



POWER BRUSHES

CHOOSE QUALITY

Weiler's Design Engineering and Product Development teams work together continuously improving and expanding our power brush line in order to provide the most cost-effective solutions to surface conditioning problems. This dedication to design excellence has resulted in performance-engineered power brushes that solve a variety of problems in multiple industries.

The quality of our power brush construction ensures a long product life and superior performance – and that results in your lowest cost-per-finished piece.

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SOLUTIONS SHOWCASE

TUBE END DEBURRING

Problem: Structural tubing is fabricated into an abundance of different forms. In order to facilitate safer handling and proper fit, the ends of the tubing must frequently be deburred.

Solution: Wide face crimped wire wheel brushes are an extremely effective solution for tube end deburring. Brushes can deburr the OD and ID of tubing at an extremely high rate and produce a media-cost-per-part of considerably less than \$0.01 per part.



GEAR DEBURRING

Problem: Power transmission components like gears cannot function properly when burrs prevent correct engagement. Further, burrs that become detached from gears can become lodged in critical transmission components causing premature wear and potential failure.

Solution: Knot wire wheel brushes with surface speed in excess of 6,000 SFPM are an excellent solution for deburring gears prior to heat treatment. The high energy filament tips are able to separate burrs from base material and produce a uniform edge break, which protects the edge of the gear.



Photos courtesy of On-Line Services.

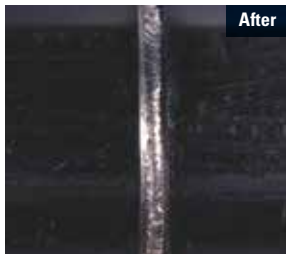
REMOVAL OF MILL SCALE

Problem: Mill processing of steel often involves heat treating and oil quenching operations that produce an adherent scale, which must be removed prior to joining or finishing operations.

Solution: Wire brushes are capable of quickly cleaning material to white metal and producing varying degrees of surface roughening to promote adhesion. Brushing operations are often preferred over blasting and chemical processes that generate an expensive waste stream and can be costly to operate and maintain.



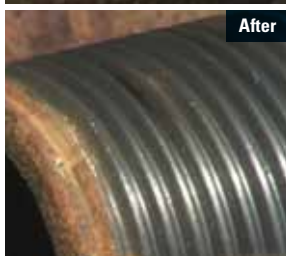
INTER-PASS PIPELINE WELD CLEANING



Problem: To prevent voids and inclusions when welding multi-pass joints, the surface of each bead must be completely cleaned of slag and other residuals. Performing inter-pass weld cleaning as quickly and as thoroughly as possible is critical to avoiding costly repair work and delays.

Solution: Weiler's Roughneck® and Dually® stringer bead wheels have been engineered to maximize efficiency and minimize costs and are the preferred choice of welders' helpers on the pipeline. From hot pass to cap pass, these premium weld cleaning brushes excel at quickly and thoroughly removing slag, spatter, and oxidation without damaging the filler material.

CLEANING THREADED CONNECTIONS



Problem: The box ends of drill string and other oilfield tubular goods are examples of connections that must be periodically cleaned without altering the geometry of the threads. Abrasive products all remove base material to some extent and are capable of damaging threads, resulting in unreliable connections and the risk of potential failures.

Solution: The conformability and impact action of small diameter crimped wire wheels make them ideal tools for cleaning threads without fear of damage. When used on a high-speed die grinder, these radial wheel brushes quickly remove residual dope as well as rust, corrosion and scale from male or female thread ends.

REMOVAL OF EXCESS MOLDED RUBBER



Problem: Mechanical rubber components such as motor mounts are produced through a process that commonly leaves flash and excess rubber on critical surfaces. In order for the component to function properly, this unwanted material must be removed.

Solution: The non-loading nature of wire brushes makes them the best available solution in the marketplace for removal of rubber from targeted surfaces. This solution can be implemented off-hand or using automated equipment.

SELECTING THE RIGHT BRUSH

SELECTION BY TOOL

	Crimped Wheels	Knot Wheels	Crimped Cups	Knot Cups	Crimped Stem-Mtd. Wheels	Knot Stem-Mtd. Wheels	Crimped Stem-Mtd. End	Knot Stem-Mtd. End	Encapsulated Brushes	Power & Hand Tube Brushes	Mini Brushes
Right Angle Grinder	✓	✓	✓	✓					✓		
Straight Grinder	✓	✓			✓	✓	✓	✓	✓		
Die Grinder	✓	✓			✓	✓	✓	✓	✓		
Corded/Cordless Hand Drill					✓	✓	✓	✓		✓	
High Speed Pencil Grinder											✓
Bench/Pedestal Grinder	✓	✓							✓		
Drill Press					✓	✓	✓	✓		✓	
CNC/Milling/Automatic Machine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

WIRE SIZE

To maximize brush life and reduce costs, always use the finest wire that will accomplish the job without requiring excessive applied pressure or engagement with the brush face.

Wire	Coarse		Medium to Coarse		Medium		Fine		Very Fine	
Gauge #	20	24	25	30	33	34	35	38	43	47
Dia. in Inches	.035	.023	.020	.014	.0118	.0104	.0095	.008	.006	.005
Dia. in Millimeters	0,89	0,58	0,51	0,36	0,30	0,26	0,24	0,20	0,15	0,13

Wire sizes in decimals of an inch are shown in all tables throughout this catalog. American Steel Wire Equivalent Gauge (Formerly Washburn & Moen)

LARGE DIAMETER WIRE

- Aggressive brushing action
- Fatigues and breaks more quickly

SMALL DIAMETER WIRE

- Resists fatigue and breakage
- Less aggressive
- Flexible brushing action

CRIMPED VS. KNOT WIRE

CRIMPED WIRE BRUSHES:



- Wire is crimped to allow individual filaments to support each other.
- Provide flexibility for light/medium duty applications.
- Use on parts that could be damaged by the impact of a knot brush.
- Use for a broad range of applications.

KNOT WIRE BRUSHES:



- Straight wire filaments that are twisted as a single unit like a piece of cable or wire rope.
- Provide less flexibility and more aggressive brushing action in heavy-duty applications.
- Use on parts requiring high-impact action.
- Use to remove large burrs and heavy contamination, such as multiple layers of rust, scale, paint or oxides.

KNOT TWIST CONFIGURATIONS



STANDARD

Provides some flexibility for use on irregular surfaces. Sharp wire tips make this knot aggressive right from the start.



HURRICANE®

Provides smoother operation but sacrifices much of the cleaning action.



CABLE

Provides very aggressive brushing action. Sharp wire tips make this knot aggressive right from the start.



STRINGER BEAD

High-impact action, primarily for weld cleaning. Sharp wire tips make this knot aggressive right from the start.

TRIM LENGTH & FILL DENSITY

To maximize brush life and reduce costs, always use the shortest trim, highest density brush that will adequately conform to the surface or part edges.

LONG TRIM, LOW DENSITY BRUSHES

- Flexibility that is ideal for applications such as cleaning surfaces that are somewhat irregular
- Lower fill density can result in shorter brush life and less consistent performance in production environments.

SHORT TRIM, HIGH DENSITY BRUSHES

- Less flexible and faster action requires less applied pressure
- Consistent performance and longer life



POLYFLEX® ENCAPSULATED

These brushes are suitable for extremely demanding applications that do not require a high degree of conformability. They are especially well-suited for users with the following types of requirements:

Extreme brushing pressure - Encapsulation protects wires from over-flexing and extends brush life relative to conventional knot and crimped wire brushes.

Severe cleaning operations - Encapsulation holds the wire tips rigidly in place and creates the most aggressive brushing action that can be achieved with a wire brush.

BURGUNDY (STANDARD)



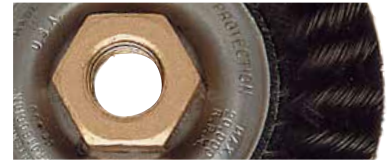
General purpose elastomer; suitable for most manufacturing applications.

ORANGE (HEAVY-DUTY)



A more heavy-duty elastomer than burgundy; used for more demanding applications.

BLACK (EXTRA HEAVY-DUTY)



A heat stabilized elastomer that does not wear easily; used primarily for cleaning welds.

ARBOR HOLE VARIATIONS

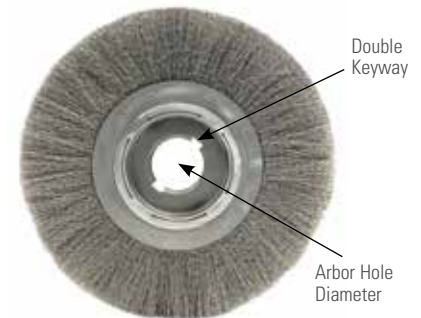
FOR WEILER PERFORMANCE LINE WHEELS

If an arbor hole size other than the size listed in the product table is required, change the last digit of the Item Number as indicated in the Table.

