanding service life - Perfectly suited for sandstone, chalky sandstone and abrasive materials

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 33 / 2,5 / 12	1	334039
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,5 / 12	1	334040
150 x 22,23	80 m/s	10200 rpm	11 / 33 / 2,5 / 12	1	336180
180 x 22,23	80 m/s	8500 rpm	11 / 42 / 2,7 / 12	1	334041
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,7 / 12	1	334042









#### **Properties**

Design	Laser welded
Segmentation	Short segments
Aggression	
Service life	



Granite	•
Terrazzo	•

**Advantages:** High stock removal rate - Excellent service life - Clean cutting - Great price-performance ratio - Suitable for all types of granite

Diameter x Bore	Max. operating	Max.	Segment in mm	Packing unit/pcs.	Cat.
in mm	speed	RPM	Number / Length / Width / Height		number
180 x 22,23	80 m/s	8500 rpm	22 / 20 / 2,6 / 9	1	325096







#### **Properties**

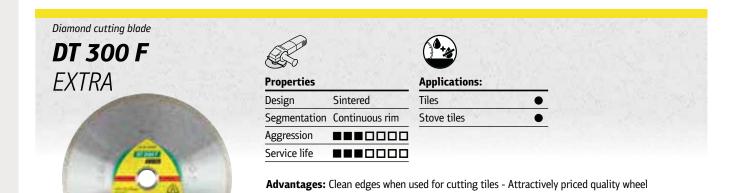
Design	Laser welded
Segmentation	Standard
Aggression	
Service life	

**Applications:** 

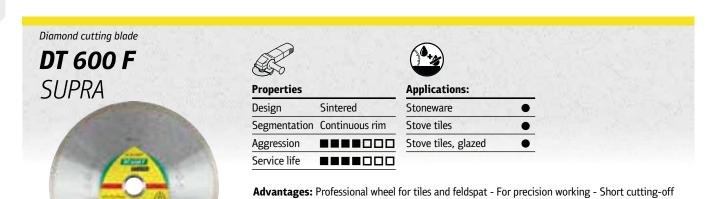
Granite	•
Terrazzo	•

**Advantages:** High stock removal rate - Excellent service life - Clean cutting - Great price-performance ratio - Suitable for all types of granite

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 33 / 2,4 / 10	1	336614
125 x 22,23	80 m/s	12200 rpm	9 / 33 / 2,4 / 10	1	336615
180 x 22,23	80 m/s	8500 rpm	11 / 42 / 2,6 / 10	1	336616
230 x 22,23	80 m/s	6600 rpm	15 / 42 / 2,6 / 10	1	336617



Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	CR / CR / 1,6 / 7	1	325357
125 x 22,23	80 m/s	12200 rpm	CR / CR / 1,6 / 7	1	325358
180 x 22,23	80 m/s	8500 rpm	CR / CR / 1,6 / 7	1	325359
230 x 22.23	80 m/s	6600 rpm	CR / CR / 1.9 / 7	1	325360



450					
Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	CR / CR / 1,6 / 7	1	325368
125 x 22,23	80 m/s	12200 rpm	CR / CR / 1,6 / 7	1	325369
150 x 22,23	80 m/s	10200 rpm	CR / CR / 1,6 / 7	1	325370

CR / CR / 1,6 / 7

CR / CR / 1,9 / 7

325371

325372

times - Clean edges

8500 rpm

6600 rpm

180 x 22,23

230 x 22,23

80 m/s

80 m/s









Service life



#### Properties Applications:

Design	Sintered
Segmentation	Continuous rim, with laser-cut slots
Aggression	

Wall tiles	•
Floor tiles	•
Porcelain	•
Ceramics	•

Marble • Stoneware •

**Advantages:** High-precision tool for hard wall and floor tiles - Laser-cut slots for exceptionally smooth operation and perfectly cut edges

Diameter x Bore	Max. operating	Max.	Segment in mm	Packing unit/pcs.	Cat.
in mm	speed	RPM	Number / Length / Width / Height		number
115 x 22,23	80 m/s	13300 rpm	CR / CR / 1,4 / 7	1	331042







**Applications:** 



#### **Properties**

Service life

Design	Sintered
Segmentation	Turbo continuous rim
Aggression	

	Stoneware
inuous	Stove tiles
	Stove tiles,
	Granite

Stove tiles

Stove tiles, glazed

Granite

**Advantages:** 1,4 mm thin professional blade for extremely demanding applications - Work results of superior quality - Continuous rim with turbo segments - Clean and nick-free edges

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	CR / CR / 1,4 / 7,5	1	325392
125 x 22,23	80 m/s	12200 rpm	CR / CR / 1,4 / 7,5	1	325393
230 x 22,23	80 m/s	6600 rpm	CR / CR / 2 / 7	1	330629

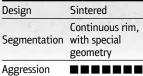






## **Properties**

Service life





#### **Applications:**

	Hard floor tiles
,	Porcelain
	Hard wall tiles
-	Hard fine stoneware

Ceramics

Advantages: Extra thin disc for hard tiles and porcelain - The special geometry allows for superior cutting speeds and perfectly cut edges

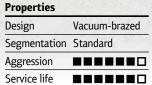
Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	CR / CR / 1,4 / 10	1	331039
125 x 22,23	80 m/s	12200 rpm	CR / CR / 1,4 / 10	1	331040

Diamond cutting blade

# **DT 600 ACM**









#### **Applications:**

Steel	•
Stainless steel	•
Metals	•
NF metals	•

Castings	•
Aluminium	0

Advantages: Vacuum-brazed disc for almost all metallic materials - No wear behaviour as with conventional diamond cutting blades and therefore almost odourless and dirt-free - Extra thin blade for high cutting performance and aggressiveness

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	8 / 42 / 1,3 / 1,8	1	355720
125 x 22,23	80 m/s	12200 rpm	10 / 36 / 1,3 / 1,8	1	355722
230 x 22,23	80 m/s	6600 rpm	16 / 42 / 1,6 / 1,8	1	355721











#### **Applications: Properties**

Design	Vacuum-brazed
Segmentation	Narrow gullet
Aggression	
Service life	

Construction materials	•
Concrete, universal	•
Glass	•
Wood-based materials	•

Plastic	•
Rubber	•
Metal	0

Advantages: Vacuum-brazed diamond cutting blade for almost all materials - Very wide range of applications due to special manufacturing process - 10 mm high diamond coating for a good service life and an aggressive cut for very different and demanding materials - Ideal for rescue services

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	6 / 56 / 2,8 / 10	1	355723
125 x 22,23	80 m/s	12200 rpm	6 / 45 / 2,8 / 10	1	355724
230 x 22,23	80 m/s	6600 rpm	12 / 56 / 3,1 / 10	1	355725







#### **Properties**

Design	Laser welded
Segmentation	Standard
Aggression	
Service life	

Applicacions	6.6. 30.000
Mortar joints	•
Plaster	•
Aerated concrete	•

**Advantages:** Special broaching wheel with robust design for removing mortar from bricks, natural stones and clinker facades - Specially designed hammer segments - Optimum protection of the steel core

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	80 m/s	13300 rpm	9 / 33 / 4,5 / 7	1	325380
125 x 22,23	80 m/s	12200 rpm	10 / 33 / 4,5 / 7	1	325381





Properties
Design

Aggression

Service life

Brazed

Segmentation Standard





### **Applications:**

Concrete	•
Screed	•
Construction materials	•

**Advantages:** Double row cup grinding wheel with outstanding stock removal performance - High aggressiveness at low force requirements - Exceptional price-performance ratio - M14 adapter available, see DZ 114

Diameter x Bore in mm	Cup grinding wheel height in mm	Max. operating speed	Max. RPM	Segment in mm Number / Width / Height	Packing unit/pcs.	Cat. number
100 x 16 / 22,23	20	80 m/s	15300 rpm	14 / 7 / 5,5	1	330622
115 x 22,23	20	80 m/s	13300 rpm	14 / 8,2 / 5,5	1	325361
125 x 22,23	24,5	80 m/s	12200 rpm	18 / 7 / 5	1	325362
180 x 22,23	30,5	80 m/s	8500 rpm	22 / 8 / 5	1	325363











#### **Properties**

Design	Brazed
Segmentation	Standard
Aggression	
Service life	

#### Applications:

Concrete	•
Screed	•
Construction materials	•

**Advantages:** Double row cup grinding wheel for machining concrete and abrasive materials - Efficient dust extraction - Aggressive grinding performance - Long service life - M14 adapter available, see DZ 1.14

Diameter x Bore in mm	Cup grinding wheel height in mm	Max. operating speed	Max. RPM	Segment in mm Number / Width / Height	Packing unit/pcs.	Cat. number
115 x 22,23	20	80 m/s	13300 rpm	16 / 8,2 / 5,5	1	325377
125 x 22,23	23,5	80 m/s	12200 rpm	20 / 7,2 / 5,5	1	325378
180 x 22,23	30,5	80 m/s	8500 rpm	24 / 8 / 5,5	1	325379







**Properties** 





Annlient	ione.

Design	Brazed	(
Segmentation	Standard	F
Aggression		1
Service life		N

ions - M14 adapter available, see DZ 114

23910112000
•
•
•
•

Advantages: Excellent dust extraction thanks to specially designed (fan-shaped) opening - Low weight thanks to lightweight steel plate - Rugged performance and operation with minimum vibrat-

Brickwork

Sandstone

Diameter x Bore in mm	Cup grinding wheel height in mm	Max. operating speed	Max. RPM	Segment in mm Number / Width / Height	Packing unit/pcs.	Cat. number
100 x 16 / 22,23	20,5	80 m/s	15300 rpm	16 / 7,2 / 5,5	1	331022
115 x 22,23	20,5	80 m/s	13300 rpm	16 / 7,2 / 5,5	1	331023
125 x 22,23	20,5	80 m/s	12200 rpm	16 / 7,2 / 5,5	1	331024
180 x 22,23	30,5	80 m/s	8500 rpm	24 / 7,8 / 5,5	1	331025

Brazed

Segmentation Standard





**Properties** 

Aggression

Service life

Design





### Applications:

Asphalt	•
Abrasive materials	•
Green concrete	•
Aerated concrete	•

**Advantages:** An ideal match with all types of abrasive materials - Outstanding grinding performance combined with a long service life - Fast and smooth grinding of surfaces thanks to doublerow segments - Extended service life thanks to optimized matrix and diamonds - Simple dust extraction through openings in the steel enclosure - M14 adapter available, see DZ 114

	Diameter x Bore in mm	Cup grinding wheel height in mm	Max. operating speed	Max. RPM	Segment in mm Number / Width / Height	Packing unit/pcs.	Cat. number
Ī	115 x 22,23	20	80 m/s	13300 rpm	14 / 8,2 / 5,5	1	331027
	125 x 22,23	24,5	80 m/s	12200 rpm	18 / 7,2 / 5	1	331028
	180 x 22,23	30,5	80 m/s	8500 rpm	22 / 7,8 / 5,3	1	331029







Design

Aggression Service life





### **Applications:**

Brazed	Epoxy resin
	Adhesive
	Coatings
	Filler

Carried States	
Bitumen	•
Paint	•
Glue	•

**Advantages:** PCD (Poly Crystalline Diamonds) cup grinding wheel with good stock removal on hard resins and adhesive residues - Good dust removal - Aggressive grinding performance - Support segments for a smooth and low-vibration grinding process - M14 adapter available, see DZ 114

Diameter x Bore in mm	Cup grinding wheel height in mm	Max. operating speed	Max. RPM	Segment in mm Number / Width / Height	Packing unit/pcs.	Cat. number
125 x 22,23	21,6	80 m/s	12200 rpm	6 / 13 / 3,6	1	355953
180 x 22,23	29	80 m/s	8500 rpm	6 / 13 / 4	1	355940

Diamond cup grinding wheel

### **DS 900 PKD SPECIAL**





**Properties** 

Aggression

Service life

Design



**Brazed** 



#### **Applications:**

Adhesive	•
Epoxy resin	•
Filler	•
Coatings	•

Bitumen	•
Paint	•
Glue	•

**Advantages:** Ultra-aggressive polycrystalline diamond cutting wedges enable the cup grinding wheel to remove hard and solid coatings - Support segments for a smooth and low-vibration grinding process - M14 adapter available, see DZ 114

Diameter x Bore in mm	Cup grinding wheel height in mm	Max. operating speed	Max. RPM	Segment in mm Number / Width / Height	Packing unit/pcs.	Cat. number
125 x 22,23	21	80 m/s	12200 rpm	6 / 5 / 3,5	1	355941
180 x 22,23	21,5	80 m/s	8500 rpm	8 / 5 / 3,5	1	355948











### Properties Applications:

. op 0. 0.05			30.00.00.00
Design	Brazed	Granite	•
Segmentation	Turbo	Hard stone	•
Aggression		Marble	0
Sondica lifa			

**Advantages:** Turbo-serrated diamond cup grinding wheel for granite - Premium quality for perfect grinding on hard granite - Clean grinding results on edges - For medium grinding - M14 adapter available, see DZ 114

Diameter x Bore in mm	Cup grinding wheel height in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
125 x 22,23	22,85	80 m/s	12200 rpm	Turbo / Medium / 20 / 7,3	1	331056





Service life





# PropertiesADesignBrazedGSegmentationTurboHAggressionAggressionM

Applications:	
Granite	•
Hard stone	•
Marble	•

**Advantages:** Turbo-serrated cup grinding wheel for granite - Premium quality for perfect grinding on hard granite - Clean grinding results on edges - For fine grinding- M14 adapter available, see DZ 114

Diameter x Bore in mm	Cup grinding wheel height in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
125 x 22,23	22,85	80 m/s	12200 rpm	Turbo / Fine / 20 / 7,3	1	331059

### **Adapter**

Adapter M14

DZ 114



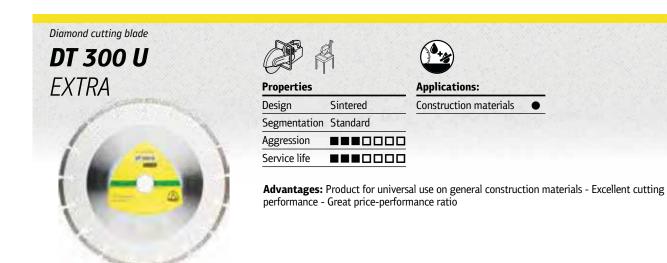


**Advantages:** For retooling diamond cup grinding wheels with a  $\emptyset$  22.23 mm hole to an M14 spindle size - Suitable for all Klingspor diamond cup grinding wheels

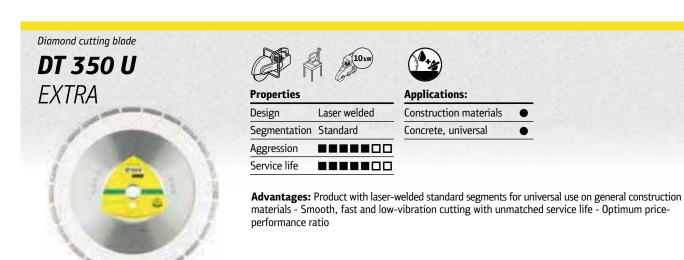
Mounting	Packing unit/pcs.	Cat. number
thread M14	1	331332

# Diamond cutting blades for petrol powered cutters, table saws and joint cutters



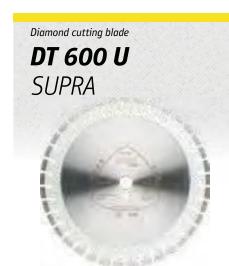


Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 20	100 m/s	6400 rpm	17 / 50,1 / 2,8 / 7	1	326831
300 x 25,4	100 m/s	6400 rpm	17 / 50,1 / 2,8 / 7	1	325349
300 x 30	100 m/s	6400 rpm	17 / 50,1 / 2,8 / 7	1	325351
350 x 25,4	100 m/s	5500 rpm	20 / 50,1 / 2,8 / 7	1	325350
350 x 30	100 m/s	5500 rpm	20 / 50,1 / 2,8 / 7	1	325352



Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 20	100 m/s	6400 rpm	21 / 40 / 2,8 / 10	1	336223
300 x 25,4	100 m/s	6400 rpm	21 / 40 / 2,8 / 10	1	336220
350 x 20	100 m/s	5500 rpm	24 / 40 / 3 / 10	1	336224
350 x 25,4	100 m/s	5500 rpm	24 / 40 / 3 / 10	1	336221

### Diamond cutting blades for petrol powered cutters and table saws









Tropercies	
Design	Laser welded
Segmentation	Short segments
Aggression	
Service life	

**Applications:** 

Construction materials Concrete, universal Cured concrete, reinforced Chalky sandstone

Advantages: High cutting performance - Long service life thanks to the use of premium-grade raw materials and diamonds - Clean cutting edges - Effortless cutting thanks to short serrated segments

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 20	100 m/s	6400 rpm	32 / 24 / 2,8 / 10	1	325183
300 x 25,4	100 m/s	6400 rpm	32 / 24 / 2,8 / 10	1	325184
300 x 30	100 m/s	6400 rpm	32 / 24 / 2,8 / 10	1	325185
350 x 20	100 m/s	5500 rpm	37 / 24 / 3 / 10	1	325194
350 x 25,4	100 m/s	5500 rpm	37 / 24 / 3 / 10	1	325195
350 x 30	100 m/s	5500 rpm	37 / 24 / 3 / 10	1	325196
400 x 25,4	100 m/s	4800 rpm	43 / 24 / 3,6 / 10	1	347485
450 x 25,4	100 m/s	4300 rpm	48 / 24 / 3,6 / 10	1	325201
450 x 30	100 m/s	4300 rpm	48 / 24 / 3,6 / 10	1	325200
500 x 25,4	100 m/s	3900 rpm	54 / 24 / 3,6 / 10	1	325203
500 x 30	100 m/s	3900 rpm	54 / 24 / 3,6 / 10	1	325202









#### **Properties**

Design	Laser welded
Segmentation	Narrow/wide gullet
Aggression	
Service life	

**Applications:** 

Construction materials Concrete, universal Cured concrete, reinforced Chalky sandstone

Granite

Advantages: Suitable for a wide range of applications - Ultra fast cutting speed - Special segment bond for long service life and clean cuts - Engineered for professional use

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 25,4	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 10	1	325053
300 x 25,4	100 m/s	6400 rpm	~~~	21 / 40 / 2,8 / 10	1	325067
300 x 30	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 10	1	325052
300 x 30	100 m/s	6400 rpm	~~~	21 / 40 / 2,8 / 10	1	325066
350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3 / 10	1	325085
350 x 25,4	100 m/s	5500 rpm	~~~	24 / 40 / 3 / 10	1	325100

**Continuation** →

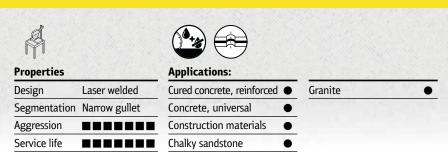
### Diamond cutting blades for petrol powered cutters and table saws



#### → Continuation of DT 900 U Special, Diamond cutting blade

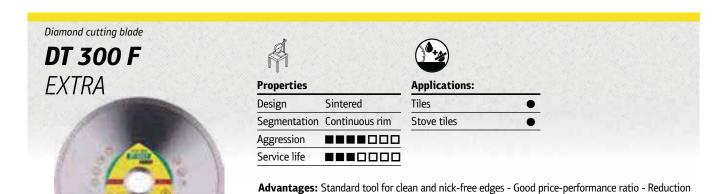
Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
350 x 30	100 m/s	5500 rpm	~	21 / 40 / 3 / 10	1	325084
350 x 30	100 m/s	5500 rpm	~~~	24 / 40 / 3 / 10	1	325099
450 x 25,4	100 m/s	4300 rpm	~	26 / 40 / 3,6 / 10	1	325133
450 x 25,4	100 m/s	4300 rpm		32 / 40 / 3,6 / 10	1	325176
450 x 30	100 m/s	4300 rpm	$\sim$	26 / 40 / 3,6 / 10	1	325132
450 x 30	100 m/s	4300 rpm	~~~	32 / 40 / 3,6 / 10	1	325175
500 x 25,4	100 m/s	3900 rpm		36 / 40 / 3,7 / 10	1	325155
500 x 25,4	100 m/s	3900 rpm	~	30 / 40 / 3,7 / 10	1	325164
500 x 30	100 m/s	3900 rpm	~~~	36 / 40 / 3,7 / 10	1	325154





**Advantages:** All-purpose high-performance tool - Extremely high cutting speed - Special segment bond for long service life and clean cuts - Engineered for professional use - Ideally suited for lownoise work environments thanks to sandwich core

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
350 x 25,4	100 m/s	5500 rpm	~~~	24 / 40 / 3 / 10	1	334063



Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
200 v 25 4 / 30	90 m/s	7600 rpm	CD / CD / 1 Q / 7	1	Z25/5/

ring from 30 mm to 25,4 mm included

### Diamond cutting blades for table saws









#### **Properties**

Design	Sintered
Segmentation	Continuous rim
Aggression	
Service life	

#### **Applications:**

Stoneware	•
Stove tiles	•
Stove tiles, glazed	•

Advantages: Professional wheel for tiles and feldspar - Continuous rim for clean and nick-free edges - Reduction ring from 30 mm to 25,4 mm included

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
180 x 25,4 / 30	80 m/s	8500 rpm	CR / CR / 1,6 / 7	1	325455
200 x 25,4 / 30	80 m/s	7600 rpm	CR / CR / 1,9 / 7	1	325373
250 x 25,4 / 30	80 m/s	6100 rpm	CR / CR / 1,9 / 7	1	325374
300 x 25,4 / 30	100 m/s	6400 rpm	CR / CR / 2 / 7	1	325375
350 x 25,4 / 30	100 m/s	5500 rpm	CR / CR / 2 / 7	1	325376

Diamond cutting blade

DT 900 FL **SPECIAL** 









### **Properties**

Design	Sintered
Segmentation	Continuous rim, with laser-cut slots
Aggression	

Service life



#### **Applications:**

•
•
•
•

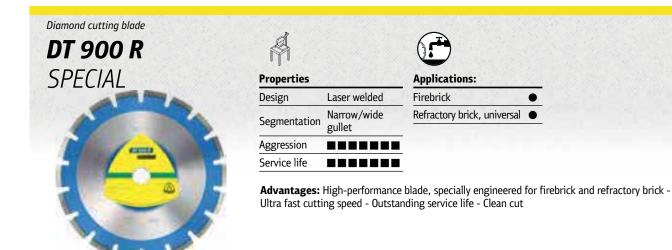
Marble	•
Stoneware	•

Advantages: High-precision tool for hard wall and floor tiles - Laser-cut slots for exceptionally smooth operation and perfectly cut edges - Reduction ring from 30 mm to 25,4 mm included

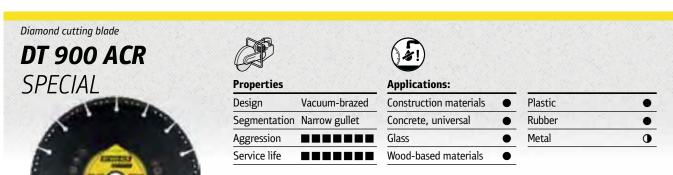
	Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
_	250 x 25,4 / 30	100 m/s	7600 rpm	CR / CR / 2 / 7	1	331047
	300 x 25,4 / 30	100 m/s	6400 rpm	CR / CR / 2,2 / 7	1	331049
	350 x 25,4 / 30	100 m/s	5500 rpm	CR / CR / 2,2 / 7	1	331050

# Diamond cutting blades for petrol powered cutters and table saws





Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
350 x 25,4	100 m/s	5500 rpm	~~~	24 / 40 / 3 / 10	1	325102
500 x 25,4	100 m/s	3900 rpm		36 / 40 / 3,7 / 10	1	325157



**Advantages:** Vacuum-brazed diamond cutting blade for almost all materials - Very wide range of applications due to special manufacturing process - 10 mm high diamond coating for a good service life and an aggressive cut for very different and demanding materials - Ideal for rescue services

