

VSM ILUMERON

Long-term abrasive for perfect surfaces and highest gloss levels

ILUMERON For a s

Your workpiece

FOT



Sheet metal

Square steel

Tubes

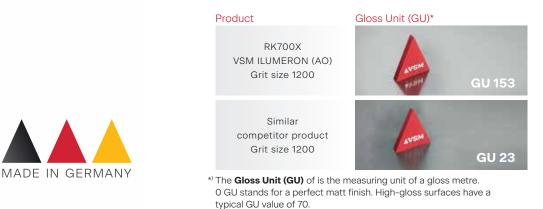
Sheets, panels

hiny scratch pattern



- > 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





Features

 for medium contact pressure also suitable for wet applications \wedge

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

X sturdy









Commercial kitchens

Pots and pans

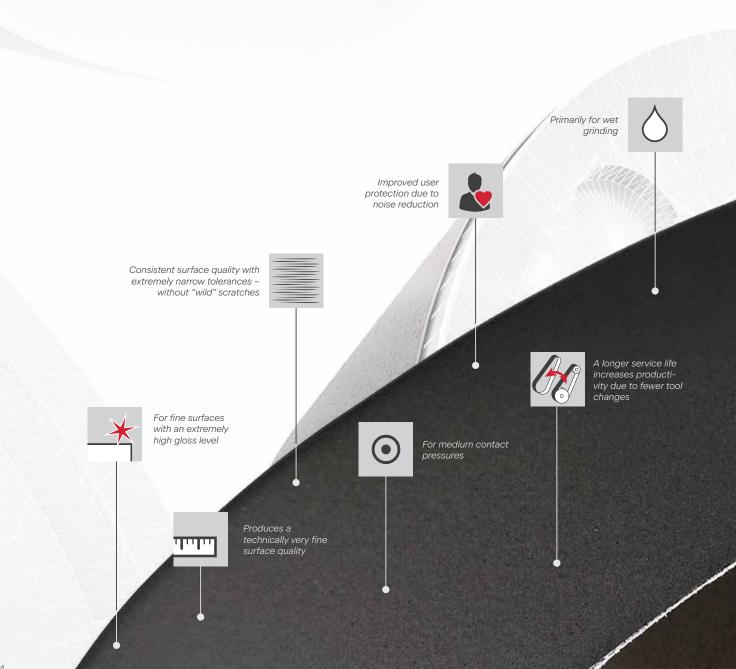
Hydraulic cylinders

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



Grinding and polishing in one single step

Wear pattern of the grain



t=0

Machines/Grinding processes







Grinding time

Long belt grinding

Planetary grinding

Wide belt grinding

Slack of belt Robotic grinding

Materials



Also suitable for: Unalloyed Steel

Superalloys

2.06 Aluminium

Non-ferrous metal

Case studies

Cylindrical grinding of rollers



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
Series	VSM ILUMERON RK700X
Grit size	P180 – P1200
Lubricant	Emulsion
Results	 > 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	 > 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, longterm 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).



Closer to you



Germany (Headquarters) VSM · Vereinigte Schmirgelund Maschinen-Fabriken AG Siegmundstraße 17 30165 Hanover, Germany 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

Switzerland

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

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. UI. Polna 1A 62-025 Kostrzyn Wielkopolski T +48 61 8970 480 www.pferdvsm.pl

Turkey

Latin America

VSM Abrasivos

Latinoamérica S.A.S.

Carrera 9 No. 115-06

Bogota, Colombia

T +57 601 639 8489

M +57 316 8311705

www.vsmabrasives-

latinamerica.com

Edificio Tierra Firme Piso 17

STARCKE VSM VITEX Zimpara Teknolojisi Sanayi ve Dis Ticaret Ltd. Sti. AYOSB Gazi Bulvari 8. Sokak No: 5, Tuzla Istanbul T +90 216 591 06 17 T +90 216 591 07 01 www.starckevsm.com

France

VSM Impavide S.A.S. 52 Avenue Marcel Paul 93297 Tremblay en France T +33 1 4151 0300 www.vsmabrasives.fr

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

Asia-Pacific

Singapore VSM Abrasives Asia Pacific Pte. Ltd. 4 Battery Road #25. Bank of China Building Singapore 049908 T +66 2 513 7441 www.vsmabrasives-apac.com

Thailand

VSM Abrasives Asia Pacific Pte. Ltd. **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

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

Sweden

VSM Abrasives Sverige AB Stockholm Sweden M +46 73 077 70 32 www.vsmabrasives.se

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

www.vsmabrasives.com

Visit our website: