

Good. Safe. Yellow.

Long-Life Abrasive Belts for the
Stainless Steel & Metal Industry



5

We rank amongst the world's five leading manufacturers of abrasives.

1893

Klingspor was founded as a family owned business.

More than

five hundred

qualified technicians and sales representatives offer professional on-site assistance.

300 million

euros in sales during the past year.

Over

50 thousand

items in our product range.

Every day Klingspor produces:

110,000

abrasive mop discs.

350,000

cutting-off wheels and grinding discs.

One hundred thousand square metres

of coated abrasives.

2,900

employees are hard at work everyday to keep our customers satisfied.

Klingspor - a world leader in sanding solutions



Good. Safe. Yellow.

Klingspor is one of the world's leading manufacturers of sanding solutions and has been setting new standards in abrasive technology for over 125 years. The company's product range comprises of more than 50,000 products that are designed to fulfill the most demanding standards of stock removal and surface finish. Klingspor embodies premium quality, innovative concepts and unwavering customer support.

Focus on the stainless steel industry

Our many years of experience as a partner to leading companies in the stainless steel sector has furnished Klingspor with a knowledge of the industry that is second to none. This extensive expertise has provided our customers with a wide range of sanding solutions that maximise production volumes and satisfy the highest quality standards.

Target Industries

Tube Polishing Industry



Hydraulic Cylinder & Ram Industry



Stainless Steel Service Centre



Tanks and Vessels Industry



Machine & Plant Industry



Wire Industry



Workpieces

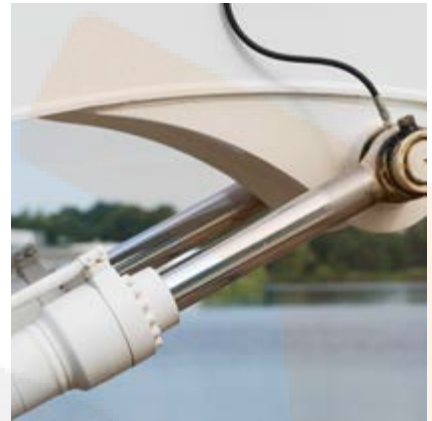
Coils



Dished Bottoms and Ends



Hydraulic Rams



Flat Sheet and Plates



Wire



Tubes



Cylinders & Rollers

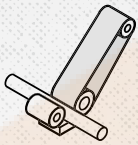


Punched and Laser-Cut Parts



Machines & Applications

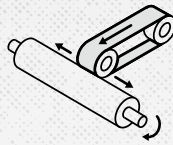
Cylindrical grinding



Centreless

Application:

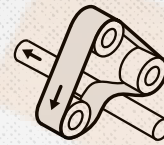
- Tubes
- Pipes



Between centres

Application:

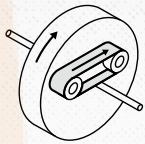
- Cylinders
- Rollers
- Hydraulic rams



Slack of belt grinding

Application:

- Longitudinally welded tubes



Planetary

Application:

- Wires
- Elliptic tubes

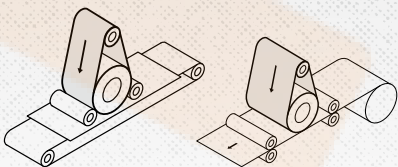


Rotary grinding

Application:

- Dished tank bottoms and ends

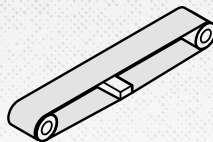
Flat grinding



Wide belt

Application:

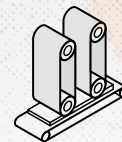
- Coil
- Sheet



Long belt

Application:

- Heavy plate
- Sheet



Narrow belt

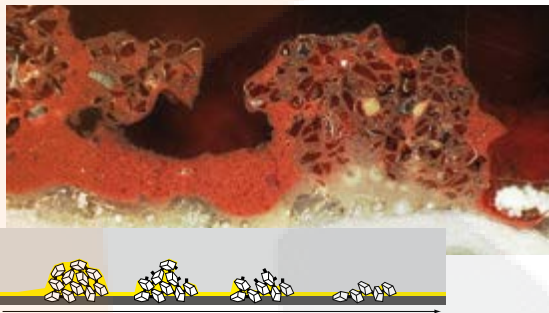
Application:

- Square material
- Die-cut parts
- Laser-cut parts

Long-Life Abrasive Belts

Compared to other grain types, abrasive belts with agglomerate grain (KULEX and NOPPEX) offer a uniform surface scratch pattern until the abrasive is completely depleted and a vastly increased service life.

