

# SPIRAL BRUSHES, INC.

Heavy Duty, Industrial Quality Brushing Tools for Industry





**1355 Commerce Drive Stow, Ohio 44224** Toll Free: 1-800-888-2861 Phone: 330-686-2861 Fax: 330-686-9436

WWW.SPIRALBRUSHES.COM

# SPIRAL BRUSHES, INC.

Heavy Duty, Industrial Quality Brushing Tools for Industry

> CUSTOM DESIGNED BRUSHES POWER BRUSHES STRIP BRUSH CYLINDER BRUSHES

SPLIT CORE CYLINDER BRUSHES INVERTED COIL & DISC BRUSHES CONVEYOR CLEANING BRUSHES

**SCRATCH & MAINTENANCE BRUSHES** 

SB

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### SPIRAL BRUSHES, INC., YOUR BEST SOURCE FOR POWER BRUSHES

EXPERIENCE	Since 1939, Spiral Brushes has specialized in supplying major industries with heavy duty, industrial quality power brushes.				
KNOW HOW	We are distinguished by our ability to custom design and manufacture brushes to fit specific applications. We stock a wide range of wire, synthetic, and natural materials.				
QUALITY	We take pride in our workmanship and use only the finest raw materials available.				
WE CARE	We maintain a reputation for high quality products and services by working to continually improve our processes, products, and performance, and by maintaining good working relationships with customers and suppliers.				
DESIGN & APPLICATION HELP	There is a right brush for every job. Spiral's Service and Engineering Staff are available to help you determine the most practical and economical brush for every application.				
HAVE QUESTIONS?	Call us at 1.800-888-2861				

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<b>HOW TO ORDER</b>
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#### **BRUSH IDENTIFICATION**

Each brush is identified by a 5-digit brush number which is the only description necessary for ordering.

#### **IMPORTANT**

#### • ARBOR HOLE SIZE

When ordering power brushes the **5th digit specifies the arbor hole size**. See the table of arbor holes at the bottom of each page where applicable.

#### EXAMPLE

4" Permanent Plate Wheel Brush, .014" Wire, 1/2" Arbor Hole. 4844(3) ← Add Arbor Hole size code.

#### • FILAMENT OR GRIT SIZE

When ordering synthetic filament power brushes, the **4th digit specifies the filament or grit size**. See the table of filament sizes and grits at the bottom of each page where applicable.

#### EXAMPLE

2" Rivet Ring Wheel Brush, .008" Nylon, 1/2" Arbor Hole size code 310(4)(6) ← Add Arbor Hole size code. ↑ Add Filament size code.

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#### • ENCAPSULATED BRUSHES

When ordering, the 4th digit specifies density or encapsulating material.

#### EXAMPLE

4" Narrow Face Encapsulated Wheel Brush, .010" Wire, 5/8" Arbor Hole, Hard Encapsulating Material

374(4)(4) ← Add Arbor Hole size code. ↑ Change fourth digit from 3 to 4 to specify hard

encapsulating material.

#### • SPECIAL BRUSHES

If you do not find the brush you require in this catalog, please send the following information:

1. Complete description and specifications

2. A print, sketch, or sample brush

Our engineering staff will be pleased to work with you on new brushing applications. Please send complete details.

#### 1355 Commerce Drive Stow, Ohio 44224

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Fax: 330-686-9436 Email: sales@spiralbrushes.com

# **BRUSH FILL MATERIALS**

#### **SST Type Steel Wire**

High fatigue, oil tempered wire that is highly resistant to fatigue and has excellent cutting qualities. It is used in most Spiral brushes having a .008" diameter or larger wire.

#### **SHS Type Steel Wire**

Hard drawn, high carbon wire with excellent fatigue resistance. It is used in most Spiral brushes having .0025" to .006" diameter wire.

#### SUT Type Untempered Steel Wire

Quality wire for light brushing applications and surface finishes.

#### Stainless Steel Wire Type 302/304 - 18-8 ANALYSIS

Highly resistant to corrosion and higher temperatures. It should be used where contamination and "after-rust" is a problem.

#### $\label{eq:stainless} Steel Wire \ Type \ 316- \ Special \ Order$

Special, ultra-high corrosion resistance.

#### **Important Information On Stainless Steel Brushes**

Stainless steel brushes must be kept free of all foreign matter to prevent "after-rust" and discoloration transferring to the stainless or aluminum part being brushed. If a stainless wire brush is used on carbon steel it should never again be used to brush stainless steel because contamination will result.

### NOTE: SDS (Safety Data Sheets) are available in GHS Compliant format upon request.

To preserve stainless steel brushes and to keep them in the best condition possible, immerse brushes in a 10% to 20% nitric acid solution after each use. [NOTE: only the brushing wires are stainless steel, all other parts are carbon steel or other material.]

#### **Brass Wire**

Alloy 260 brass wire is softer than steel or stainless steel and will not scratch most hard metals. Suitable for cleaning plastic extrusion tooling, static reduction, most non-sparking applications, and satin finishing softer metals.

#### **Bronze Wire**

Alloy 510 bronze wire is harder and has better fatigue properties than brass wire, while still offering non-sparking qualities, static charge dissipation, and good corrosion resistance.

#### **Static Grounding Mixtures**

Brass and bronze wires can be mixed with synthetic filaments to drain off static electricity build-up.

#### **Other Wires Available**

Other grades of stainless steel, nickel-silver, aluminum, and other specialty wires.

#### WIRE FORMS

#### **WIRE SIZES**

The wire sizes shown in this catalog and all Spiral Brushes literature are displayed in decimals of an inch. The following table outlines the conversion to American Steel Wire's (formerly Washburn & Moen) equivalent gauge.

WIRE SIZES													
Wire		Coarse			Medium Coarse			Medium		Fine	Very	Fine	
Gauge No.	20	23	24	25	26	28	29	30	33	34	38	43	47
Wire Size Diam.	.035"	.0258"	.023"	.020"	.018"	.016"	.015"	.014"	.0118"	.0104"	.008"	.006"	.005"

#### SYNTHETIC FIBERS

#### Type 6.6 Nylon

A general purpose nylon used in dry applications for cleaning, polishing and scrubbing. Maximum operating temperature is 190°F. A superior synthetic fiber for oil spreading and/or other liquids requiring wicking action.

#### Type 6.10 Nylon

A medium to high performance nylon, slightly stiffer than 6.12 with slightly more moisture wicking, and higher temperature resistance.

#### Type 6.12 Nylon

A superior, long wearing nylon for both wet and dry applications. Excellent recovery and abrasion resistance, low water absorption. Maximum operating temperature is 200°F.

#### **Nylon Abrasive Filament**

A nylon monofilament with either silicon carbide, or aluminum oxide abrasive grit securely encapsulated in the filament. Ceramic or diamond available as special order. Available in 80, 120, 180, 240, 320, and 500 grit sizes. See pages 5 and 15– Abrasive Nylon Brushes.

#### Polypropylene

Tough filament, resistant to petroleum solvents, oils, greases, and most acid and alkali solutions. A special formulation is available for wet and hot applications. Maximum operating temperature is 175°F.

#### **OTHER POPULAR FILAMENTS**

#### Tampico

A natural vegetable fiber that can be used either wet or dry, for scrubbing, washing and dusting applications. Maximum wet operating temperature is 400°F. Tampico can be treated to make it tacky for application of grease stick and abrasives.

#### Horsehair - Stiff or Soft

For fine dusting, washing, cleaning and polishing applications. Maximum wet operating temperature is  $400^{\circ}$ F.

#### **Special Mixtures**

For special applications, mixtures of synthetic filaments and natural fibers, synthetic filaments and wire, or other special mixtures can be supplied.

# POWER BRUSH TERMINOLOGY

#### **OUTSIDE DIAMETER**

#### **TRIM LENGTH**

#### **ARBOR HOLE**

The largest diameter brush that is practical will usually be the most efficient and have the lowest end-of-service cost.



The visible length of wire or filament extending beyond the brush back or face plates.

A short trim makes a stiff, fast cutting brush. A long trim brush works using a less aggressive brushing action while giving more flexibility for brushing irregular surfaces.



The diameter of the brush mounting hole. Many arbor hole sizes and adapters are available to accommodate shaft sizes.

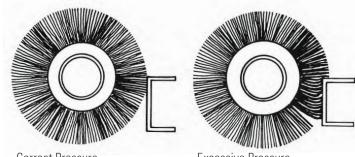
Maximum arbor hole is largest arbor hole the brush can accommodate.

#### FACE WIDTH



The width of the brush face when brush is in its static condition. Operating face width may be less than static free.

#### **BRUSHING PRESSURE AND SPEED**



**Correct Pressure** 

**Excessive Pressure** 

The amount of pressure between the brush tips and the working surface is very important as it affects the quality of the work and the brush life. The sharp tips of the wire, or filament, do the work. Brushes should be operated at the highest practical speed, within the brush's maximum rated safe-free speed, with the lightest possible pressure. Excess pressure causes stress, flexing and a wiping action rather than a cutting action, eventually resulting in premature breakage of the wire or filament.

The largest diameter brush that the equipment will handle produces the highest peripheral speed and is generally the most efficient. Increasing the speed increases the face hardness and cutting action. Usually a finer wire brush rotating at a higher speed will produce the same results as a coarser wire brush at a slower speed. The finer wire brush at a higher speed, is less subject to fatigue and embrittlement.

#### **BRUSH FACE CONTACT**

Like a grinding wheel, if the full face of the brush is not utilized, it will result in grooving, but unlike a grinding wheel, a brush face is harder to true-up.

If a wire brush face must be dressed, a coarse grinding wheel must be used and, if possible, a coolant to prevent damaging the wire points. Use coarse, abrasive paper to dress fiber and synthetic brushes.

#### **REVERSING BRUSH ROTATION**

Periodically reversing the rotation of the brush will prolong the life of the brush and keep the tips sharp.

#### **BRUSHING AREAS WITH IRREGULAR SURFACES**

Use a brush with long trim for maximum flexibility.

#### **BRUSH DENSITY**

The denser the brush, the faster the brushing action. Increasing the inside diameter or center plate diameter, while maintaining the outside diameter, results in a stiffer brush face with more wire tips on the cutting perimeter.

#### **TRIM LENGTH**

The shorter the trim length, the faster the cutting.

#### **HIGH TEMPERATURE BRUSHING**

When temperatures exceed 200°F stainless steel wire is recommended.

#### **BRUSHING STAINLESS STEEL OR ALUMINUM**

Use of carbon steel wire on stainless steel or aluminum will contaminate the surface and leave an "after-rust" effect. To prevent "after-rust", always use a stainless steel wire brush. Even stainless steel brushes used on carbon steel will become contaminated and should not thereafter be used to brush stainless steel or aluminum.

#### **NON-SPARKING BRUSHES**

Use bronze or brass wire, or synthetic filament.

#### **MICRO-FINISHING AND DEBURRING**

Use nylon abrasive filament.

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# **TECHNICAL INFORMATION**

#### HORSEPOWER REQUIRED TO DRIVE BRUSHES

Four factors that govern the horsepower necessary to drive a power brush are as follows:

- 1. Brushing pressure required
- 2. Resistance between work surface and trim length of the brush
- 3. Speed of the brush
- 4. Brush face width

HORSEPOWER APPROXIMATION GUIDE								
Brush Diameter	Motor Sizes	RPM						
4"	1/4hp	3,450						
6"	1/2hp	3,450						
8"	3/4hp	3,450						
10"	1hp	1,750						
12"	1hp	1,750						
15"	1-1/2hp	1,750						

Based upon medium brushing action for 1" brush face.

Longer face brushes require additional horsepower depending upon the relative brush load. Long trim brushes can usually be operated with less horsepower than short trim brushes.

#### **PORTABLE TOOLS**

The maximum recommended diameter of a brush to be used with electric or air powered portable tools is 8".

BRUSH SPEEDS IN SURFACE FEET PER MINUTE									
	Brush Diameters								
R.P.M.	4"	6"	8"	10"	12"	13"	14"	15"	16"
900	950	1,400	1,900	2,350	2,800	3,100	3,350	3,550	3,750
1,150	1,200	1,800	2,400	3,000	3,600	3,900	4,200	4,500	4,800
1,200	1,250	1,900	2,500	3,200	3,800	4,100	4,400	4,700	5,000
1,500	1,550	2,350	3,150	3,900	4,700	5,200	5,500	5,900	6,250
1,750	1,800	2,750	3,650	4,550	5,500	6,000	6,400	6,800	7,300
2,000	2,100	3,100	4,200	5,200	6,300	6,800	7,300	7,800	8,400
2,400	2,500	3800	5,000	6,100	7,500	8,250	8,800	9,400	10,000
2,800	2,900	4,400	5,850	7,300	8,800	9,600	10,200	11,000	11,700
3,000	3,100	4,700	6,300	7,800	9,400	10,250	11,000	11,800	12,500
3,200	3,350	5,000	6,700	8,400	10,200	11,000	11,700	12,600	13,400
3,450	3,600	5,400	7,200	9,000	11,000	11,800	12,600	13,500	
3,750	3,900	5,900	7,800	9,800	11,800	12,800	13,700		
4,000	4,200	6,300	8,400	10,500	12,500	13,750			
4,500	4,700	7,200	9,400	11,800	14,100				
5,000	5,200	7,800	10,500	13,100					
5,400	5,600	8,500	11,300						
6,000	6,300	9,400	12,500						

### RECOMMENDED BRUSHING SURFACE SPEEDS

Application	Surface Speed (in RPMs)
Deburring	5,500-7,500
Descaling	7,500-10,000
Weld Cleaning	7,500-9,500
Edge Blending	4,500-7,500
Cleaning (Dry)	4,000-6,000
Cleaning (Wet)	2,000-4,000
Polishing	6,000-8,000
Buffing	8,000-10,000

#### **ENGLISH-METRIC EQUIVALENTS**

Brush Diam.	Brush Face Widths	Arbor Hole Sizes
3" - 76mm	1/8" - 3mm	1/4" - 6.4mm
4" - 102mm	1/4" - 6mm	3/8" - 9.5mm
6" - 152mm	3/8" - 10mm	1/2" - 12.7mm
7" - 178mm	1/2" - 13mm	5/8" - 15.9mm
8" - 203mm	5/8" - 16mm	3/4" - 19mm
10" - 254mm	3/4" - 19mm	7/8" - 22.2mm
12" - 305mm	7/8" - 22mm	1" - 25.4mm
14" - 356mm	1" - 25mm	1-1/8" - 28.6mm
15" - 381mm	1-1/8" - 29mm	1-1/4" - 31.8mm
16" - 406mm	1-1/4" - 32mm	1-1/2" - 38.1mm
	1-1/2" - 38mm	1-3/4" - 44.5mm
	2" - 51mm	2" - 50.8mm

#### **BRUSH & OPERATING ADJUSTMENTS**

Results	Recommended Changes
Brush action too slow	<ol> <li>Increase surface speed by increasing OD or RPM.</li> <li>Decrease trim length.</li> <li>Increase filament diameter.</li> </ol>
Brush action too fast	<ol> <li>Reduce surface speed by reducing RPM or OD.</li> <li>Reduce filament diameter.</li> <li>Increase trim length.</li> </ol>
Action of brush peens burr	<ol> <li>Decrease trim length and increase fill density.</li> <li>Increase brush speed.</li> <li>Check pressure to determine if wire tips are cutting instead of wiping.</li> <li>Try non-metallic brush such as abrasive nylon or treated Tampico.</li> </ol>
Finish too smooth	<ol> <li>Increase trim length.</li> <li>Reduce surface speed.</li> <li>Increase filament diameter.</li> </ol>
Non-uniform brushing action	<ol> <li>Increase trim length and decrease fill density.</li> <li>Use brushing fixture.</li> </ol>
Longer brush life	<ol> <li>Use finer wire.</li> <li>Use longer trim.</li> </ol>

# **TECHNICAL INFORMATION**

#### **ENCAPSULATED WIRE BRUSHES**

With Encapsulated Wire Wheel Brushes the wires are bonded in a synthetic elastomer that firmly holds each wire in place to provide a maximum cutting edge. Available in Narrow Face Wheel, Wide Face Wheel, Cup, Copper Center Rivet Ring, End and Tube Brushes.

#### **APPLICATIONS**

- When aggressive short trim cutting action is required
- For use on relatively flat surfaces
- For heavy deburring, surface blending, cleaning and weld preparation
- Where controlled brushing area is required

#### **OPERATING INFORMATION**

- Use normal brushing speeds and brush pressure.
- When using an encapsulated wire brush to replace a standard wire brush, the next smaller wire size should approximate the same results.
- Do not use on surfaces over 180°F.

#### **ADVANTAGES**

- Faster cutting action
- Longer brush life
- Brush shape is retained
- Minimum wire breakage
- Uniform wear
- Safer to operate
- Resists weak acids and alkalines
- Available in soft, standard (medium) and hard density

#### **ABRASIVE NYLON BRUSHES**

Filaments are produced by extruding nylon combined with a 30% load of silicon carbide or aluminum oxide grit into a uniformly impregnated (not coated) filament. Silicon carbide is standard because it is harder and sharper than aluminum oxide; it is preferred for finishing ferrous metals. On the other hand, aluminum oxide is less likely to fracture and is preferred for finishing soft metals. Brushes can be used wet or dry. They are available in the following grit sizes:

Grit Size	Diameter	Quality of Filament
600*	.018"	Super Fine
500*	.018"	Extra Fine
320*	.022"	Fine
180*	.035"	Medium
120*	.040"	Medium
80*	.040"	Medium-Coarse
46	.060"	Extra Coarse (not heat stabilized)

\*Also available in aluminum oxide, ceramix and diamond.

#### **TYPICAL APPLICATIONS**

- Light deburring
- Decorative metal finishing
- Wood finishing
- Stain removal
- Circuit board cleaning
- Removing color contamination
- Weld preparation
- Steel sheet scrubbing
- Removing rubber and plastic flash
- Surface finish improvement

#### **ARBOR HOLES WITH KEYWAYS OR THREADS**

Most Fixed Arbor Hole Wheel Brushes, 4" to 8", can be supplied with 5/8" – 11 threaded arbor holes. If the brush is smaller than 4" it is supplied with smaller American or Metric threads (see page 19). Standard keyways are also available.

AMERICAN STANDARD SQUARE KEYWAYS										
Arbor Hole Size	5/8"	3/4"	1"	1-1/4"	2"	2-1/2"	3"			
Keyway Size	3/16" X 3/32"	3/16" X 3/32"	1/4" X 1/8"	1/4" X 1/8"	1/2" X 1/4"	5/8" X 5/16"	3/4" X 3/8"			

#### **BRUSHING CHARACTERISTICS OF NON-METALLIC FIBERS**

Material	Moisture	Relative S	Stiffness	Relative Resistance to Abrasion	Max. Operating	Relative Costs
Ivialeriai	Absorption	Wet	Dry	nelative nesistance to Abrasion	Temperature	
Tampico	35%	.90	1.20	.36	280°	Inexpensive
Tampico-Union Mix	35%	1.20	1.35	.34	280°	Inexpensive
Polypropylene	.03%	.95	1.00	.67	175°	Moderate
6.6 Nylon	Up to 9%	.65	1.00	1.00	190°	Moderately Expensive
6.12 Nylon	Up to 3%	.80 1.00	1.00	1.00	190°	Expensive

#### **CHEMICAL RESISTANCE OF NON-METALLIC FIBERS**

Material	Acids	Alkalines	Petroleum Solvents	Alcohols Vegetable Oils	Benzine	Acetone Ethylacetate
Tampico	Poor	Good	Good	-	-	-
Tampico-Union Mix	Poor	Good	Good	-	-	-
Polypropylene	Excellent	Excellent	Good	Excellent	Good	Excellent
6.6 Nylon	Poor	Good	Excellent	Poor	Excellent	Excellent
6.12 Nylon	Good	Good	Good	Poor	Excellent	Excellent

# SAFE OPERATION OF POWER BRUSHES

Power Brushes are rotating cutting tools that must always be operated with certain safety precautions. Here are some of the safety precautions that are to be observed.

#### **OPERATOR INSTRUCTIONS – ANSI B165.1**

All operators of Power Brushes should be familiar with "Safety Requirements for the Design, Care, and Use of Power Driven Brush Tools," ANSI B165.1. Below we have summarized some of the operator care and use safety requirements. It is mandatory that you read and observe these safety requirements.

**Inspection** Upon receipt, make sure brushes were not damaged in transit. If damaged, do not use.

Storage & Handling Repackage and store brushes in original boxes or equivalent. Do not expose brush to high humidity, heat, acids, fumes, water or other liquids which might adversely affect it. Do not allow brush fill or components to become distorted as this may cause an imbalanced condition when run. Do not allow foreign matter to accumulate on or become lodged in the brush face.

Machine Condition Maintain brushing machine in safe operating condition. Use safety guards on machine. Provide adequate power to maintain spindle speed. Provide adequate exhaust for the application. Use adequate spindle diameter for the brush. Use work rest. Adjust rest so that not more than a 1/8" opening is between the rest and the brush. Adjust rest only when brush is not in motion. Do not use brush larger than the machine is designed for. If spindle nut is used to secure brush the direction of the thread should be in such relation to the direction of rotation that the nut will tend to tighten as the spindle revolves. If flanges are used they should be identical in size and radial bearing surface to avoid cross bending pressure on the brush. Threaded spindles should be long enough to allow full nut mounting, but the threading should not extend more than halfway within the arbor hole of the brush.

Mounting Brush (also read MACHINE CONDITION) Inspect brushes for damage, rust or oxidation. If brush is not in good condition, do not use. Check spindle speed R.P.M. Do not mount brush if spindle R.P.M. exceeds MAXIMUM SAFE FREE SPEED (MSFS) for which brush is rated. Brush nominal arbor hole should be the same as the spindle diameter. Brush should fit freely, but not loosely on spindle. If brush has bushing, the brush, not the bushing, should be gripped by the machine. Flanges,

if used, should be compressed with sufficient force to anchor the brush but should not damage the fill material, compress the thickness of the brush thru the hub or otherwise distort the brush.

Shank type brushes: the shank shall be inserted into chuck or collet as far as possible with minimum possible overhang of brush.

Speed Do not exceed MAXIMUM SAFE FREE SPEED (MSFS) for which the brush has been rated. MSFS is the maximum R.P.M. at which the brush should be run with no work applied (spinning free), and is not the recommended operating speed. The recommended operating speed should be determined by the application but should not exceed the MSFS for which the brush is rated. A periodic speed check of the spindle is the operator's responsibility.

**Personal Protective Equipment** Safety glasses and full face shields shall be used by brush operators and others in the area. Full face protection, appropriate protective gloves and clothing shall be required by the employer. Other personnel within 50 or more feet of the brushing operation may be in the danger zone and should wear eye protection and other safety equipment to prevent injury. Employers should use an enclosure to isolate any particularly hazardous brushing operation from the operator and other personnel.

**Machine Guards** Keep all machine guards in place. Use rotating brushes only on machines provided with safety guards. Brushes used on recessed or internal work and those used on hand held power tools (ie. drills and grinders) are excluded from requiring guards, unless recommended by the power tool manufacturer in the instruction manual provided with the tool.

**Starting The Brush** Before starting, jog machine to be sure it is ready to use and that the brush is fastened securely. Brushes shall be run at operating speed with safety guards in place or in a protective enclosure for at least one minute before applying work. During this time no one should stand in front of or in line with the brush.

**Supervision** Competent persons shall be assigned to the mounting, care, and inspection of brushes and brush machinery. It is the responsibility of the user to fully inform all operating personnel about all of the hazards relating to brush use and to instruct them in the proper use of brushes, safety rules, correct speeds and need for eye protection.

