



VSM ILUMERON

Long-term abrasive for perfect
surfaces and highest gloss levels

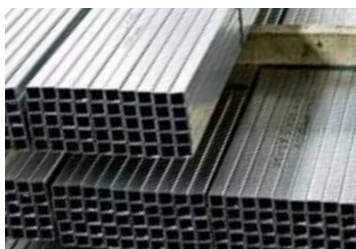
ILUMERON For a s



Your workpiece



Sheet metal



Square steel



Tubes



Sheets, panels

hiny scratch pattern



Your advantages at a glance

- > For a **fine surface finish** with a **very high gloss level**
- > **Consistent surface quality** with extremely narrow tolerances
- > **Increase in productivity:** Grinding and polishing can be accomplished in one single step
- > A specially designed manufacturing process **prevents unwanted chatter marks**
- > Fewer tool changes thanks to an **extended service life** reduce grinding costs and improve process stability
- > **Less dust accumulation** on the workpiece
- > VSM can be relied on to always deliver premium quality **made in Germany**

Grinding of stainless steel surfaces

Product	Gloss Unit (GU)*
RK700X VSM ILUMERON (AO) Grit size 1200	 GU 153
Similar competitor product Grit size 1200	 GU 23



*) The **Gloss Unit (GU)** of is the measuring unit of a gloss metre. 0 GU stands for a perfect matt finish. High-gloss surfaces have a typical GU value of 70.



VSM Series	Rolls (max. width mm)	Wide belts	Narrow belts	Backing	Grain technology	Features	80	120	150	180	220	240	280	320	360	400	500	600	800	1000	1200	
RK700X	1.090 mm	⊙	⊙	Cloth	VSM ILUMERON (AO)	⊖																

Last revised: 04/2024

Features

- ⊙ for medium contact pressure
- ⊖ also suitable for wet applications

Flexibility of the backing material

(last letter of the series name):

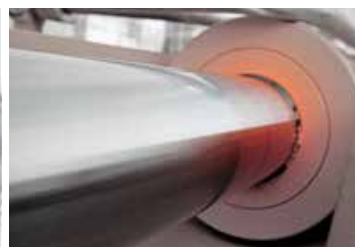
- X sturdy



Commercial kitchens



Pots and pans



Hydraulic cylinders



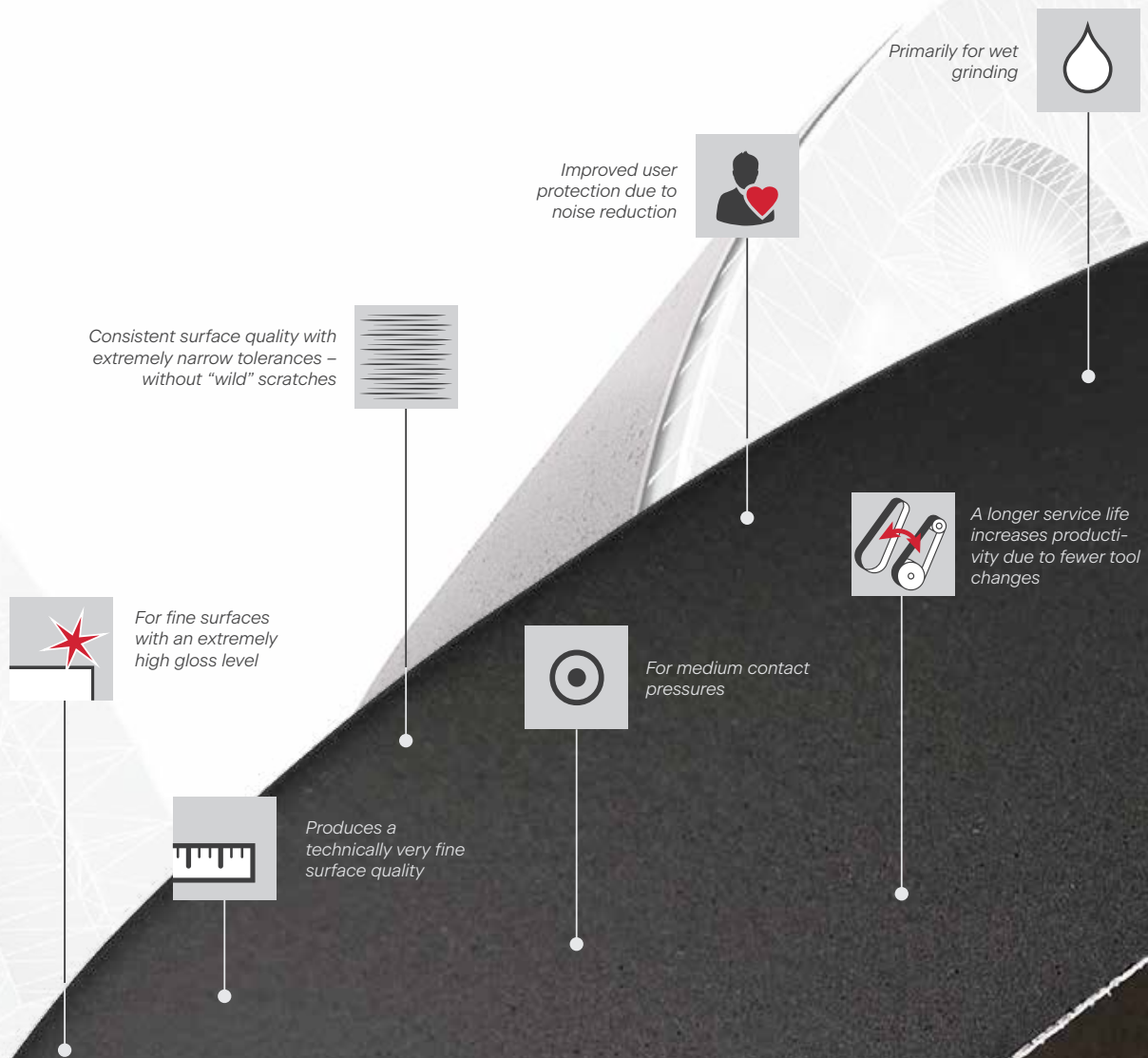
Furniture

VSM ILUMERON – A shiny

For very fine surfaces

For many years, VSM's long-term abrasives have been achieving uniform surface finishes and consistent stock removal. **VSM ILUMERON** goes a step further: The latest VSM long-term abrasive stands out thanks to a much longer service life and a very high gloss level.

A product-specific manufacturing process translates into an equal distribution of the grains in the full faced coated abrasive, which break down completely and gradually over a period of time. This results in a considerably more defined surface finish.

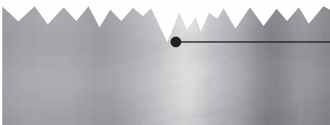


performance

Schematic drawing of a cut surface



Ground with VSM ILUMERON



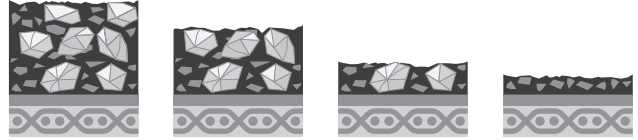
Ground with conventional agglomerates

"wild scratch"



Grinding and polishing in one single step

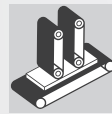
Wear pattern of the grain



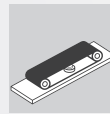
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Grinding time

Machines/Grinding processes



Flat grinding



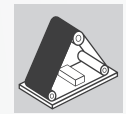
Long belt grinding



Centerless



Planetary grinding



Wide belt grinding



Slack of belt



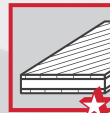
Robotic grinding

Materials

Developed for:



Stainless Steel

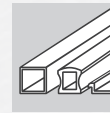


Superalloys

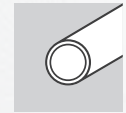


Unalloyed Steel

Also suitable for:



Aluminium



Non-ferrous metal

Case studies

Cylindrical grinding of rollers



Workpiece	Roller, Ø 440 mm 2,120 mm length
Material	St-52
Contact wheel	Ø 450 mm Hardness: 75° Shore A
Cutting speed	14 m/s
Feed rate	900 mm/min, rotation speed roller 128 U/min
Belt dimensions	150 × 3,500 mm
Series	VSM ILUMERON RK700X
Grit size	P180 – P1200
Lubricant	Emulsion
Results	<ul style="list-style-type: none"> > Uniform stock removal > Improved surface quality due to narrow tolerances > No "wild" scratches

Grinding of tubes



Workpiece	Tube
Material	Stainless steel
Contact wheel	–
Cutting speed	27 m/s
Feed rate	2 m/min
Belt dimensions	60 × 940 mm
Series	VSM ILUMERON RK700X
Grit size	P800 – P1200
Lubricant	–
Results	<ul style="list-style-type: none"> > Optimum gloss > Increase in efficiency: Fewer subsequent process steps required (polishing)



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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