



## **ABRASIVE SAFETY REQUIREMENTS SUMMARY**



Protective Equipment: Appropriate protective equipment (such as full face shields, respirator, etc.) must be used where a possibility of injury exists that can be prevented by such equipment.



Safety Goggles: Safety Goggles and Full Face Shields MUST BE WORN by all operators AND OTHERS IN THE AREA of power brush operations. Persons within 50 or more feet may be with in danger zone. Comply with the requirements of ANSI B165.1 "Safety Requirements-Power Brushes". Also see ANSI B7.1 "Safety Requirements - For the Use, Care and Protection of Abrasive Wheels".



Safety Gloves and Protective Clothing: Appropriate protective clothing must be used where there is a possibility of injury that can be prevented by such clothing. The use of safety gloves is recommended.



**Guards:** Keep all machine guards in place at all times.



Speeds: Observe all speed restrictions indicated on the brushes, containers, labels or printed in pertinent literature. "MSFS" or "MAX.SFS" means Maximum Safe Free Speed (R.P.M.)-spinning free with no work applied: For reasons of safety, the "MSFS/MAX.SFS" should not be exceeded under any circumstances (see ANSI 3.1.8 for more information).



Dust and Fumes: Wear respiratory protection to avoid this hazard (see ANSI Z88.2).



Before Starting Brush: Use eye protection and safety equipment. Inspect brush for rust, damage, speed limit, etc. If no-load speed marked on the power tool is higher than the brush speed limit, do not mount brush. Inspect and jog machine to assure the brush is mounted properly and securely, machine guards are in place, no vibration, etc. Run machine at operating speed for at least one minute before applying work-DO NOT STAND IN FRONT OF OR IN LINE WITH BRUSH.



Safety Standard: Comply with the Safety Standards of the American National Standards Institute, ANSI B165.1 and ANSI B165.2 "Safety Requirements-Power Brushes".



#### Availability of ANSI Standards:

Contact: ANSI, 1430 Broadway, New York, NY 10018 or www.ansi.org

This information for users is provided solely as a public service. Contact Tanis Inc. for regulatory information. These recommendations are not necessarily complete for any particular application—you should follow common sense safety considerations. Federal, state or local laws or regulations must be strictly obeyed and control over these recommendations.

#### **Abrasive Brushes**

Abrasive Brushes are constructed with nylon filament that contains 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<sup>™</sup> 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 is a super abrasive used for polishing, deburring and edge radiusing applications but comes at a higher price point.

	MORE AGGRE	<b></b>	LESS AGGRESSIVE								
ABRASIVE FILAMENT	GRIT SIZE										
	46	80	120	180	220	240	320	500			
CeramiX®		.040", .055"	.028", .040"	.035"	.022"		.022"				
Gerannix		.045" x .090"									
Silicon Carbide	.060", .045"	.040", .050"	.022", .040"	.035"		.030"	.022"	.018"			
	.070"	.045" x .090"									
Aluminum Oxide			.040"		.024"	.040"					

120 grit is our recommended starting point for most applications.



## CeramiX<sup>®</sup> Brushes with 3M<sup>™</sup> Abrasive Grain **Deliver Unmatched Performance**

Tanis CeramiX abrasive brushes deliver superior deburring performance in application due to our industry-leading mineral grain from 3M<sup>TM</sup>.

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

What makes our filament special? It's the 3M<sup>™</sup> Abrasive Grain 321. This specialty grain allows the filament to be self-sharpening, which means every time the filament strands strike the metal part, the grain fractures creating sharper edges that blend, break the edges, and deburr faster and more efficiently. This is a unique property not shared by other ceramic grains.

With CeramiX, you get a longer lasting brush that's built for rigorous performance.

3M™ is a registered trademark of the 3M Company. CeramiX is a registered trademark of Tanis Inc.

#### **Two Phase Microstructure**

The 3M™ ceramic abrasive grain 321 also has a unique two-phase microstructure, a combination of fine crystals and a platelet phase. The platelets serve to reinforce the abrasive grains to withstand greater abrasion forces. The random orientation of the platelets also deflects fractures into multiple directions, creating a jagged irregular surface after the grain fractures. This continuous self-sharpening and jagged grain surface provide superior abrasion for filaments containing 321 ceramic abrasive grains.



Sol Gel Abrasive Grains



3M<sup>™</sup> Ceramic Abrasive Grains with Platelets

#### SUGGESTIONS FOR

## **MAXIMIZING BRUSH PERFORMANCE**





	– Diameter	Increasing outside diameter at a constant RPM increases surface speed: SFPM (Surface Feet Per Minute). Increasing surface speed increases work results.	Assuming constant RPM, a decrease in tool diameter decreases surface speed.
	RPM	Increasing RPM at a constant outside diameter increases surface speed.	Assuming same diameter brush, decreasing RPM decreases surface speed.
URE _	Trim Length	Allows the filament to be more flexible and to conform more readily to irregular surfaces.	Stiffens filament action, thereby increasing work accomplished.
FEAT	Filament Size	Provides faster cutting action and thereby increases work accomplished. <b>NOTE:</b> Coarser filament/grit sizes work faster than finer filament/grit sizes, with faster wear.	Provides superior surface finish and maximize tool life. <b>NOTE:</b> For best results, choose minimum diameter and increase as needed.
	Grit Size	Provides faster cutting action and thereby increases work accomplished. <b>NOTE:</b> Coarser filament/grit sizes work faster than finer filament/grit sizes, with faster wear.	Provides superior surface finish and maximize tool life. For best results, choose minimum grit size and increase as needed.
	Filament Density	Provides more filament to do work, thereby increasing work accomplished.	Provides greater brush flexibility; leaving more room for individual filaments to conform to irregular workpiece shapes.

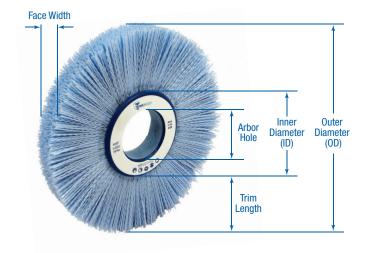
## **Abrasive Nylon Wheel Brushes**

WHEEL DIAMETER	DRY APPLICATION STARTING RPM	RECOMMENDED MOTOR SIZE (BASED ON A 1" BRUSH FACE)
4"	2,000 - 3,000	1/4 HP
5"	2,000 - 3,000	1/4 HP
6"	1,500 - 2,000	1/2 HP
8"	1,200 - 1,500	3/4 HP
10"	1,000 - 1,200	1 HP
12"	800 - 1,000	1 HP
14"	800 - 900	1 HP

Abrasive nylon wheel brushes work best at speeds allowing fairly deep penetration of the work piece into the brush filaments. Faster speeds do not typically work as well as slower speeds, since the maximum RPM listed on the brush is not the optimum working speed. A good rule of thumb is to stay below 2,500 SFPM in dry applications and 3,500 SFPM with coolant. When operating multiple wheel brushes on a common shaft, multiply the HP requirements listed above times the number of brushes in use.

	SURFACE SI	PEED (PERIPI	HERAL SPEE	D IN FEET PE	R MINUTE)			
RPM	4" DIA	6" DIA	8" DIA	10" DIA	12" DIA	14" DIA		
900	950	1,400	1,900	2,350	2,800	3,350		
1,150	1,200	1,800	2,400	3,000	3,600	4,200		
1,200	1,250	1,900	2,500	3,200	3,800	4,400		
1,500	1,550	2,350	3,150	3,900	4,700	5,500		
1,750	1,800	2,750	3,650	4,550	5,500	6,400		
2,000	2,100	3,100	4,200	5,200	6,300	7,300		
2,400	2,500	3,800	5,000	6,100	7,500	8,800		
2,800	2,900	4,400	5,850	7,300	8,800	10,200		
3,000	3,100	4,700	6,300	7,800	9,400	11,000		
3,200	3,350	5,000	6,700	8,400	10,200	11,700		
3,450	3,600	5,400	7,200	9,000	11,000	12,600		
3,750	3,900	5,900	7,800	9,800	11,800	13,700		
4,000	4,200	6,300	8,400	10,500	12,500	N/A		
4,500	4,700	7,200	9,400	11,900	14,100	N/A		
5,000	5,200	7,800	10,500	13,100	π Dia (inches	s) X RPM /12		
5,400	5,600	8,500	11,300	N/A	π Dia (inches) X RPM /12			
6,000	6,300	9,400	12,500	N/A	π Dia (inches	s) X RPM /12		

## **Wheel Brush Terminology**



#### **Outer Diameter**

Overall diameter measured through the center of the brush from outside edge-to-edge.