**A**WARNING

#### **REQUEST FREE SAFETY SLIP ON POWER BRUSH SAFETY PRECAUTIONS**

Spiral Brushes supplies copies of the Power Brush Safety Precautions Slip with all power brush shipments. Published in multilingual form by the Industrial Division of the American Brush Manufacturers Association, as a guide for the proper use of Power Brushes. Please send your request to:

Email: sales@spiralbrushes.com

- Fax: 330-686-9436
- Mail: Spiral Brushes, Inc. 1355 Commerce Drive Stow, Ohio 44224

<u>R</u>	All operators must read, study, understand, and comply with all warnings and operating instructions on both sides of this safety slip and those instructions provided with your power tool before using this brush.	Todos los operadores deben leer, estudiar, comprender y cumplir todas las advertencias e instrucciones de funcionamiento que aparecen en ambos lados de esta hoja de seguridad, así como las instrucciones que se facilitan con la herramienta eléctrica antes de usar este cepillo.	Tous les opérateurs doivent lire, étudier et comprendre et se conformer à tous les avertissements et d'exploitation des instructions sur les deux côtés de ce feuillet de sécurité et les instructions fournies avec votre outil électrique avant d'utiliser cette brosse.
Ø	Safety glasses and full face shields must be worn by users and others in area. Persons within 50 or more feet may be within danger zone. See ANSI/ISEA Z87.1	Los usuarios y otros en la zona deben utilizar lentes de seguridad y protectores faciales. Las personas dentro de 50 o más pies pueden estar dentro de la zona de peligro. Vea la norma ANSI/ISEA Z87.1	Lunettes de securité et écrans faciaux doivent être porté par les utilisateurs et d'autres dans la région. Les personnes à l'interieu de 50 pieds ou plus peuvent être au sein de la zone de danger. Voir la norme ANSI/ISEAZ87.1
XX,00 MAX RPM	Observe all speed restrictions. Maximum RPM or Maximum Safe Free Speed (MSFS), See ANSI 3.1.8	Observe las restricciones de velocidad. Máxima Velocidad Libre Segura(MSFS). Consulte ANSI 3.1.8	Respecter toutes les restrictions de vitesse. Maximale Coffre-fort Gratuit Vitesse (MSFS). Voir ANSI 3.1.8
	Tool guards must be kept in place at all times.	Los protectores deben mantenerse en su lugar, en todo momento.	Des protecteurs doivent être maintenus en place en tout temps.
	Appropriate protective gloves must be worn.	Guantes de protección adecuados deben ser usados.	Des gants protecteurs appropriés doivent être portés.
<b>)</b>	Appropriate protective clothing must be worn.	Ropa de protección adecuada debe ser utilizada.	Vêtements de protection appropriés doivent être utilisés.
	Over	Encima	Sur

ADVERTENCIA AVERTISSEMENT

## TYPES OF POWER BRUSHES

#### **STANDARD LINE WHEELS**

Highest quality, general purpose Wire Wheel Brushes. 2" arbor hole is standard, but can be supplied for smaller arbor holes. (See page 8)



#### **BRUSH SECTIONS**

Narrow brushing face sections that can be used individually or ganged to make a wide face brush. (See pages 11, 20)



#### **CUP BRUSHES**

Cup Shaped Brushes for use on electric or air tools. Filled with crimped wire, twisted knot tufts and other fill materials. (See pages 23-25)



#### **STRIP BRUSHES**

Filled with wire or other filament, Strip Brushes can be used to custom-make special purpose brushes. (See pages 39-41)



#### **KNOT WHEELS**

Twisted Tuft Knot Brushes for the toughest wire brushing applications. Standard twist or cable twisted-to-the-end. (See pages 10-11)



#### **CENTERLESS BRUSHES**

Denselv filled brushes for use on centerless brushing and grinding machines to remove grinding burrs and surface finish. (See page 18)



#### FND BRUSHES

For use in portable tools and drill presses. Available in many sizes, styles and fill materials. (See pages 26-28)



#### CYLINDER BRUSHES

Spiral Wound Cylinder Brushes are wound on a shaft, core or tubing, or on a customer's core. Also available as unmounted refill. (See pages 42-45)



#### PERMANENT PLATE WHEELS

Narrow and wide face Wheel Brushes with a customer's specified arbor hole in the side plate. Can be ganged to make a wide face brush. (See page 11)



#### **SMALL RIVET RING COPPER CENTER** WHEELS

Small diameter, high speed wheel brush for electric or air tools. Available in a wide range of wires and other fill materials. Can be ganged to make a wide face brush. (See pages 21-22)



#### **TWISTED-IN-WIRE BRUSHES**

Side action brushes for hand or power tool use. Twisted-in-wire brushes have thousands of uses to clean and finish holes and threads. (See pages 29-38)



#### **CONVEYOR CLEANING BRUSHES**

Spiral offers a complete range of standard and custom designed Conveyor Cleaning Brushes. (See pages 46-47)



#### STANDARD LINE ADAPTER STYLE WHEEL BRUSHES STANDARD PACKAGE 1 CRIMPED WIRE, ADAPTER STYLE



Highest quality, general purpose Wheel Brushes for deburring, cleaning, removing paint and rust, edge blending and roughing for adhesion.

- Heavily filled with high fatigue, tempered steel wire or type 304 stainless wire
- Standard 2" basic arbor hole
- One pair of No. 1211\* arbor hole adapters required with each brush, if smaller than 2" arbor hole is requested. Adapters sold separately, see chart on next page.





No. 1211\* adapter

#### NARROW FACE

Brush	Approx. Running	Approx. Width	Trim Longth	Maximum Safe		Brush	Catalog Nu	mber & Wire	Sizes	
Diam.	Face	Approx. Width on Arbor**	Trim Length	Free Speed (RPM)	.006"	.008"	.0104"	.0118"	.014"	.020"
				Carbon Ste	el					
4-1/4"	5/8"	7/8"	5/8"	6,000	07659	07399	07329	07159	07049	-
6"	5/8"	7/8"	1-1/8"	6,000	07699	07409	07339	07199	07059	-
7"	5/8"	7/8"	1-5/8"	6,000	07709	07479	07349	07209	07069	-
8"	7/8"	1-3/16"	1-1/8"	4,500	07799	07499	07359	07259	07079	07009
10"	1-1/4"	1-1/2"	1-11/16"	3,600	07809	07509	07369	07299	07089	07019
12"	1-1/4"	1-1/2"	2-11/16"	3,000	07859	07599	07379	07309	07099	07029
15"	1-3/8"	1-3/8"	4-3/16"	2,400	07899	07609	07389	07319	07109	07039
				Stainless St	eel					
4-1/4"	5/8"	7/8"	5/8"	6,000	08659	08399	08329	08159	08049	-
6"	5/8"	7/8"	1-1/8"	6,000	08699	08409	08339	08199	08059	-
7"	5/8"	7/8"	1-5/8"	6,000	08709	08479	08349	08209	08069	-
8"	7/8"	1-3/16"	1-1/8"	4,500	08799	08499	08359	08259	08079	08009
10"	1-1/4"	1-1/2"	1-11/16"	3,600	08809	08509	08369	08299	08089	08019
12"	1-1/4"	1-1/2"	2-11/16"	3,000	08859	08599	08379	08309	08099	08029
15"	1-3/8"	1-3/8"	4-3/16"	2,400	08899	08609	08389	08319	08109	08039

#### **MEDIUM FACE**

Brush	Approx. Running	Approx. Width on Arbor**	Trim Length	Maximum Safe		Brush	Catalog Nu	mber & Wire	Sizes		
Diam.	Face	on Arbor**	i i i i cengui	Free Speed (RPM)	.006"	.008"	.0104"	.0118"	.014"	.020"	
				Carbon Ste	el						
4-1/4"	7/8"	1-3/16"	5/8"	6,000	07469	07489	07419	07429	07449	-	
6"	7/8"	1-3/16"	1-1/8"	6,000	07669	07689	07619	07629	07649	07679	
7"	7/8"	1-3/16"	1-5/8"	6,000	07769	07789	07719	07729	07749	07779	
8"	1"	1-5/8"	1-1/8"	4,500	07869	07889	07819	07829	07849	07879	
10"	1-1/2"	1-3/4"	1-11/16"	3,600	07169	07189	07119	07129	07149	07179	
12"	1-1/2"	1-3/4"	2-11/16"	3,000	07269	07289	07219	07229	07249	07279	
				Stainless St	eel						
6"	7/8"	1-3/16"	1-1/8"	6,000	08669	08689	08619	08629	08649	08679	
8"	1"	1-5/8"	1-1/8"	4,500	08869	08889	08819	08829	08849	08879	
10"	1-1/2"	1-3/4"	1-11/16"	3,600	08169	08189	08119	08129	08149	08179	
12"	1-1/2"	1-3/4"	2-11/16"	3,000	08269	08289	08219	08229	08249	08279	

WIDE	E FACE									
Brush	Approx. Running	Approx. Width	Trim Longth	Maximum Safe		Brush	Catalog Nu	mber & Wire	Sizes	
Diam.	Face	on Arbor**	Trim Length	Free Speed (RPM)	.006"	.008"	.0104"	.0118"	.014"	.020"
				Carbon Ste	el					
4-1/4"	1-3/8"	1-11/16"	5/8"	6,000	09469	09489	09419	09429	09449	-
4-1/2"	1-3/8"	1-11/16"	3/4"	6,000	09569	09589	09519	09529	09549	-
6"	1-3/8"	1-11/16"	1-1/8"	6,000	09669	09689	09619	09629	09649	09679
7"	1-3/8"	1-11/16"	1-5/8"	6,000	09769	09789	09719	09729	09749	09779
8"	1-1/4"	2-1/8"	1-1/8"	4,500	09869	09889	09819	09829	09849	09879
10"	1-3/4"	2"	1-11/16"	3,600	09169	09189	09119	09129	09149	09179
12"	2"	2-1/4"	2-11/16"	3,000	09269	09289	09219	09229	09249	09279
15"	2"	2-1/4"	4-3/16"	2,400	09369	09389	09319	09329	09349	09379
				Stainless St	eel					
4-1/2"	1-3/8"	1-11/16"	3/4"	6,000	10569	10589	10519	10529	10549	-
6"	1-3/8"	1-11/16"	1-1/8"	6,000	10669	10689	10619	10629	10649	10679
8"	1-1/4"	2-1/8"	1-1/8"	4,500	10869	10889	10819	10829	10849	10879
10"	1-3/4"	2"	1-11/16"	3,600	10169	10189	10119	10129	10149	10179
12"	2"	2-1/4"	2-11/16"	3,000	10269	10289	10219	10229	10249	10279
15"	2"	2-1/4"	4-3/16"	2,400	10369	10389	10319	10329	10349	10379

EXTR	A WIDE FACE									
Brush	Approx. Running	Approx. Width	Trim Length	Maximum Safe	Brush Catalog Number & Wire Sizes					
Diam.	Face	on Arbor**	IIIII Leiigiii	Free Speed (RPM)	.006"	.008"	.0104"	.0118"	.014"	.020"
				Carbon Ste	el					
6"	1-3/4"	2-3/16"	1-1/8"	6,000	80669	80689	80619	80629	80649	80679
8"	1-3/4"	2-3/8"	1-1/8"	4,500	80869	80889	80819	80829	80849	80879
10"	2"	2-1/4"	1-11/16"	3,600	80169	80189	80119	80129	80149	80179
12"	1-3/4"	2-1/2"	2-11/16"	3,000	80269	80289	80219	80229	80249	80279
15"	1-3/4"	2-1/2"	4-3/16"	2,400	80369	80389	80319	80329	80349	80379
				Stainless St	eel					
6"	1-3/4"	2-3/16"	1-1/8"	6,000	90669	90689	90619	90629	90649	90679
8"	1-3/4"	2-3/8"	1-1/8"	4,500	90869	90889	90819	90829	90849	90879
10"	2"	2-1/4"	1-11/16"	3,600	90169	90189	90119	90129	90149	90179
12"	2-1/4"	2-1/2"	2-11/16"	3,000	90269	90289	90219	90229	90249	90279
15"	2-1/4"	2-1/2"	4-3/16"	2,400	90369	90389	90319	90329	90349	90379

Brass and bronze wires: See page 14.

\*\*This dimension is not the width through the arbor hole, but the measurement at the widest point on the side-plates. This measurement can be used to determine the number of brushes that can be ganged to build a wider brush face.

#### **SPECIAL SIZES**

Standard Line Wheel Brushes can be supplied on a special order basis in wider faces and in most types of wires and fill materials.



#### **TO ORDER EXTRA SETS OF ADAPTERS** Use No. 1211\* and add the fifth digit to specify an arbor hole size.

Use No. 1211*	and add the fi	ifth digit to specify an a	arbor hole size.

* Arbor Hole Ad	apters, add fifth	digit to specify arbo	or hole size.					
Arbor Hole	1/2″	5/8"	3/4"	7/8″	1"	1-1/4″	1-1/2″	Other
Fifth Digit	3	4	6	1	7	8	9	0 (Specify)

# STANDARD TWIST KNOT WHEELS

#### **STANDARD PACKAGE 1**

Fabricated of high quality, high fatigue, straight tempered wire for heavy and severe cleaning applications. Ideal for weld cleaning, heavy flash and surface preparation. Can be ganged in multiples.





Standard 2/3 Twist Regular Face Single Section

Brush	Approx. Face	Approx. Trim	Maximum	Maximum Safe		Bi	rush Catalo	g Number	& Wire Siz	es	
Diam.	Width	Length	Arbor Hole	Free Speed (RPM)	.0118"	.014"	.016"	.020"	.023"	.030"	.040"
				Carbon Stee	el Wire						
4"	1/2"	7/8"	3/4"	12,500	1642*	1644*	1646*	1647*	1660*	1697*	-
6"	5/8"	1-5/16"	1-1/4"	9,000	1662*	1664*	1666*	1667*	1668*	1669*	-
7"	5/8"	1-13/16"	1-1/4"	9,000	-	1677*	-	1678*	-	-	-
8"	5/8"	1-7/8"	1-1/2"	6,000	1682*	1684*	1686*	1687*	1688*	1683*	-
10"	3/4"	2-3/8"	2-1/2"	4,500	1612*	1614*	1616*	1617*	1623*	1698*	1524*
12"	13/16"	2-1/4"	3"	3,600	1622*	1624*	1626*	1627*	1635*	1699*	1525*
Stainless Wire – Type 304											
4"	1/2"	7/8"	3/4"	12,500	1742*	1744*	1746*	1747*	-	-	-
6"	5/8"	1-5/16"	1-1/4"	9,000	1762*	1764*	1766*	1767*	-	-	-
8"	5/8"	1-7/8"	1-1/2"	6,000	1782*	1784*	1786*	1787*	-	-	-
10"	3/4"	2-3/8"	2-1/2"	4,500	1712*	1714*	1716*	1717*	-	-	-
12"	13/16"	2-1/4"	3"	3,600	1722*	1724*	1726*	1727*	-	-	-
				Brass W	ire						
4"	1/2"	7/8"	3/4"	12,500	-	1531*	-	1591*	-	-	-
6"	5/8"	1-5/16"	1-1/4"	9,000	-	1532*	-	1592*	-	-	-
8"	5/8"	1-7/8"	1-1/2"	6,000	-	1533*	-	1593*	-	-	-
10"	3/4"	2-3/8"	2-1/2"	4,500	-	1534*	-	1594*	-	-	-
				Bronze V	Vire						
4"	1/2"	7/8"	3/4"	12,500	-	1537*	-	1595*	-	-	-
6"	5/8"	1-5/16"	1-1/4"	9,000	-	1538*	-	1596*	-	-	-
8"	5/8"	1-7/8"	1-1/2"	6,000	-	1539*	-	1597*	-	-	-
10"	3/4"	2-3/8"	2-1/2"	4,500	-	1540*	-	1598*	-	-	-

Special diameters and wire sizes available.

* Standard Arl	Standard Arbor Holes, add fifth digit to specify arbor hole size.								
Arbor Hole	3/8"	1/2"	5/8"	5/8"-11 threaded	3/4"	1"	1-1/4"	2"	Other
Last Digit	2	3	4	5	6	7	8	9	0 (Specify)



Toughcut

#### **SPECIAL ARBOR HOLES AND KEYWAYS**

Special diameter round arbor holes, with and without keyways, are available. See page 5 for standard size keyways.

**TOUGHCUT** - SHORT TRIM, HIGH DENSITY Approx. Face Width Brush Catalog Number & Wire Sizes Brush Approx. Trim Maximum Maximum Safe Diam. Length Arbor Hole Free Speed (RPM) .0118" .014" .020" .030" .040" .016" .023" **Carbon Steel Wire** 8" 3/4" 1-3/8" 2-1/2' 6,000 1663\* 1665\* 1679\* --10" 3/4" 1-1/4" 3" 4,500 1685\* 1681\* 1689\* 1670\* 1697\*

Stainless and double row available on special order.

# KNOT WIRE WHEEL BRUSHES

#### **STANDARD PACKAGE 1**

WIDE FACE, DOUBLE SECTION												
Brush			Maximum	Maximum Safe	Brush Catalog Number & Wire Sizes							
Diam.	Width	Length	Arbor Hole	Free Speed (RPM)	.0118"	.014"	.016"	.020"	.023"			
				<b>Carbon Steel Wire</b>								
4"	7/8"	7/8"	1/2"	12,500	1628*	1629*	1630*	1631*	-			
6"	1"	1-5/16"	1"	9,000	1962*	-	1966*	-	-			
8"	1-1/4"	1-7/8"	2"**	6,000	1982*	-	1986*	-	1988*			
10"	1-1/2"	2-3/8"	2"**	4,500	1912*	-	1916*	-	-			
12"	1-3/4"	2-1/4"	2"**	3,600	1922*	-	1926*	-	1928*			
			Sta	inless Wire – Type 3	04							
4"	7/8"	7/8"	1/2"	12,500	1751*	1753*	1755*	1757*	-			
6"	1"	1-5/16"	1"	9,000	1758*	-	1759*	-	-			
8"	1-1/4"	1-7/8"	2"**	6.000	1760*	-	1761*	-	-			



Standard 2/3 Twist Wide Face Double Section

10" and 12" double row available on special order.

\*\*Adapter style. Standard 1211\* adapters required for arbor holes smaller than 2". See the bottom of page 9.

#### **FULL CABLE TWIST** Approx. Trim Approx. Trim Brush Catalog Number & Wire Sizes Maximum Safe Free Speed (RPM) Maximum Brush Diam. Arbor Hole .0118" .014" .016" .020" .023" Length Length **Carbon Steel Wire** 3/4" 4" 1/4" 7/8" 20,000 1847\* 6" 3/8" 1-5/16" 1-1/4" 9.000 1867\* 1868\* 8" 3/8" 1-7/8" 1-1/2" 6,000 1888\* 1887\* 4,500 10" 3/8" 2-3/8" 2-1/2" 1818\* -12" 3/8" 2-1/4" 3" 3,600 1820\* Stainless Wire – Type 304 4" 1/4" 7/8" 3/4" 20,000 1948\* -



Full Cable Twist

For severe applications, wire tufts are twisted to the end for low flexibility and a narrow face.

#### **STRINGER BEAD - EXTRA NARROW FACE**

Brush	Approx.	Approx.	Maximum	Maximum Safe	Brush	Brush Catalog Number & Wire Sizes						
Diam.	Irım Length	Trim Length	Arbor Hole	Free Speed (RPM)	.0118"	.014"	.016"	.020"	.023"			
Carbon Steel Wire												
4"	3/16"	3/4"	5/8"	20,000	-	-	-	1857*	-			
6"	3/16"	1-5/16"	5/8"-11	9,000	-	-	-	18775	-			
			Sta	ainless Wire – Type 3	804							
4"	3/16"	3/4"	5/8"	20,000	-	-	-	1957*	-			
6"	3/16"	1-5/16"	5/8"-11	9,000	-	-	-	19775	-			

<b>M</b>
Stringer Bead

* Standard Arbor Holes, add fifth digit to specify arbor hole size.												
Arbor Hole	3/8"	1/2"	5/8"	5/8"-11 threaded	3/4"	1"	1-1/4"	2"	Other			
Last Digit	2	3	4	5	6	7	8	9	0 (Specify)			



### GANGED KNOT SECTIONS

Knot Wheels are available with standard keyways, with or without sideplates, for ganging on customer's shaft.

# PERMANENT PLATE, FIXED ARBOR HOLE, CRIMPED WIRE WHEEL BRUSHES **STANDARD PACKAGE 1**

#### **CRIMPED WIRE, ADAPTER STYLE**

- No arbor hole adapters required •
- Choice of two brush face widths
- Can be ganged to make wide face brush
- •
- .008" to .020" high fatigue, tempered steel wire
- .0025" to .006" hard drawn, high carbon steel wire
- Type 304 stainless wire .003" to .020"
- Brushes can be used separately or ganged Other wire sizes and types available on request

NAR	NARROW FACE												
Brush	Approx. Face	Approx	Max	Maximum		Brush	Catalog	Numbe	r & Wir	e Sizes			
Diam.	Width Between Face Plates	Trim Length	Arbor Hole	Safe Free Speed (RPM)	.005"	.006"	.008"	.0104"	.0118"	.014"	.020"		
				Carbon Ste	el								
3"	3/8"	13/16"	3/8"	10,000	1676*	1675*	1674*	1673*	1672*	1671*	-		
4"	7/16"	37/64"	3/4"	6,000	0180*	0164*	0148*	0132*	0116*	0100*	1841*		
5"	7/16"	1-1/4"	5/8"	6,000	0183*	0167*	0151*	0135*	0119*	0103*	-		
6"	1/2"	1-3/8"	1-1/4"	6,000	1835*	1834*	1833*	1832*	1831*	1830*	1842*		
6"	1/2"	3/4"	2"	6,000	0186*	0170*	0154*	0138*	0122*	0106*	-		
8"	1/2"	2-1/2"	1-1/4"	4,500	1945*	1944*	1943*	1942*	1941*	1940*	1843*		
8"	1/2"	1-3/4"	2"	4,500	0189*	0173*	0157*	0141*	0125*	0109*	-		
10"	1/2"	2-3/4"	2"	3,600	0191*	0175*	0159*	0143*	0127*	0111*	-		
12"	1/2"	3-3/4"	2"	3,000	0193*	0177*	0161*	0145*	0129*	0113*	-		
15"	1/2"	5-1/4"	2"	2,400	0195*	0179*	0163*	0147*	0131*	0115*	-		
			St	tainless Steel -	Type 30	4							
3"	3/8"	13/16"	3/8"	10,000	1696*	1695*	1694*	1693*	1692*	1691*	-		
4"	7/16"	37/64"	3/4"	6,000	0280*	0264*	0248*	0232*	0216*	0200*	1951*		
5"	7/16"	1-1/4"	5/8"	6,000	0283*	0267*	0251*	0235*	0219*	0203*	-		
6"	1/2"	1-3/8"	1-1/4"	6,000	1935*	1934*	1933*	1932*	1931*	1930*	1952*		
6"	1/2"	3/4"	2"	6,000	0286*	0270*	0254*	0238*	0222*	0206*	-		
8"	1/2"	2-1/2"	1-1/4"	4,500	1806*	1805*	1804*	1803*	1802*	1801*	1953*		
8"	1/2"	1-3/4"	2"	4,500	0289*	0273*	0257*	0241*	0225*	0209*	-		
10"	1/2"	2-3/4"	2"	3,600	0291*	0275*	0259*	0243*	0227*	0211*	-		
12"	1/2"	3-3/4"	2"	3,000	0293*	0277*	0261*	0245*	0229*	0213*	-		
15"	1/2"	5-1/4"	2"	2,400	0295*	0279*	0263*	0247*	0231*	0215*	-		

#### WIDE FACE - DOUBLE SECTION

Brush	Approx. Face	Approx.	Max	Maximum		Brush	Catalog	Numbe	r & Wir	e Sizes	
Diam.	Width Between Face Plates	Trim Length	Arbor Hole	Safe Free Speed (RPM)	.005"	.006"	.008"	.0104"	.0118"	.014"	.020"
				Carbon Ste	el						
4"	1"	37/64"	3/4"	6,000	0580*	0564*	0548*	0532*	0516*	0500*	1836*
6"	1"	1-3/8"	1-1/4"	6,000	0585*	0569*	0553*	0537*	0521*	0505*	1837*
6"	1"	3/4"	2"	6,000	0586*	0570*	0554*	0538*	0522*	0506*	-
8"	1"	1-3/4"	2"	4,500	0589*	0573*	0557*	0541*	0525*	0509*	1838*
10"	1"	2-3/4"	2"	3,600	0591*	0575*	0559*	0543*	0527*	0511*	-
12"	1"	3-3/4"	2"	3,000	0593*	0577*	0561*	0545*	0529*	0513*	-
15"	1"	5-1/4"	2"	2,400	0595*	0579*	0563*	0547*	0531*	0515*	-
			St	ainless Steel -	Type 30	4					
4"	1"	37/64"	3/4"	6,000	0680*	0664*	0648*	0632*	0616*	0600*	1947*
6"	1"	1-3/8"	1-1/4"	6,000	0685*	0669*	0653*	0637*	0621*	0605*	1950*
6"	1"	3/4"	2"	6,000	0686*	0670*	0654*	-	-	-	-
8"	1"	1-3/4"	2"	4,500	0689*	0673*	0657*	0641*	0625*	0609*	1949*
10"	1"	2-3/4"	2"	3,600	0691*	0675*	0659*	0643*	0627*	0611*	-
12"	1"	3-3/4"	2"	3,000	0693*	0677*	0661*	0645*	0629*	0613*	-
15"	1"	5-1/4"	2"	2,400	0695*	0679*	0663*	0647*	0631*	0615*	-
* Stand	* Standard Arbor Holes, add fifth digit to specify arbor hole size										

* Standard Arbor Holes, and fifth digit to specify arbor hole size.											
Arbor Hole	1/4"	3/8"	1/2"	5/8"	5/8"-11 threaded (extra cost)	3/4"	1"	1-1/4"	2"	Other	
Last Digit	1	2	3	4	5	6	7	8	9	0 (Specify)	



Narrow Face Carbon Steel



Narrow Face Stainless Steel



Wide Face Stainless Steel



Wide Face Carbon Steel



### PLASTIC SNAP-OUT ADAPTERS

Adapter No.	Size
40040	3/8" to 1/4"
40050	1/2" to 1/4"
40060	1/2" to 3/8"
40070	5/8" to 1/2"
40081	3/4" to 5/8"

Adapters are used for 3/8" and 1/2" arbor holes. Other sizes can be used singularly or in multiples to achieve the desired arbor hole size.

