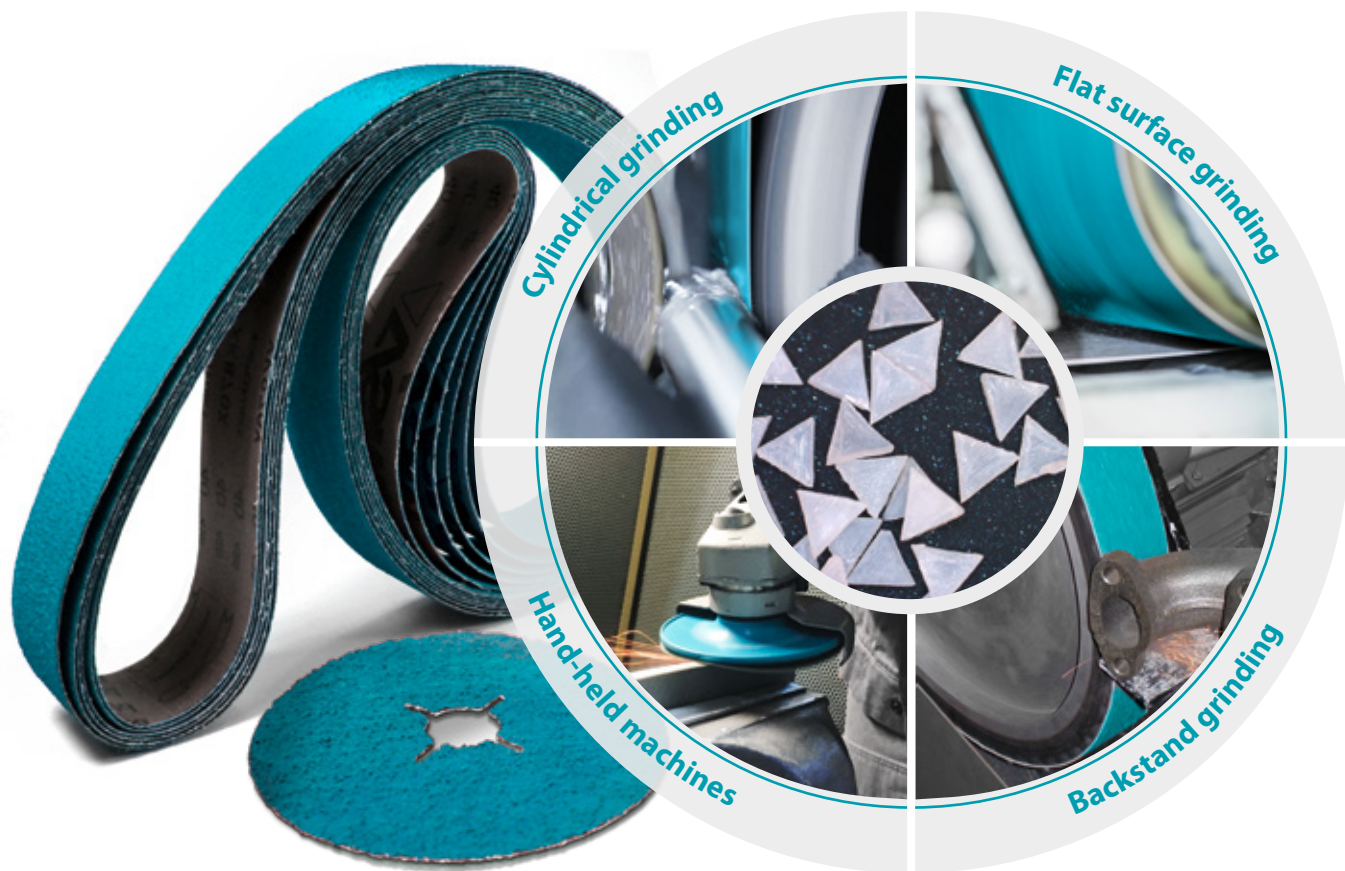


**VSM ACTIROX**

**The latest generation of abrasives  
for maximum stock removal**

# The new VSM ACTIROX



## Your workpiece

Slabs



Tools



Pipes



Tanks and Containers



Hydraulic cylinders



Wire



Castings and forgings



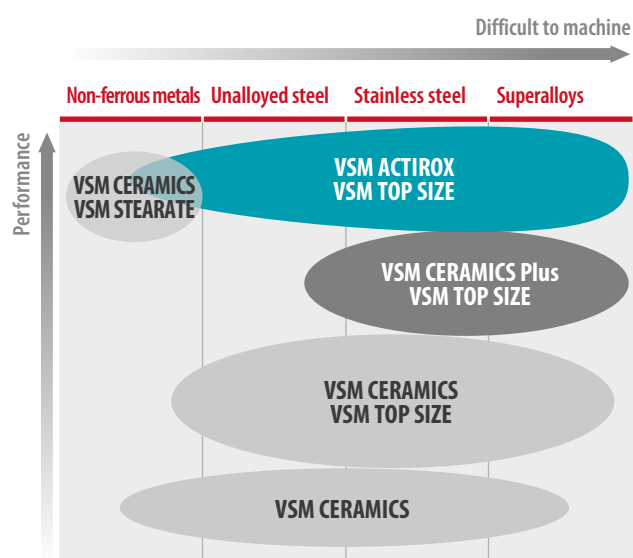
Rollers



# A significant increase in productivity

## Your advantages at a glance

- > **Maximum stock removal** thanks to geometrically shaped ceramic grains leads to a **reduction of operating costs**
- > **Increase in productivity:** More workpieces per unit of time due to **faster cut**
- > Premium performance with **superalloys and stainless steels** thanks to optimum coating density
- > **Cool grinding processes** and **extended service lives** thanks to the additional grinding-active layer VSM TOP SIZE
- > VSM can be relied on to always deliver premium quality **made in Germany**



## VSM ACTIROX Products:



|  |                       |               |                 |       |          |             | <div><div>Stock removal</div><div>Surface</div></div> |    |    |    |    |    |    |    |     |     |     |     |     |     |     |            |          |
|-------------------------------------------------------------------------------------|-----------------------|---------------|-----------------|-------|----------|-------------|-------------------------------------------------------|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|------------|----------|
|                                                                                     | Rolls<br>(max. width) | Wide<br>belts | Narrow<br>belts | Discs | Backings | Grain type  | Features                                              | 20 | 24 | 36 | 40 | 50 | 60 | 80 | 100 | 120 | 150 | 180 | 240 | 320 | 400 | VSM series |          |
