VSM
WE KNOW ABRASIVES



ALU-X

THE X-PERTS FOR ALUMINIUM


FOR
X-TREME
PERFORMANCE.

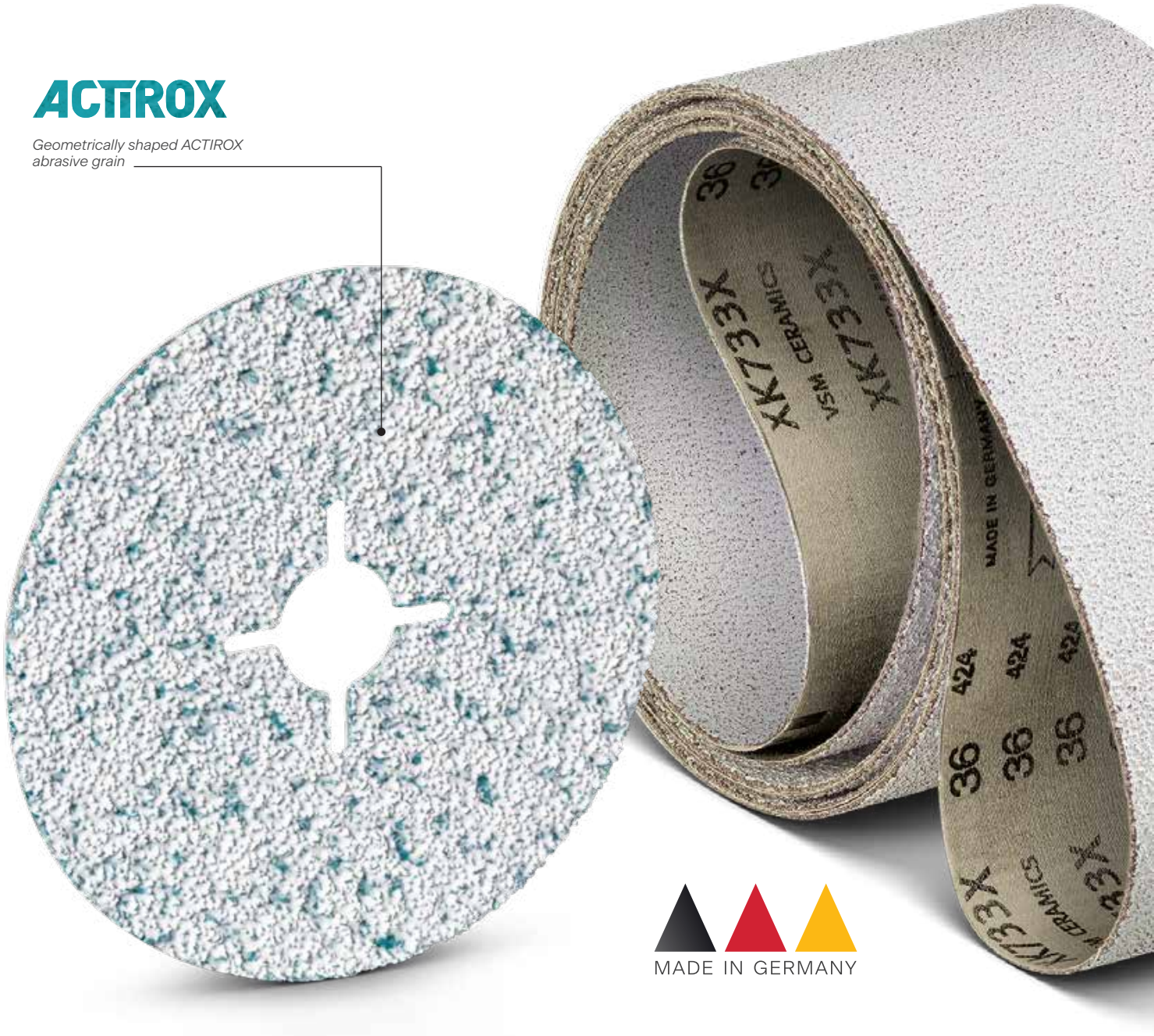


From X-PERTS for X-PERTS

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

This is where the high-performance **VSM ceramic grain** meets the **VSM ALU-X** additional grinding-active layer. The result: Improved chip removal, resulting in fewer tool changes, more workpieces per shift, more stock removal and a grease-free workplace.

