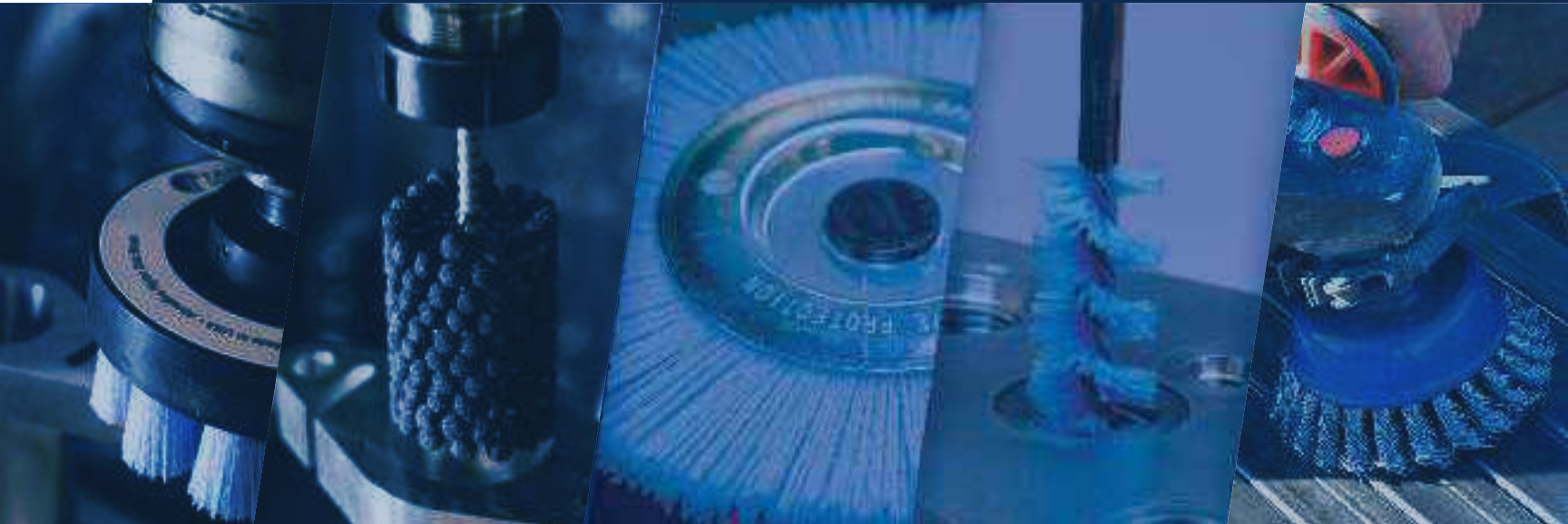




INDUSTRIAL & ABRASIVE
BRUSH MANUFACTURER



TANISBRUSH.COM

WHY TANIS BRUSH?



Tanis is a leading manufacturer and supplier of industrial and abrasive brushes. We take pride in offering a wide selection of standard brushes that fit countless applications. If your project calls for special considerations, our team can work with you to adapt to your specifications.

We are committed to providing quality brush solutions backed by great service to achieve your performance needs.



ABRASIVE BRUSHES



Abrasive Brushes are constructed with nylon filament that contains an abrasive mineral grain. The strands are 'impregnated' with grit throughout the nylon to make the abrasive filament.

There are several types of abrasive filaments with different properties to accomplish a variety of abrasive functions from deburring, honing, and edge radiusing/blending to surface finishing, conditioning, polishing, and refurbishing.

TYPES OF ABRASIVE BRUSHES

Disc Brushes



End Brushes



Wheel Brushes



Twisted Brushes



Bore-Hone™ Brushes



ABRASIVE FILAMENTS



CeramiX® is the most aggressive filament and contains an exclusive mineral grain from 3M™ that delivers unmatched deburring performance.



Silicon Carbide is a widely used abrasive grain due to its effective cutting action, polishing capacity, durability and cost.



Aluminum Oxide is preferred for finishing soft metals or other materials where a smooth finish is required.



Alumina Silicate is a fine grain abrasive filament well-suited for fine finishing and cleaning.



DIAMOND

Diamond is a super abrasive used for polishing, deburring and edge radiusing applications but comes at a higher price point.