| NEW                                                                                 | 1,480 mm              | ●             | ●               |       | Cloth    | VSM ACTIROX | ◀ TOP SIZE, ◇                                         |    |    | ■  |    |    |    |    |     |     |     |     |     |     |     |            | AK890Y*) |
| NEW                                                                                 | 1,470 mm              |               |                 | ●     | Fibre    | VSM ACTIROX | ◀ TOP SIZE                                            |    |    | ■  |    |    |    |    |     |     |     |     |     |     |     |            | AF890    |

### Legend:

- for medium to high contact pressure
- ◇ also suitable for wet applications
- ▼ **TOP SIZE** Grinding-active additional layer reduces the temperature in the grinding zone

**Flexibility of the backing material** (last letter of the series name):  
Y very sturdy

<sup>\*)</sup> available during the first half of 2019

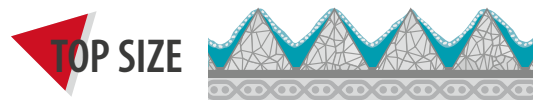
Last revised: 10/2018

# VSM ACTIROX – An abrasive grain in top shape

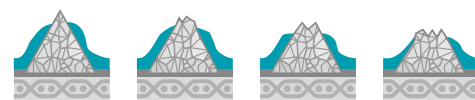
## Compelling stock removal

VSM ceramic grain abrasives have for many years been synonymous with a long service life: One of the reasons is their unique self-sharpening effect.

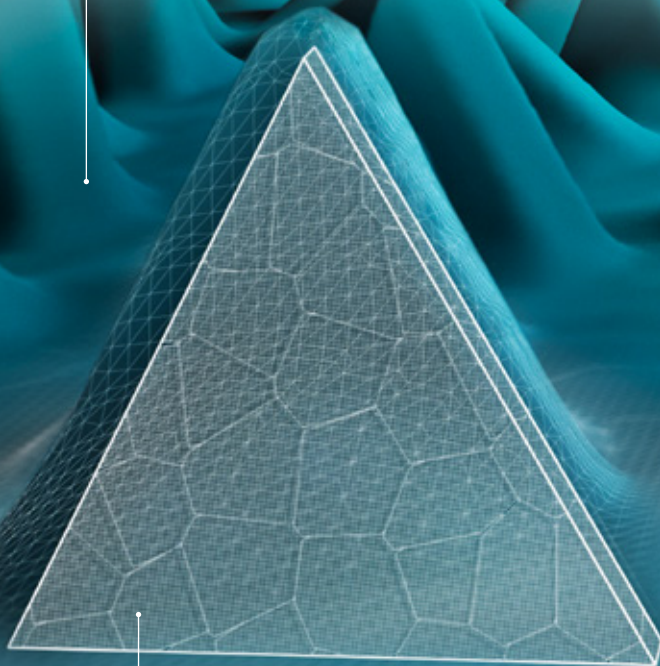
VSM has now come up with the latest generation of abrasives. It is thanks to its geometrically shaped abrasive grain that **VSM ACTIROX** performs an aggressive and faster cut, thus maximizing the stock removal from alloyed steels and stainless steel workpieces.



