



VSM PRODUCT RANGE 2026/2027

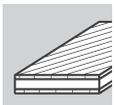
Valid as of January 2026.

Additional grinding-active layers (for more information, please refer to page 31)



Materials

Metallic materials



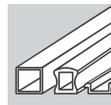
Superalloys



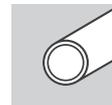
Stainless Steel



Unalloyed Steel



Aluminium



Non-ferrous metal

Non-metallic materials



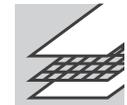
Wood



Lacquer



Glass/Stone/
Ceramic



Composite

Features

Product features



Open coated



Medium coated



Medium close coated



Close coated



Velour-backed

Product application



Also for wet grinding



Low to medium pressure



Medium pressure



Medium to high pressure

FEPA safety recommendations*

The pictograms with FEPA safety recommendations* are guidelines for the correct use of coated abrasives. It is in the interest of your own safety to comply with these guidelines. In addition, compliance with these guidelines ensures full performance of the abrasive.



Wear eye protection



Wear a mask



Wear ear protection



Wear protective gloves



Refer to instruction manual



Do not use if damaged



Only permitted for grinding at an angle > 10°



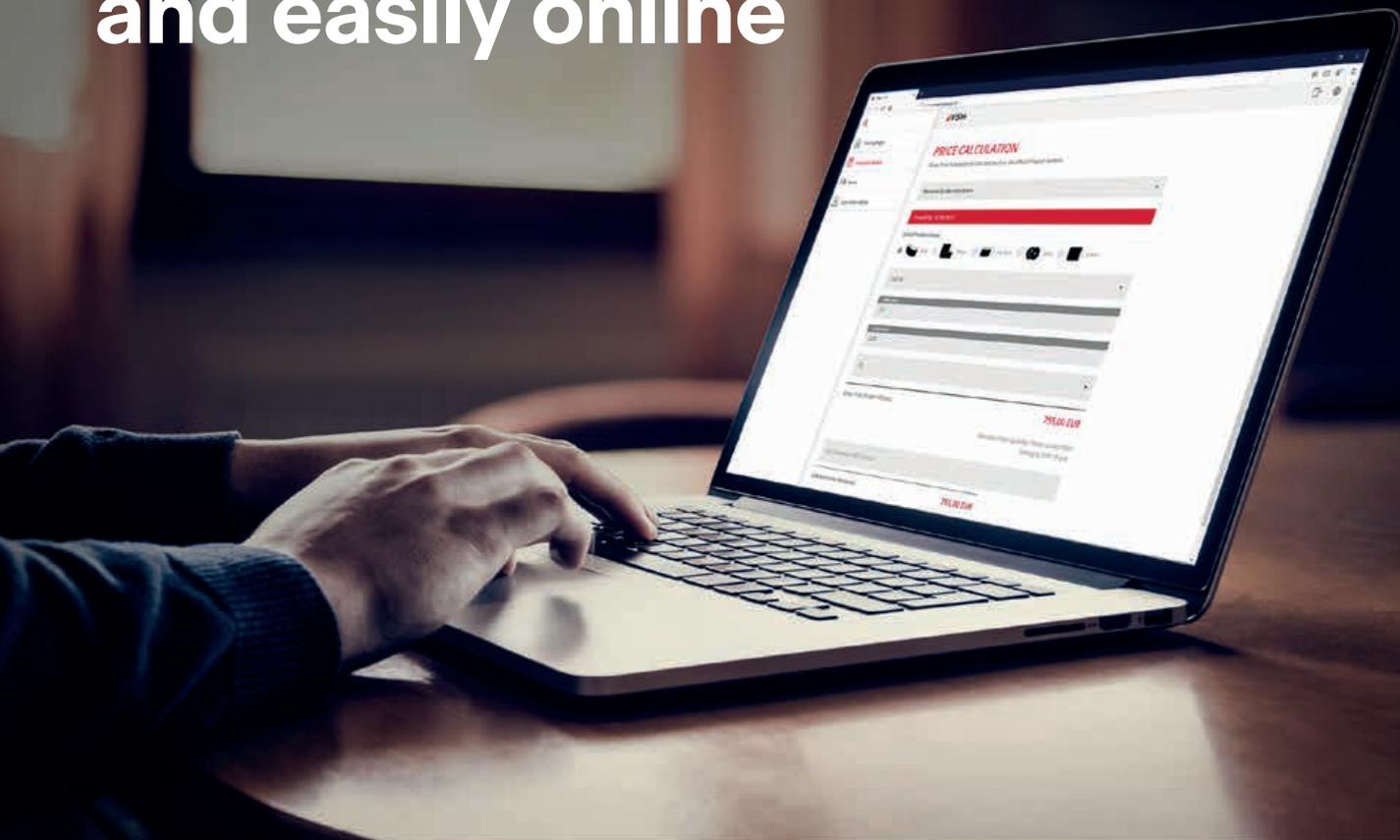
Only to be used with a back-up pad



Do not use for wet grinding

*The FEPA safety recommendations are published on our website. Visit us at www.vsmabrasives.com/service/downloads.

Calculate prices quickly and easily online



You can calculate the price of your abrasives quickly and easily online, or request them in the usual way from your contact person in the VSM sales service team.



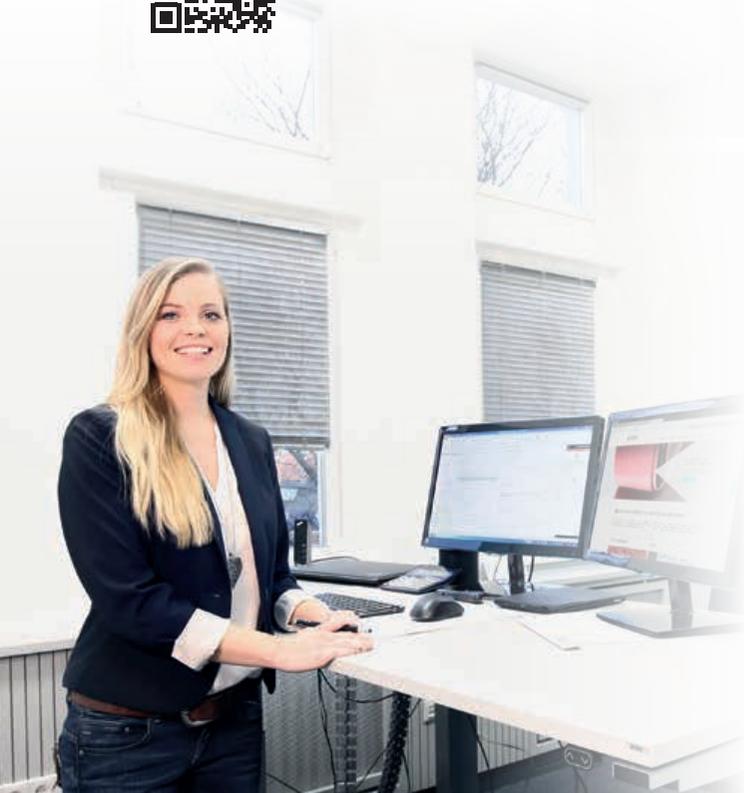
Get started today:
b2b.vsmabrasives.com

Do you have any questions or suggestions?

If so, please email us at
marketing@vsmabrasives.com

You need access authorisation?

Please contact your VSM sales service team.
(See pages 6-9)



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HIGHLIGHTS

VSM ACTIROX 16

VSM ALU-X 20

VSM XELERION 22

Our cover model is an expert for fine polishing applications and uses a **XELERION KK670J** file belt.



General

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Belts	Instructions for use	32
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Wide belts	> 500 mm width	
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Cloth	40
Paper	43
Non-woven	44

Belts	≤ 500 mm width	
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Cloth	46
Paper	61
Non-woven	62

File belts		
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Cloth	63
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Discs	Instructions for use	68
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Fibre discs		76
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Discs		
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Cloth	84
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Rolls	Instructions for use	90
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Sheets and pads	Instructions for use	96
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Sheets · Paper	98	Pads · Non-woven	100



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Back-up pads for fibre discs	105		





Successful all over the world

VSM is the brand name of **VSM - Vereinigte Schmirgel- und Maschinen-Fabriken AG** founded by Siegmund Oppenheim and Siegmund Seeligmann in 1864, and became a public limited company in 1898. Its headquarters is

located in Hanover-Hainholz, Germany, where the company was founded. VSM has more than 850 employees worldwide. With **more than 160 years of experience** in the manufacturing of quality abrasives, VSM is one of the global



FOR 160 YEARS

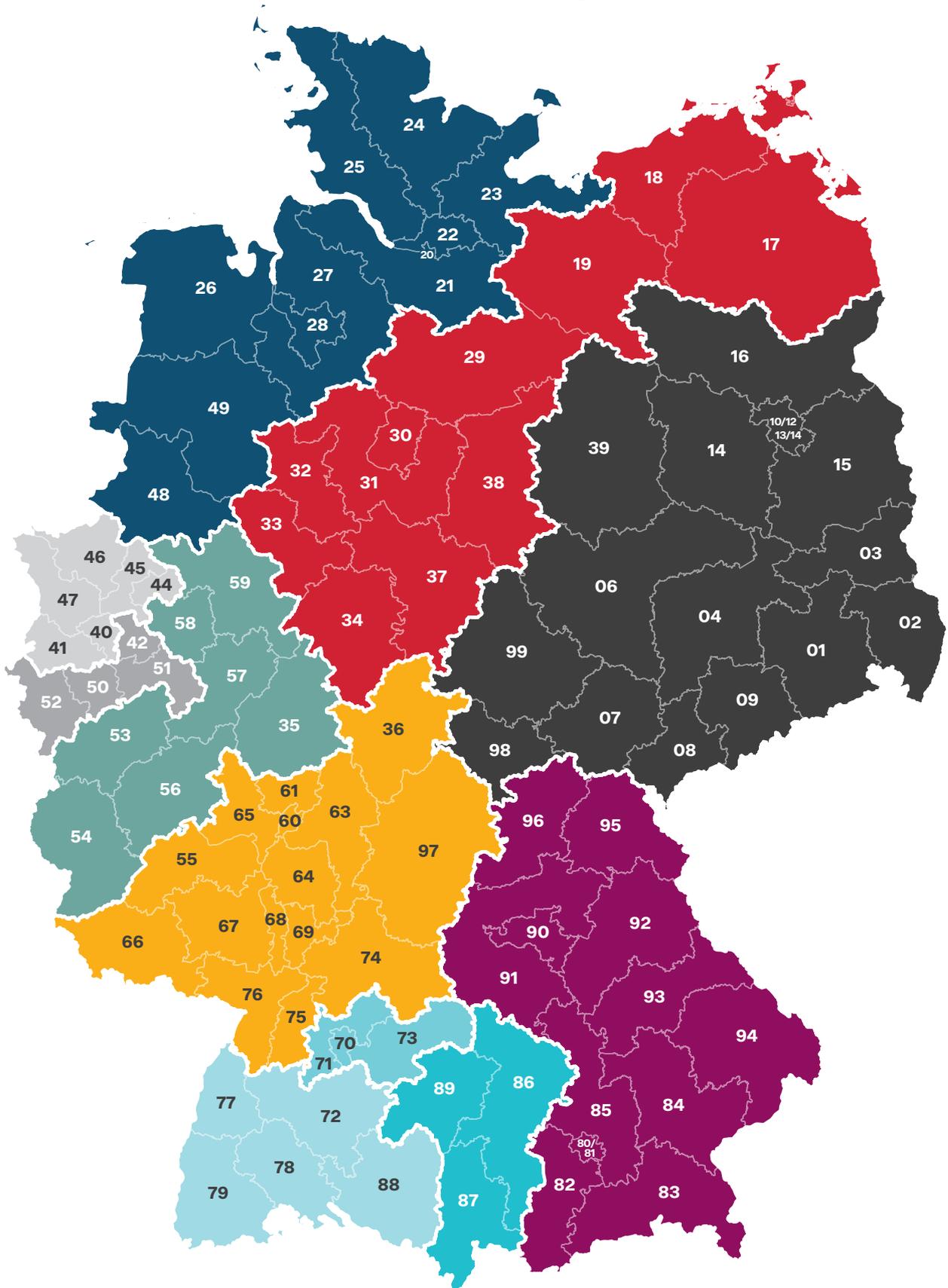
1864 // 2024

WE KNOW ABRASIVES

leaders in the abrasives market. Specialised in premium grinding solutions for the metal and wood industries, VSM's market activities are based on a company strategy which focuses on the success of its customers.

Satisfied customers are the only benchmark for our company's performance. International VSM subsidiaries and a global distribution network ensure that manufacturers can get our full support in every region of the world.

Our sales service team for Germany





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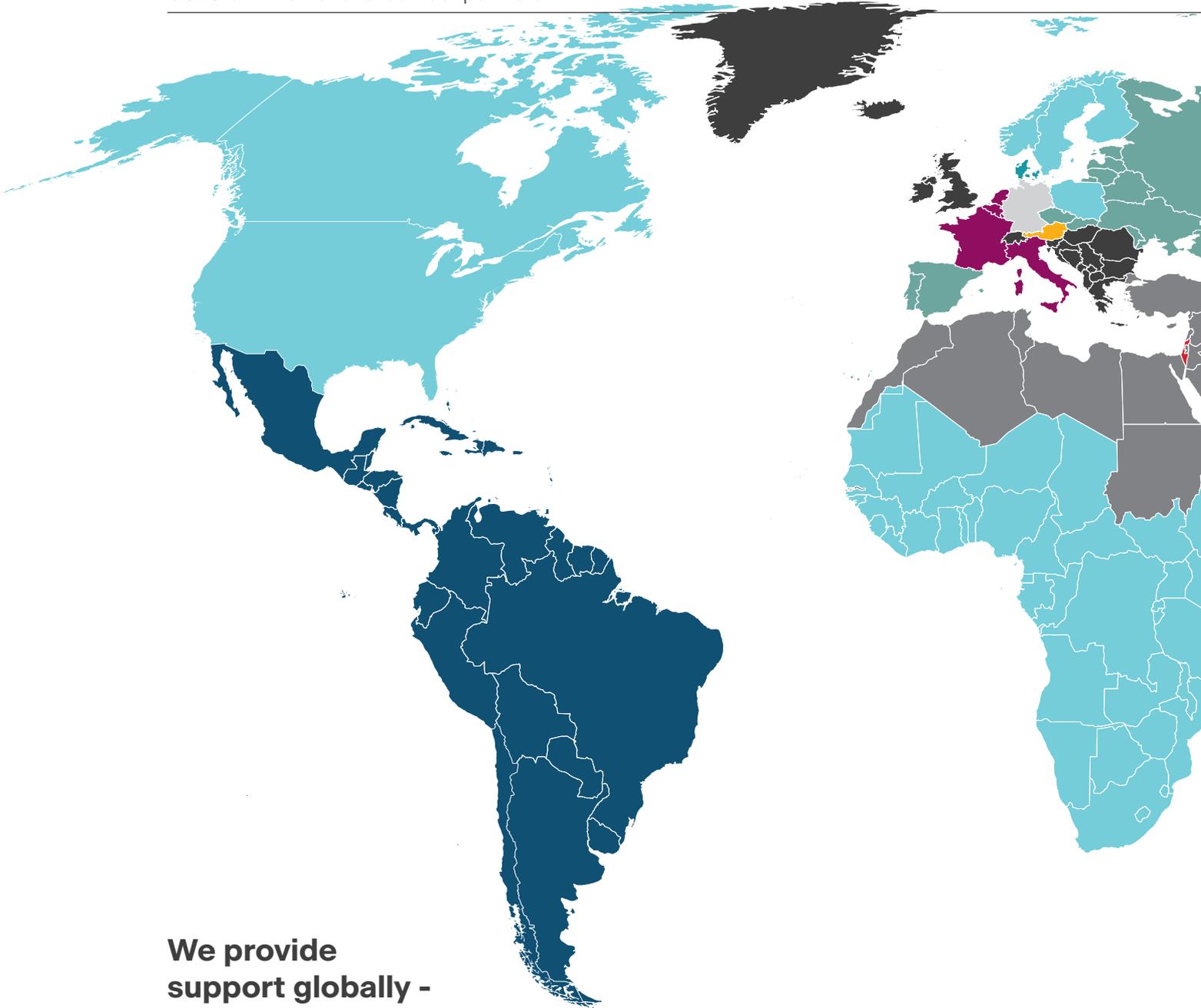
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Support throughout Germany - efficient, competent, reliable.



**We provide
support globally -
give us a call!**



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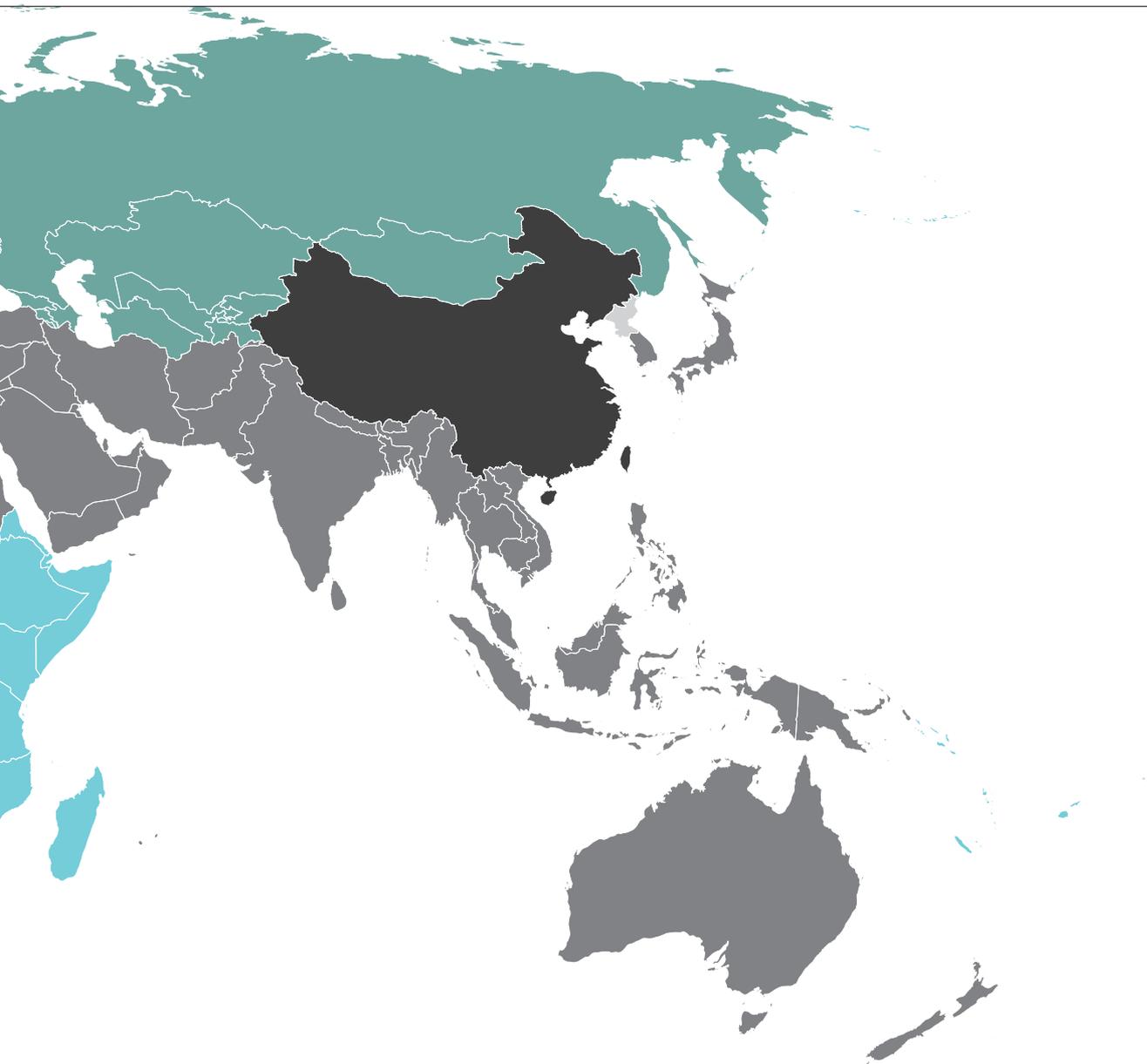
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Technical abrasives seminars in Hanover

Benefit from our process expertise in abrasives

- > Expand your know-how of grinding processes and their potential for optimisation
- > Extensive machine pool for simulating your grinding operations
- > Talk directly to our abrasive technology specialists
- > High proportion of industry-related grinding tasks and exercises under expert guidance
- > Interpreter services available for seminars in one or more foreign languages (please ask for details)

„VSM training courses are the best on the market. I always learn something new and there are many opportunities to try out different abrasive technologies.“

Kerstin Kunze, owner of Mende Industrieprodukte e.K.

> GRINDING TECHNOLOGY USER SEMINAR

Are you often faced with the question of which abrasive to use to achieve the highest quality surface finish? Would you like to make your grinding process more efficient by optimising the process steps? Then you need to come along to our technical abrasives seminar!

TECHNICAL ABRASIVES FORUM FOR DISTRIBUTORS

The new VSM Distributors Forum will keep you up to date! We'll give you an overview of new grain technologies and their advantages for the grinding process. We'll also be presenting our special product range for OEM business and assembly companies, and show you how to find the right abrasive for your customers quickly and reliably.

CUSTOMER-SPECIFIC SEMINAR ON GRINDING *(please ask for details)*

You have very specific requirements in your company. These may involve achieving defined surface values, or processing as many workpieces as possible per shift. Whatever machines and materials you use: Our VSM abrasives experts know their business and work with you to develop a tailor-made seminar for your employees.



Interested in our VSM seminars?

Visit us at vsmabrasives.com/en/service/seminars

Call us on **+49 511 3526 222**

Mail us at: training@vsmabrasives.com



Experience abrasives first-hand

In the face-to-face seminars at the VSM Competence Centre (CC) in Hanover, you can experience abrasives with your own hands. Detailed practical sessions give you the opportunity to test what you have learnt in theory directly.

In our grinding circle, you can apply a wide variety of grinding techniques at several stations:

- > State-of-the-art robot cell
- > Centerless grinding machine
- > Double backstand
- > Backstand with contact wheels in three levels of hardness
- > Planetary grinding machine
- > Long belt grinding machine
- > Angle grinder (various power levels)
- > Extensive range of power tools

How do different types of grain behave? Which grinding sequence can cut down on process steps? How are surface analysis devices used? Working in small groups, you'll learn about all of this and much more in special blocks dedicated to each of the machines.



With our new, state-of-the-art robot cell, we can demonstrate precise grinding solutions for complex geometries and demanding, multi-stage grinding processes.

Thanks to the generous space offered on our premises, we can also set up large third-party machines, which lets us offer seminars on specially selected topics.

We look forward to your participation!

Become a grinding professional:

In just 30 to 60 minutes, our live webinars will give you useful tips and tricks for your everyday work, plus valuable insights into metalworking with any kind of abrasive.

VSM webinars – live from our Competence Center

Our machine pool – right on your desk

Use your precious time effectively and benefit from our expert knowledge. Experience practical applications that also have relevance for your own day-to-day work. We bring our entire machine pool to you – wherever you are. By chatting directly to our experts, you will get

valuable tips and tricks for your grinding processes. And all this comes to you as an online event, at a place of your choosing. And naturally in your language of choice, as required.

In the short space space of 30 to 60 minutes, you will gain a wealth of knowledge on a wide variety of topics. Check out the details of our latest VSM live webinars on the right hand page. The registration couldn't be easier: You don't need any special software – all you need is a computer, tablet or smartphone.



Interested in our VSM live webinars?

Visit us at vsmabrasives.com/en/service/webinars

Call us on **+49 511 3526 222**

Mail us at: webinar@vsmabrasives.com



Our live webinar topics at a glance



Dynamic discs – comparing grinding, flap and fibre discs

Which technology is best for which application? What are grinding discs, flap discs and fibre discs – and what are their specific properties?



By eye? By feel? By technology! - Spotlight on surface roughness measurement

Even technically measured surfaces have a high potential for errors. We give you certainty in the assessment and evaluation of the surfaces you produce and therefore also your grinding process.



The finest surfaces – right on point

Perfect technical and optical surfaces in fewer processing steps than you would expect. After grit 80 comes grit P400 for us, logical right? Please take 20 minutes of your time and let us convince you



Measure - Evaluate - Change: Parameters optimise your grinding process

In this webinar we will show you how you can significantly improve your grinding process with simple parameter adjustments.



