









VSM CERAMICS Plus
VSM CERAMICS

**Self-sharpening
ceramic grain abrasives
for high stock removal**

Our products



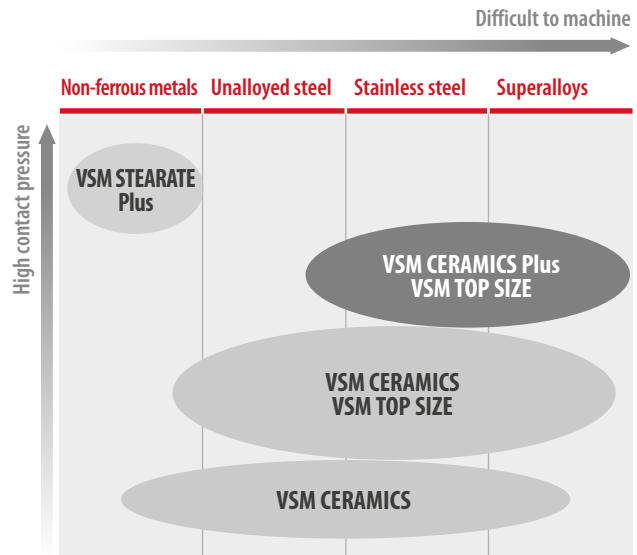
Your application

Turbine blades	Tools	Tubes	Plants and containers
			
Coils, sheet metal	Sanitary fittings	Castings and forged parts	Medical instruments
			

VSM CERAMICS for maximum productivity

Your advantages at a glance

- > With **VSM CERAMICS** and **VSM CERAMICS Plus** VSM provides two **innovative grain technologies** suitable for specific applications
- > A proven track record of up to **40 % increase** in **stock removal** and **service life** as compared to conventional ceramic grain abrasives
- > Reduced temperature in the grinding zone due to the grinding-active additional layer: **VSM TOP SIZE**
- > Significantly reduced chip adhesion is achieved with the new **VSM STEARATE Plus** technology, a combination of **VSM CERAMICS** abrasive grain and STEARATE
- > VSM can be relied on to always deliver premium quality **made in Germany**



Premium quality thanks to preliminary products from our own production

Our high vertical integration enables us to achieve a consistently high quality of our abrasives. VSM develops and produces all the main preliminary products such as backing fabrics, resinoid

bonds and abrasive grains itself at the Hanover site. This is how we can make a grain which is perfectly tailored to your requirements.

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

Finishing of the backing materials



Resin production



Production of abrasive grain



Coating and spreading



Basic goods



Case studies

Centreless grinding



VSM CERAMICS XK760X	
Workpiece	Tubes Outer diameter 104 mm
Material	Chromium nickel steel (1.4301)
Contact wheel	<ul style="list-style-type: none"> > 450 mm diameter > Hardness: 60° Shore A > Serration: 2:1
Cutting speed	25 m/sec
Axial feed rate	2.5 m/min
Belt dimensions	150 × 3,500 mm
Grit size	40
Lubricant	Emulsion
Outcome	<ul style="list-style-type: none"> > Increase in cutting performance per abrasive belt from 600 to 900 parts. > Reduction in set-up costs.

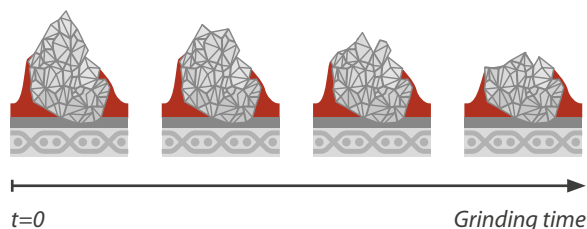
Grinding of dished ends



VSM CERAMICS Plus XK885Y	
Workpiece	Tank bottoms
Material	Chromium nickel steel (1.4301)
Contact wheel	<ul style="list-style-type: none"> > 390 mm diameter > Hardness: 80° Shore A > Serration: 10:8
Cutting speed	29.5 m/sec
Rotation speed	Manual
Belt dimensions	60 × 2,175 mm
Grit size	20
Lubricant	None
Outcome	> 100 % increase in the number of machined workpieces.

VSM CERAMICS abrasives for demanding grinding tasks

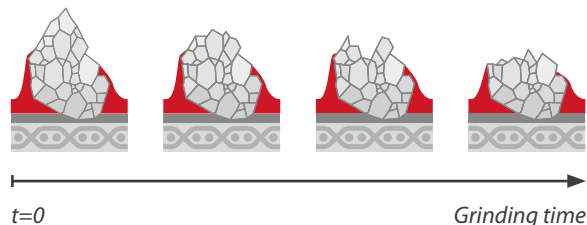
VSM CERAMICS Plus (CER Plus)



VSM CERAMICS Plus grains feature an improved self-sharpening effect when machining high-alloyed steels and super alloys, which are materials that require high contact pressure.

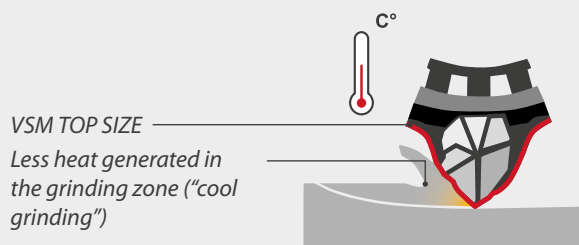
The unique structure of **VSM CERAMICS Plus** microcrystals enables a much more subtle breaking down of the grain and produces much sharper edges. This in turn leads to lower temperatures in the contact area and an extended service life.