X-TREME performance -



Your grinding task



Grinding of cast parts



Deburring

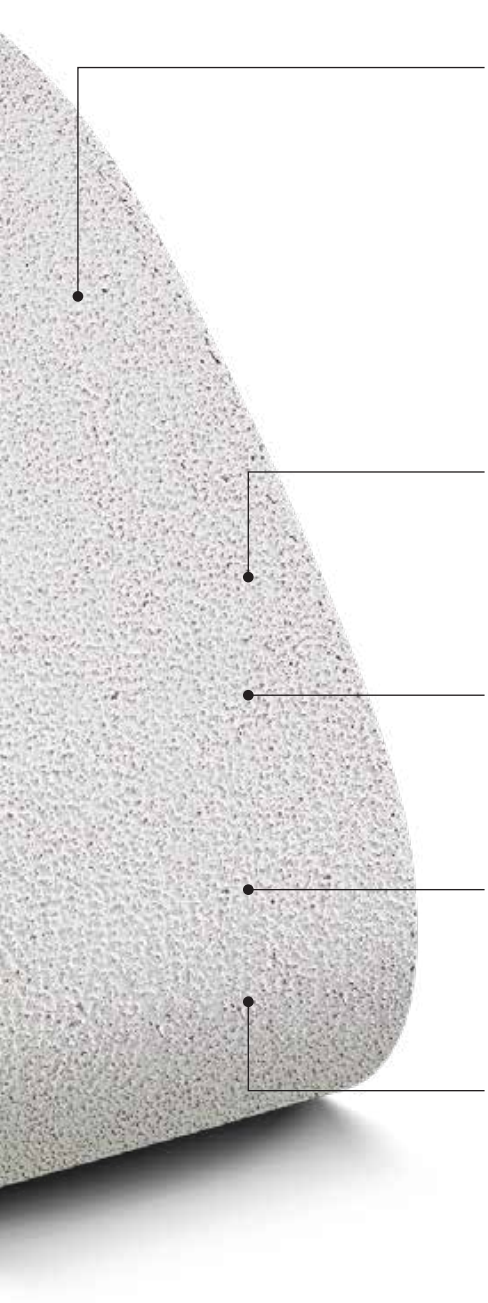


Removing welded seams



Preparing welded seams

- reduced chip adhesion



Proven CERAMICS technology with self-sharpening effect

Reduced chip adhesion means fewer tool changes

High stock removal rate and a longer service life

Reduced tool costs per workpiece

Grease-free and oil-free grinding

Your advantages at a glance

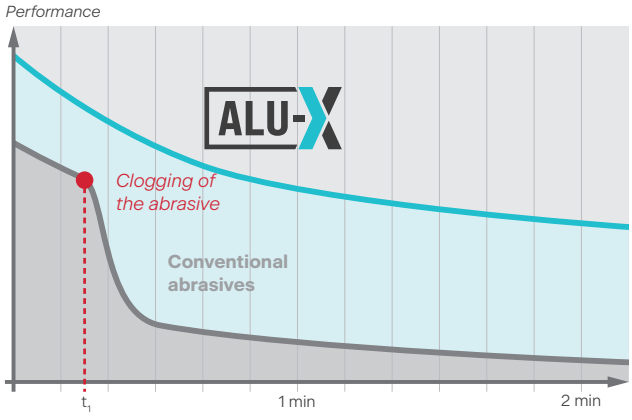
> Specially developed for machining **aluminium and non-ferrous metals**