#### **Inner (Hub) Diameter**

Diameter of the urethane-based composite hub (shown with Tanis label in image). Measured top to bottom through center of the brush.

#### **Arbor Hole**

Arbor Hole is mounted to a spindle or shaft. Arbors are driven by the spindle and provide the necessary length for the tool to reach the workpiece. Adapters available to reduce the arbor hole, if necessary.

#### **Trim Length**

Length of filament needed for the application.

#### **Filament Trim & Density**

Length of trim matters to performance and brush wear. Density of filament depends on part and desired finish.

#### **Pro Tips**

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.







Short Trim, High Density

## **CeramiX® Abrasive Nylon Wheel Brushes**

Tanis abrasive nylon wheel brushes are made with CeramiX filament molded into a urethane-based composite hub construction. The proprietary mineral grain in CeramiX brushes is exclusive to Tanis and was developed with 3M™. CeramiX provides enhanced cutting action up to 3 to 5 times faster than traditional abrasive filaments. The mineral fractures with sharper edges and wears away in smaller pieces, consistently leaving more mineral in the filament to work on the part surface.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	FACE WIDTH	TRIM LENGTH	MAX. RPM
30132	6"	80	.055	2"	1"	1-1/4"	3,600
30140	6"	120	.028	2"	1"	1-1/4"	3,600
30145	6"	120	.040	2"	1"	1-1/4"	3,600
30162	8"	80	.055	2"	1"	1-1/4"	3,600
30175	8"	120	.040	2"	1"	1-1/4"	3,600
30185	8"	220	.022	2"	1"	1-1/4"	3,600
30200	8"	120	.040	2"	1"	2-1/4"	3,600
30215	10"	80	.040	2"	1"	1-1/2"	3,600
30230	10"	120	.040	2"	1"	1-1/2"	3,600
30246	10"	80	.055	2"	1"	3-1/4"	3,600
30255	10"	120	.040	2"	1"	3-1/4"	3,600
30285	12"	120	.040	4-1/4"	1"	1-1/2"	1,800
30300	12"	80	.040	4-1/4"	1"	3"	1,800
30310	12"	120	.040	4-1/4"	1"	3"	1,800
30325	14"	80	.040	5-1/4"	1"	1-1/2"	1,800
30340	14"	120	.040	5-1/4"	1"	1-1/2"	1,800
30357	14"	80	.055	5-1/4"	1"	3-1/2"	1,800
30365	14"	120	.040	5-1/4"	1"	3-1/2"	1,800



Adaptors Available for nylon wheel brushes on page 62.

Additional diameters and grits available upon request.

## Silicon Carbide Abrasive Nylon Wheel Brushes

Tanis silicon carbide abrasive nylon wheel brushes are made using nylon filament impregnated with a traditional grit. Silicon carbide is known for its durability and preferred for finishing ferrous metals. It provides a consistent finish with controlled surface abrading action and has less filament breakage than wire brushes.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	FACE WIDTH	TRIM LENGTH	MAX. RPM
30420	6"	120	.022	2"	1"	1-1/4"	3,600
30435	6"	320	.022	2"	1"	1-1/4"	3,600
30440	6"	500	.018	2"	1"	1-1/4"	3,600
30455	8"	120	.022	2"	1"	1-1/4"	3,600
30485	8"	120	.040	2"	1"	2-1/4"	3,600
30490	8"	180	.035	2"	1"	2-1/4"	3,600
30495	8"	320	.022	2"	1"	2-1/4"	3,600



30500

Additional diameters and grits available upon request.

#### **Custom Diamond Grit Wheel Brushes**

Diamond wheel brushes are most effective on super hard materials such as tungsten carbide, ceramics, diamond and glass. Diamond wheel brush tools are also effective on drill honing, polishing and honing indexable cutting tool inserts.

Various Brush Diameters, Face Widths and Trim Lengths Available

DIAMOND									
GRIT	120	220	240	400	600	800	1000		
FILAMENT DIAMETER	.040	.024	.040	.020	.020	.010	.010		



**CeramiX® Abrasive Nylon Large Wheel Brushes**Our large deburring wheel brushes with CeramiX® filament in a urethane-based hub use 3M™ Abrasive Grain for up to six times the cutting efficiency. Their self-sharpening technology enhances throughput and longevity. Ideal for automated processes, these brushes provide aggressive yet compliant deburring in robotic cells or custom equipment, acting as a flexible file for uniform part finishing.

TANIS Part No.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	FACE WIDTH	TRIM LENGTH	MAX. RPM
30282	12"	120	.028	2"	1"	3-1/4"	1,800
30284	12"	120	.040	2"	1"	3-1/4"	1,800
30286	12"	80	.055	2"	1"	3-1/4"	1,800
30342	14"	120	.040	2"	1"	1-3/4"	1,800
30346	14"	80	.040	2"	1"	1-3/4"	1,800
30348	14"	80	.055	2"	1"	1-3/4"	1,800
30364	14"	120	.028	2"	1"	4-1/4"	1,800

## **Industries & Applications**



**Automotive** 



**Aerospace** 



**Heavy Construction** 



**Robotic Cell** 



## Metal Hub Brushes with CeramiX® Abrasive Filament

The metal hub abrasive wheel brushes feature an innovative 3M<sup>™</sup> abrasive grain that provides enhanced cutting action up to 5 times faster than traditional abrasive filaments. This filament has a tough, hard and self-sharpening abrasive grain with a crystalline structure, which increases the life of the brush.

TANIS PART NUMBER	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	FILAMENT TYPE	ARBOR HOLE	HUB Material	FACE WIDTH	TRIM	MAX RPM
30002	3"	80	.040"	CeramiX®	1/2"-5/8"	Galvanized Steel	.375"	.625"	4,500
30006	3"	120	.028"	CeramiX®	1/2"-5/8"	Galvanized Steel	.375"	.625"	4,500
30008	3"	120	.040"	CeramiX®	1/2"-5/8"	Galvanized Steel	.375"	.625"	4,500
30012	4"	80	.040"	CeramiX®	1/2"-5/8"	Galvanized Steel	.500"	.850"	4,500
30016	4"	120	.028"	CeramiX®	1/2"-5/8"	Galvanized Steel	.500"	.850"	4,500
30018	4"	120	.040"	CeramiX®	1/2"-5/8"	Galvanized Steel	.500"	.850"	4,500
30022	6"	80	.040"	CeramiX®	1/2"-5/8"	Galvanized Steel	.500"	1-3/16"	3,600
30026	6"	120	.028"	CeramiX®	1/2"-5/8"	Galvanized Steel	.500"	1-3/16"	3,600
30028	6"	120	.040"	CeramiX®	1/2"-5/8"	Galvanized Steel	.500"	1-3/16"	3,600
30032	6"	80	.040"	CeramiX®	2"	Galvanized Steel	1.00"	1.00"	3,600
30034	6"	80	.055"	CeramiX®	2"	Galvanized Steel	1.00"	1.00"	3,600
30036	6"	120	.028"	CeramiX®	2"	Galvanized Steel	1.00"	1.00"	3,600
30038	6"	120	.040"	CeramiX®	2"	Galvanized Steel	1.00"	1.00"	3,600





#### **Metal Hub Brushes with Silicon Carbide Filament**

The metal hub brushes also come in silicon carbide which is an abrasive grain that is widely used in industrial applications and preferred for finishing ferrous metals, leaving a smoother finish.

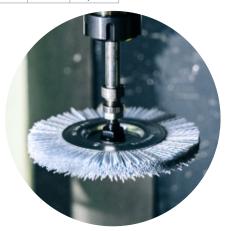
TANIS PART NUMBER	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	FILAMENT TYPE	ARBOR HOLE	HUB MATERIAL	FACE WIDTH	TRIM	MAX RPM
30052	3"	80	.040"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.375"	.625"	4,500
30054	3"	180	.035"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.375"	.625"	4,500
30058	3"	120	.040"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.375"	.625"	4,500
30060	3"	320	.022"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.375"	.625"	4,500
30062	4"	80	.040"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	.850"	4,500
30064	4"	180	.035"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	.850"	4,500
30068	4"	120	.040"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	.850"	4,500
30070	4"	320	.022"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	.850"	4,500
30072	6"	80	.040"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	1-3/16"	3,600
30074	6"	180	.035"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	1-3/16"	3,600
30076	6"	120	.022"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	1-3/16"	3,600
30078	6"	120	.040"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	1-3/16"	3,600
30080	6"	320	.022"	Silicon Carbide	1/2"-5/8"	Galvanized Steel	.500"	1-3/16"	3,600
30082	6"	80	.040"	Silicon Carbide	2"	Galvanized Steel	1.00"	1.00"	3,600
30084	6"	180	.035"	Silicon Carbide	2"	Galvanized Steel	1.00"	1.00"	3,600
30086	6"	120	.022"	Silicon Carbide	2"	Galvanized Steel	1.00"	1.00"	3,600
30088	6"	120	.040"	Silicon Carbide	2"	Galvanized Steel	1.00"	1.00"	3,600
30090	6"	320	.022"	Silicon Carbide	2"	Galvanized Steel	1.00"	1.00"	3,600



30068



See shanks on page 61.