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 20	100 m/s	6400 rpm	16 / 57 / 3,1 / 6	1	355726
300 x 25,4	100 m/s	6400 rpm	16 / 57 / 3,1 / 6	1	355727
350 x 20	100 m/s	5500 rpm	20 / 53 / 3,1 / 6	1	355729
350 x 25,4	100 m/s	5500 rpm	20 / 53 / 3,1 / 6	1	355728

### **Diamond cutting blades for petrol powered cutters** and joint cutters





**Properties** Design











### Applications:

asee.aea	Asphal
ide gullet	Sandst
	aser welded lide gullet

Aggression Service life  tone

Advantages: Diamond cutting blade for general repairs with an outstanding price-performance ratio - Specially engineered for applications on asphalt - Inclined protective segments prevent the premature wearing of the welds which can lead to segment loss on standard blades

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 20	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 10	1	337731
300 x 25,4	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 10	1	337729
350 x 20	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 10	1	337732
350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 10	1	337730
450 x 25,4	100 m/s	4300 rpm	~	28 / 40 / 3,7 / 10	1	337734
500 x 25,4	100 m/s	3900 rpm	~	30 / 40 / 3,7 / 10	1	337735

Laser welded





**Properties** Design

Aggression

Service life



Segmentation Wide gullet







### Applications

Asphalt Sandstone 

**Advantages:** First-rate cutting performance - Protective segments to guard the blade - Great price-performance ratio - Specially engineered for applications on asphalt - Also suitable for use on electric joint cutters

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 20	100 m/s	6400 rpm	~~	18 / 40 / 2,8 / 10	1	327025
300 x 25,4	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 10	1	325060
350 x 20	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 10	1	327026
350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 10	1	325092
400 x 25,4	100 m/s	4800 rpm	$\sim$	24 / 40 / 3,6 / 10	1	349240
450 x 25,4	100 m/s	4300 rpm	~	28 / 40 / 3,7 / 10	1	325128
500 x 25,4	100 m/s	3900 rpm		30 / 40 / 3,7 / 10	1	325171

## Diamond cutting blades for petrol powered cutters and joint cutters







**Properties** 

Aggression Service life

Design



Segmentation Wide gullet

Laser welded





#### **Applications:**

2	Asphalt	•
	Sandstone	•

**Advantages:** High cutting speed combined with excellent service life - Protective segments to shield the core - Specially designed for applications on asphalt - Also suitable for use on electric joint cutters

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 25,4	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 10	1	330075
350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 10	1	330076
450 x 25,4	100 m/s	4300 rpm	~	28 / 40 / 3,7 / 10	1	330078
500 x 25,4	100 m/s	3900 rpm	~	30 / 40 / 3,7 / 10	1	330079

Laser welded

\_\_\_\_\_

Segmentation Wide gullet





**Properties** 

Aggression Service life

Design









#### **Applications:**

•
•
•
•

Advantages: Very high cutting performance - 12 mm high segments - Protective segments to guard the blade

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 25,4	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 12	1	325062
350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 12	1	325094
450 x 25,4	100 m/s	4300 rpm	~	28 / 40 / 3,7 / 12	1	325130
500 x 25,4	100 m/s	3900 rpm	~	30 / 40 / 3,7 / 12	1	325173

## Diamond cutting blades for petrol powered cutters and joint cutters













## **Properties**

Design Laser welded Segmentation Narrow gullet Aggression Service life 

App	ıca	tions	:
Asph	alt	17	

Aspilale	
Sandstone	•
Green concrete	•
Screed	•

Advantages: Good cutting performance - 12 mm high segments - Protective segments to guard the blade - Exceptional service life

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 25,4	100 m/s	6400 rpm	~~~	21 / 40 / 2,8 / 12	1	325077
350 x 25,4	100 m/s	5500 rpm		24 / 40 / 3,2 / 12	1	325110
450 x 25,4	100 m/s	4300 rpm		30 / 40 / 3,7 / 12	1	325161
500 x 25,4	100 m/s	3900 rpm		35 / 40 / 3,7 / 12	1	325189













Service life

Design Laser welded Segmentation Wide gullet Aggression  **Applications:** 

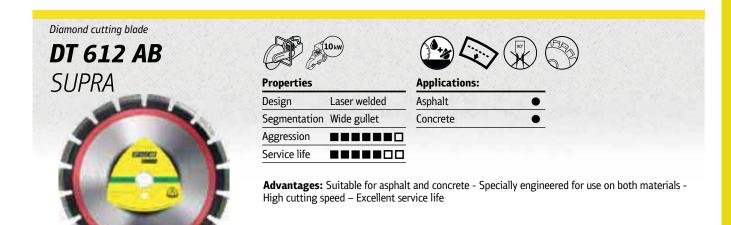
Asphalt Concrete

**Advantages:** Multi-purpose product for all repairs on asphalt and concrete thanks to laser-welded block segments, turbo segments and slanted protective segments - Can be used on gasoline-powered cutters and joint cutters with up to 10 kW

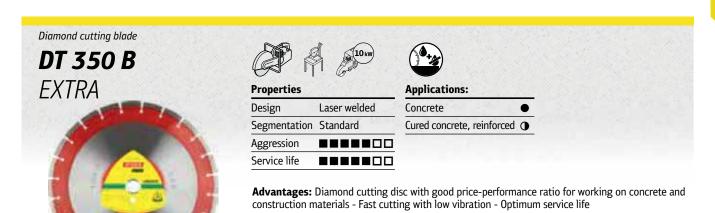
_	Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
Ī	350 x 20	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 12	1	340236
	350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 12	1	340240
	450 x 25,4	100 m/s	4300 rpm	~	28 / 40 / 3,7 / 12	1	353717

# Diamond cutting blades for petrol powered cutters, table saws and joint cutters



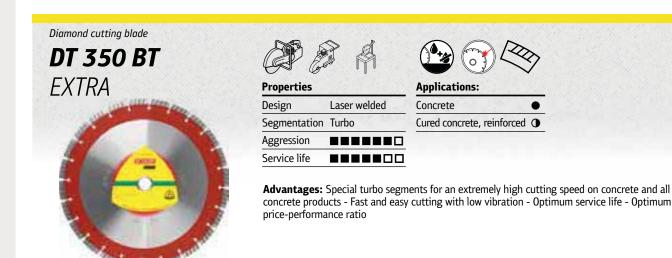


Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 25,4	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 10	1	330080
350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 10	1	330081
450 x 25,4	100 m/s	4300 rpm	~	28 / 40 / 3,7 / 10	1	330083
500 x 25,4	100 m/s	3900 rpm	~	30 / 40 / 3,7 / 10	1	330084

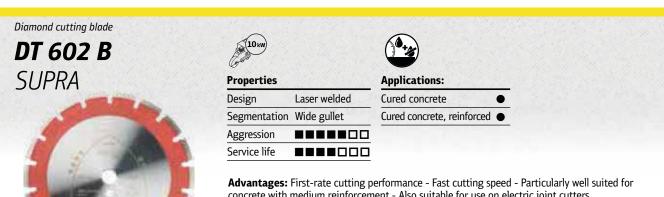


Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
350 x 25,4	100 m/s	5500 rpm	24 / 40 / 3 / 10	1	339830
350 x 30	100 m/s	5500 rpm	24 / 40 / 3 / 10	1	356985

# Diamond cutting blades for petrol powered cutters, table saws and joint cutters



Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 20	100 m/s	6400 rpm	21 / 40 / 2,8 / 10	1	354795
300 x 25,4	100 m/s	6400 rpm	21 / 40 / 2,8 / 10	1	354796
350 x 20	100 m/s	5500 rpm	24 / 40 / 3 / 10	1	354797
350 x 25,4	100 m/s	5500 rpm	24 / 40 / 3 / 10	1	354798
400 x 25,4	100 m/s	4800 rpm	28 / 40 / 3,6 / 10	1	354799



concrete with medium reinforcement - Also suitable for use on electric joint cutters

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 25,4	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 9	1	325056
350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 9	1	325088
450 x 25,4	100 m/s	4300 rpm	~	26 / 40 / 3,7 / 9	1	325136
500 x 25,4	100 m/s	3900 rpm	~	30 / 40 / 3,7 / 9	1	325167

# Diamond cutting blades for petrol powered cutters and joint cutters











Properties

Design	Laser welded
Segmentation	Turbo
Aggression	
Service life	

Applications:

Cured concrete, reinforce	d
Concrete, universal	•
Construction materials	•
Chalky sandstone	•

**Advantages:** Titanium-coated diamonds for first-rate cutting performance - Fast cutting speed even on reinforced concrete - Unrivalled service life - Designed for professional applications on concrete

Diameter x Bore in mm	Max. operating speed	Max. RPM	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
300 x 20	100 m/s	6400 rpm	20 / 40 / 2,8 / 12	1	325078
300 x 25,4	100 m/s	6400 rpm	20 / 40 / 2,8 / 12	1	325079
350 x 20	100 m/s	5500 rpm	22 / 40 / 3 / 12	1	325080
350 x 25,4	100 m/s	5500 rpm	22 / 40 / 3 / 12	1	325081







#### **Properties**

Service life

Design Laser welded
Segmentation Wide gullet
Aggression

**Applications:** 

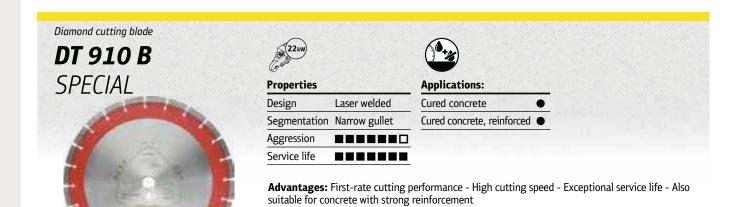
Cured concrete 

Cured concrete, reinforced

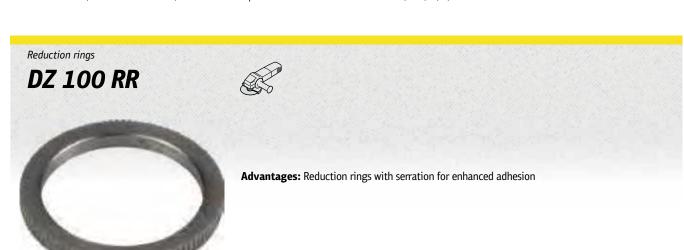
**Advantages:** First-rate cutting performance - Ultra fast cutting speed - Also suitable for concrete with strong reinforcement

_	Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
•	300 x 25,4	100 m/s	6400 rpm	~	18 / 40 / 2,8 / 11	1	325058
	350 x 25,4	100 m/s	5500 rpm	~	21 / 40 / 3,2 / 11	1	325090
	400 x 25,4	63 m/s	3000 rpm	~	24 / 40 / 3,4 / 11	1	325122
	450 x 25,4	100 m/s	4300 rpm	~	26 / 40 / 3,7 / 11	1	325138
	500 x 25,4	100 m/s	3900 rpm	~	30 / 40 / 3,7 / 11	1	325169

## Diamond cutting blades for joint cutters / Reduction rings



Diameter x Bore in mm	Max. operating speed	Max. RPM	Segmen- tation	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
350 x 25,4	100 m/s	5500 rpm	~~~	24 / 40 / 3,2 / 11	1	325106
450 x 25,4	100 m/s	4300 rpm	~~~	32 / 40 / 3,7 / 11	1	325182
500 x 25,4	100 m/s	3900 rpm		36 / 40 / 3,7 / 11	1	325193



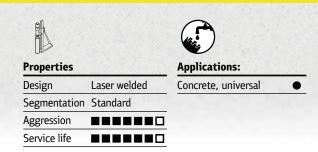
Diameter x Wi x Bore in mi		Packing unit/pcs	
25,4 x 2 x 2	0 Bore 25,4 m	m 1	328933
25,4 x 2,5 x 2	20 Bore 25,4 m	m 1	328934
30 x 2 x 25,	4 Bore 30,00 n	ım 1	337344

### Drill bits with R 1/2" connection



R 1½" BSP Male drill bit **DK 612 B**SUPRA





**Advantages:** Drill bits for universal applications - High cutting speed and service life - Can be used on electric drilling machines - For replacement segments, see DE 600 B

Diameter in mm	Thread/Shaft	Overall length in mm	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
51	thread 1/2"	300	5 / 24 / 2,5 / 10	1	325720
56	thread 1/2"	300	5 / 24 / 2,5 / 10	1	325721
61	thread 1/2"	300	5 / 24 / 2,5 / 10	1	325722
71	thread 1/2"	300	7 / 24 / 2,5 / 10	1	325724
81	thread 1/2"	300	8 / 24 / 2,5 / 10	1	325755
91	thread 1/2"	300	8 / 24 / 2,5 / 10	1	325756
101	thread 1/2"	300	9 / 24 / 2,5 / 10	1	325757
111	thread 1/2"	300	9 / 24 / 2,5 / 10	1	325758
121	thread 1/2"	300	10 / 24 / 2,5 / 10	1	325759
131	thread 1/2"	300	10 / 24 / 2,5 / 10	1	325761
141	thread 1/2"	300	11 / 24 / 2,5 / 10	1	325762
151	thread 1/2"	300	12 / 24 / 2,5 / 10	1	325763
161	thread 1/2"	300	12 / 24 / 2,5 / 10	1	325764
171	thread 1/2"	300	12 / 24 / 2,5 / 10	1	325765
180	thread 1/2"	300	13 / 24 / 2,5 / 10	1	325766
201	thread 1/2"	300	15 / 24 / 2,5 / 10	1	325768

### Drill bits with 1 1/4" UNC connection



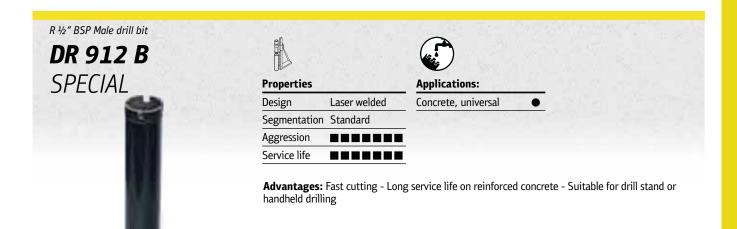


**Advantages:** Drill bits for universal applications - Very fast cutting - Long service life - Roof-shaped segments - Can be used on electric and hydraulic machines - For replacement segments, see DE 600 B

Diameter in mm	Thread/Shaft	Overall length in mm	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
52	thread 1 1/4"	450	5 / 24 / 3,5 / 11	1	325769
56	thread 1 1/4"	450	5 / 24 / 3,5 / 11	1	325770
61	thread 1 1/4"	450	5 / 24 / 3,5 / 11	1	325771
62	thread 1 1/4"	450	5 / 24 / 3,5 / 11	1	325772
66	thread 1 1/4"	450	5 / 24 / 3,5 / 11	1	325773
67	thread 1 1/4"	450	6 / 24 / 3,5 / 11	1	359062
72	thread 1 1/4"	450	6 / 24 / 3,5 / 11	1	325774
77	thread 1 1/4"	450	7 / 24 / 3,5 / 11	1	359063
82	thread 1 1/4"	450	7 / 24 / 3,5 / 11	1	325775
92	thread 1 1/4"	450	8 / 24 / 3,5 / 11	1	325776
102	thread 1 1/4"	450	9 / 24 / 3,5 / 11	1	325777
112	thread 1 1/4"	450	10 / 24 / 3,5 / 11	1	325778
122	thread 1 1/4"	450	10 / 24 / 4 / 11	1	325779
132	thread 1 1/4"	450	10 / 24 / 4 / 11	1	325781
142	thread 1 1/4"	450	11 / 24 / 4 / 11	1	325782
152	thread 1 1/4"	450	12 / 24 / 4 / 11	1	325783
162	thread 1 1/4"	450	13 / 24 / 4 / 11	1	325784
172	thread 1 1/4"	450	13 / 24 / 4 / 11	1	325785
182	thread 1 1/4"	450	14 / 24 / 4 / 11	1	325786
202	thread 1 1/4"	450	15 / 24 / 4,5 / 11	1	325787
225	thread 1 1/4"	450	16 / 24 / 4,5 / 11	1	325788
250	thread 1 1/4"	450	17 / 24 / 4,5 / 11	1	325789
300	thread 1 1/4"	450	22 / 20 / 5 / 11	1	325790

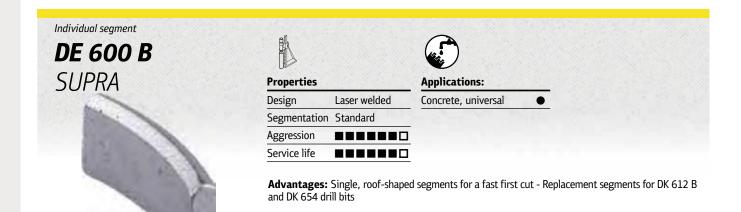
# Drill bits with ring segments, R $\frac{1}{2}$ connection



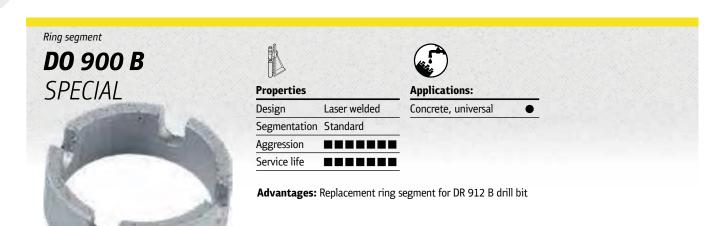


Diameter in mm	Thread/Shaft	Overall length in mm	Segment in mm Number / Width / Height	Packing unit/pcs.	Cat. number
8	thread 1/2"	300	1 / 2 / 10	1	325791
10	thread 1/2"	300	1 / 2 / 10	1	325792
12	thread 1/2"	300	1/2/10	1	325793
14	thread 1/2"	300	1 / 2 / 10	1.	325794
15	thread 1/2"	300	1 / 2,5 / 10	1	325795
16	thread 1/2"	300	1 / 2,5 / 10	1	325796
18	thread 1/2"	300	1 / 2,5 / 10	1	325797
20	thread 1/2"	300	1 / 2,5 / 10	1	325798
22	thread 1/2"	300	1 / 2,5 / 10	1	325799
24	thread 1/2"	300	1 / 2,5 / 10	1	325800
25	thread 1/2"	300	1 / 2,5 / 10	1	325801
26	thread 1/2"	300	1 / 2,5 / 10	1	325802
28	thread 1/2"	300	1 / 2,5 / 10	1	325803
30	thread 1/2"	300	1 / 2,5 / 10	1	325804
32	thread 1/2"	300	1 / 2,5 / 10	1	325805
35	thread 1/2"	300	1/3/10	1	325806
40	thread 1/2"	300	1 / 3 / 10	1	325807
42	thread 1/2"	300	1 / 3,5 / 10	1	325808
52	thread 1/2"	300	1 / 3,5 / 10	1	325811

## Drill bit segments for DK 654 and DK 612 Ring segments for drill bits DR 912 B



Segment length in mm	Suitable for	Segment in mm Length / Width / Height / Radius	Packing unit/pcs.	Cat. number
20	Ø >272	20 / 5 / 11 / G	30	325839
24	Ø 56-67	24 / 3,5 / 11 / 30	30	325833
24	Ø 72-87	24 / 3,5 / 11 / 40	30	325834
24	Ø 92-112	24 / 3,5 / 11 / 50	30	325835
24	Ø 107-142	24 / 4 / 11 / 60	30	325836



Diameter in mm	Segment in mm Width / Height	Packing unit/pcs.	Cat. number
8	2 / 10	10	325812
10	2 / 10	10	325813
12	2 / 10	10	325814
14	2 / 10	10	325815
15	2,5 / 10	10	325816
16	2,5 / 10	10	325817
18	2,5 / 10	10	325818
20	2,5 / 10	5	325819
22	2,5 / 10	5	325820
25	2,5 / 10	5	325822
26	2,5 / 10	5	325823
28	2,5 / 10	5	325824

Continuation  $\rightarrow$ 

### Core cutter / diamond drill



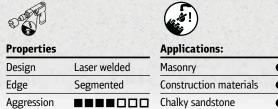
#### → Continuation of DO 900 B Special, Ring segment

Diameter in mm	Segment in mm Width / Height	Packing unit/pcs.	Cat. number
30	2,5 / 10	3	325825
32	2,5 / 10	3	325826
35	3 / 10	3	325827
40	3 / 10	3	325828
42	3,5 / 10	3	325829
52	3,5 / 10	3	325832

Core cutter for switch boxes

# **DD 600 U SUPRA**





Advantages: For machining soft and medium-hard materials such as brick, clinker and firebrick -Hexagon mounting with center drill bit are separately available (see ADS 200)

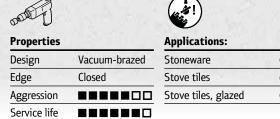
Diameter in mm	Thread/Shaft	Max. operating speed	Max. RPM	Overall length in mm	Segment in mm Number / Length / Width / Height	Packing unit/pcs.	Cat. number
68	thread M16	8 m/s	2000 rpm	70	3 / 24 / 3,5 / 7	1	325390
82	thread M16	8 m/s	1600 rpm	70	4 / 24 / 3,5 / 7	1	325391

Service life

Diamond drill

# **DB** 600 F **SUPRA**





**Advantages:** Dry cutting drill bit for drilling with pinpoint accuracy on hard materials such as fine stoneware, granite floor tiles and stove tiles - Clean edges - Precise holes - No bursting, cracking, or splintering - Integrated cooling wax - No water required - Excellent price-performance ratio

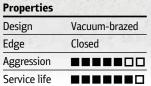
Diameter in mm	Thread/Shaft	Max. RPM	Overall length in mm	Segment in mm Number / Height	Packing unit/pcs.	Cat. number
6	1/4" bit, hexagonal	3000 rpm	32	1 / 10	1	325382
8	1/4" bit, hexagonal	3000 rpm	40	1 / 10	1	325527
10	1/4" bit, hexagonal	3000 rpm	40	1 / 10	1	325383
12	1/4" bit, hexagonal	3000 rpm	40	1 / 10	1	325384
14	1/4" bit, hexagonal	3000 rpm	40	1 / 10	1	325528

### Diamond drill set / drill bit











#### **Applications:**

Stoneware	•
Stove tiles	•
Stove tiles, glazed	•
Stove tiles, glazea	

**Properties:** 7 piece diamond drill set in a Klingspor case

**Contents:**  $2x \ \emptyset \ 6 \ mm \ (325382), \ 1x \ \emptyset \ 8 \ mm \ (325527), \ 1x \ \emptyset \ 10 \ mm \ (325383), \ 1x \ \emptyset \ 12 \ mm$ 

(325384), 1x Ø 14 mm (325528), 1x hole starting aid (313807)

Advantages: Diamond drill bits and stainless steel centring aids in a convenient and sturdy alu-

minium case

Size	Max.	Packing unit/pcs.	Cat.
in mm	RPM		number
200 x 140 x 55	3000 rpm	1	331021

Dry drill bit

# **DK 600 F SUPRA**





# **Properties**

Design	Vacuum-brazed
Edge	Closed



#### **Applications:**

Stoneware	•
Tiles	•
Stove tiles	•

**Advantages:** Dry drill bit for all standard angle grinders - Suitable for the hardest of tiles, masonry and stoneware - Freehand centering - Precise and accurate drilling - Clean edges, precise holes - No splitting, cracking or chipping - No water needed

Diameter in mm	Thread/Shaft	Max. RPM	Overall length in mm	Segment in mm Number / Height	Packing unit/pcs.	Cat. number
26	thread M14	13300 rpm	45	1 / 15	1	325385
38	thread M14	13300 rpm	45	1 / 15	1	325386
58	thread M14	13300 rpm	45	1 / 15	1	325387
65	thread M14	13300 rpm	45	1 / 15	1	325388
70	thread M14	13300 rpm	45	1 / 15	1	325389

### Diamond drill bit set









# Properties

Design	Vacuum-brazed
Edge	Closed

Applications:	
Stoneware	•
Tiles	•
Stove tiles	•

**Properties:** 6-piece dry drill bit set in a Klingspor case

**Contents:** 2x Ø 6 mm (330670), 2x Ø 8 mm (330671), 1x Ø 10 mm (330672), 1x Ø 12 mm

(330673)

Advantages: Dry drill bits in a convenient and sturdy aluminium case

Size in mm	Max. RPM	Packing unit/pcs.	Cat. number
110 x 130 x 100	13300 rpm	1	331076



# Flexible abrasives



### **About the product**

#### **R-Flex abrasives**

Used for finishing and polishing all kinds of surfaces. Despite their elastic construction, R-Flex abrasives boast a long service life with high dimensional stability throughout their use.