Reducing heat in the grinding process

Many users are well that workpieces will discolour if they become too hot during grinding. But did you know that too much heat actually causes structural changes in the metal?



Quality made in Germany – the champion ceramic grain

An abrasive grain developed and made entirely in-house

Did you know that VSM produces its own ceramic grain at its Hanover site? This makes us one of only a handful of ceramic grain manufacturers worldwide. By producing our own abrasive grain, we can significantly influence the performance characteristics of our abrasives. And we also utilise our wealth of technical know-how to develop, produce and continuously optimise new grain technologies in-house – such as the geometrically shaped ceramic grain used in ACTIROX abrasives, for example.



Ceramic grain abrasives are required for demanding grinding tasks. We produce the grain for this in-house.

Backing materials finished on site

We also finish the backing materials for our abrasives ourselves, in our own fabric treatment plant. Why go to all this trouble? Because backing material quality is not only essential for abrasive grain adhesion, but also applies the stock removal forces to the respective workpiece. By adjusting the backing material characteristics to perfectly match our abrasives, we can significantly influence both the performance and the service life of the abrasive.



The backing materials for our abrasives are finished in our own facility in Hanover.

The perfect bond for VSM abrasives

Synthetic resin bonds ensure the best-possible adhesion of abrasive grain to the backing material. And the use of active abrasive fillers keeps grinding cool or improves chip clearance. These bonds are also manufactured and actively developed at VSM in Hanover. For high-performance high-quality abrasives – Made in Hanover.

Our quality promise

Finished goods and pre-assembled articles are subjected to continuous quality assurance testing in-house to verify their grinding performance or belt joints. These tests are carried out in our purpose-built, state-of-the-art Grinding Unit as well as our VSM Competence Center. We have also been certified to the ISO 9001:2015 standard for many years, and are a member of FEPA, oSa and VDS.

Producing our own preliminary products in-house is a special feature of VSM's abrasive production

Finishing of backing materials

Resin production

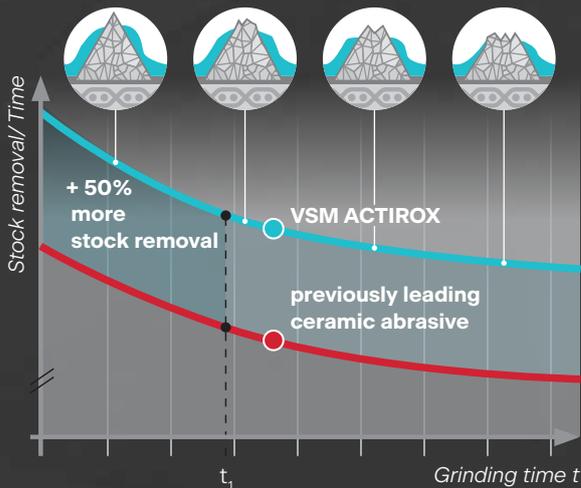
Production of abrasive grain

Coating and spreading

Basic goods



ACTIROX



Thanks to their extremely high stock removal rate, VSM ACTIROX fibre discs can process more workpieces in the same time.

From deburring to grinding cast parts or levelling weld seams, you too can enjoy the benefits offered by **VSM ACTIROX**.

VSM ACTIROX utilises geometrically shaped ceramic abrasive grains that break down in a precise, predictable way. As they do, they constantly produce new, razor-sharp cutting edges. This ensures aggressive grinding and maximum stock removal.

YOUR ADVANTAGES

- > Maximum stock removal per time unit thanks to geometrically shaped ceramic grain
- > More workpieces processed per unit of time
- > Cooler grinding, preventing discolouration on stainless steels
- > Improved chip clearance – even when grinding aluminium

Your grinding task



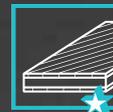
Abrasive grain in top shape!

3 good reasons why AK890Y should be an essential part of your operation

- 1 **Maximum stock removal** results in **lower operating expenses**, such as energy and storage costs.
- 2 Low to medium contact pressures significantly reduce noise and vibrations, and therefore **reduce the strain on operators and machines**.
- 3 Faster grinding greatly **reduces processing times** – even when deburring and removing sprues or weld seams.



Developed for ...



Superalloys



Stainless Steel



Unalloyed Steel



VSM ACTIROX
AK890Y

Product data sheet

ACTROX

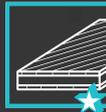
VSM is one of only a **handful of ceramic grain manufacturers in Germany and the rest of the world.** By producing our own abrasive grain at our Hanover site, we can significantly influence the performance characteristics of our VSM abrasives.



AF890

TOP SIZE

Developed for ...



Superalloys



Stainless Steel



Product data sheet

ALU-X

The ALU-X additional layer significantly reduces chip adhesion during grinding of non-ferrous metals



t=0

Grinding time

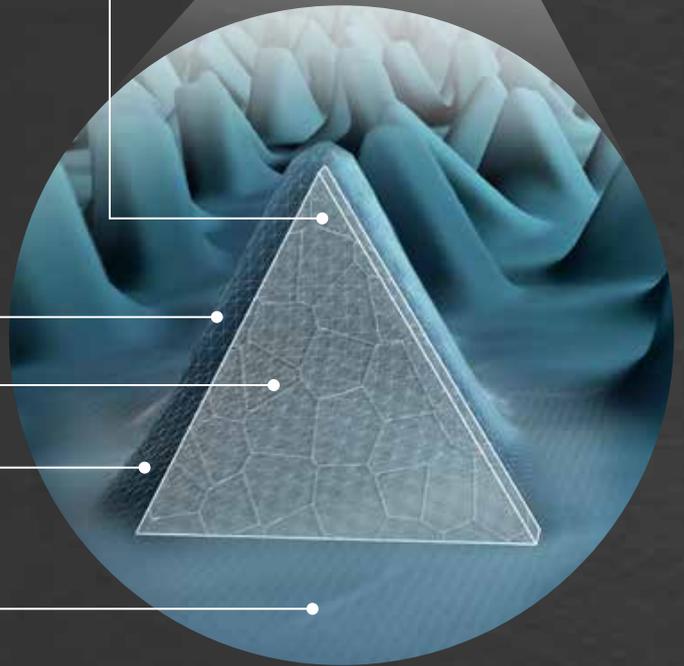
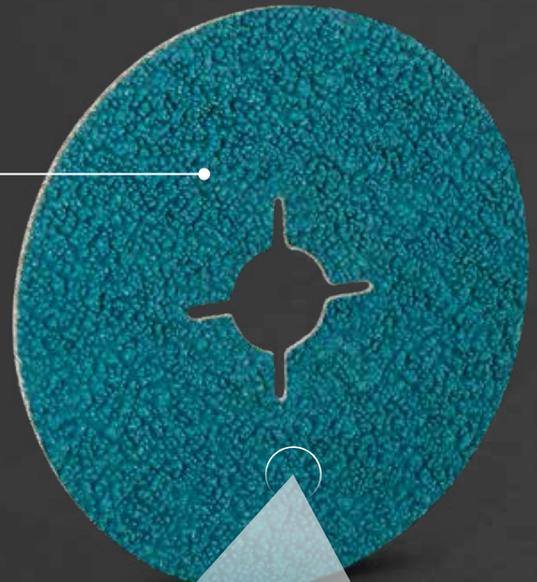
The geometrically shaped ceramic abrasive grain wears down in a defined manner, creating a series of new, sharp cutting edges

TOP SIZE

Enhanced stock removal and lower temperatures in the grinding zone thanks to the VSM TOP SIZE grinding-active top size coat

Cloth and vulcanised fibre backing materials have been developed in-house to handle the toughest jobs

Upright abrasive grain for aggressive and faster grinding



Fibre discs for maximum stock removal

AF799

Developed for ...



Unalloyed Steel



Aluminium



Product data sheet

AF979

Developed for ...



Unalloyed Steel



Aluminium



Product data sheet

AF733

ALU-X

Developed for ...



Aluminium



Unalloyed Steel



Non-ferrous metal



Product data sheet

RECOMMENDED BACK-UP PADS

TURBO PAD 1



Hard, with cooling fins (page 143)

TURBO PAD 2



Hard, with cooling fins, cambered (page 143)

TURBO PAD 3



Extra hard, with cooling fins, cambered, for maximum stock removal (page 143)

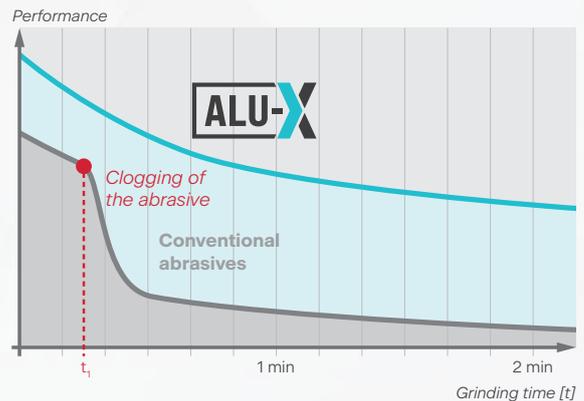


X-TREME performan

From X-PERTS for X-PERTS

ALU-X is the new series of abrasives developed by VSM to meet the specific requirements of grinding non-ferrous metals.

Here, the proven **VSM CERAMICS** grain technology with continuous self-sharpening is complemented by the additional grinding-active layer **VSM ALU-X**. The result: Improved chip removal, resulting in fewer tool changes, more workpieces per shift, more stock removal, and a grease-free workplace.



Grinding aluminium alloy bars (Ø 30 mm, AlSi12Cu) using fibre discs with grit size 24.

Your advantages at a glance

- > Specially developed for machining **aluminium and non-ferrous metals**
- > **VSM ALU-X significantly reduces** chip adhesion and thus also **clogging of the abrasive**; this, in turn, reduces the number of **tool changes**
- > **Grease-free and oil-free grinding** keeps the **workplace clean**.
- > **Increased performance** enables **faster workpiece machining** and lowers the process costs
- > **VSM** always delivers premium **made-in-Germany quality**



Your grinding task

Grinding of cast parts



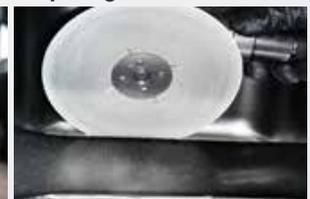
Deburring



Removing welded seams



Preparing welded seams



Bevelling



Cleaning



Removing imperfections



Technical surface quality

ce – reduced chip adhesion



High stock removal rate and a longer service life



Reduced tool costs per workpiece



Reduced chip adhesion means fewer tool changes



Grease-free and oil-free grinding



VSM CERAMICS
XK733X



Product data sheet

Developed for:



Aluminium



Non-ferrous metal



Unalloyed Steel



The additional layer ALU-X significantly reduces chip adhesion during grinding of non-ferrous metals



VSM CERAMICS
XF733



Product data sheet

FOR
X-TREME
PERFORMANCE.



ACTROX ALU-X
AF733

Product data sheet

XELERION

Fine polish



VSM XELERION
KK670F

Product data sheet



VSM XELERION
KK670J

Product data sheet

Developed for:



Stainless
Steel



Non-ferrous
metal

Your application

Medical instruments



Implants



Plant and tank construction



Kitchen industry



Fittings



Furniture



Automotive



Shipbuilding

ing – right on point



Creates flawless, consistent surfaces up to high gloss



High initial aggressiveness and constant stock removal



Cotton backing conforms to every contour



Optimal distribution of force and heat reduces discoloration and deformation



User-friendly due to reduced noise, odor and dust



New standards for fine polishing applications.

VSM XELERION achieves a flawless, reproducible finish, ensures sustained high stock removal and reduces the number of required process steps. Polishing processes are more efficient and operator fatigue is significantly reduced.

For maximum productivity

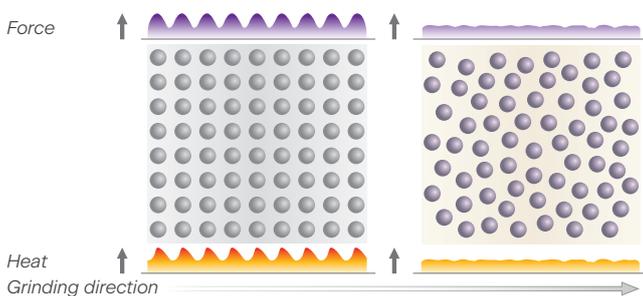
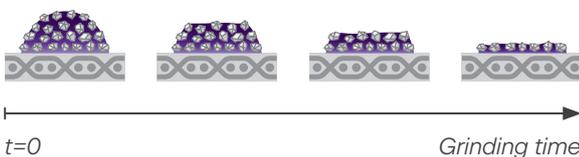
The improved stock removal performance simplifies the polishing process considerably. Even with fine grit sizes, stock removal is high, which means **XELERION** can easily polish out rough surfaces. Furthermore, common grit size steps can be skipped to achieve the desired surface finish with just a few grinding passes.

High performance also means fewer process steps and tool changes. Productivity is massively increased.

Randomized structure

Unlike similar competitor products, the **XELERION dots** are not arranged strictly symmetrically on the backing, but in a randomized manner.

Short, irregular grinding interruptions optimize the distribution of force and heat, resulting in cooler grinding. This helps to prevent discoloration and deformation of the material. This results in a **perfectly reproducible finish** is achieved – right up to a flawless scratch pattern for high-gloss surfaces.



Recommended products

Backstand



	Series	Grain technology	Unalloyed steel	Stainless steel	Non-ferrous metals	Pressure	Removal rate	Surface fineness	Grit sizes	Features
STOCK REMOVAL	AK890Y	ACTIROX				++	+++	-	36+	TOP SIZE ⚡
	XK870X	CERAMICS				+	++	-	24 – 120	TOP SIZE ⚡
	XK760X	CERAMICS				+	++	-	24 – 120	⚡
	XK733X	CERAMICS				+	++	-	24 – 120	ALU-X
	XK885Y	CERAMICS Plus				+++	++	-	20 – 120	TOP SIZE ⚡
SURFACE	KK670J	XELERION				-	++	+++	P240 – P2500	NEW
	KK772J	COMPACTGRAIN				-	+	++	P80 – P1200	⚡
	KK532F	ALUMINIUM OXIDE				-	++	++	P80 – P240, P320, P400, P600	ALU-X
	KV710X	NON-WOVEN (AO)				-	+	++	100 – 400	⚡

Flat grinding



	Series	Grain technology	Unalloyed steel	Stainless steel	Non-ferrous metals	Pressure	Removal rate	Surface fineness	Grit sizes	Features
STOCK REMOVAL	AK890Y	ACTIROX				++	+++	-	36+	TOP SIZE ⚡
	XK880Y	CERAMICS Plus				++	++	-	20 – 120	TOP SIZE ⚡
	XK785Y	CERAMICS Plus				+++	++	-	36 – 120	⚡
	XK733X	CERAMICS				+	++	-	24 – 120	ALU-X
SURFACE	RK700X	ILUMERON				-	+	+++	P120 – P1200	⚡
	KK791Y	COMPACTGRAIN Plus				-	+++	+	P80 – P800	⚡
	KK712X	COMPACTGRAIN				-	++	++	P80 – P600	⚡
	KP532E	ALUMINIUM OXIDE				-	++	++	P120 – P220	ALU-X
	KV710X	NON-WOVEN (AO)				-	+	++	100 – 400	⚡



Centerless



	Series	Grain technology	Material compatibility			Pressure	Removal rate	Surface fineness	Grit sizes	Features
			Unalloyed steel	Stainless steel	Non-ferrous metals					
STOCK REMOVAL	XK785Y	CERAMICS Plus				+++	+++	-	36 – 120	⊖
	XK885Y	CERAMICS Plus				+++	+++	-	20 – 120	TOP SIZE
	XK733X	CERAMICS				++	++	-	24 – 120	ALU-X
	XK760X	CERAMICS				++	++	-	24 – 120	
SURFACE	RK700X	ILUMERON				-	+	+++	P120 – P1200	⊖
	KK790Y	COMPACTGRAIN Plus				-	+++	+	P60 – P600	⊖
	KK718X	COMPACTGRAIN				-	++	++	P60 – P600	⊖
	CK917C	CORK (SIC)				-	+	+++	P320 – P1200	⊖
	KV710X	NON-WOVEN (AO)				-	+	++	100 – 400	⊖

Angle grinders



	Series	Grain technology	Material compatibility			Power	Pressure	Removal rate	Surface fineness	Grit sizes	Features	
			Unalloyed steel	Stainless steel	Non-ferrous metals							
STOCK REMOVAL	AF979	ACTIROX				1,500 W	+++	+++	-	36+		NEW
	AF890	ACTIROX				1,500 W	++	+++	-	36+, 60+, 80+	TOP SIZE	
	AF733	ACTIROX				1,200 W	++	+++	-	36+, 60+, 80+	ALU-X	NEW
	XF760	CERAMICS				1,200 W	+	++	-	24 – 80		
	XF870	CERAMICS				1,200 W	++	++	-	24 – 120	TOP SIZE	
	XF733	CERAMICS				1,200 W	+	++	-	24, 36, 60, 80	ALU-X	
	ZF713	ZIRCONIA ALUMINA				800 W	+	+	-	36 – 120		
SURFACE	KK670J	XELERION				-	-	+++	+++	P240 – P2500	Velours-backed	NEW
	KK772K	COMPACTGRAIN				-	-	+	++	P80 – P600	Velours-backed	
	KP131K	ALUMINIUM OXIDE				-	-	++	+	P60 – P180, P240, P320, P400	Velours-backed	
	KV710X	NON-WOVEN (AO/SIC)				-	-	+	++	100 – 400		
	KV707K	NON-WOVEN (AO)				-	-	+	++	100 – 240	Velours-backed	

Errors and omissions excepted. For special requirements, please contact your VSM application engineer.

▼ **TOP SIZE** Grinding-active additional layer, reduces the temperature in the grinding zone

ALU-X Grinding-active additional layer, significantly reduces chip adhesion

⊖ also suitable for wet applications

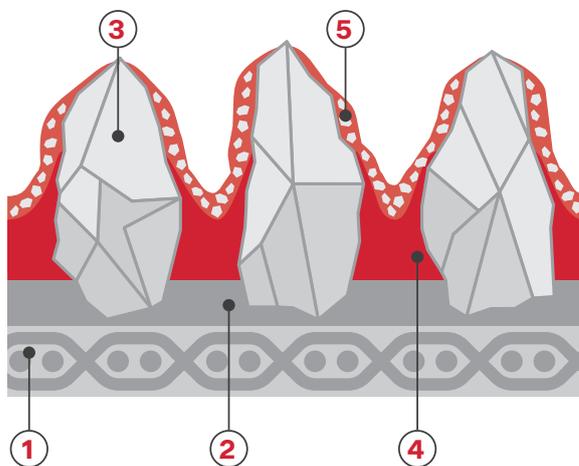


VSM grinding technology

Coated abrasives: schematic view

Coated abrasives consist of grains bonded to a flexible substrate. The substrate can have varying degrees of flexibility ranging from extremely flexible (E weight cotton backings) to

extremely sturdy (Z weight polyester backings). These substrates are used as backings for different types of abrasives: rolls, belts, discs and sheet goods.



A coated abrasive is made up of four to five different components

1. Backing material
2. Maker coat
3. Abrasive grain
4. Size coat
5. Optional coat: Additional grinding-active layer (TOP SIZE)

1 Backing material

The abrasive grain is bonded to a substrate which retains the grain and transfers the cutting forces to the workpiece. The substrates used by VSM as backing materials are:

Paper backing

- > Optimum stretching behaviour
- > Smooth running, special types of belt joints E13, E08 (page 34/35)
- > Lower weight in comparison to cloth backings
- > The lower the paper weight the more flexible is the backing

Cloth backing

- > Aramid, cotton, polyester and polycotton
- > High tear resistance
- > The flexibility of cloth backings varies between extremely flexible and extremely sturdy subject to the application
- > Standard belt joint E07, E08 (page 34/35)

Vulcanised fibre

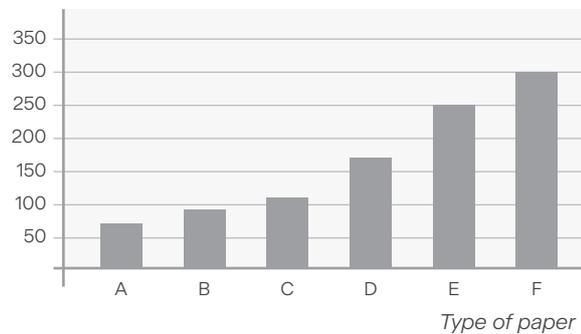
- > Multi-layer material made from special types of paper
- > Extremely sturdy backing material
- > Extremely high tear resistance
- > Used for making fibre discs

Thanks to having **our own cloth finishing plant** in Hanover, we are able to check the quality of the materials we use for each individual production step and ascertain that the same high level is maintained throughout. This guarantees that we use backing material with the best properties for our abrasives, which in turn translates into optimum performance.

VSM specifications paper

Backing	Paper weight	Typical applications
A-Paper	approx. 70 g/m ²	profile + surface grinding (hand)
B-Paper	approx. 100 g/m ²	profile + surface grinding (hand)
C-Paper	approx. 120 g/m ²	surface grinding (hand)
D-Paper	approx. 160 g/m ²	surface grinding (hand, machine)
E-Paper	approx. 250 g/m ²	surface grinding (hand)
F-Paper	approx. 300 g/m ²	surface grinding (hand)

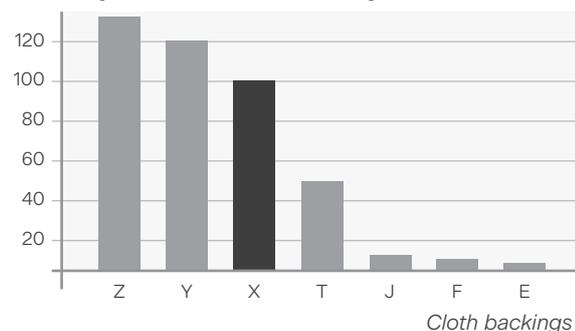
Paper weight [g/m²]



VSM specifications cloth

Backing	Flexibility	Typical applications
E-Cloth	extremely flexible	profiled workpieces
F-Cloth	very flexible	profiled workpieces
J-Cloth	flexible	profiled workpieces
T-Cloth	semi-sturdy	dynaflex
X-Cloth	sturdy	flat surfaces, edges, rotational bodies
Y-Cloth	very sturdy	flat surfaces, edges, rotational bodies
Z-Cloth	extremely sturdy	edge and surface grinding (machine)

VSM specification flexibility [%]



2 Maker coat

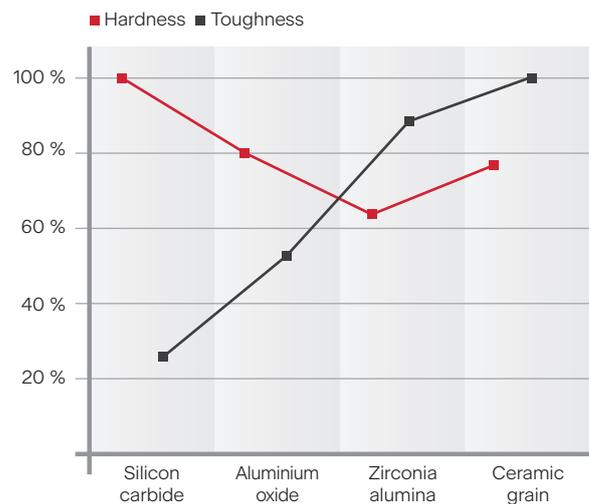
The maker coat holds the abrasive grain in place. In most cases, phenolic resins or urea resins are used as bonding agents. Specific properties such as flexibility or water-resistance are achieved by adding fillers.

3 Abrasive grain

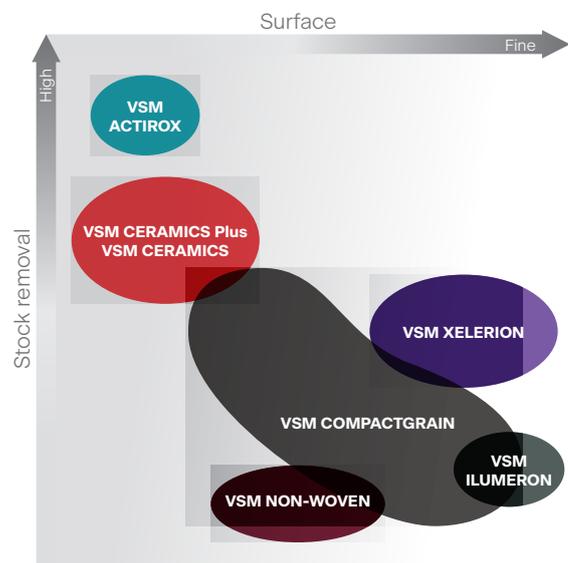
It is the abrasive grain which performs the actual job. It penetrates the workpiece and lifts the chip. High hardness, toughness and sharp edges are the most important characteristics of an abrasive grain. High-performance abrasives are made from the following synthetic materials:

- > Silicon carbide
- > Aluminium oxide (corundum)
- > Zirconia alumina
- > Ceramic grain
- > Cubic Boron Nitride (CBN)
- > Diamond

Hardness and toughness of different types of grain



The right grain for every application



VSM is **one of only a few manufacturers of ceramic grain worldwide and in Germany**. It is thanks to having our own ceramic grain production in Hanover, Germany that we have a decisive influence on the performance of VSM abrasives.