# LONG TRIM FIXED ARBOR HOLE WHEELS

Long Trim Brushes have the flexibility for cleaning and polishing irregular surfaces, slots and depressed areas. Used for platers and manufacturers of art metal goods, cookware and builder hardware.

Available in carbon steel, stainless, and brass wires. For long trim abrasive nylon, see page 16.

LONG	LONG TRIM WHEEL BRUSHES - FINE WIRE												
Bruch	Approx.	Approx.	Maximum	Maximum Safe		Brush Catal	og Number 8	er & Wire Sizes					
Brush Diam.	Face Width	Trim Length	Arbor Hole	Free Speed (RPM)	Wire Size	Steel Wire	Stainless Steel Wire	Brass Wire					
3"	3/8"	13/16"	3/8"	6,000	.003"	4751*	5541*	6071*					
3"	3/8"	13/16"	3/8"	6,000	.004"	4752*	5542*	6072*					
3"	3/8"	13/16"	3/8"	6,000	.005"	4753*	5543*	6073*					
4"	7/16"	1-5/32"	1/2"	6,000	.003"	4756*	5620*	6076*					
4"	7/16"	1-5/32"	1/2"	6,000	.004"	4757*	5621*	6078*					
4"	7/16"	1-5/32"	1/2"	6,000	.005"	4758*	5622*	6079*					
5"	7/16"	1-1/4"	5/8"	4,000	.003"	4761*	5623*	6081*					
5"	7/16"	1-1/4"	5/8"	4,000	.004"	4762*	5624*	6082*					
5"	7/16"	1-1/4"	5/8"	4,000	.005"	4763*	5625*	6083*					
6"	1/2"	1-3/4"	3/4"	4,000	.003"	4766*	5626*	6086*					
6"	1/2"	1-3/4"	3/4"	4,000	.004"	4767*	5627*	6087*					
6"	1/2"	1-3/4"	3/4"	4,000	.005"	4768*	5628*	6088*					
6"	1/2"	1-3/4"	3/4"	4,000	.008"	4769*	5629*	6089*					
7"	1/2"	2-1/4"	3/4"	3,700	.005"	4772*	5630*	6092*					
7"	1/2"	2-1/4"	3/4"	3,700	.008"	4773*	5631*	6093*					
8"	1/2"	2-3/4"	3/4"	3,700	.005"	4774*	5632*	6094*					
8"	1/2"	2-3/4"	3/4"	3,700	.008"	4775*	5633*	6095*					



Brush	Approx.	Approx.	Maximum	Maximum Safe		Brush Catal	og Number &	k Wire Sizes
Diam.	Face Width	Trim Length	Arbor Hole	Free Speed (RPM)	Wire Size	Steel Wire	Stainless Steel Wire	Brass Wire
3"	3/8"	13/16"	3/8"	6,000	.010"	4776*	5536*	7014*
3"	3/8"	13/16"	3/8"	6,000	.012"	4777*	5537*	7015*
3"	3/8"	13/16"	3/8"	6,000	.014"	4778*	5538*	7016*
4"	7/16"	1-5/32"	1/2"	6,000	.010"	4780*	5539*	7018*
4"	7/16"	1-5/32"	1/2"	6,000	.012"	4781*	5540*	7019*
4"	7/16"	1-5/32"	1/2"	6,000	.014"	4782*	5531*	7020*
5"	7/16"	1-1/4"	5/8"	4,000	.010"	4784*	5532*	7022*
5"	7/16"	1-1/4"	5/8"	4,000	.012"	4785*	5533*	7023*
5"	7/16"	1-1/4"	5/8"	4,000	.014"	4786*	5544*	7024*
6"	1/2"	1-3/4"	3/4"	4,000	.010"	4788*	5545*	7026*
6"	1/2"	1-3/4"	3/4"	4,000	.012"	4789*	5546*	7027*
6"	1/2"	1-3/4"	3/4"	4,000	.014"	4790*	5547*	7028*
7"	1/2"	2-1/4"	3/4"	3,700	.010"	4792*	5548*	7030*
7"	1/2"	2-1/4"	3/4"	3,700	.012"	4793*	5549*	7031*
7"	1/2"	2-1/4"	3/4"	3,700	.014"	4794*	5554*	7032*
8"	1/2"	2-3/4"	3/4"	3,700	.010"	4795*	5555*	7033*
8"	1/2"	2-3/4"	3/4"	3,700	.012"	4796*	5556*	7034*
8"	1/2"	2-3/4"	3/4"	3,700	.014"	4797*	5557*	7035*

* Fixed Arbor	Holes, add fifth	n digit to specify	arbor hole size.			
Arbor Hole	1/4"	3/8"	1/2"	5/8"	5/8"-11 threaded (extra cost)	3/4"
Last Digit	1	2	3	4	5	6





# BRASS AND BRONZE WIRE WHEEL BRUSHES

FIXED ARBOR HOLE STYLE											
Brush	Face	Trim	Max Arbor	Maximum Safe	Br	ush Cat	alog Nu	mber &	Wire Siz	es	
Diam.	Width	Length	Hole*	Free Speed (RPM)	.003"	.005"	.008"	.0104"	.0118"	.014"	.020"
			В	rass Wire - Type 260,	, Narrow	Face					
4"	7/16"	3/4"	5/8"	6,000	4843*	4845*	4848*	4841*	4842*	4844*	4847*
6"	1/2"	1-1/2"	1-1/4"	6,000	4863*	4865*	4868*	4861*	4862*	4864*	4867*
8"	1/2"	1-3/4"	2"	4,500	4883*	4885*	4888*	4881*	4882*	4884*	4887*
10"	1/2"	2-3/4"	2"	3,600	4813*	4815*	4818*	4811*	4812*	4814*	4817*
Bronze Wire - Narrow Face											
4"	7/16"	3/4"	5/8"	6,000	7843*	7845*	7848*	7841*	7842*	7844*	7847*
6"	1/2"	1-1/2"	1-1/4"	6,000	7863*	7865*	7868*	7861*	7862*	7864*	7867*
8"	1/2"	1-3/4"	2"	4,500	7883*	7885*	7888*	7881*	7882*	7884*	7887*
10"	1/2"	2-3/4"	2"	3,600	7813*	7815*	7818*	7811*	7812*	7814*	7817*
			1	Brass Wire - Type 260	D, Wide F	ace					
4"	1"	29/64"	1"	6,000	6843*	6845*	6848*	6841*	6842*	6844*	6847*
6"	1"	1-21/32"	1"	6,000	6863*	6865*	6868*	6861*	6862*	6864*	6867*
8"	1"	1-3/4"	2"	4,500	6883*	6885*	6888*	6881*	6882*	6884*	6887*
10"	1"	2-3/4"	2"	3,600	6813*	6815*	6818*	6811*	6812*	6814*	6817*
				Bronze Wire - W	ide Face						
4"	1"	29/64"	1"	6,000	9843*	9845*	9848*	9841*	9842*	9844*	9847*
6"	1"	1-21/32"	1"	6,000	9863*	9865*	9868*	9861*	9862*	9864*	9867*
8"	1"	1-3/4"	2"	4,500	9883*	9885*	9888*	9881*	9882*	9884*	9887*
10"	1"	2-3/4"	2"	3,600	9813*	9815*	9818*	9811*	9812*	9814*	9817*

Fixed Arbor Hole Wheel Brushes for non-sparking and metal finishing applications. Also available in larger diameters.

#### ADAPTER STYLE - STANDARD 2" BASIC ARBOR HOLE

One pair of No. 1211\* arbor hole adapters required for each brush. Smaller arbor hole adapters are sold separately.

ADAP	TER ST	<b>/LE</b> — STAI	NDARD 2" BAS	SIC ARBOR HOLE, STAI	NDARD PA	ACKAGE 1						
Brush	Face	Trim	Max Arbor	Maximum Safe		Brush Ca	italog Nu	mber & W	/ire Sizes			
Diam.	Width	Length	Hole**	Free Speed (RPM)	.020"	.014"	.012"	.010"	.008"	.006"		
				Brass Wire - Med	ium Face							
4-1/4"	7/8"	1-3/16"	5/8"	6,000	7310*	7317*	7324*	7331*	7338*	7345*		
6"	7/8"	1-3/16"	1-1/8"	6,000	7311*	7318*	7325*	7332*	7339*	7346*		
8"	1"	1-5/8"	1-1/8"	4,500	7313*	7320*	7327*	7334*	7341*	7348*		
10"	1-1/2"	1-3/4"	1-11/16"	3,600	7314*	7321*	7328*	7335*	7342*	7349*		
	Bronze Wire - Wide Face											
4-1/4"	7/8"	1-3/16"	5/8"	6,000	8510*	8617*	8624*	8631*	8638*	8645*		
6"	7/8"	1-3/16"	1-1/8"	6,000	8511*	8618*	8625*	8632*	8639*	8646*		
8"	1"	1-5/8"	1-1/8"	4,500	8513*	8620*	8627*	8634*	8641*	8648*		
10"	1-1/2"	1-3/4"	1-11/16"	3,600	8514*	8621*	8628*	8635*	8642*	8649*		
				Brass Wire - Med	ium Face							
4-1/4"	1-3/8"	1-11/16"	5/8"	6,000	7410*	7417*	7424*	7431*	7438*	7445*		
6"	1-3/8"	1-11/16"	1-1/8"	6,000	7411*	7418*	7425*	7432*	7439*	7446*		
8"	1-1/2"	2-1/8"	1-1/8"	4,500	7413*	7420*	7427*	7434*	7441*	7448*		
10"	1-3/4"	2"	1-11/16"	3,600	7414*	7421*	7428*	7435*	7442*	7449*		
				Bronze Wire - Wi	de Face							
4-1/4"	1-3/8"	1-11/16"	5/8"	6,000	8710*	8717*	8724*	8731*	8738*	8745*		
6"	1-3/8"	1-11/16"	1-1/8"	6,000	8711*	8718*	8725*	8732*	8739*	8746*		
8"	1-1/2"	2-1/8"	1-1/8"	4,500	8712*	8720*	8727*	8734*	8741*	8748*		
10"	1-3/4"	2"	1-11/16"	3,600	8714*	8721*	8728*	8735*	8742*	8749*		

\*\*This dimension is not the width through the arbor hole, it is the measurement at the widest point on the sideplates and can be used to determine the number of brushes that can be ganged to build a wider brush face.



\* Fixed Arbor Hole, add fifth digit to specify arbor hole size.

Arbor Hole	Fifth Digit
1/4"	1
3/8"	2
1/2"	3
5/8"	4
5/8"-11 threaded (extra cost)	5
3/4"	6
1"	7
1 1/4"	8
2"	9
Other	O (Specify)





No. 1211\* adapter

\* Adapter Arbor Hole, add fifth digit to specify arbor hole size.

Arbor Hole	Fifth Digit
1/2"	3
5/8"	4
3/4"	6
1"	7
1-1/4"	8
2"	9
Other	0 (Specify)

#### **SPECIAL SIZES**

Standard Line Wheel Brushes can be supplied on a special order basis in wider faces and in most types of wires and fill materials.

#### TO ORDER EXTRA SETS OF ADAPTERS

Use No. 1211\* and add the fifth digit to specify arbor hole size.

## TAMPICO, SYNTHETIC & HORSEHAIR WHEEL BRUSHES

Very dense fill, with approximately 100% more filaments than tufted construction. Can be used singly or ganged in multiples.

#### TAMPICO - STANDARD PACKAGE 1

Brush	Face	Trim	Maximum	Maximum	Brush Catal	og Numbers
Diam.	Width	Length	Arbor Hole	Safe Free Speed (RPM)	Tampico	Treated Tampico
				Narrow Face		
4"	7/16"	37/64"	3/4"	12,000	2043*	2005*
6"	1/2"	1-3/8"	1-1/4"	6,000	2063*	2006*
8"	1/2"	1-3/4"	2"	4,500	2083*	2007*
10"	1/2"	2-3/4"	2"	3,600	2013*	2008*
12"	1/2"	3-3/4"	2"	3,000	2023*	2009*
14"	1/2"	4-3/4"	2"	2,400	2003*	2010*
				Wide Face		
4"	1"	37/64"	1-1/4"	12,000	3843*	3805*
6"	1"	1-3/8"	1-1/4"	6,000	3863*	3806*
8"	1"	1-3/4"	2"	4,500	3883*	3807*
10"	1"	2-3/4"	2"	3,600	3813*	3808*
12"	1"	3-3/4"	2"	3,000	3823*	3809*
14"	1"	4-3/4"	2"	2,400	3803*	3810*

#### HORSEHAIR - STANDARD PACKAGE 1

_						
	Brush Diam.	Face Width	Trim Length	Maximum Arbor Hole	Maximum Safe Free Speed (RPM)	Brush Catalog Numbers
					Narrow Face	
	4"	7/16"	37/64"	3/4"	12,000	2044*
	6"	1/2"	1-3/8"	1-1/4"	6,000	2064*
	8"	1/2"	1-3/4"	2"	4,500	2084*
	10"	1/2"	2-3/4"	2"	3,600	2014*
	12"	1/2"	3-3/4"	2"	3,000	2024*
	14"	1/2"	4-3/4"	2"	2,400	2004*
					Wide Face	
	4"	1"	37/64"	1-1/4"	12,000	3844*
	6"	1"	1-3/8"	1-1/4"	6,000	3864*
	8"	1"	1-3/4"	2"	4,500	3884*
	10"	1"	2-3/4"	2"	3,600	3814*
	12"	1"	3-3/4"	2"	3,000	3824*
	14"	1"	4-3/4"	2"	2,400	3804*

SYNTHETIC - STANDARD PACKAGE 1											
Brush	Face	Trim	Maximum	Maximum	Bru	Brush Catalog Numbers					
Diam.	Width	Length	Arbor Hole	Safe Free Speed (RPM)	Nylon 6.6	Nylon 6.12	Polypropylene				
				Narrow Face							
4"	7/16"	37/64"	3/4"	12,000	556†*	704†*	576†*				
6"	1/2"	1-3/8"	1-1/4"	6,000	557†*	705†*	577†*				
8"	1/2"	1-3/4"	2"	4,500	558†*	706†*	578†*				
10"	1/2"	2-3/4"	2"	3,600	559†*	707†*	579†*				
12"	1/2"	3-3/4"	2"	3,000	560†*	708†*	580†*				
14"	1/2"	4-3/4"	2"	2,400	561†*	709†*	581†*				
				Wide Face							
4"	1"	37/64"	1-1/4"	12,000	569†*	715†*	590†*				
6"	1"	1-3/8"	1-1/4"	6,000	570†*	716†*	591†*				
8"	1"	1-3/4"	2"	4,500	571†*	717†*	592†*				
10"	1"	2-3/4"	2"	3,600	572†*	718†*	593†*				
12"	1"	3-3/4"	2"	3,000	573†*	719†*	594†*				
14"	1"	4-3/4"	2"	2,400	574†*	720†*	596†*				

Refer to page 20 for larger arbor hole sizes.

#### **TAMPICO APPLICATIONS**

- Polishing and dusting
- Wet scrubbing and cleaning
- Removing feather burrs
- Removing surface imperfections
- Blending surface junctures
- Spreading liquids

#### **TREATED TAMPICO WHEELS**

Tampico Wheels can be treated with a special process to stiffen the wheel. Holds abrasive compound, prevents knifing and weaving, and minimizes shredding.

* Arbor Hole Sizes, add fifth digit to specify arbor hole size.							
Arbor Hole	Fifth Digit						
1/4"	1						
3/8"	2						
1/2"	3						
5/8"	4						
5/8"-11 threaded (extra cost)	5						
3/4"	6						
1"	7						
1 1/4"	8						
2"	9						
Other	0 (Specify)						

#### **HORSEHAIR APPLICATIONS**

- Wet scrubbing
- Fine dusting
- Wet and dry cleaning
- Staining and painting
- Spreading fine powders

#### † Wire Filament & Grit,

add fourth digit to specify filament size.							
Filament	Fourth Digit						
.006″	1						
.008″	2						
.010"	3						
.012"	4						
.014"	5						
.016″	6						
.020″	7						
.022″	8						
.028″	9						
Other	0 (Specify)						

#### SYNTHETIC APPLICATIONS

- Wet scrubbing
- Polishing and dusting
- Scrubbing with acids and alkalis
- Slurry abrasive finishing
- Staining and painting



# ABRASIVE NYLON WHEEL BRUSHES

Spiral's abrasive nylon wheels are heavily filled with abrasive grit encapsulated in the nylon filaments. Brushes are available in many grit sizes and can be used individually or ganged in multiples to make a wide face brush.

Abrasive nylon wheels are excellent for light deburring and decorative metal finishing. They can be used in either wet or dry application.

Abrasive compounds can be eliminated.

Silicon carbide grit is standard. Aluminum oxide is available in 600, 500, 320, 180, and 80 grit. If the brush for your job requires aluminum oxide please specify when ordering by adding "A.O." after the 5th digit of the catalog number.

Abrasive Nylon Brushes are generally rated at higher MSFS (RPM) speeds than their suggested operating speeds. When abrasive nylon filaments are operated at speeds in excess of the suggested speeds below, the brush tips tend to soften or melt causing streaking on the work surface.

NARF	NARROW FACE - 1/2" BRUSH PART AT FACE PLATE - SINGLE SECTION											
Durrah	<b>F</b>	Trim	Mary Auban	Maximum		Brush	Catalog Nu	mber & Wir	e Sizes			
Brush Diam.	Face Width	Length	Max Arbor Hole	Safe Free Speed (RPM)	500 Grit .018"	320 Grit .022"	180 Grit .035"	120 Grit .040"	80 Grit .040"	46 Grit .060"		
4"	7/16"	37/64"	3/4"	12,000	9101*	9102*	9103*	9104*	9105*	9108*		
6"	1/2"	1-3/8"	1-1/4"	6,000	9111*	9112*	9113*	9114*	9115*	9118*		
8"	1/2"	1-3/4"	2"	4,500	9121*	9122*	9123*	9124*	9125*	9128*		
10"	1/2"	2-3/4"	2"	3,600	9131*	9132*	9133*	9134*	9135*	9138*		
12"	1/2"	3-3/4"	2"	3,000	9141*	9142*	9143*	9144*	9145*	9148*		
14"	1/2"	4-3/4"	2"	2,400	9151*	9152*	9153*	9154*	9155*	9158*		

#### WIDE FACE - 1" APPROX. AT FACE PLATE - DOUBLE SECTION

Durrah	<b>F</b>	Tuing	Mary Auban	Maximum	Brush Catalog Number & Wire Sizes					
Brush Diam.	Face Width	Trim Length	Max Arbor Hole	Safe Free Speed (RPM)	500 Grit .018"	320 Grit .022"	180 Grit .035"	120 Grit .040"	80 Grit .040"	46 Grit .060"
4"	1"	37/64"	3/4"	12,000	9231*	9232*	9233*	9234*	9235*	9238*
6"	1"	1-3/8"	1-1/4"	6,000	9241*	9242*	9243*	9244*	9245*	9248*
8"	1"	1-3/4"	2"	4,500	9251*	9252*	9253*	9254*	9255*	9258*
10"	1"	2-3/4"	2"	3,600	9261*	9262*	9263*	9264*	9265*	9268*
12"	1"	3-3/4"	2"	3,000	9271*	9272*	9273*	9274*	9275*	9278*
14"	1"	4-3/4"	2"	2,400	9281*	9282*	9283*	9284*	9285*	9288*

#### SHORT TRIM - HIGH DENSITY - WIDE FACE - 1" APPROX. AT FACE PLATE - DOUBLE SECTION

Brush Diam.	Гала	Tuine		Maximum		Brush	Catalog Nur	nber & Wire	e Sizes	
	Face Width	Trim Length	Max Arbor Hole	Safe Free Speed (RPM)	500 Grit .018"	320 Grit .022"	180 Grit .035"	120 Grit .040"	80 Grit .040"	46 Grit .060"
6"	1"	3/4"	2"	6,000	9291*	9292*	9293*	9294*	9295*	9298*

#### LONG TRIM - NARROW FACE - 1/2" APPROX. AT FACE PLATE - SINGLE SECTION

Bruch	Face	Trim	Max Arbor	Maximum		Brush Catalog Number & Wire Sizes				
Brush Diam.	Face Width	Length		Safe Free Speed (RPM)	500 Grit .018"	320 Grit .022"	180 Grit .035"	120 Grit .040"	80 Grit .040"	46 Grit .060"
4"	7/16"	1-1/8"	3/4"	6000	8771*	8772*	8773*	8774*	8775*	-
6"	1/2"	1-3/4"	3/4"	4000	8781*	8782*	8783*	8784*	8785*	-
7"	1/2"	2-1/4"	3/4"	4000	8791*	8792*	8793*	8794*	8795*	-
8"	1/2"	2-3/4"	3/4"	3750	9001*	9002*	9003*	9004*	9005*	-

12"

1,400

14"

1.250

16"

1.000

BRUSHING SPEEDS USING ABRASIVE NYLON										
	Brush Diameter	4"	6"	8"	10"					
	Suggested Maximum RPM	3,450	3,000	2,200	1,750					

#### \* Standard Arbor Holes, add fifth digit to specify arbor hole size.

			5						
Arbor Hole	3/8"	1/2"	5/8"	5/8"-11 threaded (extra cost)	3/4"	1"	1 1/4"	2"	Other
Last Digit	2	3	4	5	6	7	8	9	0 (Specify)



Narrow Face





Short Trim High Density Use for aggressive finishing, polishing, and burr removal.



Long Trim Use for irregular surfaces, slots, and depressed areas.

# ENCAPSULATED WIRE WHEEL BRUSHES

Encapsulated with synthetic elastomer that holds each wire firmly in place and provides a maximum cutting edge. See technical information on page 5. All brushes are available in stainless wire on special order.