#### **Mounted points**

Available in numerous sizes and grains. They are used for apparatus and container construction, in the aviation and automobile industries, as well as in the food and chemical sectors.

#### The Sandflex hand block

Cleans, polishes and matt finishes a large variety of materials including metal, wood, paints, plastics, rubber and paper. In addition to its commercial applications, the Sandflex hand block is also excellent for car care and jobs around the house like cleaning iron soleplates, ski edges etc. Sandflex performs even better when used with water, soap, paraffin oil or pastes. With four different grain sizes to choose from, you will find the right product for all types of materials and jobs.

#### **R-Flex wheels**

Available with silicon carbide or corundum grit in different binding hardnesses and dimensions. Typical applications are deburring plastic parts, giving surgical instruments their final finish, sharpening knives, etc. R-Flex wheels are, due to their elastic attachment, easy to shape and adjust to the contours of the tool during grinding.



Mottling point fixing spindle with milled plane surface

#### **Mottling points**

Create special surface effects with a uniform, extra fine finish. R-Flex mottling points are used with great success for surface treatment applications in tank and container construction (breweries, wine and champaign producers) and in plant construction for commercial kitchens. They are available with bonding agents E (specially designed for aluminium and NF metals) and the softer, more elastic bonding agents W and T (for stainless steel) – with the T bonding agent creating a glossier finish on stainless steel surfaces and offering suitability for universal use.

Klingspor mottling points are available with 2 shaft options

- ► a full length round shaft
- ► a shaft with a milled plain surface (see image above) for secure mounting

Please note the product descriptions provided on the following pages.

			Material applications											
Description	Туре	Iron	Steel	Stainless steel	NF metals	Wood	Paint / Varnish	Glass / Stone	Plastic	Leather	Paper	Ceramic	Porcelain	Page
	RFS 651 bond E			•	•									*
R-Flex	RFM 652 bond E				•									•
	RFR 654 bond Z/E	•	•	•	•	•	•	•	•			•	•	•
	SFM 656 bond W			•										269
Sandflex	SFM 656 bond T			•										•
	SFK 655 block	•	•	•	•	•	•	•	•	•	•	•	•	269

<sup>=</sup> main application
= possible application
\* available on request

### Flexible abrasives

### Applications guide

R-Flex points for cleaning and finishing and R-Flex wheels are ideally suited for fine machining surfaces thanks to their elastically embedded grit. Matching any type of possible application, Klingspor offers an extensive range of tools with a large variety of dimensions, grit sizes and three different kinds of bonding agents (hard, medium and soft). The chart below provides an overview of the available versions:



Example of a decorative finish created with an R-Flex mottling point SFM 656 on a stainless steel sheet

### **Dimensions R-Flex point RFS 651**

[	Ø mm]	Possible widths [mm]	Grit size	Minimum order quantities	Requested grit type / grit size
	15	15, 20, 25, 30	60, 120, 240	10	from 450 pieces
	20	15, 20, 25, 30	60, 120, 240	10	from 450 pieces
	25	10, 15, 20, 25, 30	60, 120, 240	10	from 250 pieces
	30	10, 15, 20, 25, 30	60, 120, 240	10	from 250 pieces
	40	10, 15, 20, 30, 40	60, 120, 240	10	from 160 pieces
	50	10, 20, 30, 40	60, 120, 240	10	from 110 pieces
	60	30, 40	60, 120, 240	10	from 90 pieces

To ensure safe handling of R-Flex points and R-Flex wheels, observe the general "FEPA Safety Recommendations for the Correct Use of Grinding Tools" and the "FEPA Safety Code for Bonded Abrasives".

#### **Dimensions R-Flex wheel RFR 654**

Ø [mm]	Possible widths [mm]	Grit size	Minimum order quantities	Requested grit type / grit size
100	10, 15, 20, 25, 30, 35	60, 120, 240	1	from 15 pieces
125	10, 15, 20, 25, 30, 35	60, 120, 240	1	from 12 pieces
150	10, 15, 20, 25, 30, 35	60, 120, 240	1	from 6 pieces
175	15, 20, 25, 30, 35	60, 120, 240	1	from 6 pieces
200	15, 20, 25, 30, 35	60, 120, 240	1	from 6 pieces

Other grit sizes on request

# Bonding types for RFS 651 mounted points used for cleaning and finishing as well as for R-Flex wheels RFR 654

Ту	pes of bonding	Grain	Hardness	Maximum operating speed
Z	tough, hard wearing	Aluminium oxide	hard	up to 32 m/s
Ε	non clogging, free cutting (ideal for aluminium)	SiC	medium	up to 16 m/s
W	elastic, hard wearing, matt finish (ideal for stainless steel)	SiC	soft	up to 5 m/s

### **Bonding types for mottling points**

Ту	pes of bonding	Grain	Hardness	Maximum operating speed
W	elastic, hard wearing, matt finish (ideal for stainless steel)	SiC	soft	up to 5 m/s
Т	elastic, more free cutting, for a glossier finish (ideal for stainless steel)	SiC	soft	up to 5 m/s
Е	non clogging, free cutting (ideal for aluminium)	SiC	medium	up to 16 m/s

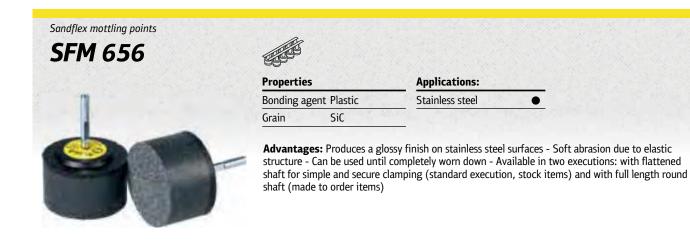


We reserve the right to over-deliver or under-deliver made to order items.

### Flexible abrasives

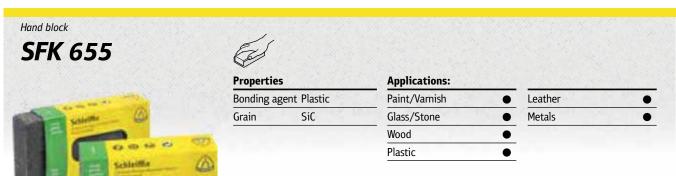
Mottling points / Hand block





#### Available grits:

16	24	30	36	40	60		100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
	D	iamete x Shaf		_	G	rit	ı	Bondin agent	_			opera speed	ting			Max. RPM			cking t/pcs.			Cat numb		
_		50 x	30 x	6	6	50		W				5 m/s			19	00 rpr	n		10			1386	52	_
		50 x	30 x	6	13	20		W				5 m/s			19	00 rpr	n		10			1386	3	



**Advantages:** Universal hand block for cleaning and finishing - Can be used on many materials - Cleaning performance is significantly increased by use of additives - Soft abrasion due to elastic structure - Can be used until completely worn down - Easy to cut to desired shape

#### Available grits:

16	24	30	36	40		60		100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
				Widt		ngth x	( Heig	ht					Grit					cking it/pcs				Ca num			
					80 x	50 x 2	0						60					18				138	301		
					80 x	50 x 2	0						120					18				138	302		
					80 x	50 x 2	0						240					18				138	303		





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282 282

### **About the product**

#### Powerful milling and leveling of surfaces and forms

Klingspor carbide burrs are used wherever outstanding stock removal and service life are pivotal to the proper processing of hard-to-reach places. The burrs are manufactured according to the highest quality standards and with utmost precision. Our comprehensive product selection offers all shapes and dimensions

necessary to find the solution that matches each application best. Thanks to the abundance of available toothing options, you can be sure to achieve the desired outcome on any material and with unparalleled speed.

Туре			Form	Page	Туре			Form
HF 100 A	(ZYA)	28 j	Cylindrical	274	HF 100 J	(KSJ)	₩	Conical shape, pointed nose (60°)
HF 100 B	(ZYAS)	200	Cylindrical with end cut	275	HF 100 K	(KSK)	4	Conical shape, pointed nose (90°)
HF 100 C	(WRC)	575	Cylindrical with spherical head	276	HF 100 L	(KEL)	-	Conical shape, round nose
HF 100 D	(KUD)	100	Spherical shape	277	HF 100 M	(SKM)		Conical shape, pointed nose
HF 100 E	(TRE)	-6	Oval shape	277	HF 100 N	(WKN)	A	Dovetail
HF 100 F	(RBF)	0	Conical shape	278	Sets of b	urrs		
		200			HF 100		Set, 40 carbide b	ourrs
HF 100 G	(SPG)	A.	Arch shape	278	HF 100		Set, 5 carbide bu	ırrs
					HF 100 Sto	eel	Set, 5 carbide bu	ırrs
HF 100 H		-88	Flame shape	279	HF 100 IN	OX	Set, 5 carbide bu	ırrs
					* available	on request		

												Mate	rials											
				Steel				S	oft NF	meta	ls	н	ard NF	meta	ls	resis	eep tant rials	Cast	iron			Plastic	s	
<u>Cut</u>	Carbon steel	Tool steel	Non-alloyed steel	Case-hardened steel	Cast steel	Alloyed steel	Hardened steel	Aluminium	Messing	Copper	Zinc	Bronze	Titanium	Titanium alloy	Aluminium alloy (high SiC contingent)	Nickel based alloy	Cobalt based alloy	Grey cast iron	White cast iron	GRP	CFRP	Ebonite / Hard rubber	Thermoplastic material	Thermosets
2	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•					•
3								•	•	•	•											•	•	
6	•	•	•	•	•	•	•		•	•		•	•	•	•	•	•	•	•	•	•			•
10	•	•	•	•	•	•	•											•	•					
11																•	•							

Applications guide

### The cuts at a glance

#### 2 Cuts

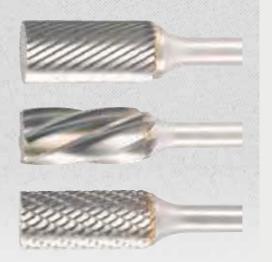
Standard cut / plain cut with good finishing properties for universal applications.

#### **3 Cuts aluminium**

High stock removal rate and reduced clogging of teeth for working on long-chipping and soft materials like NF metals and plastics.

#### 6 Cuts mega seller

Double cut for universal applications, improved handling and low vibration. Creates a small chip.



# New high performance tooth geometries for steel and INOX processing

Perfectly adapted to the respective group of processed material, the newly engineered blade geometries 10 (steel) and 11 (INOX) allow for a significantly higher stock removal rate when compared to the cross-cut toothing typically found on ordinary burrs.

#### The advantages at a glance:

- ▶ higher level of aggressiveness and cutting performance
- ▶ improved chip removal
- ► markedly enhanced service life thanks to reduced built-up edge formation
- ▶ less thermal stress on tool and workpiece
- ► decrease in annealing colours during INOX applications

#### 10 cuts high performance tooth geometry - steel

Toothing optimised for steel processing; significantly higher stock removal rate compared to a standard cross-cut tooth geometry

#### 11 cuts high performance tooth geometry - INOX

Toothing optimised for the processing of austenitic as well as corrosion and acid-resistant grades of stainless steel; strikingly improved stock removal performance by contrast with standard cross-cut tooth geometries



Additional cuts available on request

Applications guide



25,000

20,000

15,000

### **Important safety recommendations**

- ▶ Please ensure that a maximum 30% of the tools circumference is in contact with the workpiece
- ► Extra long burrs with extended shank require slower operating
- ► Ensure the burr is clamped correctly in a regularly maintained operating tool
- ► Run the selected burr at the correct operating speed to avoid risks and to ensure an optimum tool performance

Burr head in mm	Max. RPM
2/2,4/3	100,000
4/4,8/5/6/6,3	65,000
8/9,6/10/11	55,000
12/127	7E 000

**Maximum operating speeds** 

16

19,2

25,4

### ► Please observe the safety recommendations on the packaging

## **Recommended operating speeds**

	The values in brackets a	Uptimal speed range (KPM re recommended starting speeds	l), depending on materials (start points) if no empirical val	ues are already availabl
Burr head diameter in mm	NF metals	Aluminium, plastic	Unhardened steels	Hardened steels, stainless steel
	45,000	60,000	60,000	60,000
2/2,4/3	(65,000)	(65,000)	(80,000)	(80,000)
	up to 80,000	up to 80,000	up to 80,000	up to 80,000
	22,000	15,000	45,000	30,000
4/4,8/5/6/6,3	(45,000)	(40,000)	(50,000)	(40,000)
	up to 60,000	up to 60,000	up to 60,000	up to 45,000
	15,000	10,000	30,000	19,000
8/9,6/10/11	(30,000)	(25,000)	(30,000)	(25,000)
	up to 40,000	up to 50,000	up to 40,000	up to 30,000
	11,000	7,000	22,000	15,000
12/12,7	(25,000)	(20,000)	(25,000)	(20,000)
	up to 30,000	up to 30,000	up to 30,000	up to 22,000
	9,000	6,000	18,000	12,000
16	(20,000)	(15,000)	(20,000)	(15,000)
	up to 20,000	up to 20,000	up to 20,000	up to 18,000
	8,000	5,000	15,000	10,000
19,2	(12,000)	(10,000)	(15,000)	(10,000)
	up to 17,000	up to 17,000	up to 17,000	up to 15,000
	6,000	4,000	10,000	7,000
25,4	(10,000)	(8,000)	(10,000)	(8,000)
	up to 13,000	up to 13,000	up to 13,000	up to 11,000

Carbide burr

HF 100 A





**Properties:** Cylindrical burr without end-cut - Designation in accordance with DIN 8032: ZYA **Advantages:** For universal use - Especially suitable for surface grinding

Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	14	38	3	2	5	295475
3	14	38	3	6	5	295482
6,3	12,7	45	3	6	5	295506
6	18	50	6	2	1	295521
12,7	25	70	6	2	1	295602
6	18	50	6	3	1	295525
9,6	19	64	6	3	1	295563
12,7	25	70	6	3	1	295604
6	18	50	6	6	1	295531
8	19	64	6	6	1	295552
9,6	19	64	6	6	1	295568
12,7	19	64	6	6	1	295594
12,7	25	70	6	6	1	295609
16	25	70	6	6	1	295621
12,7	25	70	6	10	1	334122



Carbide burr

HF 100 B





**Properties:** Cylindrical burr with end cut - Designation in accordance with DIN 8032: ZYAS **Advantages:** The end cut makes it suitable for blind holes and faces on inner contours



Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	14	38	3	2	5	295476
3	14	38	3	6	5	295483
6,3	12,7	55	3	6	5	295507
6	18	50	6	2	1	295522
12,7	25	70	6	2	1	295603
6	18	50	6	3	1	295526
9,6	19	64	6	3	1	295564
12,7	25	70	6	3	1	295605
6	18	50	6	6	1	295532
8	19	64	6	6	1	295553
9,6	19	64	6	6	1	295569
12,7	19	64	6	6	1	295595
12,7	25	70	6	6	1	295610
16	25	70	6	6	1	295622

Carbide burr

HF 100 C



**Properties:** Cylindrical burr with ball end - Designation in accordance with DIN 8032: WRC **Advantages:** For universal use on surfaces, contours and radiuses



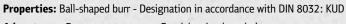


Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	14	38	3	2	5	295649
3	14	38	3	6	5	295654
6,3	12,7	44	3	6	5	295673
6	18	50	6	2	1	295686
12,7	25	70	6	2	1	295747
6	18	50	6	3	1	295688
9,6	19	63	6	3	1	295725
12,7	25	70	6	3	1	295750
6	18	50	6	6	1	295694
8	19	63	6	6	1	295713
9,6	19	63	6	6	1	295727
12,7	19	64	6	6	1	295741
12,7	25	70	6	6	1	295753
16	25	70	6	6	1	295763
9,6	19	64	6	10	1	334137
12,7	25	70	6	10	1	334140
12.7	25	70	6	11	1	334139



# HF 100 D





Advantages: For use on contours - For deburring bore holes





Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	2,5	38	3	2	5	295778
3	2,5	38	3	6	5	295784
4	3,4	38	3	6	5	295798
6	4,7	50	6	2	1	295815
12,7	11	56	6	2	1	295856
6	4,7	50	6	3	1	295816
9,6	8	54	6	3	1	300054
12,7	11	56	6	3	1	295857
6	4,7	50	6	6	1	295819
8	6	52	6	6	1	295831
9,6	8	54	6	6	1	295843
12,7	11	56	6	6	1	295859
16	14	60	6	6	1	295868

Carbide burr

# HF 100 E



**Properties:** Drop-shaped burr - Designation in accordance with DIN 8032: TRE **Advantages:** For milling out fillet welds - Suitable for working on moulded parts





Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
6	10	50	6	6	1	295905
8	15	60	6	6	1	295909
9,6	16	60	6	6	1	295916
12,7	22	67	6	6	1	295925

Carbide burr

# HF 100 F



Properties: Semi-circular burr - Designation in accordance with DIN 8032: RBF

Advantages: Well suited for working on moulded parts





Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	14	38	3	2	5	295946
3	14	38	3	6	5	295951
6	18	50	6	2	1	295967
9,6	19	64	6	3	1	295985
12,7	25	70	6	3	1	296007
6	18	50	6	6	1	295971
9,6	19	64	6	6	1	295987
8	20	65	6	6	1	295978
12,7	25	70	6	6	1	296010
16	25	70	6	6	1	296020

Carbide burr

HF 100 G



**Properties:** Pointed arch-shaped burr with flattened tip - Designation in accordance with DIN 8032: SPG

Advantages: Ideal for chamfering - For deburring bore holes





Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	14	38	3	2	5	296043
3	14	38	3	6	5	296047
6,3	12,7	45	3	6	5	296055
6	18	50	6	2	1	296058
12,7	25	70	6	2	1	296082
6	18	50	6	6	1	296062
8	19	64	6	6	1	296066

**Continuation** →



#### → Continuation of HF 100 G, Carbide burr

	Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
_	9,6	19	64	6	6	1	296074
	12,7	19	64	6	6	1	296079
	12,7	25	70	6	6	1	296086
	12,7	25	70	6	10	1	334165
	12,7	25	70	6	11	1	334166

Carbide burr

# HF 100 H



**Properties:** Flame-shaped burr - No designation in accordance with DIN 8032 **Advantages:** Well suited for working on moulded parts





Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	6	38	3	6	5	296106
12,7	32	77	6	2	1	297076
6	14	50	6	6	1	300046
8	19	64	6	6	1	296193
9,6	19	65	6	6	1	297074
12,7	32	77	6	6	1	296194

Carbide burr

HF 100 J



**Properties:** Conical burr - 60° angle - Designation in accordance with DIN 8032: KSJ **Advantages:** Suitable for chamfering or bevelling





All sizes and minimum purchasing quantities available on request

Carbide burr

# HF 100 K



 $\textbf{Properties:} \ \ \text{Conical burr - } 90° \ \ \text{angle - Designation in accordance with DIN 8032: KSK}$ 

Advantages: For deburring bore holes - For chamfering or bevelling





Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
12,7	6,3	55	6	6	1	296197

Carbide burr

HF 100 L



Properties: Conical round-nosed burr - Designation in accordance with DIN 8032: KEL

Advantages: For difficult-to-access areas





Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	14	38	3	6	5	296199
9,6	30	76	6	3	1	300055
12,7	32	77	6	3	1	297470
6	18	50	6	6	1	296200
8	25,4	70	6	6	1	296205
9,6	30	76	6	6	1	296201
12,7	32	77	6	6	1	296192
12,7	32	77	6	11	1	334174



# HF 100 M



**Properties:** Pointed cone burr - Designation in accordance with DIN 8032: SKM **Advantages:** For deburring tasks - For conical holes and grooves - Ideal for model building





Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
3	11	38	3	6	5	296114
3	11	38	3	2	5	296204
6	20	50	6	2	1	296133
12,7	22	71	6	2	1	296145
6	20	50	6	6	1	296136
8	18	64	6	6	1	300052
16	25	74	6	6	1	296152
9,6	16	64	6	6	1	296144
12,7	22	71	6	6	1	296148

Carbide burr

## HF 100 N



**Properties:** Angular burr without end cut - Designation in accordance with DIN 8032: WKN **Advantages:** Suitable for difficult-to-access areas, inner edges or conical profiles





	Diameter in mm	Height in mm	Total length in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
•	6	8	50	6	6	1	296168
	9,6	9,5	55	6	6	1	296174

Carbide burr

### HF 100 set





Properties: 40 piece burr set, cut 6, in lockable Klingspor presentation box

Contents: 2 x HF 100 B 6x18x6 (295532), 2 x HF 100 C 6x18x6 (295694), 2 x HF100 F 6x18x6 (295971), 2 x HF100 G 6x18x6 (296062), 2 x HF 100 L 6x18x6 (296200), 2 x HF 100 B 8x19x6 (295553), 2 x HF 100 C 8x19x6 (295713), 2 x HF 100 F 8x20x6 (295978), 2 x HF 100 G 8x19x6 (295066), 2 x HF 100 L 8x25,4x6 (296205), 2 x HF 100 B 9,6x19x6 (295569), 2 x HF 100 C 9,6x19x6 (295727), 2 x HF 100 F 9,6x19x6 (295987), 2 x HF 100 G 9,6x19x6 (295074), 2 x HF 100 L 9,6x30x6 (296201), 2 x HF 100 B 12,7x25x6 (295610), 2 x HF 100 C 12,7x25x6 (295753), 2 x HF 100 F 12,7x25x6 (296010), 2 x HF 100 G 12,7x25x6 (296086), 2 x HF 100 L 12,7x32x6 (296192)

Advantages: All top sellers at a glance

Size in mm	Shaft diameter in mm	Cut		Cat. number
335 x 225 x 380	6	6	1	300627

Carbide burr

### HF 100 set





**Properties:** 5 piece burr set, cut 6, in a Klingspor screw lid container

**Contents:** HF 100 B 9,6x19x6 (295569), HF 100 C 9,6x19x6 (295727), HF 100 D 9,6x8x6

(295843), HF 100 E 9,6x16x6 (295916), HF 100 F 9,6x19x6 (295987)

Advantages: Presentation of the top sellers - Practical and safe storage of the burrs

Size in mm	Shaft diameter in mm	Cut	Packing unit/pcs.	Cat. number
70 x 70 x 100	6	6	1	336927







### **About the product**

The wire brushes made by Klingspor are used for a wide variety of machining tasks in the steel and stainless steel sector. A key benefit a wire brush holds over abrasives is the fact that the brush only works on the surface of the workpiece without changing the shape of the workpiece to be processed. This benefit is of particular importance during work on ultra-thin sheet metal.

The selection of wire brushes offered by Klingspor comprises a comprehensive range of products that are designed for the most diverse machining tasks, materials and machines.