## **CeramiX® Small Diameter Copper Center Wheel Brushes**

CeramiX small profile wheels for cleaning, polishing and deburring recessed areas such as small openings, slots, machined grooves, fine deburring on medical instruments and gear splines. CeramiX contains 3M™ Company 321 mineral grain that provides enhanced cutting action up to 3 to 5 times greater than traditional abrasive filaments. CeramiX brushes fracture in sharper, jagged surfaces for superior abrasion providing minimum cycle times, increased productivity and maximizes abrasive media on part.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	FACE WIDTH	TRIM LENGTH	MAX. RPM
35502	1"	120	.028	1/4"	1/4"	7/32"	10,000
35503	1-1/4"	120	.028	1/4"	1/4"	11/32"	10,000
35512	1-1/2"	120	.028	1/4"	1/4"	1/2"	10,000
35505	1-1/2"	120	.028	1/2"	1/4"	1/4"	10,000
35510	2"	120	.028	1/2"	5/16"	1/2"	10,000
35515	2"	180	.035	1/2"	5/16"	1/2"	10,000
35520	2"	80	.040	1/2"	5/16"	1/2"	10,000
35525	2-1/2"	120	.028	5/8"	5/16"	3/4"	10,000
35530	2-1/2"	80	.040	5/8"	5/16"	3/4"	10,000
35535	3"	120	.028	1/2"	3/8"	1"	10,000
35545	3"	120	.040	1/2"	3/8"	1"	10,000
35550	3"	80	.040	1/2"	3/8"	1"	10,000
35551	3"	80	.055	1/2"	3/8"	1"	10,000



Additional diameters and grits available upon request.

### Silicon Carbide Small Diameter Copper Center Wheel Brushes

Silicon Carbide small profile wheels are known for durability and preferred for finishing ferrous metals.

TANIS Part no.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	FACE WIDTH	TRIM LENGTH	MAX. RPM
35570	1-1/2"	180	.035	1/2"	1/4"	1/4"	10,000
35575	1-1/2"	120	.022	1/2"	1/4"	1/4"	10,000
35580	2"	500	.018	1/2"	5/16"	1/2"	10,000
35585	2"	120	.022	1/2"	5/16"	1/2"	10,000
35590	2"	120	.040	1/2"	5/16"	1/2"	10,000
35595	2-1/2"	320	.022	5/8"	5/16"	3/4"	10,000
35600	2-1/2"	180	.035	5/8"	5/16"	3/4"	10,000
35605	2-1/2"	120	.022	5/8"	5/16"	3/4"	10,000
35610	3"	320	.022	1/2"	3/8"	1"	10,000
35615	3"	180	.035	1/2"	3/8"	1"	10,000
35620	3"	120	.022	1/2"	3/8"	1"	10,000
35625	3"	120	.040	1/2"	3/8"	1"	10,000

Additional diameters and grits available upon request.



## **Wheel Brush Extensions**



TANIS PART NO.	COMPATIBLE WITH BRUSH ARBOR HOLES OF:	LENGTH OF EXTENSION	BRUSH Type
10020	1/4"	6"	Copper Center Wheel
10022	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.





## **CeramiX**<sup>®</sup> **Heavy-Duty Copper Center Wheels**

CeramiX small profile wheels for cleaning, polishing and deburring recessed areas such as small openings, slots, machined grooves, fine deburring on medical instruments and gear splines.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	FACE WIDTH	TRIM LENGTH	MAX RPM
35558	3"	120	0.028	5/8"	1/2"	1/2"	10,000
35559	3"	120	0.040	5/8"	1/2"	1/2"	10,000
35560	3"	80	0.040	5/8"	1/2"	1/2"	10,000
35564	4"	120	0.028	5/8"	5/8"	1"	10,000
35566	4"	120	0.040	5/8"	5/8"	1"	10,000
35567	4"	80	0.040	5/8"	5/8"	1"	10,000
35568	4"	80	0.055	5/8"	5/8"	1"	10,000

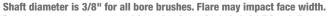




### **CeramiX® Bore Brushes**

The cross hole bore brush is designed for automated use to remove burrs from internal edges and finishing bores. CeramiX contains 3M™ Company 321 mineral grain that provides enhanced cutting action 3 to 5 times greater than traditional abrasive filaments.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	FACE WIDTH	TRIM LENGTH	SHAFT LENGTH	MAX. RPM
35652	1"	120	.028	1"	7/32"	4-3/4"	8,000
35654	1-1/4"	120	.028	1"	11/32"	4-3/4"	8,000
35656	1-1/2"	120	.028	1"	1/4"	4-3/4"	8,000
35657	1-1/2"	120	.028	1"	1/2"	4-3/4"	8,000
35658	2"	120	.028	1"	1/2"	4-3/4"	6,000
35660	2"	180	.035	1"	1/2"	4-3/4"	6,000
35662	2"	80	.040	1"	1/2"	4-3/4"	6,000
35664	2-1/2"	120	.028	1"	3/4"	4-3/4"	6,000
35666	2-1/2"	80	.040	1"	3/4"	4-3/4"	6,000
35668	3"	120	.028	1"	.560"	4-3/4"	6,000
35670	3"	120	.040	1"	.560"	4-3/4"	6,000
35672	3"	80	.040	1"	.560"	4-3/4"	6,000
35686	4"	120	.028	1"	1"	4-3/4"	6,000
35688	4"	120	.040	1"	1"	4-3/4"	6,000
35689	4"	80	.040	1"	1"	4-3/4"	6,000
35690	4"	80	.055	1"	1"	4-3/4"	6,000



Set screw to securely mount drive arbor is not included. Additional diameters and grits available upon request.



#### APPLICATIONS

- Bore Finishing
- Remove Burrs from Internal Edges

### **Miniature Wheel Brushes**

Tanis miniature wheel brushes are used for surface conditioning, edge contouring, fine deburring, cleaning and polishing. Applications include, but are not limited to, aerospace, molds, hydraulics, tool & dies, Swiss machines and medical parts.,

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	TRIM LENGTH	SHANK DIAMETER	MAX. RPM	FILL MATERIAL
11800	3/4"	600	.012	3/16"	1/8"	6,000	Aluminum Oxide
11801	1"	600	.012	5/16"	1/8"	6,000	Aluminum Oxide
11805	3/4"	500	.018	3/16"	1/8"	6,000	Silicon Carbide
11806	1"	500	.018	5/16"	1/8"	6,000	Silicon Carbide
11810	3/4"	800	.010	3/16"	1/8"	6,000	Diamond
11811	1"	800	.010	5/16"	1/8"	6,000	Diamond

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







#### **Air Motor Shanks**

For air motors and flexible shafts. Accepts single or multiple brushes.

TANIS PART NO.	SHANK DIAMETER	ARBOR HOLE	FOR ARBOR WIDTH UP TO	OVERALL LENGTH
10030	1/4"	1/2"	3/8"	1-7/8"
10031	1/4"	3/8"	3/8"	1-5/8"
10032	3/16"	1/4"	3/4"	1-3/4"
10033	1/4"	5/8"	3/8"	1-7/8"





### **Drill Press Shanks**

For use in portable tools and drill presses with 1/4" chuck adaptability.

TANIS Part No.	SHANK DIAMETER	ARBOR HOLE	FOR ARBOR WIDTH UP TO	OVERALL LENGTH
10025	1/4"	1/4"	5/8"	2-1/2"
10026	1/4"	3/8"	7/8"	2-1/2"
10027	1/4"	1/2"	3/8"	2-1/2"





## **Wheel Brush Adapter Plates**

These slip-fit metal adapters are used for mounting nylon abrasive wheel brushes onto smaller shafts. Sold in pairs. Available for 4-1/4" and 5-1/4" brush ID wheels and 2" brush ID wheels.

TANIS Part no.	ADAPTER FITS ARBOR HOLE	ADAPTER ID	KEYWAY Size	FITS WHEEL BRUSH DIAMETER SIZE
35040	4-1/4"	2"	1/2 x 1/4 (2)	12"
35045	5-1/4"	2"	1/2 x 1/4 (2)	14"

TANIS Part no.	ADAPTER FITS ARBOR HOLE	ADAPTER ID	FITS WHEEL BRUSH DIAMETER SIZE
35005	2"	1/2"	6", 8", 10"
35010	2"	5/8"	6", 8", 10"
35015	2"	3/4"	6", 8", 10"
35020	2"	7/8"	6", 8", 10"
35025	2"	1"	6", 8", 10"
35030	2"	1-1/4"	6", 8", 10"
35035	2"	1-1/2"	6", 8", 10"





#### **Brush Extensions**

TANIS PART NO.	COMPATIBLE WITH BRUSH ARBOR HOLES OF:	LENGTH OF Extension	BRUSH Type
10020	1/4"	6"	Copper Center Wheel
10022	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.

## **Plastic Bushings**

Plastic bushings are designed for economical, one-time use to match the brush inside diameter with your mounting shaft. Available in a range of inner and outer diameters. For safety, use only one per brush. Flange eliminates side movement.

TANIS Part No.	OUTSIDE DIAMETER	INSIDE Diameter
10035	3/8"	1/4"
10036	1/2"	1/4"
10037	1/2"	3/8"
10038	5/8"	1/2"



## **Abrasive Nylon Disc Brushes - Speeds & Feed Rate**

DISC DIAMETER	DRY APPLICATION STARTING RPM	RECOMMENDED MOTOR SIZE (BASED ON A 1" BRUSH FACE)
2"	1,750 - 2,500	1/4 HP
3"	1,750 - 2,500	1/4 HP
4"	1,750 - 2,500	1/4 HP
5"	1,500 - 1,750	1/4 HP
6"	1,250 - 1,750	1/2 HP
8"	800 - 1,200	3/4 HP
10"	700 - 800	1 HP
12"	600 - 700	1 HP
14"	500 - 600	1 HP

DISC DIAMETER	FEED RATE STAINLESS STEEL / ALLOY STEELS	FEED RATE MILD STEEL / CAST IRON	FEED RATE ALUMINUM / NON-FERROUS
2"	12 - 18" /min	25 - 30" /min	35 - 50" /min
3"	12 - 18" /min	25 - 30" /min	35 - 50" /min
4"	12 - 18" /min	25 - 30" /min	35 - 50" /min
5"	12 - 18" /min	25 - 30" /min	35 - 50" /min
6"	12 - 18" /min	25 - 30" /min	35 - 50" /min
8"	12 - 18" /min	25 - 30" /min	35 - 50" /min
10"	12 - 18" /min	25 - 30" /min	35 - 50" /min
12"	12 - 18" /min	25 - 30" /min	35 - 50" /min
14"	12 - 18" /min	25 - 30" /min	35 - 50" /min

Abrasive nylon disc brushes work best at speeds allowing fairly deep penetration of the work piece into the brush filaments. Faster speeds do not typically work as well as slower speeds, since the maximum RPM listed on the brush is not the optimum working speed. A good rule of thumb is to stay below 2,500 SFPM in dry applications and 3,500 SFPM with coolant.

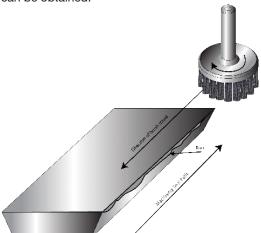
## **Disc Brush Depth of Contact**

Recommended penetration rates for abrasive nylon disc brushes range from .075" to .100".

This will maximize the abrasive action while ensuring long brush life.

The brush filament slides across the part surface and edge of the part creating abrasive, deburring action.

When the correct balance between speed (RPMs), penetration, dwell time and abrasive grit size are achieved, then optimum life and finish can be obtained.



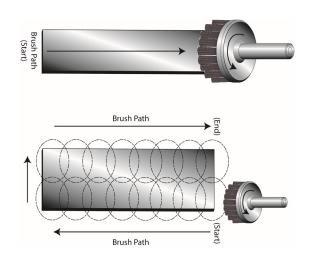
### **Recommended Brush Paths**

The ideal brush path is in the opposite direction of travel from the cutting tool that created the burr. The brush path should also be longer than the cutting tool path, to a point where the trailing edge of the brush is effective on reaching burrs at the end of the part. Lastly, to maximize the amount of filament that is striking the part, the center line of the brush should be offset slightly from the center of the part.



#### **Brush Rotational Path**

On the initial pass, the brush should be rotated in the opposite direction of the cutting tool that created the burr in order to effectively remove the burr. Rotating in the same direction simply pushes the burr down without removing it. The brush should overlap the edge of the part by 1" minimum to successfully reach the whole burr.



## **Disc Brush Pattern Types**

Disc brushes can be easily mounted into automated machinery, custom-designed equipment, CNC machining centers and robotic centers. There are numerous applications where these brushes perform brilliantly including deburring, surface preparation and finishing, rust and scale removal, sand and texturing, blending surface marks and edge radiusing. See below to view the various filament patterns available for disc brushes and select the pattern that will work best for your application.

#### Tufted Pattern

Use the Tufted Brush on contoured areas that need light to moderate surface finish. The bristle spacing offers superior filament flexibility, ideally suited for grooves, slots, and parts with indents or open areas.





#### **Dense Pattern**

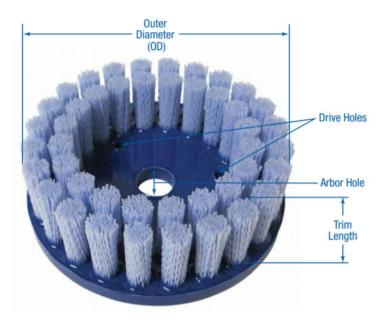
Apply on large flat surfaces that require tough aggressive performance. The great bristle density creates more deburring and finishing pressure to remove heavy burrs, providing a consistent finish.

## **Teardrop Pattern**

Use on contoured areas that require moderate to aggressive abrasive performance. The exceptionally dynamic teardrop brush offers the flexibility needed to reach contoured areas. the bristle density to finish tough jobs and an innovative design for superior coolant flow.



## **Disc Brush Terminology**



#### **Outer Diameter**

Overall diameter measured through the center of the brush from outside edge-to-edge

#### **Arbor Hole**

Arbor Hole is mounted to a tool or drive arbor. Arbors are driven by the spindle and provide the necessary length for the tool to reach the workpiece.

#### **Drive Holes**

A drive arbor has pins that mount into the brush. The pins mount into the locator holes and serve as drive pins for the brush.

## **Filament Trim Length**

Length of Filament matters to performance and brush wear. Filament length is determined by the part to be finished. Longer trim provides flexibility. Short trim is rigid for more aggressive brushing action.

### CeramiX® Shell Mill Holder Disc Brushes

CeramiX Shell Mill Disc Brushes provide a consistent, flat brush for superior dimensional precision. CeramiX filament provides exceptional abrasive action in deburring applications on flat surfaces, improving metal finish on milled and machined surfaces as well as blending rough edges on machined parts. Shell mill disc brush has built-in keyway to mount directly to a standard shell mill holder for use in CNC machining centers.



Dense Pattern



Tufted Pattern



DENSE Part No.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	TRIM LENGTH	MAX. RPM
36132	2"	120	.040	3/4"	1-1/2"	2,500
36136	2"	80	.055	3/4"	1-1/2"	2,500
36142	3"	120	.040	3/4"	1-1/2"	2,500
36146	3"	80	.055	3/4"	1-1/2"	2,500
36148	3"	80	.045 x .090	3/4"	1-1/2"	2,500
36150	4"	120	.028	1-1/4"	1-1/2"	2,500
36152	4"	120	.040	1-1/4"	1-1/2"	2,500
36154	4"	80	.040	1-1/4"	1-1/2"	2,500
36156	4"	80	.055	1-1/4"	1-1/2"	2,500
36158	4"	80	.045 x .090	1-1/4"	1-1/2"	2,500
36160	6"	120	.028	1-1/4"	1-1/2"	2,500
36166	6"	80	.055	1-1/4"	1-1/2"	2,500
36168	6"	80	.045 x .090	1-1/4"	1-1/2"	2,500
36176	8"	80	.055	1-1/4"	1-1/2"	2,000
36178	8"	80	.045 x .090	1-1/4"	1-1/2"	2,000
36186	10"	80	.055	1-1/4"	1-1/2"	2,000
36188	10"	80	.045 x .090	1-1/4"	1-1/2"	2,000

TUFTED PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	TRIM LENGTH	MAX. RPM
36030	4"	120	.028	1-1/4"	1-1/2"	2,500
36032	4"	120	.040	1-1/4"	1-1/2"	2,500
36040	6"	120	.028	1-1/4"	1-1/2"	2,500
36042	6"	120	.040	1-1/4"	1-1/2"	2,500
36050	8"	120	.028	1-1/4"	1-1/2"	2,000
36052	8"	120	.040	1-1/4"	1-1/2"	2,000
36060	10"	120	.028	1-1/4"	1-1/2"	2,000
36062	10"	120	.040	1-1/4"	1-1/2"	2,000

Additional diameters and grits available upon request.