Narrow Face Fixed Arbor Hole Style

#### NARROW FACE - FIXED ARBOR HOLE WHEELS

#### **APPLICATIONS**

- Heavy duty burr and rust removal
- Weld scale, rubber and plastic flash removal
- Surface refinement and juncture blending



Wide Faced Adapter Style

NAK	NARROW FACE - FIXED ARBOR HOLE WHEELS										
Brush	Face	Trim Length	Max Arbor	Maximum Safe	Brush Catalog Number & Wire Sizes						
Diam.	Width	IIIII Leiigiii	Hole	Free Speed (RPM)	.006"	.008"	.0104"	.0118"	.014"	.020"	
	Medium Density (Pliant)										
4"	3/8"	37/64"	3/4"	6,000	3703*	-	3713*	-	3723*	-	
6"	1/2"	1-3/8"	1-1/4"	6,000	9903*	9913*	9923*	3733*	9933*	-	
8"	1/2"	1-5/8"	2"	4,500	-	9943*	3743*	-	3753*	-	
10"	1/2"	1-11/16"	3"	3,600	-	-	3763*	-	3783*	-	
12"	1/2"	2-5/8"	3"	3,000	-	-	3773*	-	3793*	-	
				Hard D	ensity						
4"	3/8"	37/64"	3/4"	6,000	4104*	-	4114*	-	3724*	-	
6"	1/2"	1-3/8"	1-1/4"	6,000	9904*	9914*	9924*	3734*	9934*	-	
8"	1/2"	1-5/8"	2"	4,500	-	9944*	3744*	-	3754*	-	
10"	1/2"	1-11/16"	3"	3,600	-	-	3764*	-	3784*	-	
12"	1/2"	2-5/8"	3"	3,000	-	-	3774*	-	3794*	-	

WIDE	WIDE FACE - ADAPTER STYLE WHEELS										
Brush	Face	Trim Length	Max Arbor	Maximum Safe		Brush Catalog Number & Wire Sizes					
Diam.	Width	IIIIII Leiigiii	Hole	Free Speed (RPM)	.006"	.008"	.0104"	.0118"	.014"	.020"	
	Medium Density (Pliant)										
4-1/4"	1"	5/8"	2"	6,000	-	-	94139	94439	94539	-	
6"	1"	1-1/8"	2"	6,000	-	79139	94639	94239	94739	-	
8"	1-1/2"	1-1/8"	2"	4,500	-	79239	94839	94939	94339	99539	
10"	1-3/4"	2"	2"	3,600	-	-	99639	99739	99839	-	
12"	2"	2-7/8"	2"	3,000	-	-	-	99939	-	-	
				Hard Do	ensity						
4-1/4"	1"	5/8"	2"	6,000	-	-	94149	94449	94549	-	
6"	1"	1-1/8"	2"	6,000	-	79149	94649	94249	94749	-	
8"	1-1/2"	1-1/8"	2"	4,500	-	79249	94849	94949	94349	99549	
10"	1-3/4"	2"	2"	3,600	-	-	99649	99749	99849	-	
12"	2"	2-7/8"	2"	3,000	-	-	-	99949	-	-	

* Standard Arbor	* Standard Arbor Holes, add fifth digit to specify arbor hole size. Two required per brush.									
Arbor Hole	1/2"	5/8"	3/4"	7/8"	1"	1-1/4"	1-1/2"	OTHER		
Part Number	12113	12114	12116	12111	12117	12118	12119	12110 (Specify)		

# **CENTERLESS BRUSHES**

#### **STANDARD PACKAGE 1**

Densely filled brushes for use on Cincinnati No. 2 and 3, Landis No. 5, Hammond thru-feed centerless grinders, and for other special brushing machines for surface finishing of cylindrical parts and automated production deburring. Centerless Brushes can be used with grinding coolants and grease based abrasive compounds. Special sizes can be supplied.

#### **SURFACE FINISH GUIDE**

- Non-metallic fill, as low as 3-4 micro inches
- Fine wire fill, as low as 12 to 18 micro inches with grease based abrasive compounds
- Course wire fill for surface refining
- Nylon abrasive fill for burr removal and final surface finish

#### **TYPICAL APPLICATIONS**

- Removal of sharp edges
- Removal of feather burrs
- Surface finish
- Surface preparation for plating
- Removal of rust stains and heat treating discoloration

#### CARBON STEEL AND STAINLESS STEEL - STANDARD 20" DIAMETER SIZES

Brush Face		Br	ush Catalog Nu	mber & Wire Siz	es	
DIUSIIFace	.005"	.006"	.008"	.0104"	.0118"	.014"
		C	arbon Steel Wir	e		
3-1/2"	22355	22356	22358	22351	22352	22353
4"	22405	22406	22408	22401	22402	22403
5"	22505	22506	22508	22501	22502	22503
6"	22605	22606	22608	22601	22602	22603
8"	22705	22706	22708	22701	22702	22703
10"	22805	22806	22808	22801	22802	22803
		Stain	less Wire – Typ	e 304		
3-1/2"	22365	22366	22368	22361	22362	22363
4"	22415	22416	22418	22411	22412	22413
5"	22515	22516	22518	22511	22512	22513
6"	22615	22616	22618	22611	22612	22613
8"	22715	22716	22718	22711	22712	22713
10"	22815	22816	22818	22811	22812	22813



12" inside brush diameter. 1,200 Maximum Safe Free Speed (RPM)

#### ABRASIVE NYLON - STANDARD 20" DIAMETER SIZES

Brush Face	Brush Catalog Number & Wire Sizes									
DIUSIIFACE	500 Grit .018"	320 Grit .022"	180 Grit .035"	120 Grit .040"	80 Grit .040"	46 Grit .060"				
3-1/2"	22371	22372	22374	22375	22376	22378				
4"	22471	22472	22474	22475	22476	22478				
5"	22571	22572	22574	22575	22576	22578				
6"	22671	22672	22674	22675	22676	22678				
8"	22771	22772	22774	22775	22776	22778				
10"	22871	22872	22874	22875	22876	22878				

12" inside brush diameter. 750 Maximum Safe Free Speed (RPM)

TAMPICO - STANDARD 20" DIAMETER SIZES								
Brush Face	Brush Catalog Numbers							
3-1/2"	22350							
4"	22400							
5"	22500							
6"	22600							
8"	22700							
10"	22800							

12" inside brush diameter. 1,200 Maximum Safe Free Speed (RPM)



# MINI-GRINDER BRUSHES

Choice of American or Metric threaded, or round arbor holes. Permanently clinched to brush, for quick fastening to grinder. Excellent for reaching tight spaces.

#### **CRIMPED WIRE WHEEL BRUSHES** - FOR GENERAL DUTY APPLICATIONS

Druch		Maximum Cafe	Brush	Catalog Nu	nber & Wire	e Sizes	1984 - Contractor
Brush Diam.	Wire Size	Maximum Safe Free Speed (RPM)	Carbon Steel	Stainless Steel	Brass	Bronze	
4"	.006"	12,500	6310*	6330*			
4"	.008"	12,500	6311*	6331*			
4"	.0104"	12,500	6312*	6332*			Where I He
4"	.0118"	12,500	6313*	6333*			
4"	.014"	12,500	6314*	6334*			- and a street
4"	.020"	12,500	6315*	6335*			CHARLES STORE

#### **KNOT TYPE WHEEL BRUSHES** - FOR HEAVY DUTY APPLICATIONS

Brush		Wire	Maximum	Brush Ca	talog Numl	oer & Wi	re Sizes
Diam.	Knot Type	Size	Safe Free Speed (RPM)	Carbon Steel	Stainless Steel	Brass	Bronze
4"	Standard Twist	.014"	20,000	6341*	6350*		
4"	Standard Twist	.016"	20,000	6342*	6351*		
4"	Standard Twist	.020"	20,000	6343*	6352*		
4"	Cable	.0118"	20,000	6390*	6389*		
4"	Stringer Bead	.020"	20,000	6345*	6354*		
4-1/4"	Stringer Bead	.020"	20,000	6338*	6355*		
3-1/2"	Stringer Bead Bevel	.020"	20,000	6324*	-		
	ASPA		Allen		ALAN A	STA .	
			Sille 1	A SI	C BASHA	W-AND-	
			9		63	C. Din	
				010		Series	
	Talle L	2015				54	
	- Alle			and The	North State	24	

#### **APPLICATIONS**

- Deburring
- Paint and Rust Removal
- Weld Cleaning
- Surface Preparation

#### \*ARBOR HOLE SIZE

Arbor Hole	Fifth Digit
3/8"-24 threaded	1
3/8"-16 threaded	2
1/2"-13 threaded	3
1/2" Plain-Not threaded	4
5/8"-11 threaded	5
M14-2.0 threaded	6
M14-1.5 threaded	7
M10-1.5 threaded	8
M10-1.25 threaded	9
Other - Specify	0

#### CRIMPED WIRE CUP BRUSHES - FOR LIGHT DUTY APPLICATIONS

Brush	Wire	Maximum Safe	Brush Catalog Number & Wire Sizes						
Diam.	Size	Free Speed (RPM)	Carbon Steel	Stainless Steel	Brass				
2-3/4"	.006"	12,500	6361*	6370*	-				
2-3/4"	.008"	12,500	6362*	6371*	-				
2-3/4"	.0104"	12,500	6364*	6372*	-				
2-3/4"	.0118"	12,500	6365*	6373*	-				
2-3/4"	.014"	12,500	6366*	6374*	6054*				
2-3/4"	.020"	12,500	6367*	6375*	6055*				

Standard Twist

Cable Twist

## KNOT TYPE CUP BRUSHES - FOR HEAVY DUTY APPLICATIONS Brush Wire Maximum Safe Brush Catalog Number & Wire Sizes

Diam.	Size	Free Speed (RPM)	Carbon Steel	Stainless Steel	Brass	Bronze
2-3/4"	.014"	12,500	6381*	6385*	6056*	-
2-3/4"	.016"	12,500	6382*	6391*	-	-
2-3/4"	.020"	12,500	6383*	6387*	6057*	6397*



Knot Type Steel

### BASIC WHEEL BRUSH SECTIONS STANDARD PACKAGE 6

Versatile, narrow face Brush Sections can be used singularly or ganged in multiples. When ganging, the density may be varied by putting spacer washers between brush sections. 2-1/8" round arbor hold and 1-1/4" hex are available on special order.

#### WIRE FILLED SECTIONS - 1/2" APPROX. FACE WIDTH

Brush	Trim	Arbertlele	Maximum Safe		Brush	n Catalog Nui	mber & Wire	Sizes	
Diam.	Length	Arbor Hole	Free Speed (RPM)	.005"	.006"	.008"	.0104"	.0118"	.014"
				Carbon S	teel				
4"	1"	1-1/4"	10,000	22140	22113	22086	22059	22032	22002
4"	5/8"	2"	10,000	22142	22115	22088	22061	22034	22004
4-1/2"	1-1/4"	1-1/4"	8,600	22143	22116	22089	22062	22035	22006
4-1/2"	2"	2"	8,600	22145	22118	22091	22064	22037	22008
5"	1-1/4"	1-1/4"	7,200	22146	22119	22092	22065	22038	22010
5"	1-1/8"	2"	7,200	22148	22121	22094	22067	22040	22012
6"	2"	1-1/4"	6,000	22150	22123	22096	22069	22042	22015
6"	1-5/8"	2"	6,000	22152	22125	22098	22071	22044	22017
6"	7/8"	3"	6,000	22153	22126	22099	22072	22045	22018
8"	3"	1-1/4"	4,800	22154	22127	22100	22073	22046	22020
8"	2-5/8"	2"	4,800	22156	22129	22102	22075	22048	22022
8"	1-7/8"	3"	4,800	22157	22130	22103	22076	22049	22023
10"	2-7/8"	3"	4,500	22158	22133	22106	22079	22052	22026
				Stainless	Steel				
4"	1"	1-1/4"	10,000	22291	22264	22237	22210	22183	22160
4"	5/8"	2"	10,000	22293	22266	22239	22212	22185	22161
4-1/2"	1-1/4"	1-1/4"	8,600	22294	22267	22240	22213	22186	22162
4-1/2"	2"	2"	8,600	22296	22269	22242	22215	22188	22163
5"	1-1/4"	1-1/4"	7,200	22297	22270	22243	22216	22189	22164
5"	1-1/8"	2"	7,200	22299	22272	22245	22218	22191	22165
6"	2"	1-1/4"	6,000	22301	22274	22247	22220	22193	22166
6"	1-5/8"	2"	6,000	22303	22276	22249	22222	22195	22167
6"	7/8"	3"	6,000	22304	22277	22250	22223	22196	22168
8"	3"	1-1/4"	4,800	22305	22278	22251	22224	22197	22170
8"	2-5/8"	2"	4,800	22307	22280	22253	22226	22198	22172
8"	1-7/8"	3"	4,800	22308	22281	22254	22227	22200	22173
10"	2-7/8"	3"	4,500	22311	22284	22257	22230	22203	22176

Also available in brass and bronze wire.

TAM	TAMPICO, SYNTHETIC, HORSEHAIR, ABRASIVE NYLON - 1/2" APPROX. FACE WIDTH												
	Approx.		Maximum				log Numbers						
Brush Diam.	Trim Length	Arbor Hole	Safe Free Speed (RPM)	Tampico	Treated Tampico	Nylon 6.6	Polypropylene	Stiff Horsehair	Abrasive Nylon*				
4"	1"	1-1/4"	10,000	23000	23005	2303*	2306*	23100	2313*				
4"	5/8"	2"	10,000	23020	23007	2305*	2308*	23120	2315*				
4-1/2"	1-1/4"	1-1/4"	8,600	23160	23008	2319*	2322*	23250	2328*				
4-1/2"	2"	2"	8,600	23180	23011	2321*	2324*	23270	2330*				
5"	1-1/4"	1-1/4"	7,200	23310	23012	2335*	2339*	23430	2347*				
5"	1-1/8"	2"	7,200	23330	23014	2337*	2341*	23450	2349*				
6"	2"	1-1/4"	6,000	23510	23016	2355*	2359*	23630	2367*				
6"	1-5/8"	2"	6,000	23530	23018	2357*	2361*	23650	2369*				
6"	7/8"	3"	6,000	23540	23019	2358*	2362*	23660	2370*				
8"	3"	1-1/4"	4,800	23710	23022	2375*	2309*	23830	2387*				
8"	2-5/8"	2"	4,800	23730	23024	2377*	2381*	23850	2389*				
8"	1-7/8"	3"	4,800	23740	23025	2378*	2382*	23860	2390*				
10"	2-7/8"	3"	4,500	23933	23027	2379*	2380*	23460	2376*				

#### \* Wire Filament & Grit, add fifth digit to specify filament or grit size.

Filament	.006"	.008"	.010"	.012"	.014"	.016"	.020"	.022"	.028"	Other
Fifth Digit	1	2	3	4	5	6	7	8	9	0 (Specify)
Grit/Size	500 Grit .018"	320 Grit .022"	-	180 Grit .035"	120 Grit .040"	80 Grit .040"	-	46 Grit .060"	-	Other
Fifth Digit	1	2	-	4	5	6	-	8	-	0 (Specify)



AL MONTONIA

## RIVET RING, COPPER CENTER, SMALL DIAMETER WHEEL BRUSHES

Spiral's Rivet Ring, Small Wheel Brushes are available in diameters, fill materials, and arbor hole sizes best suited to each application. Rivet Ring Brushes have many uses, such as removing scale, burrs and corrosion in hard to reach areas and internal surfaces. High speed operation is necessary for most effective use. They can be ground to a diameter tolerance of .001", then tubed in multiples and face ground to give a sharp cutting edge. Available in steel wires, non-ferrous wires, synthetic filaments, Tampico and horsehair.

Arbor Holes	Approx. Hub	Practical Dia	meter Range	Minimum	Flat Press	Dimension	Fifth Digit Part
Available	Diameter	Min	Max	Visible trim	Range (A	(pprox.)*	Number
1/4"	9/16"	1"	2"	7/32"	.15"	.17"	3
5/16"	19/32"	1"	2"	13/64"	.16"	.18"	4
3/8"	3/4"	1-1/8"	2-3/4"	3/16"	.17"	.19"	5
1/2"	1-1/16"	1-1/2"	3"	7/32"	.22"	.27"	6
9/16"	1-3/32"	1-3/4"	3"	21/64"	.25"	.28"	7
5/8"	1-3/16"	1-7/8"	4"	11/32"	.25"	.285"	8
3/4"	1-5/16"	2"	6"	11/32"	.27"	.29"	9
1"	1-9/16"	2-1/4"	7"	11/32"	.29"	.31"	0
						Self-	2

\*Depends on diameter of fill material.

Special Rivet Rings are available in other diameters and fill materials.





#### OTHER FILL MATERIALS AVAILABLE

- Treated Tampico
- Polypropylene filament
- Nickel silver wire
- Aluminum wire
- Bronze wire & other filaments

Now available: 1/4", 3/8", and 1/2" square arbor holes. Specify when required.

#### TAMPICO, SYNTHETIC, HORSEHAIR, ABRASIVE NYLON - STANDARD PACKAGE 6

		Range of		Maximum			Brush	sh Catalog Numbers					
Brush Diam.	Brush Face	Wire & Filament Sizes	Arbor Hole Sizes	Safe Free Speed (RPM)	Steel Wire	Stainless Steel	Brass or Bronze	Nylon 6.6	Tampico	Horsehair	Abrasive Nylon		
1"	1/8"	.003" to .008"	1/4", 5/16"	20,000	241†*	261†*	281†*	301†*	3310*	3511*	-		
1-1/8"	3/16"	.003" to .008"	1/4" to 3/8"	20,000	242†*	262†*	282†*	302†*	3320*	3512*	-		
1-3/16"	3/16"	.003" to .008"	1/4" to 3/8"	20,000	243†*	263†*	283†*	303†*	3330*	3513*	-		
1-1/4"	1/4"	.003" to .014"	1/4" to 3/8"	20,000	244†*	264†*	284†*	304†*	3340*	3514*	-		
1-3/8"	5/16"	.003" to .014"	1/4" to 3/8"	20,000	245†*	265†*	285†*	305†*	3350*	3515*	-		
1-1/2"	5/16"	.003" to .014"	1/4" to 1/2"	20,000	246†*	266†*	286†*	306†*	3360*	3516*	356†*		
1-5/8"	5/16"	.003" to .014"	1/4" to 1/2"	20,000	247†*	267†*	287†*	307†*	3370*	3517*	357†*		
1-3/4"	5/16"	.003" to .014"	1/4" to 9/16"	20,000	248†*	268†*	288†*	308†*	3380*	3518*	358†*		
1-7/8"	5/16"	.003" to .014"	1/4" to 5/8"	20,000	249†*	269†*	289†*	309†*	3390*	3519*	359†*		
2"	5/16"	.003" to .020"	1/4" to 3/4"	15,000	250†*	270†*	290†*	310†*	3400*	3520*	360†*		
2-1/4"	3/8"	.003" to .020"	5/16" to 1"	15,000	251†*	271†*	291†*	311†*	3410*	3521*	361†*		
2-1/2"	3/8"	.003" to .020"	3/8" to 1"	15,000	252†*	272†*	292†*	312†*	3420*	3522*	362†*		
2-3/4"	3/8"	.003" to .020"	1/2" to 1"	15,000	253†*	273†*	293†*	313†*	3430*	3523*	363†*		
3"	3/8"	.003" to .020"	1/2" to 1"	15,000	254†*	274†*	294†*	314†*	3440*	3524*	364†*		
3-1/4"	3/8"	.003" to .020"	1/2" to 1"	10,000	255†*	275†*	295†*	315†*	3450*	3525*	365†*		
3-1/2"	3/8"	.003" to .020"	1/2" to 1"	10,000	256†*	276†*	296†*	316†*	3460*	3526*	366†*		
3-3/4"	7/16"	.003" to .020"	1/2" to 1"	10,000	257†*	277†*	297†*	317†*	3470*	3527*	367†*		
4"	1/2"	.003" to .020"	1/2" to 1"	10,000	258†*	278†*	298†*	318†*	3480*	3528*	368†*		

For bronze wire, add an "a" to the end of the part number.

† Wire Filament & Grit,	add four	th digit	to specify	, wire, fi	ilament, o	r ab	orasiv	e grit size			
Wire or Filament Size	.003"	.005"	.006"	.008"	.010"	.0	118"	.014"	.016"	.020"	Other
Fourth Digit	1	2	3	4	5		6	7	8	9	0 (Specify)
Grit Size	500 ( .01)		320 Gr .022"		180 Grit .035"			20 Grit .040"	80 Gr	it .040"	Other
Fourth Digit	1		2		3			4		5	0 (Specify)

#### \* Arbor Hole Sizes, add fifth digit to specify arbor hole size.

	r Hole	1/4"	5/16"	3/8"	1/2"	9/16"	5/8"	3/4"	1"
Fift	h Digit	3	4	5	6	7	8	9	0

Refer to page 20 for larger arbor hole sizes.

# 0

21

## WIDE FACE, TUBED, MULTI-SECTION RIVET RING BRUSHES

Copper Center Rivet Ring Wheel Brushes can be ganged or tubed to make a solid wide face brush. Brushes that are tubed together are factory trimmed as a unit to give a smoother concentric face. If desired, wire brushes can be ground to a diameter tolerance of .001". The chart below shows the approximate number of brushes required to make a wider face.

WIDE	WIDE FACE, TUBED, MULTI-SECTION SMALL DIAMETER WHEEL BRUSHES																
Finished																	
Arbor Hole	Dime Range ( <i>i</i>		1/2"	3/4"		1-1/4"	1-1/2"	1-3/4"		2-1/2"	3"	3-1/2"	4"	4-1/2"	5"	5-1/2"	6"
1/4"	.17"	.19"	3	5	6	7	9	10	12	14	17	21	25	26	29	32	35
3/8"	.22"	.27"	3	4	5	6	7	8	9	11	13	18	21	23	26	29	31
1/2"	.25"	.285"	2	3	4	5	6	7	8	10	12	16	18	21	23	25	28
5/8"	.27"	.29"	2	3	4	5	6	7	8	9	11	16	18	20	22	25	27
3/4"	.29"	.31"	2	3	4	5	5	6	7	9	10	14	16	18	21	23	25
1"	.29"	.31"	2	3	4	5	5	6	7	9	10	14	16	18	20	22	24



SNAP-IN ADAP	TERS
Adapters Numbers	Extension
40040	3/8" to 1/4"
40050	1/2" to 1/4"
40060	1/2" to 3/8"
40070	5/8" to 1/2"
40081	3/4" to 5/8"



Plastic adapters for use with Rivet Rings and Wheel Brushes to reduce fixed arbor hole sizes.

### **ENCAPSULATED RIVET RINGS**

Each wire is encapsulated in a synthetic material that wears away as the brush is used, see page 5 for technical information. The brush shape is retained, resulting in a uniform cutting surface. Brushes can be used individually or ganged in multiples on a stationary or portable power tool. Available in brass and bronze on special order. Other wire sizes also available on special order.



#### ENCAPSULATED RIVET RINGS

		Maximum		Brush Catalog Numbers											
Diameter	Arbor Hole	Safe Free	.006" Wire		.008" Wire		.0104" Wire		.0118" Wire		.014" Wire				
		Speed (RPM)	Steel	Stainless	Steel	Stainless	Steel	Stainless	Steel	Stainless	Steel	Stainless			
1-1/4"	1/4"	20,000	-	-	92033	-	-	-	-	-	95433	-			
1-3/8"	1/4"	20,000	92133	-	92233	-	95333	-	-	-	-	-			
1-1/2"	3/8"	20,000	-	-	95235	85235	95335	-	95435	-	95535	-			
2"	1/2"	20,000	96138	86136	96236	-	96336	-	96436	86436	96536	86536			
2-1/2"	1/2"	15,000	98236	-	-	-	98336	-	98536	-	98736	-			
2-1/2"	5/8"	15,000	-	-	-	-	-	-	96138	-	96238	-			
3"	1/2"	15,000	-	87136	97236	-	-	-	97436	87436	97536	87536			
3"	5/8"	15,000	-	-	97238	-	-	-	96338	-	97438	-			

To order Encapsulated Rivet Rings in hard density change the fourth digit of the part number to "4".

### WIRE STRIPPING BRUSHES

The face of Wire Stripping Brushes are densely filled sections, precision ground to give a sharp cutting edge. The wire that is to be stripped of insulation is inserted between a pair of Stripping Brushes rotating in opposite directions. Most types of insulation can be removed, including formex, formvar, Teflon, asbestos, cotton, silk, nylon, etc. The size of the stripping brushes to be used depends upon the size of the wire and the insulation to be removed. Recommended speeds are 1,725 to 3,500 RPM depending on the material to be removed. Encapsulated Wire Stripping Brushes are available.



#### ORDERING INFORMATION REQUIRED

- 1. Diameter
- 2. Width
- 3. Arbor hole diameter
- 4. Wire size
- 5. Ground or trimmed face
- 6. Quantity

# **CUP BRUSHES**

A complete line of general purpose Cup Brushes for scale, rust and paint removal, deburring and polishing. Brass and Bronze Brushes are for nonsparking applications. All Standard Duty Cup Brushes have standard 5/8"-11 threaded arbor holes. Other size arbor holes are available on special order.