### **Applications**

- ► Cleaning of weld seams and surfaces (rust removal, descaling, paint stripping)
- ► Deburring of cutting edges
- ► Structuring of surfaces (creating matt, satin or rough finishes)

	Material applications													
Machines	Type of wire brush	Wire style	Bristle material	Construction steel	Carbon steel	Alloyed steels	Cast iron	Stainless steel	Aluminium	Copper	Brass	Wood	Туре	Page
	Wheel brush	knotted	Steel wire	•	•	•	•						BR 600 Z	292
			INOX wire					•	•	•	•			
	Pipeline brush	knotted	Steel wire	•	•	•	•						BRP 600 Z	292
	Cone brush	knotted	Steel wire	•	•	•	•							
			INOX wire					•	•	•	•		BK 600 Z	293
		crimped	Steel wire	•	•	•	•						BK 600 W	293
	Cup-shaped brush	knotted	Steel wire	•	•	•	•							
			INOX wire					•	•	•	•		BT 600 Z	294
		crimped	Steel wire	•	•	•	•						BT 600 W	294
			INOX wire					•	•	•	•			
	Wheel brush	crimped	Steel wire	•	•	•	•						BR 600 W	295
			INOX wire					•	•	•	•			
	Wheel brush with shaft Ø 6 mm	knotted	Steel wire	•	•	•	•						BRS 600 Z	295
			INOX wire					•	•	•	•			
	Wheel brush with shaft Ø 6 mm	crimped	Steel wire	•	•	•	•						BRS 600 W	296
			INOX wire					•	•	•	•			
	Wheel brush with shaft Ø 6 mm	abrasive bristle	SIC	•		•		•	•	•	•	•	BRS 600 P	296
	Cup-shaped brush with shaft Ø 6 mm	crimped	Steel wire	•	•	•	•						BTS 600 W	297
			INOX wire					•	•	•	•			
	End brush with shaft Ø 6 mm	knotted	Steel wire	•	•	•	•						BPS 600 Z	297
			INOX wire					•	•	•	•			
	End brush with shaft Ø 6 mm	crimped	Steel wire	•	•	•	•						BPS 600 W	298
			INOX wire					•	•	•	•			
E	Handheld brush with wooden handpiece	straight	Steel wire	•	•	•	•							
			INOX wire					•	•	•	•		BH 600	298
			Brass wire						•	•	•	•		
	Handheld brush with plastic handpiece	crimped	Steel wire	•	•	•	•						BHP 600	299
			INOX wire					•	•	•	•			
			Brass wire						•	•	•	•		
	Handheld brush fillet weld	straight	Steel wire	•	•	•	•						BHK 600	*
			INOX wire					•	•	•	•			
	Spark plug brush	crimped	INOX wire					•	•	•	•		BHZ 600	299
			Brass wire						•	•	•			

main application \* available on request

Applications guide

# The most common brushes at a glance



Wheel brushes

Preparing and finishing weld seams, deburring and cleaning cutting edges, corners or angles



**Cone brushes** 

For work on difficult-to-access areas, corners or edges as well as for surface cleaning



**Cup-shaped brushes** 

For efficient rust, paint or weld spatter removal from large surfaces



#### **End brushes**

Ideal tool for work on the insides of pipes, drill holes or indentations



**Handheld brushes** 

For the manual cleaning of surfaces and weld seams

### Applications guide



# **1. Klingspor logotype**Reference to certified Klingspor quality

#### 2. Safety recommendations

#### 3. Rotational speed

Reference to maximum permissible motor speed in revolutions per minute



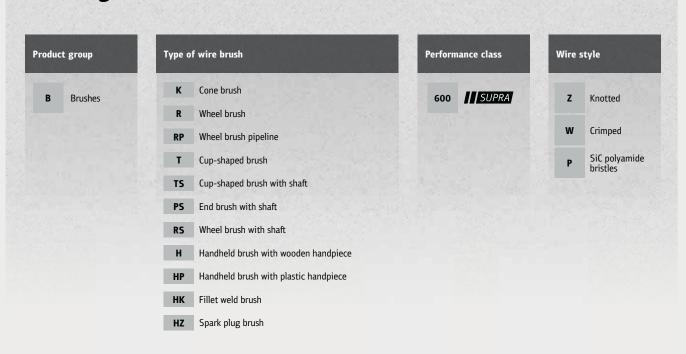
#### 4. Wire style

Klingspor offers wire brushes with knotted, crimped or SIC polyamide bristles

#### 5. Area of application

The base colour of the tool gives an indication of the wire material used Green = stainless steel
Silver = steel

# What the type designation reveals about the design of wire brushes



Here explained by example of the BTS 600 W

Product group	Type of wire brush	Performance class	Wire style		
<b>B</b> Brushes	TS Cup-shaped brush with shaft	600 SUPRA	<b>W</b> Crimped		

Applications guide

### Bristle materials and their properties

### Wire types / style

#### Steel wire

High strength quality steel wire with great tensile and bending fatigue strength for exceptional economy.



#### **Knotted**

- ► Aggressive brush action
- ► Long service life
- ► Minimum flexibility



Non-corrosive steel wire / INOX

Quality stainless steel wire with great tensile

strength for a long service life. Resistant to

corrosion during applications on chromium-

nickel steel, aluminium and other NF metals.



#### Crimped

- ► Gentle, material-friendly brush action
- ► For sensitive surfaces and soft materials
- Perfect contouring to the shape of the workpiece



#### **Brass wire**

Soft, fine brass wire for the surface finish of NF metals (copper, brass).



#### **Polyamide bristle**

A flexible abrasive bristle interspersed with SiC abrasive grain. Uniform brush action thanks to the continuous release of new abrasive grain.



Applications guide



### Safe application of wire brushes

The maximum operating speed of the brush varies with the diameter of the brush and must never be exceeded for safety reasons. Before using the brush, always verify that the motor speed of the machine does not exceed the maximum operating speed of the brush.

Refer to the table below for a recommendation as to which brush diameter you can mount on which angle grinder:

	K	<b>Ø 115 mm</b> (max. 12,500 rpm)	<b>Ø 125 mm</b> (max. 11,500 rpm)	<b>Ø 180 mm</b> (max. 8,500 rpm)				
Турс	e of brush	Brush diameter						
	<b>BR 600 Z</b> Wheel brush, knotted	Ø 115 mm (max. 12,500 rpm)	Ø 125 mm (max. 12,500 rpm)	Ø 180 mm (max. 8,500 rpm)				
	BRP 600 Z Pipeline brush, knotted	Ø 115 mm (max. 15,000 rpm)	Ø 125 mm (max. 12,500 rpm)	Ø 180 mm (max. 9,000 rpm)				
	<b>BK 600 Z</b> Cone brush, knotted	Ø 100 mm Ø 115 mm (max. 12,500 rpm)						
	BT 600 Z Cup-shaped brush, knotted	Ø 65 mm (max. 12,500 rpm)		Ø 80 mm Ø 100 mm (max. 8,500 rpm)				
	BT 600 W Cup-shaped brush, crimped	Ø 65 mm (max. 12,500 rpm)		Ø 80 mm Ø 100 mm (max. 8,500 rpm)				

Applications guide

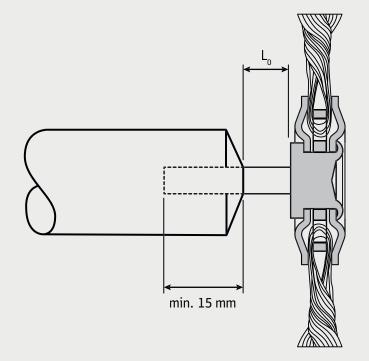
### **Cutting speeds**

The cutting speeds are dependent on the material to be processed. Working within the proper speed range is paramount to the economical operation of the brush. Depending on the material, we recommend using the following cutting speeds as guidelines:

	Cutt	ing sp	eed [n	n/s]						
Material	10	15	20	25	30	35	40	45	50	55
Steel								40-50		
Stainless steel					30	- 35				
NF metals			18-22							
Plastic		15	-20							

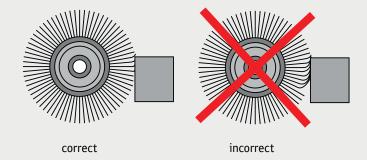
### Safe use of shaft brushes

The receiving shaft should be as low as possible, but should be clamped into the tool holder with a depth of no less than 15 mm. If the exposed shaft length is L0 > 10mm, the speed must be reduced for safety reasons.



### **Tool pressure**

You will achieve an optimum sanding result when working only with the wire tips of the brush. Increasing the tool pressure will cause the brush to wear out faster due to wire breakage and thus reduce the service life of the brush.



Applications guide



### Factors with an impact on the brushing result

If the brushing result does not satisfy your requirements, you can optimise the outcome by changing certain application parameters.

Measure Problem	Brush Ø	Rotational speed	Wire thickness	Bristle length
Brush action too weak	increase	increase	increase	reduce
Brush action too aggressive	decrease	reduce	reduce	extend
Surface finish too rough and uneven	decrease	reduce	reduce	extend
Surface finish too fine	increase	increase	increase	reduce
Formation of secondary burrs	increase	increase	increase	reduce

## The safe use of Klingspor abrasives

Manufactured in compliance with the requirements set out in the EN 1083-2, Klingspor wire brushes guarantee the highest level of safety for the user.



Wear safety goggles or glasses to protect the eves



Wear dust mask



Use ear protectors



Wear safety gloves to protect hands



Observe safety instructions

Wheel brush, knotted wire

### **BR 600 Z**





Applications:	
Stainless steel	•
Steel	

**Advantages:** Wheel brush for pre- and post-processing of welding seams - For aggressive removal of scale, rust, slag - For heavy brushing and deburring work

Diameter x Width x Bore in mm	Thread/Shaft	Fill material	Wire thickness in mm	Filament length in mm	Number of knots	Max. RPM	Packing unit/pcs.	Cat. number
115 x 14 x 22,23		Steel	0,50	22	20	12500 rpm	1	358311
115 x 14 x 22,23		Stainless steel	0,50	22	20	12500 rpm	1	358342
115 x 14	thread M14	Steel	0,50	22	22	12500 rpm	1	370717
115 x 14	thread M14	Stainless steel	0,50	22	22	12500 rpm	1	370718
125 x 14 x 22,23		Steel	0,50	22	24	12500 rpm	1	358312
125 x 14 x 22,23		Stainless steel	0,50	22	24	12500 rpm	1	358343
125 x 14	thread M14	Steel	0,50	22	26	12500 rpm	1	370719
178 x 14 x 22,23		Steel	0,50	42	30	9000 rpm	1	358313
178 x 14 x 22,23		Stainless steel	0,50	42	30	9000 rpm	1	363720
178 x 14	thread M14	Steel	0,50	39	36	9000 rpm	1	370720

Pipeline brush, knotted wire

### **BRP** 600 Z





Applications:	943	3.	3	5,00
Steel	į į	Ĭ		•

**Advantages:** Ideal tool for the professional processing of U / V-type welds in pipeline, pipework and container construction - Thanks to its slim overall width it is also well suited for working on hard-to-reach areas (e.g. root or narrow fillet welds) - Cleaning of all welding seams on pipe connections

Diameter x Width x Bore in mm	Fill material	Wire thickness in mm	Filament length in mm	Number of knots	Max. RPM	Packing unit/pcs.	Cat. number
115 x 6 x 22,23	Steel	0,50	28	32	15000 rpm	1	358314
125 x 6 x 22,23	Steel	0,50	22	36	12500 rpm	1	358315
178 x 6 x 22,23	Steel	0,50	42	48	9000 rpm	1	358319



Bevel brush with thread, knotted wire

### BK 600 Z





Applications:	
Steel	•
Stainless steel	•

**Advantages:** Ideal tool for working on hard-to-reach areas, inside corners and bevels - High brushing capacity due to knotted wire design - Excellent for cleaning larger surfaces - Removal of scale, rust, paint, slag, etc.

**Applications:** 

Steel

Diameter x Width in mm	Thread/Shaft	Fill material	Wire thickness in mm	Filament length in mm	Number of knots	Max. RPM	Packing unit/pcs.	Cat. number
100 x 14	thread M14	Steel	0,50	20	18	12500 rpm	1	358327
100 x 14	thread M14	Stainless steel	0,50	20	20	12500 rpm	1	358329
115 x 14	thread M14	Steel	0,50	22	18	12500 rpm	1	358328
115 x 14	thread M14	Stainless steel	0,50	22	20	12500 rpm	1	358330

Bevel brush with thread, crimped wire

### **BK 600 W**



rust, dirt, paint residue, etc.







**Advantages:** Ideal tool for working on hard-to-reach areas, inside corners and bevels - Material-protecting brushing due to crimped wire design - Excellent for cleaning larger surfaces - For removing

	Diameter in mm	Thread/Shaft	Fill material	Wire thickness in mm	Filament length in mm	Max. RPM	Packing unit/pcs.	Cat. number
_	115	thread M14	Steel	0,30	26	12500 rpm	1	364822
	125	thread M14	Steel	0,30	26	12500 rpm	1	370724

Cup brush with thread, knotted wire

### BT 600 Z





Applications:	
Steel	•
Stainless steel	•

**Advantages:** For aggressive brushing work on large, flat surfaces - For preparing metal surfaces before varnishing - Stable knotted wire design for easy cleaning and removal of slag, rust, scale and concrete residues

Diameter in mm	Thread/Shaft	Fill material	Wire thickness in mm	Filament length in mm	Number of knots	Max. RPM	Packing unit/pcs.	Cat. number
65	thread M14	Steel	0,35	22	18	12500 rpm	1	358334
65	thread M14	Steel	0,50	22	18	12500 rpm	1	358335
65	thread M14	Stainless steel	0,50	22	18	12500 rpm	1	358340
80	thread M14	Steel	0,50	22	20	8500 rpm	1	358337
100	thread M14	Steel	0,50	27	22	8500 rpm	1	358338

Cup-shaped brush, crimped wire

### BT 600 W





Applications:	
Steel	•
Stainless steel	•

**Advantages:** Ideal tool for cleaning and clearing profiled or uneven surfaces, e.g. checker plate - For medium-duty brushing work, derusting and removing paint, impurities and paint residues - Material-saving work - For processing very thin sheet metal, e.g. car workshops and restoration companies

Diameter in mm	Thread/Shaft	Fill material	Wire thickness in mm	Filament length in mm	Max. RPM	Packing unit/pcs.	Cat. number
65	thread M14	Steel	0,30	21	12500 rpm	1	358372
80	thread M14	Steel	0,30	24	8500 rpm	1	358373
80	thread M14	Stainless steel	0,30	24	8500 rpm	1	358326
100	thread M14	Steel	0,30	27	8500 rpm	1	358375



Wheel brush, crimped wire

### **BR 600 W**





Applications:	
Steel	•
Stainless steel	•

**Advantages:** Suitable for low to medium duty brushing and deburring of cut edges, tubes or small parts - 0150-200 mm for use on stationary machines - 0115/0125 mm for use on angle grinders - High fill density for a long service life

Incl. adapter set for brushes Ø 150 - 200 mm to reduce the mounting hole (12,7 mm, 16 mm, 19 mm, 22,2 mm, 25,4 mm)

Diameter x Width x Bore in mm	Thread/Shaft	Fill material	Wire thickness in mm	Filament length in mm	Max. RPM	Packing unit/pcs.	Cat. number
115 x 15	thread M14	Steel	0,30	24	15000 rpm	1	370722
125 x 15	thread M14	Steel	0,30	29	15000 rpm	1	370723
150 x 25 x 32		Steel	0,30	30	6000 rpm	1	363997
150 x 25 x 32		Stainless steel	0,30	30	6000 rpm	1	364000
178 x 25 x 32		Steel	0,30	42	6000 rpm	1	363998
178 x 25 x 32		Stainless steel	0,30	42	6000 rpm	1	364001
200 x 25 x 32		Steel	0,30	45	4500 rpm	1	363999
200 x 25 x 32		Stainless steel	0,30	45	4500 rpm	1	364002

Wheel brush with shaft, knotted wire

### **BRS 600 Z**





Applications:	
Steel	•
Stainless steel	

**Advantages:** Knotted design for rough brushing work and long service life - For efficient work in hard-to-reach areas such as grooves, flutes, depressions - Deburring of cut edges, removal of scale, paint, slag

Diameter x Width x Shaft in mm	Total length in mm	Fill material	Wire thickness in mm	Filament length in mm	Number of knots	Max. RPM	Packing unit/pcs.	Cat. number
75 x 12 x 6	37	Steel	0,50	19	15	25000 rpm	10	358320
75 x 12 x 6	37	Stainless steel	0,50	19	15	25000 rpm	10	358321

Wheel brush with shaft, crimped wire

### **BRS 600 W**





#### **Applications:**

Steel		•
Stainless steel	1 -11	•

**Advantages:** Crimped wire design for gentle cleaning of small to medium surfaces - Excellently suitable for components with difficult access such as beads, flanged edges - Good brushing performance even with profiled workpieces

Diameter x Width x Shaft in mm	Total length in mm	Fill material	Wire thickness in mm	Filament length in mm	Max. RPM	Packing unit/pcs.	Cat. number
30 x 9 x 6	40	Steel	0,20	6	20000 rpm	20	358346
30 x 9 x 6	40	Stainless steel	0,20	6	20000 rpm	20	358357
40 x 9 x 6	40	Steel	0,20	11	18000 rpm	20	358348
40 x 9 x 6	40	Stainless steel	0,20	11	18000 rpm	20	358358
50 x 9 x 6	40	Steel	0,30	13	15000 rpm	10	358354
50 x 9 x 6	40	Stainless steel	0,30	13	15000 rpm	10	358359
60 x 14 x 6	44	Steel	0,30	18	15000 rpm	10	358355
60 x 14 x 6	44	Stainless steel	0,30	18	15000 rpm	10	358360
70 x 16 x 6	48	Steel	0,30	20	15000 rpm	10	358356
70 x 16 x 6	48	Stainless steel	0,30	20	15000 rpm	10	358362

Wheel brush with shaft, polyamide bristles

### **BRS 600 P**









Stainless steel	•
NF metals	•
Wood	•



**Advantages:** Abrasive bristles of polyamide interspersed with silicon carbide (SiC) grain for working with light contact pressure - Ideal for structuring and paint stripping of wooden components - Removal of oxide layers on non-ferrous metals or of tarnish colours on stainless steel components, e.g. filled rods on stainless steel railings

Diameter x Width x Shaft in mm	Total length in mm	Fill material	Filament length in mm	Max. RPM	Packing unit/pcs.	Cat. number
50 x 9 x 6	45	Polyamide SiC grit 120	10	6000 rpm	10	358364
50 x 9 x 6	45	Polyamide SiC grit 320	10	6000 rpm	10	358366
70 x 12 x 6	45	Polyamide SiC grit 120	14	4500 rpm	10	358367
70 x 12 x 6	45	Polyamide SiC grit 320	14	4500 rpm	10	358369

Cup brush with shaft, crimped wire

**BTS 600 W** 





Steel

Stainless steel



**Advantages:** Ideal tool for cleaning small and medium-sized surfaces - Crimped wire ideal for fine machining or surface preparation of steel or stainless steel - Removes paint, rust, incrustations

Diameter x Shaft in mm	Total length in mm	Fill material	Wire thickness in mm	Filament length in mm	Max. RPM	Packing unit/pcs.	Cat. number
50 x 6	70	Steel	0,30	24	13000 rpm	20	358331
50 x 6	70	Stainless steel	0,30	24	13000 rpm	20	358332

End brush with shaft, knotted wire

**BPS 600 Z** 



**Applications:** 

Steel •
Stainless steel •



**Advantages:** Tool diameter changes depending on the rotation speed - Perfectly suited for working on pipe inner surfaces or bores - High brushing effect due to knotted wire design

Diameter x Shaft in mm	Total length in mm	Fill material	Wire thickness in mm	Filament length in mm	Number of knots	Max. RPM	Packing unit/pcs.	Cat. number
19 x 6	70	Steel	0,35	25	6	20000 rpm	20	358333
19 x 6	70	Stainless steel	0,35	25	6	20000 rpm	20	358336
22 x 6	70	Steel	0,35	25	8	20000 rpm	10	358339
22 x 6	70	Stainless steel	0,35	25	8	20000 rpm	10	358341
30 x 6	72	Steel	0,35	25	12	20000 rpm	10	358344
30 x 6	72	Stainless steel	0,35	25	12	20000 rpm	10	358345

End brush with shaft, crimped wire

### **BPS 600 W**





Steel •
Stainless steel •



**Advantages:** For fine machining and removal of light burrs in pipes or bores - Well suited for processing and cleaning moulds and die-cast parts - Very soft and adaptable tool

Diameter x Shaft in mm	Total length in mm	Fill material	Wire thickness in mm	Filament length in mm	Max. RPM	Packing unit/pcs.	Cat. number
12 x 6	70	Steel	0,30	25	20000 rpm	30	358350
12 x 6	70	Stainless steel	0,30	25	20000 rpm	30	358351
25 x 6	75	Steel	0,30	25	18000 rpm	10	358347
25 x 6	75	Stainless steel	0,30	25	18000 rpm	10	358352
30 x 6	75	Steel	0,30	25	18000 rpm	10	358349
30 x 6	75	Stainless steel	0,30	25	18000 rpm	10	358353

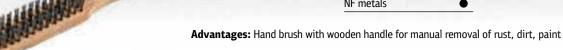
Hand brush with wooden body

**BH 600** 



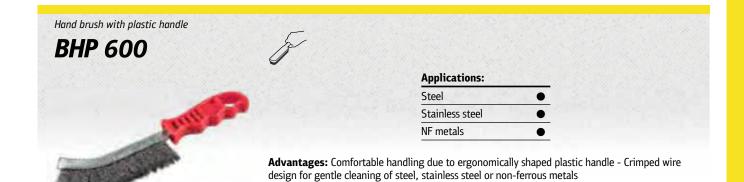


Steel
Stainless steel
NF metals

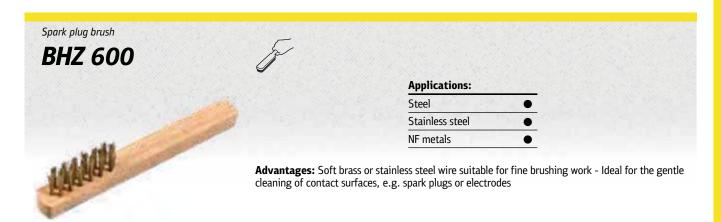


Length in mm	Overall length in mm	Filament length in mm	Total length in mm	Fill material	Structure	Number of rows	Wire thickness in mm	Packing unit/pcs.	Cat. number
290	125	25	290	Steel	Straight	2	0,35	12	358361
290	125	25	290	Steel	Straight	4	0,35	12	358365
290	125	25	290	Steel	Straight	5	0,35	12	358363
290	125	25	290	Stainless steel	Straight	3	0,30	12	358368
290	125	25	290	Stainless steel	Straight	4	0,30	12	358370
290	125	25	290	Brass	Crimped	3	0,35	12	358371
290	125	25	290	Brass	Crimped	4	0,35	12	358374





Length in mm	Overall length in mm	Filament length in mm	Total length in mm	Fill material	Structure	Wire thickness in mm	Packing unit/pcs.	Cat. number
265	140	25	265	Steel	Crimped	0,30	24	358323
265	140	25	265	Stainless steel	Crimped	0,30	24	358324
265	140	25	265	Brass	Crimped	0,30	24	358325



Length x in mm	Overall length in mm	Filament length Total lengtl in mm in mm		Fill material	Structure	Number of rows	Wire thickness in mm	Packing unit/pcs.	Cat. number
145	45	17	145	Brass	Crimped	3	0,17	25	358322

Machine	Application / Material	Product type	Dimensions in mm	Page
		FP 77 K T-ACT	150 / Set*	304
		PS 77 CKT-ACT	150	304
		FP 77 K T-ACT	125 / Set*	304
		DC 77 CVT ACT	125	704 705
		PS 77 CKT-ACT	125, 150 / Sets*	304-305
		PS 21 FK	150	available on request
		DC 10 EV	150	available on
$\sim$		PS 18 EK	125	request
			125	
		AN 400	150	305-306
			125, 150 / Sets*	_
			125	
		PS 33 B/C K	150	306-308
			125	
		PS 22 K	150	308
			125	
	Backing pads for abrasive discs	PP 555	150	309
			225	
	INOX (C)	PS 21 FK	125	available on request
			115×230	
		AN 400	70×125 available on request	
		AN 400	80 × 133 available on request	309
			93 × 178 available on request	_
			115×230	
		PS 33 B/C K	70×125 available on request	310
		F3 33 B/C K	80×133 available on request	
			93×178 available on request	
			115×230	311
		PS 22 K	70 × 125 available on request	
			80 × 133 available on request	