KULEX

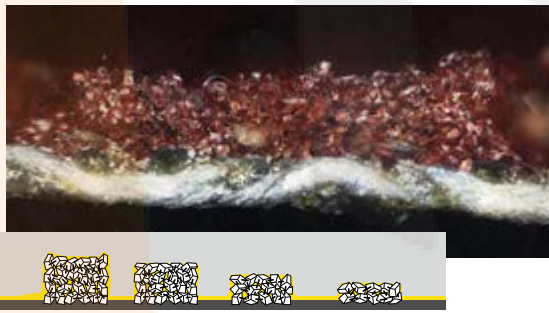


Our agglomerate products are guaranteed to deliver outstanding service life with a consistent scratch depth

Benefits:

- ▶ Unrivalled long-term grinding properties
- ▶ Consistent scratch depth
- ▶ Reduction of retooling times

NOPPEX

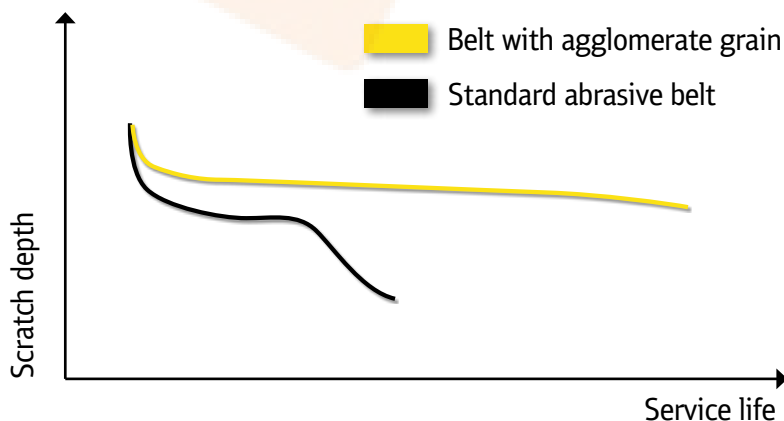
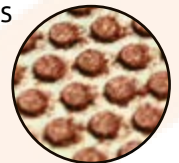


Our long-life Noppex belt with unique knob structure - perfectly suited for circular and surface grinding

Benefits:









- ▶ Extremely long service life
- ▶ Uniform wear pattern due to unique knob structure
- ▶ Highly recommended for grinding of welded tubes

Detailed view of the Noppex belt



Compared to other grain types, abrasive belts with agglomerate grain offer a uniform surface scratch pattern until the abrasive is completely depleted and a vastly increased service life.

Klingspor Product Range

Type	 Centreless	 Between centres	 Slack of belt	 Planetary	 Rotary	 Wide belt	 Long belt	 Narrow belt	Grain	Backing	Feature
CS 910 Y	x	x		x	x	x	x	x	Ceramic	Y-cloth	Multibond
CS 912 Y	x	x		x	x	x	x	x	Ceramic	Y-cloth	☐
CS 811 Y	x	x		x	x	x	x	x	Zirconia alumina	Y-cloth	☐
CS 411 Y	x	x		x	x	x	x	x	Zirconia alumina	Y-cloth	☐
CS 416 Y	x	x		x	x	x	x	x	Zirconia alumina	Y-cloth	☐
CS 409 Y	x	x		x	x	x	x	x	Zirconia alumina	Y-cloth	Multibond
CS 320 Y						x	x		SiC	Y-cloth	☐
CS 321 X						x	x		SiC	X-cloth	☐
CS 412 Y						x	x		Aluminium oxide	Y-cloth	☐
CS 420 Y	x	x	x		x			x	Aluminium oxide, NOPPEX	Y-cloth	☐
CS 326 Y	x	x	x	x	x	x	x	x	Aluminium oxide- agglomerate	Y-cloth	☐
CS 329 Y	x	x	x	x	x	x	x	x	Aluminium oxide- agglomerate	Y-cloth	
CS 341 X	x					x	x	x	Aluminium oxide	X-cloth	☐
CS 325 Y	x	x		x	x	x	x	x	SiC agglomerate	Y-cloth	☐
CS 330 X	x	x				x	x	x	SiC + Cork	X-cloth	☐
CS 322 X	x	x				x		x	Cork	X-cloth	☐
NBS 800	x	x			x	x	x	x	Aluminium oxide	SCM	☐
PS 20 F						x	x		Aluminium oxide	F-Paper	
PS 21 F						x	x		Zirconia alumina	F-Paper	
PS 24 F						x	x		SiC	F-Paper	
PS 61 F						x	x		Ceramic	F-Paper	
PS 729 F						x	x		Aluminium oxide- agglomerate	F-Paper	