VSM grain technologies for high stock removal rates



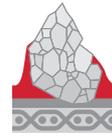
VSM ACTIROX

- > **Geometrically formed** ceramic grain
- > Maximum stock removal and a faster cut for superalloys and stainless steels
- > Cool grinding extends the service life thanks to VSM TOP SIZE



VSM CERAMICS Plus

- > **Optimised self-sharpening effect** when processing high-alloyed steels ensures very high stock removal rates
- > Reduced temperature in the contact area
- > Significantly extended service life



VSM CERAMICS

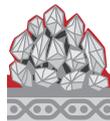
- > Top product with **self-sharpening effect** for processing non-alloyed steels and stainless steels
- > High removal rate
- > Cool grinding allows longer contact times

VSM grain technologies for perfect surface finishes



VSM ILUMERON

- > **Full faced coated long-term abrasive** with special bonding
- > For fine and consistent surfaces with high gloss levels
- > Developed primarily for processing stainless steels, superalloys and non-alloyed steels



VSM COMPACTGRAIN Plus

- > **Long-term abrasive** that wears down uniformly to the backing material, achieving a consistent surface finish
- > Optimised reserve grain capacity
- > Improved bonding properties
- > Continuous self-sharpening thanks to the granulate structure

NEW



VSM XELERION

- > **Fine abrasive** with dot structure
- > High initial aggressiveness and constant stock removal
- > Homogeneous surfaces up to high gloss
- > Optimal distribution of force and heat for a consistent grinding result

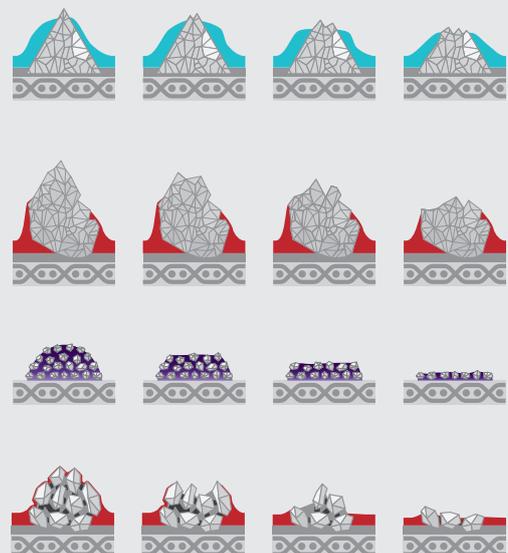
The VSM self-sharpening concept

The geometrically shaped **VSM ACTIROX** ceramic abrasive grain breaks down in a defined manner and thus continuously produces new sharp cutting edges.

The microcrystalline structure of the **VSM CERAMICS Plus** and **VSM CERAMICS** grain accounts for a more subtle breaking down of the grain and constantly produces sharper edges. This is what we call the optimized self-sharpening effect.

Die **VSM XELERION**-Dots bestehen aus mehreren Lagen vieler scharfer Schleifkörner in Kunstharzbindung. Das Ausbrechen verschlissener Schleifkörner setzt neue, scharfe Körner frei.

The long-term abrasives **VSM COMPACTGRAIN Plus** and **VSM COMPACTGRAIN** stand for a compact unit which consists of numerous abrasive grains. The used grains are torn out by the cutting forces involved whereby unused grain tips are being exposed.



Grinding time

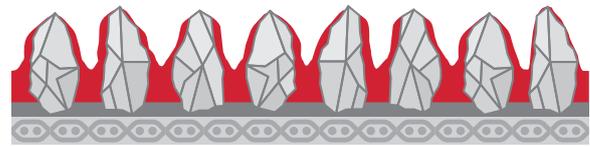
Types of coating

Different types of coating are used in order to benefit as much as possible from the grain properties and the space between the grains for chip removal. VSM uses standard, combination and open types of coating.

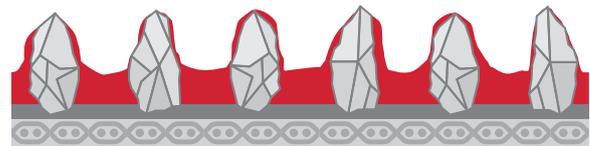
In a **Standard coating** the grain is bonded to the maker coat with the grain in an upright position. The gap between the grains may be narrow (closed coating density) or medium (coating density medium closed).

When applying a **Combi coating** supporting grains are placed in the gaps between the grains in order to retain the grain in position. This type of coating works best for applications where a machine limits the contact pressure.

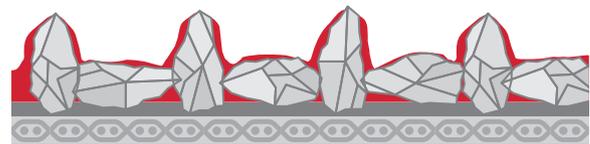
In an **Open coating** the grain is again in an upright position on the backing. However, the spacing between the abrasive grains is much bigger. The pressure spreads onto fewer grains so that the individual grain has to absorb much more of it. This in turn enhances the self-sharpening effect (page 29) and improves the chip removal.



Standard coating, closed-coated



Standard coating, medium closed-coated



Combi coating



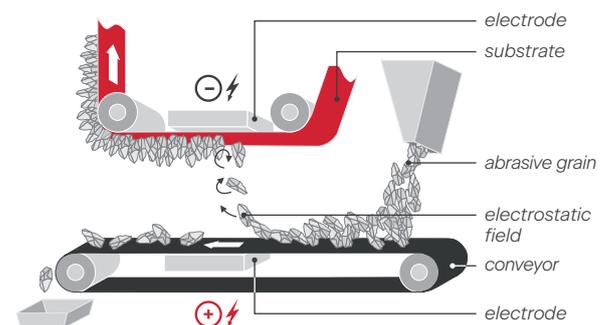
Open coating

Coating techniques

The orientation of the grains is decisive for the surface quality of the workpiece. VSM uses two different coating techniques to properly orientate the grains: **electrostatic coating** and **mechanical coating**.

The electrostatic coating process is a method where the grains are not scattered onto a substrate. They move upwards and accelerate towards the substrate while travelling through an electrostatic field. During this process the grains are oriented to achieve an upright position, in which they are bonded to the substrate. VSM

has its own facilities to integrate this process in-house. The result is a product with maximum sharpness.



The principle of electro static coating

4 Size coat

The size coat ensures proper anchoring of the abrasive grain. While the maker coat only adheres the grain to the backing, the size coat unites with the maker coat and ensures the fi-

nal anchoring of the grain and the proper total adhesive level. VSM adds fillers to its products which have a cooling effect and improve the efficiency of the abrasive.

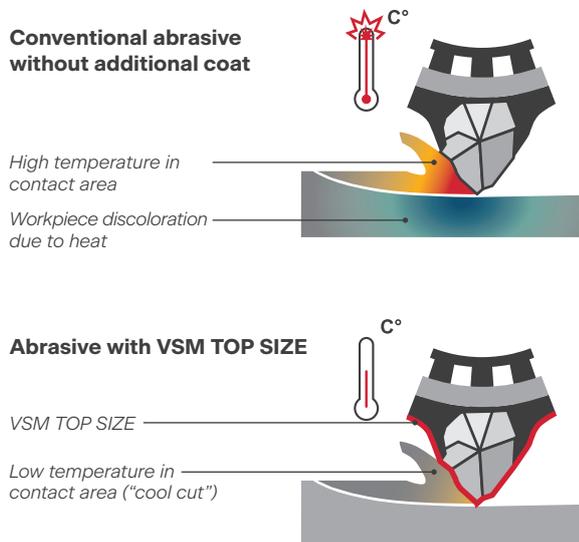
5 Additional grinding active layer

TOP SIZE

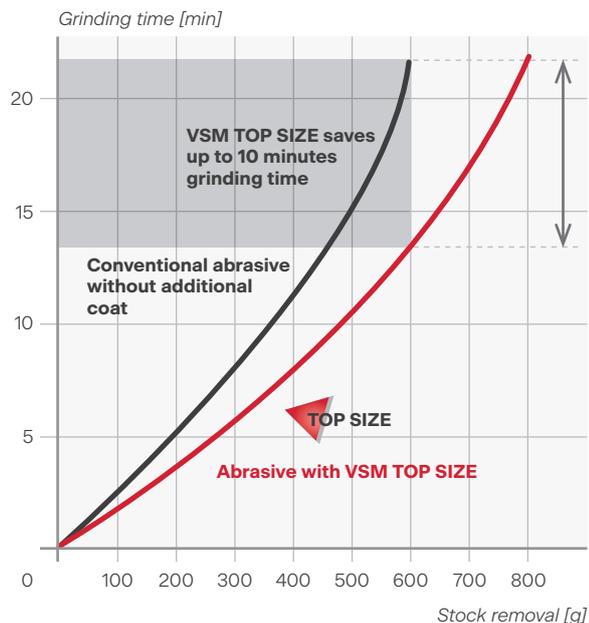
The **VSM TOP SIZE** coat is recommended for dry grinding of heat-resistant stainless steels and non-ferrous metals. Thanks to the additional layer with its grinding-inducing additives, the cutting performance is improved whilst the temperature in the contact area is reduced. In addition, the service life of the abrasive is dramatically enhanced.

ALU-X

VSM ACTIROX with **ALU-X** is the specialist for difficult tasks such as removing mill scale. **VSM CERAMICS** with **ALU-X** is the all-round talent in aluminium grinding and can be used in a wide range of applications for grinding non-ferrous metals.



VSM specifications cloth (Stainless steel grinding)





VSM belts

Possible applications

- > Slack of belt grinding, grinding with contact shoe or contact wheel
- > Dry or wet grinding
- > Defined surface finishes in coil and sheet metal grinding
- > Removal of sprues and runners
- > Deburring
- > Smoothing and levelling of welds, spot welding and braze points
- > Edge and flat surface grinding
- > Removal of surface imperfections

Your advantages

- > Customised dimensions
- > Different types of belt joints – tailored to the application in question
- > High tear resistance and edge rigidity
- > Stretch-resistant



Minimum order quantities

for manufactured products (F-Types)

Shapes/Dimensions	Cloth	Paper	Non-woven
Conical sleeves	500 pcs	–	–
File belts Width up to 20 mm Length up to 760 mm	300 pcs	–	50 pcs
Rings Width up to 60 mm Length up to 377 mm	300 pcs	–	50 pcs
Short belts Length 1,000 mm or less	50 pcs	50 pcs	30 pcs
Narrow belts Width up to 300 mm Length 1,001 to 4,500 mm	20 pcs	30 pcs	5 pcs
Master belts Width 301 to 499 mm Length 1,200 to 4,500 mm	20 pcs	30 pcs	5 pcs
Long belts Width up to 499 mm Length 4,501 mm +	20 pcs	20 pcs	5 pcs
Wide belts Width 500 mm +*) Length 1,200 to 4,500 mm	5 pcs	10 pcs	2 pcs

*) Cloth up to 1,450 mm width, paper up to 1,420 mm width, non-woven up to 1,380 mm width

Dimensional tolerances

Belt width	Width tolerance
up to 20 mm	± 0,5 mm
21 mm to 50 mm	± 1 mm
51 mm to 1,000 mm	± 2 mm
1,001 mm +	± 3 mm

Belt length	Length tolerance
30 mm to 236 mm	0 mm to -1 mm
237 mm to 377 mm	0 mm to -2 mm
378 mm to 720 mm	± 2 mm
721 mm to 1,000 mm	± 3 mm
1,001 mm to 4,000 mm	± 5 mm
4,000 mm +	± 10 mm

Belt joints

VSM provides belts with a range of different types of belt joints to suit various machines and applications. Below you will find the most

common types listed. If you require more specific information about any of the joints listed below, please do not hesitate to contact us.

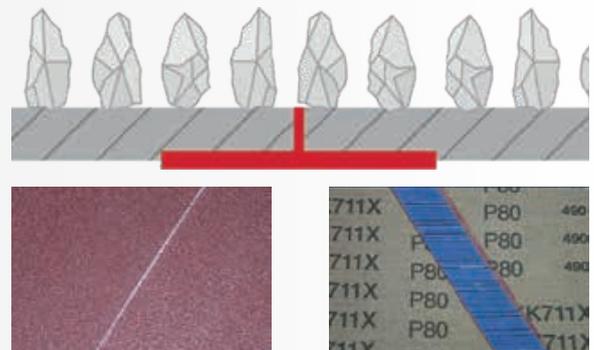
Belt joints with tape on the reverse

E07 for cloth backings

Our standard belt joint for abrasive belts with cloth backings

Straight cut. Ends are joined by means of a strip of tape on the reverse side of the belt.

Stable and sturdy standard type of joint suitable for all geometries. The E07 joint is mainly used for cloth belts and lends itself to almost any application.

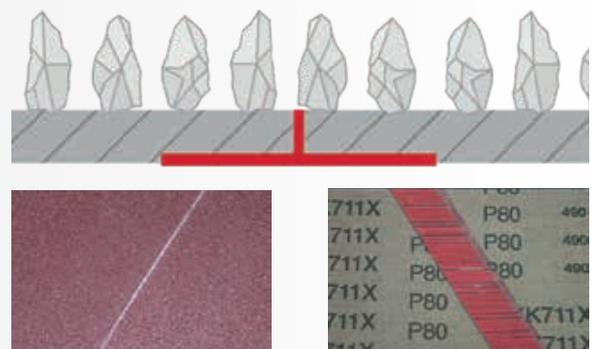


E08 for paper and cloth backings

Our thin standard belt joint for abrasive belts with paper and cloth backings

Straight cut. Ends are joined by means of a strip of tape on the reverse side of the belt.

Belt joint for a gentle removal of material in the contact zone, ensures a quiet grinding operation. The right joint for wide and narrow belts on a cloth backing.



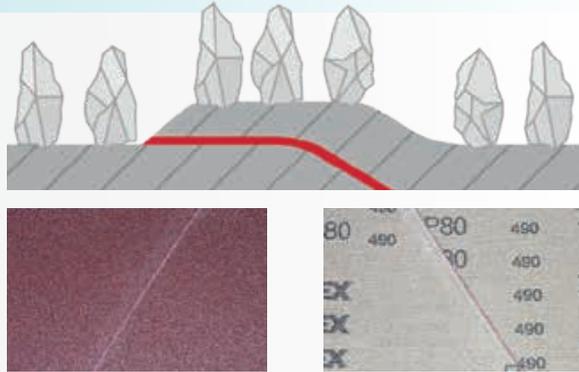
Belt joint overlaps

E13 for cloth backings

Straight cut. Both ends overlap.

This joint is mainly used for wide and narrow belts for flat grinding operations.

Our belt joint for abrasive belts with cloth backings

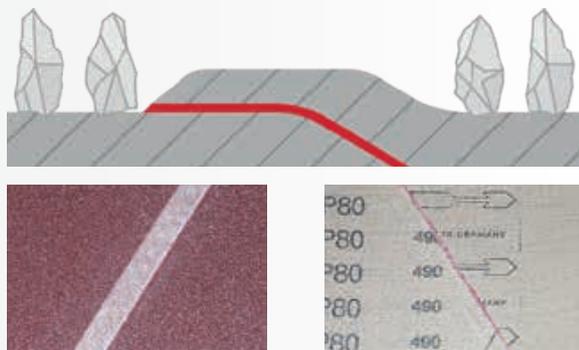


E14 for cloth backings

Straight cut. Both ends overlap, top-skived.

Suitable for flat grinding applications involving the use of a contact shoe. E14 is primarily used for woodworking.

Our belt joint for abrasive belts with cloth backings

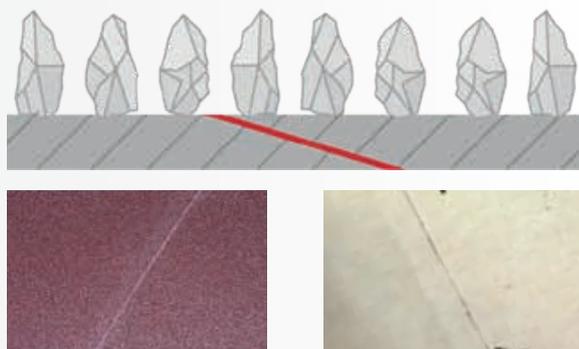


E13 for paper backings

Straight cut. Both ends overlap.

This joint is mainly used for wide and narrow belts on paper backings for flat grinding operations.

Our belt joint for abrasive belts with paper backings



Other belt joints are available on request.

The right belt for your machine

Brand	Type	W×L in mm
AEG	HBS1000E	12 × 305
	BBSE1100	100 × 560
Atlas Copco	G2403 Pro Bandschleifer	10 × 330
	G2404 Pro Bandschleifer	20 × 250
ATA	RAL20L	12 × 305
	BL16L	20 × 480
Black & Decker	KA 88	75 × 533
	KA 900 E	13 × 457
	KA 86	75 × 457
Bosch	GVS 350 AE	40 × 303
	PVS 300 AE	40 × 303
	PBS 60	60 × 400
	PBS 60 E	60 × 400
	GBS 75 AE	75 × 533
	PBS 75 A	75 × 533
	PBS 75 AE	75 × 533
	PBS 75 E	75 × 533
	PBS 7 A	75 × 457
	PBS 7 AE	75 × 533
	GBS 100 A	100 × 620
De Walt	DW650	100 × 560
	DW650E	100 × 560
	DW432	75 × 533
	DW433	75 × 533
Dynabrade	40352	13 × 457
	40353	13 × 457
	40320	13 × 457
	40321	13 × 457
	40324	13 × 457
	40335	13 × 457
	40381	13 × 457
	15300	13 × 457
	15400	13 × 457
	40326	6 × 520 12 × 520 16 × 520
	40330, 40503, 40615	6 × 520 12 × 520 16 × 520
	15360, 15420, 14000	6 × 610 12 × 610
	15401	12 × 520 16 × 560 20 × 520
	15003	6 × 305 9 × 305 12 × 305

Brand	Type	W×L in mm
Fein / Grit	GX 75 / 75 2H	75 × 2000
	GXC	75 × 2000
	GI 75 (2H) / GI 150 (2H)	75 × 2000
	GIS 75	75 × 2000
	GIC, GIM	75 × 2000 150 × 2000
	GI 100	100 × 1000
	GXR	75 × 2250
	GIL, GIS 150	150 × 2000
	BF10-280E	6 × 520 12 × 520 16 × 520 20 × 520
	RS10-70E	12 × 520 16 × 520 20 × 520 30 × 533
Festool	BS75	75 × 533
	BS 105	100 × 620
Flott	BSM 75 / 75A	75 × 2000
	BSM 150 / 150A	150 × 2000
	PBS 75 A	75 × 1000
Güde	BTS 4000 ECO	100 × 920
	BTS 4000	100 × 920
Hitachi	SB10V2	100 × 610
Makita	9910	75 × 457
	9911	75 × 457
	9902	75 × 533
	9903	75 × 533
	9920	75 × 610
	9404J	100 × 610
	9403	100 × 610
	9031	30 × 533
9032	30 × 533	
Metabo	BF 18 LTX 90	13 × 457
	RB 18 LTX 90	30 × 533
	BFE 9-90	13 × 457
	BAE 75	75 × 533
Milwaukee	BS 100 LE	100 × 620
	HBSE 75 S	75 × 533
PFERD	PBS 3 / 200 DH 99, PWS 3 / 200 DH + BSVH 25,5	6 × 305 9 × 305 12 × 305
	PBSA 5 / 160 HV 925	6 × 520 12 × 520 16 × 520 20 × 520 6 × 610 12 × 610

Brand	Type	W×L in mm		
PFERD (Cont.)	PBS 5 / 155 HV	6 × 610 10 × 480 16 × 480 20 × 480 25 × 480		
		UBS 5 / 100 SI 925	6 × 520 12 × 520 16 × 520 20 × 520 6 × 610 12 × 610	
			UBS 5 / 70 SI-R	30 × 533
			UBS 11 / 90 SI-R	30 × 610
			BSG 10 / 35E	35 × 450
	BSG 10 / 50E	50 × 450		
	BSG 3 / 10 / 40	40 × 505		
	WT 7 E M14 + BSVH 41, WZ 7 B + BSVH 36, WZ 10 B + BSVH 36	6 × 520 12 × 520 16 × 520 20 × 520 6 × 610 12 × 610		
		WZ 4 A + BSVH 24	6 × 305 9 × 305 12 × 305	
		Proxxon	BS / E	10 × 330
		Rexon	BD480A	100 × 920
BD460M	100 × 920			
Rodac	RC 8430	100 × 330		
	RC 8440	20 / 520		
Ryobi	EBS800V	75 × 533		
	EBS1310VFHG	100 × 610		
SCANTOOL	SC 75	75 × 2000		
	SC 150	150 × 2000		
Scheppach	ksm 2500	150 × 2500		
	ksm 2000	150 × 2000		
	bts 800	100 × 920		
SKIL	1215AA	75 × 457		
	1210AA	75 × 457		
Suhner	UBK 6-R	35+50 × 450		
	UTG 9-R	30 × 610		
	UTC 7-R	30 × 533		
	LBH 7 D 35	35 × 450		
	LBH 7 D 50	50 × 450		
	UBC 10-R, LBC 16 H, WB 10, WB 7	6 × 520 12 × 520		
	LBB 20 DH, WB 4	6 × 305 12 × 305		
	FTM	30 × 610		
	BSG 10 / 50	50 × 450		
	BSG 10 / 35	35 × 450		
Triton	TA 1200BS	75 × 533		

No responsibility is taken for the correctness of this information.