Stainless steel



Metal



Wood



Daint



Filler



Plastic



Steel



NF metals



Hardwood



Varnish



Glass



Aluminium





Machine	Application / Material	Product type	Dimensions in mm	Page
		AN 400	103×115	available on request
$\sim$			103×115	
		PS 33 B/C K	115×105	available on request
			115×115	
		DS 00 W	103×115	available on
		PS 22 K	115×105	request
		AN 400	98×148 / Set*	311
		PS 33 B/C K	98×148	312
		PS 22 K	98×148	312
		AN 400	96 / Set*	306
		PS 33 B/C K	96	313-314
		PS 22 K	96	314-315
Co.		PS 33 B/C K	225	307-308
<u> </u>		AN 400	225	available on request
			100×560	
			100×610	
	(Fé)	LS 309 XH	75×457	315-316
			75×533	
			75 × 533, 75 × 457, 100 × 610, 100 × 560 / Sets*	
$\sim$			10×330	
	(INOX) (T) (Fe)	CS 310 XF	13×457	317
			13×610	
			40×20×6	
and and the	INOX (I)	KM 613	60×30×6	317-318
			80×30×6	
	CO CO CE	CS 561	115×22	318
		C5 501	125 × 22 available on request	310







Long neck sander























Machine	Application / Material	Product type	Dimensions in mm	Page
		KL 375 J	115×5000	available on request
		PL 31 B	115×5000	319
		PS 33 B	115×5000	319
		PS 30 D	115×5000	available on request
	<b>F</b>	KL 371 X	230×280	available on request
//		PL 31 B	230×280	available on request
		PS 33 B / C 230×280		320
		PS 11 A	230 × 280	321
		PS 11 C	230 × 280	321
		NPA 400	152×229	available on request
		SK 500	98×68×25	322
		SK 700 A	89×125×25	322
		SW 501	96×123×12,5	323



Stainless steel



Motal



Mood



Paint



Filler



Plastic



Steel



NF metals



Hardwood



Varnish



Glass



Aluminium



Machine	Thickness in mm	Application / Material	Product type	Diameter in mm	Page
	0,8	Fé	A 980 TZ Special	115, 125	324
		INOX (C)	A 60 Extra	115, 125, 125 with display	
		INOX (T)	A 660 R Supra	115, 125	324
		INOT (T)	A 60 TZ Special	115, 125	325
	1,0	NOT (T)	A 960 TZ Special	115, 125	325
		NOT (T)	K 960 TX Special	115, 125	326
		INOX	Z 960 TX Special	115, 125	326
	1,2	INOX (A)	EDGE	115, 125	327
		NOX D	A 346 Extra	115, 125	327
	1.6		A 646 R Supra	115, 125	328
	1,6	(NOX)	A 46 TZ Special	115, 125	328
		(NOX)	A 946 TZ Special	115, 125	329

















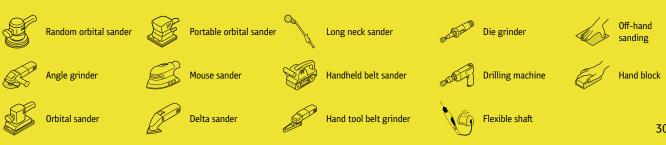
















## Properties Appl

Bonding agent Resin
Grain Aluminium oxide
Coating Semi-open
Backing Film

#### **Applications:**

Paint/Varnish/Filler	•
Primer	•
Filler	•
Gel coats	•

NEW

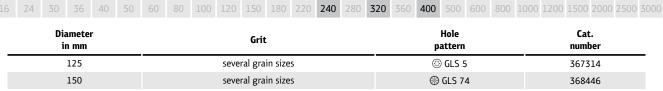
Composite materials

Plastic

•

**Advantages:** High performance disc with optimised clogging behaviour - Increased service life due to the new coating, which prevents the adhesion of paint and dust particles - With a highly flexible and perfectly flat film backing for high quality surface finishing - **Set discs:** Assortments in two pieces grit 240, two pieces grit 320 and two pieces grit 400

#### **Available grits:**



Packing unit (Minimum order quantity) = 5 packs of 6 discs





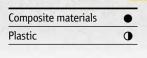
### Properties

Bonding agent	Resin
Grain	Aluminium oxide
Coating	Semi-open
Backing	C-paper

#### Applications:

Paint/Varnish/Filler	•
Primer	•
Filler	•
Gel coats	•





**Advantages:** New high-performance disc with optimized clogging behaviour - Increased service life due to the new coating, which prevents the adhesion of paint and dust particles - For aggressive grinding at high loads, a flexible and tear-resistant C-latex paper is used

#### **Available grits:**

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400	500	600		1000	1200	1500	2000	2500 3	
				meter mm					Gri	it					Ho patt					Cat. number						_
			]	L25				80							⊕ GL	S 27						36	0318			
	125						100							⊕ GL	S 27						36	0319				
	125						120				⊕ GLS 27								360321							
			]	L25					15	0		⊕ GLS 27							360322							
			]	L25				180				⊕ GLS 27							360323							
			]	L50					80	)		⊕ GLS 47									36	0349				
			]	L50					10	0		⊕ GLS 47									36	0347				
			1	L50					12	0		⊕ GLS 47							360351							
	150					150					⊕ GLS 47									36	0350					
			]	L50					180											360348						

Packing unit (Minimum order quantity) = 5 packs of 5 discs







**Properties** 

### **Applications:**

Bonding agent Resin Aluminium oxide Coating Semi-open Backing C-paper

Paint/Varnish/Filler Primer Filler Gel coats

NEV

Composite materials **Plastic** •

Advantages: New high-performance disc with optimized clogging behaviour - Increased service life due to the new coating, which prevents the adhesion of paint and dust particles - For aggressive grinding at high loads, a flexible and tear-resistant C-latex paper is used - **Set discs:** Assortments in two pieces grit 80, two pieces grit 120 and two pieces grit 180

#### **Available grits:**



Packing unit (Minimum order quantity) = 5 packs of 6 discs





### **Properties** Bonding agent Resin

Grain Aluminium oxide Polyester screen Backing

### **Applications:**

Paint/Varnish/Filler Gel coats Plaster Plasterboard walls  Composite materials Wood Wood-based materials

NEW

Advantages: Effective and full-surface dust extraction thanks to open grid structure - Dust-free grinding extends the service life of the abrasive - At the same time, improved health and safety thanks to reduced dust formation at the work station - Independent of existing extraction hole patterns - Waterproof

#### **Available grits:**

16     24     30     36     40     50     60     80	100 120 150 180 2	<b>220 240 280 320 360 400 500 60</b>	00 800 1000 1200 1500 2000 2500 3000
Diameter in mm	Grit	Hole pattern	Cat. number
125	80	Screen	360234
125	120	Screen	360235
125	180	Screen	360237
125	240	Screen	360238
125	320	Screen	360251
150	80	Screen	360261
150	120	Screen	360262
150	180	Screen	360263
150	240	Screen	360264
150	320	Screen	360265

Packing unit (Minimum order quantity) = 5 packs of 5 discs





## **Properties**

#### Bonding agent Resin Aluminium oxide Backing Polyester screen

#### **Applications:**

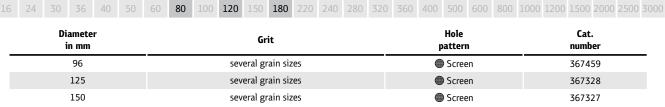
Paint/Varnish/Filler	•
Gel coats	•
Plaster	•
Plasterboard walls	•



Composite materials	•
Wood	•
Wood-based materials	•

**Advantages:** Effective and full-surface dust extraction thanks to open grid structure - Dust-free grinding extends the service life of the abrasive - At the same time, improved health and safety thanks to reduced dust formation at the work station - Independent of existing extraction hole patterns - Waterproof - Set discs: Assortments in two pieces grit 80, two pieces grit 120 and two pieces grit 180

#### **Available grits:**



Packing unit (Minimum order quantity) = 5 packs of 6 discs





## **Properties**

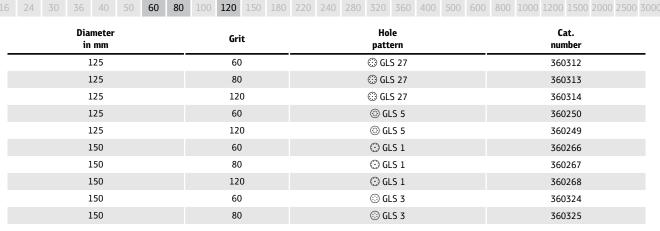
Bonding age	nt Resin
Grain	Aluminium oxide
Coating	Semi-open
Backing	C-paper

**Applications:** 

Paint/Varnish/Filler	•
Wood	•
Plastic	•

Advantages: Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

#### **Available grits:**



**Continuation** →

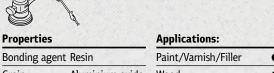


#### → Continuation of PS 33 CK Retail packs, Abrasive paper, self-fastening

Diameter in mm	Grit	Hole pattern	Cat. number
150	120	⊕ GLS 3	360326
150	60	⊕ GLS 47	368440
150	80	⊕ GLS 47	368445
150	120	⊕ GLS 47	368444
150	60	⊕ GLS 51	360272
150	80	⊕ GLS 51	360273
150	120	⊕ GLS 51	360274
150	60		360330
150	80		360331
150	120	<b>⊗</b> GLS 74	360334
225	60		366980
225	80		366979
225	120	<b>◎</b> GLS 55	366984

Packing unit (Minimum order quantity) = 5 packs of 5 discs





Aluminium oxide
Semi-open
B-paper

Paint/varnisn/rilier

Wood

Plastic

D

**Advantages:** Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

#### Available grits:

16	24	30	36	40	60	100	120	150	180	220	240	280	320	360	400	600	1000	1200	1500	2000 25	00 3000
				meter mm			Grit						Hol patte						at. nber		
_			]	L25			180						⊕ GL	5 27				360	315		
			1	L25			240						GL     Second	5 27				360	316		
			]	L25			320						⊕ GL	5 27				360	317		
			]	L25			180						③ GL	.S 5				360	247		
			]	L25			240						③ GL	.S 5				360	246		
			1	L50			180						⊙ GL	S 1				360	269		
			]	L50			240						⊙ GL	S 1				360	270		
			1	L50			320						⊙ GL	S 1				360	271		
			1	L50			180						⊕ GL	.S 3				360	327		
			1	L50			240						⊕ GL	.S 3				360	328		
			]	L50			320						⊕ GL	.S 3				360	329		
			1	L50			180						⊕ GL	5 47				368	3443		
			1	L50			240						⊕ GL	5 47				368	3442		
			1	L50			320						⊕ GL	5 47				368	8441		
			]	L50			180						⊕ GL	5 51				360	275		
			1	L50			240						⊕ GL	5 51				360	276		
			1	L50			320						⊕ GL	5 51				360	277		

**Continuation** →

#### → Continuation of PS 33 BK Retail packs, Abrasive paper, self-fastening

 Diameter in mm	Grit	Hole pattern	Cat. number
150	180	<b>⊗</b> GLS 74	360335
150	240		360336
150	320		360337
225	150		366977
225	180	<b>®</b> GLS 55	366976

Packing unit (Minimum order quantity) = 5 packs of 5 discs



**Advantages:** Universal abrasive disc for metalworking and woodworking - Uniform surface scratch pattern - Available in many grit sizes and dimensions

#### **Available grits:**

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400	500	600		1000	1200	1500 2	000 250	00 3000
	Diameter in mm							Grit					Hole pattern						Cat. number						
			]	.15					40						0	0				278805					
			1	.15					60						0	0						278	806		
			1	.15					80						$\circ$	0						278	807		
			1	.15					120	)					0	0						278	808		
			1	.15					180	)					$\circ$	0						278	809		
			1	.25					40						⊕ Gl	LS 5						241	614		
			125 60										⊙ Gl	LS 5						241	625				
		125 80											⊕ Gl	LS 5						241	626				
			1	.25					120	)		© GLS 5							241627						
			1	.25					180	)		◎ GLS 5							241628						
			1	.50					40 ③ GLS 3									241	649						
			1	.50					60													241	650		
			1	.50					80													241	651		
			1	.50					120	)					⊕ Gl	LS 3						241	652		
			1	.50					180	)					⊕ Gl	LS 3						241	653		
			1	.50					40						⊕ GL	S 51						319	068		
			1	.50					60						⊕ GL	S 51						319	069		
			1	.50					80						⊕ GL	S 51				319070					
			1	.50					120	)									319071						
			1	.50					180	)					⊕ GL	S 51				319073					

Packing unit (Minimum order quantity) = 5 packs of 5 discs











**Advantages:** Improvement of adhesion and protection of the backing pad on random orbital sanders

Diameter in mm	Suitable for	Cat. number
125	Random orbital sander	370652
150	Random orbital sander	358148
225	Random orbital sander	370662

Packing unit (Minimum order quantity) = 1 packs of 2 pads

Abrasive screen, self-fastening, waterproof

### AN 400 Retail packs

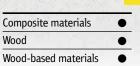




#### Properties Applications:

Bonding agent	Resin
Grain	Aluminium oxide
Backing	Polyester screen

Paint/Varnish/Filler	•
Gel coats	•
Plaster	•
Plasterboard walls	•



**Advantages:** Effective and full-surface dust extraction thanks to open grid structure - Dust-free grinding extends the service life of the abrasive - At the same time, improved health and safety thanks to reduced dust formation at the work station - Independent of existing extraction hole patterns - Waterproof

#### Available grits:

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
					h x Le in mm	-					Gı	rit					Hole attern					Cat. numb			
				11	.5 x 23	0					8	0					Scree	n				36021	.7		
				11	.5 x 23	0					12	20					Scree	n				36021	.8		
				11	.5 x 23	50					18	30					Scree	n				36021	.9		
				11	.5 x 23	0					24	40					Scree	n				36022	0		
				11	.5 x 23	0					32	20					Scree	ın.				36022	2		

Packing unit (Minimum order quantity) = 5 packs of 5 strips









Wood Plastic

Advantages: Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

NEW

**Available grits:** 

Width x Length in mm	Grit	Hole pattern	Cat. number
115 x 230	60	[:::::] GL 15	360300
115 x 230	80	[:::::] GL 15	360301
115 x 230	120	[:::::] GL 15	360302

Aluminium oxide

Semi-open

B-paper

16 24 30 36 40 50 **60 80** 100 **120** 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Aluminium oxide

Semi-open C-paper

Packing unit (Minimum order quantity) = 5 packs of 5 strips





Bonding agent Resin

Coating

Backing



Applications:	
Paint/Varnish/Filler	•
Wood	•



Plastic

Advantages: Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

**Available grits:** 

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
_					th x Lo						Grit					Hole attern	ı				Cat. numbe	er		
_				1	15 x 2	30					180					∷ GL 1	.5				36030	4		
				1	15 x 2	30					240					∷ GL 1	.5				36030	5		
				1	15 x 2	30					320					∷ GL 1	.5				36032	0		

Packing unit (Minimum order quantity) = 5 packs of 5 strips



NEW





**Properties** 



### **Applications:**

**60 80 1**00 **120 1**50 **180 2**20 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Bonding agent Resin Aluminium oxide Coating Semi-open Backing E-paper

Wood Metals Stainless steel • Paint/Varnish/Filler •

**Plastic** 0

Advantages: High removal rate - Uniform scratch pattern

**Available grits:** 

16 24 30 36 **40** 

Width x Length in mm	Grit	Hole pattern	Cat. number
115 x 230	40	[:::::] GL 15	369725
115 x 230	60	[:::::] GL 15	369726
115 x 230	80	[:::::] GL 15	369724
115 x 230	120	[:::::] GL 15	369723
115 x 230	180	[:::::] GL 15	241667
115 x 230	180	[:::::] GL 15	369722

Packing unit (Minimum order quantity) = 5 packs of 5 strips

Abrasive screen, self-fastening, waterproof

### AN 400 Retail packs Set





### **Properties**

Bonding agent	Resin
Grain	Aluminium oxid
Backing	Polyester screen

### **Applications:**

Paint/Varnish/Filler	•
Gel coats	•
Plaster	•
Plasterboard walls	•

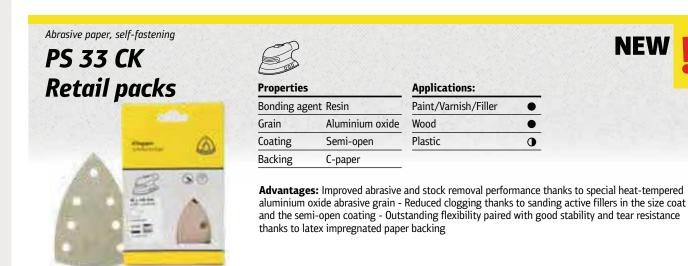
	<u> </u>
Composite materials	•
Wood	•
Wood-based materials	•

Advantages: Effective and full-surface dust extraction thanks to open grid structure - Dust-free grinding extends the service life of the abrasive - At the same time, improved health and safety thanks to reduced dust formation at the work station - Independent of existing extraction hole patterns - Waterproof - Set: Assortments in two pieces grit 80, two pieces grit 120 and two pieces grit 180

Available grits:

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400		600		1000	1200	1500	2000	2500	3000
			Wid	th x Lo								Gr	it					F	Hole pattern	1			Ca num			
			9	99 x 14	48						sev	eral gr	ain siz	es				2	GLS8	1			367	745		

Packing unit (Minimum order quantity) = 5 packs of 6 strips

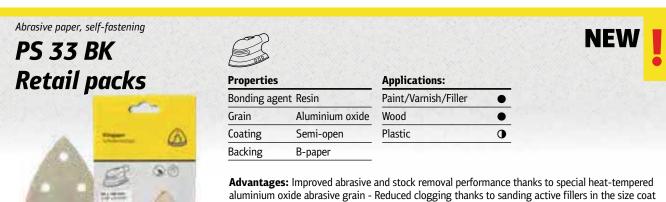


Available grits:

16 24 30 36 40 50 60 80 100 120 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Width x Length in mm	Grit	Hole pattern	Cat. number
98 x 148	40	△ GLS 24	366849
98 x 148	60	△ GLS 24	360333
98 x 148	80	△ GLS 24	360338
98 x 148	120	△ GLS 24	360339

Packing unit (Minimum order quantity) = 5 packs of 5 strips



**Advantages:** Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

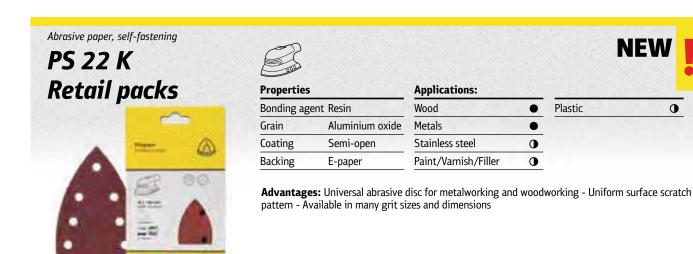
#### Available grits:

16	24	30	36	40		60	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000	2500	3000
				Wid	lth x L in m	ength.					Grit				p	Hole atterr	1			ı	Cat. numbe	r		
					98 x 1	48					180				۵	GLS 2	4			3	36034	0		
					98 x 1	48					240				۵	GLS 2	4			3	36034	1		
					98 x 1	48					320				Δ	GLS 2	4			3	36034	2		

Packing unit (Minimum order quantity) = 5 packs of 5 strips



0

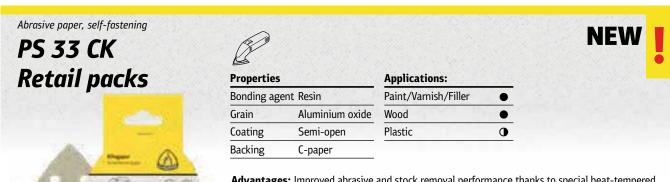


#### **Available grits:**

Width x Length in mm	Grit	Hole pattern	Cat. number
98 x 148	40	△ GLS 24	366848
98 x 148	60	△ GLS 24	366847
98 x 148	80	<b>△</b> GLS 24	366846
98 x 148	120	△ GLS 24	366845
98 x 148	180	△ GLS 24	366844

16 24 30 36 **40** 50 **60 80** 100 **120** 150 **180** 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Packing unit (Minimum order quantity) = 5 packs of 5 strips



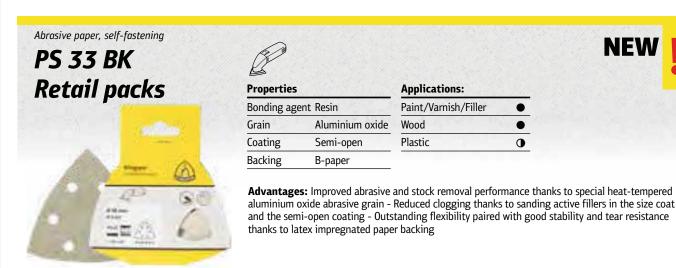
**Advantages:** Improved abrasive and stock removal performance thanks to special heat-tempered aluminium oxide abrasive grain - Reduced clogging thanks to sanding active fillers in the size coat and the semi-open coating - Outstanding flexibility paired with good stability and tear resistance thanks to latex impregnated paper backing

**60 80 1**00 **120 1**50 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

#### Available grits:

Diameter in mm	Grit	Hole pattern	Cat. number
96	40	△ GLS 15	366850
96	60	△ GLS 15	360241
96	80		360244
96	120		360243

Packing unit (Minimum order quantity) = 5 packs of 5 triangles

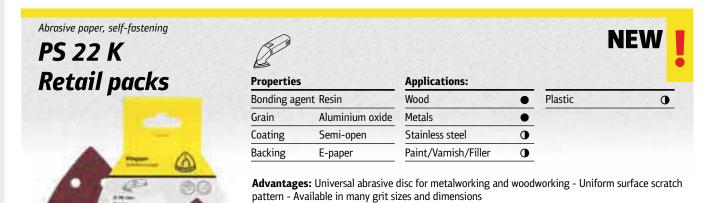


#### **Available grits:**

16	24	30	36	40	60	100	120	150	180	220	240	280	320	360	400	600	1000	1200	1500	2000	2500	
				meter mm			Gri	t					Hol patt						at. nber			
	96					18	0					△ GL	S 15				360	0242			•	
	96					24	0					△ GL	S 15				360	0240				
	96					32	0					△ GL	S 15				360	0239				

NEW

Packing unit (Minimum order quantity) = 5 packs of 5 triangles



#### **Available grits:**

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400	600	1000	1200	1500	2000	2500	3000
				meter mm					Gri	t					Hol patte						at. nber			
		96						40	)					△ GL:	S 15				241	.656				
	96						60	)					△ GL	S 15				241	.657					
				96					80	)					△ GL	S 15				241	.658			
	96						120	0					△ GL	S 15				241	.659					
	96						180	0					△ GL	S 15				241	.660					

Packing unit (Minimum order quantity) = 5 packs of 5 triangles

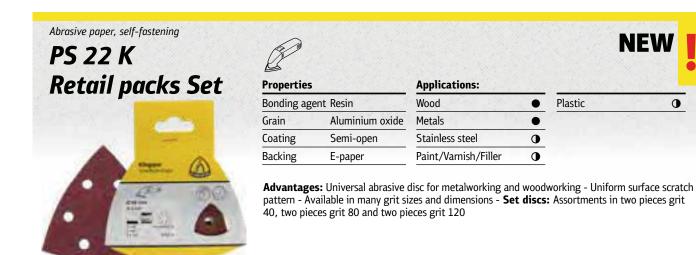
**Available grits:** 

Available grits:



0

NEV



16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000	2500	3000
		_	amete n mm	r						Grit								Hole attern				Cat numl			_
	96 several grain s						in size	S						GLS 1	5			2416	62						

Packing unit (Minimum order quantity) = 5 packs of 6 triangles



Advantages: Special type for portable belt sanders - For universal use on wood, metal, paint and varnish - Large product mix of belts for all standard machines

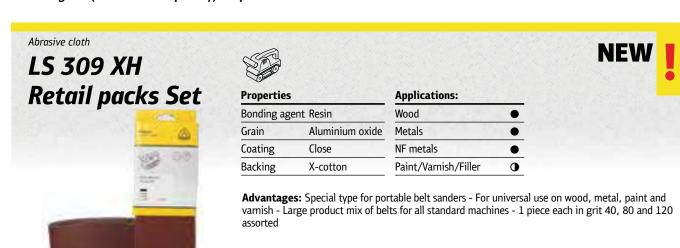
16	24	30	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400		600	1000	1200	1500	2000 2	500 3	000
_					Width in	x Leng	gth						Gr	it				elt int				at. nber			_
					75	x 457							4	0			F	5			9:	189			
					75	x 457							6	0			F	5			9:	176			
					75	x 457							8	0			F	5			9:	172			
					75	x 457							10	00			F	5			9:	171			
					75	x 457							12	20			F	5			7	138			
					75	x 533							4	0			F	5			70	018			
					75	x 533							6	0			F	5			70	019			
					75	x 533							8	0			F	5			70	020			
					75	x 533							10	00			F	5			70	021			
					75	x 533							12	20			F	5			70	022			
					75	x 533							15	50			F	5			70	023			
					75	x 533							18	30			F	5			70	077			

**Continuation** →

#### → Continuation of LS 309 XH Retail packs, Abrasive cloth

Width x Length in mm	Grit	Belt joint	Cat. number
100 x 560	40	F5	7036
100 x 560	60	F5	7037
100 x 560	80	F5	7038
100 x 560	100	F5	7039
100 x 560	120	F5	7040
100 x 610	40	F5	7080
100 x 610	60	F5	7081
100 x 610	80	F5	7082
100 x 610	100	F5	7083
100 x 610	120	F5	7084

Packing unit (Minimum order quantity) = 6 packs of 3 belts



#### **Available grits:**

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000	2500	300
			Wi	dth x l in m	Length m	1							Grit						Belt join			Ca <sup>r</sup>			
				75 x 4	157							severa	l grain	sizes					F5			3670	)35		_
				75 x 5	33							severa	l grain	sizes					F5			3670	)34		
				100 x	560							severa	l grain	sizes					F5			3670	036		
				100 x	610							severa	l grain	sizes					F5			3670	)37		

Packing unit (Minimum order quantity) = 6 packs of 3 belts



NEV



Backing

**Properties** Bonding agent Resin Aluminium oxide Coating Close

XF-cotton

**Applications:** 

Stainless steel Metals NF metals Steel

Advantages: Universal type for working on radiuses and contours with belt files in all areas of metalworking

#### **Available grits:**

Width x Length in mm	Grit	Belt joint	Cat. number
10 x 330	40	F4G	367104
10 x 330	60	F4G	367105
10 x 330	120	F4G	367106
13 x 457	40	F4G	248820
13 x 457	60	F4G	248821
13 x 457	120	F4G	248822
13 x 610	40	F4G	367101
13 x 610	60	F4G	367102
13 x 610	120	F4G	367103

16 24 30 36 **40** 50 **60** 80 100 **120** 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Packing unit (Minimum order quantity) = 6 packs of 3 belts



## **Properties**

Bonding agent Resin Grain Aluminium oxide

#### **Applications:**

Stainless steel Metals Wood Plastic

Advantages: Universal product for steel and stainless steel materials - Even removal rate - Suitable for use in hard-to-reach areas

#### **Available grits:**

Diameter x Width x Shaft in mm	Grit	Max. operating speed	Max. RPM	Cat. number
40 x 20 x 6	40	40 m/s	19000 rpm	360285
40 x 20 x 6	60	40 m/s	19000 rpm	360286
40 x 20 x 6	80	40 m/s	19000 rpm	360287
60 x 30 x 6	40	40 m/s	12700 rpm	360290

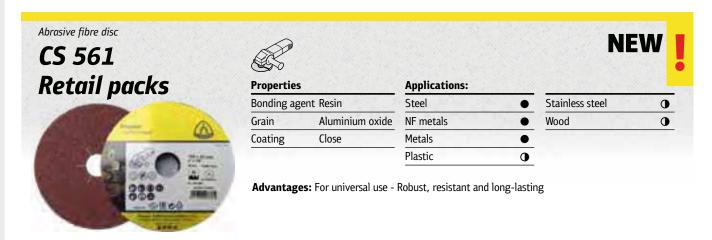
16 24 30 36 **40** 50 **60 80** 100 120 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

**Continuation** →

#### → Continuation of KM 613 Retail packs, Small abrasive mop

Diameter x Width x Shaft in mm	Grit	Max. operating speed	Max. RPM	Cat. number
60 x 30 x 6	60	40 m/s	12700 rpm	360289
60 x 30 x 6	80	40 m/s	12700 rpm	360288
80 x 30 x 6	40	40 m/s	9500 rpm	366998
80 x 30 x 6	60	40 m/s	9500 rpm	366997
80 x 30 x 6	80	40 m/s	9500 rpm	366996

Packing unit (Minimum order quantity) = Ø 40 mm 36 pcs., Ø 60 mm 24 pcs., Ø 80 mm 20 pcs.



#### Available grits:

16	24	30	36	40		60	80	100	120	150	180	220	240	280	320	360	400	500	600	1000	1200	1500	2000	2500	3000
					ter x l n mm	Hole					Grit	t				Hole	patte	ฑ				Cat. numb			
				11	5 x 22						24					()	€ 30					25590	)5		_
				11	5 x 22						40					()	€ 30					25590	)6		
				11	5 x 22						60					()	€ 30					25590	)7		
				11	.5 x 22						80					(	€ 30					25590	)8		



NEW





**Properties** 



Bonding age	ent Glue
Grain	Aluminium oxide
Coating	Semi-open
Backing	B-paper

#### **Applications:**

Paint/Varnish/Filler	•
Wood	•
Metals	•

Advantages: Product with optimal price-performance ratio - Optimized wear properties for hand sanding and handheld machine sanding

#### Available grits:

Width x Length in mm	Grit	Cat. number
115 x 5000	40	241817
115 x 5000	60	241818
115 x 5000	80	241819
115 x 5000	120	241820
115 x 5000	180	241821

16 24 30 36 **40** 50 **60 80** 100 **120** 150 **180** 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Packing unit (Minimum order quantity) = 5 rolls

### Abrasive paper **PS 33 B** Retail packs





rroperties	riopercies										
Bonding age	ent Resin	Pai									
Grain	Aluminium oxide	Wo									
Coating	Semi-open	Pla									
Backing	B-paper										

### pplications:

Paint/Varnish/Filler	•
Wood	•
Plastic	•

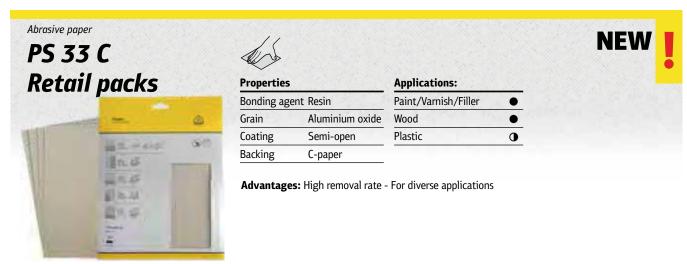
Advantages: Very high removal rate - Minimal clogging due to active abrasive substances - Longer service life - Good tear resistance and flexibility

#### Available grits:

	Width x Length in mm	Grit	Cat. number
_	115 x 5000	180	366987
	115 x 5000	240	366986
	115 x 5000	320	366988

16 24 30 36 40 50 60 80 100 120 150 **180** 220 **240** 280 **320** 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Packing unit (Minimum order quantity) = 5 rolls

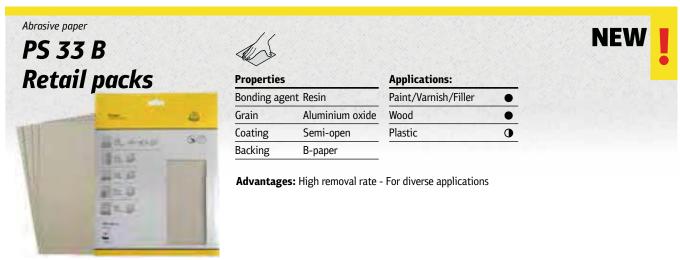


#### **Available grits:**

Width x Length in mm	Grit	Cat. number
230 x 280	80	371919
230 x 280	120	371918

16 24 30 36 40 50 60 **80** 100 **120** 150 180 220 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Packing unit (Minimum order quantity) = 5 packs of 5 sheets



#### **Available grits:**

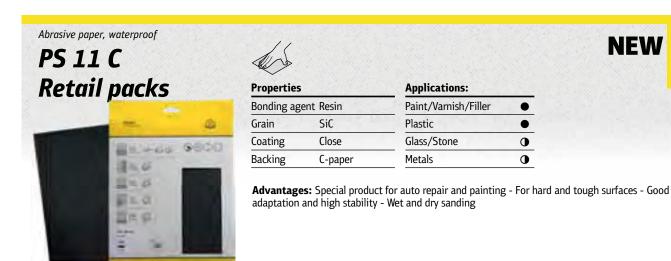
Width x Length in mm	Grit	Cat. number
230 x 280	180	371916
230 x 280	240	371922
230 x 280	320	371923

16 24 30 36 40 50 60 80 100 120 150 **180** 220 **240** 280 **320** 360 400 500 600 800 1000 1200 1500 2000 2500 3000

Packing unit (Minimum order quantity) = 5 packs of 5 sheets



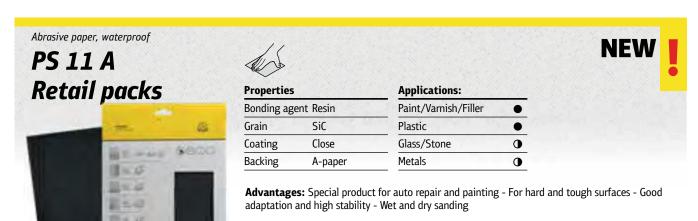
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**Available grits:** 

16	24	30	36	40		60		100	120	150	180	220	240	280	320	360	400		600		1000	1200	1500	2000	2500	3000
	Width x Length in mm										G	rit			Cat. number											
	230 x 280								120						241787					_						
	230 x 280									180					241789											

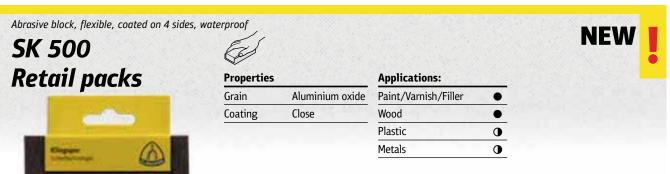
Packing unit (Minimum order quantity) = 5 packs of 5 sheets



Available grits:

16	24	30	36	40		60		100	120	150	180	220	240	280	320	360	400		600		1000	1200	1500	2000	2500	3000
	Width x Length in mm									Grit						Cat. number										
_	230 x 280										24	40					2	41790								
230 x 280										40	00					2	41791									

Packing unit (Minimum order quantity) = 5 packs of 5 sheets



**Advantages:** Can be used flat and upright (four usable sides) - For flat and profiled surfaces due to flexible foam core - Robust, washable and reusable

#### **Available grits:**

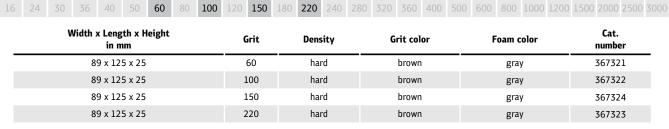
16	24	30	36	40		60		100	120	150	180	220	240	280	320	360	400	600		1000	1200	1500	2000 250	0 300	0
	Width x Length x Height in mm								(	Grit		Dens	ity		G	Foam color					Cat. number				
_	70 x 100 x 25							60		ha	rd			brown			gra	/		3	367346				
	70 x 100 x 25					70 x 100 x 25			1	100		ha	rd			brown			gra	У		3	367347		
			7	0 x 10	0 x 25				1	150		ha	rd			brown			gra	y		3	367348		
	70 x 100 x 25					2	220		ha	rd			brown			gra	y		3	367349					

Packing unit (Minimum order quantity) = 32 pcs.



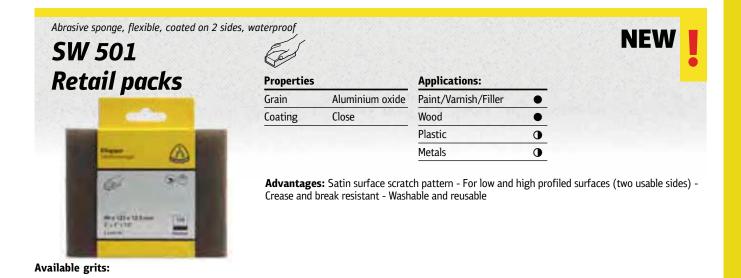
**Advantages:** Suitable for flat or upright use on all four sides - The angled edge (approx. 45°) makes it an exceptional choice for narrow, tapering workpiece contours - Excellent contouring and pressure distribution thanks to flexible foam core - Robust, washable and reusable

#### **Available grits:**



Packing unit (Minimum order quantity) = 18 pcs.

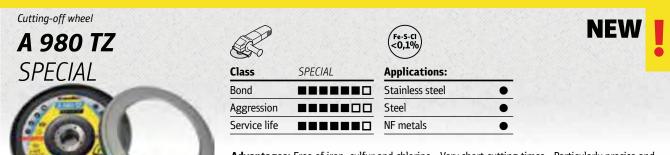




Width x Length x Height in mm	Grit	Density	Grit color	Foam color	Cat. number
96 x 123 x 12,5	120	soft	brown	yellow	367320
96 x 123 x 12,5	220	soft	brown	yellow	367319

16 24 30 36 40 50 60 80 100 **120** 150 180 **220** 240 280 320 360 400 500 600 800 1000 1200 1500 2000 2500 3000

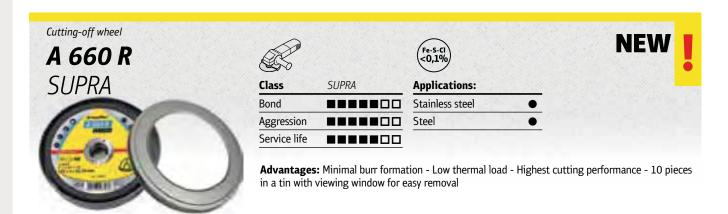
Packing unit (Minimum order quantity) = 14 packs of 2 pcs.



**Advantages:** Free of iron, sulfur and chlorine - Very short cutting times - Particularly precise and clean cuts due to the low thickness - Low thermal load - Minimal burr formation, minimizing finish-machining - 10 pieces in a tin with viewing window for easy removal

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 0,8 x 22,23		80 m/s	13300 rpm	10 discs	362548
125 x 0,8 x 22,23	~~	80 m/s	12200 rpm	10 discs	362549

Minimum order quantity = 5 tins

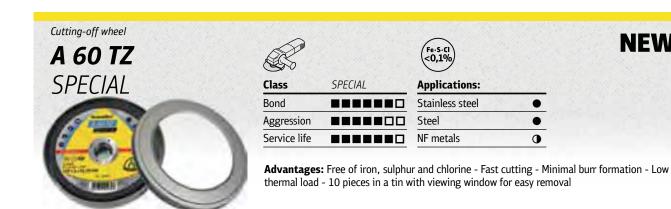


Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1 x 22,23		80 m/s	13300 rpm	10 discs	362677
125 x 1 x 22,23		80 m/s	12200 rpm	10 discs	362678

Minimum order quantity = 5 tins

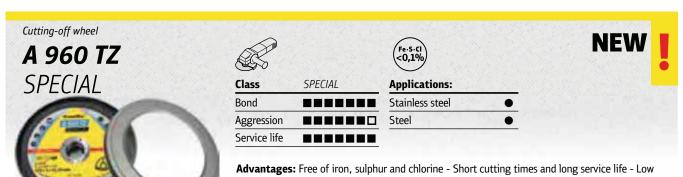


**NEW** 



Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1 x 22,23		80 m/s	13300 rpm	10 discs	310503
125 x 1 x 22,23		80 m/s	12200 rpm	10 discs	310504

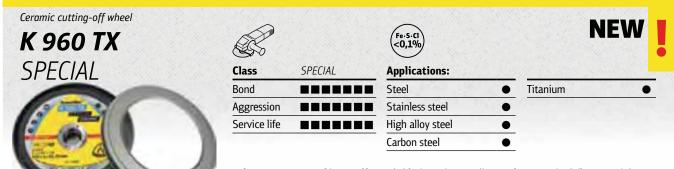
Minimum order quantity = 5 tins



thermal load - Low burr formation - Optimized bonding for considerably longer service life - For diverse applications - 10 pieces in a tin with viewing window tin for easy removal

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1 x 22,23		80 m/s	13300 rpm	10 discs	362554
125 x 1 x 22,23		80 m/s	12200 rpm	10 discs	362553

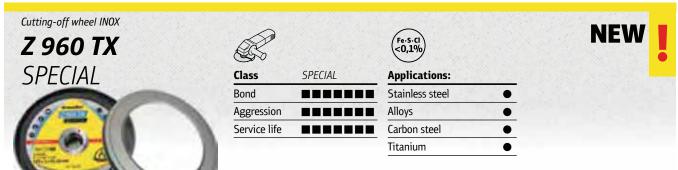
## **Retail range**



**Advantages:** Free of iron, sulfur and chlorine - Outstanding performance in daily use - Highest cutting performance, even with low grinding pressure - 10 pieces in a tin with viewing window for easy removal

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1 x 22,23		80 m/s	13300 rpm	10 discs	362590
125 x 1 x 22,23		80 m/s	12200 rpm	10 discs	362589

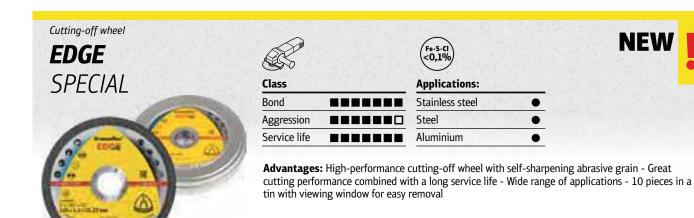
Minimum order quantity = 5 tins



**Advantages:** Free of iron, sulphur and chlorine - Ideal for tough/hard materials such as titanium and high alloy steels - Short cutting times and long service life due to self-sharpening zirconia alumina - Low thermal load - Low burr formation - 10 pieces in a tin with viewing window for easy removal

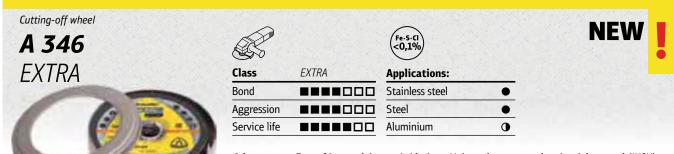
Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1 x 22,23		80 m/s	13300 rpm	10 discs	362588
125 x 1 x 22,23		80 m/s	12200 rpm	10 discs	362587





Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1,2 x 22,23		80 m/s	13300 rpm	10 discs	362578
125 x 1,2 x 22,23		80 m/s	12200 rpm	10 discs	362579

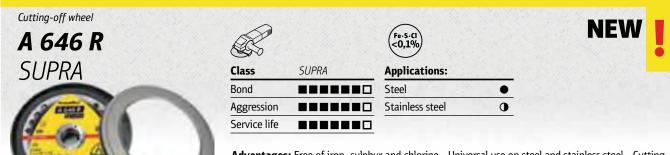
Minimum order quantity = 5 tins



**Advantages:** Free of iron, sulphur and chlorine - Universal use on steel and stainless steel (INOX) - Cutting disc made of a calcined, cubic aluminium oxide that is self-sharpening - Minimal burr formation and longer service life - Best suited for cutting thin-walled profiles and pipes - 8 pieces in a tin with viewing window for easy removal

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1,6 x 22,23		80 m/s	13300 rpm	8 discs	347566
125 x 1,6 x 22,23		80 m/s	12200 rpm	8 discs	362583

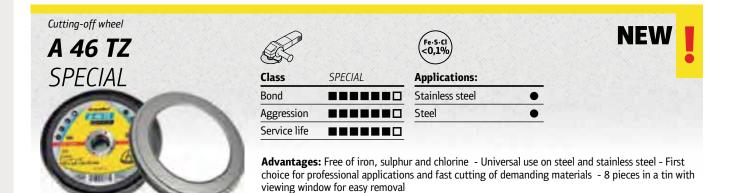
## **Retail range**



**Advantages:** Free of iron, sulphur and chlorine - Universal use on steel and stainless steel - Cutting disc made of self-sharpening, calcined aluminum oxide - Tremendous aggressiveness when used for cutting solid steel materials - 8 pieces in a tin with viewing window for easy removal

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1,6 x 22,23		80 m/s	13300 rpm	8 discs	362582
125 x 1,6 x 22,23		80 m/s	12200 rpm	8 discs	362581

Minimum order quantity = 5 tins

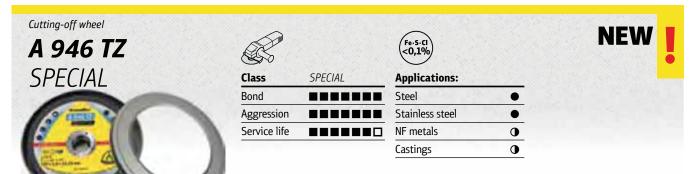


Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1,6 x 22,23		80 m/s	13300 rpm	8 discs	362580
125 x 1,6 x 22,23		80 m/s	12200 rpm	8 discs	362585

## **Retail range**

for angle grinders





**Advantages:** Free of iron, sulfur and chlorine - Extra long service life across all applications - For universal use in metal processing - Short cutting times - Low burr formation - Low thermal load - 8 pieces in a tin with viewing window for easy removal

Diameter x Width x Bore in mm	Form	Max. operating speed	Max. RPM	Packing unit/tin	Cat. number
115 x 1,6 x 22,23		80 m/s	13300 rpm	8 discs	362584
125 x 1,6 x 22,23		80 m/s	12200 rpm	8 discs	342227

# **Point of Sale**

#### Flexible, easy care and maintenance, representative: The new, modular POS system by Klingspor

The full range of products – from the show room to one-on-one selling. It must be representative, boost sales and be easy to care for – the requirements for a POS are manifold and keep changing. The new POS system by Klingspor can be configured flexibly according to individual needs.

#### **Flexibility**

The new Klingspor POS system is flexibly scalable. Standardised modules with a width of one metre can be flexibly extended in height and width. All new POS elements are fully compatible with previous Klingspor POS modules.

#### **Optimally representative**

The image modules complement your POS presentation by true attention-getters. Depending on your line of goods, these modules can be fitted out flexibly. The main eye-catcher is a large work piece, on which typical application examples can be shown.

#### Minimal effort for care and maintenance

The modular design and easily exchangeable magnetic foils keep your wall up to date: Popular products and promotions that make for sales momentum can be installed on the wall with a few simple steps. Out-of-stock fast movers can be refilled directly at the POS through an optional storage space in the base rail.

#### **Point of Sale Catalogue**

Please request our Point of Sale Catalogue for more detailed information on the POS elements, modules and accessory.





#### **Backlit top panels**

Simple but effective: With backlit top panels that disperse light to the front as well as on the products, you will find it easy to attract attention to your POS.