Key:

Ceramic: Ceramic aluminium oxide **SiC:** Silicon carbide ☐: Waterproof X: Cotton backing Y: Polyester backing

Multibond: Top size coat (grind-active layer reduces temperature)

SCM: Surface conditioning material

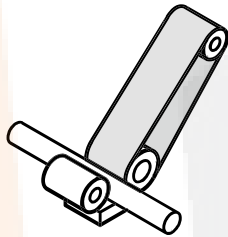
Type	24	36	40	50	60	80	100	120	150	180	220	240	280	320	360	400	500	600	800	1000	1200
CS 910 Y	■	■	■	■	■	■															
CS 912 Y		■	■	■	■	■	■	■	■	■											
CS 811 Y	■	■	■	■	■	■															
CS 411 Y	■	■	■	■	■	■	■	■													
CS 416 Y	■	■	■	■	■	■	■	■													
CS 409 Y		■	■	■	■	■	■	■													
CS 320 Y	■		■		■	■	■	■		■											
CS 321 X						■	■	■	■	■	■	■	■	■		■	■		■		
CS 412 Y	■	■	■	■	■	■	■	■	■	■		■									
CS 420 Y								■		■		■		■		■					
CS 326 Y					■	■		■		■		■		■		■		■	■		
CS 329 Y						■		■		■		■		■		■		■			
CS 341 X					■	■	■	■	■	■	■	■	■	■		■	■	■			
CS 325 Y						■		■		■		■		■		■		■	■		■
CS 330 X											■					■		■	■		
CS 322 X																					
NBS 800																					
PS 20 F					■	■	■	■	■	■	■	■		■		■					
PS 21 F			■		■	■	■	■	■	■	■	■	■	■		■					
PS 24 F						■		■	■	■	■	■	■	■	■	■	■	■	■		
PS 61 F					■	■		■	■	■	■	■	■	■		■					
PS 729 F								■		■		■		■		■					

Product Selection by Machine

Cylindrical Grinding

Centreless

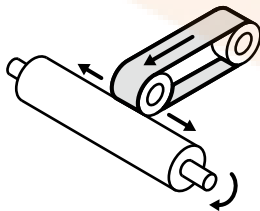
- Tubes
- Pipes



	Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
					CS 910 Y	Ceramic (Multibond)	P24-80	■■■■■	■■■	■	●	
					CS 912 Y	Ceramic	P36-180	■■■■■	■■■	■		●
					CS 409 Y	Zirc. (Multibond)	P36-120	■■■	■■	■	●	
					CS 811 Y	Zirc.	P24-80	■■■	■■	■	●	●
					CS 411 Y	Zirc.	P24-120	■■■	■■	■	●	●
					CS 416 Y	Zirc. (Open Coat)	P24-120	■■■	■■	■	●	●
					CS 326 Y	Al. Oxide Agglom.	P60-800	■■■	■■■■■	■■■■	●	●
					CS 329 Y	Al. Oxide Agglom.	P80-600	■■	■■■	■■■■	●	
					CS 420 Y	Al. Oxide NOPPEX	P120-400	■■	■■■■■	■■		●
					CS 341 X	Al. Oxide	P60-600	■■	■■	■■	●	●
					CS 325 Y	SiC Agglom.	P80-1200	■■	■■	■■■■	●	●
					CS 330 X	SiC+Cork	P220-800	■	■■■	■■■■■	●	●
					CS 322 X	Cork	Polish fine	■	■■■	■■■■■		●
					NBS 800	SCM	Coarse to fine	■	■■■	■■■■■	●	●