Recommended products

Backstand



	Series	Grain technology	Unalloyed steel	Stainless steel	Non-ferrous metals	Pressure	Removal rate	Surface fineness	Grit sizes	Features
STOCK REMOVAL	AK890Y	ACTIROX				++	+++	-	36+	TOP SIZE
	XK870X	CERAMICS				+	++	-	24 – 120	TOP SIZE
	XK760X	CERAMICS				+	++	-	24 – 120	
	XK733X	CERAMICS				+	++	-	24 – 120	ALU-X
	XK885Y	CERAMICS Plus				+++	++	-	20 – 120	TOP SIZE
SURFACE	KK670J	XELERION				-	++	+++	P240 – P2500	
	KK772J	COMPACTGRAIN				-	+	++	P80 – P1200	
	KK532F	ALUMINIUM OXIDE				-	++	++	P80 – P240, P320, P400, P600	ALU-X
	KV710X	NON-WOVEN (AO)				-	+	++	100 – 400	

NEW

Flat grinding



	Series	Grain technology	Unalloyed steel	Stainless steel	Non-ferrous metals	Pressure	Removal rate	Surface fineness	Grit sizes	Features
STOCK REMOVAL	AK890Y	ACTIROX				++	+++	-	36+	TOP SIZE
	XK880Y	CERAMICS Plus				++	++	-	20 – 120	TOP SIZE
	XK785Y	CERAMICS Plus				+++	++	-	36 – 120	
	XK733X	CERAMICS				+	++	-	24 – 120	ALU-X
SURFACE	RK700X	ILUMERON				-	+	+++	P120 – P1200	
	KK791Y	COMPACTGRAIN Plus				-	+++	+	P80 – P800	
	KK712X	COMPACTGRAIN				-	++	++	P80 – P600	
	KP532E	ALUMINIUM OXIDE				-	++	++	P120 – P220	ALU-X
	KV710X	NON-WOVEN (AO)				-	+	++	100 – 400	

Centerless



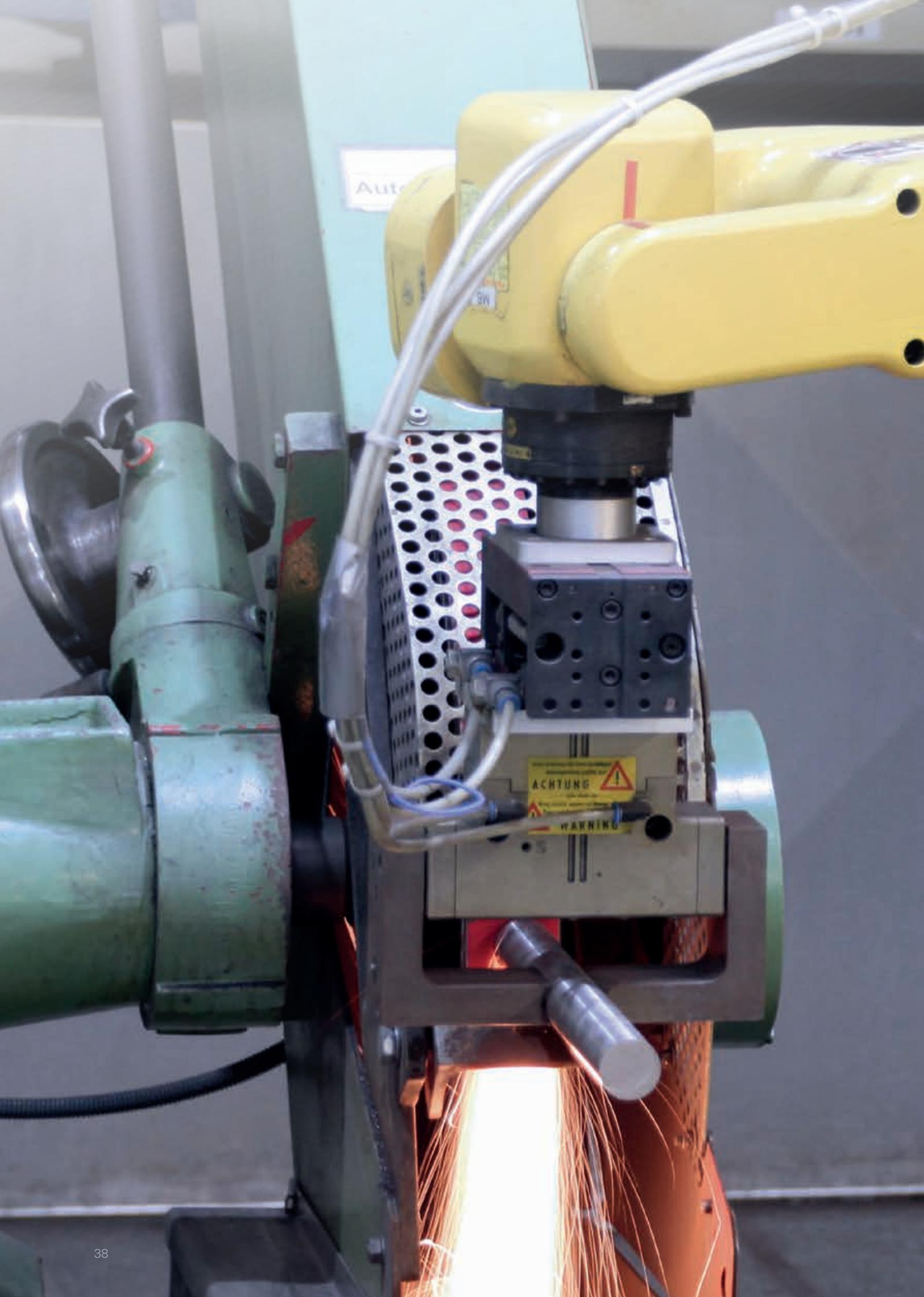
	Series	Grain technology	Unalloyed steel	Stainless steel	Non-ferrous metals	Pressure	Removal rate	Surface fineness	Grit sizes	Features
STOCK REMOVAL	XK785Y	CERAMICS Plus				+++	+++	-	36 – 120	
	XK885Y	CERAMICS Plus				+++	+++	-	20 – 120	TOP SIZE
	XK733X	CERAMICS				++	++	-	24 – 120	ALU-X
	XK760X	CERAMICS				++	++	-	24 – 120	
SURFACE	RK700X	ILUMERON				-	+	+++	P120 – P1200	
	KK790Y	COMPACTGRAIN Plus				-	+++	+	P60 – P600	
	KK718X	COMPACTGRAIN				-	++	++	P60 – P600	
	CK917C	CORK (SiC)				-	+	+++	P320 – P1200	
	KV710X	NON-WOVEN (AO)				-	+	++	100 – 400	

Errors and omissions excepted. For special requirements, please contact your VSM application engineer.

TOP SIZE Grinding-active additional layer, reduces the temperature in the grinding zone

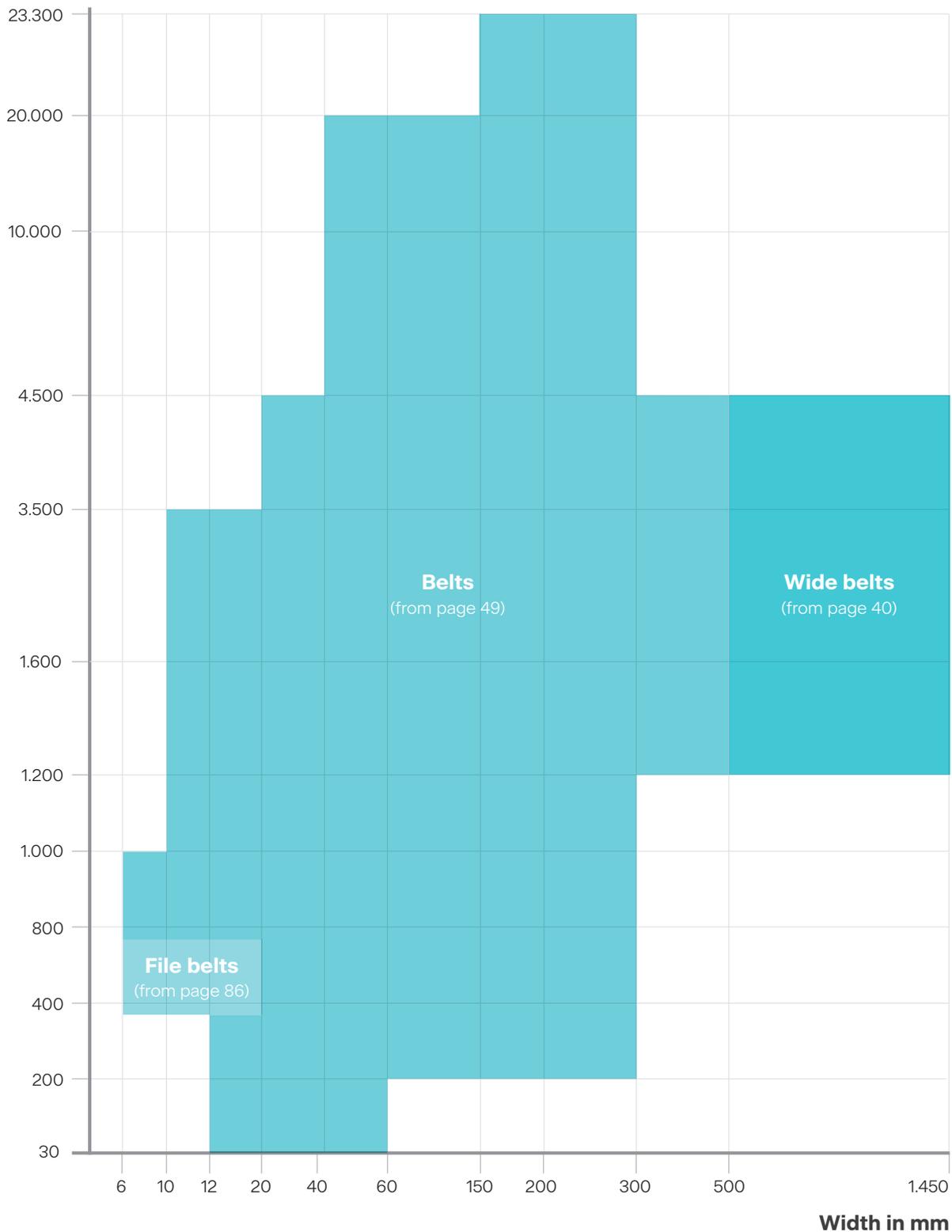
ALU-X Grinding-active additional layer, significantly reduces chip adhesion

also suitable for wet applications



Belt classifications

Lenght in mm



Other dimensions upon request.

CK721X



VSM SILICON CARBIDE



Bonding	Full-resin bonded
Colour	Black
Backing	X-Polyester (P24–P180) X-Cotton (P220–P600)
Flexibility	Sturdy

Materials



Features



Universally usable silicon carbide abrasive belt with high cutting capacity and wide range of grit sizes. Achieves a fine scratch pattern and ensures particularly brilliant gloss levels (high gloss unit). Since CK721X is oil- and water-resistant, the gloss level can be further increased by using grinding oils.

Grit range:



KK711X



VSM ALUMINIUM OXIDE

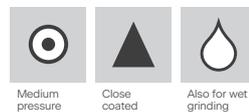


Bonding	Full-resin bonded
Colour	Red-brown
Backing	X-Polyester (P20–P80) X-Cotton (P100–P400)
Flexibility	Sturdy

Materials



Features



Universal, high-performance aluminium oxide abrasive with a sturdy polyester or cotton cloth backing. The wide range of grit sizes makes it an excellent all-rounder: It can be used for deburring work with the P24, for example after laser cutting or water jet cutting. It also withstands extreme stresses, caused by sharp edges or sharp burrs, for example, and can also be used for polishing work with the P400.

Grit range:



KK718X

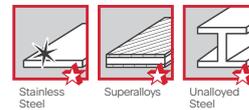


VSM COMPACTGRAIN (AO)



Bonding	Full-resin bonded
Colour	Red-brown
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



KK718X is ideal for centreless grinding of tubes and bars, or wire grinding on planetary grinding machines; with medium to high contact pressure. This long-term abrasive also excels when grinding flat steel in a throughfeed process. It creates a uniform scratch pattern and consistent surface roughness throughout its entire, very long service life.

Grit range:



RK700X



VSM ILUMERON

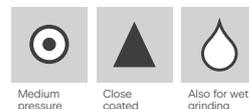


Bonding	Special bonded
Colour	Anthracite
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



ILUMERON

With RK700X, grinding and polishing can take place in a single processing step. This significantly increases productivity. The long-term abrasive also achieves a consistent surface quality within extremely tight tolerances. Thanks to the special manufacturing process, the abrasive grains are evenly distributed and wear down across the entire surface in a controlled manner. This prevents unwanted grinding grooves in the workpiece.

Grit range:



XK870X

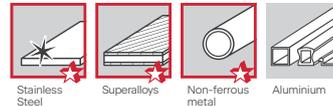


VSM CERAMICS



Bonding	Full-resin bonded
Colour	Red
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



Universal ceramic-grain workshop belt for a wide range of applications. Ideal for pre-sharpening knives. The additional TOP SIZE grinding-active layer also enables dry processing of stainless steel, since it significantly reduces the temperature in the grinding zone. A good alternative to XK760X when machining superalloys and stainless steels.

Grit range:



ZK713X



VSM ZIRCONIA ALUMINA

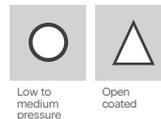


Bonding	Special bonded
Colour	Blue
Backing	X-Polyester (24–P150) X-Cotton (P180–P320)
Flexibility	Sturdy

Materials



Features



The ideal workshop grinding belt for daily use with different workpieces and materials. Versatile use on various machines for dry grinding, for example when deburring sheets. High stock removal rates even with low contact pressure.

Grit range:



CP501



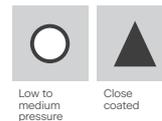
VSM SILICON CARBIDE

Bonding	Full-resin bonded
Colour	Black
Backing	E-Paper

Materials



Features



CP501 achieves surfaces with high gloss levels. The use of grinding oils can intensify the gloss and achieve an even finer scratch pattern. Thanks to the heavy paper backing, the silicon carbide abrasive belt demonstrates perfect flatness.

Fineness range:



XP780



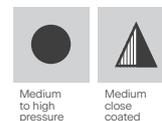
VSM CERAMICS Plus

Bonding	Full-resin bonded
Colour	Red-brown
Backing	F-Paper

Materials

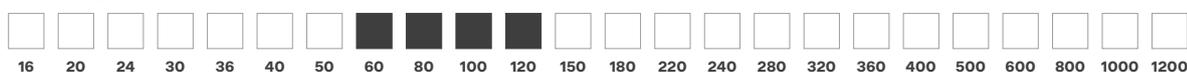


Features



XP780 combines the aggressiveness of the microcrystalline ceramic grain with a heavy, low-stretch paper backing. The optimised self-sharpening effect enables high cutting performance for rough work, such as the deburring of heavy plates, laser parts and punched parts. Suitable for long belt and wide belt applications with medium contact pressure.

Grit range:



P = Categorized according to the FEPA standard. Version 11/25. Subject to change. **Other grits / degrees of fineness upon request.**

KV706X



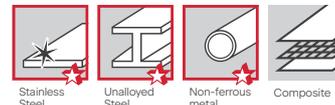
NEW

VSM NON-WOVEN (AO)

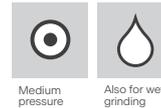


Bonding	Full-resin bonded
Colour	Coarse = brown (AO) Medium = red (AO) Very fine = blue (AO)
Backing	X-Polyester

Materials



Features



Sturdy yet flexible surface conditioning material with reinforced, low-stretch polyester backing. The non-woven abrasive is characterised by its good wear properties and low tendency to smear. Wide range of applications: From deburring work and levelling of imperfections through to final finishing of surfaces.

Fineness range:



KV707X



VSM NON-WOVEN (AO/SIC)

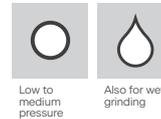


Bonding	Full-resin bonded
Colour	Coarse = brown (AO) Medium = red (AO) Very fine = blue (AO) Ultra fine = grey (SIC)
Backing	X-Polyester

Materials

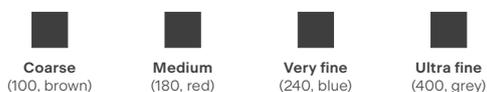


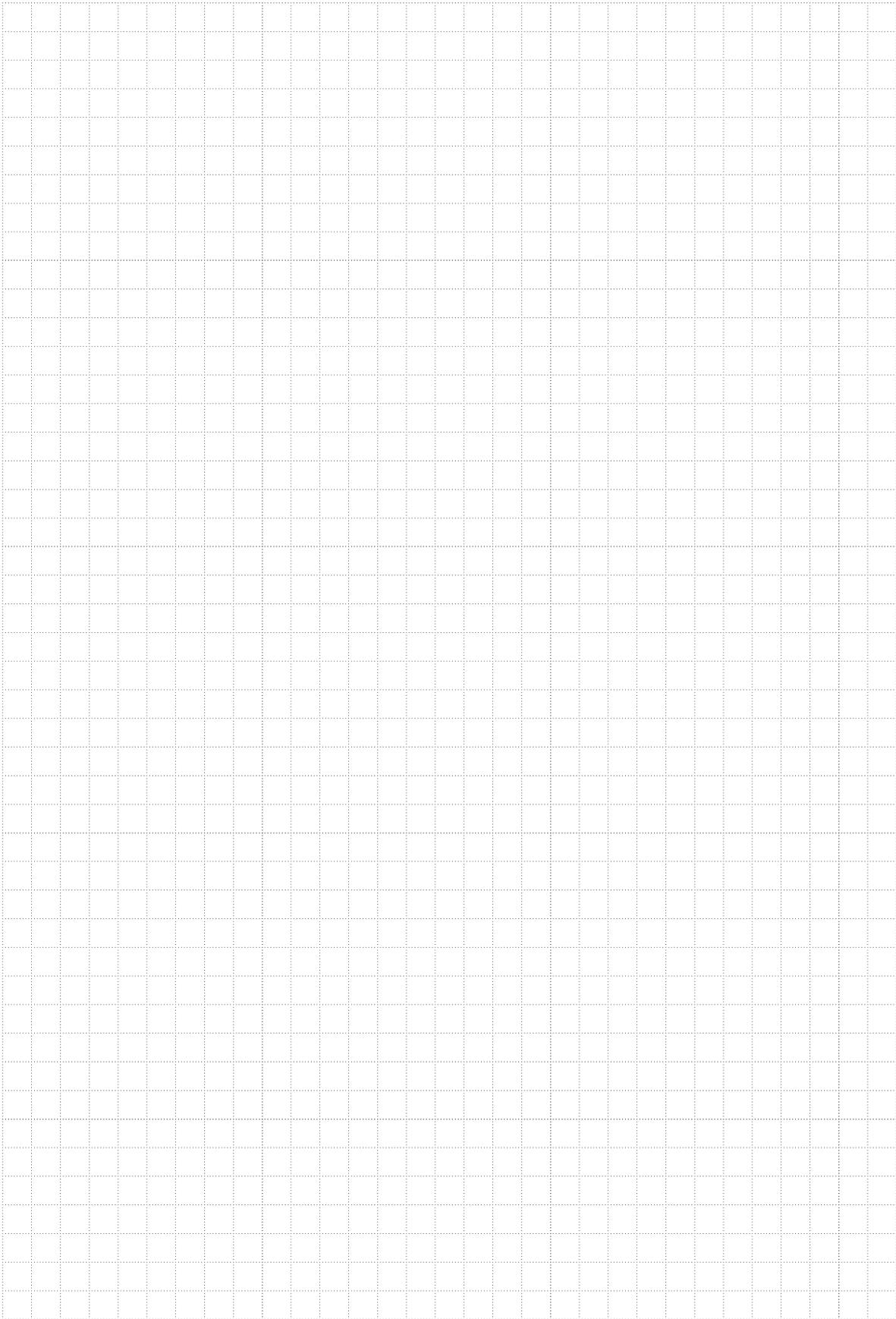
Features



Robust surface conditioning material with reinforced, low-stretch backing made of robust polyester. Wide range of applications: From deburring work to the final finishing of surfaces. Ideal for satin finishing sheets on wide belt machines or for use with cooling lubricants in centerless processes.

Fineness range:





KK670F

NEW

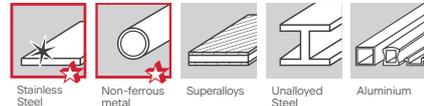


VSM XELERION

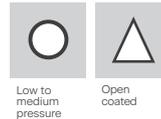


Bonding	Full-resin bonded
Colour	Brown
Backing	F-Cotton
Flexibility	Very flexible

Materials



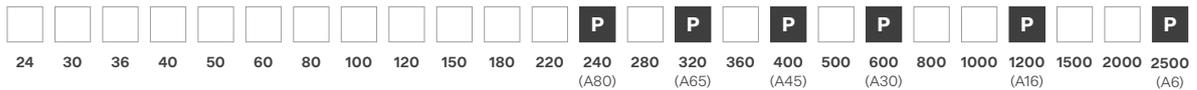
Features



XELERION

Particularly high flexibility, a flawless, uniform, and reproducible scratch pattern, and sustained high stock removal: This is what the XELERION KK670F series delivers. Due to the open structure and the very flexible F-backing, the KK670F adapts perfectly to any workpiece shape. This makes it particularly suitable for backstand grinding of small, contoured workpieces (e.g., surgical instruments, implants, or fittings).

Grit range:



KK670J

NEW

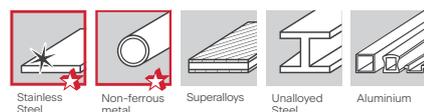


VSM XELERION

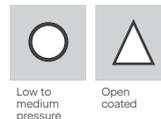


Bonding	Full-resin bonded
Colour	Brown
Backing	J-Cotton
Flexibility	Flexible

Materials



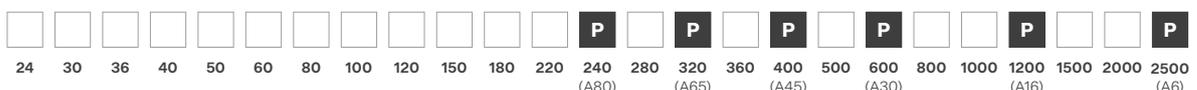
Features



XELERION

Sustained high stock removal and a flawless, uniform and reproducible scratch pattern: This is what the XELERION KK670J series delivers. Due to the high stock removal, coarsely roughed surfaces can be reliably ground out so that work steps can be skipped. This fine abrasive is used in industries such as plant and container construction as well as in the kitchen and automotive industries.

Grit range:



AK890Y



VSM ACTIROX



Bonding	Full-resin bonded
Colour	Petrol
Backing	Y-Polyester
Flexibility	Very sturdy

Materials



Features



ACTIROX

ACTIROX with geometrically shaped ceramic abrasive grain for maximum stock removal. An aggressive cut combined with low contact pressure results in less noise and vibration, and less strain for the machine and its operators. Faster grinding significantly reduces the machining time. The TOP SIZE coat results in a cool cut, which significantly reduces material waste and renders further reworking unnecessary.

Grit range:



CK721X



VSM SILICON CARBIDE

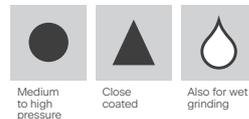


Bonding	Full-resin bonded
Colour	Black
Backing	X-Polyester (P24–P180) X-Cotton (P220–P600)
Flexibility	Sturdy

Materials



Features



Universally usable silicon carbide abrasive belt with high cutting capacity and wide range of grit sizes. Achieves a fine scratch pattern and ensures particularly brilliant gloss levels (high gloss unit). Since CK721X is oil- and water-resistant, the gloss level can be further increased by using grinding oils.

Grit range:



CK748X



VSM COMPACTGRAIN (SIC)



Bonding	Full-resin bonded
Colour	Red-brown
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



Especially suitable for applications with a small contact surface in the grinding zone. Ideal for cylindrical grinding operations and wire grinding with planetary grinding machines. Has a very long service life as a long-term abrasive with a continuous self-sharpening effect.

Grit range:



CK772T



VSM COMPACTGRAIN (SIC)

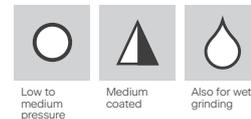


Bonding	Full-resin bonded
Colour	Grey
Backing	T-Polyester
Flexibility	Semi-sturdy

Materials



Features



CK772T creates fine surfaces; for example, when grinding welded tubes or when finishing knife blades. Thanks to the easily degrading reserve grains made of silicon carbide, the abrasive belt ensures a long service life and uniform surface roughness. Ideal for applications with soft contact elements or low contact pressure.

Grit range:



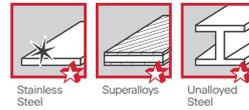
CK918X



VSM COMPACTGRAIN (SIC)

Bonding	Full-resin bonded
Colour	Black
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



Designed for surface finishing when grinding tubes and bars in a centreless process. CK918X is distinguished by a balanced combination of a long service life, uniform surface roughness, and high gloss levels. Thanks to the grain reserves, this long-term abrasive offers the benefits of reduced tool wear and fewer tool changes.

Grit range:



KK511F



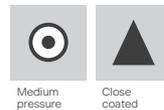
VSM ALUMINIUM OXIDE

Bonding	Full-resin bonded
Colour	Red-brown
Backing	F-Cotton
Flexibility	Very flexible

Materials



Features



Universally applicable aluminium oxide abrasive belt with excellent cutting capacity. Good supplement to KK511J in the fine grit range. Ideal for machining tight radii and complex contours or fittings thanks to the highly flexible and adaptable backing. Can be used in manual grinding on backstands, in slack belt grinding, and in robot applications.

Grit range:



KK511J

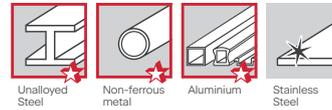


VSM ALUMINIUM OXIDE

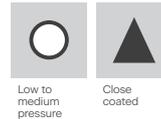


Bonding	Full-resin bonded
Colour	Red-brown
Backing	J-Cotton
Flexibility	Flexible

Materials



Features



Universally applicable abrasive belt with excellent cutting capacity. KK511J is a good alternative to KK511F when low contact pressure is required. Thanks to its adaptability, it is ideal for processing contours and for edge grinding.

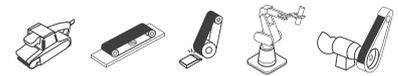
Grit range:



KK711X

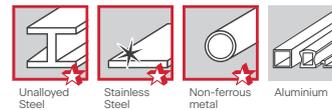


VSM ALUMINIUM OXIDE

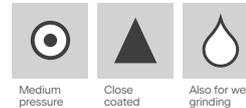


Bonding	Full-resin bonded
Colour	Red-brown
Backing	X-Polyester (P20–P80) X-Cotton (P100–P400)
Flexibility	Sturdy

Materials



Features



Universal, high-performance aluminium oxide abrasive with a sturdy polyester or cotton cloth backing. The wide range of grit sizes makes it an excellent all-rounder: It can be used for deburring work with the P24, for example after laser cutting or water jet cutting. It also withstands extreme stresses, caused by sharp edges or sharp burrs, for example, and can also be used for polishing work with the P400.