#### Optional storage space

Consultancy documents or much-in-demand fast movers for refilling the wall quickly can be stored easily in the storage space behind the base rail.

## **Point of Sale**

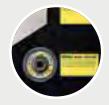






# Flexible labelling due to detachable magnetic foils

Quick orientation, fewer questions and quickly placed.



#### Representative image module

A true attention-getter – with user-oriented tasks, you can stage the highlight products in your line of goods. Beside a stainless steel hexagon with different machining examples, your own in-house work pieces can be set up.



#### Individual concepts are possible

Design the wall with individual eye-catchers that hit on the dot the work focus of your customers. We are glad to advise you!



#### Magnetic headder foils

The magnetic folis are also suited for centre gondolas and offer quick orientation.

## **Safety recommendations**

#### Applications guide

#### **General Principles of Safety**

Abrasive products improperly used can be very dangerous.

- Always follow the instructions provided by the abrasive product and machine supplier.
- Ensure that the abrasive product is suitable for its intended use. Examine all abrasive products for damage or defects before use.
- ► Follow the correct procedures for handling and storage of abrasive products. Be aware of the hazards likely during the use of abrasive products and observe the recommended precautions to be taken:
- ► Bodily contact with the abrasive product at operating speed.
- ► Injury resulting from product breakage during use.
- Grinding debris, sparks, fumes and dust generated by the grinding process.
- ▶ Noise
- Vibration

Use only abrasive products conforming to the highest standards of safety. These products will bear the relevant EN standard number and/or the inscription "oSa":

- ► EN 12413 for Bonded Abrasives.
- ► EN 13236 for Superabrasives.
- ► EN 13743 for Specific Coated Abrasives (vulcanised fibre discs, flap wheels, flap discs and spindle-mounted flap wheels).

Never use a machine that is not in good working order or one with defective parts. Employers should carry out a risk assessment on all individual abrasive processes to determine the appropriate protective measures necessary. They should ensure that their employees are suitably trained to carry out their duties.

More detailed information on the safe use of abrasive products, comprehensive Safety Codes are available from FEPA or your National Trade Association.

- ► FEPA Safety Code for Bonded Abrasives and Precision Superabrasives.
- ► FEPA Safety Code for Superabrasives for Stone and Construction.
- ► FEPA Safety Code for Coated Abrasives.

#### Precautions against likely hazards

#### **Bodily contact with the abrasive product**

- Always take great care and attention when using abrasive products. Tie back long hair and do not wear loose clothing, ties or jewellery.
- Prevent accidental start up of the machine before mounting or changing an abrasive product. Isolate machines from their power source where necessary.
- Never remove guards from machines where fitted and ensure they are in good condition and properly adjusted before starting the machine.
- Always use gloves and suitable clothing where the workpiece or machine is handheld. For gloves, a minimum protection level of EN 388 Category 2 is recommended.
- After switching off the machine, ensure the product has come to rest before leaving the machine unattended.

#### Injury caused by product breakage

- Always handle abrasives with great care, they are easily damaged. Examine all products for defects or damage before use.
- Store abrasives in dry, frost-free conditions avoiding wide variations in temperature. Ensure they are properly protected and supported to prevent damage and distortion.
- ► Coated abrasives should be stored at 18-22° C, 45-65% relative humidity.
- ► Abrasive belts should be hung on a rod or peg not less than 50mm diameter.

- ► Never use an abrasive product beyond its expiry date where marked. Observe the recommended shelf life for the following specific products; Resinoid and Shellac products 3 years, Rubber products 5 years, Vitrified products 10 years.
- ► Check abrasive product or package for any warnings or other safety information.
- Ensure that the correct abrasive product is selected. Never use a product if it cannot be properly identified.
- Follow the instructions provided by the abrasive product or machine supplier when mounting abrasive products. Observe any mounting indications marked on the product such as direction of run or mounting position.
- ▶ Never force the abrasive product onto the mounting fixture or modify it to fit.
- ▶ Never exceed the maximum operating speed where specified.
- Check that the correct mounting devices are used and that they are undistorted, clean and free from burrs.
- ▶ Use mounting blotters where supplied.
- ► Do not tighten the mounting device excessively.
- After mounting or re-mounting an abrasive product, conduct a trial run at operating speed with the guard in place for at least 30 seconds, standing clear of the machine before use.
- Never remove guards from machines where fitted and ensure they are in good condition and properly adjusted.
- Ensure that the workpiece is secure and properly supported. Ensure that work rests are properly adjusted and secure.
- ▶ Never start the machine with the workpiece in contact with the abrasive product.
- ► Never apply excessive force or shock to the abrasive product or let it overheat.
- $\,\blacktriangleright\,$  Do not grind on the part of the product that is not designed for the operation.
- Avoid grinding with the edge of abrasive belts, use the centre of the belt if possible.
- Avoid clogging and uneven wear to ensure that the abrasive product is working efficiently. Dress frequently where appropriate.
- ▶ Let the abrasive product stop naturally, not by applying pressure to its surface.
- ► Turn off and spin out excess coolant before stopping the machine.
- ▶ Do not leave abrasive belts under tension when not in use.



## **Safety recommendations**

#### Applications guide



#### Grinding debris - sparks, dust and fumes

- Exposure to dust generated from workpiece and/or abrasive materials can result in lung damage and/or other physical injury.
- ► All dry grinding processes should be provided with adequate extraction facilities.
- ▶ Do not use abrasive products near flammable materials.
- The use of respirators complying with EN149 is recommended for dry grinding processes even if extraction systems are provided.
- Guards where provided should be adjusted to deflect sparks and debris away from the operator.
- ► Take additional measures to protect people working nearby.
- Eye protection is recommended for all machine applications for abrasives. For handheld machines or workpiece, goggles or full face shields are recommended.
- ► Eye protection with a minimum protection of EN166 Grade B is recommended.
- Ensure that the correct abrasive product is selected. An unsuitable product can produce excessive debris and dust.

#### Noise

- Ear protection complying with EN352 is recommended for all applications where the workpiece or machine is handheld, irrespective of the noise level.
- ► Ensure that the correct abrasive product is selected. An unsuitable product can produce excessive noise.

#### **Vibration**

- ► Processes where the workpiece or machine is handheld can cause vibration injury.
- ► Action needs to be taken if tingling, pins and needles or numbness is experienced after 10 minutes continuous use of the abrasive product.
- The effects of vibration are more pronounced in cold conditions so keep the hands warm and exercise hands and fingers regularly. Use modern equipment with low vibration levels.
- Maintain all equipment in good condition and stop the machine and have it checked if excessive vibration occurs.
- Use good quality abrasive products and keep them in good condition during their life.
- ► Maintain mounting flanges and backing pads in good condition and replace if worn
- Do not grip the workpiece or machine too tightly and do not exert excessive pressure on the abrasive product.
- ► Avoid continuous use of the abrasive product.
- ► Use the correct product. An unsuitable product can produce excessive vibration.
- ► Don't ignore the physical symptoms of vibration seek medical advice.

#### Disposal of abrasives

- Used or defective abrasives should be disposed in accordance with local or national regulations.
- ► Further information can be obtained from material safety data sheets provided by the supplier.
- Be aware that the abrasive product may be contaminated with material from the workpiece or process after use.
- Disposed abrasive products should be damaged to prevent them from being taken from waste skips and re-used.

#### SAFETY RECOMMENDATIONS FOR THE USE OF ABRASIVE BELTS

#### 1. General safety recommendations

- ► Ensure that quality and dimensions of the belt are correct for the machine and type of application. Refer to the machine manufacturer's instructions.
- ▶ Do not use near easily flammable material.
- ► Prevent long hair, loose clothes or jewellery from getting into contact with the machine and being pulled in. Take precautionary measures.
- ► Ensure that people nearby are protected from chips, sparks, debris, fumes, dust and noise. Belt grinding operations may produce high concentrations of dust, gas or mist, which can represent a health hazard as well as a risk of explosion.
- Do not open the guard or put down the machine until the belt has come to a complete standstill.

#### 2. Specific safety recommendations

- Abrasive belts can tear. Please take precautions against risks by tearing of belt (e.g. protective clothing and devices, safety equipment of machinery).
- Abrasive machines, which do not have a completely closed guard require comprehensive protective equipment of the user (e.g. protective gloves, leather aprons, face shield, dust mask).
- Check the locking mechanism of the machine cover. Do not remove guards.
   Any contact with running belts can result in serious injuries.
- When mounting, refer to direction of running advice, if necessary.
- ▶ Make sure the workpiece is held correctly or is mechanically secured.
- Start the machine and wait until belt has reached its full operational speed before grinding.
- ► Belts should only be used dry unless specified as suitable for wet grinding (please contact the manufacturer if in any doubt).
- Use the centre of the belt, if possible, and grind as flat as possible. Avoid grinding with the edge of the belt as well as strong punctual loading e.g. through sharp or sharp-edged workpieces.
- ► Do not exert excessive pressure and prevent the belt from overheating.
- Check the belts in use periodically for wear and tear or damage (e.g. cracks at edges, fracturing or strong wear and tear in the joint) and replace the belts if necessary.

Due to the extraordinary variety of applications and machine constructions, these recommendations are limited to basic aspects of safety. Further safety regulations and instructions can be taken from the respective legislation, decrees and technical standards.

# CONDITIONS OF SALE AND DELIVERY OF KLINGSPOR ABRASIVES SA (PTY) LTD

IN THIS AGREEMENT THERE ARE CERTAIN CLAUSES OF SIMILAR FONT TO THIS TEXT, WHICH CONTAINS PROVISIONS THAT MAY HAVE THE EFFECT OF (I) LIMITING THE RISK OR LIABILITY OF THE COMPANY OR OF ANY OTHER PERSON AND/OR (II) MAY CONSTITUTE AN ASSUMPTION OF RISK OR LIABILITY BY YOU AND/OR (III) MAY IMPOSE AN OBLIGATION ON YOU TO INDEMNIFY THE COMPANY OR ANY OTHER PERSON FOR ANY CAUSE AND/OR (IV) MAY BE AN ACKNOWLEDGEMENT OF ANY FACT BY YOU. THESE PROVISIONS ARE VERY IMPORTANT AND YOU MUST ENSURE THAT YOU READ THEM CAREFULLY AND THAT YOU UNDERSTAND THEM CLEARLY.

#### 1. GENERAL

- 1.1 All contracts are exclusively subject to the COMPANY'S terms and conditions of delivery and sale and the COMPANY rejects any terms and conditions of the CUSTOMER to the contrary or deviating from the COMPANY'S terms and conditions unless it has expressly consented to their validity in writing.
- 1.2 The terms and conditions set out herein cancel all previously issued terms and conditions.
- 1.3 These terms and conditions, as re-issued or revised by the COMPANY from time to time, apply to all orders placed with the COMPANY and such orders are subject to acceptance by the COMPANY and shall be deemed to be made subject to these terms and conditions.
- 1.4 No qualification or condition contained in any order form, acknowledgement of order or otherwise, shall form part of the contract of sale or override these terms, unless expressly agreed to in writing by the Managing Director of the COMPANY. No employee or agent of the COMPANY shall have the authority or the ability to change these terms in any manner whatsoever, save for the Managing Director of the COMPANY.
- 1.5 Price lists issued by the COMPANY from time to time, are for information purposes only and do not constitute offers for sale.
- 1.6 The COMPANY reserves the right to refuse an order and acceptance on the part of the COMPANY shall only be deemed to have occurred on delivery of the GOODS.
- 1.7 Save insofar as may be otherwise specifically agreed upon in writing to the contrary by the COMPANY, orders are accepted only at prices and transport tariffs on that date of dispatch.
- 1.8 Due to variables such as quantity, size, packaging, marketing etc., invoiced prices may differ marginally from advertised prices.

#### 2. APPLICATION OF THE CONSUMER PROTECTION ACT

- 2.1 If the CPA is applicable to this AGREEMENT, the provisions of the CPA shall be applied and take precedence where they contradict any provision of this AGREEMENT
- 2.2 Whether the CPA applies to this AGREEMENT depends on whether certain values of the CUSTOMER's business (the "Threshold Values") are above or below the threshold
- 2.3 The Threshold Values are the CUSTOMER'S asset value or annual turnover. If either of these values exceed R2 000 000.00 (Two Million Rand) on the date that the Parties agree that the COMPANY will sell the GOODS, the CPA will not apply to this AGREEMENT.
- 2.4 The values measured and the threshold itself will be amended from time to time, in which case the Parties agree that the new measurements shall apply to this AGREEMENT from the date of such amendment.
- 2.5 The COMPANY'S duties in terms of this AGREEMENT may vary depending on whether the CPA applies to it, and the COMPANY shall act upon the information given by the CUSTOMER in the credit application form. Consequently:
- 2.5.1 The CUSTOMER warrants that any statement made to the COMPANY in respect of its Threshold Value is accurate.
- 2.5.2 If the CUSTOMER claims that all the Threshold Values are below R2 000 000.00 (Two Million Rand), or otherwise that the CPA applies to this AGREEMENT, the COMPANY may at its instance require the CUSTOMER to provide it with financial statements as proof thereof.
- 2.5.3 If the CUSTOMER misstates the Threshold Values and as a consequence the COMPANY believes that this AGREEMENT is subject to the CPA when it is not, then the COMPANY may retroactively apply any provisions of this AGREEMENT that were not applied as a result of this belief.
- 2.6 The CUSTOMER shall be liable for any costs or damage sustained by the COMPANY resulting from such misstatement.

#### 3. INTERPRETATION AND DEFINITIONS

- 3.1 In this AGREEMENT unless the context otherwise requires:-
- 3.1.1 The singular shall import and include the plural and vice versa;
- 3.1.2 Words indicating one gender shall import and include other genders;
- Words indicating natural persons shall import and include artificial persons;
- 3.1.4 The headnotes to this AGREEMENT are used for the sake of convenience only and shall not govern the interpretation of the clauses to which they relate;
- 3.1.5 Where any number of days is prescribed in this AGREEMENT, they shall be calculated exclusive of the first day and inclusive of the last day unless the last day falls on a Saturday, Sunday or public holiday. In such day the last day shall be the next succeeding day which is not a Saturday, Sunday or public holiday;
- 3.1.6 If any doubt or conflict arises where figures are referred to in numerals and in words, the words shall prevail;
- 3.1.7 Should there be any conflict or inconsistency between this AGREEMENT and other agreement/s concluded between the Parties, then terms and conditions of this AGREEMENT shall prevail;
- 3.1.8 If any provision in a definition contained in this AGREEMENT is a substantive provision conferring rights or imposing obligations on any Party, notwithstanding that it only appears in the definition clause, effect shall be given to it as if it were a substantive provision in the body of the AGREEMENT;
- 3.1.9 The rights and obligations of any Party arising from this **AGREEMENT**, shall devolve upon and be binding upon its successors-in-title.
- 3.2 Unless such meaning is inconsistent with the context, the following terms shall, throughout this AGREEMENT, have the meanings respectively ascribed to them, namely:
- 3.2.1 "AGREEMENT" shall mean these terms and conditions of sale and delivery and annexures, if any, attached hereto;
- 3.2.2 "COMPANY" shall mean Klingspor Abrasives SA (Pty) Ltd, with Registration Number: 1998/022423/07, a company duly registered and incorporated in accordance with the laws of the Republic of South Africa, with registered address situated at 2 Spartan Road, Spartan, Johannesburg, South Africa;
- 3.2.3 "CONTRACT PRICE" shall mean the price of the GOODS as set out in the invoice;
- 3.2.4 "the CPA" shall mean the Consumer Protection Act, 86 of 2008, as amended.
- 3.2.5 "CUSTOMER" shall mean the person or legal entity with whom an AGREEMENT is entered into for the sale of the GOODS;
- 3.2.6 "DELIVERY NOTE" shall mean a note on which is reflected at least the invoice number, delivery instruction note number, net and gross weights and number of bags/packages/cartons or other containers in which the GOODS are supplied. All INVOICES shall be accompanied by a tax invoice complying with the Value Added Tax Act (as amended);
- 3.2.7 "GOODS" shall mean the GOODS as described more specifically in the invoice;
- 3.2.8 "INVOICE" shall mean the invoice document of the COMPANY whereon an invoice number, full particulars of the CUSTOMER, CONTRACT PRICE and the date of order of the GOODS by the CUSTOMER shall appear.

#### 4. PRICES

- 4.1 Unless otherwise agreed upon in writing, the CONTRACT PRICE shall, inter alia, be deemed to include charges for landing costs, packing and storage.
- 4.2 In the event that the order value exceeds the value for free transportation, currently R2 500.00 (Two Thousand Five Hundred Rand), the costs of the transport shall be paid by the COMPANY.
- 4.3 In the event that the order value falls below the value for free transportation, currently R2 500.00 (Two Thousand Five Hundred Rand), the order will not be delivered to the CUSTOMER and will be held back by the COMPANY, pending additional orders from the CUSTOMER until such time as the cumulative order value exceeds the value for free transportation, currently R2 500.00 (Two Thousand Five Hundred Rand).
- 4.4 Notwithstanding clause 4.3 above, in the event that the order value falls below the value for free transportation, currently R2 500.00 (Two Thousand Five Hundred

- Rand), and the CUSTOMER requires immediate delivery of the GOODS, the costs of the transport shall be paid by the CUSTOMER.
- 4.5 The COMPANY reserves its right to add a reasonable charge for storage on any items which have not been collected or could not be delivered within 14 (Fourteen) days of the date on which they were available for delivery or collection, as the case may be, and in the event that this is as a result of the CUSTOMER'S conduct.
- 4.6 All orders are accepted subject to a 'minimum carriage free order value'. In this regard, the transport costs shall be borne by the CUSTOMER.
- 4.7 Any orders accepted below the 'minimum order value' shall attract an administration charge in addition to the transport charge referred to in clause 4.4 above.
- 4.8 'Minimum carriage free order values' and 'minimum order values' are subject to alteration without notice.
- 4.9 Samples and specimen products are only delivered against payment by the CUSTOMER, unless the Parties have otherwise agreed upon in writing.
- 4.10 The COMPANY shall retain the title to and copyrights in all offer documents; these may not be made available to third parties without the COMPANY'S express written consent.
- 4.11 The CONTRACT PRICE shall specifically exclude Value Added Tax (VAT) and any other taxes that may be levied in respect of the GOODS. The COMPANY reserves its rights to effect price increases from time to time without notification to the CUSTOMER. The onus shall be on the CUSTOMER to remain informed of the prices of the COMPANY. No COMPANY employee, official, agent or nominee shall have the authority to effect or authorise any discounting of the CONTRACT PRICE of the GOODS save the Managing Director of the COMPANY.
- 4.12 The price quoted for GOODS may be increased by the COMPANY in the event that the COMPANY incurs any increase in the cost of labour, materials and transport between the date of accepting an order placed by the CUSTOMER and the date of delivery of the GOODS concerned.
- 4.13 Notwithstanding the stated price on the INVOICE, the CONTRACT PRICE shall, at all material times, be subject to any increase of duties, levies, taxes, transport, storage and packing costs and the COMPANY shall endeavour, where reasonably possible, to inform the CUSTOMER in advance of any anticipated increases of the aforestated.
- 4.14 Due to the nature of the COMPANY'S manufacturing process, the COMPANY and the CUSTOMER, shall agree (where applicable) upon an allowance in respect of a reasonable variation in the quantity of GOODS supplied in respect of each order.

#### 5. PAYMENT

- 5.1 Unless otherwise agreed upon between the Parties, payment shall be made in full without any deduction or set off in respect of GOODS sold. Payment shall be made by the CUSTOMER within 30 (Thirty) days from the date of statement.
- 5.2 Notwithstanding the aforementioned, the COMPANY reserves the right to demand payment from the CUSTOMER prior to any delivery taking place.
- 5.3 The COMPANY reserves the right to extend credit facilities to CUSTOMERS, from time to time, without any obligation to do so notwithstanding having extended such facilities in the past to any CUSTOMER.
- 5.3.1 Where the COMPANY has agreed to supply GOODS on credit, payment in full shall be due within 30 (Thirty) days from date of the first monthly statement rendered by the COMPANY.
- 5.3.2 The monthly accounts of the COMPANY are closed on the 25<sup>th</sup> day of each month. Payment must be credited to the banking accounts of the COMPANY by the 25<sup>th</sup> day of the following month.
- 5.4 Credit facilities shall only be afforded to CUSTOMERS after completion of the necessary documents required by the COMPANY and the CUSTOMER having provided the COMPANY with the required guarantees/suretyships.
- 5.5 The COMPANY reserves its right to, at any time and after having provided the CUSTOMER with reasonable notice, and reasonable notice to be deemed to be 30 (Thirty) days, advise that credit facilities to a CUSTOMER by the COMPANY shall be terminated, and the COMPANY shall be under no obligation whatsoever to provide any reasons for such termination.
- 5.6 It is specifically agreed upon and recorded that at all material times, it shall be the sole prerogative of the COMPANY to decide to which CUSTOMERS it would be willing to extend credit facilities, it specifically being understood by CUSTOMERS that any differentiation shall not be deemed to be discriminatory but shall be deemed to form part of the COMPANY'S internal credit risk limitation policy.

- 5.7 The COMPANY shall be entitled to refuse the sale of GOODS to any CUSTOMER in the event of overdue accounts owing by the CUSTOMER to the COMPANY, or in the event that a CUSTOMER is not able to obtain/provide satisfactory guarantees/ suretyships.
- 5.8 It is specifically recorded and agreed that any late payments by a CUSTOMER shall constitute an automatic breach of any credit facility agreement entered into between the COMPANY and the CUSTOMER and provided to the CUSTOMER by the COMPANY and accordingly, the COMPANY reserves the right at any time to refuse any further sale of GOODS to the CUSTOMER and/or demand a cash on delivery basis, until all outstanding accounts including any accrued interest on such outstanding accounts have been settled in full by such CUSTOMER.
- 5.9 IT IS SPECIFICALLY RECORDED AND AGREED THAT THE CUSTOMER WAIVES ALL CLAIMS AGAINST THE COMPANY FOR ANY DAMAGES OR LOSSES THAT IT MAY SUFFER AS A RESULT OF THE REFUSAL OF THE COMPANY TO SELL GOODS TO THE CUSTOMER IN THE EVENT OF AN OVERDUE ACCOUNT, OR IN CONNECTION WITH ANY OTHER DISPUTE WHATSOEVER ARISING OUT OF PAYMENT FOR GOODS.

#### 6. INTEREST

It is specifically recorded and agreed that interest on overdue accounts shall be at the rate as per the Prescribed Rate of Interest Act 55 of 1975, as amended.