VSM CERAMICS (CER)



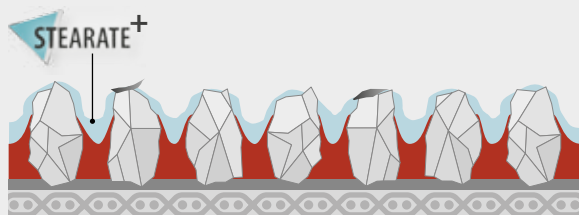
VSM CERAMICS grains achieve optimum stock removal. They are the top products for a large number of stationary and mobile grinding applications. **VSM CERAMICS** also have an excellent price-performance ratio.

VSM grinding-active additional layers



VSM TOP SIZE is recommended for dry machining heat-resistant stainless steels and non-ferrous metals. The grinding-active additional layer improves the cutting performance whilst reducing the temperature in the contact zone. This significantly extends the service life of the abrasive.

NEW



VSM STEARATE Plus

VSM STEARATE Plus and **VSM STEARATE** significantly reduce chip adhesion when processing non-ferrous metals and thus also reduce clogging of the abrasive. The service life is assured and extended so dramatically that excellent stock removal is achieved even after longer periods of use.



VSM CERAMICS



Stock removal ← → Surface

Rolls (max. width)	Wide belts	Narrow belts	Discs	Backings	Grain type	Features	20	24	36	40	50	60	80	100	120	150	180	240	320	400	VSM series
1480	●	●		Cloth	VSM CERAMICS Plus	▼ TOP SIZE, ◊	■	■	■	■	■	■	■	■	■						XK885Y
1480	⊙	⊙		Cloth	VSM CERAMICS Plus	▼ TOP SIZE, ◊	■	■	■	■	■	■	■	■	■						XK880Y
NEW 1480	●	●		Cloth	VSM CERAMICS Plus	◊			■	■	■	■	■	■	■						XK785Y
1480	●	●		Cloth	VSM CERAMICS	▼ TOP SIZE, ◊	■	■													XK888Z
1480	●	●		Cloth	VSM CERAMICS	▼ TOP SIZE, ◊	■	■	■	■	■	■	■	■	■						XK877Z
1480	⊙			Cloth	VSM CERAMICS	▼ TOP SIZE, ◊			■	■											XK870Y
1480	●	●		Cloth	VSM CERAMICS	▼ TOP SIZE, ◊			■	■	■	■	■	■	■						XK875X
1480	⊙	⊙		Cloth	VSM CERAMICS	▼ TOP SIZE, ◊	■	■	■	■	■	■	■	■	■						XK870X
1480/1050			⊙	Cloth	VSM CERAMICS	▼ TOP SIZE, velour-backed					■	■	■	■	■						XK870K
1480	⊙	⊙		Cloth	VSM CERAMICS	▼ TOP SIZE, ◊	■	■	■	■	■	■	■	■	■						XK850X
1480		⊙		Cloth	VSM CERAMICS	▼ TOP SIZE			■	■	■	■	■	■	■						XK870T
1480	⊙	⊙		Cloth	VSM CERAMICS	▼ TOP SIZE, ◊				■	■	■	■	■	■						XK870J
1480/1050		⊙		Cloth	VSM CERAMICS	▼ TOP SIZE					■	■	■	■	■	■	■	■	■	■	XK870F
1480			⊙	Cloth	VSM CERAMICS	▼ TOP SIZE, velour-backed					■	■	■	■	■						XL870F
1480		⊙		Cloth	VSM CERAMICS	◄ STEARATE ⁺ , ◊			■	■	■	■	■	■	■						XK733X
1480	⊙	⊙		Cloth	VSM CERAMICS	◊	■	■	■	■	■	■	■	■	■						XK760Y
1480	⊙	⊙		Cloth	VSM CERAMICS	◊	■	■	■	■	■	■	■	■	■						XK760X
1480			⊙	Cloth	VSM CERAMICS	velour-backed	■	■	■	■	■	■	■	■	■						XK760K
1470			●	Fibre	VSM CERAMICS Plus	▼ TOP SIZE	■	■	■	■	■	■	■	■	■						XF885
1470			⊙	Fibre	VSM CERAMICS	▼ TOP SIZE	■	■	■	■	■	■	■	■	■						XF870
1470			⊙	Fibre	VSM CERAMICS	▼ TOP SIZE			■	■	■	■	■	■	■						XF850
NEW 1470			○	Fibre	VSM STEARATE Plus	◄ STEARATE ⁺			■	■	■	■	■	■	■						XF733
1470			⊙	Fibre	VSM CERAMICS		■	■	■	■	■	■	■	■	■						XF760
1450	●	●		Paper	VSM CERAMICS Plus						■	■	■	■	■						XP780

Legend:

- for low to medium contact pressure
- ⊙ for medium contact pressure
- for medium to high contact pressure
- ◊ also suitable for wet applications

▼ TOP SIZE

Grinding-active additional layer reduces the temperature in the grinding zone

◄ STEARATE⁺

The combination of VSM CERAMICS and STEARATE significantly reduces chip adhesion

velour-backed

products with a velour backing

Flexibility of the backing material (last letter of the series name):

- F** very flexible
- J** flexible
- T** semi-sturdy
- X** sturdy
- Y** very sturdy
- Z** extremely sturdy



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 Technical Center (TC) 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).



A worldwide leader in abrasives.



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