STAN	IDARD I	DUTY, CRIMPED	WIRE -	STAND	ARD PACK	AGE 1					
Diam.	Trim	Maximum Safe Free			Brus	h Catalog	g Number	· & Wire	Sizes		
Diam.	Length	Speed (RPM)	.005"	.006"	.008"	.0104"	.0118"	.014"	.020"	.030"	.035"
				Carbo	on Steel						
4"	1-1/4"	9,000	64055	64065	64085	64015	64025	64045	64075	64095	-
5"	1-1/2"	8,000	65055	65065	65085	65015	65025	65045	65075	65095	-
6"	1-5/8"	6,000	66055	66065	66085	66015	66025	66045	66075	66095	-
				Stainle	ess Stee	l					
4"	1-1/4"	9,000	64155	64165	64185	64115	64125	64145	64175	-	-
5"	1-1/2"	8,000	65155	65165	65185	65115	65125	65145	65175	-	-
6"	1-5/8"	6,000	66155	66165	66185	66115	66125	66145	66175	-	66195
				В	rass						
4"	1-1/4"	9,000	64255	64265	64285	64215	-	64245	64275	-	-
5"	1-1/2"	8,000	65255	65265	65285	65215	-	65245	65275	-	-
6"	1-5/8"	6,000	66255	66265	66285	66215	-	66245	66275	-	-
				Br	onze						
4"	1-1/4"	9,000	64355	64365	64385	64315	-	64345	64375	-	-
5"	1-1/2"	8,000	65355	65365	65385	65315	-	65345	65375	-	-
6"	1-5/8"	6,000	66355	66365	66385	66315	-	66345	66375	-	-





NYLO	NYLON CUP BRUSHES											
	Trim	Maximum	Brush Cat	alog Numbers								
Diam.	Length	Safe Free Speed (RPM)	6.6	6.12								
4"	1-1/4"	6,000	6316*	6326*								
5"	1-1/2"	6,000	6317*	6327*								
6"	1-5/8"	6,000	6318*	6328*								

#### TAMPICO CUP BRUSHES

Diam.	Trim	Maximum Safe	Brush Cata	alog Numbers
Diaili.	Length	Free Speed (RPM)	Untreated	Treated**
4"	1-1/4"	6,000	64415	64425
5"	1-1/2"	6,000	65415	65425
6"	1-5/8"	6,000	66415	66425

\*\*For use with abrasive compound

Add fifth digit to specify nylon filament size.

Filament	.003"	.005"	.006"	.008"	.010"	.012"	.014"	.016"	.020"	Other
Last Digit	1	2	3	4	5	6	7	8	9	0 (Specify)

#### **ABRASIVE NYLON CUP BRUSHES – STANDARD PACKAGE 1**

	Trim	Maximum		В	rush Catal	og Numbe	rs	
Diam.	Length	Safe Free Speed (RPM)	500 Grit .018"	320 Grit .022"	180 Grit .035"	120 Grit .040"	80 Grit .040"	46 Grit .060"
4"	1-1/4"	6,000	64715	64725	64735	64745	64755	64785
5"	1-1/2"	6,000	65715	65725	65735	65745	65755	65785
6"	1-5/8"	6,000	66715	66725	66735	66745	66755	66785



Heavily filled with nylon filaments that are impregnated with abrasive grit. Excellent for light deburring, decorative metal finishing, stain removal, etc. Can be used in wet or dry applications. Eliminates abrasive compounds.

ENCA	ENCAPSULATED CRIMPED WIRE CUP BRUSHES														
Diam.	Approx. Trim Length	Maximum Safe Free			Brush C	atalog N	umbers								
Didili.	Length	Speed (RPM)	.0104"	.014"	.0118"	.020"	.020" Stainless								
Standard Duty - Standard Package 1															
4"	1-1/4"	6,000	-	-	67035	67135	67435								
6"	1-1/2"	6,000	-	67635	-	67235	67535								
		Utility Light Duty, 1/4"	Shank -	Standard	Package (	3									
2-3/4"	3/4"	4,500	67831	82031	67931	67731	-								
	Utility Light Duty, 1/2" Arbor Hole* - Standard Package 6														
2-3/4"		4,500	67833	82033	67933	67733	-								





Other wire sizes and types available on special order.

# **KNOT CUP BRUSHES**

#### **STANDARD PACKAGE 1**

Portable electric or high speed air tools using Spiral's Knot Cup Brushes are designed for heavy duty cleaning of large surfaces for the removal of weld scale, rust scale, old paint and corrosion. The brushes are filled with special analysis, hi-tensile wire for long life. 5/8"-11 threaded arbor holes are supplied as standard. Other sizes available on special order.



Single Row Flexible, Fast Cutting



Double Row Rugged, Longer Life, Fast Cutting

#### **STANDARD TWIST Brush Catalog Numbers** Wire Size Maximum Safe Free Speed (RPM) Trim Diam. Single Row **Double Row** Length **Stainless Steel** Brass 4" .0118" 1-1/4" 7,000 74025 74125 .014" 1-1/4" 7,000 74045 77725 77755 4" 74145 74345 .020" 74075 74475 4" 1-1/4" 7,000 74175 77735 77745 74375 7,000 .023" 1-1/4" 74035 4" ----4" 74005 .035" 1-1/4" 7,000 \_ \_ 76045 6" .014" 1-5/8" 6,000 76145 76345 --6" .020" 1-5/8" 76075 76175 6,000 76375 76475 6" .023" 1-5/8" 76035 6,000 76335 -\_ -6" .035" 1-5/8" 6,000 76005 76305

CABLE	CABLE TWIST - CARBON STEEL													
Diameter	Wire Size	Trim Length	Maximum Safe	Brush Catalog Numbers										
Diameter	WITE SIZE	IIIII Leiigii	Free Speed (RPM)	Single Row	Double Row									
4"	.020"	1-1/4"	7,000	74275	74575									
4"	.035"	1-1/4"	7,000	74205	-									
6"	.020"	1-5/8"	6,000	76275	76575									
6"	.035"	1-5/8"	6,000	76205	76505									



Cable Twist Extremely Rugged Cutting Action

-

-

### **KNOT CUP BRUSHES WITH BRIDLE BANDS**

Steel Bridle Bands reduce flare for faster cutting action. Bands can be removed after brush is partially worn, then the complete brush can be used again. See page 19 for cup brushes for mini-grinders.

STAND	)ARD T	WIST					
Brush	Wire	Trim	Maximum Safe Free	Singl	Brush Catal e Row	<b>og Numbers</b> Doul	ble Row
Diam.	Size	Length	Speed (RPM)	Carbon Steel	Stainless Steel	Carbon Steel	Stainless Steel
4"	.014"	7/8"	7,000	74645	74845	-	-
4"	.020"	7/8"	7,000	74675	74875	74975	74435
6"	.014"	7/8"	6,000	76645	76845	-	-
6"	.020"	7/8"	6,000	76675	76875	76975	76435
6"	.023"	7/8"	6,000	76635	-	-	-

#### **CABLE TWIST**

Brush	Wire	Trim	Maximum Safe Free	Brush Cata	log Numbers
Diam.	Size	Length	Speed (RPM)	Single Row	Double Row
4"	.020"	7/8"	7,000	74775	74915
4"	.035"	7/8"	7,000	74705	-
6"	.020"	7/8"	6,000	76775	76915
6"	.035"	7/8"	6,000	76705	76925



Bridle Banded Shorter Trim, Minimum Flare, Rugged Cutting

Other sizes available on special order.

# UTILITY CUP BRUSHES

#### FOR WORKSHOP AND LIGHT INDUSTRIAL USE

Designed for removing light deposits of scale, paint, rust and burrs. For heavy and severe removal jobs use Knot Type Brushes. Finer wire sizes should be used for polishing. Available in carbon steel, stainless steel, brass and nylon. Other fill materials are also available. Snap-in adapters to reduce the fixed arbor hole size are available, see page 22. For "mini-grinders" cup brushes, see page 19.

#### MAXIMUM SAFE-FREE SPEED

Utility Cup Brushes should not be operated in excess of maximum safe-free speed. Speeds over 8,000 RPM do not appreciably improve brushing performance.

UTIL	ITY CU	P BRUS	HES							
Diam.	Shank	Arbor	Trim	Maximum Safe Free		В	rush Catalo	og Number	s	
Didili.	SIIdIIK	Hole	Length	Speed (RPM)	.006"	.008"	.0104"	.0118"	.014"	.020"
				Carbon	<b>Steel Wire</b>					
1-3/4"	1/4"	-	3/4"	10,500	60106	60108	60101	60102	60104	-
2"	1/4"	-	3/4"	10,500	60206	60208	60201	60202	60204	-
2"	-	1/2"	3/4"	10,500	60216	60218	60211	60212	60214	-
2-3/4"	1/4"	-	3/4"	8,000	60306	60308	60301	60302	60304	60307
2-3/4"	-	1/2"	3/4"	8,000	60316	60318	60311	60312	60314	60317
				Stainles	s Steel Wir	е				
1-3/4"	1/4"	-	3/4"	10,500	61106	61108	61101	61102	61104	-
2"	1/4"	-	3/4"	10,500	61206	61208	61201	61202	61204	-
2"	-	1/2"	3/4"	10,500	61216	61218	61211	61212	61214	-
2-3/4"	1/4"	-	3/4"	8,000	61306	61308	61301	61302	61304	61307
2-3/4"	-	1/2"	3/4"	8,000	61316	61318	61311	61312	61314	61317
			Brass W	<b>/ire</b> (For Bronze Wire, add	d an "a" to th	e end of the	part numbe	er.)		
1-3/4"	1/4"	-	3/4"	10,500	62106	62108	62101	62102	62104	-
2"	1/4"	-	3/4"	10,500	62206	62208	62201	62202	62204	-
2"	-	1/2"	3/4"	10,500	62216	62218	62211	62212	62214	-
2-3/4"	1/4"	-	3/4"	8,000	62306	62308	62301	62302	62304	62307
2-3/4"	-	1/2"	3/4"	8,000	62316	62318	62311	62312	62314	62317
				Abras	ive Nylon					
					500 Grit .018"	320 Grit .022"	180 Grit .035"	120 Grit .040"	80 Grit .040"	46 Grit .060"
2"	1/4"	-	3/4"	10,500	-	60322	60323	60324	60325	-
2"	-	1/2"	3/4"	10,500	-	60332	60333	60334	60335	-
2-3/4"	1/4"	-	3/4"	8,000	-	60422	60423	60424	60425	-
2-3/4"	-	1/2"	3/4"	8,000	-	60342	60343	60344	60345	-







#### NYLON UTILITY CUP BRUSHES

			<b>.</b>	Maximum				Brush Ca	atalog N	umber 8	& Sizes			
Brush Diam.	Diam. Shank	Arbor Hole	Trim Length	Safe Free Speed (RPM)	.003"	.005"	.006"	.008"	.010"	.012"	.014"	.016"	.020"	Other
1-3/4"	1/4"	-	3/4"	10,500	67101	67102	67103	67104	67105	67106	67107	67108	67109	67100
2"	1/4"	-	3/4"	10,500	67201	67202	67203	67204	67205	67206	67207	67208	67209	67200
2"	-	1/2"	3/4"	10,500	67211	67212	67213	67214	67215	67216	67217	67218	67219	67210
2-3/4"	1/4"	-	3/4"	8,000	67301	67302	67303	67304	67305	67306	67307	67308	67309	67300
2-3/4"	-	1/2"	3/4"	8,000	67311	67312	67313	67314	67315	67316	67317	67318	67319	67310

Refer to pages 23 for Encapsulated Utility Cups. Also available in abrasive nylon and other materials on special order.



### CRIMPED WIRE END BRUSHES 1/4" DIAMETER X 7/8" LONG SHANKS, STANDARD PACKAGE 12

For die polishing, casting cleaning, painting and welding surface preparation. All End Brushes have 1/4" shanks and 1" visible trim length. Other trim lengths are available.

#### **SOLID FILL END BRUSHES**

	Maximum					Bru	sh Cata	log Nur	nbers				
Crimped Wire	Safe Free	1" Dia	ameter Brusł	n Part	3/4" D	iameter Bru	sh Part	1/2" D	iameter Brus	sh Part	3/8" D	iameter Brus	sh Part
Size	Speed (RPM)	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass
.003"	20,000	41001	41201	41301	42001	41201	42301	43001	43201	43301	44001	44201	44301
.005"	20,000	41002	41202	41302	42002	41202	42302	43002	43202	43302	44002	44202	44302
.006"	20,000	41003	41203	41303	42003	41203	42303	43003	43203	43303	44003	44203	44303
.008"	20,000	41004	41204	41304	42004	41204	42304	43004	43204	43304	44004	44204	44304
.0104"	20,000	41005	41205	41305	42005	41205	42305	43005	43205	43305	44005	44205	44305
.0118"	20,000	41006	41206	41306	42006	41206	42306	43006	43206	43306	44006	44206	44306
.014"	20,000	41007	41207	41307	42007	41207	42307	43007	43207	43307	44007	44207	44307
.020"	20,000	41009	41209	41309	42009	41209	42309	43009	43209	43309	44009	44209	44309
Tampico	20,000	41400	-	-	42400	-	-	43400	-	-	44400	-	-
Abrasive Nylon	10,000	4143*	-	-	4253*	-	-	4353*	-	-	4453*	-	-
Nylon	10,000	4163*	-	-	4263*	-	-	4363*	-	-	4463*	-	-

* Grit Size, add fifth d	* Grit Size, add fifth digit to specify grit size.												
Grit Size	500	320	240	180	120	80	OTHER						
Last Digit	1	2	3	4	5	6	0 (Specify)						
Nylon Size	.003"	.005"	.006"	.008"	.010"	.012"	.014"	.016"	.020"	OTHER			
Last Digit	1	2	3	4	5	6	7	8	9	0 (Specify)			

#### FLARED END BRUSHES - 15,000 MAXIMUM SAFE FREE SPEED (RPM)

<b>0</b> · · · ·					Bru	sh Cata	log Nur	nbers				
Crimped Wire	1" Di	ameter Brush	Part	1-3/4" [	Diameter Bru	ush Part	1-1/2"	Diameter Bru	sh Part	2" Dia	ameter Brusl	n Part
Size	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass
.005"	45002	45202	41500	45102	45122	41505	45212	45222	41510	45232	45331	41530
.006"	45003	45203	-	45103	45123	-	45213	45223	-	45233	45332	-
.008"	45004	45204	41501	45104	45124	41506	45214	45224	41511	45234	45333	41531
.0104"	45005	45205	41502	45105	45125	41507	45215	45225	41512	45235	45334	41532
.014"	45007	45207	41503	45107	45127	41508	45217	45227	41513	45237	45335	41533
.020"	45009	45209	41504	45109	45129	41509	45219	45229	41514	45239	45336	41534
	2-3/4"	Diameter Bru	sh Part	3" Dia	ameter Brus	h Part	4" D	iameter Brusł	n Part			
.005"	45302	45322	41515	45402	45422	41520	45502	45522	41525			
.006"	45303	45323	-	45403	45423	-	45503	45523	-			
.008"	45304	45324	41516	45404	45424	41521	45504	45524	41526			
.0104"	45305	45325	41517	45405	45425	41522	45505	45525	41527			
.014"	45307	45327	41518	45407	45427	41523	45507	45527	41528			
.020"	45309	45329	41519	45409	45429	41524	45509	45529	41529			

Other metallic materials, wire sizes and diameters available on special order.



#### **COATED END BRUSHES**

Specify when ordering. Coated Cup for mold cleaning. Protects the mold from nicks and scratches. All sizes of Solid Fill or Flared End Brushes can be supplied with Coated Cup.

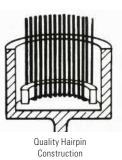


#### **BRIDLED END BRUSHES**

Specify when ordering. Bridled Cup Brush prevents flaring and provides adjustable trim lengths. All sizes of Solid Fill End Brushes can be bridled.



Solid Fill End Brushes are also available in treated Tampico, nylon, polypropylene, .008" aluminum wire, bronze and other filaments on special order. Other sizes available on special order.





Solid Fill End Brushes are also available in Tampico, nylon, polypropylene, .008" aluminum wire, bronze and other filaments on special order. Other sizes available on special order.



### END AND SHANK MOUNTED BRUSHES **KNOT STYLE END BRUSHES, STANDARD PACKAGE 12**

Use for severe applications of removal of heavy scale, corrosion, weld spatter and rust. Maximum Safe Free Speed (MSFS) is 20,000 RPM.

#### **KNOT STYLE END BRUSHES**

OTEM MOUNTED OFOTIONIC

Diam.	Wire	Brush Catalog Numbers						
Dialli.	Size	Steel	Stainless					
3/4"	.014"	47007	47107					
3/4"	.020"	47009	47109					
1-1/8"	.014"	47207	47307					
1-1/8"	.020"	47209	47309					



			-
BAND	ED KNO	TEND	
Diam.	Wire	Brush Catal	og Numbers
Dialii.	Size	Steel	Stainless
3/4"	.014"	47015	47115
3/4"	.020"	47016	47116
1-1/8"	.014"	47017	47117
1-1/8"	.020"	47018	47118



		Brush Catalog Numbers													
Crimped	1-1/2" D	iameter Bru	ush Part	2" Diameter Brush Part			2-1/2" Diameter Brush Part			3" Dia	meter Brus	h Part			
Wire Size	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass	Steel	Stainless Steel	Brass			
.005"	4602*	4612*	7102*	4622*	4632*	7120*	4642*	4652*	7130*	4662*	4672*	7140*			
.006"	4603*	4613*	7103*	4623*	4633*	7121*	4643*	4653*	7131*	4663*	4673*	7141*			
.008"	4604*	4614*	7104*	4624*	4634*	7122*	4644*	4654*	7132*	4664*	4674*	7142*			
.0104"	4605*	4615*	7105*	4625*	4635*	7123*	4645*	4655*	7133*	4665*	4675*	7143*			
.0118"	4606*	4616*	7106*	4626*	4636*	7124*	4646*	4656*	7134*	4666*	4676*	7144*			
.014"	4607*	4617*	7107*	4627*	4637*	7125*	4647*	4657*	7135*	4667*	4677*	7145*			
.020"	4609* 4619* 7108*		7108*	4629*	4639*	7126*	4649*	4659*	7136*	4669*	4679*	7146*			

Maximum Safe Free Speed is 20,000 RPM. Other fill material is available.

#### **STEM MOUNTED KNOT SECTIONS - STANDARD PACKAGE 6**

Durah	Tuing	im Face	Brus	Brush Catalog Number & Wire Sizes								
Brush Diam.	Trim Length	Width	.014"	.020"	.014"	.020"						
2.4	ini. Longti		Ste	eel	Stainless Steel							
3"	11/16"	3/8"	45601	45602	45605	45606						
4"	7/8"	1/2"	45609	45610	45613	45614						

Maximum Safe Free Speed is 25,000 RPM.

#### **PEN-TUFT BRUSHES - STANDARD PACKAGE 12**

						E	Brush Cata	log Num	ibers				
Brush Diam.	Shank Diam.	.003	8" Wire	.005	5" Wire	.008" Wire		.0104" Wire		.0118" Wire		.014" Wire	
Diam.	Diam.	Steel	Stainless	Steel	Stainless	Steel	Stainless	Steel	Stainless	Steel	Stainless	Steel	Stainless
1/8"	3/16"	49831	49841	49832	49842	49834	49844	49835	49845	49836	49846	49837	49847
1/4"	5/16"	49901	49851	49902	49852	49904	49854	49905	49855	49906	49856	49907	49857
5/16"	3/8"	49911	49861	49912	49862	49914	49864	49915	49865	49916	49866	49917	49867
3/8"	7/16"	49921	49871	49922	49872	49924	49874	49925	49875	49926	49876	49927	49877

For brushing in restricted areas. The wire fill extends the full length of the tubing. As the brush wears down, the tubing can be cut back to expose additional trim. Maximum Safe Free Speed is 10,000 RPM. Special sizes and other wires and filaments are available.

#### MINIATURE END BRUSHES - STANDARD PACKAGE 144

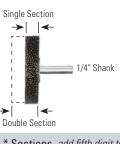
					Brush	Catalog	Number	s & Diai	neters		
Wire or Filament	Wire Size	Shank Diam.	3/4"	1"	1-1/4"	1-1/2"	9/16"	1"	3/16"	1/4"	5/16"
Thaniont	0120	Diam.		Whee	l Style		Cup	Style	End Style		
Steel	.003"	1/8"	50011	50101	-	-	51101	-	52011	-	-
Steel	.003"	3/32"	50012	-	-	-	-	-	52012	-	-
Steel	.005"	1/8"	50021	50111	50191	50291	-	-	-	52111	52191
Steel	.005"	3/32"	50022	-	-	-	-	-	-	-	-
Brass	.003"	1/8"	-	-	-	-	-	-	52031	-	-
Brass	.003"	3/32"	50032	-	-	-	-	-	-	-	-
Brass	.005"	1/8"	-	50131	-	-	51131	-	-	52131	-
Brass	.005"	3/32"	50042	-	-	-	-	-	-	-	-
Stainless	.003"	1/8"	-	50141	-	-	-	-	52051	-	-
Stainless	.005"	1/8"	50061	-	-	-	51151	-	-	52151	-
Soft Hair	-	1/8"	-	-	-	-	-	51241	52071	-	-
Stiff Black Hair	-	1/8"	50081	-	-	-	51171	51251	52081	52171	52251
Stiff Black Hair	-	3/32"	50082	-	-	-	-	-	52082	-	-

Spiral Miniature End Brushes are ideal for fine deburring, edge blending and surface finishing in tool and die shops, electronic and instrument industries, and wherever small brushes are required. Choice of 1/8" or 3/32"stem. Maximum Safe Free Speed is 25,000 RPM.









 $\rightarrow$ 

* Sections, add fit single or double se	
Single Section	1
Double Section	2

# END & DRILL BRUSHES

#### SPOT FACER, PILOT BONDING DRILL BRUSHES, STANDARD PACKAGE 12

Unique because the drill brush does two things at the same time. While cleaning the area around a hole it will also drill or ream the hole at the same time. Reverse the drill and the blank end becomes a pilot for cleaning paint, rust, dirt, etc. around a hole for a bolt, screw or rivet. Set the screw inside of the ferrule and it locks the drill in place without an adapter. Other wire sizes and larger sizes are available.



Reverse the drill and the spot facer can be used for pilot bonding.

#### **SPOT FACER BRUSHES**

			Maximum	Brush Catalog Numbers & Wire Sizes									
Brush Diam.	Drill Sizes	Tap Sizes	Safe Free Speed (RPM)	.004"		.008"		.014"		.020"			
Diam.	Diam.			Steel	Stainless	Steel	Stainless	Steel	Stainless	Steel	Stainless		
1/2"	#25 thru #3	10-24 thru 1/4-28	3,450	49001	49101	49004	49104	-	-	-	-		
3/4"	#F thru 31/64	5/16-18 thru 9/16-12	3,450	-	-	49204	49304	49207	49307	49209	49309		
1-1/8"	9/16-18 thru 3/4-16	9/16-18 thru 3/4-16	3,450	-	-	49404	49504	49407	49507	49409	49509		

\*Customer must specify when ordering. Larger sizes and other wire sizes available.

#### PILOT BONDING BRUSHES

TILUI	DUND											
Brush	Brush Trim Maximum Safe Diam. Length Free Speed (RPM)	Wire	Wire Type	Brush Catalog Number & Pilot Diameter								
Diam.		Free Speed (RPM)	Size	whe type	3/32"	1/8"	5/32"	.164"	3/16"	.191"	1/4"	
1/2"	3/8"	25,000	.004"	Stainless	49701	49702	49703	49706	49704	49707	49705	



Pilot Bonding Brushes are for cleaning around rivet or bolt holes.

#### **ENCAPSULATED END BRUSHES**

All Encapsulated End Brushes have 1/4" shanks. Wires are bonded in a synthetic elastomer. Each wire is held firmly in place providing a maximum cutting edge, see section on Encapsulated Brushes, page 5.

SOLID	SOLID FILL STYLE BRUSHES - STANDARD DENSITY ENCAPSULATION												
Druch	Maximum	Brush Catalog Number & Wire Sizes											
Brush Diam	Diam. Safe Free Speed (RPM)			.010"			14"	.020"					
Dium.		Steel	Stainless	Steel	Stainless	Steel	Stainless	Steel	Stainless				
1/2"	18,000	68030	68731	68730	69432	68930	68931	69430	69431				
3/4"	15,000	68230	68231	68330	69831	69030	69031	69730	69731				
1"	13,000	70030	70131	69230	69231	68530	68531	69930	69931				

To order hard density encapsulation, change the 4th digit from a "3" to a "4". *Example: Number 68731 should be changed to 68741.* 

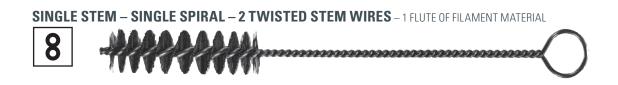
SHAN	SHANK MOUNTED CIRCULAR STYLE - STANDARD (MEDIUM) DENSITY												
Brush	Shank Diam.	Maximum Safe Free		Brush Catalog Number & Wire Sizes									
Diam.		Speed (RPM)		Stainless	Steel	Stainless		Stainless	Steel	Stainless			
1-1/2"	1/4"	20,000	51430	51431	51830	51831	52530	52531	52930	52931			
2"	1/4"	15,000	51530	51531	51930	51931	52630	52631	53730	53731			
3"	1/4"	15,000	51630	51631	52330	52331	52730	52731	53830	53831			

To order hard density encapsulation, change the 4th digit from a "3" to a "4". *Example: Number 51431 should be changed to 51441.* 



## **TWISTED-IN-WIRE BRUSHES**

Twisted-in-Wire Brushes or Tube Brushes are fabricated by twisting either 2 or 4 stem wires together to hold the fill material in place. Brushes can be twisted into a number of different styles. The 3 most popular styles are illustrated below.