Between centres

- Cylinders
- Rollers
- Hydraulic rams



	Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
					CS 910 Y	Ceramic (Multibond)	P24-80	■■■■■	■■■	■	●	
					CS 912 Y	Ceramic	P36-180	■■■■■	■■■	■		●
					CS 409 Y	Zirc. (Multibond)	P36-120	■■■	■■	■	●	
					CS 811 Y	Zirc.	P24-80	■■■	■■	■	●	●
					CS 411 Y	Zirc.	P24-120	■■■	■■	■	●	●
					CS 416 Y	Zirc. (Open Coat)	P24-120	■■■	■■	■	●	●
					CS 326 Y	Al. Oxide Agglom.	P60-800	■■■	■■■■■	■■■■	●	●
					CS 329 Y	Al. Oxide Agglom.	P80-600	■■	■■■	■■■■	●	
					CS 420 Y	Al. Oxide NOPPEX	P120-400	■■	■■■■■	■■		●
					CS 325 Y	SiC Agglom.	P80-1200	■■	■■	■■■■	●	●
					CS 330 X	SiC+Cork	P220-800	■	■■■	■■■■■	●	●
					CS 322 X	Cork	Polish fine	■	■■■	■■■■■		●
					NBS 800	SCM	Coarse to fine	■	■■■	■■■■	●	●

Ceramic: Ceramic aluminium oxide **SiC:** Silicon carbide **Zirc:** Zirconia alumina

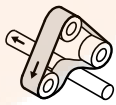
10 **Al. Oxide:** Aluminium oxide **Agglom:** Agglomerates **SCM:** Surface Conditioning Material

■■■■■ = ideal application

■■■■ = possible application

Slack of belt

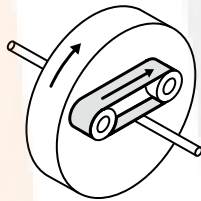
- Longitudinally welded tubes



Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
				CS 420 Y	Al. Oxide NOPPEX	P120-400	■ ■	■ ■ ■ ■	■ ■		●
				CS 326 Y	Al. Oxide Agglom.	P60-800	■ ■ ■ ■	■ ■ ■	■ ■ ■ ■		●
				CS 329 Y	Al. Oxide Agglom.	P80-600	■ ■ ■	■ ■ ■	■ ■ ■ ■	●	

Planetary

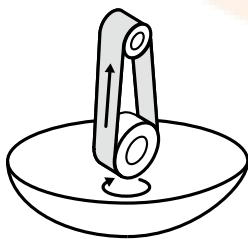
- Wires
- Elliptic tubes



Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
				CS 910 Y	Ceramic (Multibond)	P24-80	■ ■ ■ ■	■ ■ ■	■	●	
				CS 912 Y	Ceramic	P36-180	■ ■ ■ ■	■ ■ ■	■		●
				CS 409 Y	Zirc. (Multibond)	P36-120	■ ■ ■	■ ■	■	●	
				CS 811 Y	Zirc.	P24-80	■ ■ ■	■ ■	■	●	●
				CS 411 Y	Zirc.	P24-120	■ ■ ■	■ ■	■	●	●
				CS 416 Y	Zirc. (Open Coat)	P24-120	■ ■ ■	■ ■	■	●	●
				CS 326 Y	Al. Oxide Agglom.	P60-800	■ ■ ■	■ ■ ■ ■	■ ■ ■	●	●
				CS 329 Y	Al. Oxide Agglom.	P80-600	■ ■	■ ■ ■	■ ■	●	
				CS 325 Y	SiC Agglom.	P80-1200	■ ■	■ ■	■ ■ ■ ■	●	●

Rotary

- Dished tank bottoms and ends



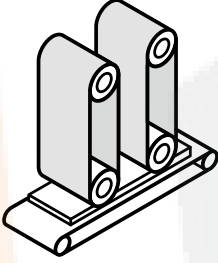
Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
				CS 910 Y	Ceramic (Multibond)	P24-80	■ ■ ■ ■	■ ■ ■	■	●	
				CS 912 Y	Ceramic	P36-180	■ ■ ■ ■	■ ■ ■	■		●
				CS 409 Y	Zirc. (Multibond)	P36-120	■ ■ ■	■ ■	■	●	
				CS 811 Y	Zirc.	P24-80	■ ■ ■	■ ■	■	●	●
				CS 411 Y	Zirc.	P24-120	■ ■ ■	■ ■	■	●	●
				CS 416 Y	Zirc. (Open Coat)	P24-120	■ ■ ■	■ ■	■	●	●
				CS 326 Y	Al. Oxide Agglom.	P60-800	■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	●	●
				CS 329 Y	Al. Oxide Agglom.	P80-600	■ ■	■ ■ ■	■ ■ ■ ■	●	
				CS 420 Y	Al. Oxide Agglom.	P120-400	■ ■	■ ■ ■ ■	■ ■	●	●
				CS 325 Y	SiC Agglom.	P80-1200	■ ■	■ ■	■ ■ ■ ■	●	●
				NBS 800	SCM	Coarse to fine	■	■ ■ ■	■ ■ ■ ■	●	●