Arbor Hole Diameter	Arbor Hole Features	Change Last Digit of Item # To:
1/2"-3/8"	Plastic Snap-Out Adapter	4
5/8"-1/2"	Plastic Snap-Out Adapter	5
5/8"-11 UNC	Threaded Nut (6", 7" & 8" Wheels Only)	6
5/8"	3", 4" & 6" Wheels Only	7
3/4"	—	8
7/8"	—	0 - 11
1"	1/4"*x 1/8"+ double keyway	0 - 12
1-1/4"	5/16"*x 5/32"+ double keyway	9
1-1/2"	3/8"*x 3/16"+ double keyway	0 - 13
1-3/4"	3/8"*x 3/16"+ double keyway	0 - 16
2"	1/2"*x 1/4"+ double keyway	0 - 14
2-1/4"	3/4"*x 3/8"+ double keyway	0 - 17
2-1/2"	1/2"*x 1/4"+ double keyway	0 - 15

* Width of keyway

+ Depth of keyway



Example: Item Number 01228 has a listed, standard size arbor hole of 3/4". If an 1-1/4" arbor hole is desired, drop the 8 from 01228 and add 9. The Item Number becomes 01229. If a 2" arbor hole is desired, drop the 8 from 01228 and add 0-14. The Item Number becomes 01220-14.

PRODUCT ADVANTAGES

PRODUCT LINE STRUCTURE

P PERFORMANCE LINE (INDUSTRIAL GRADE)

Engineered and manufactured to maximize performance and minimize operating costs in the most demanding surface conditioning applications. The use of superior construction, the highest quality materials and the most stringent manufacturing processes deliver the lowest cost-of-use and most consistent performance in heavy production

V VALUE LINE (PROFESSIONAL GRADE)

Weiler's value line is manufactured using similar product construction and the same exacting standards as other Weiler power brushes, but engineered to provide cost-effective use in less demanding environments. Vortec Pro® brushes are an economical choice for the construction trades, low volume production shops and light duty industrial MRO use.

OPERATIONAL ADVANTAGES

POWER BRUSHES DO NOT REMOVE BASE MATERIAL

- The impact action of the wire tips of a rotating brush behave in the same manner as the media in a blasting operation and they have the same ability to separate surface contaminants without damaging the substrate.
- Due to its compliant nature, a power brush is the ideal tool for removing burrs and blending sharp edges without changing overall part dimensions after sawing, cutting, grinding and machining operations.

Grinding Wheel



Wire Wheel



POWER BRUSHES DO NOT LOAD

Unlike bonded, coated and non-woven abrasive products, power brushes will not load when used on softer materials or when removing paint or similar coatings from a harder surface. Because a power brush consists of a collection of individual wire filaments, there is no place for debris to accumulate and prevent the sharp wire tips from striking the work.

Resin Fiber Disc



Wheel Brush



POWER BRUSHES ARE SELF-SHARPENING

As a power brush is used, the wire tips will naturally tend to wear to a point due to contact with the working surface. It is possible to take advantage of this self-sharpening action by periodically switching the mounting position of wheel brushes to maintain their speed and effectiveness.

WEILER SUPERIOR CONSTRUCTION



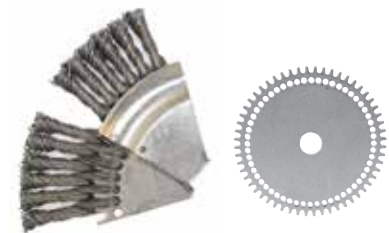
WEILER'S SOLID RING CONSTRUCTION

Our crimped wire brushes are constructed using solid rings to retain the fill material and our manufacturing process results in an even, consistent distribution of wire strands around the entire brush diameter. This ensures that our crimped wire products run smoother and last longer than the competition – even in the toughest applications.



WEILER'S INDIVIDUAL KNOT HOLE CONSTRUCTION

Weiler's knot wheels are constructed with an internal steel plate that has equally spaced individual holes around the perimeter. Wire is inserted through each hole and twisted into a knot. Each hole has precisely the same wire count, thereby assuring perfect balance. This eliminates vibration, reduces operator fatigue and increases brush life.

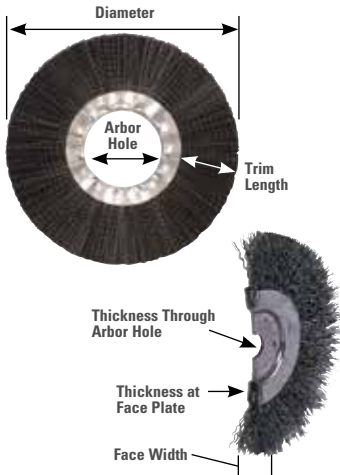


WEILER'S ROUGHNECK® WELD CLEANING BRUSH CONSTRUCTION

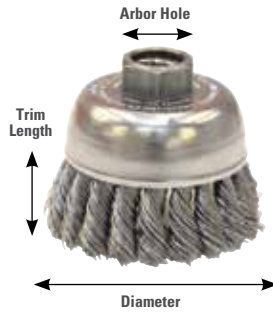
Each knot is twisted through its own hole and locked into an individual sprocket tooth. This prevents the knots from moving, providing a stronger striking action on the work surface, longer brush life and less operator fatigue. This results in the most aggressive weld cleaning in the market with the lowest cost-per-piece brushed.

PRODUCT CHARACTERISTICS

WHEEL BRUSH



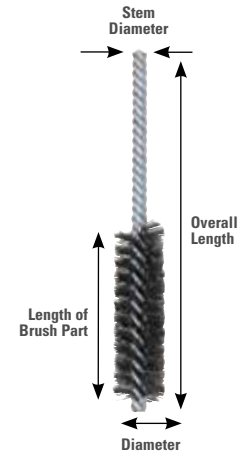
CUP BRUSH



END BRUSH



TUBE BRUSH



FILL MATERIALS



Steel Wire - Carbon steel wire is the most durable power brush fill material for metalworking and heavy-duty cleaning applications. **Weiler industrial grade brushes** utilize heat treated, high tensile steel wire that has been drawn to the most exacting industry standards for superior fatigue resistance and aggressive brushing action. **Vortec Pro® professional grade brushes** utilize more cost-effective grades of steel wire to deliver reliable performance in less demanding applications.



Stainless Steel Wire - Stainless steel wire is only recommended when brushing corrosion-resistant or non-ferrous metals such as stainless or aluminum or when the brush is being used in a wet environment. Stainless steel wire is not any more durable or aggressive than the highest grades of steel wire. All Weiler stainless steel brushes are manufactured with Type 302 stainless wire, but select items are also available with Type 316 wire by special order.



Non-Ferrous Wire - Brass, bronze and aluminum wire are available in assorted Weiler industrial grade power brush items. These non-ferrous materials will not generate a spark in use, but they lack the durability of carbon steel and stainless steel wire. Due to their soft brushing action, these materials may also be used in special applications such as decorative finishing.



Animal Hair - Natural hair bristle is used primarily in miniature power brushes for scratch-free cleaning and polishing. Depending on the animal species and type of hair, this fill material can range from relatively stiff to relatively soft, making it suitable for a variety of applications from removing dust from optical lenses to buffing precious metals using abrasive compounds.



Vegetable Fiber - Tampico, a natural fiber produced from the Mexican agave plant, is a common natural fill material used in wet scrubbing and cleaning applications as well as buffing and polishing metals. It is heat, alkali and acid resistant. Its natural color is off-white but it may be dyed or bleached.



Synthetic - Nylon is typically the most durable synthetic bristle material for use in power brushes and can be used in a variety of applications due to its flexibility, high fatigue strength and resistance to abrasion, heat, acids and alkali. Polypropylene is less durable and used primarily in strip brushes.

STAINLESS STEEL BRUSHES

Weiler's stainless steel wire brushes are manufactured using wire drawn from Type 302 stainless steel. Although 302 stainless is typically a non-magnetic material, it is important to remember that the amount of cold-working that it experiences during the wire-drawing process causes it to become magnetic. For this reason, proper storage and handling of stainless steel brushes is critical to prevent cross-contamination and "after rust" issues. Type 302 is widely used in the manufacture of power brushes for its relative durability

and aggressive action as well as for its austenitic properties that insure the corrosion resistance of the materials on which it is applied. The use of a different grade of stainless steel wire is typically required in critical weld preparation and cleaning applications, but it will not address "after rust" and other cross-contamination issues. To insure the corrosion resistance of any stainless steel surface after brushing, passivating it with a 10-20% solution of nitric acid is recommended.

WORK SAFER WITH PROPER BRUSH USAGE

Weiler products are designed and manufactured to the strictest standards to ensure the highest level of quality and safety. But safety doesn't stop there; raising awareness of basic safety practices and thinking about safety before the job starts — and after the job is complete — can help curb accidents and injuries in the shop. That's why Weiler offers customers a Safety Training Program based on the **SPOT (Speed & Size, Pressure, Orientation, Time)** methodology to help promote safe and proper product usage.



Deploying our **SPOT Safety Training Program** in your facility helps improve safety, regardless of your application or work environment.

For **SPOT Safety Training** contact your Weiler representative.