*High cutting capacity and low temperatures in the contact area thanks to VSM TOP SIZE*



*The geometrically shaped ceramic grain breaks down in a defined fashion constantly producing new sharp edges*

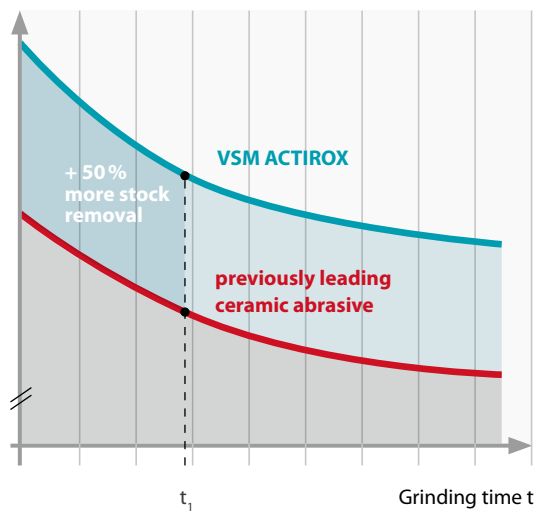


*The geometrically shaped ceramic grain guarantees maximum stock removal*



*For medium to high contact pressures*

Stock removal/time



Thanks to the extremely high stock removal **VSM ACTIROX** fibre discs can machine more workpieces in the same period of time.



*Increase in productivity thanks to faster grinding*



*Suitable for both dry and wet grinding*

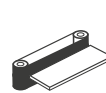
## Machines / Grinding processes



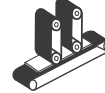
Angle grinder  
> 1,500 watts



Backstand



Edge grinding



Flat grinding



Wide belt grinding



Centerless



Slack of belt



Robotic grinding



Planetary grinding

## Materials

Developed for:



Superalloys



Stainless steel

Also suitable for:



Aluminium



Unalloyed steel



Non-ferrous metals

## Back-up pad VSM TURBO PAD 3

A significantly better performance can be achieved when using the **VSM TURBO PAD 3** in conjunction with **VSM ACTIROX**.



VSM ceramic grain  
Made in Germany

VSM is **one of only 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.

For further information please visit  
[www.actirox.com](http://www.actirox.com)

# Case studies

## Grinding of castings



| VSM ACTIROX            | AK890Y                                                                   |
|------------------------|--------------------------------------------------------------------------|
| <b>Workpiece</b>       | Castings                                                                 |
| <b>Material</b>        | Titanium alloy (Ti AL 6242)                                              |
| <b>Contact wheel</b>   | > Ø = 350 mm, 85° Shore A, serration 6:10                                |
| <b>Cutting speed</b>   | 10.8 m/s                                                                 |
| <b>Feed rate</b>       | Manual                                                                   |
| <b>Belt dimensions</b> | 70 × 3,500 mm                                                            |
| <b>Grit size</b>       | 36                                                                       |
| <b>Lubricant</b>       | None                                                                     |
| <b>Result</b>          | > 15 % more stock removal as compared to the previously leading abrasive |

## Weld removal



| VSM ACTIROX             | AF890                                                                    |
|-------------------------|--------------------------------------------------------------------------|
| <b>Workpiece</b>        | Welding seam                                                             |
| <b>Material</b>         | Stainless steel                                                          |
| <b>Contact element</b>  | > VSM TURBO PAD 3                                                        |
| <b>Rotational speed</b> | 8,500 rpm                                                                |
| <b>Feed rate</b>        | Manual                                                                   |
| <b>Disc dimensions</b>  | Ø 180 mm                                                                 |
| <b>Grit size</b>        | 36                                                                       |
| <b>Lubricant</b>        | None                                                                     |
| <b>Result</b>           | > 50 % more stock removal as compared to the previously leading abrasive |



# 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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Visit our website at  
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