POPULAR GRIT SIZES



120 grit is our recommended starting point for most applications.

		MORE AGGRESSIVE ←————→ LESS AGGRESSIVE						
ABRASIVE FILAMENT	GRIT SIZE							
	46	80	120	180	220	240	320	500
CeramiX	.065" x .080"	.040", .055"	.028", .040"	.035"	.022"		.022"	
	.068" x .090"	.045" x .090"						
Silicon Carbide	.060", .045"	.040", .050"	.022", .040"	.035"		.030"	.022"	.018"
	.070"	.045" x .090"						
Aluminum Oxide			.040"		.024"	.040"		

TRIM LENGTH & BRUSH DENSITY

A brush with a short trim length is rigid and used for high speed cutting. Longer trim lengths are more flexible and used for conforming to irregular shaped surfaces.

UNMATCHED PERFORMANCE IN DEBURRING & SURFACE FINISHING WITH CERAMIX®



Tanis CeramiX® abrasive brushes deliver superior performance in application due to our industry-leading 3M™ Abrasive Grain.

Using CeramiX®, our brushes perform up to **SIX TIMES BETTER** than silicon carbide in throughput and cutting action.

The 3M™ Abrasive Grain allows the filament to be self-sharpening, which means every time the strands strike the metal part the grain fractures creating sharper edges that blend, break the edges, and deburr faster and more efficiently.

With CeramiX® You get a longer lasting brush built for performance.



3M™ is a registered trademark of the 3M Company.

INDUSTRY SPOTLIGHT ●●●●●



AUTOMOTIVE



AEROSPACE



**HEAVY
CONSTRUCTION**



**MACHINING &
FABRICATION**



SHIP BUILDING



OIL & GAS

DISC BRUSHES



Disc Brushes are ideal for flat part deburring, surface preparation and finishing, rust and scale removal, blending surface marks and edge radiusing on milled or machined parts.

Disc brushes are easily mounted and used in a variety of applications – CNC machining centers, robotic cells, 5-axis machines, automated machinery, and custom-designed equipment.



Dense Pattern

Dense Pattern Disc Brushes are effective for more aggressive brushing and removal of burrs.

Greater filament density is necessary to deburr parts faster and helps remove a range of burr sizes. More filament provides more mineral grain to deburr the part, delivering considerably more throughput.

DISC BRUSHES



Choose our Tufted Pattern when you need filament flexibility to brush around features in the part such as bore holes and recessed areas that create edges. You still get the aggressive brushing action you need while efficiently achieving the goal of removing the burrs and sharp edges.



Tufted Pattern

Our Shell Mill disc brushes come with a built-in keyway that mount directly on a standard shell mill holder.



MINI DISC BRUSHES



Tanis Mini Disc Brushes are perfect for deburring and improving surface finish when your application calls for a tool with a smaller footprint or there are space constraints in the machine. They come standard in 2" & 3" diameters.

These small diameter discs feature a high filament density so abrasive cutting action is in full force. While performance is still at peak, depending on your part surface area and the size of the burrs you may need to increase the number of rotations to ensure the right finish is achieved.

Remember to start brushing in the opposite direction of the cutting tool to remove any burrs created in the machining process.

DISC BRUSH ROTATIONAL DIRECTION

On the initial pass of the brush, rotation should be in the opposite direction of the cutting tool that created the burr for optimal deburring performance.

Brush should overlap the edge of the working piece by 1" minimum.



BRUSH PATH:

The ideal brush path is in the opposite direction of travel from the cutting tool that created the burr.

The brush path should start and end off the part, to a point where the trailing edge of the brush is extending over the part edge a 1/2" to 1" to effectively remove any burrs.