SPEED & SIZE

- Power brushes, operate most effectively when the speed and pressure of the operation are properly matched to the demands of the application. In most operations, the highest speed and lightest pressure will ensure the fastest brushing action and longest brush life.
- Increasing brush speed increases the face hardness and brushing action; therefore, a fine wire brush rotating at a higher speed will often produce the same results as a coarser wire brush rotating at a slower speed. Finer wire operating at a higher speed is generally preferred and will provide a longer brush life.
- MSFS - Maximum Safe Free Speed (RPM) is the maximum speed at which the brushes may be used safely but is not necessarily the optimum speed for a given application. Operating speed should be determined by the application. When running a wire

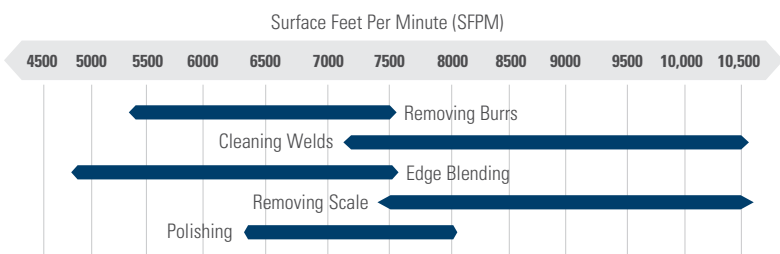
brush, a rule of thumb is to run it a "mile a minute" or a minimum of 5,000 Surface Feet Per Minute (SFPM). However, never exceed the Maximum Safe Free Speed of the brush.

- Make sure spindle size and motor of machine are large enough to accommodate the diameter of brush to be used (see table on pg. 61).



Match the RPM rating of the power brush to the tool being used. The RPM of the tool should never exceed the RPM of the power brush.

RECOMMENDED SURFACE SPEEDS FOR BRUSHING APPLICATIONS



$$\text{SFPM} = \frac{\pi \text{ Dia. (Inches)} \times \text{RPM}}{12}$$

SURFACE SPEEDS (PERIPHERAL SPEED IN FT./MIN.)

RPM	Diameter (Inches)							
	2	3	4	6	8	10	12	15
1000	525	785	1,050	1,575	2,100	2,625	3,150	3,925
1500	785	1,175	1,575	2,350	3,150	3,925	4,725	5,900
1750	915	1,375	1,850	2,750	3,650	4,550	5,500	6,800
2500	1,300	1,950	2,625	3,925	5,250	6,550	7,850	9,825
3000	1,575	2,350	3,125	4,725	6,275	7,850	9,425	11,775
3450	1,800	2,700	3,600	5,400	7,200	9,000	11,000	13,500
4000	2,100	3,150	4,175	6,275	8,375	10,475	—	—
6000	3,125	4,700	6,275	9,425	—	—	—	—
10,000	5,250	7,850	10,500	—	—	—	—	—
15,000	7,850	11,775	15,750	—	—	—	—	—
20,000	10,450	15,700	20,950	—	—	—	—	—

Example: A 6" diameter wheel running at 3,450 RPM has a surface speed of 5,400 SFPM.

MINIMUM RECOMMENDED SPINDLE DIAMETER (From ANSI Standard B165.1)

Outside Dia. of Wheel Brush	Maximum Face Width of Wheel Brush	Minimum Outside Dia. of Spindle (Shaft)
2"	1/4"	1/4"
3"	3/4"	1/4"
3" (heavy-duty)	1"	3/8"
4"	1"	3/8"
6"	1-1/4"	1/2"
8"	1-1/4"	5/8"
10"	2"	3/4"
12"	3"	1"
14"	3"	1-1/4"
15"	3"	2"
16"	3"	2"

Note: These diameters are based on the wheel brush being mounted next to the supported end of the shaft rather than the unsupported end in order to minimize overhang.

RECOMMENDED MOTOR SIZES (Based on 1" Brush Face)

Brush Diameter	Motor Size	RPM
4"	1/4 HP	3,450
6"	1/2 HP	3,450
8"	3/4 HP	3,450
10"	1 HP	1,750
12"	1 HP	1,750
15"	1-1/2 HP	1,750

PRESSURE

Avoid excessive pressure when using a wire brush. Excessive pressure causes over-bending of the filaments and heat build-up resulting in filament breakage, rapid dulling and reduced brush life.

INSTEAD OF GREATER PRESSURE, TRY:

- A brush with more aggressive action (increase filament diameter, decrease trim length, different brush type, i.e.; knot type instead of crimped type).
- Higher surface speed (increase RPM or brush diameter)

Never exceed the recommended Maximum Safe Free Speed or RPM rating of the brush.



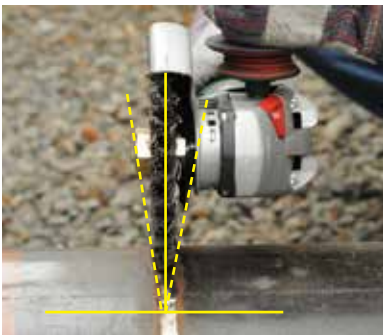
Correct
Wire Tips Doing the Work

Incorrect
Excessive Pressure Causes Wire Breakage

ORIENTATION

WORKING ANGLE BY BRUSH TYPE

Never stray more than 15° from the suggested working angles of the brush configurations below.



WHEEL +/- 15°



CUP +/- 15°



BEVEL +/- 15°

TIME

Reduce the time it takes to get the job done by choosing the most appropriate product configuration. (See page 56 for product selection information.)

SELF-SHARPENING OF WIRE WHEEL BRUSHES

When using wire wheel brushes without nuts, periodically reverse the direction of rotation to take advantage of the self-sharpening action that will result. Remove the brush from the spindle, flip the wire brush 180° and remount the brush securely.



Remove



Flip 180°



Remount Securely

POWER BRUSH TROUBLESHOOTING GUIDE

There are many variables in power brush applications. If the power brush you are using does not accomplish the desired results, select a solution from the suggestions below for your specific application or call Weiler's Application Engineering Hotline at 888-299-2777.

Problem	Recommended Solutions
Brush works too fast	<ul style="list-style-type: none"> • Select a brush with longer filaments and/or lower fill density • Select a brush with a smaller diameter wire • Select a brush with a narrower face and/or lower fill density • Select a brush with a smaller outside diameter • Operate the brush at a slower RPM
Brush works too slowly	<ul style="list-style-type: none"> • Select a brush with shorter filaments and/or higher fill density • Select a brush with a larger diameter wire • Select a brush with a wider face and/or higher fill density • Select a brush with a larger outside diameter • Operate the brush at a faster RPM
Brushing action rolls or peens the burr over instead of removing burr	<ul style="list-style-type: none"> • Select a brush with a larger diameter wire • Select a brush with shorter filaments and/or higher fill density • Operate the brush at a faster RPM • Replace the crimped wire brush with a knot wire brush
Finer final finish required	<ul style="list-style-type: none"> • Select a brush with longer filaments • Select a brush with a smaller diameter wire • Operate the brush at a higher RPM • Replace the wire brush with a nylon abrasive brush (Nylox_®)
Coarser final finish required	<ul style="list-style-type: none"> • Select a brush with shorter filaments • Select a brush with a larger diameter wire • Operate the brush at a slower RPM
Non-uniform brushing action	<ul style="list-style-type: none"> • Select a brush with longer filaments • Select a brush with a larger diameter wire • Automate the operation to reduce human variables
Filaments break off	<ul style="list-style-type: none"> • Reduce applied pressure or engagement • Select a brush with a smaller diameter wire • Select a brush with a lower fill density
Short brush life	<ul style="list-style-type: none"> • Reduce applied pressure or engagement • Select a brush with a smaller diameter wire • Select a brush with a higher fill density

NEED HELP?

Call our Application Engineering Hotline at 888-299-APPS (2777). If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or your facility. Either way, Weiler will provide the most cost-effective solution for your specific application.

KNOT WIRE WHEELS WITH ARBOR HOLE

Knot wire wheels with arbor holes are intended for use on straight grinders and stationary machines such as bench or pedestal grinders and buffing lathes. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel, and bronze wire for use in a wide variety of applications.

APPLICATIONS

- Removing rust, scale and heavy corrosion
- Surface roughening and preparation
- Coating removal
- Removing excess molded rubber or plastic
- Heavy deburring



Removing rubber coating from a hydraulic hose.

P **STANDARD TWIST WHEELS** provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on somewhat irregular surfaces.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number	
										Steel	Stainless
3"	.0118	1/2"-3/8"	20	3/8"	5/8"	1/2"	7/16"	25,000	10	08004	08254
	.014									08014 ■	08264 ■
	.020									08024 ▲	08274
4"	.0118	1/2"-3/8"	24	1/2"	7/8"	1/2"	7/16"	20,000	10	08034	08284
	.014									08044 ■	08294
	.020									08064	08314
4"	.014	5/8"-1/2"	24	1/2"	7/8"	7/8"	7/16"	20,000	10	08045	—
	6"									.0118	5/8"-1/2"
.014		08085 ■	—								
.016		08095	08345								
	.023	08105	—								
6"	.016	5/8"-1/2"	30	5/8"	1-1/4"	1-1/4"	5/8"	9,000	5	08975	—
7"	.014	5/8"	24	5/8"	1-7/8"	1-1/4"	9/16"	9,000	2	08835	—
										8"	.0118
.014	08135	—									
.016	08145	08395									
	.023	08155	—								
8"	.014	3/4"	38	5/8"	1-5/8"	2"	1/2"	6,000	2	08138	—
10"	.014	3/4"	52	3/4"	1-3/4"	2-1/2"	3/4"	4,500	2	08178	—
10"	.014	1-1/4"★	52	3/4"	1-3/4"	2-1/2"	3/4"	4,500	2	08179	—
										08189	—
12"	.014	1-1/4"★	52	3/4"	2-3/4"	2-1/2"	11/16"	3,600	1	08209	—
										08219	—
12"	.014	2"◆	52	3/4"	2-3/4"	2-1/2"	11/16"	3,600	1	08200-14	—
12"	.020	1-1/4"★	56	5/8"	2-3/4"	3"	13/16"	4,500	2	09719	—
12"	.023	2"◆	66	3/4"	2-1/4"	3"	13/16"	5,000	2	09870	—
										08249	—
15"	.016	1-1/4"★	52	7/8"	4-1/4"	2-1/2"	3/4"	3,600	2	08249	—

★ 5/16" x 5/32" Double Keyway

◆ 1/2" x 1/4" Double Keyway

▲ Available in non-sparking bronze wire, see page 94-95 for details.

■ Packaged product available. See pages 131-141 for details.



08014



08085



08189

COATED ABRASIVES

NON-WOVEN ABRASIVES

POWER BRUSHES

NYLON BRUSHES

PACKAGED ITEMS

MAINTENANCE

V **VORTEC PRO® STANDARD TWIST WHEELS** provide aggressive brushing action for general-purpose surface cleaning applications.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number	
										Steel	Stainless
3"	.014	1/2"-3/8"	20	3/8"	3/8"	1/2"	7/16"	25,000	10	36290	—
4"	.014	1/2"-3/8"	20	5/8"	7/8"	1/2"	9/16"	20,000	10	36226 ■	—
										—	36293
6"	.014	5/8"-1/2"	24	1/2"	1-1/4"	5/8"	9/16"	9,000	10	36227 ■	—
8"	.014	5/8"	34	9/16"	1-5/8"	5/8"	1/2"	6,000	2	36228 ■	—
										.023	36279

■ Packaged product available. See pages 131-141 for details.



36228

NOTE

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 57.

P STANDARD TWIST WHEELS - High Density & Extra High Density - Engineered for maximum performance in production applications; for use on automated equipment such as dedicated gear deburring machines.



08339



09020

Diameter	Wire Size	Arbor Hole	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number Steel
80 KNOTS								
14"	.0118	1-1/4" ★	3/4"	2-1/2"	5/8"	5,000	2	08309
	.0118	2" ◆						08300
	.014	1-1/4" ★						08319
	.014	2" ◆						08310
	.020	1-1/4" ★						08339
	.020	2" ◆						08330
15"	.0118	1-1/4" ★	3/4"	3"	5/8"	5,000	2	09969
	.0118	2" ◆						09960
	.014	1-1/4" ★						09989
	.014	2" ◆						09980
	.020	1-1/4" ★						09999
	.020	2" ◆						09990
90 KNOTS								
14"	.014	2" ◆	3/4"	1-1/2"	5/8"	5,000	2	09020*
	.016	2" ◆						09790
	.016	1-1/4" ★						09799
	.020	2" ◆						09800
	.020	1-1/4" ★						09809
	.020	1-1/4" ★						09049*
15"	.020	2" ◆	3/4"	2"	5/8"	5,000	2	09840
	.020	2" ◆						09080*
	.020	1-1/4" ★						09089*

★ 5/16" x 5/32" Double Keyway

◆ 1/2" x 1/4" Double Keyway

* Economy

P STANDARD TWIST WHEELS - Two Section - Provide heavy-duty brushing action with some flexibility; feature a double row of knotted wire for a wider brush face.



09460

Diameter	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number Steel
3"	.0118	1/2"-3/8"	40	3/4"	5/8"	3/4"	22,000	5	09104
4"	.0118	1/2"-3/8"	48	3/4"	7/8"	3/4"	20,000	5	09134
	.016								09160
6"	.0118	2"	60	7/8"	1-3/8"	7/8"	8,000	5	09180
	.016								09410
	.023								09430
8"	.0118	2"	76	1"	1-5/8"	1"	6,000	1	09440
	.016								09460
	.023								09480
10"	.0118	2"	104	1-1/4"	1-3/4"	1-1/4"	4,500	1	09490
	.016								09510
	.023								09530
12"	.0118	2"	104	1-1/4"	2-3/4"	1-1/4"	3,600	1	09540
	.016								
	.023								

See Metal Adapters on page 72 for brushes with 2" arbor holes.

P STANDARD TWIST WHEELS - Four Section - Featuring four rows of knotted wire; for use in automated cleaning processes such as removing light mill scale from metal rod and wire.



94000

Diameter	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number Steel
12"	.0118	2"	208	2"	2-3/4"	1-3/4"	3,600	1	94098
	.014								94000

See Metal Adapters on page 72 for brushes with 2" arbor holes.

P **CABLE TWIST WHEELS** provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and coating removal applications on relatively smooth surfaces.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number	
										Steel	Stainless
4"	.020	1/2"-3/8"	24	1/4"	7/8"	1/2"	7/16"	20,000	10	08534 ■	—
6"	.023	5/8"-1/2"	24	3/8"	1-3/8"	1-1/4"	9/16"	9,000	10	08565 ■	08695★
8"	.023	5/8"	38	1/2"	1-5/8"	2"	1/2"	6,000	2	08615	—
10"	.023	3/4"	52	1/2"	1-3/4"	2-1/2"	3/4"	4,500	2	08878	—
		1-1/4"★								08879	—
12"	.023	1-1/4"★	52	7/16"	2-3/4"	3"	3/4"	3,600	2	09379	—

If a different arbor hole is required (than listed) refer to the Arbor Hole Variations Table on page 57. ★ 5/16" x 5/32" Double Keyway * Standard Pack 2
 ■ Packaged product available. See pages 131-141 for details.



08534

P **CABLE TWIST WHEEL - Four Section** - Featuring four rows of tightly knotted wire; for use in demanding automated applications such as cleaning the OD of drill pipe and other oilfield tubular goods.

Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number
10"	.023	2"	208	1-3/4"	1-3/4"	2"	1-7/8"	4,500	1	94008



94008

P **JOINT & CRACK CLEANING WHEELS** feature heavy-duty construction and an extra long trim length for cleaning expansion joints and cracks in concrete and asphalt.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number
10"	.035	1" with two drive holes★	38	3/8"	2-5/8"	1/2"	5,000	2	94199
12"	.035	1" with two drive holes★	38	3/8"	3-5/8"	1/2"	5,000	2	94224
12"	.035	1" with two drive holes★	52	3/8"	2-3/4"	3/4"	6,000	2	94026

*Drive holes are 3/8" diameter with 1/4" x 1/8" double keyway.



94224

ADAPTER for mounting Joint & Crack Cleaning Wheels onto a 20mm arbor.

For Brush Arbor Hole Size	Adapted Arbor Hole Size	Standard Pack	Item Number
1"	20mm	10	04455



04455

Cleaning a crack on an airport runway with a joint & crack cleaning brush prior to filling.



NOTE

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 57.

Key:

P PERFORMANCE LINE Industrial Grade **V** VALUE LINE Professional Grade

WHY WEILER
 BONDED ABRASIVES
 COATED ABRASIVES
 NON-WOVEN ABRASIVES
 POWER BRUSHES
 NYLON BRUSHES
 PACKAGED ITEMS
 MAINTENANCE

KNOT WIRE WHEELS WITH NUT



Cleaning a corner weld with a bevel brush.

Knot wire wheels with a threaded nut are intended for use primarily on small and large right angle grinders. Featuring Weiler's individual knot hole construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel and bronze wire for use in a wide variety of applications.

APPLICATIONS

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- Removing heavy burrs from large pieces after cutting

P **STANDARD TWIST WHEELS** provide heavy-duty brushing action with some flexibility; ideal for deburring and demanding cleaning applications on somewhat irregular surfaces.



13106

Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. RPM	Std. Pack	Item Number	
								Steel	Stainless
3"	.014	3/8"-24 UNF	20	3/8"	5/8"	25,000	5	13201	13208
4"	.014	M10 x 1.25	24	1/2"	7/8"	20,000	5	13100	13107
		M10 x 1.50						13101	13108
		M14 x 2.0						13102	13109
		3/8"-24 UNF						13103	13110
		1/2"-13 UNC						13105	—
5/8"-11 UNC	13106 ■	13113 ■							
4"	.020	M10 x 1.25	24	1/2"	7/8"	20,000	5	13114	—
		M10 x 1.50						13115	—
		M14 x 2.0						13116	—
		3/8"-24 UNF						13117	—
		1/2"-13 UNC						13119	—
		5/8"-11 UNC						13120 ▲ ■	—
6"	.016 .023	5/8"-11 UNC	24	1/2"	1-3/8"	9,000	2 5	—	08346
								08106	—

■ Packaged product available. See pages 131-141 for details.

▲ Available in non-sparking bronze wire, see page 94-95 for details.



36224

V **VORTEC PRO® STANDARD TWIST WHEELS** provide an aggressive brushing action for general purpose deburring, cleaning, and surface preparation applications.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. RPM	Std. Pack	Item Number	
								Steel	Stainless
4"	.014	5/8"-11 UNC	20	1/2"	7/8"	20,000	5	36212 ■	36213 ■
		M10 x 1.25						36215 ■	—
		M10 x 1.50						36216 ■	—
		M14 x 2.0						36217 ■	—
6"	.025	5/8"-11 UNC	24	3/4"	1-1/4"	11,000	10	36224 ■	—

■ Packaged product available. See pages 131-141 for details.



13266

P **CABLE TWIST WHEELS** provide maximum brushing action with minimal flexibility; ideal for demanding cleaning and surface preparation applications on relatively smooth surfaces.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. RPM	Std. Pack	Item Number	
								Steel	Stainless
4"	.020	M10 x 1.25	24	1/4"	7/8"	20,000	5	13261	—
		M10 x 1.50						—	13272
		5/8"-11 UNC						13266 ■	13276

■ Packaged product available. See pages 131-141 for details.

V **VORTEC PRO CABLE TWIST WHEELS** provide the most aggressive brushing action for general purpose cleaning and surface preparation applications.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. RPM	Std. Pack	Item Number	
								Steel	Stainless
4"	.020	5/8"-11 UNC	20	1/4"	7/8"	20,000	5	36255 ■	—
		M10 x 1.50						—	36257
		M10 x 1.25						—	36258

■ Packaged product available. See pages 131-141 for details.

P **STANDARD TWIST BEVEL BRUSHES** are saucer-shaped radial wheels that provide a heavy-duty brushing action with some flexibility; ideal for cleaning fillet welds and into corners.



Diameter	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. RPM	Std. Pack	Item Number	
								Steel	Stainless
4"	.014	M10 x 1.25	20	3/8"	3/4"	12,500	1	13401	—
		M10 x 1.50						13402	—
		5/8"-11 UNC						13406	13416
4"	.020	M14 x 2.0	20	3/8"	3/4"	12,500	1	13423	—
		5/8"-11 UNC						13426	13436
4-1/2"	.014	5/8"-11 UNC	20	3/8"	1"	12,500	1	13456	13466
4-1/2"	.020	5/8"-11 UNC	20	3/8"	1"	12,500	1	13476	13486



13456

P **THREADED ADAPTERS** for mounting brushes with a 5/8"-11 UNC nut to other threaded spindles.

Fixed Thread Size	Adapted Thread Size	Standard Pack	Item Number
5/8"-11 UNC	M10 x 1.25	10	07771 ■
5/8"-11 UNC	M10 x 1.50	10	07772 ■
5/8"-11 UNC	3/8"-16 UNC	10	07769
5/8"-11 UNC	3/8"-24 UNF	10	07746



07771

■ Packaged product available. See pages 131-141 for details.

KNOT WIRE WHEELS WITH STEM

Knot wire wheels with a permanently attached 1/4" stem or shank are primarily intended for use on high-speed die grinders. Although they can also be mounted onto a drill, the speed and power of that tool will limit the effectiveness of the brush. Featuring Weiler's individual knot hole construction, these radial wheels are available in heat-treated steel and Type 302 stainless steel wire.

APPLICATIONS

- Removing powder-coating, epoxy-based paints, and rubberized coatings
- Weld preparation and cleaning
- Cleaning scale and heavy corrosion
- Removing heavy burrs from large pieces after cutting

P **STANDARD TWIST WHEELS 1/4" Stem** - Provide heavy-duty brushing action with some flexibility; ideal for deburring and demanding cleaning applications on somewhat irregular surfaces.



Diameter	Wire Size	No. of Knots	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number	
							Steel	Stainless
3-1/4"	.0118	20	3/8"	5/8"	25,000	5	17680	—
	.014						17681 ■	17684
	.020						17682	—
4"	.0118	24	1/2"	7/8"	20,000	5	17686	—
	.014						17687 ■	17691
	.020						17689	—



17684

■ Packaged product available. See pages 131-141 for details.

"We get a competitive edge with Weiler because their prices are competitive but they last far longer."

- **Jim Martin**, Vice President, Karnel Incorporated



Key:

P PERFORMANCE LINE Industrial Grade **V** VALUE LINE Professional Grade

WHY WEILER
BONDED ABRASIVES
COATED ABRASIVES
NON-WOVEN ABRASIVES
POWER BRUSHES
NYLON BRUSHES
PACKAGED ITEMS
MAINTENANCE

WELD CLEANING BRUSHES

Weiler's stringer bead wheels are the most effective weld cleaning tools for the most demanding users. Our premium weld cleaning brushes are manufactured to the most stringent quality standards, utilizing the highest quality wire available. The twist puts all the sharp tips at the end of the knots, making them the fastest, most aggressive weld cleaning tools on the market.



Removing weld slag before the next weld pass.

WEILER ROUGHNECK®

MADE IN USA

Weiler's Roughneck brush construction virtually eliminates knot movement, resulting in the most effective cleaning action, smoothest operation, and longest wheel life.

Offered in a variety of widths for efficient use in inter-pass weld cleaning operations, our entire line of Roughnecks excel at removing slag, spatter, and oxidation without damaging the filler material. They are engineered to maximize your efficiency and minimize your costs.



P **ROUGHNECK STRINGER BEAD WHEELS** are the standard for high-performance weld cleaning brushes. Narrow face brushes are suitable for cleaning root and hot passes and reaching into corners; wider face wheels can be used for cleaning filler and cap passes as well as for other surface prep and cleaning applications.



Diameter	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number		
									Steel	Stainless	
Root Pass Brushes											
4"	.020	1/2"-3/8" M10 x 1.25 M10 x 1.50 M14 x 2.0 3/8"-24 UNF 1/2"-13 UNC 5/8"-11 UNC	32	3/16"	7/8"	7/16"	20,000	5	13124	08954*	
									13125 ■	13132	
									13126	13133	
									13127	13134	
									13128	13135	
									13130	13137	
									13131 ■	13138 ■	
4-1/2"	.020	5/8"-11 UNC M14 x 2.0 7/8"	38	3/16"	13/16"	3/8"	15,000	5	13232 ■	13238	
									13233	13239	
									13234	13249	
5"	.020	5/8"-11 UNC 7/8"	38	3/16"	7/8"	3/8"	12,500	5	08756 ■	08806 ■	
									08750	—	
6"	.020	5/8"-11 UNC	48	3/16"	1-1/8"	3/8"	12,500	10	08766 ■ †	—	
			38		1-3/8"				3/8"	—	08786 † •
			56		1-1/8"				7/16"	09400 ■	09500
6-7/8"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	9,000	10	09000 ■	09200	
			76						—	—	09100
Filler Pass Brushes											
5"	.023	5/8"-11 UNC	24	1/2"	7/8"	3/8"	12,500	5	09856	09866	
6"	.023	5/8"-1/2"	24	1/2"	1-3/8"	9/16"	12,500	10	08775	—	
		5/8"-11 UNC	24		1-3/8"	9/16"			08776 ■	08796 •	
		5/8"-11 UNC	30		1-1/4"	5/8"			08916	08926 •	
		5/8"-11 UNC	30		1-3/8"	1/2"			09386	09396 •	

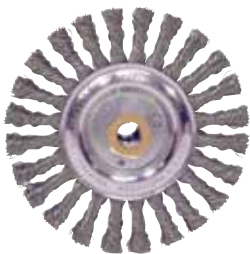
† Light Duty • Standard Pack 5 * Standard Pack 10 ■ Packaged product available. See pages 131-141 for details.



13131



09000



08776



35800

NOTE

If a different arbor hole is required (than listed in the tables) refer to Threaded Adapter Chart shown on Pg. 67.

P **POLYFLEX™ ENCAPSULATED STRINGER BEAD WHEELS** Black Elastomer*

Feature a heat-stabilized encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life; suitable for cleaning hot welds.



Diameter	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number	
									Steel	Stainless
4"	.020	5/8"-11 UNC	32	3/16"	7/8"	7/16"	20,000	5	35800	—
6"	.014	5/8"-11 UNC	-	3/16"	1-7/16"	3/8"	9,000	5	35206 ▲	—
6-7/8"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	9,000	10	35600	—
7"	.014	5/8"-11 UNC	-	3/16"	1-15/16"	3/8"	9,000	5	35216 ▲	—

* See Elastomer Color Code Chart on page 57 for more information. ▲ Crimped wire

THE DUALLY® FROM WEILER

Featuring a unique dual-hex nut, this full line of weld cleaning brushes simplifies periodic flipping of the wheels for maximum cutting action, long life, and safer use.

These "Flip 'N Fast" Wheels offer:

- **Maximum Cleaning Action** — Featuring a knot twist with the most aggressive cutting action, the new dual-hex nut makes it easier for the user to regularly switch mounting position and keep the brush running at peak performance.
- **Long Wheel Life** — Utilizing the highest quality heat-treated Steel wire and construction that virtually eliminates knot movement, the Dually delivers smooth operation and long life for the lowest cleaning costs in demanding multi-pass welding applications such as pipeline construction.
- **Improved User Safety** — The one-piece, dual-hex nut is designed to provide adequate tool clearance so there is no need to remove the guard from the grinder in order to change the position of the wheel.



MADE IN USA

P **DUALLY STRINGER BEAD WHEELS** feature a dual-hex nut design that simplifies periodic flipping of the wheel for maximum cleaning action, long life, and safer use.



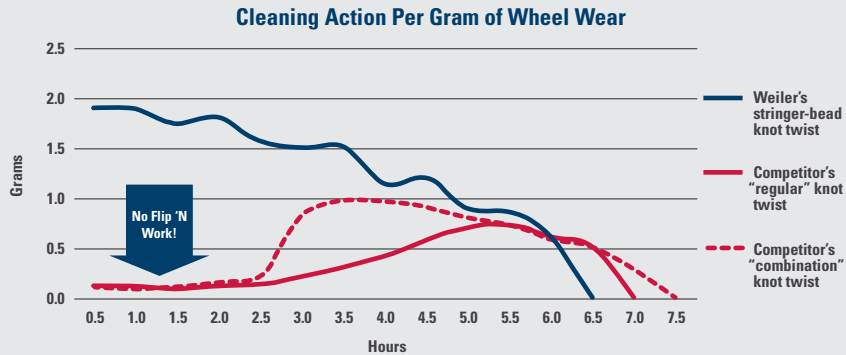
Diameter	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number	
									Steel	Stainless
Root Pass Brushes										
4-1/2"	.020	5/8"-11 UNC	38	3/16"	13/16"	3/8"	15,000	5	79801	79811
5"	.020	5/8"-11 UNC	38	3/16"	7/8"	3/8"	12,500	5	79802	79812
6"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	12,500	5	79805	79815
7"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	7/16"	9,000	5	79800	79810
Filler Pass Brushes										
5"	.023	5/8"-11 UNC	24	1/2"	7/8"	3/8"	12,500	5	79803	79813
6"	.023	5/8"-11 UNC	30	1/2"	1-1/4"	5/8"	12,500	5	79804	79814



79802

The Dually features a wire twist that produces the fastest, most effective cleaning action right out of the box!

Competing knot styles feature much less effective knot twists. As the graph shows, it is only after these brushes have been used for a long enough period of time for wire breakage to occur that they go to work.



V **VORTEC PRO® STRINGER BEAD WHEELS** are manufactured using similar product construction and to the same exacting standards as other Weiler weld cleaning brushes; they have been engineered for cost-effective use in less demanding applications.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. RPM	Std. Pack	Item Number	
								Steel	Stainless
4"	.020	5/8"-11 UNC	30	1/4"	7/8"	20,000	5	36218 ■	36219
		M10 x 1.25		36221 ■				—	
		M10 x 1.50		36222				—	
		M14 x 2.0		36223				—	
5"	.020	5/8"-11 UNC	38	3/16"	7/8"	12,500	5	36295	36296
6"	.020	5/8"-11 UNC	48	1/4"	1-1/4"	12,500	10	36225	—
				3/16"				1-3/8"	36307*
6-7/8"	.020	5/8"-11 UNC	56	3/16"	1-1/8"	9,000	10	36297	—



36218

*Light Duty ■ Packaged product available. See pages 131-141 for details.

WHY WEILER BONDED ABRASIVES COATED ABRASIVES NON-WOVEN ABRASIVES POWER BRUSHES NYLON BRUSHES PACKAGED ITEMS MAINTENANCE

CRIMPED WIRE WHEELS WITH ARBOR HOLE



Removing heat discoloration from a stainless steel canister.

Crimped Wire Wheels with Arbor Hole are intended for use on straight grinders and stationary machines such as bench or pedestal grinders and buffing lathes. Featuring Weiler's solid ring construction, these radial brushes are available in heat-treated steel, Type 302 stainless steel and brass wire for use in a wide variety of applications.

APPLICATIONS

- Removing rust and light corrosion
- Paint removal and surface cleaning
- Decorative finishing
- Removing heat discoloration
- Light deburring

P **CRIMPED WIRE WHEELS - Narrow Face** - provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.



00184



01238

Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number	
									Steel	Stainless
3"	.006	1/2"-3/8"	7/16"	1/2"	3/4"	7/16"	12,500	2	00204	00244
	.008								00214	-
	.0118								00234	00264
	.014								00274	-
4"	.006	1/2"-3/8"	1/2"	7/8"	3/4"	7/16"	12,500	2	00104	00154
	.006								5/8"-1/2"	-
	.008	1/2"-3/8"	-							
	.0095		00124	-						
	.0118	00134	00184							
	.0118	5/8"-1/2"	-							
.014	1/2"-3/8"	00135	-							
6"	.006	5/8"-1/2"	3/4"	1-7/16"	1-1/4"	7/16"	6,000	10	01035 ▲	01675*
	.008								01045	-
	.008	1-1/4" ★	-							
	.0104	5/8"-1/2"	01055	01695*						
	.0118	-	01065 ▲	01705*						
	.014	-	01075 ■	-						
6"	.0118	3/4"	3/4"	1-7/16"	1-1/4"	7/16"	6,000	10	01068	-
8"	.006	5/8"	3/4"	2-1/16"	1-1/4"	1/2"	6,000	2	01135	01775
	.008								01145	-
	.0104								01155	01795
	.0118								01165	01805
	.014								01175 ■	-
8"	.006	3/4"	3/4"	2-1/16"	1-1/4"	1/2"	6,000	2	01138	-
	.008								01148	-
	.0104								01158	-
	.0118								01168	-
	.014								01178	-
8"	.0118	1-1/4" ★	3/4"	2-1/16"	1-1/4"	1/2"	6,000	2	-	01809
	.014								01179	-
10"	.006	3/4"	3/4"	2-1/2"	2"	5/8"	4,000	2	01228	-
	.0104								01238	-
	.0118								01248	-
	.014								01258	01898
	.014								1" •	01250-12
10"	.014	1-1/4" ★	3/4"	2-1/2"	2"	5/8"	4,000	2	01259	-
12"	.006	1-1/4" ★	3/4"	2-15/16"	2-1/2"	1/2"	3,000	2	01299	01939
	.0104								01309	01949
	.0118								01319	-
	.014								01329	-
12"	.014	2" ◆	3/4"	2-15/16"	2-1/2"	1/2"	3,000	2	01320-14	-
	.0118								01339	-
15"	.0118	1-1/4" ★	3/4"	4-7/16"	2-1/2"	1/2"	3,000	2	01349	-
	.014								01349	-

NOTE

If a different arbor hole is required (than listed in the tables) refer to Arbor Hole Table shown on Pg. 57.

◆ 1/2" x 1/4" Double Keyway ★ 5/16" x 5/32" Double Keyway • 1/4" x 1/8" Double Keyway
 ▲ Available in non-sparking brass wire, see page 94-95 for details. * Standard Pack 2 ■ Packaged product available. See pages 131-141 for details.

V **VORTEC PRO® CRIMPED WIRE WHEELS - Narrow Face** - provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Max.RPM	Std. Pack	Item Number	
								Steel	Stainless
4"	.014	1/2"-3/8"	1/2"	3/4"	1/2"	6,000	2	36262 ■	–
6"	.014	5/8"-1/2"	3/4"	1-1/4"	5/8"	6,000	2	36200 ■	36201 ■
8"	.014	5/8"	3/4"	2"	5/8"	6,000	2	36205 ■	–

■ Packaged product available. See pages 131-141 for details.



36205

P **POLYFLEX™ ENCAPSULATED CRIMPED WIRE WHEELS** feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number Steel
Burgundy Elastomer*									
4"	.0095	1/2"-3/8"	3/8"	7/8"	3/4"	7/16"	6,000	2	35084
6"	.0104	5/8"-1/2"	1/2"	1-7/16"	1-1/4"	7/16"	6,000	2	35105
	.014								35117
8"	.014	5/8"	1/2"	2-1/16"	1-1/2"	1/2"	6,000	2	35135
Orange Elastomer* - Heavy-Duty									
6"	.0104	5/8"-1/2"	1/2"	1-7/16"	1-1/4"	7/16"	6,000	2	35520

* See Elastomer Color Code chart on page 57 for more information.



35105

P **BENCH GRINDER WHEELS** feature a shorter trim length, narrower face width, and the same durable construction as other Weiler crimped wire wheels; designed specifically for use on small bench grinders for reduced flaring and long life in a broad range of applications.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number Steel
6"	.006	5/8"-1/2"	1/2"	1-1/16"	1-1/4"	7/16"	6,000	10	01085
	.008								01095
	.0118								01115
	.014								01125



01115

P **CRIMPED WIRE WHEELS - High Density** - Feature an increased fill density for greater brushing action, more consistent performance, and longer life in the most demanding applications requiring the flexibility of a crimped wire wheel.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number	
									Steel	Stainless
4-1/4"	.0118	5/8"-1/2"	3/4"	5/8"	3/4"	9/16"	6,000	1	01501	–
	.014								01502	–
6"	.008	5/8"-1/2"	3/4"	1-1/8"	1"	9/16"	6,000	1	01503	–
	.0118								01504	01508
	.014								01505	01509
	.020								01506	–
7"	.014	5/8"	7/8"	1-5/8"	1"	9/16"	6,000	1	01511	–
8"	.006	5/8"	7/8"	1-1/2"	1-1/4"	11/16"	4,500	1	01512	–
	.0104								01513	–
	.0118								01514	–
	.014								01515	–
10"	.0118	3/4"	1"	2-1/2"	1-1/4"	11/16"	4,500	2	01517	–
	.014								01518	–



01515

WHY WEILER

BONDED ABRASIVES

COATED ABRASIVES

NON-WOVEN ABRASIVES

POWER BRUSHES

NYLOX BRUSHES

PACKAGED ITEMS

MAINTENANCE



06080



06150

P **CRIMPED WIRE WHEELS - Medium Face** - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number	
								Steel	Stainless
4-1/2"	.0118	2"	15/16"	3/4"	7/8"	6,000	1	06020	—
6"	.006	2"	1"	1-1/8"	15/16"	6,000	1	06040	—
	.008							06050	—
	.0104							06060	06440
	.0118							06070	06450
	.014							06080	—
8"	.006	2"	1"	1-3/8"	1"	4,500	1	06090	—
	.0104							06100	—
	.0118							06110	06490
	.014							06120	—
	.020							06620	—
10"	.0118	2"◆	1-1/8"	2"	1"	3,600	1	06150	06530
	.014							06160	—
	.020							06170	—
12"	.0118	2"◆	1-1/4"	3"	1"	3,600	1	06180	—
	.014							06190	—
	.014							06200	—
	.020							06200	—

◆ 1/2" x 1/4" Double Keyway
For arbor hole reducing adapters, see Metal Adapter Table below.



02325

V **VORTEC PRO® CRIMPED WIRE WHEELS - Medium Face** - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications; feature a wider face width to cover more area.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number	
								Steel	
6"	.014	5/8"-1/2"	5/8"	1-1/16"	1/2"	6,000	1	02325	■
			3/4"	1-7/16"	7/16"			36203	■
7"	.014	5/8"	3/4"	1-9/16"	1/2"	6,000	1	02335	■

■ Packaged product available. See pages 131-141 for details.

P **METAL ADAPTERS** for Medium & Wide Face Brushes. Used in pairs & priced per pair.



03809

For Brush Arbor Hole Size	Adapted Arbor Hole Size	Item Number
2"	1/2"	03809
	5/8"	03810
	3/4"	03811
	7/8"	03824
	1"	03812
	1-1/4"	03813
	1-1/2"	03814



22241

P **PLATER'S WIRE WHEELS** feature a longer trim length and very small diameter fill material for producing fine satin and antique finishes on non-ferrous and precious metals.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Number of Rows	Max. RPM	Std. Pack	Item Number
								Brass*
3"	.003	1/4"	1/2"	1"	2	6,000	12	22021
4"	.004	1/4"	1"	1-1/4"	4	4,000	5	22061
6"	.005	1/4"	1"	1-7/8"	4	3,600	1	22241

* Also available in carbon steel, stainless steel and nickel silver wire.

P

CRIMPED WIRE WHEELS - Wide Face - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number	
								Steel	Stainless
4-1/2"	.006	2"	1-1/4"	3/4"	7/8"	6,000	1	03000	-
	.0118							03010	-
	.014							03020	-
6"	.006	2"	1-1/4"	1-1/8"	1"	6,000	1	03030	03480
	.008							03040	-
	.0104							03050	-
	.0118							03060	03510
	.014							03070	03520
7"	.0118	2"	1-1/4"	1-5/8"	1"	6,000	1	03090	-
	.014							03100	-
8"	.006	2"	1-1/2"	1-3/8"	1-3/8"	4,500	1	03110	-
	.0095							03130	-
	.0118							03140	03590
	.014							03150	-
	.020							03160	-
10"	.0104	2"	2"	1-7/8"	1-5/8"	4,000	1	03180	-
	.0118							03190	-
	.014							03200	-
	.020							03210	-
12"	.0118	2"	2"	2-7/8"	1-9/16"	3,000	1	03220	-
	.014							03230	03680
	.020							03240	-

For arbor hole reducing adapters, see Metal Adapter Table on page 72.



03110

V

VORTEC PRO® CRIMPED WIRE WHEELS - Wide Face - Provide a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications; feature a wider face width to cover more area.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number	
								Steel	
6"	.014	2"-5/8"-1/2"	7/8"	1-1/8"	7/8"	6,000	1	06645 ■	
								36204 ■	
7"	.014	2"-5/8"-1/2"	7/8"	1-5/8"	7/8"	6,000	1	06655 ■	
8"	.014	2"-5/8"-1/2"	1"	1-3/8"	1"	4,000	1	36206 ■	
10"	.014	2"-3/4"	1-1/8"	2"	1"	3,600	1	36265 ■	

■ Packaged product available. See pages 131-141 for details.



06655

P

POLYFLEX™ ENCAPSULATED CRIMPED WIRE WHEEL - Wide Face - Burgundy*
Elastomer* - Features an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life. Wider face width covers more area.



Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number	
								Steel	
6"	.0118	2"	1"	1-1/8"	1"	6,000	1	35160	

* See Elastomer Color Code Chart on page 57 for more information.
For arbor hole reducing adapters, see Metal Adapter Table on page 72.



35160

WHY WEILER
BONDED ABRASIVES
COATED ABRASIVES
NON-WOVEN ABRASIVES
POWER BRUSHES
NYLOX BRUSHES
PACKAGED ITEMS
MAINTENANCE

SMALL DIAMETER “COPPER CENTER” WHEELS



Removing casting flash from ductile-iron housing with an encapsulated brush.

Weiler's small diameter crimped wire wheels feature a plain arbor hole for use on a variety of portable tools and stationary machines. Featuring Weiler's solid ring construction for high-speed use, these radial brushes are available in heat-treated steel, Type 302 stainless steel, and brass wire.

APPLICATIONS

- Removing carbon build-up and deposits
- Removing rust and light corrosion
- Cleaning and finishing ID's and recessed areas
- Cleaning boiler tubes and internal passages
- Cleaning threads
- Wire stripping
- Light deburring

P **SMALL DIAMETER WHEELS** provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheel.



15433



15563

Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number					
							Steel	Stainless				
1"	.003	1/4"	3/16"	1/4"	20,000	10	—	16461				
	.005						—	16471				
	.006						15071	—				
1-1/4"	.003	1/4"	1/4"	3/8"	20,000	10	15101	—				
	.006						15111	16511				
	.008						—	16521				
	.008						15732	—				
1-3/8"	.006	1/4"	1/4"	3/8"	20,000	10	15131	—				
	.008						15141	—				
	.0104						15151	—				
1-1/2"	.006	3/8"	1/4"	7/16"	20,000	10	15302 ▲	16702				
	.008			7/16"			16712					
	.008			1/4"			—					
	.0104			3/8"			15322	—				
	.0118			3/8"			15332	—				
	.014			3/8"			15762	—				
2"	.003	1/4"	3/8"	3/4"	20,000	10	99307	—				
	.003	1/2"		1/2"			15863	—				
	.005	1/2"		—			16833					
	.006	1/2"		15433 ▲			—					
	.008	1/2"		15443			16843					
	.0104	1/2"		15453			16853					
	.0118	1/2"-3/8"		15463 ▲			—					
	.014	1/2"-3/8"		15473			16873					
	2-1/2"	.0118		1/2"-3/8"			1/2"	3/4"	20,000	10	15513	—
		.014									15523	—
	3"	.003		1/2"			5/8"	1"	20,000	10	99551	—
.006		1/2"-3/8"	1"	15533	16933							
.006		5/8"	15/16"	15637	—							
.008		1/2"-3/8"	1"	15543	16943							
.008		5/8"	15/16"	15647	—							
.0104		1/2"	1"	15553	—							
.0118		1/2"-3/8"	1"	15563	16963							
.0118		5/8"	15/16"	15667	—							
.014		1/2"-3/8"	1"	15573 ▲	16973							
.014		5/8"	15/16"	15677	—							
4"		.006	1/2"	1/2"	1-1/2"	20,000		10			99553	—

▲ Available in non-sparking brass wire, see page 94-95 for details.

P

POLYFLEX™ ENCAPSULATED SMALL DIAMETER WHEELS -

Burgundy Elastomer* - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.



Diameter	Wire Size	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
							Steel
1-1/4"	.008	3/8"	3/16"	5/16"	20,000	10	35293
	.014						35294
2"	.0104	1/2"	1/4"	1/2"	20,000	10	35240
	.014						35070
3"	.008	1/2"	1/4"	1"	20,000	10	35808
	.0118						35250
	.014						35260

* See Elastomer Color Code chart on page 57 for more information.



35070

WIRE STRIPPING BRUSHES

Used for removing insulation from electrical wire. These brushes are made to order according to the specifications needed for the specific application.

When ordering, please specify:

- Brush diameter
- Brush face width
- Arbor hole size
- Wire size

For application assistance, call our Application Engineering Hotline toll-free at: 888-299-APPS (2777)



NOTE

- The adapters and drive arbors listed on this page are for use with small diameter wheel brushes only; do not attempt to use them with cutting or grinding wheels, buffing wheels, or any type of abrasive wheel or disc.
- Do not adapt a wheel brush for use on a shaft diameter less than that specified by ANSI B165.1 (see page 53) or exceed the maximum wheel diameter specified for a drive arbor.
- Never mount a drive arbor onto a tool that operates above the maximum RPM rating of either the arbor or the brush (whichever may be lower) and be sure that the stem of the arbor is properly secured in the collet or chuck before use.



07723



07722



07727



07726



07724



07721



07729



04401, 04402

P

DRIVE ARBORS for mounting small diameter wheels into a collet or chuck.