Grit range:



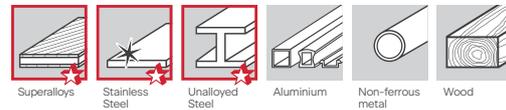
KK711Y

VSM ALUMINIUM OXIDE

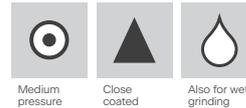


Bonding	Full-resin bonded
Colour	Red-brown
Backing	Y-Polyester (P36–P180) Y-Cotton (P220–P500)
Flexibility	Very sturdy

Materials



Features



Aluminium oxide abrasive belt for all types of application. Thanks to the very robust polyester backing, KK711Y offers high edge stability when applying low to medium contact pressure. Ideal complement to KK711X, if an even more robust backing is needed.

Grit range:



KK712X

VSM COMPACTGRAIN (AO)



Bonding	Full-resin bonded
Colour	Brown
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



KK712X is particularly suitable for flat grinding applications and for grinding operations with medium contact pressure. This long-term abrasive has the advantages of short initial grinding times, continuous self-sharpening, reduced tool wear, and thus fewer tool changes.

Grit range:



KK718X



VSM COMPACTGRAIN (AO)



Bonding	Full-resin bonded
Colour	Red-brown
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



KK718X is ideal for centreless grinding of tubes and bars, or wire grinding on planetary grinding machines; with medium to high contact pressure. This long-term abrasive also excels when grinding flat steel in a throughfeed process. It creates a uniform scratch pattern and consistent surface roughness throughout its entire, very long service life.

Grit range:



KK772J



VSM COMPACTGRAIN (AO)

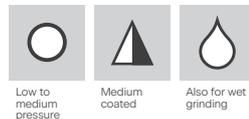


Bonding	Full-resin bonded
Colour	Grey
Backing	J-Polyester
Flexibility	Flexible

Materials



Features



Long-term abrasive for applications with low contact pressure or in combination with soft contact elements. The flexible backing enables the abrasive belt to mould well around contoured workpieces, such as punched parts. KK772J also achieves very good results in flat grinding when working with stainless steel and unalloyed steel.

Grit range:



KK790Y



VSM COMPACTGRAIN Plus



Bonding	Full-resin bonded
Colour	Red-brown
Backing	Y-Polyester
Flexibility	Very sturdy

Materials



Features



Latest generation of long-term abrasives with particularly large reserves of grain and with continuous self-sharpening effect. Developed for grinding tubes and bars in centreless processes and for wire grinding on planetary grinding machines – especially with high contact pressure. KK790Y allows an increase in feed speed in these applications.

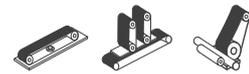
Grit range:



KK791Y



VSM COMPACTGRAIN Plus

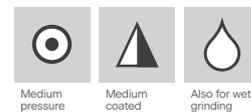


Bonding	Full-resin bonded
Colour	Red-brown
Backing	Y-Polyester
Flexibility	Very sturdy

Materials



Features



Latest generation of long-term abrasives, developed for applications with medium contact pressure. Ideal for flat grinding operations or pendulum grinding of welded tubes. Particularly when machining softer grade steels, a more even scratch pattern and a more uniform surface roughness are achieved.

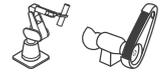
Grit range:



KK841F

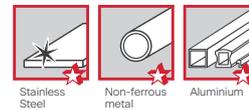


VSM ALUMINIUM OXIDE

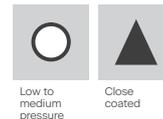


Bonding	Full-resin bonded
Colour	Red-brown
Backing	F-Cotton
Flexibility	Very flexible

Materials



Features



Aluminium oxide abrasive belt with TOP SIZE additional grinding-active layer. This reduces the temperature in the grinding zone and prevents discolouration of heat-sensitive materials such as stainless steel. The very flexible backing is ideal for manually machining highly contoured workpieces on backstands, when finishing knife blades, for example.

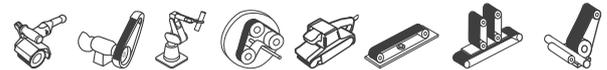
Grit range:



RK700X



VSM ILUMERON

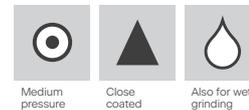


Bonding	Special bonded
Colour	Anthracite
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



ILUMERON

With RK700X, grinding and polishing can take place in a single processing step. This significantly increases productivity. The long-term abrasive also achieves a consistent surface quality within extremely tight tolerances. Thanks to the special manufacturing process, the abrasive grains are evenly distributed and wear down across the entire surface in a controlled manner. This prevents unwanted grinding grooves in the workpiece.

Grit range:



XK733X **ALU-X**

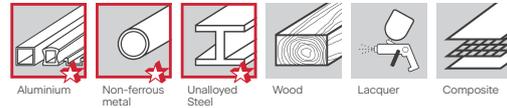


VSM CERAMICS

Bonding	Full-resin bonded
Colour	White
Backing	X-Polyester
Flexibility	Sturdy



Materials



Features



XK733X is a leader when it comes to machining aluminium and non-ferrous metals. The additional ALU-X layer and the semi-open coating result in reduced chip adhesion and optimised chip clearance. In addition, grease-free and oil-free grinding ensures a clean workplace.

Grit range:



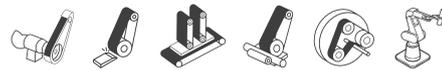
XK760F

NEW



VSM CERAMICS

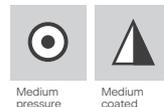
Bonding	Full-resin bonded
Colour	Red-violet
Backing	F-Cotton



Materials

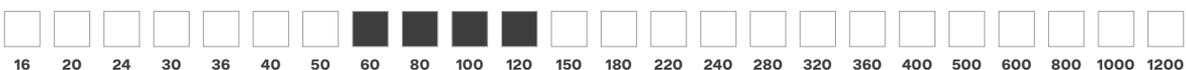


Features



XK760F grinds very aggressively even with low contact pressure. The very flexible backing adapts well to tight radii and fine contours. Also ideal for robot applications or hand grinding operations on the backstand, such as pre-sharpening knives.

Grit range:



XK760X



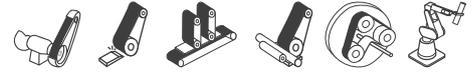
VSM CERAMICS

Bonding	Full-resin bonded
Colour	Red-violet
Backing	X-Polyester
Flexibility	Sturdy

Materials

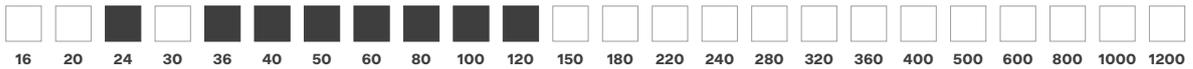


Features



Self-sharpening ceramic-grain abrasive belt as an all-rounder for processing unalloyed steel, for example when descaling slabs or for flat grinding of steel plates. Also suitable for wet grinding, since it is oil- and water-resistant.

Grit range:



XK785Y



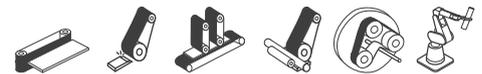
VSM CERAMICS Plus

Bonding	Full-resin bonded
Colour	Red-violett
Backing	Y-Polyester
Flexibility	Very sturdy

Materials



Features



Thanks to its very robust backing, this product is particularly well suited for high contact pressures and demanding grinding tasks such as bevelling. Ideal for grinding unalloyed steel. The microcrystalline ceramic grain with optimised self-sharpening effect ensures maximum stock removal performance. Ideal alternative to XK885Y if the TOP SIZE additional layer is not required.

Grit range:



XK850X

VSM CERAMICS



Bonding	Full-resin bonded
Colour	Red
Backing	X-Polyester
Flexibility	Sturdy

Materials

 Aluminium	 Stainless Steel	 Unalloyed Steel	 Non-ferrous metal
--	---	--	--

Features

 Medium pressure	 Medium close coated	 Also for wet grinding
--	---	--

Self-sharpening ceramic grain abrasive belt with high initial aggressiveness and a cool cut thanks to the additional TOP SIZE grinding-active layer. More densely coated compared to XK870X, for high contact pressure applications and for machining aluminium or steel. Ideal for rough applications such as bevelling.

Grit range:



XK870F

VSM CERAMICS



Bonding	Full-resin bonded
Colour	Red
Backing	F-Cotton
Flexibility	Very flexible

Materials

 Stainless Steel	 Superalloys	 Non-ferrous metal	 Aluminium
--	---	--	--

Features

 Medium pressure	 Medium coated
--	---

XK870F grinds very aggressively even with low contact pressure. The very flexible backing adapts well to tight radii and fine contours. The grinding belt is particularly suitable for workpieces with very hard surfaces such as non-ferrous metals, stainless steels or superalloys. Also ideal for robot applications or hand grinding operations on the backstand, such as pre-sharpening knives.

Grit range:



XK870J



VSM CERAMICS



Bonding	Full-resin bonded
Colour	Red
Backing	J-Polyester
Flexibility	Flexible

Materials



Features



Self-sharpening ceramic-grain abrasive belt with smooth backing. Impressive results when working on very hard surfaces; with an aggressive cut and a very long service life. Slightly less flexible than XK870F, but a very good alternative for wet grinding applications. XK870J is very popular for pre-sharpening knives.

Grit range:



XK870X

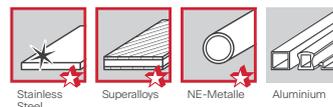


VSM CERAMICS

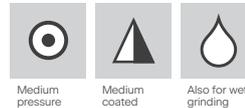


Bonding	Full-resin bonded
Colour	Red
Backing	X-Polyester
Flexibility	Sturdy

Materials

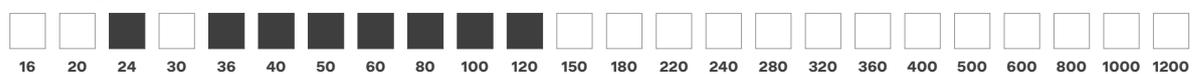


Features



Universal ceramic-grain workshop belt for a wide range of applications. Ideal for pre-sharpening knives. The additional TOP SIZE grinding-active layer also enables dry processing of stainless steel, since it significantly reduces the temperature in the grinding zone. A good alternative to XK760X when machining superalloys and stainless steels.

Grit range:



XK880Y



VSM CERAMICS Plus

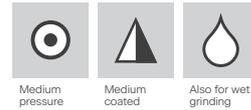


Bonding	Full-resin bonded
Colour	Red-brown
Backing	Y-Polyester
Flexibility	Very sturdy

Materials



Features



Microcrystalline ceramic-grain abrasive with optimised self-sharpening effect for excellent stock removal rates when grinding slabs, coils and sheets in wide belt and long belt grinding applications. Ideal for medium pressure bevelling. With a grit size of 20 to 120, it is ideal for removing scale from workpieces before finishing with a VSM surface conditioning material (e.g. KV707X).

Grit range:



XK885Y



VSM CERAMICS Plus



Bonding	Full-resin bonded
Colour	Red-brown
Backing	Y-Polyester
Flexibility	Very sturdy

Materials



Features



Developed for applications with medium to high contact pressure, such as cylindrical grinding of piston rods, cylinders and rollers. Thanks to the optimised self-sharpening effect of the microcrystalline ceramic grain, it is also very well suited for reclamation grinding of slabs and the removal of scale layers in flat grinding.

Grit range:



ZK713X

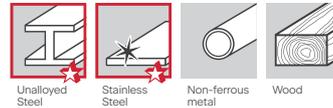


VSM ZIRCONIA ALUMINA

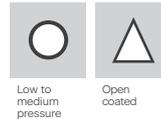


Bonding	Full-resin bonded
Colour	Blue
Backing	X-Polyester (24–P150) X-Cotton (P180–P320)
Flexibility	Sturdy

Materials



Features



The ideal workshop grinding belt for daily use with different workpieces and materials. Versatile use on various machines for dry grinding, for example when deburring sheets. High stock removal rates even with low contact pressure.

Grit range:



ZK744X



VSM ZIRCONIA ALUMINA

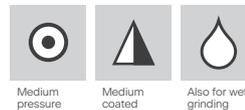


Bonding	Full-resin bonded
Colour	Blue
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



Ideal for rough grinding tasks such as bevelling. Thanks to the additional TOP SIZE grinding-active layer, it also prevents discolouration of the workpiece when dry grinding stainless steel. It can also be used in wet grinding.

Grit range:



KP709



VSM ALUMINIUM OXIDE

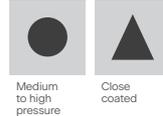


Bonding	Full-resin bonded
Colour	Red-brown
Backing	F-Paper

Materials



Features



KP709 is ideal for long belt applications with high contact pressure in the fine grit range up to P320. The backing, made of heavy F-paper, is low-stretch and achieves excellent flatness.

Grit range:



XP780



VSM CERAMICS Plus

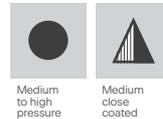


Bonding	Full-resin bonded
Colour	Red-brown
Backing	F-Paper

Materials

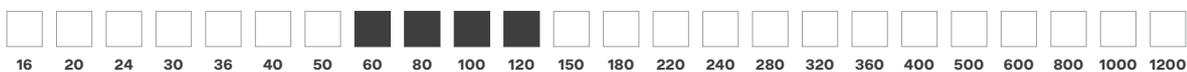


Features



XP780 combines the aggressiveness of the microcrystalline ceramic grain with a heavy, low-stretch paper backing. The optimised self-sharpening effect enables high cutting performance for rough work, such as the deburring of heavy plates, laser parts and punched parts. Suitable for long belt and wide belt applications with medium contact pressure.

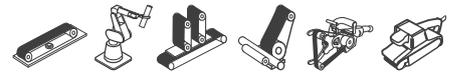
Grit range:



KV707T



VSM NON-WOVEN (AO)



Bonding Full-resin bonded

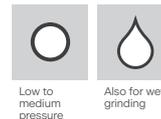
Colour Coarse = brown
Medium = red
Very fine = blue

Backing T-Polyester

Materials

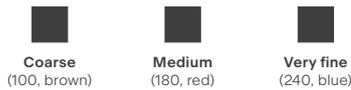


Features



Surface conditioning material for deburring, removing rust, cleaning, and removing grinding grooves and old paint. The semi-robust backing ensures good adaptation to the shape of the workpiece and allows the use of cooling lubricants. Also ideal for the final finishing of surfaces.

Fineness range:



KV707X



VSM NON-WOVEN (AO/SIC)



Bonding Full-resin bonded

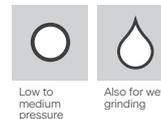
Colour Coarse = brown (AO)
Medium = red (AO)
Very fine = blue (AO)
Ultra fine = grey (SIC)

Backing X-Polyester

Materials



Features



Robust surface conditioning material with reinforced, low-stretch backing made of robust polyester. Wide range of applications: From deburring work to the final finishing of surfaces. Ideal for satin finishing sheets on wide belt machines or for use with cooling lubricants in centerless processes.

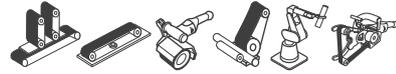
Fineness range:



KV710X



VSM NON-WOVEN (AO/SIC)



Bonding	Full-resin bonded
Colour	Coarse = brown (AO) Medium = red (AO) Very fine = blue (AO) Ultra fine = grey (SIC)
Backing	X-Polyester

Materials



Features



Surface conditioning material with optimised, open fibre structure, without any inclusions or islands of resin. This non-woven abrasive has significantly reduced clogging; also when grinding non-ferrous metals. KV710X ensures a consistent scratch pattern throughout its entire, long service life. The backing is soft and flexible enough to adapt to the contours of the workpiece.

Fineness range:



KK670J

NEW

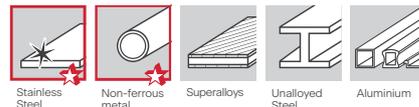


VSM XELERION

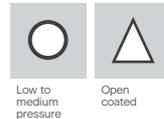


Bonding	Full-resin bonded
Colour	Brown
Backing	J-Cotton
Flexibility	Flexible

Materials



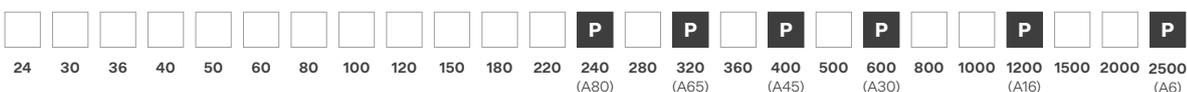
Features



XELERION

Sustained high stock removal and a flawless, uniform and reproducible scratch pattern: This is what the XELERION KK670J series delivers. Due to the high stock removal, coarsely roughed surfaces can be reliably ground out so that work steps can be skipped. This fine abrasive is used in industries such as plant and container construction as well as in the kitchen and automotive industries.

Grit range:



P = Categorized according to the FEPA standard. Version 11/25. Subject to change. **Other grits / degrees of fineness upon request.**

KK711T



VSM ALUMINIUM OXIDE

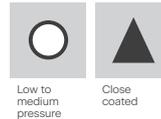


Bonding	Full-resin bonded
Colour	Red-brown
Backing	T-Cotton
Flexibility	Semi-sturdy

Materials



Features



Universally applicable aluminium oxide abrasive belt with a semi-robust cotton backing. Ideal for levelling welds in chemical or food tanks. Because it adapts well to the workpiece, it also enables optimal results at low to medium contact pressures.

Grit range:



KK711X



VSM ALUMINIUM OXIDE

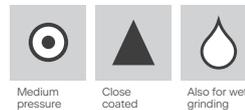


Bonding	Full-resin bonded
Colour	Red-brown
Backing	X-Polyester (20-80) X-Cotton (100-400)
Flexibility	Sturdy

Materials



Features



Universal, high-performance aluminium oxide abrasive with a sturdy polyester or cotton cloth backing. The wide range of grit sizes makes it an excellent all-rounder: It can be used for deburring work with the P24, for example after laser cutting or water jet cutting. It also withstands extreme stresses, caused by sharp edges or sharp burrs, for example, and can also be used for polishing work with the P400.

Grit range:



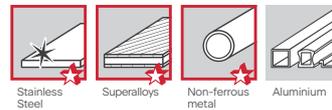
XK870T

VSM CERAMICS

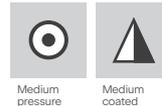


Bonding	Full-resin bonded
Colour	Red
Backing	T-Cotton
Flexibility	Semi-sturdy

Materials



Features



XK870T is especially suitable for grinding turbine blades, medical instruments and implants. The self-sharpening ceramic-grain grinding belt with additional grinding-active TOP SIZE layer reduces the temperature in the grinding zone and prevents discolouration of the workpiece.

Grit range:



ZK713T

VSM ZIRCONIA ALUMINA

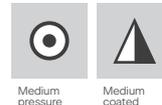


Bonding	Full-resin bonded
Colour	Blue
Backing	T-Cotton
Flexibility	Semi-sturdy

Materials



Features



Universally applicable, semi-flexible zirconia alumina abrasive. Achieves aggressive grinding on tough material surfaces, even with only moderate contact pressure. In addition to XK870T, it is also suitable for machining unalloyed steels.

Grit range:



KV707T



VSM NON-WOVEN (AO)

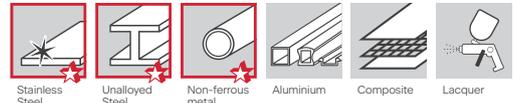


Bonding Full-resin bonded

Colour Coarse = Brown
Medium = Red
Very fine = Blue

Backing T-Polyester

Materials



Features



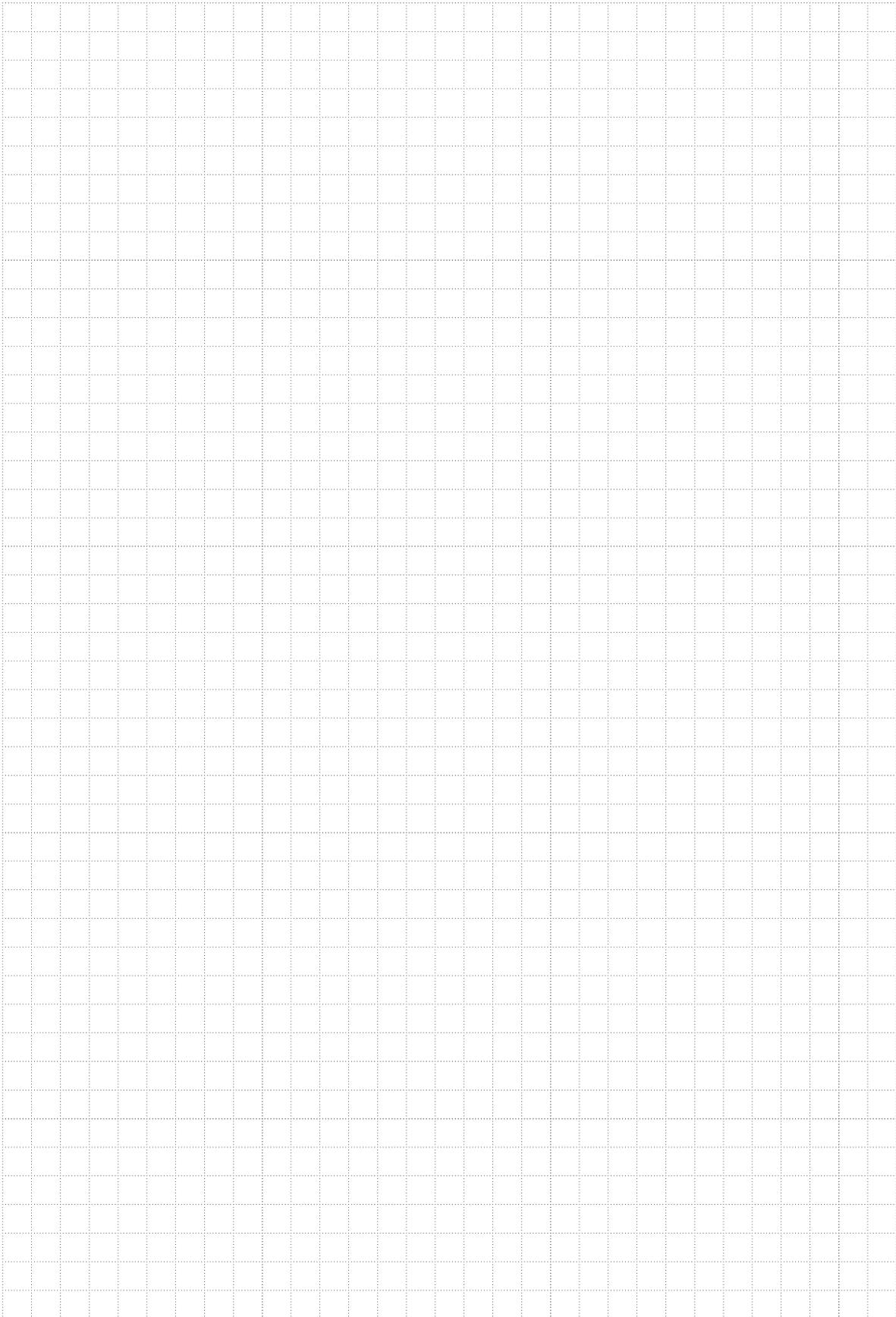
Surface conditioning material for deburring, removing rust, cleaning, and removing grinding grooves and old paint. The semi-robust backing ensures good adaptation to the shape of the workpiece and allows the use of cooling lubricants. Also ideal for the final finishing of surfaces.

Fineness range:

Coarse
(100, brown)

Medium
(180, red)

Very fine
(240, blue)





VSM discs

Possible applications

- > Power tools
- > Deburring machines
- > Weld seam preparation and rework
- > Removal of gates and feeders
- > Rust removal
- > Repair grinding
- > Cleaning and deburring
- > Roughing and finish grinding
- > Machining of paints and varnishes

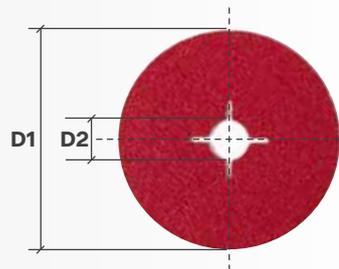
Your advantages

- > VSM fibre discs: Dimensionally stable vulcanised fibre backing, which lives up to the highest safety demands, certified by oSa®
- > Broad range of applications thanks to a selection of different dimensions and back-up pads with different degrees of hardness
- > Paper and cloth discs: available with velour backing
- > Different dimensions and hole patterns for almost any machine
- > Abrasives can quickly and easily be changed thanks to velour-backed discs and velour-backed plates.



