

# **VSM®CERAMICS**

- The Choice for Metal Grinding
  - Higher Cut Rates
  - Longer Service Life
  - Products for all Part Profiles
  - Excellent Price-Performance Ratio

#### QUALITY ABRASIVES

### **VSM Ceramics**

VSM's Ceramic Grain products have the reputation of being the toughest, longest- lasting metal removal products on the market today. Compared to other conventional grain products that immediately begin to lose aggressiveness once grinding begins, ceramic abrasives maintain its cut rate needing minimal additional pressure (see chart to the right).

This constant cut rate reduces grinding time, resulting in less operator fatigue, while increasing productivity and improving abrasive costs.

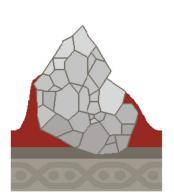
## **Longer Lasting**

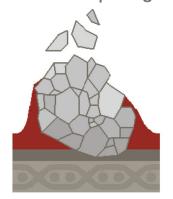
The self-sharpening characteristics of VSM's engineered ceramic grain is the secret to its ability to provide customers a more aggressive cut and produce higher rates of stock removal than conventional coate abrasives.

The grain's inherent crystalline structure provides for "thousands" of new cutting points throughout the life of the product. As illustrated in Aluminum Oxide
Zirconia Alumina
Ceramic Alumina
Ceramic Alumina
Alumina
Ceramic Alumina
Ceramic Alumina
at a constant stock removal rate.

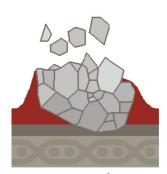
the drawing below, as the cutting crystals becomes dull, the forces of the grinding process break them away, exposing new sharp crystals ready to cut. This unique process is duplicated thousands of times throughout the life of the product, allowing it to last longer than conventional abrasives.

## **Self Sharpening Process of Ceramic**









## Grinding time (t)

## **Recommened Applications**

VSM has developed a wide variety of ceramic products which have been designed to take into account many different types of materials. There are products designed to be used on harder metals such as; Titanium, Nickel and Cobalt based alloys or Stainless Steel. Others can be used on Carbon Steel or Cast Iron.

Machines which utilize these products include hand held power tools, stroke sanders, backstands, wide belt machines, flat and centerless grinders, robotic processes and many more types of equipment. These machines can exert light to very heavy pressures when grinding workpieces, which is an important factor when deciding on the proper coated abrasive product.

VSM offers a variety of products for the customer to choose from, allowing them to select the best product for their application.



### **VSM Ceramic Products**

## **VSM Backings**

The type of backing utilized within the application is very important in the success of the product. VSM offers many backings for its ceramic product line from heavy duty robust polyester backings to very flexible cotton cloth products. These backings which are treated in VSM's own cloth treatment plant, have been designed to have optimum grain retention and superb edge wear, resulting in the best product for the customer's application.

## **Grinding Aids**

In many applications, the workpiece is sensitive to the heat generated during the grinding process. VSM offers many products with a grinding aid, which allows the coated abrasive product to cut cooler, resulting in less discoloration of the workpiece and longer abrasive life. Products without grinding aids are also available, if the application warrants.

#### **Resin Fiber Discs**

Resin Fiber Discs are available in 4-1/2", 5", 7" and 9-1/4" diameters. The are offered in both a top sized and non top sized products.



Product Range													
				Grit Size									
VSM Series	Backing	Backing Type	Special Feature	24	36	40	50	60	80	100	120	150	180
XK870X	Polyester	Sturdy	TS	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
SK855X	Polyester	Sturdy	TS	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
XK875X	Polyester	Sturdy	TS		Χ	Χ	Χ	Χ	Χ	Χ	Χ		
XK870J	Polyester	Flexible	TS				Χ	Χ	Χ	Χ	Χ		
XK870F	Cotton	Very Flexible	TS					Χ	Χ	Χ	Χ	Χ	Χ
XK84oT	Cotton	Flexible	TS		Χ	Χ		Χ	Χ		Χ		
XK877Z	Polyester	Very Sturdy	TS	Χ	Χ	Χ							
XK888Z	Polyester	Very Sturdy	TS	Χ	Χ								
XK84oY	Polyester	Sturdy	TS					Χ					
SK85oX	Polyester	Sturdy	TS		Χ	Χ	Χ	Χ	Χ				
XK76oX	Polyester	Sturdy		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
SK750X	Polyester	Sturdy		Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
XK747Z	Polyester	Very Sturdy		Χ									
XK77oZ	Polyester	Very Sturdy			Χ								
XF870	Fiber	Fiber	TS	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ		
SF840	Fiber	Fiber	TS	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ		
SF850	Fiber	Fiber	TS		Х	Χ	Χ	Χ	Χ				
XF760	Fiber	Fiber		Χ	Х	Χ	Χ	Χ	Χ		Χ		
SF750	Fiber	Fiber		Χ	Х	Χ	Χ	Χ	Χ		Χ		

# Made in Germany high-performing – competent – reliable More than 140 years of experience

Please find details of VSM supply and service around the world at  ${\bf www.vsmabrasives.com}$ 