> **VSM ALU-X significantly reduces** chip adhesion and thus also **clogging of the abrasive;** this, in turn, reduces the number of **tool changes**

> **Increased performance** enables **faster workpiece machining** and lowers the process costs

> **Grease-free and oil-free grinding** keeps the **workplace clean.**

> **VSM** always delivers premium **made-in-Germany** quality



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



Bevelling



Cleaning



Removing imperfections



Technical surface quality

Six X-perts for aluminium grinding

Whether for preparing or removing weld seams, deburring, grinding sprues, grinding out flaws as part of repair grinding, or achieving the desired technical surface quality: virtually all grinding work with non-ferrous workpieces can be carried out easily with the **ALU-X** series from **VSM.**

Series with VSM ceramic grain, such as **ACTIROX** and **CERAMICS,** are ideal for coarse grinding applications. **VSM ALUMINIUM OXIDE** abrasive belts are true all-rounders. The abrasive grain produces a matte scratch pattern and is particularly recommended for working on contours.

Product overview



	VSM Series	Rolls (max. width mm)	Wide belts	Narrow belts	Discs	Backing	Grain technology	Features	Stock removal → Surface: 24	36	40	50	60	80	100	120	150	180	220	240	320	400	600
NEW	**AF733**	1,470			○	Fibre	ACTIROX	ALU-X		+			+	+									
	XF733	1,470			○	Fibre	VSM CERAMICS	ALU-X															
	XK733X	1,480	⊙	⊙		Cloth	VSM CERAMICS	ALU-X 💧															
	KK732X	1,480	⊙	⊙		Cloth	VSM ALUMINIUM OXIDE	ALU-X 💧															
	KK532F	1,050	○	○		Cloth	VSM ALUMINIUM OXIDE	ALU-X															
	KP532E	1,450	○	○		Paper	VSM ALUMINIUM OXIDE	ALU-X															

Last updated: 03/2025. Other dimensions and grit sizes on request.

Features

○ for low to medium contact pressure ⊙ for medium contact pressure ● for medium to high contact pressure 💧 also suitable for wet grinding

Backing flexibility (last letter of series name):

E (paper) stiff **F** very flexible **X** sturdy

+ The plus in grinding performance

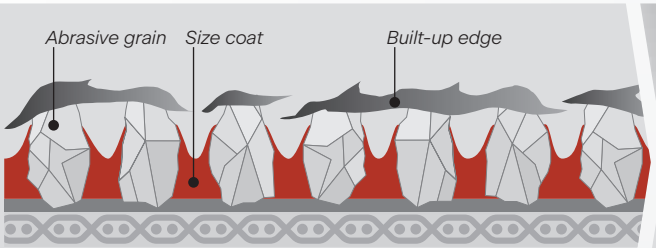
Practice has shown that **ACTIROX** abrasives have a **higher abrasive performance** than comparable conventional abrasives – with a consistent surface finish.



Ideal machining of non-ferrous metals

Non-ferrous metals such as aluminium, bronze and copper are demanding materials that can easily clog the abrasive. This means that, instead of being removed, the chips stick to the tips of the abrasive grain: A built-up cutting edge is created. This prevents the abrasive grain from functioning and the abrasive becomes unusable.

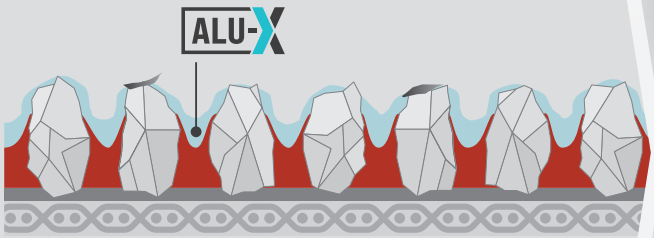
The new **VSM ALU-X** additional layer reduces chip adhesion and thus reduces clogging of the abrasive. The service life is assured and extended so that excellent stock removal is achieved even after longer periods of use.