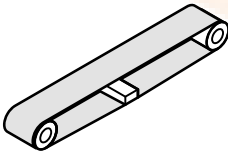
■ = ideal application

■ = possible application

Product Selection by Machine

Flat Grinding

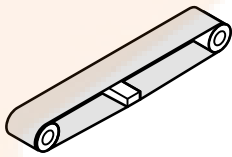
Flat (narrow belts) ▶ Square material ▶ Die-cut parts ▶ Laser-cut parts	Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
					CS 910 Y	Ceramic (Multibond)	P24-80	■■■■■	■■■■	■	●	
					CS 912 Y	Ceramic	P36-180	■■■■■	■■■■	■		●
					CS 409 Y	Zirc. (Multibond)	P36-120	■■■■	■■■	■	●	
					CS 811 Y	Zirc.	P24-80	■■■■	■■■	■	●	●
					CS 411 Y	Zirc.	P24-120	■■■■	■■■	■	●	●
					CS 416 Y	Zirc. (Open Coat)	P24-120	■■■■	■■■	■	●	●
					CS 326 Y	Al. Oxide Agglom.	P60-800	■■■■	■■■■■	■■■■	●	●
					CS 329 Y	Al. Oxide Agglom.	P80-600	■■■	■■■■	■■■■	●	
					CS 420 Y	Al. Oxide NOPPEX	P120-400	■■■	■■■■■	■■■		●
					CS 341 X	Al. Oxide	P60-600	■■■	■■■	■■■	●	●
					CS 325 Y	SiC Agglom.	P80-1200	■■■	■■■	■■■■	●	●
					CS 330 X	SiC+Cork	P220-800	■	■■■■	■■■■■	●	●
					CS 322 X	Cork	Polish fine	■	■■■■	■■■■■		●
					NBS 800	SCM	Coarse to fine	■	■■■■	■■■■■	●	●

Long belt (stroke sanding) ▶ Heavy plate ▶ Sheet	Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
					CS 910 Y	Ceramic (Multibond)	P24-80	■■■■■	■■■■	■	●	
					CS 912 Y	Ceramic	P36-180	■■■■■	■■■■	■		●
					CS 409 Y	Zirc. (Multibond)	P36-120	■■■■	■■■	■	●	
					CS 811 Y	Zirc.	P24-80	■■■■	■■■	■	●	●
					CS 411 Y	Zirc.	P24-120	■■■■	■■■	■	●	●
					CS 416 Y	Zirc. (Open Coat)	P24-120	■■■■	■■■	■	●	●
					CS 412 Y	Al. Oxide	P24-240	■■■	■■■	■■■	●	●
					CS 326 Y	Al. Oxide Agglom.	P60-800	■■■■	■■■■■	■■■■	●	●
					CS 329 Y	Al. Oxide Agglom.	P80-600	■■■	■■■■	■■■■	●	
					CS 341 X	Al. Oxide	P60-600	■■■	■■■	■■■	●	●
					CS 320 Y	SiC	P24-180	■■■	■■■	■■■■	●	●
					CS 321 X	SiC	P80-800	■■■	■■■	■■■■	●	●
					CS 325 Y	SiC Agglom.	P80-1200	■■■	■■■	■■■■	●	●
					CS 330 X	SiC+Cork	P220-800	■	■■■■	■■■■■	●	●
					NBS 800	SCM	Coarse to fine	■	■■■■	■■■■■	●	●

↑
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↓
Cloth belts

Long belt (stroke sanding)

- Heavy plate
- Sheet

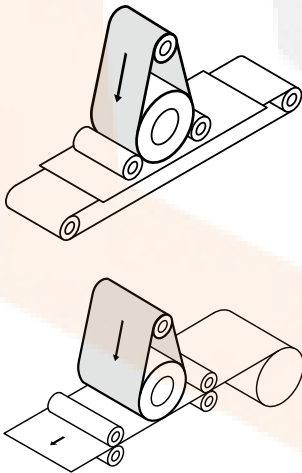


↑ Paper belts
↓

Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
				PS 21 F	Zirc.	P40-400	■■■	■■	■■	●	
				PS 61 F	Ceramic	P60-280	■■■■	■■■	■■	●	
				PS 20 F	Al. Oxide	P60-400	■■	■	■■	●	
				PS 729 F	Al. Oxide Agglom.	P120-400	■■■	■■■■	■■■	●	
				PS 24 F	SiC	P80-800	■	■■	■■■■	●	