PRO TIP - STARTING PARAMETERS

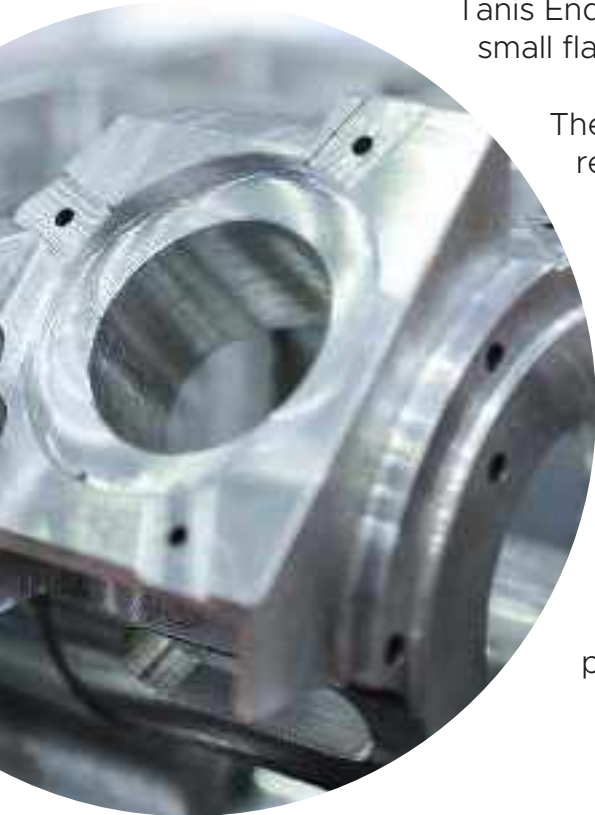
Recommended Depth of Penetration for Disc Brushes is .075" to .100"

Recommended Surface Feed Rate is 30-40" per minute

Starting RPM range is 1,000 to 1,500*

*Subject to your application needs and brush size.

CERAMIX® END BRUSHES WITH BRIDLES



Tanis End Brushes deliver targeted brushing action to small flat surfaces or recessed areas on machined parts.

They blend tool marks, deburr slots and small recessed areas, rough edges, and internal part features.

Our End Brushes feature bridles to prevent flaring in use and an integrated stem for easy mounting in a collet or tool holder.

Made with our CeramiX® filament containing an exclusive Abrasive Grain from 3M™ that delivers unmatched deburring action.

They easily integrate in CNC machines and robotic centers and can also be used in portable air or electric tools.



FINE BLANKING DISC BRUSHES



Tanis Fine Blanking Disc Brushes are designed for stationary finishing machines. Our fine blanking abrasive nylon disc brushes are created to your specification and ideal for deburring and edge radiusing fine-blanked parts and polishing machined surfaces.

Our brushes fit Loeser, Peter Wolters, Abtex and Cleveland Deburring Machine Company machines.



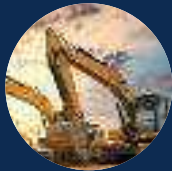
FINE BLANKING INDUSTRIES



Automotive



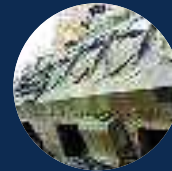
Aerospace



Heavy Machinery



Medical



Military & Defense

SMALL DIAMETER WHEEL BRUSHES

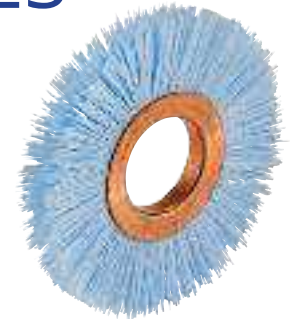


Get in the grooves with our small diameter Copper Center Wheel Brushes.

They are perfect for cleaning, polishing, and deburring recessed areas such as small openings, slots, machined grooves, and for fine deburring on medical instruments and gear splines.

Available in our CeramiX[®] filament or Silicon Carbide for finishing carbon steel, stainless steel, titanium, and cast iron parts. Our CeramiX[®] filament features an exclusive 3M[™] Abrasive Grain -- for greater cutting action and throughput.

Brushes come in 1" to 4" diameters.



1" Brush Diameter



3" Brush Diameter

PRO TIP

Wheel Brush Depth of Penetration

For optimal performance, the recommended depth of contact for a wheel brush is up to 10% of the trim length

WHEEL & BORE BRUSHES



Our CeramiX® Metal Hub Wheel Brushes give you great flexibility in application and come in standard diameters from 3" to 6".

They are ideally suited for deburring and finishing irregular-shaped parts, contoured surfaces, cylinder bores and machined grooves. When looking to edge radius or blend the edges, wheel brushes are the perfect choice.