#### **APPLICATIONS**

- Cast Part Deburring
- Aircraft Components
- Deburring Face-Milled Parts
- Blending Grinding Marks
- Improving Surface Finish





Both brush patterns feature shell mill mount-fits standard shell mill holders. (Holders not included.)

## CeramiX<sup>®</sup> Mini Disc Brushes

Ideal for deburring or improving surface finish, these small-diameter disc brushes have an aluminum hub and feature a very high filament density. CeramiX contains 3M™ Company 321 mineral grain which provides enhanced cutting action up to 5 times greater than traditional abrasive filaments. CeramiX fractures in sharper, jagged surfaces for superior abrasion providing minimum cycle times, increased productivity and maximizes abrasive media on part.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	TRIM LENGTH	MAX. RPM	ARBOR PART NO.
34580	2"	120	.028	3/8"	1-1/4"	4,500	35048
34585	2"	80	.040	3/8"	1-1/4"	4,500	35048
34590	2"	120	.040	3/8"	1-1/4"	4,500	35048
34592	2"	80	.055	3/8"	1-1/4"	4,500	35048
34595	2"	80	.045 x .090	3/8"	1-1/4"	4,500	35048
34605	3"	120	.028	3/8"	1-1/4"	4,500	35048
34610	3"	80	.040	3/8"	1-1/4"	4,500	35048
34615	3"	120	.040	3/8"	1-1/4"	4,500	35048
34617	3"	80	.055	3/8"	1-1/4"	4,500	35048
34620	3"	80	.045 x .090	3/8"	1-1/4"	4,500	35048



Set screw included to securely mount drive arbor.

Additional diameters and grits available upon request.

#### **Silicon Carbide Mini Disc Brushes**

Ideal for deburring or improving surface finish, these small-diameter disc brushes have an aluminum hub and feature a very high filament density. Silicon carbide in the .045 x .090 rectangular shape is shown in the photo below.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	TRIM LENGTH	MAX. RPM	ARBOR PART NO.
34630	2"	120	.022	3/8"	1-1/4"	4,500	35048
34635	2"	80	.040	3/8"	1-1/4"	4,500	35048
34640	2"	120	.040	3/8"	1-1/4"	4,500	35048
34645	2"	80	.045 x .090	3/8"	1-1/4"	4,500	35048
34655	3"	80	.040	3/8"	1-1/4"	4,500	35048
34660	3"	120	.040	3/8"	1-1/4"	4,500	35048
34665	3"	80	.045 x .090	3/8"	1-1/4"	4,500	35048

Set screw included to securely mount drive arbor.

Additional diameters and grits available upon request.



#### **Mini Disc Brush Drive Arbor**

Used to securely mount mini disc brushes for use in any type of milling or CNC machine. Drive arbor shaft is 1/2" diameter for use in any live tool holder. Set screw included in each brush to secure brush to drive arbor.



TANIS	BRUSH	SHAFT	MAX.
Part No.	DIAMETER	DIAMETER	RPM
35048	2", 3"	1/2"	4,500

## **CeramiX® Abrasive Nylon Disc Brushes**

The composite molded construction of Tanis disc brushes creates a tough, high-productivity brush tool. Higher fill densities allow for a more aggressive brush, making this brush capable of maximized productivity. Alternative filament patterns are available for applications requiring maximum density (teardrop pattern) or lighter filament density (tufted pattern).



Tufted Pattern

TUFTED PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	TRIM LENGTH	MAX. RPM	ARBOR PART NO.
33760	4"	80	.040	7/8"	1-1/2"	2,500	35050
33775	4"	120	.040	7/8"	1-1/2"	2,500	35050
33790	5"	80	.040	7/8"	1-1/2"	2,500	35050
33805	5"	120	.040	7/8"	1-1/2"	2,500	35050
33820	6"	80	.040	7/8"	1-1/2"	2,000	35050
33830	6"	120	.028	7/8"	1-1/2"	2,000	35050
33835	6"	120	.040	7/8"	1-1/2"	2,000	35050
33840	6"	180	.035	7/8"	1-1/2"	2,000	35050
33850	8"	80	.040	7/8"	1-1/2"	2,000	35065
33865	8"	120	.040	7/8"	1-1/2"	2,000	35065
33880	10"	80	.040	7/8"	1-1/2"	1,750	35070
33895	10"	120	.040	7/8"	1-1/2"	1,750	35070



Teardrop Pattern

TEARDROP PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	TRIM LENGTH	MAX. RPM	ARBOR PART NO.
33280	4"	80	.040	7/8"	1-1/2"	2,500	35050
33295	4"	120	.040	7/8"	1-1/2"	2,500	35050
33300	4"	180	.035	7/8"	1-1/2"	2,500	35050
33305	4"	220	.022	7/8"	1-1/2"	2,500	35050
33310	5"	80	.040	7/8"	1-1/2"	2,500	35050
33325	5"	120	.040	7/8"	1-1/2"	2,500	35050
33340	6"	80	.040	7/8"	1-1/2"	2,000	35060
33350	6"	120	.028	7/8"	1-1/2"	2,000	35060
33355	6"	120	.040	7/8"	1-1/2"	2,000	35060
33370	8"	80	.040	7/8"	1-1/2"	2,000	35065
33385	8"	120	.040	7/8"	1-1/2"	2,000	35065
33400	10"	80	.040	7/8"	1-1/2"	1,750	35070
33415	10"	120	.040	7/8"	1-1/2"	1,750	35070

Additional diameters and grits available upon request.

#### **Disc Brush Drive Arbors**

Used to securely mount disc brushes for use in any type of milling or CNC machine. Drive arbor shaft is 3/4" diameter for use in any live tool holder. Drive arbor includes bolt and washer, part no. 35075.



DRIVE ARBOR PART NO.	FOR BRUSH DIAMETER	SHAFT DIAMETER	NUMBER OF LOCATOR PINS
35050	3", 4", 5"	3/4"	2
35055	6"	3/4"	2
*35060	6"	3/4"	3
35065	8"	3/4"	4
35070	10", 12", 14"	3/4"	4

\*Use with 6" teardrop pattern disc brushes.

REPLACEMENT	FOR BRUSH
BOLT/WASHER KIT	DIAMETER
35075	ALL

Disc Brush Drive Arbors used with any CeramiX or Silicon Carbide Disc Brushes

## **Silicon Carbide Abrasive Nylon Disc Brushes**

Our exclusive teardrop-shaped filament configuration provides the best of both worlds—heavy duty abrasive action with sufficient room for air or coolant flow. Tufted configuration is designed for light-to-medium abrasive action applications. Custom engineered disc brushes can also be produced to suit your application, in a variety of abrasive nylon filament choices.

TUFTED PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	TRIM LENGTH	MAX. RPM	ARBOR PART NO.
33520	4"	80	.040	7/8"	1-1/2"	2,500	35050
33525	4"	80	.045 x .090	7/8"	1-1/2"	2,500	35050
33535	4"	120	.040	7/8"	1-1/2"	2,500	35050
33540	4"	180	.035	7/8"	1-1/2"	2,500	35050
33545	4"	320	.022	7/8"	1-1/2"	2,500	35050
33550	5"	80	.040	7/8"	1-1/2"	2,500	35050
33570	5"	180	.035	7/8"	1-1/2"	2,500	35050
33580	6"	80	.040	7/8"	1-1/2"	2,000	35050
33595	6"	120	.040	7/8"	1-1/2"	2,000	35050
33600	6"	180	.035	7/8"	1-1/2"	2,000	35050
33610	8"	80	.040	7/8"	1-1/2"	2,000	35065
33625	8"	120	.040	7/8"	1-1/2"	2,000	35065
33630	8"	180	.035	7/8"	1-1/2"	2,000	35065
33640	10"	80	.040	7/8"	1-1/2"	1,750	35070
33655	10"	120	.040	7/8"	1-1/2"	1,750	35070



Tufted Pattern

Additional diameters and grits available upon request.

TEARDROP PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	ARBOR HOLE	TRIM LENGTH	MAX. RPM	ARBOR PART NO.
33045	4"	80	.045 x .090	7/8"	1-1/2"	2,500	35050
33075	5"	80	.045 x .090	7/8"	1-1/2"	2,500	35050
33105	6"	80	.045 x .090	7/8"	1-1/2"	2,000	35060
33135	8"	80	.045 x .090	7/8"	1-1/2"	2,000	35065
33165	10"	80	.045 x .090	7/8"	1-1/2"	1,750	35070





Teardrop Pattern

#### **Disc Brush Bands**

Apply to disc or end brushes to prevent flare and enhance aggressive action. To use, insert bands on disc where filament meets composite material.