DOUBLE STEM - SINGLE SPIRAL - 4 TWISTED STEM WIRES - 1 FLUTE OF FILAMENT MATERIAL



DOUBLE STEM - DOUBLE SPIRAL - 4 TWISTED STEM WIRES - 2 FLUTES OF FILAMENT MATERIAL



#### **STEM WIRES**

Stem wires are usually plated carbon steel. 300 series stainless steel, and brass wire are also available on special order.



STANDARD STRAIGHT CUT END



CONTINUOUS END

#### **STANDARD FILL MATERIALS**

- Types 6.6 and 6.12 nylon •
- Polypropylene •
- Horsehair •
- **Carbon steel and stainless wire** •
- Brass and bronze wire •
- **Tampico** •
- **Abrasive nylon** •
- **Encapsulated wire**



COATED TIP

## STANDARD TUBE CLEANING BRUSHES

#### **SINGLE SPIRAL FOR HAND USE**

- 1. Use a brush with a slightly larger diameter than the tube to be cleaned.
- 2. Push the brush completely through the tube that is being cleaned to allow the bristles to straighten out before pulling the brush back.



#### SINGLE STEM, SINGLE SPIRAL - STANDARD PACKAGE 12

	0 11		<b>T</b>	147			Brush (	Catalog Num	bers		
Brush Diam.	Overall Length	Brush Length	Twisted Stem Diam.	Wire Size	High Carbon Steel	Stainless Fill	All Stainless Construction	Brass	Nylon	Hors Regular	sehair Extra Stiff
1/8"	6"	1"	.088"	.003"	00100	00200	00250	00300	Stem wire d	liameter, overa	II length and
1/8"	6"	1"	.088"	.005"	00102	00202	00252	00302		length are slig	
3/16"	7"	1-1/2"	.088"	.003"	00103	00203	00253	00303	on the nylor	n and horsehai	r single spiral
3/16"	7"	1-1/2"	.088"	.005"	00104	00204	00254	00304		brushes.	
1/4"	7"	1-1/2"	.088"	.003"	00105	00205	00255	00305	-		-
1/4"	7"	1-1/2"	.088"	.005"	00106	00206	00256	00306	93201	93250	-
5/16"	7"	1-1/2"	.088"	.004"	00108	00208	00258	00308	-		-
5/16"	7"	1-1/2"	.088"	.005"	-	-	-	-	93204	93251	-
5/16"	7"	1-1/2"	.088"	.006"	00110	00210	00260	00310	-		-
3/8"	8"	2"	.120"	.004"	00112	00212	00262	00312	93206		-
3/8"	8"	2"	.120"	.005"	-	-	-	-	93207	93252	-
3/8"	8"	2"	.120"	.006"	00113	00213	00263	00313	-		-
7/16"	8"	2"	.120"	.004"	00114	00214	00264	00314	-		-
7/16"	8"	2"	.120"	.006"	00115	00215	00265	00315	93210	93253	-
1/2"	8"	2"	.120"	.004"	00116	00216	00266	00316	-		-
1/2"	8"	2"	.120"	.006"	00117	00217	00267	00317	93211	93254	-
9/16"	9"	2-1/2"	.150"	.005"	00118	00218	00268	00318	-		-
9/16"	9"	2-1/2"	.150"	.008"	00120	00220	00270	00320	93214	93255	-
5/8"	9"	2-1/2"	.150"	.005"	00121	00221	00271	00321	-		-
5/8"	9"	2-1/2"	.150"	.008"	00122	00222	00272	00322	93217	93256	-
11/16"	9"	2-1/2"	.150"	.005"	00123	00223	00273	00323	-		-
11/16"	9"	2-1/2"	.150"	.008"	00125	00225	00275	00325	93220	93257	-
3/4"	9"	2-1/2"	.150"	.005"	00126	00226	00276	00326	-		-
3/4"	9"	2-1/2"	.150"	.008"	00128	00228	00278	00328	-	93258	93150
3/4"	9"	2-1/2"	.150"	.010"	-	-	-	-	93224		
13/16"	10"	3"	.172"	.005"	00130	00230	00280	00330	-		
13/16"	10"	3"	.172"	.008"	00132	00232	00282	00332	-	93259	93151
13/16"	10"	3"	.172"	.010"	-	-	-	-	93228		
7/8"	10"	3"	.172"	.005"	00133	00233	00283	00333	-		
7/8"	10"	3"	.172"	.008"	00134	00234	00284	00334	-	93260	93152
7/8"	10"	3"	.172"	.010"	-	-	-	-	93232		
15/16"	10"	3"	.172"	.005"	00136	00236	00286	00336	-		
15/16"	10"	3"	.172"	.008"	00138	00238	00288	00338	-	93261	93153
15/16"	10"	3"	.172"	.010"	-	-	-	-	93236		
1"	10"	3"	.172"	.005"	00140	00240	00290	00340	-		
1"	10"	3"	.172"	.008"	00142	00242	00292	00342	-	93153	93154
1"	10"	3"	.172"	.010"	-	-	-	-	93240		

All wire brushes are fabricated with straight wire.

#### **DOUBLE SPIRAL FOR POWER USE**

- 1. Use a brush with a slightly smaller or equal diameter than the tube to be cleaned.
- 2. Use the brush only in the rotational direction in which the brush is twisted.



DOUBLE STEM, DOUBLE SPIRAL - STANDARD PACKAGE 12 Brush Catalog Numbers									
Brush Diam.	Overall Length	Brush Length	Twisted Stem Diam.	Wire Size	High Carbon Steel	Stainless Fill	All Stainless Construction	Brass	Nylon
1/4"	4"	1-1/2"	.090"	.003"	93000	93030	93060	93090	93120
1/4"	4"	1-1/2"	.090"	.005"	93001	93031	93061	93091	-
5/16"	4"	1-1/2"	.123"	.003"	93002	93032	93062	93092	93121
5/16"	4"	1-1/2"	.123"	.005"	93003	93033	93063	93093	93122
3/8"	5"	2"	.123"	.004"	93004	93034	93064	93094	93123
3/8"	5"	2"	.123"	.006"	93005	93035	93065	93095	93124
7/16"	5"	2"	.163"	.004"	93006	93036	93066	93096	93125
7/16"	5"	2"	.163"	.006"	93007	93037	93067	93097	93126
1/2"	5"	2"	.163"	.004"	93008	93038	93068	93098	93127
1/2"	5"	2"	.163"	.006"	93009	93039	93069	93099	93128
9/16"	5"	2"	.208"	.005"	93010	93040	93070	93100	93129
9/16"	5"	2"	.208"	.008"	93011	93041	93071	93101	93130
5/8"	5"	2"	.208"	.005"	93012	93042	93072	93102	93131
5/8"	5"	2"	.208"	.008"	93013	93043	93073	93103	93132
11/16"	5"	2"	.208"	.005"	93014	93044	93074	93104	93133
11/16"	5"	2"	.208"	.008"	93015	93045	93075	93105	93134
3/4"	5-1/2"	2-1/2"	.238"	.006"	93016	93046	93076	93106	93135
3/4"	5-1/2"	2-1/2"	.238"	.010"	93017	93047	93077	93107	93136
13/16"	5-1/2"	2-1/2"	.238"	.006"	93018	93048	93078	93108	93137
13/16"	5-1/2"	2-1/2"	.238"	.010"	93019	93049	93079	93109	93138
7/8"	5-1/2"	2-1/2"	.238"	.006"	93020	93050	93080	93110	93139
7/8"	5-1/2"	2-1/2"	.238"	.010"	93021	93051	93081	93111	93140
15/16"	5-1/2"	2-1/2"	.238"	.006"	93022	93052	93082	93112	93141
15/16"	5-1/2"	2-1/2"	.238"	.010"	93023	93053	93083	93113	93142
1"	5-1/2"	2-1/2"	.238"	.006"	93024	93054	93084	93114	93143
1"	5-1/2"	2-1/2"	.238"	.010"	93025	93055	93085	93115	93144

All wire brushes are fabricated with straight wire.

# **CRIMPED WIRE POWER TUBE BRUSHES**

<b>DOUBLE STEM/DOUBLE SPIRAL FOR POWER TOOL OPERATION - </b> STANDARD PACKAGE 12										
Bruch	Druch	Twisted	Wire	Brush Catalog Numbers						
Brush Diam.	Brush Length	Stem Diam.	Size	High Carbon Steel	Stainless Fill	All Stainless Construction				
1/2"	2"	.187"	.004"	94002	94032	94062				
1/2"	2"	.187"	.006"	94003	94033	94063				
5/8"	2"	.208"	.006"	94006	94036	94066				
5/8"	2"	.208"	.008"	94007	94037	94067				
5/8"	2"	.208"	.0104"	94008	94038	94068				
3/4"	2-1/2"	.238"	.006"	94011	94041	94071				
3/4"	2-1/2"	.238"	.0104"	94013	94043	94073				
7/8"	2-1/2"	.238"	.006"	94016	94046	94076				
7/8"	2-1/2"	.238"	.0104"	94018	94048	94078				
1"	2-1/2"	.238"	.006"	94021	94051	94081				
1"	2-1/2"	.238"	.0104"	94023	94053	94083				
1-1/4"	2-1/2"	.238"	.0104"	94025	94055	94085				
1-1/2"	2-1/2"	.238"	.0104"	94027	94057	94087				
2"	2-1/2"	.238"	.0104"	94029	94059	94089				

All brushes are 5" in overall length.

### LARGE DIAMETER NYLON & HORSEHAIR TUBE BRUSHES

Available in regular and in stiff horsehair with either turned or tied tuft on the end.

SINGL	ILE STEM/SINGLE SPIRAL FOR HAND USE - STANDARD PACKAGE 12							
Brush	Overall	Brush	Twisted Stem	Brush Catalog Numbers				
Diam.	Length	Length	Diam.	Nylon	Horsehair			
1-1/4"	13"	4"	.168"	93242	93265			
1-1/2"	13"	4"	.168"	93243	93266			
1-3/4"	13"	4"	.168"	93244	93267			
2"	16-3/4"	5"	.194"	93245	93268			

### MINIATURE TUBE BRUSHES

Precision made to  $\pm$  .001" diameter tolerances.

#### **Clean and Deburr Small Diameter Holes**

Miniature Brushes will clean or deburr effectively even though they are minute in size. The diameters of the brushes must be exactly tailored to each particular requirement because bristle stiffness permits very little flexing. The wire stem is capable of holding the bristles tightly only when the brush is used in the proper size hole. The brush diameter must not exceed the hole diameter.

STANDARD MINIATURE - STANDARD PACKAGE 12									
Davish Davish		Brush Catalog Numbers							
Brush Diam.	Brush Length	Nylon Fill	Stainless Fill	Brass Wire	Superfine Abrasive Nylon				
.020"	1/2"	00950	00973	00985	-				
.030"	1/2"	00951	00974	00986	00570				
.040"	1/2"	00952	00975	00987	00571				
.050"	1/2"	00953	00976	00988	00572				
.060"	1/2"	00954	00977	00989	00573				
.070"	3/4"	00955	00978	00990	00574				
.080"	3/4"	00956	00979	00991	00575				
.090"	3/4"	00957	00980	00992	00576				
.100"	3/4"	00958	00981	00993	00577				
.110"	3/4"	00959	00982	00994	00578				
.120"	3/4"	00971	00983	00995	00579				
.125"	3/4"	00972	00984	00996	00580				

All brushes are 4" in overall length. Steel wire is also available.

#### **Information Required When Ordering Special Sizes**

- 1. I.D. in exact thousands of hole to be cleaned
- 2. Type of material to be removed
- 3. Finish desired, if important
- 4. Hand or power operation
- 5. Direction of rotation and R.P.M. if power driven
- 6. Type of bristle material required



# POWER OPERATED, TWISTED-IN-WIRE, MACHINE SHOP BRUSHES

#### FOR CLEANING AND DEBURRING INTERNAL SURFACES

Heavy density, single spiral brushes are specially designed for deburring internal threads, non-concentric holes and keyways. Stainless stems give extra strength. 3-1/2" overall length, 1" brush length.

				В		•	ber & Size	S		
Brush	Twisted Stainless	Wire Diameter								
Diam.	Stem	.003"	.004"	.005"	.006"	.008"	.010"		Grit	
		.000	.001			.000	.010	.022"	.040"	
				Carbon						
1/4"	1/8"	00149	00150	00151	00152	00153	-	-	-	
5/16"	1/8"	00154	00155	00156	00157	00158	-	-	-	
3/8"	1/8"	00159	00160	00161	00162	00163	00164	15501	1570	
7/16"	1/8"	00165	00166	00167	00168	00169	00170			
1/2"	3/16"	00171	00172	00173	00174	00175	00176	15503	15703	
9/16"	3/16"	00177	00178	00179	00180	00181	00182	-	-	
5/8"	3/16"	00183	00184	00185	00186	00187	00188	15504	15704	
11/16"	3/16"	00189	00190	00191	00192	00193	00194	-	-	
3/4"	7/32"	00195	00196	00197	00198	00350	00351	15506	1570	
13/16"	7/32"	00352	00353	00354	00355	00356	00357	-	-	
7/8"	7/32"	00358	00359	00360	00361	00362	00363	-	-	
15/16"	7/32"	00364	00365	00366	00367	00368	00369	-	-	
1"	1/4"	00370	00371	00372	00373	00374	00375	15508	15708	
1-1/8"	1/4"	00382	00383	00384	00385	00386	00387	-	-	
1-1/4"	1/4"	00376	00377	00378	00379	00380	00381	15509	15709	
				Stainl	ess					
1/4"	1/8"	00800	00801	00802	00803	00804	-	-	-	
5/16"	1/8"	00805	00806	00807	00808	00809	-	-	-	
3/8"	1/8"	00810	00811	00812	00813	00814	00815	15501	1570	
7/16"	1/8"	00816	00817	00818	00819	00820	00821			
1/2"	3/16"	00822	00823	00824	00825	00826	00827	15503	15703	
9/16"	3/16"	00828	00829	00830	00831	00832	00833	-		
5/8"	3/16"	00834	00835	00836	00837	00838	00839	15504	15704	
11/16"	3/16"	00840	00841	00842	00843	00844	00845	-	-	
3/4"	7/32"	00846	00847	00848	00849	00850	00851	15506	1570	
13/16"	7/32"	00852	00853	00854	00855	00856	00857	-	-	
7/8"	7/32"	00858	00859	00860	00861	00862	00863	-	-	
15/16"	7/32"	00864	00865	00866	00867	00868	00869	-	-	
1"	1/4"	00870	00871	00872	00873	00874	00875	15508	1570	
1-1/8"	1/4"	00882	00883	00884	00885	00886	00891	-	-	
1-1/4"	1/4"	00876	00877	00878	00879	00880	00881	15509	15709	





#### ABRASIVE NYLON TUBE BRUSHES Standard Package 12

Stalluaru Fackaye iz

STANDADD CDIT SIZES

STANDARD GRIT SIZES								
Brush Overall Brush		all Brush Brush Catalog Number & Grit						
Diam	Length	Length	80 Grit	120 Grit	180 Grit	320 Grit	500 Grit	
1/4"	5"	2"	00540	00554	00788	00887	00544	
5/16"	5"	2"	00541	00555	00789	00888	00546	
3/8"	5"	2"	00542	00556	00790	00889	00548	
7/16"	5"	2"	00543	00557	00791	00890	00550	
1/2"	5"	2"	00911	00917	00924	00931	00552	
9/16"	5"	2"	00545	00559	00793	00892	00553	
5/8"	5"	2"	00912	00918	00925	00932	00558	
11/16"	5"	2"	00547	00561	00795	00894	00560	
3/4"	5-1/2"	2-1/2"	00913	00919	00926	00933	00782	
13/16"	5-1/2"	2-1/2"	00549	00783	00797	00896	00784	
7/8"	5-1/2"	2-1/2"	00914	00920	00927	00934	00786	
15/16"	5-1/2"	2-1/2"	00516	00785	00799	00898	00787	
1"	5-1/2"	2-1/2"	00915	00921	00928	00935	00792	
1-1/4"	5-1/2"	2-1/2"	00916	00922	00929	00936	00794	

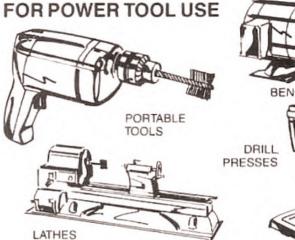
#### **EXTRA FINE** – 600 GRIT ALUMINUM OXIDE

Brush	Brush Catalog	
Decimal	Approx. Fraction	Numbers
.165"	5/32"	00581
.190"	3/16"	00582
.260"	1/4"	00583
.325"	5/16"	00584
.385"	3/8"	00585
.515"	1/2"	00586
.640"	5/8"	00587
.765"	3/4"	00588
.890"	7/8"	00589
1.015"	1"	00590

Single stem, single spiral. Use to clean, polish and deburr holes in metal and non-metallic parts. 5" overall length.

# SIDETUFT & SIDE-BOTTOM TUFT BRUSHES

Hard working brushes for removing burrs, dirt and scale. For preparation of surfaces for soldering, brazing and welding.





### SIDETUFT HOLDERS- Standard Package 1

1/4" shank diameter and 3-3/8" overall length



#12400 for 14 gauge (1/8") stem series



#12401 for 17 gauge (3/32") stem series



### 17 GAUGE STEM SIDETUFT **STYLE** – STANDARD PACKAGE 36

Brush Diam,					
Diam.	.003"	.005"	.008"		
	High Carl	oon Steel			
1/4"	12300	12301	-		
9/32"	12303	12304	-		
5/16"	12306	12307	-		
11/32"	12309	12310	-		
3/8"	12312	12313	12314		
13/32"	12315	12316	12317		
7/16"	12318	12319	12320		
15/32"	12321	12322	12323		
1/2"	12324	12325	12326		
	Stainles	ss Steel			
1/4"	-	12327	-		
3/8"	-	12329	12330		
7/16"	-	12331	12332		
1/2"	-	12333	12334		
	Brass				
1/4"	12335	12336	-		
5/16"	12337	12338	-		
3/8"	12339	12340	-		
7/16"	12341	12342	-		
1/2"	12343	12344	-		

Uses #12401 sidetuft holder. Overall length 2-1/8", brush part length is 9/16", and stem diameter is 3/32".



A.B. H. B. B. B. B. B. B. B. B.

### **14 GAUGE STEM SIDETUFT STYLE** – STANDARD PACKAGE 36

Brush Diam.	Brush Catalog Number & Wire Diameters		
Diam.	.003"	.005"	.008"
	High Carl	oon Steel	
3/8"	12345	12346	12347
7/16"	12348	12349	12350
1/2"	12351	12352	12353
9/16"	12354	12355	12356
5/8"	12357	12358	12359
3/4"	12360	12361	12362
7/8"	12363	12364	12365
15/16"	12366	12367	12368
1"	12369	12370	12371
1-1/16"	12372	12373	12374
1-1/8"	12375	12376	12377
1-3/16"	12378	12379	12380
1-1/4"	12381	12382	12383
	Stainles	ss Steel	
9/16"	-	12384	12385
5/8"	-	12386	12387
3/4"	-	12388	12389
7/8"	-	12390	12391
1	-	12392	12393
1-1/4"	-	12394	12395
	Bra	ass	
7/8"	12396	12397	-
1-1/4"	12396	12397	-

Uses #12400 sidetuft holder. Overall length 2-1/4", brush part length is 5/8", and stem diameter is 1/8".

### SIDE-BOTTOM STYLE -STANDARD PACKAGE 12

Squara	Wire	Overall	Brush	n Catalog Nu	umber
Square Diam.	Size	Length	Steel	Stainless Steel	Brass
1"	.006"	3-1/4"	37005	37040	37072
1"	.010"	3-1/4"	37007	37042	37073
1-1/16"	.006"	3-5/16"	37009	37044	37074
1-1/16"	.010"	3-5/16"	37010	-	-
1-1/4"	.006"	3-3/8"	37011	37046	37075
1-1/4"	.010"	3-3/8"	37013	37048	37076
1-1/2"	.006"	3-7/16"	37015	37050	37077
1-1/2"	.010"	3-7/16"	37017	37052	37078
1-3/4"	.006"	3-1/2"	37019	37054	37079
1-3/4"	.010"	3-1/2"	37121	37056	37081
1-7/8"	.006"	4"	37123	37058	37082
1-7/8"	.010"	4"	37125	37060	37083
2"	.006"	4"	37026	-	-
2"	.010"	4"	37127	37062	37084
2-1/4"	.006"	4-1/8"	37128	-	-
2-1/4"	.010"	4-1/8"	37129	37064	37085
2-1/2"	.010"	4-5/8"	37141	37066	37086
2-3/4"	.010"	4-3/4"	37143	37068	37087
3"	.006"	4-7/8"	37144	37069	-
3"	.010"	4-7/8"	37145	37070	37088

Brushes the side and the bottom in one operation. The brush has right angle junctures. Special round and square sizes are available on special order in most wire and filament sizes.

# VALVE GUIDE BRUSHES

VALVE GUIDE BRUSHES - STANDARD PACKAGE 12					
Brush Diam.	Wire Fill	Nylon Fill	Brush Diam.	Wire Fill	Nylon Fill
1/4"	00940	00960	19/32"	00905	00998
9/32"	00901	00909	5/8"	00945	00965
5/16"	00941	00961	11/16"	00946	00966
11/32"	00942	00962	3/4"	00947	00967
3/8"	00943	00963	7/8"	00948	00968
13/32"	00944	00964	1"	00949	00969
7/16"	00902	00938	1-1/32"	00907	00999
1/2"	00903	00939	1-1/4"	00908	00923
9/16"	00904	00997			

# Manage Market Market

# **GUN BRUSHES**

GUN BRUSHES - STANDARD PACKAGE 36

Rifle Brushes - 2-1/4" Brush Part Length, 3-9/32" Overall Length, 8-32 Zinc Plated Steel				
Caliber Brush Catalog Number				
Caliber	Stainless Steel	Bronze	Nylon	Cotton 1-5/8" Long
22	-	93416	93424	93500
25	-	93417	93425	93501
27	-	93418	93426	93502
30	93411	93419	93427	93503
35	93412	93420	93428	93504
38	93413	93421	93429	93505
45	93414	93422	93430	93506
50	93415	93423	93431	93507
Pistol Bru	Ishes - 1-1/4" Brush P	art Length, 2-9/32" Ov	verall Length, 8-32	2 Zinc Plated Steel
Caliber	Stainless Steel	Bronze	Nylon	Cotton 1-5/8" Long
22	-	93451	93459	93508
25	-	93452	93460	93509
27	-	93453	93461	93510
30	93446	93454	93462	93511
35	93447	93455	93463	93512
38	93448	93456	93464	93513
45	93449	93457	93465	93514
50	93450	93458	93466	93515
Tapered Shot	t <b>gun Brushes -</b> 1-5/8	" Brush Part Length, 2	-7/8" Overall Leng	gth, 5/16-27 Aluminum
Gauge	Stainless Steel	Bronze	Nylon	Cotton
10	93476	93482	93488	93516
12	93477	93483	93489	93517
16	93478	93484	93490	93518
20	93479	93485	93491	93519
28	93480	93486	93492	93520
.410 bore	93481	93487	93493	93521



MANANAN

# ENCAPSULATED TUBE BRUSHES

See page 5 for information on Encapsulated Brushes.

ENCAPSULATED TUBE BRUSHES - STEEL WIRE MEDIUM DENSITY - STANDARD PACKAGE 12					
Brush Diam.	Brush Part Length	Overall Length	Steel Wire Size	Catalog No.	
1/2"	2"	5"	.006"	69130	
5/8"	2"	5"	.008"	69330	
3/4"	2-1/2"	5-1/2"	.010"	69530	
7/8"	2-1/2"	5-1/2"	.010"	69630	
1"	2-1/2"	5-1/2"	.010"	69830	

To order hard density, change 4th digit to "4" when ordering. Also available in stainless steel wire.



# **CONDENSOR TUBE BRUSHES & ACCESSORIES**

Self-cleaning, single spiral brushes for removing surface deposits from condenser tubes and other internal areas. 4-1/2" brush part length and 7-1/2" overall length. No. 10 galvanized stem wire, continuous end style. 1/8" pipe nipple and 5/16" internally threaded.

CONDENSOR TUBE BRUSHES - STANDARD PACKAGE 12				
Brush Diam.		Brush Cata	log Number	
DIUSII DIAIII.	Steel Wire	Stainless Steel	Brass	Nylon
3/8"*	13944	13958	13972	13986
1/2"	13945	13959	13973	13987
5/8"	13946	13960	13974	13988
3/4"	13947	13961	13975	13989
7/8"	13948	13962	13976	13990
1"	13949	13963	13977	13991
1-1/4"	13950	13964	13978	13992
1-1/2"	13951	13965	13979	13993
1-3/4"	13952	13966	13980	13994
2"	13953	13967	13981	13995
2-1/4"	13954	13968	13982	13996
2-1/2"	13955	13969	13983	13997
2-3/4"	13956	13970	13984	13998
3"	13957	13971	13985	13999



\*No O.D. thread on 3/8" brush

<ul> <li>HANDLES FOR CONDENSOR TUBE BRUSHES</li> <li>STANDARD PACKAGE 1</li> </ul>			
ltem	Brush Catalog Number		
36" Handle	14960		
36" Extension	14961		

1	
1	Extension Rod Handle

# FLUE BRUSH ACCESSORIES

### **FIBERGLASS EXTENSION RODS**

Longth	Brush Catalog Numbers			
Length	Standard 3/8" Rod	Heavy-Duty 1/2" Rod		
36"	20916	20920		
48"	20917	20921		
72"	20919	20923		

Standard rods have a 1/4" NPT self-connect, .34" dia. extension rod Heavy duty rods have a 3/8" NPT self-connect, .44" dia. extension rod

CONNECTORS, LOOPS, & REDUCERS FOR FLUE BRUSHES					
Description	Size	Brush Catalog Numbers			
Loop	3/8" NPT	20895			
Loop	1/4" NPT	20896			
Reducer Coupling	3/8" NPT to 1/4" NPT	20897			

Fiberglass Extension Rod





Loop

Reducer

36 spiralbrushes.com Power Brushes

# FLUE & BOILER TUBE BRUSHES

### **STANDARD PACKAGE 12**

Four wire, double stem construction. Not recommended for power use. The Flue Brush diameter is 1/4" smaller than the outside of the flue, see the diagram below. Brushes are threaded with standard 1/4" threaded pipe nipple. 4-1/2" brush part and .012" wire size.

FLUE B	FLUE BRUSHES - STANDARD PACKAGE 12									
FL 0:	Exact			Brush Catalog Numbers						
Flue Size (0.D.)	Brush	Black Temp	pered Wire	Stainle	ss Steel	Brass	Wire			
(0.0.)	Size	Single Spiral	Double Spiral	Single Spiral	Double Spiral	Single Spiral	Double Spiral			
1"	3/4"	00610	00625	00420	00520	00440	00460			
1-1/4"	1"	00611	00626	00422	00522	00442	00462			
1-1/2"	1-1/4"	00612	00627	00423	00523	00443	00463			
1-3/4"	1-1/2"	00613	00628	00424	00524	00444	00464			
2"	1-3/4"	00614	00629	00425	00525	00445	00465			
2-1/4"	2"	00615	00630	00426	00526	00446	00466			
2-1/2"	2-1/4"	00616	00631	00427	00527	00447	00467			
2-3/4"	2-1/2"	00617	00632	00428	00528	00448	00468			
3"	2-3/4"	00618	00633	00429	00529	00449	00469			
3-1/4"	3"	00619	00634	00430	00530	00450	00470			
3-1/2"	3-1/4"	00620	00635	00431	00531	00451	00471			
3-3/4"	3-1/2"	00621	00636	00432	00532	00452	00472			
4"	3-3/4"	00622	00637	00433	00533	00453	00473			



≻ Flue Size 🗲



Double Stem Double Spiral Flue Brush

### **HEAVY DUTY PIPELINE FLUE BRUSHES Exact Brush Size Oil Tempered Wire Size Brush Catalog Numbers** 1-5/8" to 1-7/8" .020" 2060\* 2" to 2-7/8" .020" 2061\* 3" to 3-7/8" .020" 2062\* 4" to 4-7/8" .020" 2065\* 5" to 5-7/8" .020" 0064\* 6" to 6-7/8" .020" 0065\* 6" to 6-7/8" .030" 0066\* 7" to 7-7/8" .030" 0067\* 8" to 8-7/8" .030" 0068\* 9" to 9-7/8" .030" 0069\* 10" to 10-7/8" .030" 0070\* 10" to 10-7/8" .032" 0071\* 11" to 11-7/8" .032" 0072\* 12" to 12-7/8" .032" 0073\* 13" to 13-7/8" .032" 0074\* 14" to 14-7/8" .032" 0075\* 15" to 15-7/8" .032" 2066\* 16" .032" 20670

Rugged, double stem, single spiral construction with bright oil tempered wire. For drill pipe, casing and tube cleaning. Threaded with 1/4" threaded pipe nipple. Brush part length: 6-1/2"



NYLON FLUE BRUSHES							
Exact Brush Size	Brush Catalog Numbers						
1 to 1-7/8"	2071*						
2 to 2-7/8"	2072*						
3 to 3-7/8"	2073*						
4 to 4-7/8"	2074*						
5 to 5-7/8"	2075*						
6 to 6-7/8"	2076*						
7 to 7-7/8"	2077*						
8"	20780						

Double Stem/Single Spiral. Specify Soft (.012"), Medium (.020") or Stiff (.036") nylon size when ordering. Brush part length: 4-1/2"

* Fraction of the Diamete	* Fraction of the Diameter, add fifth digit to specify the fraction of the diameter.								
Fraction of Diameter	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	
Last Digit	1	2	3	4	5	6	7	0	

# TWISTED-IN-WIRE DESIGN YOUR OWN SPECIALS

### **CUSTOMER INFORMATION**

Name	
Company	

- Phone
- Email.
- 8

Single Stem/Single Spiral. Specify if stainless stem is desired.



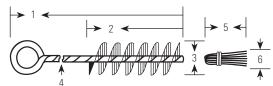
Double Stem/Double or Single Spiral. Specify if stainless stem is desired.

### **HOW TO USE**

•

•

- Select the style required from "A" through "Z".
- Fill in the dimensions in the specification blanks.
- Specify single stem or double stem if stem square is blank.
- Specify type of fill, such as: steel wire, stainless wire, brass wire, nylon, etc.
- Specify the quantity to be quoted.
- See Page 29, Reference for Technical Data & Construction.

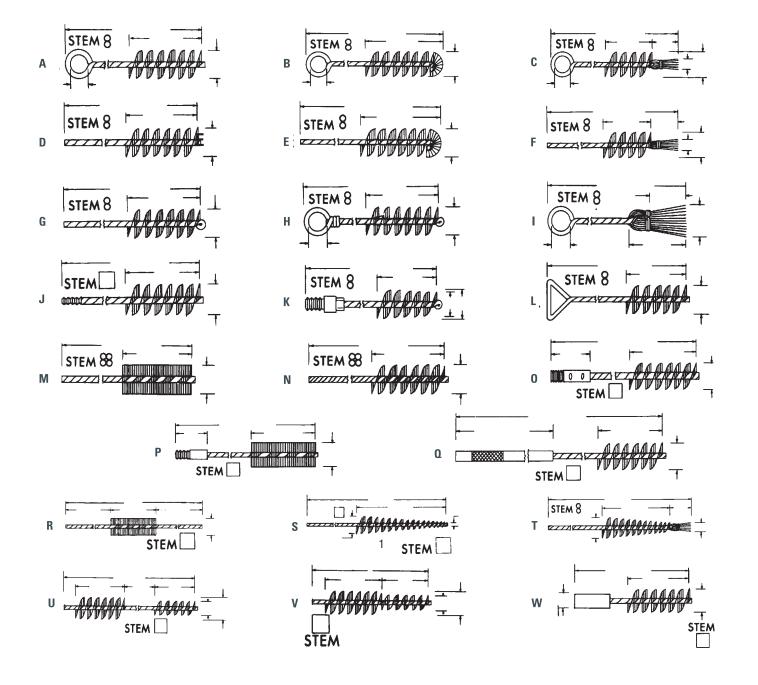


### **DIMENSIONS TO BE SPECIFIED**

- 1. Overall length
- 2. Length of brush part
- 3. Brush diameter

4

- Special stem diameter if required
- 5. & 6. End tuft dimensions if required

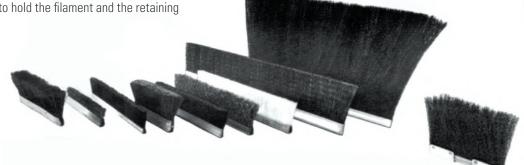


# STRIP BRUSHES

Spiral's Straight Strip Brushes are formed by forcing the filament material, held by a retaining wire, continuously into a metal channel. The sides of the metal channel are then crimped on both sides to hold the filament and the retaining wire securely in the channel.

### **APPLICATIONS**

Strip Brushes have a wide range of applications. They can be assembled on a core to form a rotary brush, used as a curtain wall, as a static eliminator, or formed into special shapes.



### **STANDARD CHANNEL SIZES**

Channel Backing No.	Flat Stock Width	Approx. Formed Width	Approx. Leg Height	Minimum Visible Trim	Range Of Wire Sizes	Range Of Synthetic Sizes
12	1-1/2"	.430"	.565"	1"	.003" to .026"	.003" to .120"
10	1-1/4"	.385"	.480"	1"	.003" to .026"	.003" to .120"
8	1"	.335"	.375"	3/4"	.003" to .026"	.003" to .120"
7	7/8"	.300"	.315"	3/4"	.003" to .020"	.003" to .060"
5	5/8"	.210"	.250"	5/8"	.003" to .010"	.003" to .020"
4	1/2"	.190"	.195"	1/2"	.003" to .008"	.003" to .014"
3	3/8"	.150"	.148"	3/8"	-	.003" to .010"

### INFORMATION NEEDED WHEN ORDERING

- 1. Type of fill material
- 2. Diameter of fill material
- 3. Channel number and style
- 4. Channel material
- 5. Length of strip
- 6. Overall height or 5A visible material length

### **CHANNEL MATERIALS AVAILABLE**

- Electrogalvanized carbon steel
- Stainless steel (Types 304 and 316)
- Brass
- Aluminum

### WIRE FILLS AVAILABLE, See Page 2

- Tempered and hard drawn carbon steel
- Stainless steel
- Brass and bronze
   //brass true 200, brasse true
- (brass type 260, bronze type 510)
- Nickel, silver and aluminum
- Other special order filaments

### SYNTHETIC FILLS AVAILABLE

- 6.6 and 6.12 nylon
- Polypropylene and other synthetic filaments
- Nylon abrasive filament



### **OTHER FILL MATERIALS**

- Tampico
- Bassine
- Tampico and bassine union mixes
- Horsehair, still or soft
- Nylon and horsehair mixtures
- Wire and synthetic mixtures

### IMPORTANT

For Strip Brushes to fit properly into a special holder or extrusion, it is very important that we have either the exact inside dimensions or a sample. This information is necessary for a quotation and for fabricating the Strip Brush.

### WELDED IN MULTIPLE

To achieve a wide, densely filled brush face, channels No. 7 or larger can be tack welded in multiples.



# **STRIP BRUSHES**

### **DIMENSIONAL LIMITATIONS**

**Length of Strip** – Generally, 120" is the longest most practical and shippable length. However, longer lengths can be manufactured.

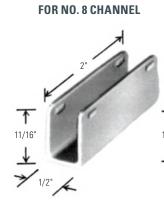
**Height of Strip** – The maximum height of a strip depends on the channel size and the type and size of the fill material. Generally, wire can be fabricated up to an overall height of 12" and synthetic filaments to an overall height of 24".

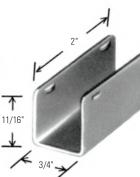
### **STANDARD STRIP HOLDERS**

Strip Brushes can be mounted in a metal or a wood backup plate or a hub, using a no. 8 oval head, with machine or wood screws on each side at approximately 4" to 6" apart. For faster replacement of strips, standard channel clips or extrusions are used.

### **CHANNEL CLIPS**

Heavy formed clips can be attached by threaded screws at 8" to 10" apart, or can be welded.





NO. 54005 Carbon Steel

FOR NO. 10 CHANNEL

NO. 54000 Carbon Steel NO. 54001 Stainless Steel



Aluminum Extrusions can be bolted, screwed or riveted to a hub or another member. Use No. 7 channel only.  $465^{*}$   $495^{*}$   $1.370^{*}$   $495^{*}$   $1.370^{*}$  $1.370^$ 

**Density of Strip** – All Spiral Strips are fabricated full density. Depending on fill material used, lighter or overfill density can be supplied.

**Color** – Unless otherwise specified, black or natural white filament is used, depending on our stock at the time of the order.

**Food Application** – U.S.D.A requires type 6.12 nylon, stainless steel channel and stainless steel holding wire to be used.

### **CUSTOM FORMED STRIPS**

Straight Strip Brushes can be formed into special custom shapes. Quantities required is necessary because most shapes require special forming tools. If possible, please submit a print or a sketch when requesting a quotation.



NO. 53002

0 spiralbrushes.com

# STRIP BRUSHES

Strip Brushes are available in standard 72" lengths or custom lengths and trim heights. For channel information, see page 39.

### **STRIP BRUSH FILAMENTS**

David		Brush (	Catalog Nur	nber & Wir	e Sizes		
Brush Diam.	No. 4 Channel	No. 5 Channel	No. 7 Channel	No. 8 Channel	No. 10 Channel	No. 12 Channel	
6.6 Nylon							
1-1/2"	5861*	5501*	5301*	5401*	8030	8201*	
2"	5862*	5502*	5302*	5402*	8100*	8202*	
2-1/2"	5863*	5503*	5303*	5403*	8101*	8204*	
3"	5864*	5504*	5304*	5404*	8033*	8205*	
			6.12 Nylon				
1-1/2"	5871*	8110*	5360*	5460*	8035*	8211*	
2"	5872*	8111*	5361*	5461*	8102*	8212*	
2-1/2"	5873*	8112*	5362*	5462*	8103*	8213*	
3"	5874*	8113*	5363*	5463*	8104*	8214*	
		Р	olypropyle	ne			
1-1/2"	5881*	8115*	5364*	5464*	8040*	8221*	
2"	5882*	8116*	5365*	5465*	8041*	8222*	
2-1/2"	5883*	8117*	5366*	5466*	8042*	8223*	
3"	5884*	8118*	5367*	5467*	8043*	8224*	
			Horsehair				
1-1/2"	59111	55130	53130	54130	80450	82311	
2"	59112	55140	53140	54140	80451	82312	
2-1/2"	59113	55150	53150	54150	80452	82313	
3"	59114	55160	53160	54160	80453	82314	
		Т	ampico Fib	er			
1-1/2"	59211	55050	53050	54050	80455	82411	
2"	59212	55060	53060	54060	80456	82412	
2-1/2"	59213	55070	53070	54070	80457	82413	
3"	59214	55080	53080	54080	80458	82414	

*Specify las	t digit v	vhen or	dering:							
Filament Size	.006"	.008"	.010"	.012"- .014"	.014"- .016"	.016"- .018"	.020"	.022"	.028"	Other
Last Digit	t 1	2	3	4	5	6	7	8	9	0 (Specify)
†Specify las	†Specify last digit when ordering:									
Wire Size	.003"	.005"	.008"	.010"	.012"	.014"	.016"	.018"	.020"	Other
Last Digit	1	2	3	4	5	6	7	8	9	0 (Specify)

					Constraint of the second			
STRIF	P BRUSH	WIRES						
Davish		Brush (	Catalog Nu	nber & Wir	e Sizes			
Brush Diam.	No. 4 Channel	No. 5 Channel	No. 7 Channel	No. 8 Channel	No. 10 Channel	No. 12 Channel		
Carbon Steel Wire								
1-1/2"	5821†	5517†	5317†	5417†	8046†	8301†		
2"	5822†	5518†	5318†	5418†	8047†	8302†		
2-1/2"	5823†	5519†	5319†	5419†	8048†	8303†		
3"	5824†	5520†	5320†	5420†	8049†	8304†		
		Stainless	Steel Wire	- Type 302				
1-1/2"	5831†	5521†	5321†	5421†	8050†	8401†		
2"	5832†	5522†	5322†	5422†	8051†	8402†		
2-1/2"	5833†	5523†	5323†	5423†	8052†	8403†		
3"	5834†	5524†	5324†	5424†	8053†	8404†		
			Brass Wir	e				
1-1/2"	5841†	5525†	5325†	5425†	8060†	8501†		
2"	5842†	5526†	5326†	5426†	8094†	8502†		
2-1/2"	5843†	5527†	5327†	5427†	8095†	8503†		
3"	5844†	5528†	5328†	5428†	8063†	8504†		
			Bronze Win	е				
1-1/2"	5851†	8000†	8010†	8020†	8065†	8601†		
2"	5852†	5001†	8091†	8090†	8096†	8602†		
2-1/2"	5853†	8002†	8092†	8093†	8097†	8603†		
3"	5854†	8003†	8013†	8023†	8098†	8604†		

# NO. 4 & 5 CHANNEL FILL MATERIAL SIZE LIMITATIONS

No. 4 channel - .003" through .008" wire diameters No. 4 channel - .003" through .014" filament diameters No. 5 channel - .003" through .010" wire diameters No. 5 channel - .003" through .020" filament diameters

### **STAINLESS CHANNEL & BRASS CHANNEL**

All channel sizes are available with stainless channel and holding wire. No. 5 and No. 7 channels are available with brass channel and stainless holding wire.

### **ABRASIVE NYLON FILAMENT**

		Brush Catalog Number								
Brush Diam.		No. 7 Channel					No. 8 Channel			
	500 Grit	320 Grit	180 Grit	210 Grit	80 Grit	500 Grit	320 Grit	180 Grit	210 Grit	80 Grit
1-1/2"	53290	53330	53370	53410	53450	54290	54330	54370	54410	54450
2"	53300	53340	53380	53420	53460	54300	54340	54380	54420	54460
2-1/2"	53310	53350	53390	53430	53470	54310	54350	54390	54430	54470
3"	53320	53360	53400	53440	53480	54320	54360	54400	54440	54480

### STATIC GROUNDING STRIP BRUSH WITH BRASS CHANNEL - SPECIFY BRONZE WIRE SIZE

		Brush Catalog Number								
Brush Diam.		No. 5 Channel			No. 7 Channel			No. 8 Channel		
	.003"	.005"	.008"	.003"	.005"	.008"	.003"	.005"	.008"	
1-1/2"	55501	55503	55504	53501	53503	53504	54501	54503	54504	
2"	55511	55513	55514	53511	53513	53514	54511	54513	54514	
2-1/2"	55521	55523	55524	53521	53523	53524	54521	54523	54524	
3"	55531	55533	55525	53531	53533	53534	54531	53533	54534	

# SPIRAL WOUND CYLINDER BRUSHES

Spiral Wound Cylinder Brushes are used for cleaning, scrubbing and dusting wherever a wide, continuous face brush is required. Brushes are usually custom made to meet customer's requirements. See page 45 for ordering and quoting specifications. Cylinder Brushes are constructed of continuous Strip Brushes filled with natural, synthetic filaments or wire. Right or left hand wound. Single or double flute.

### **GENERAL SPECIFICATIONS**

### **RANGE OF SIZES**

Brush Diameters	1-1/8" to 24"
Inside Diameters	1/2" and larger
Brush Face (Length)	up to 220"

### **OPEN OR CLOSE WOUND DENSITY**

Density	No. 5 Channel	No. 7 & 8 Channels
Maximum (Heavy)	54 coils per ft.	39 coils per ft.
Medium	27 coils per ft.	20 coils per ft.
Light	18 coils per ft.	13 coils per ft.

### **MOUNTING METHODS**



### **UNMOUNTED REFILL**

Loose wound coils can be shipped to customers for mounting on their cores or shafts.



# WOUND ON THROW-AWAY HUB, SHAFT OR TUBE

Assembled by Spiral's experts & trimmed to your specifications.

### **DYNAMIC BALANCING**

Brushes wound on cores can be dynamically balanced. When ordering, specify the maximum RPM used when the brush is operating.

### **GROUND FACE**

All Wire Brushes can be supplied with a precision ground face when very exact brush face tolerances are required.



### **FILL MATERIALS**

Tampico, fiber mixtures, horsehair, synthetic, synthetic mixtures, wire & synthetic mixtures, abrasive nylon, carbon steel, stainless steel, brass, bronze, aluminum, nickel silver wires and other special order materials.

### FACTORY MOUNTED ON CUSTOMER'S CORE OR SHAFT

Cylinder Brushes can be wound directly on customer's core or shaft and dynamically balanced, if required.

### **TO ORDER**

For a quick quote or to reserve a position in our production schedule, call, fax, or email with the following information: (See page 45 for ordering & quoting.)

- Brush diameter, fill type and size
- Core diameter
- Brush face (length)
- Close wound (maximum density) or open wound, specify spacing between coil centers.

### CRATING

Brushes returned for refilling should be in a strong crate, large enough to hold the refilled brush and to save the extra cost of recrating.



### **RETRIMMING SERVICE**

Brushes that become grooved, or are worn unevenly, can usually be retrimmed to give many additional hours of service.



### **CORE & SHAFT FABRICATION**

Spiral Brushes, Inc. offers a complete service. In addition to supplying the brush, we have the facility to fabricate cores and shafts, as well as making any repairs or modifications that are required.

# SPIRAL WOUND CYLINDER BRUSHES

### **STANDARD SIZES**

Spiral Wound Cylinder Brushes are filled with synthetic filaments, steel & nonferrous wires, horsehair, abrasive filaments or vegetable fibers. They are available either as unmounted refills

wound on disposable steel tubing or solid shafting, or they are wound directly on a special arbor. Brushes wound on disposable steel tubing can be bushed at each end to fit the customer's permanent shaft.

# INFORMATION NEEDED WHEN ORDERING

- 1. Catalog number
- 2. Length of brush face
- 3. Type and size of filament or wire
- 4. Close wound or pitch between spirals
- 5. Mounting instructions if required

### **SMALL DIAMETER WINDINGS –** SYNTHETIC, HORSEHAIR, TAMPICO AND SMALL DIAMETER WIRES

	Brush Catalog Number										
Brush Diam.	No. 5 Channel								No. 7 C	No. 7 Channel	
Drush Diam.	Filament Length	1/2" I.D.	Filament Length	5/8" I.D.	Filament Length	3/4" I.D.	Filament Length	7/8" I.D.	Filament Length	1" I.D.	
1-5/8"	5/16"	12601	-	-	-	-	-	-	-	-	
1-3/4"	3/8"	12602	5/16"	12612	1/4"	12622	-	-	-	-	
2"	1/2"	12603	7/17"	12613	3/8"	12623	5/16"	12632	-	-	
2-1/4"	5/8"	12604	9/16"	12614	1/2"	12624	7/16"	12633	-	-	
2-1/2"	3/4"	12605	11/16"	12615	5/8"	12625	9/16"	12634	7/16"	12641	
2-3/4"	7/8"	12606	13/16"	12616	3/4"	12626	11/16"	12635	9/16"	12642	
3"	1"	12607	15/16"	12617	7/8"	12627	13/16"	12636	11/16"	12643	
3-1/4"	1-1/8"	12608	1-1/16"	12618	1"	12628	15/16"	12637	13/16"	12644	
3-1/2"	1-1/4"	12609	1-3/16"	12619	1-1/8"	12629	1-1/16"	12638	15/16"	12645	
3-3/4"	1-3/8"	12610	1-5/16"	12620	1-1/4"	12630	1-3/16"	12639	1-1/16"	12646	
4"	1-1/2"	12611	1-7/16"	12621	1-3/8"	12631	1-5/16"	12640	1-3/16"	12647	

Mounting on Tubing or Shaft

### MEDIUM AND LARGE DIAMETER WINDINGS - ALL FILAMENTS AND WIRE

		Brush Catalog Number										
Brush Diam.					No. 7 Channel							
Brash Blam.	Filament Length	1-1/4" I.D.	Filament Length	1-5/8" I.D.	Filament Length	2" I.D.	Filament Length	3" I.D.	Filament Length	4" I.D.	Filament Length	6" I.D.
4"	1-1/16"	12703	1"	12715	-	-	-	-	-	-	-	-
4-1/4"	1-3/16"	12704	1-1/8"	12716	-	-	-	-	-	-	-	-
4-1/2"	1-5/16"	12705	1-1/4"	12717	15/16"	12728	-	-	-	-	-	-
4-3/4"	1-7/16"	12706	1-3/8"	12718	1-1/16"	12729	-	-	-	-	-	-
5"	1-9/16"	12707	1-1/2"	12719	1-3/16"	12730	-	-	-	-	-	-
5-1/2"	1-13/16"	12708	1-3/4"	12720	1-7/16"	12731	15/16"	12740	-	-	-	-
6"	2-1/16"	12709	2"	12721	1-11/16"	12732	1-3/16"	12741	-	-	-	-
6-1/2"	2-5/16"	12710	2-1/4"	12722	1-15/16"	12733	1-7/16"	12742	15/16"	12752	-	-
7"	2-9/16"	12711	2-1/2"	12723	2-3/16"	12734	1-11/16"	12743	1-3/16"	12753	-	-
7-1/2"	2-13/16"	12712	2-3/4"	12724	2-7/16"	12735	1-15/16"	12744	1-7/16"	12754	-	-
8"	3-1/16"	12713	3"	12725	2-11/16"	12736	2-3/16"	12745	1-11/16"	12755	-	-
9"	-	-	3-1/2"	12726	3-3/16"	12737	2-11/16"	12746	2-3/16"	12756	1-3/16"	12762
10"	-	-	-	-	-	-	3-3/16"	12747	2-11/16"	12757	1-11/16"	12763
12"	-	-	-	-	-	-	4-3/16"	12748	3-11/16"	12758	2-11/16"	12764

# STANDARD DISPOSABLE TUBING - OTHER SIZES AVAILABLE

Outside Diam.	lnside Diam.	Outside Diam.	Inside Diam.
1/2"	7/16"	1-5/8"	1-1/2"
5/8"	9/16"	2"	1-7/8"
3/4"	11/16"	2-1/8"	2"
7/8"	13/16"	3"	2-7/8"
1"	15/16"	4"	3-7/8"
1-1/4"	1-1/8"	6"	5-7/8"

### ALLIGATOR CLIPS

### Use on #7 channel and #8 channel only.

Spiral refills can be supplied with Alligator Clips that have tabs at each end to be attached to customer's mandrel.





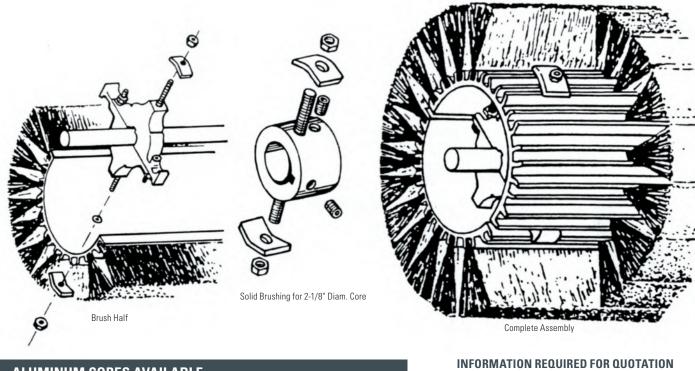


- Disposable arbor saves cost of shipping the arbor for rebristling.
- Standby and replacement brushes can be stocked at lowest possible cost.

L.H. Tang No. 12769 Straight Tang No. 12768 R.H. Tang No. 12770 •

# **SPLIT-CORE CYLINDER BRUSHES**

Split-Core Cylinder Brushes are Strip Brushes mounted in a throwaway extruded aluminum core. Used for light duty brushing in restricted spaces. The maximum operating speed is 500 RPM.



ALUMINUM CORES AVAILABLE						
Core Diam.	Maximum Arbor Hole	Maximum Number of Strips	Alternate Strip Combinations			
2-1/8"	1-11/16"	16	4 or 8			
5"	2-3/8"	20	5 or 10			
5"	2-3/8"	36	9, 12, or 18			
9"	1-1/2"	32	8 or 16			
12"	2-3/4"	48	12, 16, or 24			

Cores can be filled with synthetic filaments, Tampico and small to medium size wires. Fill density can be changed by alternating strips.

- Brush diameter 1
- 2. Brush length
- 3. Core diameter
- 4 Number of Strip Brushes
- Fill material 5.
- Arbor hole size (shaft diameter) and 6 keyway size, if required.

# **INVERTED COIL & DISC BRUSHES**

Brushes for cleaning exterior surfaces of non-revolving objects or for a brush seal around a shaft or tube. Spiral makes Inverted Coil or Disc Brushes that have nylon filaments or abrasive nylon filaments facing towards the center.





Inverted Disc

### **DIMENSIONAL LIMITATIONS**

Nylon Fill - 1-5/8" minimum outside diameter.

Size of Filament – Depends upon outside diameter of brush, trim length and brush face that is approximately .032" maximum filament diameter.

Inverted Coil

# CYLINDER BRUSH SPECIFICATIONS FOR ORDERING AND QUOTATION

### **LAYOUT SHEET**

### **BRUSH APPLICATION**

DRUGHTATTEICATION	COSTONIEN INTONIA
□ Dry □ Wet	Name
Operating temperature degrees Fahrenheit	Company
MOUNTING	Phone
$\Box$ Unmounted refill - $\Box$ Alligator Mounting Clips attached at each end	Email
□ Wound on customers core or shaft	
🗆 Wound shafting - 🛛 Carbon Steel 🖓 Stainless	ADDITIONAL INFOR Fill Material
🗆 Wound on" O.D. x" I.D 🛛 Tubing 🛛 Carbon Steel 🔅 Stainless	
□ Wound on heavy wall refillable core " diameter	Diameter
□ Wound on disposable core " diameter	Crimp
□ Spiral wound conveyor cleaning brush	Color
□ Close Wound □ Open Wound " lead between spiral centers	SPECIAL INSTRUCT
□ Right Hand Wound □ Left Hand Wound	
DENSITY	
□ Heavy □ Medium □ Light	

### PLEASE FILL IN THE APPLICABLE DIMENSIONS

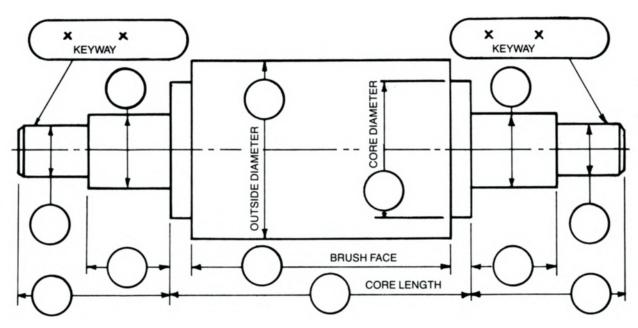
### **CUSTOMER INFORMATION**

Jame
Company
hone
mail

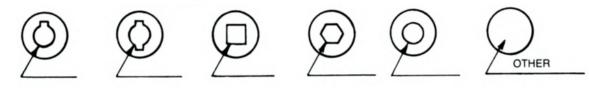
### MATION

Fill Material
Diameter
Crimp
Color

### IONS



### INDICATE THE ARBOR HOLE AND KEYWAY DIMENSIONS



1355 Commerce Drive Stow, Ohio 44224

Toll Free: 1-800-888-2861 Phone: 330-686-2861

Fax: 330-686-9436 Email: sales@spiralbrushes.com

# **CONVEYOR BELT CLEANING BRUSHES**

Since 1939, our engineers have been solving conveyor belt cleaning problems. Our experienced staff is available to help in selecting the proper, most cost efficient brush to use in conveyor belt cleaning.

### **CLEAN CONVEYOR BELTS SAVE MONEY!**

- Longer life for belt, idler roll and pulley
- Less down time and cleanup expense
- Increases production and improves product quality

We manufacture a complete line of Conveyor Belt Cleaning Brushes used for cleaning rubberized, fabric, stainless steel, roller, slat and rod conveyors.

### **SPIRAL WOUND STYLE**

Spiral Wound Brushes are custom fabricated for each application:

- High speed, continuous brushing action
- Dusting fine materials from belting
- Cleaning stainless steel belts
- Carrying loose material off to one side or both sides



Open lead to carry loose material to right or left side. 1" to 3" is the most efficient.



Half of the brush is to the left and half is to the right. Open lead to carry loose material to both sides.

### **BRUSH STYLES**

### SPIRAL WOUND

Brushes are fabricated by spirally winding a continuous metal channel Strip Brushes around a metal core or shaft. Brushes can also be supplied as refills to slip over customer's core or shaft.

### PADDLE WHEEL

Strip Brushess are attached to a metal core or shaft, either straight across or in a helical pattern.

### SCRAPER

Stationary metal backed strips that are filled with synthetic or wire bristles, rubber or leather. Scrapers are used in restricted areas or where a power source is not available.

### **INFORMATION REQUIRED FOR QUOTATION:**

- 1. Brush diameter
- 2. Brush part length
- 3. Specify close wound (maximum density) or pitch between coils
- 4. Shaft or core description and dimensions

To order or request a quotation, use dimensional information sheet, page 45.



Solid Fill Brush for installation at the unloading end of a conveyor belt, without core or shaft.

### GUIDE TO THE SELECTION OF SPIRAL WOUND, CONVEYOR BELT CLEANING BRUSHES

Brush Diam.	Core Diam.	Trim Length	Light (Dusting) Filament	Medium Stiffness Filament	Stiff Filament	Extra Stiff Filament
4"	1"	1-3/16"	.008" to .010"	.012" to .014"	.016"	.020"
6"	2"	1-1/2"	.010" to .012"	.016" to .018"	.028"	.032"
8"	3"	2"	.012" to .014"	.018" to .020"	.028" to .030"	.040"
10"	4"	2-3/8"	.012" to .014"	.018" to .020"	.028" to .040"	.060"
12"	6"	2-3/8"	.012" to .014"	.018" to .020"	.028" to .040"	.060"

### **STAINLESS CONVEYOR BELTS**

To keep a fine satin finish, use .005" to .006" type 304 stainless wire with at least a 2" trim length. Where the finish of the belt is not critical, such as on a bakery oven, use .008" to .010" stainless wire.

# **CONVEYOR BELT CLEANING BRUSHES**

Spiral Conveyor Cleaning Brushes prevent the carryover of materials that stick to rubber and fabric conveyor belts and prevent loading up on the belt, idlers, rolls and pulleys.

### PADDLE WHEEL STYLE

The Paddle Wheel Brush must be installed for brush wear adjustment.

### **BRUSH ROTATIONAL SPEEDS**

Brush should have a surface speed of twice the belt speed. With wet and tacky materials the surface speed should be three times the belt speed, in the opposite direction of belt travel.

600 RPM is the Maximum Safe Free Speed.

### **POSITIONING OF BRUSH**

Brush should be installed at the unloading end of the conveyor belt, close to the drive roll and ahead of the takeup roll. Brush rotation should be opposite to the travel of the belt. Brush drive should be wired to start and stop with the conveyor belt.

### STANDARD SIZES

Self-cleaning strips assure constant contact between brush and belt. Worn Strip Brushes can be replaced in heavy duty stainless cores. Brushes can be ganged to clean wider faced conveyor belts. Fill with polypropylene filament or .008" stainless when temperatures exceed 200°F. Available in 11" and 6" diameters and in 16", 18" and 24" face widths. Other sizes and fill materials are available.

11" OUTER DIAMETER - PADDLE WHEEL STYLE REFILLABLE								
Brush Face	Brush Face Brush Catalog Number & Degree of Stiffness							
Width	Medium .016"	Stiff .028"	Extra Stiff .040"	Stainless Steel .008"				
	Complete Core and Brushes							
16"	1551*	1554*	1557*	1560*				
18"	1552*	1555*	1558*	1561*				
24"	1553*	1556*	1559*	1562*				
	Set of 10 Replacement Strip Brushes							
16"	16510	16513	16516	16519				
18"	16511	16514	16517	16520				
24"	16512	16515	16518	16521				

Approx. 2-11/16" Overall strip height

*Specify last digit when ordering: (2 @ 180°)						
Arbor Hole Size	1-7/16"	1-1/2"	1-15/16"	2"	3"	
Keyway Size	3/8" x 3/16"	3/8" x 3/16"	1/2" x 1/4"	1/2" x 1/4"	3/4" x 3/8"	
Last Digit	1	2	3	4	5	

6" OUTER DI	AMETER - PADDL	E WHEEL STYLE RE	FILLABLE CONVEYOR	R CLEANING BRUSH			
Brush Face	В	Brush Catalog Number & Degree of Stiffness					
Width	Medium .016"	Stiff .028"	Extra Stiff .040"	Stainless Steel .008"			
	Co	mplete Core and B	rushes				
16"	1571*	1574*	1577*	1580*			
18"	1572*	1575*	1578*	1581*			
24"	1573*	1576*	1579*	1582*			
	Set of	9 Replacement Str	ip Brushes				
16"	16531	16534	16537	16540			
18"	16532	16535	16538	16541			
24"	16533	16536	16539	16542			
Approx. 1-7/8" Ove	erall strip height						

*Specify last digit when ordering: (2 @ 180°)						
Arbor Hole Size 1-1/4" 1-1/2						
Keyway Size	1/4" x 1/8"	3/8" x 3/16"				
Last Digit	7	8				

### WIRE SCRATCH BRUSHES STANDARD PACKAGE 12

General purpose cleaning tools, filled with high quality wire securely stapled into smoothly sanded hardwood or wood grain molded plastic blocks.

### **CURVED HANDLE**

Block Size Block Material		Tuft Rows	Trim Length	Wire Size	Brush Catalog Numbers					
DIOCK SIZE	DIUCKIVIALEITAI	Turt nows	I i i i Lengtri	Thin Length Whe Size	Steel Wire	Stainless Wire	Other Wire			
Curved Handle - General purpose brush for dirt, paint and rust removal										
14" x 3/4"	Wood	2 x 19	1-3/16"	.0118"	10021	10026	-			
14" x 1"	Wood	3 x 19	1-3/16"	.0118"	10024	10027	10039 Brass			
14" x 1"	Wood	3 x 19	1-3/16"	.0118"	-	-	10040 Bronze			
14" x 1"	Plastic	3 x 19	1-1/8"	.0118"	10072	SSB0035	-			
14" x 1-1/8"	Wood	4 x 18	1-1/8"	.0118"	10025	10028	-			
		Curved H	andle - With scraper	attached, minimum o	rder of 144					
14" x 1"	Wood	3 x 19	1-3/16"	.0118"	10029	-	-			
14" x 1-1/8"	Wood	4 x 18	1-3/16"	.0118"	10030	-	-			





Curved Handle 10024







SCRAPER TY	SCRAPER TYPE - A WIDER FACED BRUSH WITH SCRAPER FOR TOUGH JOBS										
Block Size	Block Material	Tuft Rows	Trim Longth	Wire Size	Br	Brush Catalog Numbers					
DIUCK SIZE	DIUCKIVIALEITAI	Turi nows	Trim Length Wire Size		Steel Wire	Stainless Wire	Other Wire				
11-1/2" x 1-1/2"	Wood	4 x 11	1-5/8"	.016"	10051	-	-				



# FINE WIRE, HAND SCRATCH BRUSHES

For use by electronics, aircraft and missile industries to clean soldered contacts and welds. Made of hardwood blocks.

WELDER - STANDARD PACKAGE 36	
------------------------------	--

Block Size	Block Material	Tuft Rows	Trim Longth	Mire Size	Brus	sh Catalog Num	bers
DIUCK SIZE	DIUCK WALEFIAI	Turrnows	Trim Length Wire	Wire Size	Stainless Wire	Brass Wire	Nylon
7-7/8" x 1/2"	Wood	3 x 7	1/2"	.006"	11005	11007	11009
7-1/2" x 1/2"	Plastic	3 x 7	1/2"	.006"	11006	11008	11010

### **STOVE & APPLIANCE - STANDARD PACKAGE 36**

Block Size	Block Material	Tuft Rows	Trim Longth	Wiro Sizo	Bru	sh Catalog Num	bers
DIUCK SIZE	DIOCKIVIALEITAI	Turrnows	Trim Length Wire Size	Stainless Wire	Brass Wire	Nylon	
8-5/8" x 1/2"	Wood	2 x 9	11/16"	.006"	11012	11013	-

Block Size	Block Material	Tuft Rows	Trim Longth	Wire Size	Bru	sh Catalog Num	bers
DIUCK SIZE	DIUCK Waterial	Turt nows	Trim Length	Wire Size	Stainless Wire	Brass Wire	Nylon
4-3/4" x 1"	Wood	2 x 6	1/2"	.0055"	11015	11016	11017

### PLATER'S BRUSHES - STANDARD PACKAGE 12, 5 1/2" BRUSH PART LENGTH, 1" TRIM LENGTH

Fill Material	Rows Wide	Curved Ha	andle Style	Shoe Handle Size		
	nows while	Block Size	Brush Catalog No.	Block Size	Brush Catalog No.	
.005" Steel	3	13" x 7/8"	12200	10" x 7/8"	12212	
.005" Steel	4	13" x 1-1/8"	12201	10" x 1-1/8"	12213	
.005" Stainless	3	13" x 7/8"	12202	10" x 7/8"	12214	
.005" Stainless	4	13" x 1-1/8"	12203	10" x 1-1/8"	12215	
.005" Brass	3	13" x 7/8"	12204	10" x 7/8"	12216	
.005" Brass	4	13" x 1-1/8"	12205	10" x 1-1/8"	12217	
Nylon	4	13" x 1-1/8"	12207	10" x 1-1/8"	12219	
Bristle	4	13" x 1-1/8"	12209	10" x 1-1/8"	12222	
Tampico	4	13" x 1-1/4"	12211	10" x 1-1/8"	12223	

### CHANNEL STYLE SCRATCH BRUSHES - STANDARD PACKAGE 12, 7" BRUSH PART, 12" OVERALL LENGTH, 1" TRIM LENGTH

Handle	Brush Catalog Numbers									
папше	.010" Steel Wire	.010" Stainless Wire	.010" Brass Wire	.010" Bronze Wire	Nylon	Horsehair				
Straight	10350	10352	10354	10356	10358	10360				
Bent	10351	10353	10355	10357	10359	10361				

### TOOTHBRUSH STYLE - STANDARD PACKAGE 12 , 1-1/4" BRUSH PART, 1/4" TRIM LENGTH, 5-1/2" OVERALL LENGTH

llandla	Brush Catalog Numbers									
Handle .01	.010" Steel Wire	.010" Stainless Wire	.010" Brass Wire	.010" Bronze Wire	Nylon					
	Straight Handle									
Steel	10003	10004	10005	10006	10007					
Brass	-	-	10008	10009	-					
	25° Bent Handle									
Steel	10012	10013	10014	10016	10018					
Brass	-	-	10015	10017	-					

ACID SV	ACID SWAB BRUSHES - STANDARD PACKAGE 144, STIFF HORSEHAIR FILL								
Handle	Brush Width	Trim Length	Overall Length	Tube Diameter	Brush				
Tin	3/8"	25/32"	6-1/32"	1/4"					

Handle	Brush Width	Trim Length	Overall Length	Tube Diameter	Brush Catalog Nos.
Tin	3/8"	25/32"	6-1/32"	1/4"	11131
Tin	1/2"	13/16"	6-1/16"	5/16"	11132
Tin	9/16"	7/8"	6-1/8"	3/8"	11133
Tin	3/4"	1-1/4"	6-3/8"	1/2"	11137

DOPE BRUSHES - STANDARD PACKAGE 72							
Handle	Brush Width	Trim Length	Overall Length	Tube Diameter	Brush Catalog Nos.		
Wood	3/4"	1-1/8"	7"	1/2"	11135		





Welder-Wood 11005

addrew 1

Stove & Appliance 11012



Upright 11015





Curved Handle Platers 12201



Dope Brush 11135

# FACTORY UTILITY BRUSHES

**STANDARD PACKAGE 12** 

PARTS CLEANING BRUSHES						
Trim Length	Trim Diame	Diameter	Brush Size	Brush Catalog Numbers		
IIIIII Leiigiii		Diameter	Drush Size	Tampico	Nylon	
2-7/8"	Square	1"	#8	11105	11110	
2-7/8"	Dome	1-1/2"	#10	11106	11112	



### OIL & CHIP BRUSHES - PURE WHITE BRISTLE, WOOD HANDLE

Thickness	Bristle Length	Std. Package	Width	Brush Catalog Nos.
1/4"	1-1/2"	36	1/2"	11115
5/16"	1-5/8"	24	1"	11116
5/16"	1-5/8"	24	1-1/2"	11117
5/16"	1-5/8"	24	2"	11118
3/8"	1-3/4"	12	2-1/2"	11119
3/8"	1-3/4"	12	3"	11120
11/16"	2-1/4"	12	4"	11121



### **SCRUB BRUSHES STANDARD PACKAGE 12**

### HAND SCRUB BRUSHES

Style	Block Size	Trim Length	Brush Catalog Numbers			
Style	BIOCK SIZE	iiiii Leiigiii	Tampico	Palmyra		
Square End	6-1/2" x 2-5/8"	1-1/8"	10101	-		
Square End	8" x 2-3/4"	1-1/8"	10104	10105		
Groove Sides Pointed End	9" x 2-1/2"	11/16"	10107	-		
Nail & Hand Brush	5" x 1-1/2"	3/4"	10108	-		



Square End Scrub 10104



Pointed End 10107



Nail & Hand Brush 10108

### **COUNTER & BENCH DUSTERS STANDARD PACKAGE 12**

Staple-set construction in a shaped hardwood back with a beaver tail style handle. Lacquer coated. Handy hanging hole.

MEDIUM DUTY COUNTER DUSTERS							
Handle Style	Length of Block	Fill Material	Trim Length	Catalog No.			
Wood	8"	Synthetic	2-1/2"	11074			
Wood	9"	Synthetic	2-1/2"	11075			



# AUTOMOTIVE BRUSHES

STANDARD PACKAGE 12

Handle Style	Fill Material	Diameter	Brush Part	Overall Length	Catalog Nos.
Wood	Plastic	2-1/8"	8-1/2"	13-1/2"	11060
Wood	White Tampico	4"	10"	15-1/2"	11061

Spoke Brush 11060



### WHITE SIDEWALL TIRE & GRILL BRUSHES - 5/8" TRIM LENGTH

Handle Style	Fill Material	Block Size	Brush Face	Catalog Nos.
Plastic	.008" Brass	8-3/8" x 2-1/2"	2" x 2-1/2"	11063
Wood	.008" Brass	8-3/4" x 2-1/2"	2-1/4" x 3"	11064



Tire & Grill 11063



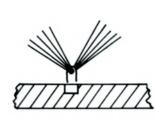
# UPRIGHT FACTORY & WAREHOUSE BROOMS

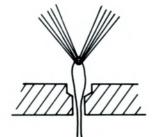
UPRIGHT FACTORY & WAREHOUSE BROOMS							
Brush Catalog Nos.	Fill Material	Type Of Sweeping					
10931	Corn	Smooth Floors					



Corn Broom 10931

# CUSTOM STAPLE SET & WIRE DRAWN BRUSHES Where special configurations are required, Spiral Brushes can staple set or hand draw tufts to meet customer's designs.





holes that are drilled in wood,

metal or plastic backing.

**WIRE DRAWN** Brush Tufts are hand drawn into

Brush Tufts are held in holes drilled in seasoned hardwood backing blocks and held in place by a metal staple.

**STAPLE SET** 

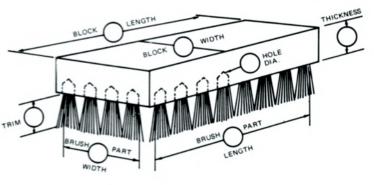


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**SPECIFICATIONS FOR ORDERING/QUOTING** 



ADDITIONAL INFORMATION	DENSITY	SPECIAL INSTRUCTIONS
Fill Material	🗆 Heavy	
Diameter	□ Medium	
Crimp	□ Light	
Color		



Name	
Company	
Phone	
Email	

spiralbrushes.com Scratch and Mainter	nance Brushes
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Toll Free: 1-800-888-2861 Phone: 330-686-2861

Fax: 330-686-9436 Email: sales@spiralbrushes.com

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