Wheel Brushes are versatile and range in capabilities from finishing cylinders, housings, camshafts, gear splines, internal bores, keyways, and slots to blisk and turbine blades, piping, threading, tubing, and countless machined parts.

If you have cross holes, you may need a Bore Brush. Designed to remove burrs from internal edges and finish bores, removing any contaminants left behind from the machining process.

Bore Brushes come standard in 1" to 4" diameters. All made with our high-performance CeramiX® filament.



ABRASIVE BRUSH ACCESSORIES



DISC BRUSH DRIVE ARBOR

Securely mount disc brushes for use in any type of milling or CNC machine. Drive arbor shaft is $\frac{3}{4}$ " diameter for use in any live tool holder. Includes bolt and washer. Coolant can be flushed through shaft and bolt.



MINI DISC DRIVE ARBOR

Mount Mini Disc Brushes in any type of milling or CNC machine. Drive arbor shaft is $\frac{1}{2}$ " diameter for use in any live tool holder. Set screw included. Coolant can be flushed through shaft.



STANDARD SHELL MILL HOLDER



Our Shell Mill Disc Brushes come with built in keyway that fit standard shell mill holders (not sold through Tanis).

BRUSH EXTENSIONS



COMPATIBLE WITH BRUSH ARBOR HOLES OF:	LENGTH OF EXTENSION	BRUSH TYPE
1/4"	6"	Copper Center Wheel
1/2" & 5/8"	12"	Copper Center Wheel (1/2") or Metal Hub Wheel (5/8")

Each part number comes with 1 extension and 3 shoulder bolts. Capable of holding up to 3 wheels. Brushes sold separately.

TWIST BRUSHES



MAXIMIZE PRODUCTIVITY WITH COLLET READY TWIST BRUSHES

Our CeramiX® Collet Ready Twist Brushes are perfect for internal hole deburring and finishing applications, tubular component parts, drilled and tapered holes.

The brushes are fitted with a solid galvanized steel shank for ease of use and stability in CNC machine tools, drill presses, and manual machine tools.

Built with our high-performance CeramiX® abrasive filament, you'll get greater productivity out of each brush.



HEAVY DUTY BURR BRUSHES FOR POWER TOOLS

Our Burr Brushes are workhorses in drill presses and hand power tools.

They deburr, polish, and clean inner bores of tubing, machined cylinders, and smooth or threaded blind holes.



TWIST BRUSHES



MINI TWIST BRUSHES WITH LOOP FOR HAND USE

Choose Mini Twist Brushes with loop end for ultra-fine cross hole deburring, cleaning, blending and polishing of small diameter holes.

Available in Stainless Steel and low scratch filaments
Brass and Nylon.



MINI TWIST BRUSHES WITH CUT END

For hand use or power tools, our Mini Twist Brushes are used for ultra-fine cross hole deburring, cleaning, blending, and polishing of small diameter holes.

Available in Stainless Steel and low scratch filaments
Brass and Nylon.



TWIST BRUSHES



ABRASIVE NYLON BURR BRUSH

Our Burr Brushes provide a high filament concentration for heavy burr removal in wet or dry applications.

The short trim allows the stiffer bristles to work harder, creating more productivity in cross hole deburring, cleaning threads, removing debris from machined parts, crankshaft bores and general deburring.



ABRASIVE NYLON TUBE BRUSH

Our Abrasive Nylon Tube Brushes are primarily used for internal deburring and finishing in tubular component parts, drilled and tapered holes in CNC machine tools, drill presses, air tools and manual machine tools.



BORE-HONE™ BRUSHES



Excellent for Heavy Deburring

Machining can leave behind metal fragments and burrs that adversely affect part performance. That's where the Tanis Bore-Hone™ excels.

The Bore-Hone™ brush is a flexible tool with more brush surface area that removes heavy burrs and creates a cross hatch pattern to achieve maximum surface finishing and oil retention.

Flexible nylon stems allow for the silicon carbide spheres to self-center, providing evenly distributed pressure within the part.

The Bore-Hone™ delivers a smooth, consistent finish every time.



BORE-HONE™ BRUSHES



**FOR SURFACE FINISHING, INTERNAL DEBURRING,
CROSS HOLE DEBURRING, AND DEGLAZING***

Standard-Duty Bore-Hone™ Brushes
Improves the surface finish of internal bores,
cylinders, and cross holes.