TANIS Part No.	FOR BRUSH DIAMETER	RING ID	RING OD	RING WIDTH
35080	1-1/2"	1-1/8"	1-1/2"	.210"
35082	2"	1-1/2"	1-7/8"	.210"
35083	2-1/2"	2"	2-3/8"	.210"
35084	3"	2-1/2"	2-7/8"	.210"
35086	4"	3-1/4"	3-5/8"	.210"
35088	5"	4-3/8"	4-3/4"	.210"
35090	6"	5-1/8"	5-5/8"	.275"
35092	8"	7"	7-1/2"	.275"
35094	10"	9"	9-1/2"	.275"
35096	12"	11"	11-1/2"	.275"
35098	14"	13"	13-1/2"	.275"

Package quantity: 3 per pack.

#### CeramiX® End Brushes With Bridles

CeramiX End Brushes with Bridles feature an integrated stem that allows mounting in a collet or tool holder for CNC machine or robotic use. End brushes can also be used in portable air or electric tools. End brushes are a great choice for deburring slots, small recessed areas and internal part features. CeramiX End Brushes are able to deliver a targeted brushing action to small areas on machined parts to blend end-mill tool marks, deburr and blend rough edges and provide ideal surface finish. Now including bridles to prevent flaring and for increased aggressive performance. \* Bridles can be removed to create filament to flare.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	TRIM LENGTH	OVERALL LENGTH	SHANK DIAMETER	MAX. RPM
35697	3/8"	120	.040	1"	2-3/4"	1/4"	10,000
35698	3/8"	180	.035	1"	2-3/4"	1/4"	10,000
35699	3/8"	220	.022	1"	2-3/4"	1/4"	10,000
35700	1/2"	120	.040	1"	2-3/4"	1/4"	10,000
35705	1/2"	180	.035	1"	2-3/4"	1/4"	10,000
35710	1/2"	220	.022	1"	2-3/4"	1/4"	10,000
35712	3/4"	80	.055	1"	2-3/4"	1/4"	10,000
35715	3/4"	120	.040	1"	2-3/4"	1/4"	10,000
35720	3/4"	180	.035	1"	2-3/4"	1/4"	10,000
35725	3/4"	220	.022	1"	2-3/4"	1/4"	10,000
35728	1"	80	.055	1"	2-3/4"	1/4"	10,000
35730	1"	120	.040	1"	2-3/4"	1/4"	10,000
35735	1"	180	.035	1"	2-3/4"	1/4"	10,000
35740	1"	220	.022	1"	2-3/4"	1/4"	10,000



Additional diameters and grits available upon request.

#### Silicon Carbide End Brushes With Bridles

Silicon Carbide End Brushes with Bridles feature an integrated stem that allows mounting in a collet or tool holder for CNC machine or robotic use. End brushes can also be used in portable air or electric tools. End brushes are a great choice for deburring slots, small recessed areas and internal part features. Includes bridles to prevent flaring. \* Bridles can be removed to create filament to flare.

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	TRIM LENGTH	OVERALL LENGTH	SHANK DIAMETER	MAX. RPM
35745	1/2"	120	.040	1"	2-3/4"	1/4"	10,000
35750	1/2"	180	.035	1"	2-3/4"	1/4"	10,000
35755	1/2"	320	.022	1"	2-3/4"	1/4"	10,000
35760	3/4"	120	.040	1"	2-3/4"	1/4"	10,000
35765	3/4"	180	.035	1"	2-3/4"	1/4"	10,000
35770	3/4"	320	.022	1"	2-3/4"	1/4"	10,000
35775	1"	120	.040	1"	2-3/4"	1/4"	10,000
35780	1"	180	.035	1"	2-3/4"	1/4"	10,000





## **CeramiX® Stem Mounted End Brushes**

The integrated stem allows for convenient mounting in a collet or tool holder. These smaller diameter disc brushes are a great choice for deburring slots or small recessed areas, as well as reaching into internal part features.



TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	SHANK DIAMETER	TRIM LENGTH	MAX. RPM
32285*	1-1/2"	80	.040	1/4"	1-3/8"	4,500
32287*	1-1/2"	80	.055	1/4"	1-3/8"	4,500
32295*	1-1/2"	120	.040	1/4"	1-3/8"	4,500
32300*	1-1/2"	120	.028	1/4"	1-3/8"	4,500
32305*	1-1/2"	220	.022	1/4"	1-3/8"	4,500
32310	2"	80	.040	1/4"	1-3/8"	4,500
32312	2"	80	.055	1/4"	1-3/8"	4,500
32320	2"	120	.040	1/4"	1-3/8"	4,500
32325	2"	120	.028	1/4"	1-3/8"	4,500
32330	2"	220	.022	1/4"	1-3/8"	4,500
32335	2-1/2"	80	.040	1/4"	1-3/8"	4,500
32337	2-1/2"	80	.055	1/4"	1-3/8"	4,500
32345	2-1/2"	120	.040	1/4"	1-3/8"	4,500
32350	2-1/2"	120	.028	1/4"	1-3/8"	4,500
32355	2-1/2"	220	.022	1/4"	1-3/8"	4,500

<sup>\*</sup>Dense pattern.

Additional diameters and grits available upon request.

#### **APPLICATIONS**

- Blend Tool Marks
- Deburr Slots and Small Recessesd Areas
- Radius Edges
- Surface Finish and Deburr Internal Part Features
- Improving Surface Finish
- Engine Block Deburring



## **Abrasive Collet Ready Twist Brushes**

Ideal for internal deburring and finishing applications, tubular component parts and drilled and tapered holes. These power tube brushes are fitted with a solid galvanized steel shank for ease of use in CNC machine tools, drill presses and manual machine tools.

**CeramiX**<sup>®</sup> (Single stem, single spiral; continuous end.)

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	BRUSH LENGTH	OVERALL LENGTH	SHANK DIAMETER
34820	1/4"	180	.035	2"	8"	3/16"
34825	1/4"	120	.028	2"	8"	3/16"
34827	5/16"	180	.035	2"	8"	3/16"
34829	5/16"	120	.028	2"	8"	3/16"
34830	3/8"	180	.035	2"	8"	1/4"
34835	3/8"	120	.028	2"	8"	1/4"
34840	1/2"	180	.035	2"	8"	1/4"
34845	1/2"	120	.040	2"	8"	1/4"
34855	5/8"	120	.040	2"	8"	1/4"
34865	3/4"	120	.040	2"	8"	1/4"
34869	7/8"	120	.040	2"	8"	1/4"
34870	1"	120	.040	2"	8"	1/4"
34875	1"	80	.040	2"	8"	1/4"
34880	1-1/4"	120	.040	2"	8"	1/4"
34885	1-1/4"	80	.040	2"	8"	1/4"

Additional diameters and grits available upon request.





## **Abrasive Collet Ready Twist Brushes**

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	BRUSH LENGTH	OVERALL LENGTH	STEM DIAMETER
34740	3/8"	120	.028	1"	3-1/2"	1/4"
34745	1/2"	120	.028	1"	3-1/2"	1/4"
34760	5/8"	120	.028	1"	3-1/2"	1/4"
34765	3/4"	120	.028	1"	3-1/2"	1/4"
34770	7/8"	120	.028	1"	3-1/2"	1/4"
34775	1"	120	.028	1"	3-1/2"	1/4"



### **Micro Abrasive Tube Brushes**

Micro-abrasive tube brushes are ideal for ultra-fine deburring of internal holes produced by small diameter drilling. Light deburring and cleaning will not alter bore dimensions or surface finishes. Micro-abrasive tube brushes are used in power tools to create a side-wiping action, or used manually.

