VSM COMPACTGRAIN Plus
VSM COMPACTGRAIN

Self-sharpening long-term abrasive for consistent and reproducible surfaces

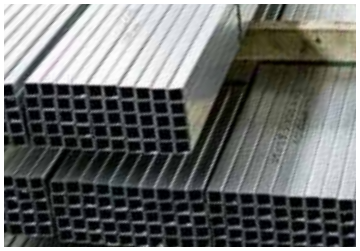
The original – VSM CO

MADE IN GERMANY

Your workpiece

Coils

Sheets



Square steel

Tubes

MPACTGRAIN

Long-term abrasive for perfectly finished surfaces

VSM offers the largest range in the marketplace with more than 30 compact grain series, in order to meet almost any customer requirement. You may rely on a consistently high quality of our long-term abrasives: **VSM COMPACTGRAIN** – known to be **the original** – for more than forty years.

Impressive from start to finish

> Optimum **self-sharpening effect** and **consistent, reproducible surface values**

> Extremely long service life for a uniform scratch pattern with **constant roughness and stable gloss values**

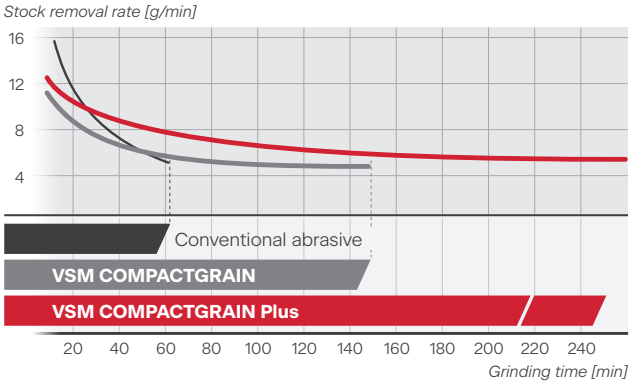
> VSM can be relied on to always deliver premium quality – **Made in Germany**

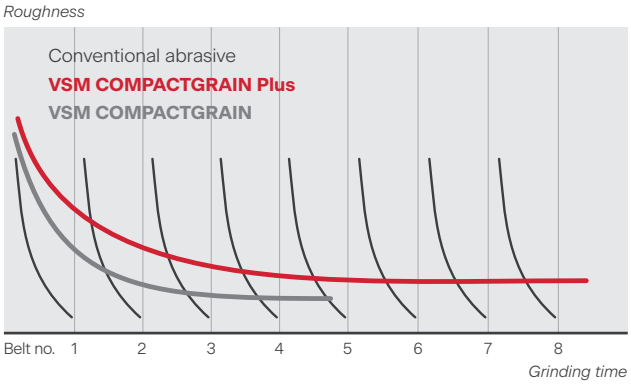
VSM COMPACTGRAIN Plus

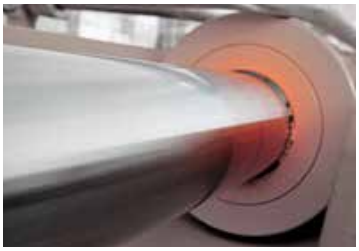
> A **substantial increase in service life** compared to conventional abrasives translates into fewer tool changes

> **A more uniform surface** finish and a **more consistent scratch pattern**

> **Constant stock removal,** thanks to a **more even wear pattern,** guarantees a higher process stability







Piston rods and cylinders

Tank and plant construction

Medical instruments

Large catering facilities

Case studies

Grinding of stainless steel coils

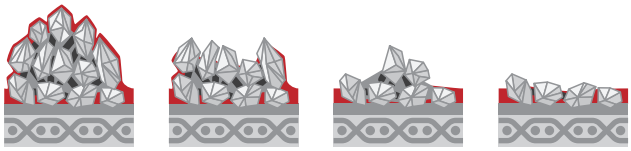
Workpiece	Coil 1,200 m in length
Material	Stainless steel
Contact element	Rubberised roll Hardness: 80° Shore A
Cutting speed	25 m/sec
Feed rate	37 m/min
Series	**VSM COMPACTGRAIN Plus KK790Y**
Grit size	180
Lubricant	Oil
Result	> Two-fold increase in service life: Grinding of two coils with one belt (2,400 m) > Reduction of set-up costs/downtimes > Reduction of the costs of belts disposals

