

P240 P240

240

240

**VSM ILUMERON** 

# Long-term abrasive for perfect surfaces and highest gloss levels

p240

P241

# The new VSM ILUMERON



## Your workpiece



# For a glossy scratch pattern

## Your advantages at one 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



\*) 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 ILUMERON products:**

			Ø				Stock removal		I	Surface					ce			
	Rolls (max. width)	Wide belts	Narrow belts	Backings	Grain technology	Features	120 150	<u>18</u>	220	240 280	320	09 09 09	200	000	1000	00 72 VS	M seri	es
NEW	1,090 mm	0	0	Cloth	VSM ILUMERON (AO)	0										R	(700)	×

Legend:

O for low to medium contact pressure ◊ also suitable for wet applications Flexibility of the backing material (last letter of the series name): X sturdy

Last revised: 10/2018

# VSM ILUMERON – A shiny performance

## 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.

# Schematic drawing of a cut surface

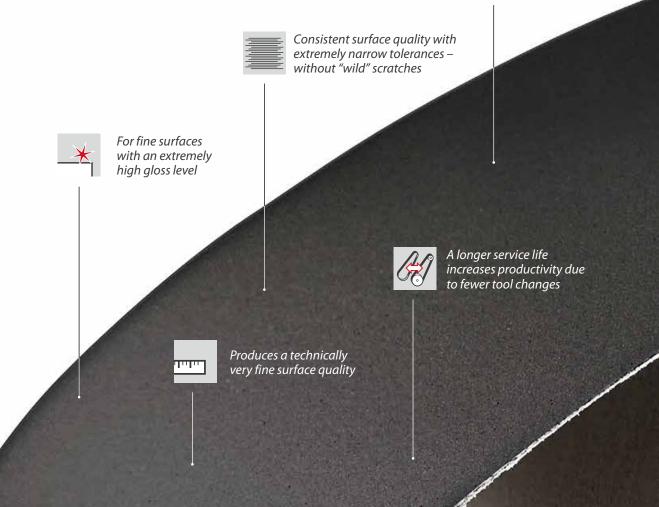




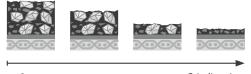
- "wild scratch"

Ground with conventional agglomerates





## Wear pattern of the grain



t=0

Grinding time



## Improved user protection due to , noise reduction



## Machines/Grinding processes









Flat grinding Long belt grinding

Planetary grinding Centerless

Wide belt grinding



Slack of belt

Robotic grinding



## Materials

## Developed for:



## Also suitable for:



Non-ferrous metal



For low to medium contact pressures

# **Case studies**

## Cylindrical grinding of rollers



## **Grinding of tubes**



VSM ILUMERON	RK700X
Workpiece	Roller, Ø 440 mm 2,120 mm lenght
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
Grit size	P180 – P1200
Lubricant	Emulsion
Results	<ul> <li>&gt; Uniform stock removal</li> <li>&gt; Improved surface quality due to narrow tolerances</li> </ul>

> No "wild" scratches

VSM ILUMERON	RK700X
Workpiece	Tube
Material	Stainless steel
Contact wheel	-
Cutting speed	27 m/s
Feed rate	2 m/min
Belt dimensions	60 × 940 mm
Grit size	P800 – P1200
Lubricant	-
Results	<ul> <li>&gt; Optimum gloss</li> <li>&gt; Increase in efficiency: Fewer subsequent process steps required (polishing)</li> </ul>

# 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.



#### Europe

Germany (Headquarters)

VSM · Vereinigte Schmirgelund Maschinen-Fabriken AG Siegmundstraße 17 30165 Hannover T+49 511 3526 478 www.vsmabrasives.de

#### Hungary

#### VSM Abrasives Hungary Ltd. Leshegy út 31 2310 Szigetszentmiklós T + 36 24 519223 www.vsmabrasives.hu

#### Sweden

**PFERD-VSM AB** Radiovägen 3B 18155 Lidingö T+46 8 5647 2300 www.pferd-vsm.se

## Americas

#### Canada

VSM Abrasives Canada Inc. 2425 Wyecroft Road Unit #1 Oakville, Ontario L6L 6R5 T+1 905 827 0005 www.vsmabrasives.ca

### USA

VSM Abrasives Corp. 1012 East Wabash St. O'Fallon, Mo. 63366 T+1 636 272 7432 us.vsmabrasives.com

### **Czech Republic**

VSM Abrasives s.r.o. River Garden, 5th Floor Rohanské nábřeží 678/23 18600 Praha T+420 277 015 300 www.vsmabrasives.cz

#### Poland

PFERD-VSM Sp. z o.o. Ul. Polna 1A 62-025 Kostrzyn Wielkopolski T+48 61 8970 480 www.pferdvsm.pl

#### Switzerland

Latin America

PFERD-VSM (Schweiz) AG Zürichstr. 38 B 8306 Brüttisellen T+41 44 805 2828 www.pferd-vsm.ch

VSM Latinoamérica S.A.S.

Edificio Tierra Firme Piso 17

Carrera 9 No. 115-06

Bogota, Colombia

T +57 1 639 8489

M +57 316 8311705

www.vsmabrasives-

latinamerica.com

## Asia

#### China

## VSM Abrasives (China) Co. Ltd.

Rooms 203/205, Building C, No. 38, Xuxiang Road, Qingpu District, Shanghai, P.R. China Postal Code: 201702 T+86 21 5976 2011 www.vsmabrasives.com.cn

## Thailand

#### VSM AG · Thailand **Representative Office**

444 Olympia Thai Tower, 13th FL Ratchadaphisek Rd., Samsennok Huay Kwang, Bangkok 10310 T+66 2 513 7441 www.vsmabrasives-apac.com



Visit our website at www.vsmabrasives.com

#### Great Britain

VSM Abrasives Ltd. Unit 5, Joplin Court Sovereign Business Park, Crownhill Milton Keynes, MK8 0JP T+44 19 0831 0207 www.vsmabrasives.co.uk

#### Spain

### **VSM · VITEX ABRASIVOS** IBERICA, S.A.U.

Ctra. de Molins de Rei, 79A, Nave 8 08191 Rubí (Barcelona) T+34 93 697 3411 www.vsmabrasives.es

#### Turkey

France

Russia

VSM Impavide S.A.S.

52 Avenue Marcel Paul

T +33 1 4151 0300

VSM AG · Russian

T +7 499 346 35 27

www.vsmabrasives.ru

**Representative Office** 

141006, Moscow region

c. Mytishchi Volkovskoe

roadway vl. 5a, str. 1, of. 208

www.vsmabrasives.fr

93297 Tremblay en France

STARCKE VSM VITEX Zimpara Teknolojisi Sanayi ve Dis Ticaret Ltd. Sti. Yan Sanayi Sitesi Nubuk Cad. No: 8, Kat 1-4 34953 Istanbul/Tuzla T+90 216 591 07 01 www.starckevsm.com