### **Silicon Carbide** (Single stem, single spiral; cut off end.)

TANIS	BRUSH	CDIT	FILAMENT	BRUSH	OVERALL	STEM	M FOR HOLE DIAMETERS			
PART NO.	DIAMETER	GRIT	DIAMETER	LENGTH	LENGTH	DIAMETER	INCH	FRACT.	ММ	
31040	.050"	500	.018	1/2"	4"	.022"	.047"	3/64	1.190	
31045	.075"	500	.018	3/4"	4"	.033"	.063"	1/16	1.600	
31050	.090"	500	.018	3/4"	4"	.041"	.078"	5/64	1.984	
31055	.105"	500	.018	1"	4"	.041"	.094"	3/32	2.381	
31060	.125"	500	.018	1"	4"	.064"	.109"	7/64	2.778	
31065	.135"	500	.018	1"	4"	.075"	.125"	1/8	3.175	
31070	.150"	500	.018	1"	4"	.075"	.141	9/64	3.572	



### **Silicon Carbide** (Single stem, single spiral; continuous end.)



TANIS	BRUSH	GRIT	FILAMENT	BRUSH	OVERALL	STEM	FOR	HOLE DIAME	TERS
PART NO.	DIAMETER	GKII	DIAMETER	LENGTH	LENGTH	DIAMETER	INCH	FRACT.	MM
31075	.165"	500	.018	1"	5"	.087"	.156"	5/32	3.969
31085	.190"	500	.018	1"	5"	.087"	.188"	3/16	4.736
31090	.215"	500	.018	1"	5"	.087"	.203"	13/64	5.159
31095	.230"	500	.018	1"	5"	.087"	.219"	7/32	5.556
31100	.245"	500	.018	1"	5"	.115"	.234"	15/64	5.953
31105	.260"	500	.018	1"	5"	.115"	.250"	1/4	6.35
31110	.325"	500	.018	1"	5"	.115"	.313"	5/16	7.938
31115	.385"	500	.018	1"	5"	.147"	.375"	3/8	9.525
31010	.515"	320	.022	1"	5"	.168"	.500"	1/2	12.70
31120	.515"	500	.018	1"	5"	.168"	.500"	1/2	12.70
31015	.640"	320	.022	1"	5"	.168"	.625"	5/8	15.87
31125	.640"	500	.018	1"	5"	.168"	.625"	5/8	15.87
31020	.765"	320	.022	1"	5"	.221"	.750"	3/4	19.05
31130	.765"	500	.018	1"	5"	.221"	.750"	3/4	19.05
31025	.890"	320	.022	1"	5"	.221"	.875"	7/8	22.22
31135	.890"	500	.018	1"	5"	.221"	.875"	7/8	22.22
31030	1.015"	320	.022	1"	5"	.248"	1"	1	25.40
31035	1.015"	500	.018	1"	5"	.248"	1"	1	25.40

### **Micro Abrasive Tube Brushes**

Micro-abrasive tube brushes are ideal for ultra-fine deburring of internal holes produced by small diameter drilling. Light deburring and cleaning will not alter bore dimensions or surface finishes. Micro-abrasive tube brushes are used in power tools to create a side-wiping action, or used manually.

### **Alumina Silicate** (Single stem, single spiral; cut off end.)

TANIS	BRUSH	GRIT	FILAMENT	BRUSH	OVERALL	STEM	FOR	HOLE DIAME	TERS
PART NO.	DIAMETER	GHII	DIAMETER	LENGTH	LENGTH	DIAMETER	INCH	FRACT.	ММ
31210	.030"	1000	.008	1/2"	4"	.015"	.031"	1/32	.794
31215	.050"	1000	.008	1/2"	4"	.022"	.047"	3/64	1.191
31220	.075"	1000	.008	3/4"	4"	.033"	.063"	1/16	1.588
31225	.090"	1000	.008	3/4"	4"	.041"	.078"	5/64	1.984
31230	.105"	1000	.008	1"	4"	.041"	.094"	3/32	2.381
31235	.125"	1000	.008	1"	4"	.064"	.109"	7/64	2.778
31240	.135"	1000	.008	1"	4"	.075"	.125"	1/8	3.175
31260	.190"	1000	.008	1"	5"	.087"	.188"	3/16	4.736
31265	.215"	1000	.008	1"	5"	.087"	.203"	13/64	5.159
31275	.245"	1000	.008	1"	5"	.115"	.234"	15/64	5.953



#### **Aluminum Oxide** (Single stem, single spiral; continuous end.)

TANIS	BRUSH	GRIT	FILAMENT	BRUSH	OVERALL	STEM	FOR	HOLE DIAME	TERS
PART NO.	DIAMETER	GKII	DIAMETER	LENGTH	LENGTH	DIAMETER	INCH	FRACT.	MM
31140	.165"	600	.012	1"	5"	.087"	.156"	5/32	3.969
31150	.190"	600	.012	1"	5"	.087"	.188"	3/16	4.736
31155	.215"	600	.012	1"	5"	.087"	.203"	13/64	5.159
31170	.260"	600	.012	1"	5"	.115"	.250"	1/4	6.350
31175	.325"	600	.012	1"	5"	.115"	.313"	5/16	7.938
31180	.385"	600	.012	1"	5"	.147"	.375"	3/8	9.525
31185	.515"	600	.012	1"	5"	.168"	.500"	1/2	12.70
31190	.640"	600	.012	1"	5"	.168"	.625"	5/8	15.87
31195	.765"	600	.012	1"	5"	.221"	.750"	3/4	19.05
31200	.890"	600	.012	1"	5"	.221"	.875"	7/8	22.225
31205	1.015"	600	.012	1"	5"	.248"	1"	1	25.40





## **Standard-Duty Bore-Hone™ Brushes**

Silicon Carbide Bore-Hone™ Brushes are used for manual or automated solutions. Bore-Hone™ Brushes improve surface finish of internal bores and cylinders. Ideal for internal deburring of machined bores and inside diameters of castings.

120 GRIT Tanis	180 GRIT Tanis	240 GRIT TANIS	320 GRIT Tanis	FOR HOLE SIZES	FOR Hole Sizes	BRUSH DIA.	BRUSH LENGTH	OVERALL LENGTH	STEM DIAMETER	MAX. RPM
PART NO.	PART NO.	PART NO.	PART NO.	IN INCHES	IN MM	IN MM	LLINGIII	LLINGIII	DIAMETER	
-	61000	62000	63000	0.177"	4.5 mm	5 mm	3/4"	6"	.083"	1,000
-	61002	62002	63002	0.188"	4.75 mm	5.3 mm	3/4"	6"	.083"	1,000
-	61004	62004	63004	0.197"	5 mm	5.6 mm	1-1/2"	8"	.083"	1,000
-	61006	62006	63006	0.217"	5.5 mm	6.1 mm	1-1/2"	8"	.083"	1,000
-	61008	62008	63008	0.236"	6 mm	6.7 mm	1-1/2"	8"	.098"	1,000
60010	61010	62010	63010	0.25"	6.35 mm	7.1 mm	1-1/2"	8"	.098"	1,000
60012	61012	62012	63012	0.276"	7 mm	7.8 mm	2"	8"	.098"	900
60014	61014	62014	63014	0.315"	8 mm	9 mm	2"	8"	.110"	900
60016	61016	62016	63016	0.354"	9 mm	10 mm	2"	8"	.125"	900
60018	61018	62018	63018	0.375"	9.5 mm	10.6 mm	2"	8"	.125"	900
60020	61020	62020	63020	0.394"	10 mm	11.2 mm	2"	8"	.125"	900
60022	61022	62022	63022	0.433"	11 mm	12.3 mm	2"	8"	.125"	900
60024	61024	62024	63024	0.472"	12 mm	13.5 mm	2"	8"	.142"	900
60026	61026	62026	63026	0.50"	12.7 mm	14.2 mm	2"	8"	.142"	900
60028	61028	62028	63028	0.552"	14 mm	15.7 mm	2"	8"	.142"	900
60030	61030	62030	63030	0.625"	16 mm	18 mm	2"	8"	.157"	900
60032	61032	62032	63032	0.709"	18 mm	20.2 mm	2"	8"	.157"	900
60034	61034	62034	63034	0.75"	19 mm	21.3 mm	2"	8"	.177"	900
60036	61036	62036	63036	0.787"	20 mm	22.5 mm	2"	8"	.177"	900
60038	61038	62038	63038	0.875"	22 mm	24.5 mm	2"	8"	.177"	900
60040	61040	62040	63040	0.9375"	23.8 mm	26.5 mm	3"	8"	.197"	900
60042	61042	62042	63042	1"	25.4 mm	28.5 mm	3"	8"	.213"	900
60044	61044	62044	63044	1.125"	29 mm	32.5 mm	3"	8"	.213"	800
60046	61046	62046	63046	1.25"	31.8 mm	35.6 mm	3"	8"	.224"	800
60048	61048	62048	63048	1.375"	35 mm	39.2 mm	3"	8"	.224"	800
60050	61050	62050	63050	1.50"	38 mm	42.5 mm	3"	8"	.224"	800
60052	61052	62052	63052	1.625"	41 mm	46 mm	3"	8"	.224"	800
60054	61054	62054	63054	1.75"	45 mm	50.4 mm	3"	8"	.256"	800
60056	61056	62056	63056	1.875"	47.60	54 mm	3"	8"	.256"	800
60058	61058	62058	63058	2"	51 mm	57 mm	3"	8"	.256"	700
60060	61060	62060	63060	2.125"	54 mm	60.5 mm	3"	8"	.283"	700
60062	61062	62062	63062	2.25"	57 mm	64 mm	3"	8"	.283"	700
60064	61064	62064	63064	2.375"	60 mm	67 mm	3"	8"	.283"	700
60066	61066	62066	63066	2.50"	64 mm	71.5 mm	3"	8"	.283"	700
60068	61068	62068	63068	2.625"	67 mm	75 mm	3"	8"	.283"	700
60070	61070	62070	63070	2.75"	70 mm	78 mm	3"	8"	.283"	700
60072	61072	62072	63072	2.875"	73 mm	81.5 mm	3"	8"	.322"	700
60074	61074	62074	63074	3"	76 mm	85 mm	3"	8"	.322"	700

These brushes are always to be used with a lubricant. Some common choices are water-soluble oils, mineral oils, motor oils, cutting and tapping fluids.