Grinding of tubes

Workpiece	Tube with weld
Material	Stainless steel
Contact element	–
Cutting speed	35 m/sec
Feed rate	6–8 m/min
Series	**VSM COMPACTGRAIN CK748X**
Grit size	180, 240, 400, 600
Lubricant	Oil
Result	> It was possible to produce a customized finish > Increase in service life from 130 minutes (competition) to 400 minutes

Uniform stock removal producing consistent surface values

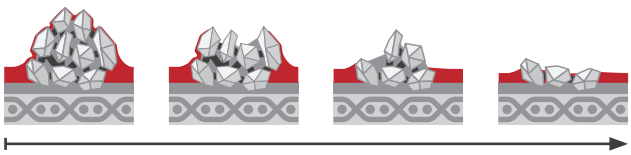
VSM COMPACTGRAIN Plus



t=0 *Grinding time*

Thanks to an optimized grain reserve in conjunction with improved bonding properties, **VSM COMPACTGRAIN Plus** series feature a more uniform wear pattern. This means that all of the granulate is used down to the substrate. This added benefit translates into an a prolonged service life and a uniform surface finish.

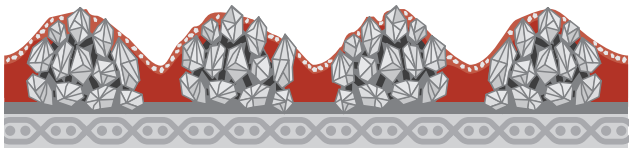
VSM COMPACTGRAIN



t=0 *Grinding time*

All established **VSM COMPACTGRAIN** series benefit from the self-sharpening effect of the VSM abrasive grain. The long-term abrasive are completely made of granules with scores of abrasive grains. Once used, grains are broken out of the granulate by the grinding forces exposing new and sharp grain tips.

Grinding active additional layer



VSM TOP SIZE

TOP SIZE **VSM TOP SIZE** is recommended for dry machining of stainless and heat-resistant steels and non-ferrous metals. The additional layer with grinding additives improves the cutting performance while the temperature in the grinding area is reduced. The service life of the abrasive is enhanced considerably.

Products

Stock removal — Surface

VSM Series	Rolls (max. width mm)	Wide belts	Narrow belts	Discs	Backing	Grain technology	Features	40	60	80	120	180	240	320	400	600	800	1000	1200
KK791Y	1.090	⊙	⊙		Cloth	**VSM COMPACTGRAIN Plus (AO)**	💧												
KK790Y	1.090	●	●		Cloth	**VSM COMPACTGRAIN Plus (AO)**	💧												
XK789X	1.480	●	●		Cloth	**VSM COMPACTGRAIN (CER)**	💧												
XK786X	1.480	●	●		Cloth	**VSM COMPACTGRAIN (CER)**	💧												
LK719X	1.480	●	●		Cloth	**VSM COMPACTGRAIN (AO)**	💧												
KK718X	1.090	●	●		Cloth	**VSM COMPACTGRAIN (AO)**	💧												
KK834X	1.090	⊙	⊙		Cloth	**VSM COMPACTGRAIN (AO)**	◀ **TOP SIZE**, 💧												
KK712Y	1.480	⊙	⊙		Cloth	**VSM COMPACTGRAIN (AO)**	💧												
KK712X	1.480/1.090	⊙	⊙		Cloth	**VSM COMPACTGRAIN (AO)**	💧												
KK712J	1.090		⊙		Cloth	**VSM COMPACTGRAIN (AO)**													
KK731X	1.090	○	○		Cloth	**VSM COMPACTGRAIN (AO)**													
KK731K	1.090			○	Cloth	**VSM COMPACTGRAIN (AO)**													
KK772X	1.090	⊙	⊙		Cloth	**VSM COMPACTGRAIN (AO)**	💧												
KK772K	1.090			○	Cloth	**VSM COMPACTGRAIN (AO)**													
KK772J	1.090	○	○		Cloth	**VSM COMPACTGRAIN (AO)**	💧												
KK712F	1.050		○		Cloth	**VSM COMPACTGRAIN (AO)**													
KK770J	1.090		○		Cloth	**VSM COMPACTGRAIN (AO)**	💧												
CK748X	1.090	⊙	⊙		Cloth	**VSM COMPACTGRAIN (SIC)**	💧												
CK918X	1.090	⊙	⊙		Cloth	**VSM COMPACTGRAIN (SIC)**	💧												
CK772T	1.090	○	○		Cloth	**VSM COMPACTGRAIN (SIC)**	💧												
CK742J	1.090		⊙		Cloth	**VSM COMPACTGRAIN (SIC)**													
KF712	1.470			⊙	Fibre	**VSM COMPACTGRAIN (AO)**													
KF736	1.470			⊙	Fibre	**VSM COMPACTGRAIN (AO)**													
KP712	1.450	⊙	⊙		Paper	**VSM COMPACTGRAIN (AO)**													
CP772	1.450	○	○		Paper	**VSM COMPACTGRAIN (SIC)**													

Last revised: 06/2025

Other dimensions and grit sizes upon request.

Features

- ○ for low to medium contact pressure
- ⊙ for medium contact pressure
- ● for medium to high contact pressure
- 💧 also suitable for wet applications

Flexibility of the backing material

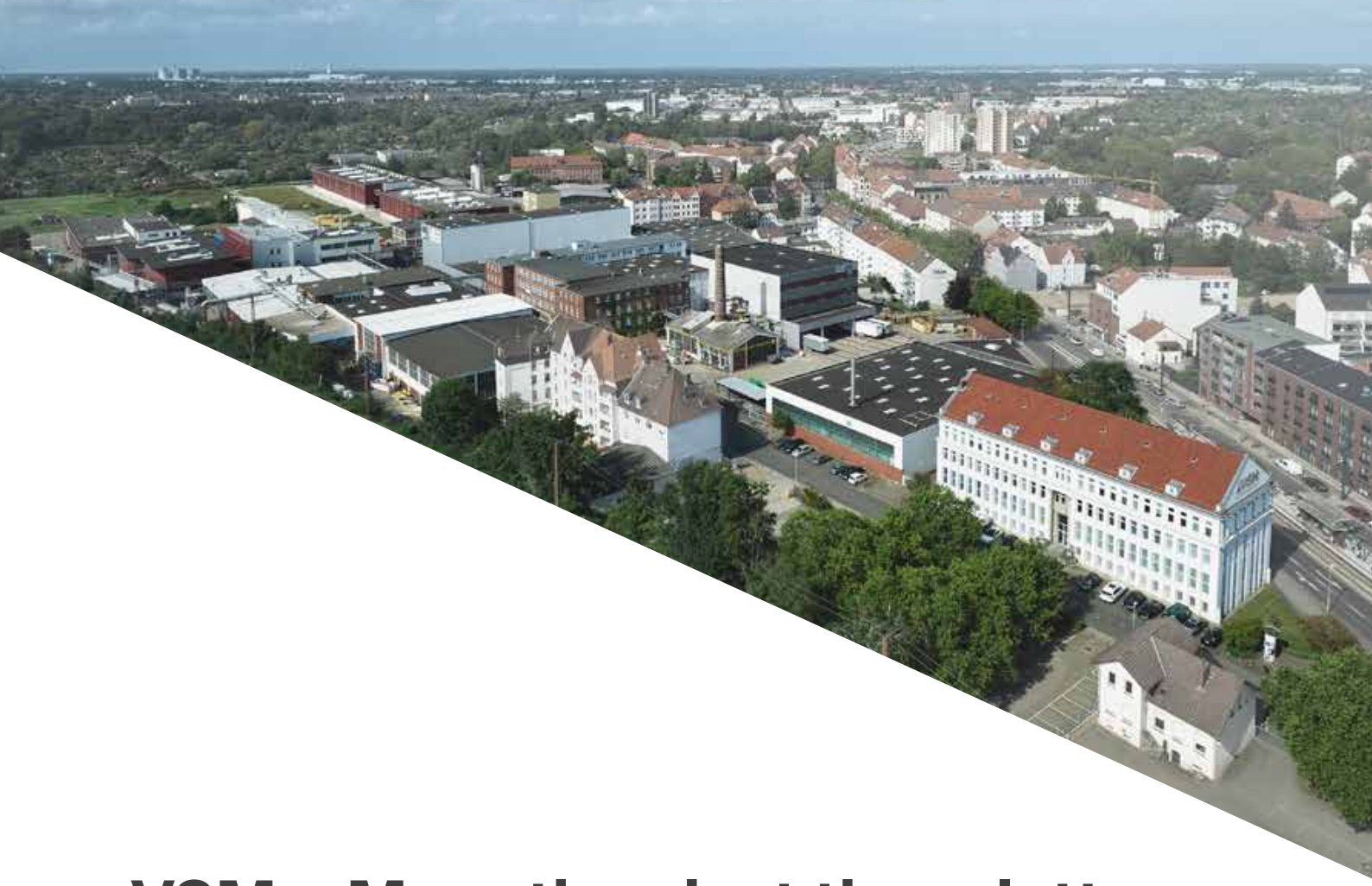
(last letter of the series name):