Types of fibre discs

VSM fibre discs are suitable for a large range of applications. This is why they are available in a variety of different dimensions and shapes. In addition to slotted discs with a cross-shaped centre slot other shapes such as discs with a circular opening in the middle are included in our offering.



D1	D2
100 mm	16 mm
115 mm	22 mm
125 mm	22 mm
150 mm	22 mm
180 mm	22 mm
235 mm	22 mm

Shapes of fibre discs



	Non-slotted	S0	S01 (only ø 180 mm and 235 mm)	S05 (only ø 180 mm)
	Cross-shaped centre slot	S1	S11 (only ø 180 mm and 235 mm)	S15 (only ø 180 mm)
	Eight slot opening	S8		
	X-Lock	SX (only ø 125 mm)		
	Other special shapes (such as rosettes, polygon shapes) are available upon request			

GENERAL WORKING AND SAFETY INSTRUCTIONS FOR THE USE OF FIBRE DISCS

The safety instructions for the use of coated abrasives according to DIN EN 13743 must be complied with. Among other things, this means that the following applies:

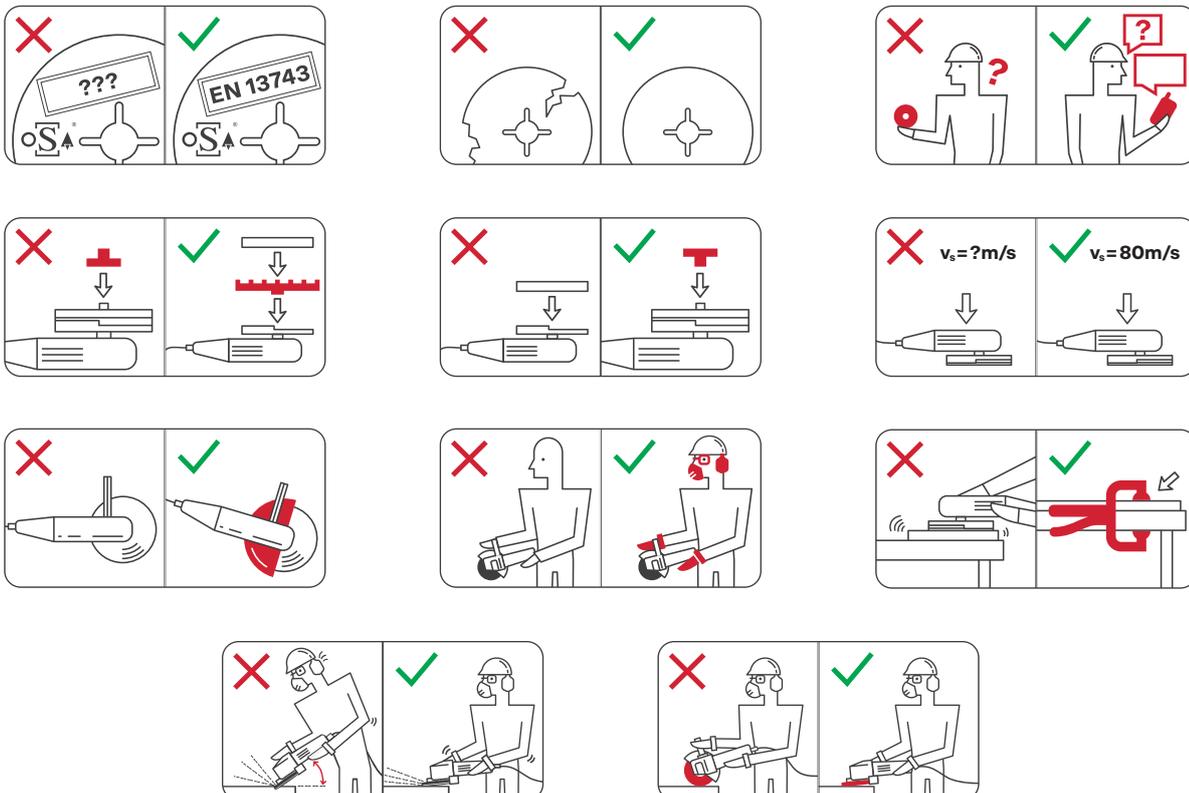
- > Fibre discs may only be used in conjunction with approved and correct backing pads.
- > The diameter of the fibre disc must not exceed that of the backing pad by more than 15 mm.
- > Plunge grinding is not permitted.
- > Appropriate safety equipment, such as goggles, work gloves and ear protection must be worn before any work is commenced.



The maximum admissible peripheral surface speed (v_s) is 80 m/s. Depending on the diameter of the disc the maximum rpm (n_{max}) is:

- | | |
|------------------------|------------------------|
| > 100 mm: 15,300 1/min | > 150 mm: 10,200 1/min |
| > 115 mm: 13,300 1/min | > 180 mm: 8,500 1/min |
| > 125 mm: 12,250 1/min | > 235 mm: 6,500 1/min |

VSM instructions for work safety



VSM fibre discs: Safety certificate issued by oSa®

What does oSa® mean?

oSa® stands for "Organisation for the Safety of Abrasives". Since it was founded in 2000, the oSa® has become an internationally acclaimed centre of excellence for the safety of abrasive tools.

The oSa® trademark: A sign for proven safety

Only quality tested tools are given the internationally protected oSa® trademark. These tools are in demand worldwide and clearly distinguish themselves from those of suppliers with no clear safety profile. The right to use the oSa® trademark is only granted to those companies which voluntarily undertake to adhere to the European safety standards for abrasive tools and accept to comply with stricter manufacturing and testing requirements. This means that abrasives approved by this organisation live up to the highest safety standards. Provided

general working and safety instructions are adhered to, the users of these abrasive tools enjoy maximum protection.

As a member of the oSa®, VSM complies with the following:

- > The entire production process of VSM abrasives is monitored
- > VSM has a certified quality management system
- > VSM carries out regular production controls according to EN standards
- > VSM abrasives are fully traceable
- > VSM is committed to the best possible working conditions and the highest level of environmental protection



More information

Check the oSa® safety certificate given to VSM on the Internet at:

www.vsmabrasives.com/service/downloads

For more information on oSa® go to www.osa-abrasives.org

Recommended products

Angle grinders



	Series	Grain technology	Unalloyed steel	Stainless steel	Non-ferrous metals	Power	Pressure	Removal rate	Surface fineness	Grit sizes	Features	
STOCK REMOVAL	AF979	ACTIROX				1,500 W	+++	+++	-	36+		NEW
	AF890	ACTIROX				1,500 W	++	+++	-	36+, 60+, 80+		
	AF733	ACTIROX				1,200 W	++	+++	-	36+, 60+, 80+		NEW
	XF760	CERAMICS				1,200 W	+	++	-	24 – 80		
	XF870	CERAMICS				1,200 W	++	++	-	24 – 120		
	XF733	CERAMICS				1,200 W	+	++	-	24, 36, 60, 80		
	ZF713	ZIRCONIA ALUMINA				800 W	+	+	-	36 – 120		
SURFACE	KK670J	XELERION				-	-	+++	+++	P240 – P2500	Velours-backed	NEW
	KK772K	COMPACTGRAIN				-	-	+	++	P80 – P600	Velours-backed	
	KP131K	ALUMINIUM OXIDE				-	-	++	+	P60 – P180, P240, P320, P400	Velours-backed	
	KV710X	NON-WOVEN (AO/SIC)				-	-	+	++	100 – 400		
	KV707K	NON-WOVEN (AO)				-	-	+	++	100 – 240	Velours-backed	

Errors and omissions excepted. For special requirements, please contact your VSM application engineer.

- Grinding-active additional layer, reduces the temperature in the grinding zone
- Grinding-active additional layer, significantly reduces chip adhesion
- also suitable for wet applications

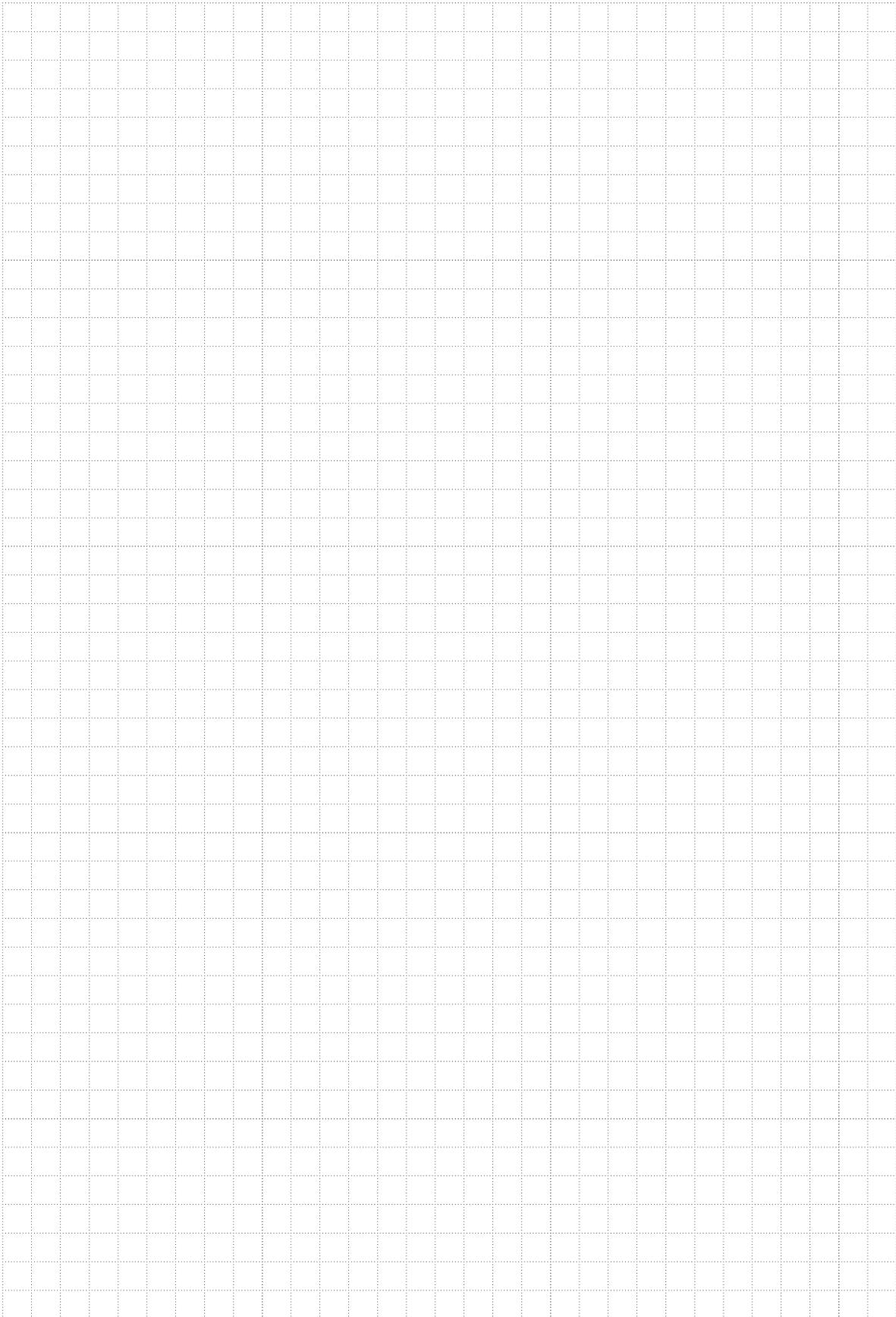
Hole patterns and models of discs with paper and cloth backings

Shape of disc		Version
	Without hole pattern	S
	With hole pattern	S0*

*to be completed with a drawing number when ordering.

Drawing numbers (Z-No.) for discs with paper and cloth backings

Shape of disc		Diameter	Perforation
	Z-Nr. 019	ø 150 mm	6 holes ø 10 mm Pitch circle ø 80 mm
	Z-Nr. 021	ø 125 mm	8 holes ø 10 mm Pitch circle ø 65 mm
	Z-Nr. 076	ø 150 mm	8 holes ø 10 mm Pitch circle ø 120 mm Centre hole ø 18 mm
<p>Number of holes and hole pattern flexible for all popular brands, such as: Bosch, Fein, Festool, Flex, Makita and Metabo.</p>			



AF733 **ALU-X**



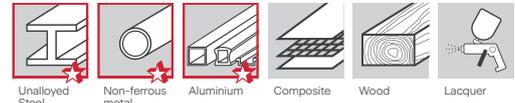
NEW

VSM ACTIROX

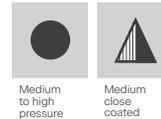


Bonding	Full-resin bonded
Colour	White
Backing	Vulcanised fibre

Materials



Features



ACTIROX

The specialist product for difficult tasks such as removing mill scale. Geometrically shaped ACTIROX ceramic grain is combined with the ALU-X additional grinding-active layer. The result? Maximum stock removal and significantly improved chip clearance. This leads to a long service life and high stock removal – especially when grinding aluminium and other non-ferrous metals.

Grit range:



AF979



NEW

VSM ACTIROX

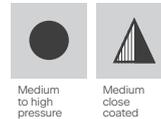


Bonding	Full-resin bonded
Colour	Dark Petrol
Backing	Vulcanised fibre

Materials



Features



ACTIROX

Maximum stock removal rate and a high initial aggressiveness thanks to the geometrically shaped ceramic grain. Ideal for machining stainless steels and superalloys with a cool cut and no discolouration thanks to the TOP SIZE additional grinding-active layer. AF890 achieves its full performance when used with angle grinders in the upper power range.

Grit range:



AF799



VSM ACTIROX

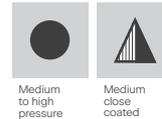


Bonding	Full-resin bonded
Colour	Dark Petrol
Backing	Vulcanised fibre

Materials



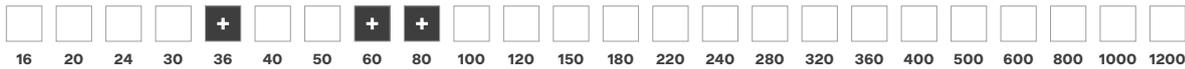
Features



ACTIROX

Maximum stock removal and improved chip removal: Even when grinding aluminium. The geometrically shaped ceramic grain achieves fast grinding has a very long service life. Recommended for angle grinders in the upper power range.

Grit range:



AF890



VSM ACTIROX

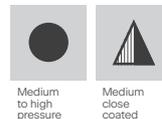


Bonding	Full-resin bonded
Colour	Petrol
Backing	Vulcanised fibre

Materials



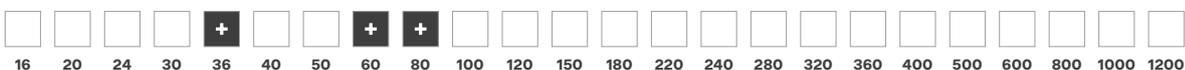
Features



ACTIROX

Maximum stock removal rate and a high initial aggressiveness thanks to the geometrically shaped ceramic grain. Ideal for machining stainless steels and superalloys with a cool cut and no discolouration thanks to the TOP SIZE additional grinding-active layer. AF890 achieves its full performance when used with angle grinders in the upper power range.

Grit range:



KF708



VSM ALUMINIUM OXIDE

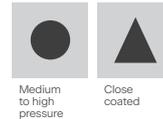


Bonding	Full-resin bonded
Colour	Red-brown
Backing	Vulcanised fibre

Materials



Features



Universal aluminium oxide fibre disc with a wide grit-size spectrum. Ideal for workshop use with different materials, from stainless steel to wood. The special bonding used for hand-held machines significantly increases the service life.

Grit range:



KF808



VSM ALUMINIUM OXIDE

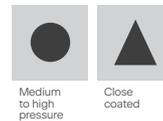


Bonding	Full-resin bonded
Colour	Red-brown
Backing	Vulcanised fibre

Materials



Features



Aluminium oxide fibre disc with TOP SIZE grinding-active layer for processing stainless steel. KF808 supplements the application spectrum of KF708 in that it can grind heat-sensitive workpieces without causing discoloration.

Grit range:



XF733 **ALU-X**



VSM CERAMICS

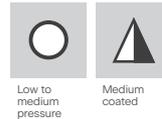


Bonding	Full-resin bonded
Colour	White
Backing	Vulcanised fibre

Materials



Features



Improved chip clearance results in a longer service life and high stock removal rates. Especially when grinding aluminium and non-ferrous metals. The open coating of ceramic grain with self-sharpening effect also offers an impressively aggressive cutting action.

Grit range:



XF760



VSM CERAMICS

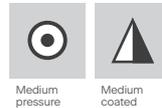


Bonding	Full-resin bonded
Colour	Red-violet
Backing	Vulcanised fibre

Materials



Features



The all-rounder for machining unalloyed steel. Self-sharpening ceramic-grain fibre disc achieves excellent results and a long service life when removing weld seams and when bevelling. Ideal alternative to XF870 if the additional TOP SIZE layer can be omitted.

Grit range:



XF850



VSM CERAMICS

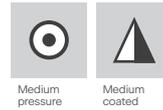


Bonding	Full-resin bonded
Colour	Red
Backing	Vulcanised fibre

Materials



Features



Self-sharpening ceramic-grain fibre disc with high initial aggressiveness. Ideal for cutting aluminium or steel and for machining small contact surfaces, such as in bevelling operations or when removing welds. The additional TOP SIZE layer improves stock removal while reducing the temperature in the grinding zone.

Grit range:



XF870



VSM CERAMICS

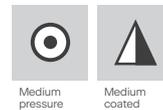


Bonding	Full-resin bonded
Colour	Red
Backing	Vulcanised fibre

Materials

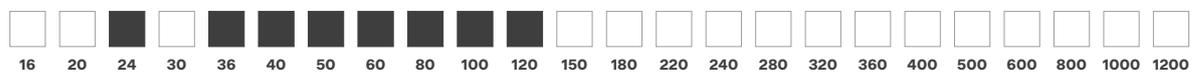


Features



Self-sharpening ceramic-grain fibre disc with additional TOP SIZE grinding-active layer for processing stainless steels and superalloys; for example for bevelling or for removing weld seams. Ideal alternative to the XF760, if heat-sensitive work-pieces need to be machined without causing discolouration.

Grit range:



XF885 ▶ TOP SIZE



VSM CERAMICS Plus

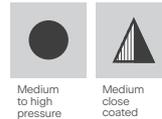


Bonding	Full-resin bonded
Colour	Red-brown
Backing	Vulcanised fibre

Materials



Features



CERAMICS Plus meets TOP SIZE: XF885 has microcrystalline ceramic grains with optimised self-sharpening effect. With the grinding-active additional layer, the fibre disc is optimised for machining superalloys, stainless steels and aluminium and has an impressively aggressive yet cool grinding action and a very long service life. The even further improved performance ensures very high stock removal rates during bevelling or weld seam processing.

Grit range:



ZF713



VSM ZIRCONIA ALUMINA

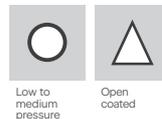


Bonding	Full-resin bonded
Colour	Blue
Backing	Vulcanised fibre

Materials

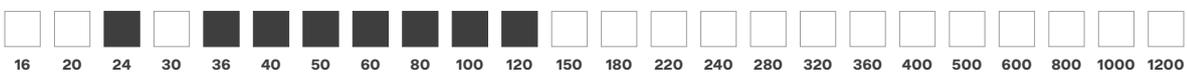


Features



Open-coated zirconia alumina fibre disc that grinds aggressively even with low contact pressure and ensures high stock removal rates. Ideal for use with angle grinders in the low to medium power range. Developed for surface grinding in tank construction and for grinding turbine components.

Grit range:



ZF714



VSM ZIRCONIA ALUMINA

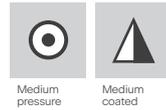


Bonding	Full-resin bonded
Colour	Blue
Backing	Vulcanised fibre

Materials



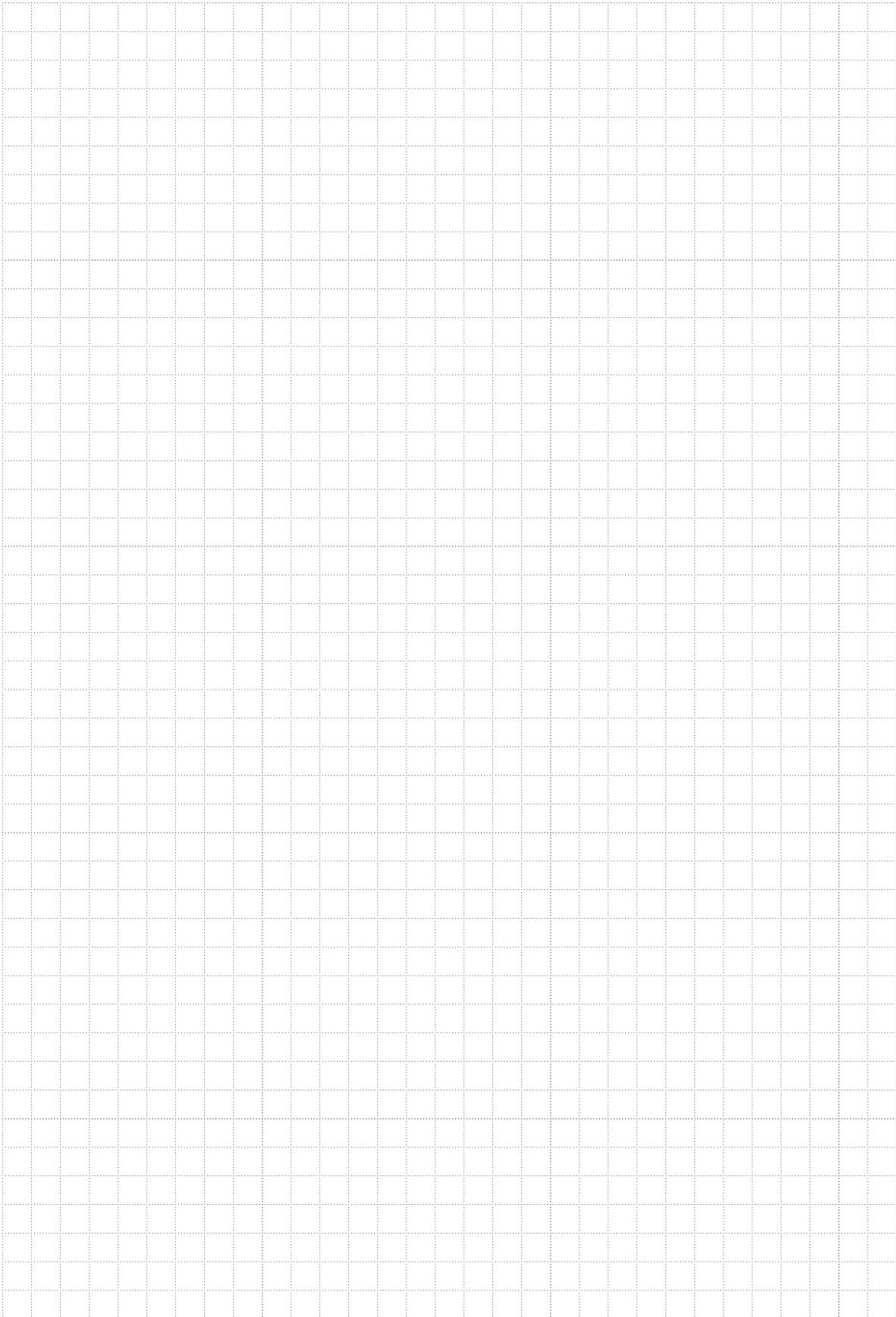
Features



Zirconia alumina fibre disc, with semi-open coating, for applications with medium contact pressure. Angle grinders even in the low to medium power range achieve aggressive grinding with high stock removal rates. Ideal for bevelling unalloyed and stainless steels and for vehicle construction applications.

Grit range:





KK670J

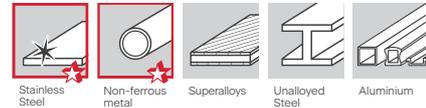


VSM XELERION

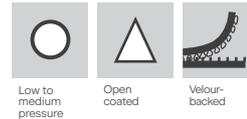


Bonding	Full-resin bonded
Colour	Brown
Backing	J-Cotton
Flexibility	Flexible

Materials



Features



XELERION

Sustained high stock removal and a flawless, uniform and reproducible scratch pattern: This is what the XELERION KK670J series delivers. Due to the high stock removal, coarsely roughed surfaces can be reliably ground out so that work steps can be skipped. This fine abrasive is used in industries such as plant and container construction as well as in the kitchen and automotive industries.