#### 7. DELIVERY

- 7.1 Time of delivery shall not be of the essence in this AGREEMENT.
- 7.2 WHILST EVERY EFFORT SHALL BE MADE TO DISPATCH AND DELIVER THE GOODS AS ADVISED, THE COMPANY DOES NOT GUARANTEE DISPATCH AND/OR DELIVERY ON ANY SPECIFIC DATE AND SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING CONSEQUENTIAL DAMAGES THAT MAY BE SUFFERED BY THE CUSTOMER, AS A RESULT OF ANY DELAYS IN THE DELIVERY OF THE GOODS THAT MAY OCCUR, SAVE TO THE EXTENT THAT THE COMPANY MAY BE LIABLE FOR ANY LOSSES IN TERMS OF SECTION 47 OF THE CPA.
- 7.3 The CUSTOMER shall not be entitled to cancel any order by reason of such delay.
- 7.4 Should the COMPANY be prevented from the performance of any of its obligations as a result of Force Majeure, or any cause whatsoever beyond the control of the COMPANY, the COMPANY shall be entitled, at its option, to cancel the AGREEMENT or to suspend performance of its obligations there under and SHALL NOT BE LIABLE WHATSOEVER FOR ANY LOSS OR DAMAGE, CONSEQUENTIAL OR OTHERWISE, RESULTING FROM SUCH INABILITY TO PERFORM ITS OBLIGATIONS, CANCELLATION OR SUSPENSION.
- 7.5 Unless otherwise agreed upon in writing, delivery and passing of the risk in the GOODS shall be deemed to have taken place when:
- 7.5.1 the GOODS are offloaded by the COMPANY, or its duly appointed delivery agent, at the CUSTOMER'S premises; or
- THE GOODS ARE COLLECTED BY THE CUSTOMER FROM THE PREMESIS OF THE COMPANY.RESERVATION OF OWNERSHIP
- 8.1 The COMPANY shall reserve ownership of GOODS delivered, until receipt of all payments due in terms of this AGREEMENT. Further, the COMPANY reserves ownership of GOODS until the CUSTOMER has affected any payments in full.
- 8.2 In the event that the CUSTOMER defaults in payment, it shall deliver the GOODS to the COMPANY upon receipt of notice by the CUSTOMER from the COMPANY, without any undue delay.
- 8.3 The COMPANY may elect, without detracting from other remedies which may be available to it, to continue with the AGREEMENT or to cancel it and cancel the sale of any further GOODS to the CUSTOMER and to rely on the provisions of this clause to repossess those GOODS sold and delivered by the COMPANY to the CUSTOMER or to claim specific performance of all the CUSTOMER'S obligations whether or not such obligations would otherwise have fallen due for performance, in either event, without prejudice to the COMPANY'S rights to claim damages.
- 8.4 The COMPANY'S request for repossession and repossession itself shall not be construed as rescission of the contract. After repossession of the delivered items, the COMPANY shall be authorised to realise the same. The realisation proceeds shall be set off against the CUSTOMER'S liabilities less appropriate realisation costs. The COMPANY may also realise the repossessed, reserved GOODS by selling them by private contract.
- 8.5 The CUSTOMER undertakes to handle the GOODS with care; in particular, it is obliged to insure them adequately at the reinstatement value against damage caused by fire, water, and theft at its expense.

- 8.6 In the event of attachments, attempted attachments, or other intervention by third parties, the CUSTOMER shall inform the COMPANY, in writing, without delay. The CUSTOMER shall be liable to the COMPANY for the judicial and extra-judicial costs of any necessary action pursuant to third-party action in respect of acts of execution. GOODS belonging to the COMPANY shall be clearly marked as property of the COMPANY.
- 8.7 The CUSTOMER is entitled to resell the GOODS in the ordinary course of business. In exchange, it herewith assigns to the COMPANY all claims against its customers or third parties in the amount of the total invoice (including value added tax) which, to its benefit, accrue from the resale, irrespective of whether the delivered item was resold without any processing or after processing. The COMPANY accept this assignment of the CUSTOMER to the COMPANY.
- 8.8 The CUSTOMER shall remain authorised to collect these claims, even after the assignment. However, the COMPANY shall be authorised to collect the claim itself, if the CUSTOMER no longer performs its obligations to pay from the collected proceeds, or there has been a suspension of payments. In this event, the COMPANY may demand that the CUSTOMER discloses to the COMPANY the assigned claims and their debtors, furnishes all the information required to collect the claims, delivers the pertinent documents and notifies the debtor (third party) of the assignment.
- 8.9 In processing or transforming the GOODS, the CUSTOMER shall invariably be acting for the COMPANY and on its behalf. If the GOODS are processed with other items not belonging to the COMPANY, the COMPANY shall acquire joint title to the new thing in the same proportion as the value of the delivered item bears to the other processed items at the time of the processing. In all other cases, the new thing having resulted from the processing shall be governed by the same provision as GOODS. The reservation of title shall remain effective even if individual claims of the COMPANY or all of the COMPANY'S claims are included in a current account and a balance is struck or the balance is confirmed.

#### 9. RETURN OF GOODS

- 9.1 A PRECONDITION OF THE WARRANTY RIGHTS (CLAIMS BASED ON DEFECTS) OF THE CUSTOMER, IN TERMS OF THE AGREEMENT, IS THAT A CUSTOMER WHO IS A MERCHANT INSPECTS THE GOODS UPON RECEIPT WITHOUT UNDUE DELAY AND GIVES WRITTEN NOTICE OF ANY VISIBLE DEFECTS (SPECIFYING THE DEFECT) WITHOUT UNDUE DELAY, AFTER THE INSPECTION. THIS SHALL ALSO APPLY TO WRONG DELIVERIES OR ITEMS IN INSUFFICIENT QUANTITIES BEING DELIVERED. NOTIFICATION MUST BE GIVEN WITHIN A PERIOD OF 7 (SEVEN) DAYS. FOR NON-MERCHANTS (I.E. CONSUMER AS DEFINED IN THE CPA) NOTIFICATION MUST BE GIVEN WITHIN A PERIOD OF 14 (FOURTEEN) DAYS.
- 9.2 SHOULD THERE BE AN ALLEGATION THAT ANY GOODS ARE UNSAFE, OR DEFECTIVE THE COMPANY SHALL NOT BE LIABLE FOR ANY HARM CAUSED WHERE SUCH ALLEGED UNSAFE GOODS CHARACTERISTIC, FAILURE, DEFECT OR HAZARD DID NOT EXIST IN THE GOODS AT THE TIME AT WHICH THEY WERE SUPPLIED TO THE CUSTOMER BY THE COMPANY. THEREFORE IF NO SUCH NOTIFICATION IS RECEIVED IN TERMS OF CLAUSE 9.1 ABOVE, IT SHALL BE REGARDED AS SUFFICIENT (PRIMA FACIE) PROOF THAT NO DEFECTS WERE PRESENT AT THE TIME OF DELIVERY AND THAT THE GOODS WERE DELIVERED IN ACCORDANCE WITH THIS AGREEMENT.
- 9.3 In the event that the COMPANY receives notification in terms of clause 9.1 above and it is satisfied that the GOODS are defective or does not conform to specifications, then the COMPANY shall, at the COMPANY'S election, replace such quantity of GOODS with an equal quantity of GOODS or refund the applicable portion of the purchase price to the CUSTOMER against return of the defective portion of the GOODS (the return to be made at the CUSTOMER'S risk and expense).
- 9.4 The CUSTOMER may not however return to the COMPANY any GOODS for any reason whatsoever unless:-
- 9.4.1 the Parties have agreed in writing to such return and to the conditions of such return:
- 9.4.2 the **GOODS** are being returned in accordance with the provisions of clauses 9.2 and 9.3 above:
- 9.4.3 the GOODS were intended to satisfy a particular purpose communicated to the COMPANY, prior to the PURCHASE thereof, and have been found not to satisfy the purpose for which they were intended, within 7 (Seven) business days of delivery and the COMPANY has been notified of this in writing within that time period;
- 9.4.4 the CUSTOMER is exercising its right to cool-off in terms of section 16 of the CPA.
- 9.5 Notwithstanding the aforementioned:
- 9.5.1 The **CUSTOMER** shall accept slight imperfections in colour and appearance.

- 9.5.2 The decision by the COMPANY in respect of any alleged defect shall be final, conclusive and binding upon the Parties.
- 9.5.3 The replacement costs of any returned GOODS shall under no circumstances exceed the cost of replacement of the GOODS and/or the price paid by the CUSTOMER of the GOODS.
- 9.5.4 **GOODS** sold to the **CUSTOMER** in accordance with the **CUSTOMER**'S specifica tions shall not be returnable/and/or replaced.
- 9.6 It is specifically recorded and agreed that in the event of the GOODS being returned by the CUSTOMER, the COMPANY shall be entitled to invoice the CUSTOMER WITH A "RE-STOCKING CHARGE" at 15% (Fifteen Percent plus VAT) of the value of the GOODS. Same shall be invoiced to the CUSTOMER upon receipt of the GOODS by the COMPANY.

#### 10. REPRESENTATIONS AND WARRANTIES

- 10.1 The COMPANY makes no warranty of any kind, express or implied, including without limitation, any warranty of merchantability, or non-infringement. The COMPANY specifically makes no warranties as to any services or as to compliance with laws, regulations, standards and/or conventions including any related to the environment or to the packaging, labelling and/or transport of hazardous GOODS. No warranty shall apply to shipping damage, damage caused by improper installation, GOODS that have been modified or altered in any manner, damage caused by corrosion, abrasion, or severe temperatures or moisture, or GOODS that have been subjected to improper maintenance, abuse, misuse, abnormal usage, or accident.
- 10.2 THE CUSTOMER WARRANTS THAT IT SHALL FULLY COMPLY WITH ALL LABEL DIRECTIONS FOR THE HANDLING, STORAGE, POSSESSION OR USE OF THE GOODS SOLD HEREUNDER AND THE CUSTOMER AGREES THAT IT SHALL INDEMNIFY AND HOLD THE COMPANY HARMLESS FROM ALL CLAIMS (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES) OF PERSONAL INJURY OR PROPERTY DAMAGE, RESULTING FROM ANY NEGLIGENCE, RECKLESSNESS OR WILLFUL/GROSS MISCONDUCT ON THE PART OF THE CUSTOMER.
- 10.3 Specifications, illustrations and the like remain the property of the COMPANY and may only be used for the purpose specified in this AGREEMENT and must be returned upon the request of the COMPANY. The design method of construction and content of all literature packaging and all other goods remains the property of the COMPANY and the sale of any goods shall not give to the CUSTOMER any implied licence to do any act which would otherwise constitute a breach/novation of the COMPANY'S industrial/intellectual property rights...
- 10.4 WHILST THE COMPANY SHALL TAKE ALL REASONABLE STEPS TO ENSURE THAT THE GOODS TO BE SOLD AND DELIVERED TO THE CUSTOMER, IN TERMS HEREOF ARE MANUFACTURED IN ACCORDANCE WITH THE CUSTOMER'S SPECIFICATIONS, THE COMPANY DOES NOT WARRANT THAT THE SAID GOODS WILL BE FIT FOR THE SPECIFIC PURPOSE FOR WHICH THE CUSTOMER INTENDS TO USE THE SAID GOODS, AND THE CUSTOMER ACCORDINGLY ABSOLVES THE COMPANY FROM ANY LIABILITY WHATSOEVER (HOWSOEVER ARISING) AS A RESULT OF THE SAID GOODS NOT BEING FIT FOR THE PURPOSE FOR WHICH THE CUSTOMER INTENDS TO USE THE SAID GOODS, UNLESS THE CUSTOMER HAS SPECIFICALLY INFORMED THE COMPANY, IN WRITING, OF THE PARTICULAR PURPOSE FOR WHICH THE CUSTOMER WISHES TO ACQUIRE ANY GOODS OR THE USE TO WHICH THE CUSTOMER INTENDS TO APPLY THOSE GOODS AND THE COMPANY AGREES TO SUPPLY SUCH GOODS.
- 10.5 NO LIABILITY FOR DAMAGES RESULTING FROM UNSUITABLE OR IMPROPER USE, IMPROPER ASSEMBLY AND IMPROPER COMMISSIONING OR HANDLING BY THE CUSTOMER OR BY THIRD PARTIES, OR ANY OTHER DISREGARD OF INSTALLATION AND OPERATING INSTRUCTIONS OR OF GENERALLY ACCEPTED TECHNICAL RULES AND NORMAL OPERATIONAL WEAR AND TEAR, SHALL ATTACH TO THE COMPANY.

#### 11. LIMITATION OF LIABILITY

11.1 IN NO EVENT SHALL THE COMPANY, IT'S DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, INDIRECT OR SPECIAL DAMAGES, INCLUDING PUNITIVE DAMAGES OR ATTORNEYS' FEES, WHETHER FORESEEABLE OR UNFORESEEABLE. THIS INCLUDES CLAIMS OF THE CUSTOMER OR IT'S CLIENTS (INCLUDING, BUT NOT LIMITED TO, CLAIMS FOR LOSS OF BUSINESS, GOODWILL, PROFITS, LOSS OF MONEY OR USE OF GOODS OR IMPAIRMENT OF OTHER ASSETS), ARISING OUT OF BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, MISREPRESENTATION, NEGLIGENCE, IN DELICT OR OTHERWISE IN CONNECTION WITH OR ARISING OUT OF THIS AGREEMENT, EXCEPT IN THE EVENT OF PERSONAL INJURY OR PROPERTY DAMAGE WHERE AND ONLY TO THE EXTENT THAT APPLICABLE LAW REQUIRES SUCH LIABILITY. TO THE EXTENT THE CUSTOMER INCORPORATES OR CAUSES OTHERS TO INCORPORATE THE GOODS IN ITS OWN GOODS OR THE GOODS OF ANY THIRD PARTY, THE COMPANY SHALL NOT BE LIABLE FOR THIRD PARTY CLAIMS FOR INFRINGEMENT OF LETTERS PATENT, REGISTERED DESIGN, TRADEMARK

OR COPYRIGHT RESULTING FROM SUCH INCORPORATION AND BASED UPON THE USE OF THE GOODS OR THE MANUFACTURE, USE, SALE OR OFFER FOR SALE OF ANY GOODS CONTAINING SUCH GOODS, EXCEPT AS SUCH LIABILITY FOR THIRD PARTY CLAIMS FOR INFRINGEMENT IS EXPRESSLY REQUIRED BY APPLICABLE LAW AND NOT WAIVABLE BY THE CUSTOMER THE CUSTOMER ASSUMES RESPONSIBILITY FOR ALL PERSONAL INJURY AND PROPERTY DAMAGE RESULTING FROM HANDLING, POSSESSION, USE, RESALE OR DISPOSAL OF THE GOODS.

11.2 ANY ACTION BY THE CUSTOMER FOR BREACH OF THIS AGREEMENT BY THE COMPANY OR ANY OTHER CAUSES OF ACTION OF THE CUSTOMER EXPRESSLY ALLOWED UNDER THIS AGREEMENT MUST BE COMMENCED WITHIN 1 (ONE) YEAR AFTER THE CAUSE OF ACTION HAS ACCRUED, FAILING WHICH NO CLAIM SHALL BE ACKNOWLEDGED BY THE COMPANY.

#### 12. BREACH

- 12.1 In the event that the CUSTOMER:
- 12.1.1 Breaches any condition contained in these conditions and failing to pay any amount due and payable on due date, and having failed to rectify such breach or outstanding payment within 10 (Ten) days of having been requested to do so in writing by the COMPANY;
- 12.1.2 Suffering any civil judgment to be taken or entered against it, causing a notice of surrender of its estate to be published in terms of the Insolvency Act of 1936 (as amended);
- 12.1.3 The CUSTOMER dying or ceasing to exist;
- 12.1.4 The CUSTOMER'S estate being placed under an order of provisional or final winding up, business rescue, as the case may be, then, and in that event, the COMPANY shall, without retracting from other remedies which may be available to it, be entitled to cancel this AGREEMENT and cancel the sale of any GOODS to the CUSTOMER without notice to the CUSTOMER and to rely on the provisions of this clause to repossess those GOODS sold and delivered by the COMPANY to the CUSTOMER or to claim specific performance of all the CUSTOMER'S obligations whether or not such obligations would otherwise have fallen due for performance, in either event, without prejudice to the COMPANY'S rights to claim damages.

#### 13. PRESCRIPTION

THE **CUSTOMER** HEREBY EXPRESSLY WAIVES ITS RIGHT TO CLAIM PRESCRIPTION UNDER THE RELEVANT PROVISIONS OF THE PRESCRIPTION ACT NO. 68 OF 1969, AS AMENDED FROM TIME TO TIME.

#### 14. INDEMNITY

14.1 The CUSTOMER agrees to indemnify, hold harmless and defend the COMPANY and the COMPANY'S directors, officers, employee's and agents, and the directors, officers, employees and agents of any the COMPANY parent, subsidiary or related company (the "COMPANY Indemnities") from and against any and all claims, suits, losses, damages, costs, fees and expenses arising out of the death or injury to person or damage to property resulting from the sale, marketing or use of the GOODS by the CUSTOMER, except that such claims, suits, losses, damages, costs, fees or expenses arise or result from any grossly negligent or wrongful act or omission of the COMPANY.

#### 15. JURISDICTION

- 15.1 The Parties do hereby consent that the Magistrate's Court shall have jurisdiction to determine any action or proceedings which may arise under or in connection with this AGREEMENT.
- 15.2 This AGREEMENT, as well as the relationship between the COMPANY and the CUSTOMER is governed by the Law of the Republic of South Africa.

#### 16. LEGAL ACTION

- 16.1 All debt collection charges incurred by the COMPANY, including the costs of collection agencies, including collection commission shall solely be borne by the CUSTOMER.
- 16.2 In the event of the COMPANY instructing attorneys in regard to any breach of the CUSTOMER, of the conditions of this AGREEMENT, then the CUSTOMER shall pay all the costs on the scale between Attorney and Client, including any costs incidental to such action instituted against the CUSTOMER.

#### 17. CERTIFICATE OF INDEBTEDNESS

A certificate under the hand of the Managing Director of the COMPANY as to the existence and the amount of the CUSTOMER'S indebtedness to the COMPANY, as well as the amount of interest accrued thereon, and as to any other fact, matter or thing relating to the CUSTOMER'S indebtedness to the COMPANY, shall be accepted as sufficient (prima facie) proof of the contents and correctness thereof and of the amount of the CUSTOMER'S indebtedness for the purpose of provisional sentence or summary judgement or any other proceedings against the CUSTOMER in any competent Court and shall be valid and constitute a liquid document for such purposes. Furthermore, it shall not be necessary to prove the appointment of the person signing such a certificate and it shall be deemed to be sufficient particularly for the purpose of any action or any other proceeding instituted by the COMPANY against the CUSTOMER.

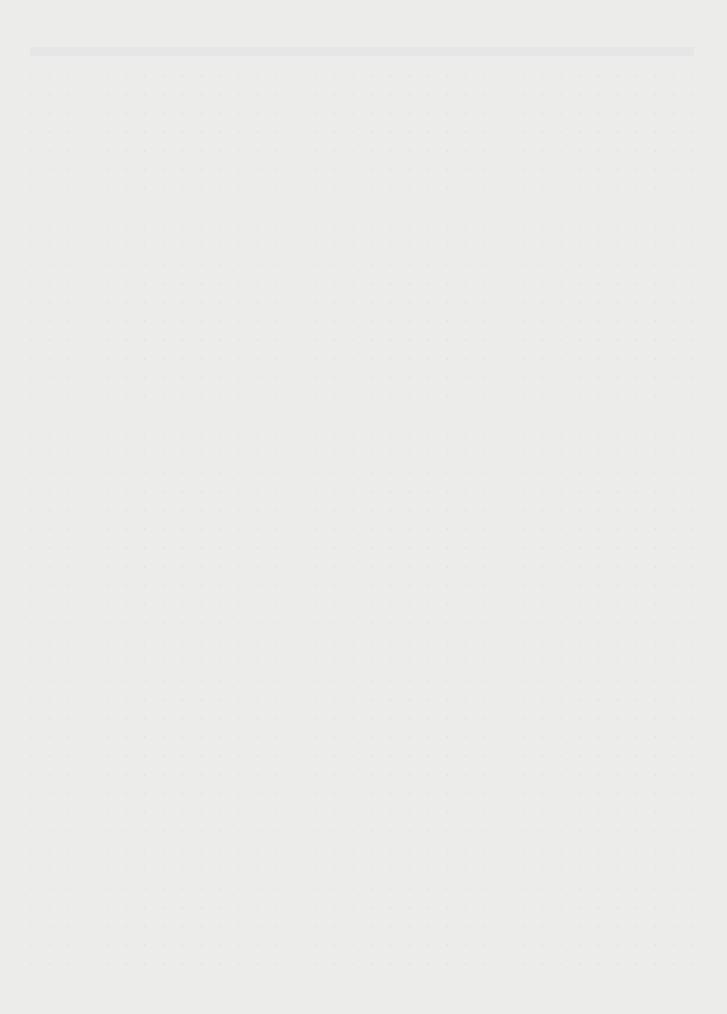
#### **18. NOTICE AND DOMICILIA**

- 18.1 Any notices to be given to the Parties in terms of this AGREEMENT shall be in writing and delivered by hand during ordinary business hours or posted by pre-paid registered post to the addresses mentioned hereunder, which addresses the Parties choose as their domicilium *citandi et executandi* for all purposes arising out of this AGREFMENT
- 18.2 The COMPANY: 2 Spartan Road, Spartan, Johannesburg, South Africa.
- 18.3 The CUSTOMER: The delivery address as reflected on the face of the latest delivery note issued to the CUSTOMER, or such other address within the Republic of South Africa as either Party may choose by written notice to the other.

#### 19. NO VARIATION

- 19.1 This AGREEMENT constitutes the entire agreement between the Parties and no representation by either of the Parties or their agents, whether made prior or subsequent to the signing of this AGREEMENT, shall be binding on the Parties unless done in writing and signed by both Parties hereto.
- 19.2 No variation, alteration or consensual cancellation of this AGREEMENT, or any of the terms thereof, shall be of any force or effect, unless done in writing and signed by the Parties hereto.
- 19.3 No waiver or abandonment by either Party of any of its rights in terms of this AGREEMENT shall be binding on that Party, unless such waiver or abandonment is in writing and signed by the waiving Party.
- 19.4 No indulgence, extension of time, relaxation or latitude which any Party may show, grant or allow to another shall constitute a waiver by a Party of any such Party's rights and such Party shall not hereby be prejudiced or estopped from exercising any of its rights against any Party, which may have arisen in the past or which might arise in the future. Unless the context indicates otherwise, the rights and obligations of any Party arising from this AGREEMENT shall devolve upon and bind its successors-in-title.
- 19.5 The Parties agree that they will do all things and sign all documents necessary to give effect to the terms of this AGREEMENT and to all transactions deriving there from.

## **Notes**





Klingspor N.V. / S.A. Herent, België / Belgique

Клингспор България ЕООД

София, България KLINGSPOR Brusivo, spol. sr.o.

Brno, Česká republika

Klingspor A/S Kolding, Danmark

Klingspor Schleifsysteme GmbH & Co. KG Haiger, Deutschland

Klingspor Abrasivos S.A. Alcobendas (Madrid), España

Klingspor S.A.S.

Le Perray en Yvelines, France

**Klingspor Abrasives Limited** Worksop, Nottinghamshire **Great Britain** 

Klingspor S.R.L Brescia, Italia

Klingspor Magyarország Kft. Budapest, Magyarország

Klingspor B.V. Sittard, Nederland

Klingspor Schleifwerkzeuge Gesmbh

Wien, Österreich

Klingspor Sp. z o.o. Bielsko, Polska

Klingspor Sp. z o.o. Kozy, Polska

Klingspor România SRL Pantelimon, Ilfov, România

Klingspor d.o.o. Beograd Beograd, Republika Srbija

Klingspor Suisse GmbH Bubendorf, Suisse

Клінгспор ТОВ Великі Мости, Львівська обл.,

Україна

Klingspor Inc.

S.A. de C.V.

Tijuana, Mexico

Klingspor Abrasivos

Stoney Creek, Ontario, Canada

Klingspor Abrasives, Inc.

Hickory, North Carolina, USA

Klingspor Qingdao Ltd. Qingdao, P.R. China

Klingspor Abrasive (Shanghai) Co. Ltd.

Shanghai, P.R. China

Klingspor India Private Limited

Pune, India

Klingspor PTE LTD Singapore, Singapore

Klingspor PTE LTD Bangkok, Ratcha-anachak Thai

Klingspor Middle East FZCO Dubai, United Arab Emirates

Klingspor Vietnam Limited Ho Chi Minh City, Vietnam

Klingspor Argentina SRL

Partido Belén de Escobar, Argentina

Klingspor Abrasivos Industriais Ltd Pinhais, Brasil

**Comercial Klingspor** Chile Ltda.

Pudahuel, Santiago, Chile Klingspor SAC

Lima, Perú

**Klingspor Abrasives** South Africa (Pty) Ltd. Spartan-Kempton Park, South Africa

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**O** /klingspor\_ag



Klingspor AG