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

Legend

CER = CERAMICS
AO = ALUMINIUM OXIDE
SIC = SILICON CARBIDE

◀ **TOP SIZE**
Grinding-active additional layer reduces the temperature in the grinding zone



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).

Closer to you

Europe

Germany (Headquarters)
VSM · Vereinigte Schmirgel- und Maschinen-Fabriken AG
Siegmundstraße 17
30165 Hanover, Germany
T +49 511 3526 478
www.vsmabrasives.de

Czech Republic
VSM Abrasives s.r.o.
River Garden II
Rohanské nábřeží 678/23
CZ 18600 Praha
P: +420 277 015 300
www.vsmabrasives.cz

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

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

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

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

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

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

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

Turkey
STARCKE VSM VITEX Zimpara Teknolojisi Sanayi ve Dis Ticaret Ltd. Sti.
Soğanlık Yeni Mah. Aliağa Sok.
Bumerang Kartal Rezidans
No:8 Kat:26 Daire:137
34880 Kartal / İstanbul
T +90 216 591 07 01
www.starckevsm.com

Americas

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

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

Mexico
VSM Mexico
4A, Office 02
6518 Vía Atlixcáyotl, Lomas de Angelópolis, San Andrés Cholula, Puebla 72830, Mexico.
T +1 636 272 7432
us.info@vsmabrasives.com
www.vsmabrasivos.mx

Latin America
VSM Latinoamérica S.A.S.
Carrera 7 No. 116 – 50.
WeWork Building, Floor 5
Office 5-115
Bogotá, Colombia
M +57 317 641 6748
www.vsmabrasivos.com

Asia-Pacific

Singapore
VSM Abrasives Asia Pacific Pte. Ltd.
9 Raffles Place #24-01
Republic Plaza Tower 1
Singapore 048619
T +66 2 513 7441
www.vsmabrasives-apac.com

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 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

Visit our website:
www.vsmabrasives.com

VSM is a registered trademark of VSM · Vereinigte Schmirgel- und Maschinen-Fabriken AG, Hanover.
Subject to technical changes. VSM · P/COM/05.WW/10.26/en/1