Wide belt

- Coil
- Sheet



↑ Cloth belts
↓

Pre-sanding	Intermediate sanding	Final sanding	Finishing	Product	Grain type	Grit size	Required pressure	Lifetime	Finish	Dry use	Wet use
				CS 910 Y	Ceramic (Multibond)	P24-80	■■■■	■■■	■	●	
				CS 912 Y	Ceramic	P36-180	■■■■	■■■	■		●
				CS 409 Y	Zirc. (Multibond)	P36-120	■■■	■■	■	●	
				CS 811 Y	Zirc.	P24-80	■■■	■	■	●	●
				CS 411 Y	Zirc.	P24-120	■■■	■■	■	●	●
				CS 416 Y	Zirc. (Open Coat)	P24-120	■■■	■■	■	●	●
				CS 412 Y	Al. Oxide	P24-240	■■	■■	■■	●	●
				CS 326 Y	Al. Oxide Agglom.	P60-800	■■■	■■■■	■■■	●	●
				CS 329 Y	Al. Oxide Agglom.	P80-600	■■	■■■	■■■	●	
				CS 341 X	Al. Oxide	P60-600	■■	■■	■■	●	●
				CS 320 Y	SiC	P24-180	■■	■■	■■■	●	●
				CS 321 X	SiC	P80-800	■■	■■	■■■	●	●
				CS 325 Y	SiC Agglom.	P80-1200	■■	■■	■■■	●	●
				CS 330 X	SiC+Cork	P220-800	■	■■■	■■■■	●	●
				CS 322 X	Cork	Polish fine	■	■■■	■■■■		●
				NBS 800	SCM	Coarse to fine	■	■■■	■■■■	●	●
				PS 21 F	Zirc.	P40-400	■■■	■■	■■	●	
				PS 61 F	Ceramic	P60-280	■■■■	■■■	■■	●	
				PS 20 F	Al. Oxide	P60-400	■■	■	■■	●	
				PS 729 F	Al. Oxide Agglom.	P120-400	■■■	■■■■	■■■	●	
				PS 24 F	SiC	P80-800	■	■■	■■■■	●	

↑ Paper belts
↓

■ = ideal application

■ = possible application

Delivering operational reliability worldwide

Operational reliability starts with the availability of the resources. Our vast warehouse and elaborate logistics concept have put us in the unique position to make delivery to customers around the globe within 4 weeks. In most cases, delivery times are even shorter than that.



Highly advanced logistics centre

All processes taking place at our logistics centre are optimised to minimise the time that will pass between the receipt of the order and its shipping. This optimisation, combined with our extensive raw material warehouse and high delivery capacity, makes it possible for us to prevent belt downtime for our customers. Better still, customers enjoy the added benefit of markedly reducing their own stockpiling costs.

Shipping and handling

All belts are packed with utmost care and ship in special premium packaging. Our packaging ensures that the products are reliably protected from mechanical damage and climatic influences and that they will arrive in perfect condition.

Open to custom requests

Service is at the centre of everything we do. Our standard is to satisfy the requirements of our customers in a quick and efficient manner.

Service that goes above and beyond

As a long-term partner of the industry's principal panel board producers, our job does not end when we ship our belts to the customers. Instead, our service is all-embracing and extends from the initial consultation to aftersales service. Our tightly woven service network allows us to respond quickly no matter where our customers are in the world.



Competent consulting

There is a solution to any requirement. Our product specialists are happy to help you find the belt solution that is right for your specific application - by email, over the phone or in person at your premises. This allows you to take full advantage of our profound industry knowledge and the extensive experience our team has gained over many years.

Our definition of all-inclusive service also includes training our customers in a way that enables them to use our products in the most efficient way.

In-depth training

Whether you need guidance on setting up a system for a new type of belt, or require a basic training seminar on the topic of storage and handling, we offer training at our facility in Worksop or at customer premises in line with your personal requirements and exact specifications.

Global service

Spanning the globe, our service network boasts sales organisations in 39 countries worldwide. This expansive network allows us to remain where our customers are and speedily respond to any request they may have.

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