Conventional abrasives: Chips stick to the grain tips and the abrasive becomes clogged.



Fibre disc clogged with aluminium chips

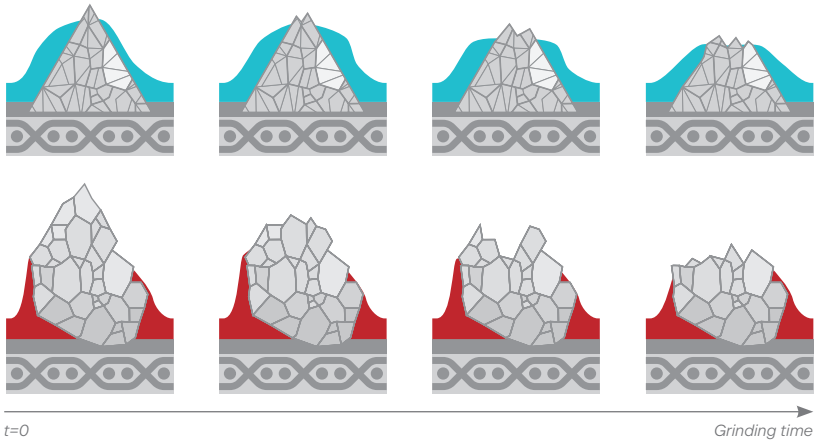


The VSM ALU-X additional layer significantly reduces adhesion; the abrasive can be used for longer.



VSM ALU-X: It is clear to see that significantly fewer chips stick.

The right grain for every application



VSM ACTIROX stands for maximum stock removal and increased productivity due to its geometrically shaped ceramic grain.

VSM CERAMICS abrasives are prized for their aggressive cut and very long service life. Continuous self-sharpening of the grain guarantees long-lasting high performance.

Case studies

Cleaning structural parts



Workpiece	Automotive bodywork
Material	Aluminium alloy
Cutting speed	80 m/s
Feed rate	Manual
Series	**XF733**
Disc dimensions	Ø 180 mm
Grit size	36

> **Result:** Twice the stock removal compared to the previous leading abrasive

Welded seam levelling



Workpiece	Window frames
Material	Aluminium alloy
Cutting speed	63 m/s
Feed rate	Manual
Series	**XF733**
Disc dimensions	Ø 125 mm
Grit size	36, 60, 80

> **Result:** 90% longer service life compared to conventional abrasives

Removing sprues



Workpiece	Cast parts
Material	Aluminium alloy
Cutting speed	28 m/s
Feed rate	Manual
Series	**XK733X**
Contact element	75 mm, 90° Shore A
Grit size	36

> **Result:** 35% longer service life compared to the competing product

From X-PERTS for X-PERTS



Would you like to find out more about grinding non-ferrous metals, or request samples without obligation?