Grit range:



KK772K



VSM COMPACTGRAIN (AO)

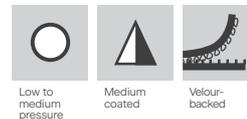


Bonding	Full-resin bonded
Colour	Grey
Backing	J-Polyester
Flexibility	Flexible

Materials



Features



Compact-grain velour disc with grain reserves made of aluminium oxide that wear down easily, for continuous self-sharpening with low contact pressure. Thanks to its wide grit-size spectrum, KK772K is suitable for many areas of application, from rough to fine grinding. Achieves constant stock removal and uniform surfaces over its entire, very long service life.

Grit range:



*) designed for use with VSM back-up pad ZKL for medium and high speed angle grinders (only for KK670J) and for VSM back-up pad ZKLF for low and medium speed angle grinders (page 105).

XK760K



VSM CERAMICS

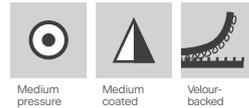


Bonding	Full-resin bonded
Colour	Red-violet
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



Multi-purpose ceramic-grain velour disc with self-sharpening effect and aggressive grinding. Has a very long service life when processing stainless steel tanks and containers. XK760K is used especially by metalworking plants that manufacture items for the food, chemical and pharmaceutical industries.

Grit range:



XK870K ▶ TOP SIZE

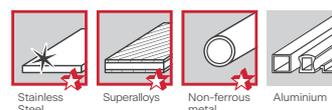


VSM CERAMICS

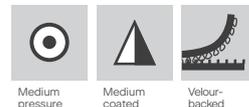


Bonding	Full-resin bonded
Colour	Red
Backing	X-Polyester
Flexibility	Sturdy

Materials

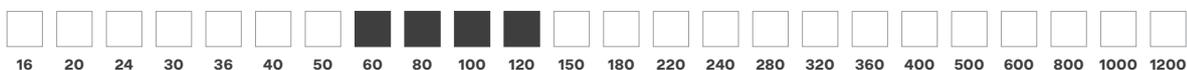


Features



Self-sharpening ceramic grain for grinding stainless steels and superalloys. Ideal for cleaning, deburring and levelling bodywork components in the automotive industry. The TOP SIZE grinding-active layer significantly reduces the temperature in the grinding zone.

Grit range:



*) designed for use with VSM back-up pad ZKL for medium and high speed angle grinders and for VSM back-up pad ZKLF for low and medium speed angle grinders (page 105).

ZK713K



VSM ZIRCONIA ALUMINA

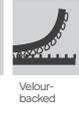


Bonding	Full-resin bonded
Colour	Blue
Backing	X-Polyester
Flexibility	Sturdy

Materials



Features



Zirconia alumina velour disc for very high stock removal rates with low contact pressure. Good alternative to XK870K for machining unalloyed steels, and if the TOP SIZE grinding-active additional layer can be omitted.

Grit range:



KP131K



VSM ALUMINIUM OXIDE

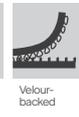


Bonding	Full-resin bonded
Colour	Brown
Backing	C-Paper (60-120) B-Paper (150-400)

Materials



Features



Thanks to its good chip clearance and low tendency to clog, KP131K is ideal for machining wood or painted surfaces.

Grit range:



*) designed for use with VSM back-up pad ZKL for medium and high speed angle grinders and for VSM back-up pad ZKLF for low and medium speed angle grinders (page 105).

KV701K

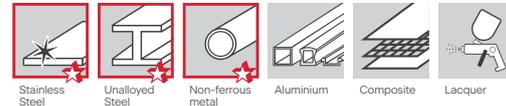


VSM NON-WOVEN (AO)

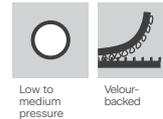


Bonding	Full-resin bonded
Colour	Red-brown
Material	Polyamide fibre

Materials



Features



Velour non-woven disc with a soft structure for optimum adaptation to the shape of the workpiece. Ideal for cleaning tasks or for surface finishing in container construction for the chemical, food and kitchen industries. The open non-woven fabric prevents clogging and ensures a long service life.

Fineness range:



KV707K

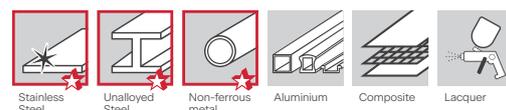


VSM NON-WOVEN (AO)

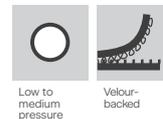


Bonding	Full-resin bonded
Colour	Coarse = brown Medium = red Very fine = blue
Material	X-Polyester

Materials



Features



Surface conditioning velour disc with a wide range of applications, from deburring work to the final finishing of surfaces of cast, forged or punched parts.

Fineness range:



*) designed for use with VSM special back-up pad ZVL for low and medium speed angle grinders (page 105).

KV710X



VSM NON-WOVEN (AO/SIC)



Bonding	Full-resin bonded
Colour	Coarse = brown (AO) Medium = red (AO) Very fine = blue (SIC) Ultra fine = grey (SIC)
Material	X-Polyester

Materials



Features

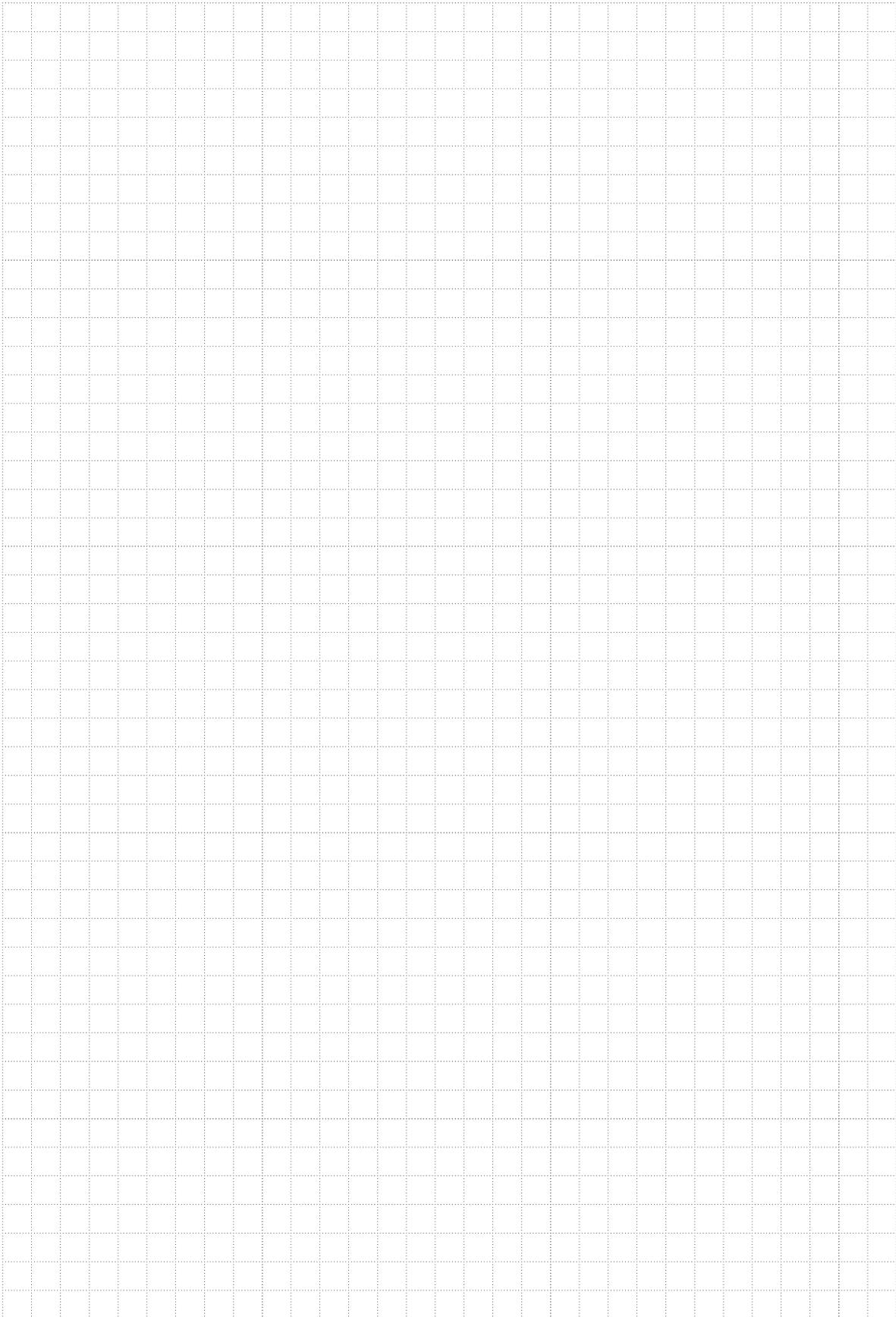


Surface conditioning velour disc with an optimised fibre structure for a longer service life. Thanks to robust polyester backings, and fineness grades ranging from coarse to ultra fine, this product is suitable for a wide range of applications, from deburring work to finishing surfaces with high gloss grades. The open non-woven fabric prevents clogging and smearing, even with non-ferrous metals, and ensures a long service life and a larger quantity of ground workpieces.

Fineness range:



*) designed for use with VSM special back-up pad ZVL for low and medium speed angle grinders (page 105).
The centre hole Ø 22 mm is pre-punched and can be removed when using the back-up pad ZVLZ.





VSM rolls

Possible applications

- > Manual grinding
- > Easy deburring
- > Smoothing, cleaning and roughing in order to prepare workpiece for further surface finishing
- > Roughing and polishing of surfaces and of shaped and profiled parts
- > Removing of paint and varnish coats

Specifications

Specification	Description
R	Rolls without packaging
RSPA	Rolls with plastic core (sleeve packaging)
RSPB	Economy rolls, in a box with integrated cutter

Dimensional tolerances for cut rolls

Width	Tolerance
> 1,000 mm	± 3 mm
51 mm to 1,000 mm	± 2 mm
≤ 50 mm	± 1 mm

Length	Tolerance
all	± 1 m



KK114F

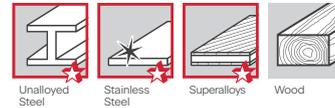


VSM ALUMINIUM OXIDE

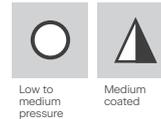


Bonding	Full-resin bonded
Colour	Red-brown
Backing	F-Cotton
Flexibility	Very flexible

Materials



Features



KK114F belongs on every workbench: It can be used universally in off-hand grinding. It moulds around the finest contours thanks to its very flexible backing and can be easily torn off to the required length.

Grit range:



RSPA = Rolls with plastic core/RSPB = Rolls in a box with integrated cutter /

KK711X

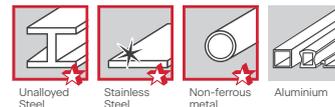


VSM ALUMINIUM OXIDE

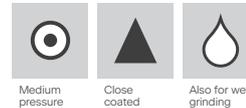


Bonding	Full-resin bonded
Colour	Red-brown
Backing	X-Polyester (P20–P80) X-Cotton (P100–P400)
Flexibility	Sturdy

Materials



Features



Universal, high-performance aluminium oxide abrasive with a sturdy polyester or cotton cloth backing. The wide range of grit sizes makes it an excellent all-rounder: It can be used for deburring work with the P24, for example after laser cutting or water jet cutting. It also withstands extreme stresses, caused by sharp edges or sharp burrs, for example, and can also be used for polishing work with the P400.

Grit range:



P = Categorized according to the FEPA standard. Version 11/25. Subject to change. **Other grits / degrees of fineness upon request.**

ZK713X

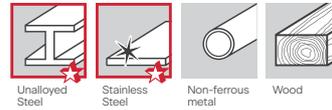


VSM ZIRCONIA ALUMINA



Bonding	Full-resin bonded
Colour	Blue
Backing	X-Polyester (24–P150) X-Cotton (P180–P320)
Flexibility	Sturdy

Materials



Features



The ideal workshop grinding belt for daily use with different workpieces and materials. Versatile use on various machines for dry grinding, for example when deburring sheets. High stock removal rates even with low contact pressure.

Grit range:



CV701

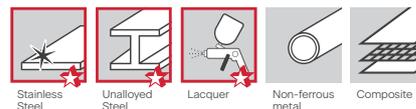


VSM NON-WOVEN (SIC)



Bonding	Full-resin bonded
Colour	Grey
Material	Polyamide fibre

Materials



Features



A clean and finish product with fine grit sizes (280, 400, 1000) as a supplement to KV701. Ideal for off-hand grinding or in combination with disc and orbital sanders. Both sides of the open non-woven fibre fabric can be used and it is suitable for use in the production of grinding tools such as grinding wheels, drums or discs.

Fineness range:



P = Categorized according to the FEPA standard. Version 11/25. Subject to change. Other grits / degrees of fineness upon request.

KV301

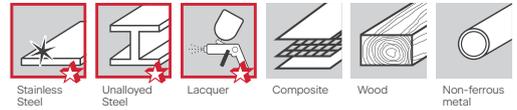


VSM NON-WOVEN (AO)



Bonding	Full-resin bonded
Colour	Red-brown
Material	Polyamide fibre

Materials



Features



Open-texture clean & finish non-woven for off-hand grinding. Both sides can be used. Ideal for cleaning hand tools and metal fittings as well as creating a defined scratch pattern. Available in medium grit sizes (100, 180, 280).

Fineness range:



KV701

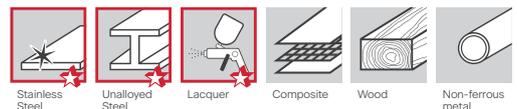


VSM NON-WOVEN (AO)



Bonding	Full-resin bonded
Colour	Red-brown
Material	Polyamide fibre

Materials



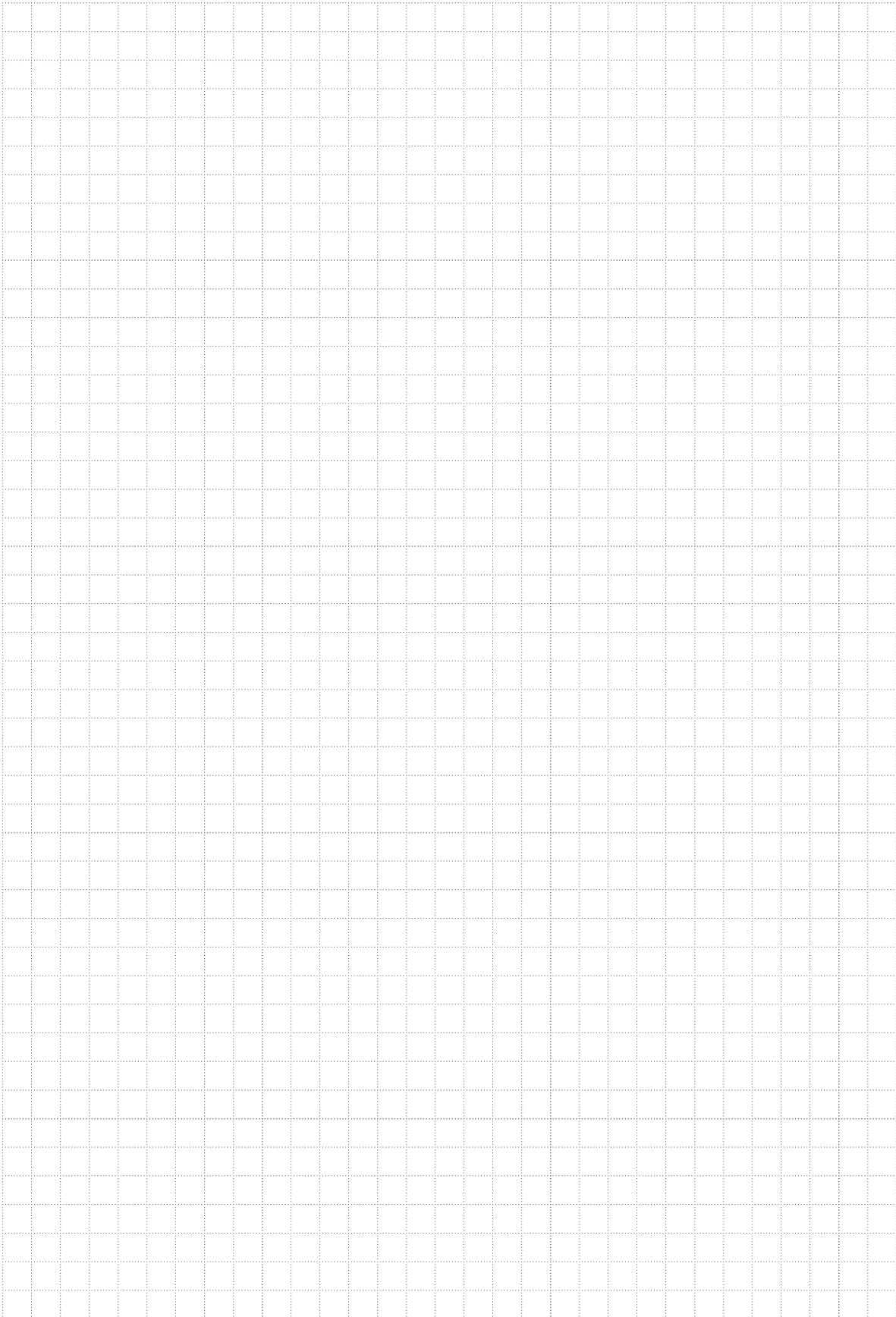
Features



Clean and finish product with medium grit sizes (100, 180, 280) for use with disc and orbital sanders. The non-woven has an impressively long service life – even when processing turbine blades. Both sides can be used. The open-texture non-woven fibre fabric can also be used in the manufacture of grinding tools such as grinding wheels, drums or discs.

Fineness range:







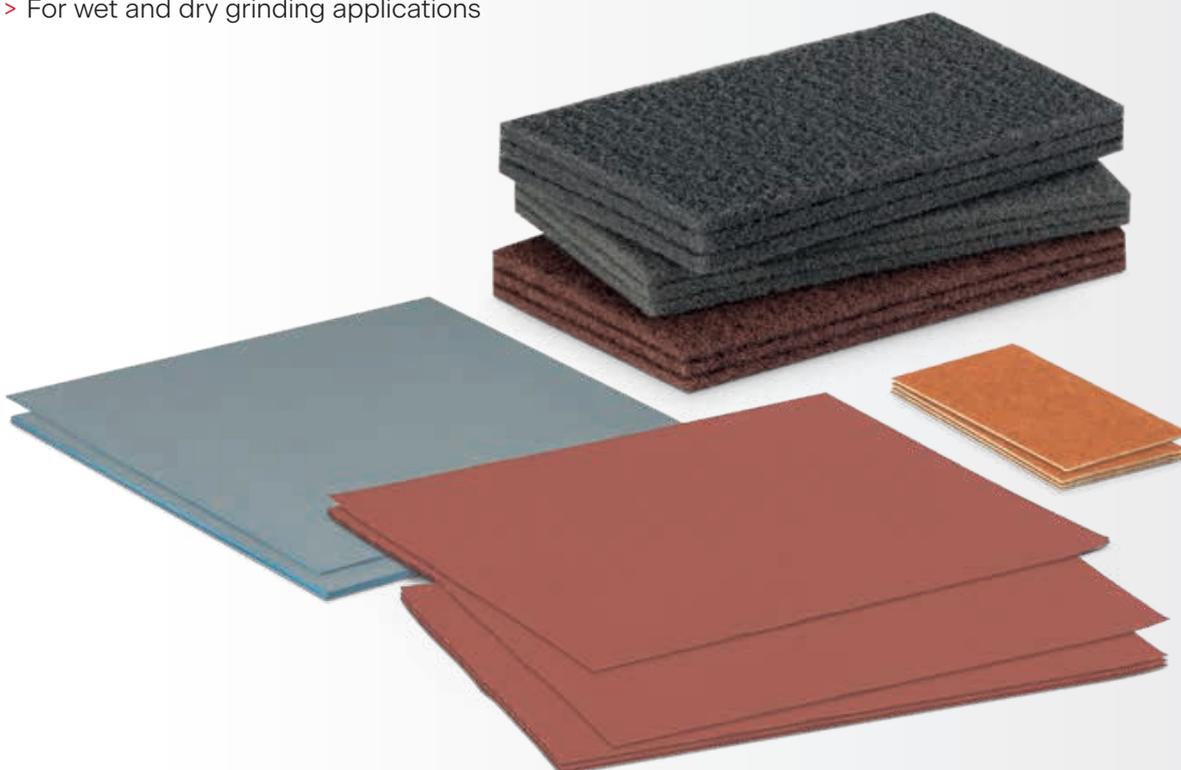
VSM sheets and pads

Possible applications

- > Manual grinding
- > Easy deburring
- > Smoothing, cleaning and roughing in order to prepare workpiece for further surface finishing
- > Roughing and polishing of surfaces and of shaped and profiled parts
- > Removing of paint and varnish coats
- > Paints and coats in the car repair sector

Your advantages

- > For universal use
- > Flexible handling
- > May be cut or torn to measure
- > For wet and dry grinding applications



KK114F

VSM ALUMINIUM OXIDE

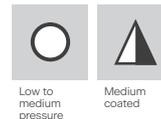


Bonding	Full-resin bonded
Colour	Red-brown
Backing	F-Cotton
Flexibility	Very flexible

Materials



Features



KK114F belongs on every workbench: It can be used universally in off-hand grinding. It moulds around the finest contours thanks to its very flexible backing and can be easily torn off to the required length.

Grit range:



CP918A

VSM SILICON CARBIDE

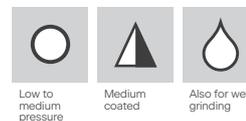


Bonding	Full-resin bonded
Colour	Black
Backing	A-Paper

Materials

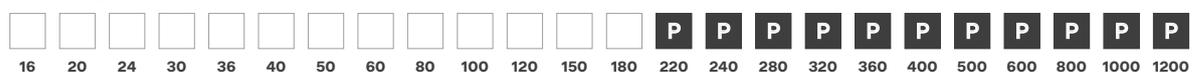


Features



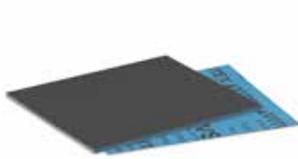
The specialist product for the sanding and intermediate sanding of paint coatings: The silicon carbide on lightweight latex paper achieves good adaptability to the workpiece contours, also in wet grinding.

Grit range:



CP918C

VSM SILICON CARBIDE



Bonding	Full-resin bonded
Colour	Black
Backing	C-Paper

Materials



Lacquer

Features



Low to medium pressure



Medium coated



Also for wet grinding

Silicon carbide abrasive on a stable, harder latex paper for machining painted surfaces, using dry or wet grinding techniques.

Grit range:



KP131K

VSM ALUMINIUM OXIDE



Bonding	Full-resin bonded
Colour	Brown
Backing	C-Paper (P60-P120) B-Paper (P150-P400)

Materials



Wood



Lacquer

Features



Low to medium pressure



Medium coated



Velour-backed

Thanks to its good chip clearance and low tendency to clog, KP131K is ideal for machining wood or painted surfaces.



for **Vitexo hand sanding block**
(page 104)

Grit range:



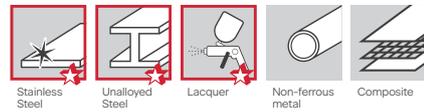
CV301

VSM NON-WOVEN (SiC)



Bonding	Full-resin bonded
Colour	Grey
Material	Polyamide fibre

Materials



Features



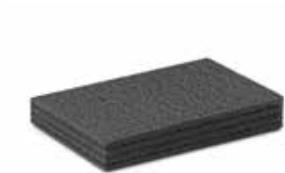
A clean and finish non-woven fibre fabric for excellent adaptation to the shape of the workpiece in off-hand grinding. For machining cast, forged and punched parts, and for grinding coils, sheets or wire. Recommended for clean and finish applications for medical instruments and containers. The silicon carbide grains embedded in the non-woven achieve fine scratch patterns with high gloss levels.