## **Heavy-Duty Bore-Hone™ Brushes**

Silicon Carbide Bore-Hone™ Brushes for heavy-duty applications. Ideal for cross hatching larger engine cylinders, combustion chambers and power generation cylinders.

120 GRIT Tanis Part no.	180 GRIT Tanis Part no.	240 GRIT Tanis Part No.	320 GRIT Tanis Part no.	FOR HOLE SIZES IN INCHES	FOR Hole Sizes In MM	BRUSH DIA. IN MM	BRUSH LENGTH	OVERALL LENGTH	STEM DIAMETER	MAX. RPM
64000	65000	66000	67000	3"	76 mm	85 mm	5-1/2"	13-1/2"	.299"	700
64002	65002	66002	67002	3-1/4"	83 mm	93 mm	5-1/2"	13-1/2"	.299"	700
64004	65004	66004	67004	3-1/2"	89 mm	99.5 mm	5-1/2"	13-1/2"	.315"	700
64006	65006	66006	67006	3-3/4"	95 mm	106.5 mm	5-1/2"	13-1/2"	.315"	700
64008	65008	66008	67008	4"	101 mm	113 mm	5-1/2"	13-1/2"	.346"	600
64010	65010	66010	67010	4-1/4"	108 mm	121 mm	5-1/2"	13-1/2"	.346"	600
64012	65012	66012	67012	4-1/2"	114 mm	127.5 mm	5-1/2"	13-1/2"	.346"	600
64014	65014	66014	67014	5"	127 mm	142 mm	6-1/2"	18"	.346"	600
64016	65016	66016	67016	5-1/2"	140 mm	157 mm	6-1/2"	18"	.402"	600
64018	65018	66018	67018	6"	152 mm	170 mm	6-1/2"	18"	.402"	600
64020	65020	66020	67020	6-1/2"	165 mm	184.5 mm	6-1/2"	18"	.402"	600
64022	65022	66022	67022	7"	178 mm	199.5 mm	6-1/2"	18"	.402"	600
64024	65024	66024	67024	7-1/2"	190 mm	213 mm	6-1/2"	18"	.402"	600
64026	65026	66026	67026	8"	203 mm	227.5 mm	6-1/2"	18"	.402"	600

These brushes are always to be used with a lubricant. Some common choices are water-soluble oils, mineral oils, motor oils, cutting and tapping fluids.



#### STANDARD-DUTY & HEAVY-DUTY

#### **APPLICATIONS**

- » Cross Hole Deburring
- » Deburring Internal Bores and Cylinders
- » Surface Finishing
- » Deglazing Cylinder Walls

#### **INDUSTRIES**

- » Automotive
- » Aerospace
- » Marine
- » Oil and Gas
- » Tube, Pump and Valve Production
- » Military
- » Firearms

#### **BENEFITS**

- » Improves Oil Retention by Creating Cross-hatch Patterns
- » Better Part Efficiency
- » The Flexible Nylon Stems Help the Brush Distribute Pressure Evenly; Creating the Perfect Hone
- » Improves Internal Surface Finish with Resilient, Flexible Bore-Hone™

### **Abrasive Nylon Tube Brushes**

Abrasive nylon tube brushes are used in tubular component parts and drilled and tapered holes. Applications include internal deburring and finishing. Use in CNC machine tools, drill presses and manual machine tools.



**Silicon Carbide** (Double stem, single spiral; cut off end. Galvanized stem wire.)

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	BRUSH LENGTH	OVERALL LENGTH	STEM DIAMETER
31490	1/4"	320	.022	2"	4"	1/8"
31505	3/8"	320	.022	2"	5"	1/8"
31520	1/2"	320	.022	2"	5"	5/32"
31530	1/2"	80	.040	2"	5"	5/32"
31540	5/8"	320	.022	2"	5"	7/32"
31550	5/8"	80	.040	2"	5"	7/32"
31565	3/4"	320	.022	2-1/2"	5-1/2"	1/4"
31575	3/4"	80	.040	2-1/2"	5-1/2"	1/4"
31585	1"	320	.022	2-1/2"	5-1/2"	1/4"
31595	1"	80	.040	2-1/2"	5-1/2"	1/4"
31625	1-1/4"	320	.022	2-1/2"	5-1/2"	1/4"
31630	1-1/4"	120	.040	2-1/2"	5-1/2"	1/4"
31635	1-1/4"	80	.040	2-1/2"	5-1/2"	1/4"
31645	1-1/2"	320	.022	2-1/2"	5-1/2"	1/4"
31650	1-1/2"	120	.040	2-1/2"	5-1/2"	1/4"
31655	1-1/2"	80	.040	2-1/2"	5-1/2"	1/4"
31670	1-3/4"	120	.040	2-1/2"	5-1/2"	1/4"
31675	1-3/4"	80	.040	2-1/2"	5-1/2"	1/4"
31685	2"	320	.022	2-1/2"	5-1/2"	1/4"
31695	2"	80	.040	2-1/2"	5-1/2"	1/4"

Additional diameters and grits available upon request.



### **Abrasive Nylon Burr Brushes**

Abrasive burr brushes provide a high filament concentration for heavy burr removal. Burr brushes can be used in wet or dry applications and are ideal for reducing cycle times in cross-hole deburring, cleaning threads, debris removal from blocks or machined blocks, crankshaft bores and general deburring.

**Silicon Carbide** (Single stem, single spiral; continuous end.)

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	BRUSH LENGTH	OVERALL LENGTH	STEM DIAMETER
31290	1/4"	120	.022	1"	3-1/2"	1/8"
31295	1/4"	180	.035	1"	3-1/2"	1/8"
31297	5/16"	120	.022	1"	3-1/2"	1/8"
31300	3/8"	120	.022	1"	3-1/2"	3/16"
31305	3/8"	180	.035	1"	3-1/2"	3/16"
31310	1/2"	120	.022	1"	3-1/2"	3/16"
31315	1/2"	120	.040	1"	3-1/2"	3/16"
31320	5/8"	120	.022	1"	3-1/2"	3/16"
31325	5/8"	120	.040	1"	3-1/2"	3/16"
31330	3/4"	120	.022	1"	3-1/2"	3/16"
31335	3/4"	120	.040	1"	3-1/2"	3/16"
31337	7/8"	120	.040	1"	3-1/2"	3/16"
31340	1"	120	.022	1"	3-1/2"	1/4"
31345	1"	120	.040	1"	3-1/2"	1/4"
31347	1-1/8"	120	.040	1"	3-1/2"	1/4"

Additional diameters and grits available upon request.

## **Large Stem Wire with Increased Filament Density. Silicon Carbide.**

(Single stem, single spiral; continuous end.)

TANIS PART NO.	BRUSH DIAMETER	GRIT	FILAMENT DIAMETER	BRUSH LENGTH	OVERALL LENGTH	STEM DIAMETER
08481	1/4"	120	.022	1-1/2"	4"	1/8"
08482	5/16"	120	.022	1-1/2"	4"	1/8"
08484	3/8"	120	.022	1-1/2"	4"	1/8"
08486	1/2"	120	.022	2"	5"	3/16"
08488	5/8"	120	.040	2"	5"	1/4"
08490	3/4"	120	.040	2-1/2"	5-1/2"	1/4"
08492	7/8"	120	.040	2-1/2"	5-1/2"	1/4"
08494	1"	120	.040	2-1/2"	5-1/2"	1/4"
08496	1-1/8"	120	.040	2-1/2"	5-1/2"	1/4"
08498	1-1/4"	120	.040	2-1/2"	5-1/2"	1/4"

Additional diameters and grits available upon request.



## TanisBrush.com

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All information contained in this catalog was accurate at time of publishing. Information should be used as a reference. Tanis Incorporated reserves the right to change product specifications without notice. Contact Tanis for the latest product information.

Always follow safety guidelines when using brush products.

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