Call us at:
+49 511 3526 479

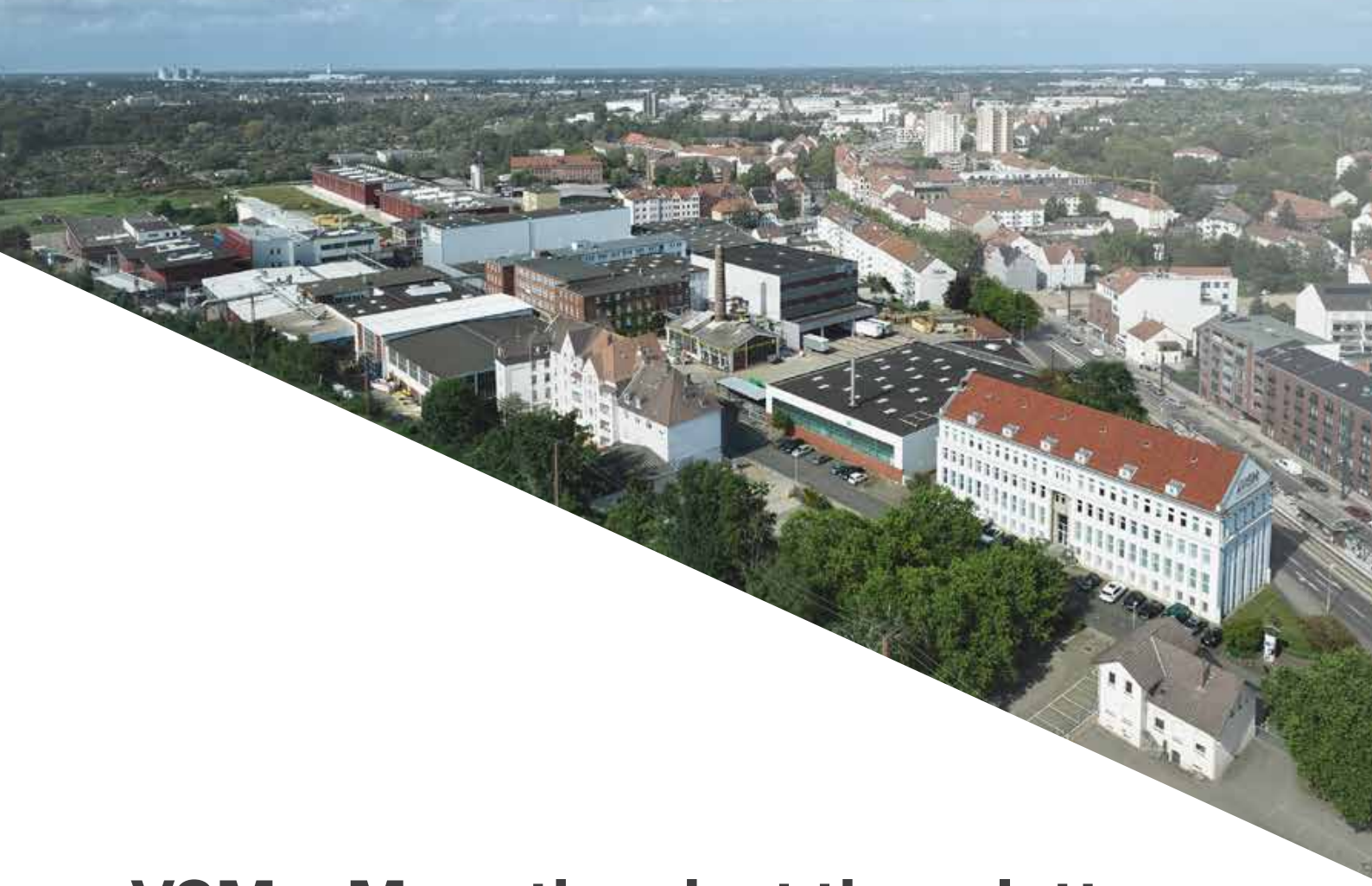
Or send us an email:
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We impart expert knowledge and give comprehensive practical tips in our **webinars** and **seminars:**

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www.alu-x.expert



VSM – More than just three letters

VSM stands for competence, quality and customer orientation.

Very few others understand grinding processes like we do. Not only do we grind every surface to precision, we also analyse the specific grinding applications of our customers so that we can always find the best, long-term solution. Process-related expertise is one of the distinguishing features of VSM.

We know abrasives

Because we understand them. VSM develops and produces all the main preliminary products such as backing fabrics, resinoid bonds and abrasive grains at its Hanover site. By doing so, we fulfil our high, self-imposed requirements in industry, the commercial and trade sector. The continuous development of further grain compositions, their refinement and processing ensures that VSM remains one of the most experienced manufacturers of ceramic grain worldwide.