Fineness range:



CV701

VSM NON-WOVEN (SiC)

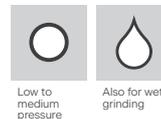


Bonding	Full-resin bonded
Colour	Grey
Material	Polyamide fibre

Materials



Features



A clean and finish product with fine grit sizes (280, 400, 1000) as a supplement to KV701. Ideal for off-hand grinding or in combination with disc and orbital sanders. Both sides of the open non-woven fibre fabric can be used and it is suitable for use in the production of grinding tools such as grinding wheels, drums or discs.

Fineness range:



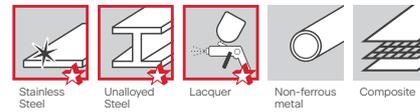
KV301

VSM NON-WOVEN (AO)



Bonding	Full-resin bonded
Colour	Red-brown
Material	Polyamide fibre

Materials



Features



Open-texture clean & finish non-woven for off-hand grinding. Both sides can be used. Ideal for cleaning hand tools and metal fittings as well as creating a defined scratch pattern. Available in medium grit sizes (100, 180, 280).

Fineness range:





VSM accessories

VSM accessories for abrasives simplify operations and increase efficiency

- > The tear-off mechanism of roll holders reduces consumption.
- > VSM back-up pads in various shapes and models guarantee safe support, stability and cool handling.



Magazines and holders



Roll magazine

The VSM magazine which holds a supply of up to five rolls for proper storage at the workplace. It makes it possible to use just what is needed thanks to a tear-off mechanism. Designed for rolls with a maximum width of 50 mm.



Roll holder

VSM roll holder for proper storage of one roll at the workplace. Designed for rolls with a maximum width of 50 mm.



Fibre disc holder

For the proper storage of fibre discs of up to \varnothing 235 mm, with centre hole \varnothing 22 mm. To be kept at the workplace. Firmly clamped to prevent distortions.

Hand sanding block



VSM Vitexo hand sanding block, double-sided use

The VSM hand sanding block features an ergonomic shape and is highly flexible. VSM velour-backed pads may be used on either side. The hand sanding block is a multipurpose tool. Pads for the hand sanding block can be found on page 99.

Back-up pads for paper and cloth discs



Back-up pads for velour-backed discs, hard

Hard velour-backed back-up pad for use on medium and high speed angle grinders.



Back-up pad for velour-backed discs, soft, with cellular rubber

Velour-backed back-up pad with a 12 mm cellular rubber layer. For use on low and medium speed angle grinders.



Back-up pad for non-woven discs

Special back-up pad for non-woven discs KV707K (page 87) and KV710X (page 88). For use on low and medium speed angle grinders.



Back-up pad for non-woven discs, with centering collar

Special back-up pad for non-woven discs KV707K (page 87) and KV710X (page 88), ø 125 mm with center hole ø 22 mm. For use on low and medium angle grinders.

Back-up pads for fibre discs



Back-up pad, medium-hard

Backing pad for smooth transitions from the grinding zone to the surrounding area. Very easy handling. Suitable for medium- to heavy-duty use.



TURBO PAD 1 – Back-up pad, hard, with cooling fins

Cooling fins and holes in the pad reduce the amount of heat generated during grinding. Cooler grinding extends the service life of the abrasive. For heavy-duty use. Allows very good control of the angle grinder on the workpiece.



TURBO PAD 2 – Back-up pad, hard, with cooling fins, cambered

The cooling fins reduce the amount of heat generated during grinding. Cooler grinding extends the service life of the abrasive. The cambering improves stock removal and reduces the amount of vibration. For heavy-duty use and for processing flat and slightly contoured workpieces.



TURBO PAD 3 – Back-up pad, extra hard, with cooling fins, cambered

The cooling fins reduce the amount of heat generated during grinding. Cooler grinding extends the service life of the abrasive. Ensures a significant increase in performance and maximised stock removal, especially with AF890. Enables selective grinding with a clearly defined grinding zone. Recommended for flat workpieces and very heavy-duty applications.

L = Stock items: Delivery time 48 hours. Version 11/25. Subject to change.



General Terms & Conditions

§ 1 Scope

1. These terms and conditions shall not apply to contracts with endusers.
2. Otherwise these terms and conditions shall apply exclusively unless otherwise agreed in writing. Conflicting or deviating terms and conditions of the customer are not binding for us, even if we have not expressly objected to these or have made the delivery in the knowledge of conflicting terms and conditions.

§ 2 Contract

1. Our offers are without obligation with regard to price, quantity, delivery and lead time. Customer orders shall only become binding upon receipt of written acceptance in the form of printed confirmation (invoice or delivery note).
2. Other orders, instructions, explanations and notifications of the customer are valid without a form. Subsequent changes are to be clearly marked as such. The burden of proof for the contents as well as the correct and complete transmission shall be done by the party who refers thereto.
3. Insofar as the written form is requested for explanations remote data transmission and all other legible forms shall be deemed equivalent to a written form provided the sender can be identified.

§ 3 Scope of deliveries and services

1. Insofar as documents (drawings, technical data, etc.) are enclosed with our offers, these are estimations only and in particular are not guaranteed. Advice which we may provide in terms of application technology either verbally, in writing and through tests is carried out to the best of our knowledge and is deemed as non-binding advice with regard to possible property rights of third parties. It does not release the customer from their own verification of the products delivered by us for their suitability for the intended processes and purposes.
2. The right is also expressly reserved to make changes in the productions methods, the recipes, the materials, etc. after the contract as long as the price and/or the essential specifications or the delivery time are not changed thereby.
3. We reserve the right to over- and under-deliver to a manufacturing tolerance of 10 % of the ordered quantity. The customer cannot derive any rights from such a discrepancy in quantities.

§ 4 Delivery dates

1. The delivery dates stated by us are non-binding. The pre-requisite is the full clarification of all questions relating to technical details. Any deviations need to be expressly agreed in writing.
2. If a specific delivery time is expressly agreed in writing we shall only be deemed in default after a separate written reminder and after expiry of the final deadline stated therein, which must be reasonable.
3. Force majeure of all kinds, unforeseeable disruption to operation, transport or shipment, fire damage, flooding, unforeseeable lack of manpower, energy, raw materials or auxiliary materials, strikes, lock-outs, government orders or other impediments for which we are not responsible, which reduce, delay or prevent or make unreasonable the production, the shipment, the acceptance or the use, release from the obligation to deliver and/or accept during the duration of the disruption. If the delivery and/or receipt is exceeded by more than 8 weeks as a result of the disruption then both parties are entitled to cancellation. With partial or full loss of our procurement sources we are not obliged to cover our requirements from third party sub-suppliers.
4. We reserve the right to make partial and/or early deliveries.
5. The adherence to delivery deadline by us presumes the timely and proper execution all contractual duties of the customer in particular his payment obligations.

§ 5 Risk Transfer, shipment, packaging

1. The risk of deterioration, loss or damages to the delivered goods shall pass to the customer upon despatch or collection by the customer. Unless otherwise agreed in writing, we reserve the right to choose the shipment route and the type of shipment.
2. There are no costs for standard packaging. Special packaging will be charged at cost. Costs associated with any special customer requests will also be charged to the customer. The same shall apply to increases in the cargo rates which occur after conclusion of the contract, possible additional re-routing costs, storage costs, etc., insofar as carriage paid delivery was not agreed.
3. Deliveries into countries abroad are made upon basis of the current Incoterms 2020.

§ 6 Price, payment terms, security

1. Our prices are valid for minimum net order values of EUR 160,--. Individual line items are subject to minimum quantities for made to order and stock items as shown in the relevant price list. The minimum order value of EUR 160,-- must be reached. For orders less than EUR 160,-- net we shall charge a surcharge of EUR 15,-- or increase the order to EUR 160,-- taking into account our sales units. Orders of less than EUR 60,-- net will not be delivered.
2. The prices which apply on the date upon which the order is placed shall be invoiced unless otherwise expressly agreed in writing. Should we generally increase our prices during the time between conclusion of the contract and delivery then the customer is entitled to cancel the contract within a period of 2 weeks after publication of the price increase unless the price increase is due explicitly to an increase in cargo rates. The right of cancellation shall not apply to permanent supply contracts (Continuous Obligation contracts). Deposits and pre-payments are to be made plus value added tax.
3. In case of changes in the financial circumstances of the customer after conclusion of the contract which may raise doubts about the customer meeting the payment obligation, or if we only become aware of such circumstances, then we shall be entitled to withhold the delivery of the goods until a) the customer either makes a pre-payment payment or b) has provided reasonable collateral. If the latter is not carried out within a reasonable period of time we are entitled to cancel the contract, also insofar as we have not provided the service yet.
4. Retention on the part of the customer is excluded. He may only offset against undisputed claims or claims which have been declared final and absolute.
5. We shall grant cash discount of 2 % (excluded bills of exchange) for payments received within 14 days from invoice date. The payment terms are 30 days net cash. The customer shall be deemed in default, without a reminder, with the expiry of the 30th day after invoice date. We reserve the right to use payments to settle the oldest due invoice item plus the interest on default and costs accrued on this amount in the following order: costs, interest, principal claim.
6. Bills of exchange and cheques are only accepted as conditional payment. The acceptance of bills of exchange requires our express written consent. In such a case the bank, discount and collection charges shall be charged separately to the account of the customer.

§ 7 Customer Claims for quality defects

1. We shall only accept rectification for quality defects according to the statutory regulations by improving defects in the recipe, the quality or in the design or delivering substitute goods at our choice free of charge within a reasonable period of time. Other or further claims of the customer owing to quality defects are excluded. Subclause 5 below remains unaffected.
2. In case of a complaint of quality defects samples of the reported goods are to be sent to us for assessment. The balance of the goods under complaint is to be kept available without specific request for the duration of one month – at no charge to us – on request these goods are to be returned to us for inspection.
3. Even with the existence of quality defects we are only obliged to subsequent rectification if the customer specifies in writing the recognisable quality defects according to §§ 377, 378 HGB [Commercial Code] within a period of 10 days after receipt of the goods and has informed us within this period unless he has resold the item in normal business transactions before discovery or identification of the quality.
4. Product specifications or other features of the delivered goods, which are mentioned in the order documents, do not include any warranted properties and/or guarantees.
5. If we are not willing to correct quality defects or are not in a position, within a reasonable time frame set to us, then the customer is entitled to cancel the contract or demand a reduction in the purchase price. Further claims of the customer, no matter for what legal grounds, – in particular claims for damages, also those of a non-contractual type – are excluded insofar as we, our executives and other vicarious agents can only be accused of ordinary negligence as a breach of duty. We shall only be liable for indirect damages and for damages which were not foreseeable at the time when the contract was concluded if there is a case of gross negligence. Mandatory statutory liability regulations remain unaffected.
6. The warranty period is 2 years from risk transfer.

§ 8 Retention of title

1. Title of goods shall only pass to the customer if he has met all his liabilities from the business relationship with us including secondary claims, claims for damages and the redemption of cheques/bills of exchange. This shall also apply to claims of such companies, in which we directly hold 50 % shares or more. The retention of title shall also continue to exist if individual claims are included in a current account and the balance is drawn and recognised.
 2. A possible processing or conversion of reserved goods by the customer is always undertaken on our behalf. If the reserved goods are processed with other items which do not belong to us we shall acquire the co-ownership for the new items as a ratio of the value of the reserved goods to the other processed items at the time of processing. Incidentally the same shall apply to the items produced as for the reserved goods themselves.
 3. We are entitled to demand that the reserved goods from the customer without setting a final deadline and without cancellation of the contract if he is in default with his obligations with us. The return of the reserved goods shall only represent a cancellation of the contract if we expressly declare this in writing.
 4. The customer is entitled to resell the delivered items. However he hereby assigns all claims to us which he acquires against the buyer or third parties from the resale no matter whether the reserved goods are resold without or after processing. The assignment comprises all claims with all secondary and security rights including bills of exchange and cheques. If reserved goods are sold together with other items at a total price the assignment shall be limited to the pro rata amount from our invoice for the co-sold reserved goods. If goods are sold in which we have a co-ownership share according to the above rules then the assignment is limited to that part of the claim, which corresponds with the co-ownership share of the goods delivered by us. If the customer uses the reserved goods for finishing items which are the property of a third party against payment he hereby assigns in advance his remuneration claim against the third party to us for the afore-mentioned security purpose. As long as the customer meets his payment obligations in time he is entitled to claims from a resale or a finishing process himself. He is not entitled to pledges of any assignments whatsoever.
 5. If our claims appear at risk to us, then the customer must inform his buyers of the assignment upon request and provide us with all necessary information and documents. The customer must inform us immediately of any claims of third parties to the reserved goods and assigned claims.
 6. If the value of the collateral to which we are entitled exceeds our claims which are to be secured against the customer by more than 20 % then we are, upon request of the customer, obliged to release collateral items.
- The collateral item to be released shall be chosen by us.

§ 9 Trademarks

1. It is not permitted to offer or deliver substitute products instead of our products with reference to these products nor to use the word „substitute“ in connection with our product designations no matter whether protected or not, in price lists and similar documentation nor to compare these with the designations of substitute products.
2. It is further not permitted when using our products for manufacturing purposes or further processing, to use our product designations, in particular our trademarks, on such goods or their packaging or in printed format and advertising material without our prior consent – in particular as a specification of a part. The delivery of products under a trademark is not to be classed as consent for the use of this trademark for the products produced from these.

§ 10 Place of performance and jurisdiction; applicable law; validity clause

1. The place of performance for the delivery is the respective shipment department, the place for payment is Hanover.
2. The place of jurisdiction for both parties is Hanover. We are also entitled to make our claims at the general place of jurisdiction of the customer.
3. German law shall apply exclusively. Customary trade terms are to be interpreted according to the respective applicable Incoterms. If agreed that we shall bear customs and import duties of the country of destination any increases in such duties which come into force between the submission of the order confirmation and delivery of the goods shall be for the account of the customer. All other fees, taxes and costs associated with the purchase contract shall also be borne by the customer.
4. Should individual clauses of these terms and conditions be invalid in whole or in part this shall have no effect on the validity of the other clauses or the other parts of such clauses. The parties must replace an invalid clause with a clause that, as far as possible, corresponds to the commercial intention of the invalid clause and is valid.

§ 11 Data protection

According to Art. 6 para. 1 sentence 1 lit. f) GDPR we point out that we store personal data, of which we are made aware of during the contract.

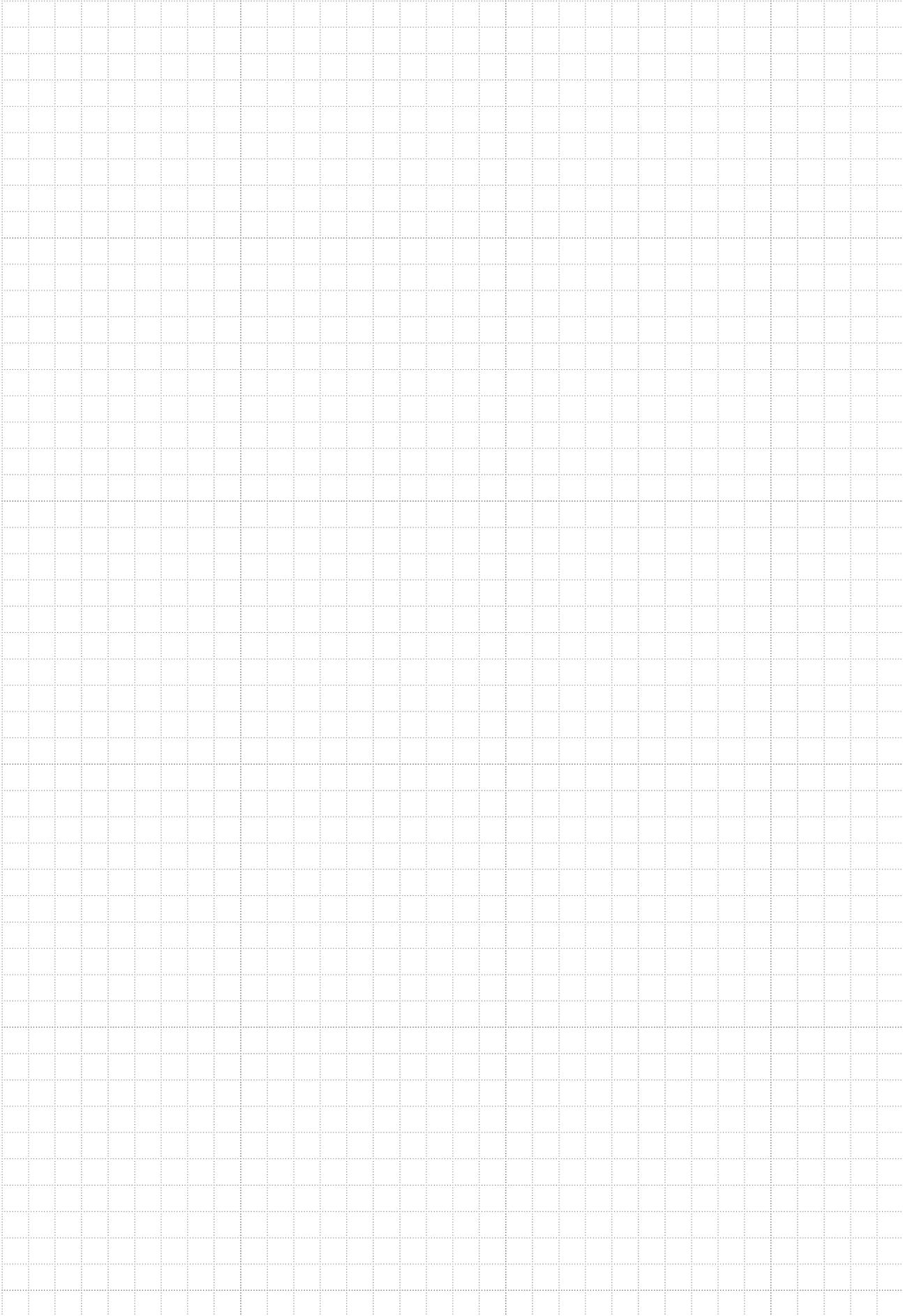
§ 12 International purchase contracts

Insofar as the buyer is registered outside Germany German law shall apply exclusively under the inclusion of the CISG. In this case the following special terms shall apply notwithstanding the afore-mentioned sales terms:

1. Contract amendments or cancellations must be made in writing. This shall also apply to agreements with regard to the cancellation of this written form clause.
2. We shall be liable to the buyer for damages according to the statutory provisions, insofar as a breach of contract is due to willful or gross negligent breach of duty for which we are responsible; or a fault of our representatives or vicarious agents shall be attributed to us. We shall also be liable according to the statutory provisions insofar as we breach an essential contractual duty.
3. In the event of delivery of goods in breach of the contract the buyer shall only be entitled to cancel the contract or to substitute delivery if claims for damages against us are excluded or it is not deemed reasonable for the buyer to use the goods which are in breach of the contract and claim for remaining damages. In these cases we are initially entitled to remedy the defect. If the remedy of the defect fails and/or it leads to an unreasonable delay the buyer is entitled, at his choice, to declare the contract null and void or demand substitute delivery. The buyer is also entitled to do this if the remedy of the defects causes unreasonable inconvenience or there is uncertainty about the reimbursement of possible expenses of the buyer. The remedy of the defect shall be deemed as failed after the second unsuccessful attempt.
4. Responses of the customer to an offer from us which assume an acceptance, however contain supplements or deviations, always represent a rejection of our offer associated with a new offer of the buyer, even if the supplements or deviations do not essentially change the conditions of the offer.
5. We do not guarantee that the goods delivered by us comply with the standards and laws at the location, at which the goods delivered by us are used or where they are resold unless it concerns international standards, i.e. in particular possible ISO Standard which apply to the goods or the buyer has informed us of the standards or other applicable regulations before conclusion of the contract and we have expressly confirmed their compliance. The technical compatibility of the goods delivered by us with tools and machines of the buyer or his buyers is the responsibility of the buyer unless we have expressly confirmed this.
6. The interest for arrears is 11 percentage points above the base lending rate according to § 247 BGB in the respective version.
7. If we have to repay the purchase price this shall bear interest according to Art. 84 Par. 1 CISG at the statutory interest rate according to § 246 BGB [Civil Code], should we be in arrears the interest rate valid on the day when arrears commenced will apply.
8. Notwithstanding Art. 90 CISG contracts made under the law of other countries are not valid.

Status: Hanover, November 2023
VSM AG

Only the General Terms and Conditions valid at the time of conclusion of the contract apply. These can be obtained from our sales service at any time. No liability accepted for printing errors and mistakes made during the production of this document.





For more than **160** years

Founded 1864 in Hanover-Hainholz – more than 160 years' experience in the production of coated abrasives.



More than **900** employees

More than 900 employees are working on behalf of our customers worldwide each day.

VSM worldwide – Operating in more than **70** countries

VSM is operating in more than 70 countries with international subsidiaries and numerous partners.



Made in Germany – Headquarters in Hanover

VSM stands for competence, quality and customer orientation.



Extremely high level of safety – Certified and recognized worldwide

All VSM abrasives have been certified by internationally recognized testing bodies for many years and therefore conform to the highest safety standards.



Internal research and development – High vertical integration

High vertical integration VSM has its own internal grain and cloth production and develops almost all of its preliminary products itself.

VSM series register

	Series	Wide belts	Belts	File belts	Fibre discs	Discs	Rolls	Sheets and pads
NEW	AF733	-	-	-	76	-	-	-
	AF799	-	-	-	77	-	-	-
	AF890	-	-	-	77	-	-	-
NEW	AF979	-	-	-	76	-	-	-
	AK890Y	-	47	-	-	-	-	-
	CK721X	40	47	-	-	-	-	-
	CK748X	-	48	-	-	-	-	-
	CK772T	-	48	-	-	-	-	-
	CK918X	-	49	-	-	-	-	-
	CP501	43	-	-	-	-	-	-
	CP918A	-	-	-	-	-	-	98
	CP918C	-	-	-	-	-	-	99
	CV301	-	-	-	-	-	-	100
	CV701	-	-	-	-	-	93	100
	KF708	-	-	-	78	-	-	-
	KF808	-	-	-	78	-	-	-
	KK114F	-	-	-	-	-	92	98
	KK511F	-	49	-	-	-	-	-
	KK511J	-	50	-	-	-	-	-
NEW	KK670F	-	46	-	-	-	-	-
NEW	KK670J	-	46	63	-	84	-	-
	KK711T	-	-	64	-	-	-	-
	KK711X	40	50	64	-	-	92	-
	KK711Y	-	51	-	-	-	-	-
	KK712X	-	51	-	-	-	-	-
	KK718X	41	52	-	-	-	-	-
	KK772J	-	52	-	-	-	-	-
	KK772K	-	-	-	-	84	-	-
	KK790Y	-	53	-	-	-	-	-
	KK791Y	-	53	-	-	-	-	-
	KK841F	-	54	-	-	-	-	-
	KP131K	-	-	-	-	86	-	99
	KP709	-	61	-	-	-	-	-
	KV301	-	-	-	-	-	94	100

	Series	Wide belts	Belts	File belts	Fibre discs	Discs	Rolls	Sheets and pads
	KV701	-	-	-	-	-	94	-
	KV701K	-	-	-	-	87	-	-
	KV706X	44	-	-	-	-	-	NEW
	KV707K	-	-	-	-	87	-	-
	KV707T	-	62	66	-	-	-	-
	KV707X	44	62	-	-	-	-	-
	KV710X	-	63	-	-	88	-	-
	RK700X	41	54	-	-	-	-	-
	XF733	-	-	-	79	-	-	-
	XF760	-	-	-	79	-	-	-
	XF850	-	-	-	80	-	-	-
	XF870	-	-	-	80	-	-	-
	XF885	-	-	-	81	-	-	-
	XK733X	-	55	-	-	-	-	-
	XK760F	-	55	-	-	-	-	NEW
	XK760K	-	-	-	-	85	-	-
	XK760X	-	56	-	-	-	-	-
	XK785Y	-	56	-	-	-	-	-
	XK850X	-	57	-	-	-	-	-
	XK870F	-	57	-	-	-	-	-
	XK870J	-	58	-	-	-	-	-
	XK870K	-	-	-	-	85	-	-
	XK870T	-	-	65	-	-	-	-
	XK870X	42	58	-	-	-	-	-
	XK880Y	-	59	-	-	-	-	-
	XK885Y	-	59	-	-	-	-	-
	XP780	43	61	-	-	-	-	-
	ZF713	-	-	-	81	-	-	-
	ZF714	-	-	-	82	-	-	-
	ZK713K	-	-	-	-	86	-	-
	ZK713T	-	-	65	-	-	-	-
	ZK713X	42	60	-	-	-	93	-
	ZK744X	-	60	-	-	-	-	-

Closer to you



This catalogue was supplied to you by:

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