Ideal for internal deburring of machined
bores and inside diameters of castings.

Heavy-Duty Bore-Hone™ Brushes
Best suited for cross hatching larger engine
cylinders, combustion chambers, and power
generation cylinders for better performance.

*Always use a lubricant with Bore-Hone Brushes for
optimal performance.



WIRE WHEEL POWER BRUSHES



Wire Wheel Brushes are suitable for cleaning cavities, edge deburring, pipe deburring, and weld cleaning within chamfers or pipe heads.

TWISTED KNOT WIRE WHEEL BRUSHES

For heavy duty applications, Twisted Knot Wheels deliver aggressive brushing performance for weld preparation and removal of large or stubborn burrs.



CRIMPED WIRE WHEELS FOR GRINDERS

For light surface deburring and brushing, edge radiusing, rust removal, and surface cleaning.



WIRE CUP POWER BRUSHES



Wire Cup Brushes are ideal for surface preparation of flat parts in metalworking applications, from deburring and slag, rust and corrosion removal to weld prep and cleaning.

TWISTED KNOT WIRE CUP BRUSHES

Ideal for removing slags, rust, paint, and other hard materials. For use on angle grinders.



CRIMPED WIRE CUP BRUSHES FOR GRINDERS

For light cleaning of rust, paint, and other materials.



WIRE END POWER BRUSHES



Wire End Brushes are best suited for holes and cleaning cavities.

TWISTED KNOT WIRE END BRUSHES

Made with very resistant, hardened steel wire for aggressive deburring and cleaning. Used on hand tools.



CRIMPED WIRE END BRUSHES FOR GRINDERS

Effective for cleaning and accurate brushing action in tight areas. Used for removing slag, scale, rust, and paint along with tool and die finishing.



Once the brush starts spinning, the wire filament spreads out to reach and brush the side walls of the cavity.



Recommended Speeds for Wire Power Brushes by Application

5000 5500 6000 6500 7000 7500 8000 8500 9000 9500 10000

Edge Radiusing

Deburring

Polishing

Cleaning Welds

Removing Scale, Rust or Paint

POWER BRUSH APPLICATIONS:

Weld Preparation & Removal of Burrs

Hole & Cavity Cleaning

Edge Deburring

Weld Cleaning within Chamfers or Pipe Heads

Pipe Deburring

Cleaning and Removal of Rust, Paint, Slags or Other Hard Materials



SCRATCH BRUSHES FOR INDUSTRIAL CLEANING



WOOD HANDLE WELDERS BRUSHES

Made of solid hardwood block, this 1-1/2" brush is excellent for cleaning small welds and hard to reach areas.

Available in: .006 Stainless Steel | .006 Brass | .006 Bronze
.016 Nylon | Horse Hair



PLASTIC HANDLE WELDERS BRUSH

Made from plastic block, this 1-1/2" brush is also used for cleaning small welds and hard to reach areas.

Available in: .006 Stainless Steel | .010 Stainless Steel
.006 Brass | .006 Bronze | .016 Nylon | Horse Hair



LARGE UTILITY BRUSHES

Made with a curved smooth hardwood block or plastic handle, this brush is good for light to heavy duty cleaning.

Available in: .008 Brass | .016 Black Nylon | .016 Natural Nylon
.008 Stainless Steel



ARTIST BRUSHES FOR INDUSTRIAL FINE DETAILING



RED SABLE MARKING BRUSHES



Red Sable Marking brushes are used for many different paint and liquid applying tasks. Red sable has unique properties that allow it to come to a fine point and retain elasticity. Best for watercolors, lettering applications, and fine touch-ups.

TAKLON WHITE ARTIST BRUSHES



Taklon is a versatile and durable nylon filament made of the finest quality. Primarily used for acrylics, watercolor, and fabric paints. This round-shaped brush is great for detailing and stenciling applications.

GOLD NYLON FLAT ARTIST BRUSH



Gold nylon flat artist brushes are made from long-lasting nylon filament that has excellent absorption qualities. Ideal for acrylics, the flexible, malleable fibers allow for easy contouring and even flow.



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