Application-based expertise

We see the entire grinding processes of our customers as a challenge. A global network of VSM specialists provides expert advice wherever it is needed irrespective of whether your company is large or small. Thanks to our close collaboration with machine manufacturers, cutting fluid experts and research institutes, we ensure that our customers can benefit from technological trends as soon as possible.

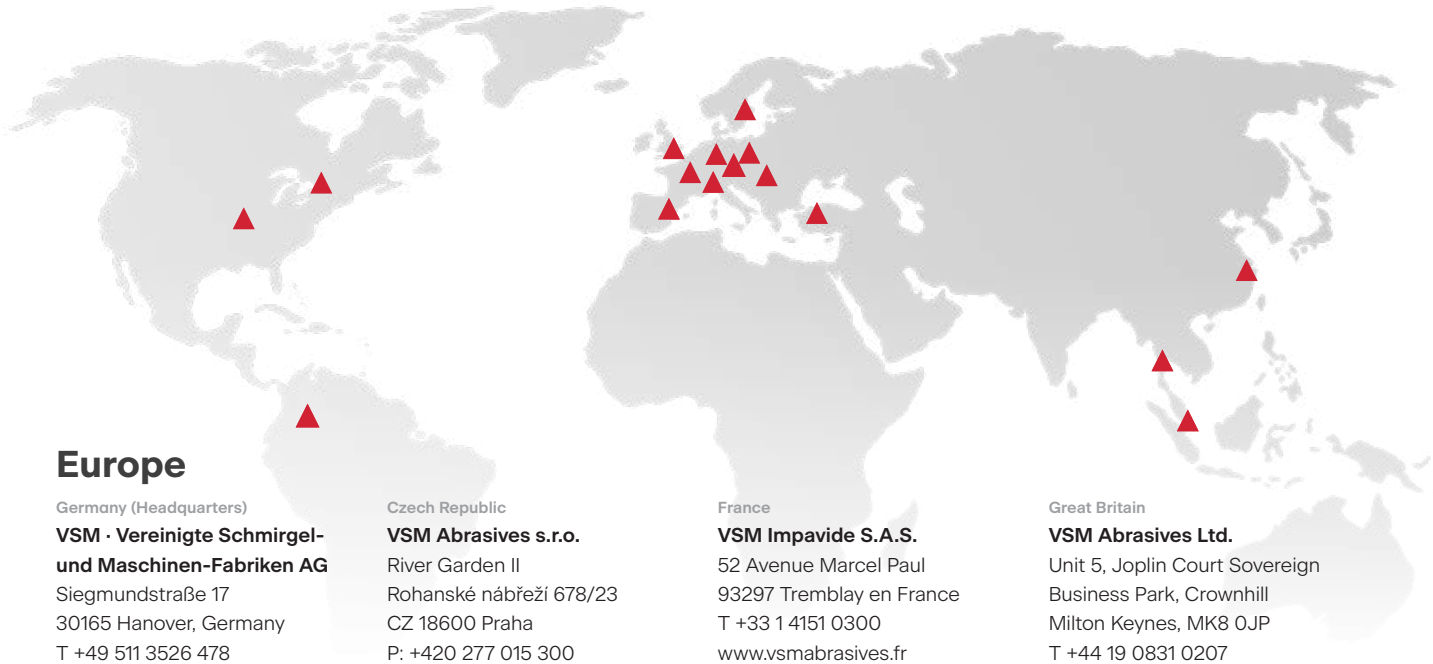
We make our expertise available for you

The VSM Competence Center (CC) in Hanover provides an opportunity for product training, seminars and extensive application tests. Customer applications can be adjusted and results reviewed. This service from VSM reduces downtimes and productivity losses for our customers.

Certified and recognized worldwide

VSM has been certified to ISO standard 9001:2008 as its basis for quality assurance for many years. In addition, it is a member of FEPA, oSa and the German Abrasives Association (VDS).

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