

XELERION

Fine polishing, on a whole new level

VSM XELERION sets new standards for fine polishing applications. XELERION achieves a flawless, reproducible finish, ensures sustained high stock removal and reduces the number of required process steps. Polishing processes are more efficient and operator fatigue is significantly reduced.

Fine polishing - right on po

Consistent surface finish, a reproducible scratch pattern and a sustained high stock removal rate – this is what the new XELERION series KK670F and KK670J are all about.



Creates flawless, consistent surfaces up to high gloss ____



High initial aggressiveness and constant stock removal



Cotton backing conforms to every contour _____



Optimal distribution of force and heat reduces discoloration and deformation



User-friendly due to reduced noise, odor and dust _____

Your application

Medical instruments



Implants





Plant and tank construction





Kitchen industry

Shipbuilding





Fittings Automotive

oint



XELERION

XELERION excels in applications with low contact pressure, such as backstand grinding or grinding using hand-held tools.

Developed for:





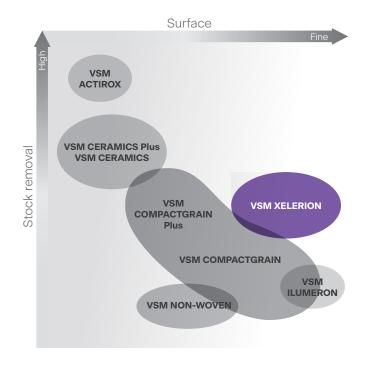
Also suitable for...



Aluminum







Product overview







VSM range	Rolls (max. width inches)	Belts	Discs	Backing	Grain technology	120	150	180	220	240	280	360	400	500	900	800	1000	1200	1500	2000
KK670F	23"	0		Cloth	VSM XELERION (AO)					Р	F		Р		Р			Р		Р
KK670J	23"	0	0	Cloth	VSM XELERION (AO)					Р	F		Р		Р			Р		Р

Last updated: 10/2024. Other dimensions and grit sizes on request.

Features

O for low to medium contact pressure

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

F very flexible

J flexible

P = categorization according to FEPA standard. AO = aluminum oxide



XELERION

For maximum productivity

The improved stock removal performance simplifies the polishing process considerably. Even with fine grit sizes, stock removal is high, which means **XELERION** can easily polish out rough surfaces. Furthermore, common grit size steps can be skipped to achieve the desired surface finish with just a few grinding passes.

High performance also means fewer process steps and tool changes. Productivity is massively increased.

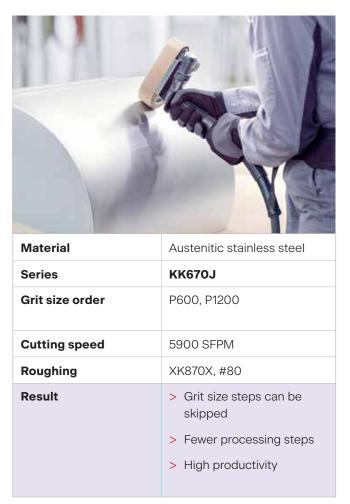
Case studies

Medical instrument



Material	Martensitic stainless steel					
Series	KK670F					
Grit size order	P240, P600, P1200, P2500					
Cutting speed	5100 SFPM					
Roughing	XK870F, #120					
Result	> No thermal damage to the workpiece					
	Low polishing effort required					
	> Service life doubled					

Pharmaceutical container



Further examples of use

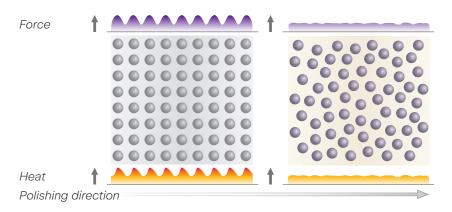






Innovations that point the way

Randomized structure



Unlike similar competitor products, the **XELERION dots** are not arranged strictly symmetrically on the backing, but in a randomized manner.

This new, innovative manufacturing process makes a decisive difference on several levels.

The short, irregular grinding interruptions **optimize the distribution of force and heat,** resulting in cooler grinding. This helps to prevent discoloration and deformation of the material.

This results in a **fine, even surface** without any "random scratches." A perfectly reproducible finish is achieved – right up to a **flawless scratch pattern for high-gloss surfaces.**

In combination with a flexible backing, the new dot design results in **outstanding adaptability to the workpiece geometry.** This means that even tight radii and complex contours, such as those of tools or medical instruments, can be processed with pin-point accuracy and precision.

XELERION dots









t=0

Grinding time

- > Newly developed grain structure: The XELERION dots consist of several layers of sharp abrasive grains set in a synthetic resin bond
- > New sharp grains are continually presented throughout the polishing process
- > This ensures sustained high stock removal

Made in Germany, manufactured in the U.S.

XELERION was developed, tested and is now produced in Hanover, Germany. In O'Fallon, Missouri the base materials are further processed into finished goods.

With our in-house expertise, we are able to significantly influence the performance of the abrasives and meet the stringent demands of the metal processing industry.







VSM - More than just three letters

VSM stands for competence, quality and customer orientation.

Few others understand grinding processes like we do. Not only do we grind every surface to precision, we also analyze 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

VSM develops and produces all the main components such as backing fabrics, resin bonds and abrasive grains at its Hanover site. By doing so, we fulfill our high, self-imposed requirements in industrial, commercial and trade sectors. 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 all 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.

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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