Arbor Dia.	Stem Dia.	Stem Length	Length of Shaft	For Brushes with a Max. Dia. of	Overall Length	Max. RPM	Standard Pack	Item Number
Unthreaded Shaft								
1/4"	1/4"	1-1/8"	3/16"	2"	2-1/16"	20,000	5	07723
3/8"	1/4"	1-1/8"	3/16"	4"	1-15/16"	20,000	5	07722
Threaded Shaft								
1/4"	1/4"	1-1/16"	1-1/8"	2"	2-9/16"	20,000	5	07725
3/8"	1/4"	3/4"	3/4"	3"	1-9/16"	25,000	5	07727
3/8"	1/4"	1"	1-1/8"	3"	2-9/16"	20,000	5	07726
1/2"	1/4"	3/4"	3/4"	3"	1-3/4"	25,000	5	07724
1/2"	1/4"	7/8"	3/4"	3"	1-11/16"	20,000	5	07721
5/8"	1/4"	3/4"	3/4"	3"	1-13/16"	25,000	5	07729

P

PLASTIC ADAPTERS for mounting small diameter wheels onto various arbor sizes.

Fixed Arbor Hole Size	Adapted Arbor Hole Size	Standard Pack	Item Number
3/8"	1/4"	10	04403
1/2"	1/4"	10	04400
1/2"	3/8"	10	04401
5/8"	1/2"	10	04402

WHY WEILER BONDED ABRASIVES COATED ABRASIVES NON-WOVEN ABRASIVES POWER BRUSHES NYLON BRUSHES PACKAGED ITEMS MAINTENANCE

CRIMPED WIRE WHEELS WITH NUT OR STEM



Removing flash from a sand-cast iron engine block.

Crimped wire wheels with a threaded nut are intended for use primarily on small angle grinders. Featuring Weiler's solid ring construction, these radial brushes are available in heat-treated steel and Type 302 stainless steel wire.

APPLICATIONS

- Removing rust and light corrosion
- Surface prep prior to welding
- Removing heat discoloration and welding residuals

P **CRIMPED WIRE WHEELS** provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications.



13085

Dia.	Wire Size	Arbor Hole	Face Width	Trim Length	Max. RPM	Std. Pack	Item Number	
							Steel	Stainless
4"	.006	5/8"-11 UNC	1/2"	7/8"	14,000	5	—	00156
4"	.014	M14 x 2.0	1/2"	7/8"	14,000	5	13077	—
		3/8"-24 UNF					13078	—
		5/8"-11 UNC					13081	13085
4"	.014	5/8"-11 UNC	1/2"	7/8"	14,000	5	35416*	—

* Polyflex™ encapsulated - Burgundy elastomer. See Elastomer Color Code Chart on page 57 for more information.

V **VORTEC PRO® CRIMPED WIRE WHEEL** provides a flexible brushing action and cost-effective performance in general purpose cleaning and deburring applications.



Diameter	Wire Size	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
							Steel
4"	.014	5/8"-11 UNC	1/2"	3/4"	14,000	5	36207

Crimped wire wheels with a permanently attached 1/4" stem or shank are primarily intended for use on high-speed die grinders. Although they can also be mounted onto a drill, the speed and power of that tool will limit the effectiveness of the brush. Featuring Weiler's solid ring construction, these radial wheels are available in heat-treated steel, Type 302 stainless steel, and brass wire.

APPLICATIONS

- Cleaning and finishing ID's and recessed areas
- Paint removal and surface cleaning
- Cleaning threads
- Light deburring

P **CONFLEX BRUSHES** Narrow Face - 1/4" Stem - Provide a very flexible brushing action.



17616

Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
2"	.006	3/8"	1/2"	20,000	10	17609	—
	.0118					17610 ■	17611 ■
2-1/2"	.006	3/8"	3/4"	20,000	10	17612	—
	.014					17614	—
3"	.008	1/2"	1"	20,000	10	17615 ■	—
	.0118					17616 ▲ ■	—
	.014					17617	17618 ■

■ Packaged product available. See pages 131-141 for details.

▲ Available in non-sparking brass wire, see page 94-95 for details.

P **POLYFLEX™ ENCAPSULATED CONFLEX BRUSHES** - Burgundy Elastomer* - 1/4" Stem - Feature an encapsulation that gradually wears away to expose a consistent short trim for higher aggression, controlled brushing action, and longer life.



35310

Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
						Steel
2"	.0118	1/4"	1/2"	20,000	10	35305
3"	.008	1/4"	1"	20,000	10	35310
	.0118					35315

* See Elastomer Color Code Chart on page 57 for more information.

P

CONFLEX BRUSHES - Wide Face - 1/4" Stem - Provide a flexible brushing action and consistent performance for demanding light-duty cleaning and deburring applications; feature a wider face width to cover more area.



Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1-1/4"	.006	1/2"	3/8"	20,000	10	17600	—
	.008					17601	—
1-1/2"	.006	1/2"	1/2"	20,000	10	17602	—
	.008					17603	—
	.0118					17604	—
1-3/4"	.006	1/2"	5/8"	20,000	10	17605	—
	.008					—	17608
2"	.0118	3/4"	7/16"	20,000	10	17619	—
2-1/2"	.014	3/4"	11/16"	20,000	10	17620	—
3"	.008	1"	15/16"	20,000	10	17621	17637
	.0118					17622	—
	.014					17623	—



17603

P

CRIMPED WIRE RADIAL WHEELS 1/4" Stem - Feature side plates for a shorter trim length and more controlled brushing action in a stem-mounted crimped wire wheel.



Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1-1/2"	.006	1/4"	3/8"	20,000	10	17950	17971
	.008					17951	17972
	.0118					17952	17973
	.014					17953	—
						17954	—
2"	.006	3/8"	7/16"	20,000	10	17954	—
	.008					17955	17974
	.0118					17956	—
	.014					17957	17975
	.020					17958	—
2-1/2"	.008	7/16"	9/16"	20,000	10	17959	17976
	.0118					17961	—
	.014					17962	17977
	.020					17963	—
						17964	17978
3"	.008	1/2"	13/16"	20,000	10	17964	17978
	.0118					17965	—
	.014					17966	17979
	.020					17967	—
						17968	17981
4"	.008	9/16"	1-5/16"	15,000	10	17968	17981
	.014					17969	17982



17971

V

VORTEC PRO® CRIMPED WIRE RADIAL WHEELS 1/4" Stem - Designed to be a flexible and economic small diameter brushing tool for a broad range of general purpose applications.



Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1-1/2"	.0118	1/4"	3/8"	20,000	10	36208 ■	—
2"	.014	3/8"	7/16"	20,000	10	36209 ■	—
3"	.008	7/16"	13/16"	20,000	10	36259 ■	—
	.014					36211 ■	—

■ Packaged product available. See pages 131-141 for details.



36211

P

CONCAVE BRUSHES 1/4" Stem - Saucer-shaped radial wheels provide flexible brushing action for addressing corners and hard-to-reach areas.



Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1-1/2"	.006	1/4"	3/8"	20,000	10	17901	17930
	.008					17902	—
	.0118					17903	17931
2"	.008	3/8"	1/2"	20,000	10	17906	—
	.014					17907	17933
2-1/2"	.006	7/16"	5/8"	20,000	10	17909	—
	.014					17912	17935
3"	.006	1/2"	15/16"	20,000	10	17914	17936
	.008					17915	—
	.014					17917	17937
4"	.008	9/16"	1-1/4"	20,000	10	17922	—
	.014					17923	—



17907

WHY WEILER

BONDED ABRASIVES

COATED ABRASIVES

NON-WOVEN ABRASIVES

POWER BRUSHES

NYLON BRUSHES

PACKAGED ITEMS

MAINTENANCE

NYLON AND TAMPICO WHEELS



Deburring a plastic part using a nylon brush.

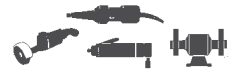
NYLON WHEELS

Wheel brushes filled with non-metallic filaments are primarily intended for light-duty surface cleaning and scrubbing applications as well as scratch-free finishing and polishing. Synthetic filaments such as nylon are durable and provide a very flexible brushing action in applications requiring less aggression than a wire brush. The softer fill material allows them to be used on materials that a wire brush would scratch or gouge.

APPLICATIONS

- Wet or dry cleaning and scrubbing
- Removing burrs and die flash from plastic parts
- Sweeping loose chips and debris

P **NYLON WHEELS** feature a chemical-resistant synthetic fill material with excellent bend recovery for use in applications requiring a soft, durable fill material.



Diameter	Fill Diameter	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
2"	.010	1/2"	3/8"	1/2"	20,000	10	17223
	.014						17233
2-1/2"	.022	5/8"	3/8"	11/16"	20,000	10	99346
3"	.010	1/2"	3/8"	1"	20,000	10	29070
	.016						17263
6"	.016	2"	3/4"	1-1/2"	6,000	2	20490
8"	.020	2"	3/4"	2-1/2"	5,000	2	20510

For arbor hole reducing adapters, see Metal Adapter Table below and plastic adapters on page 75.



17233



20490

TAMPICO WHEELS

Wheel brushes filled with non-metallic filaments are primarily intended for light-duty surface cleaning and scrubbing applications as well as scratch-free finishing and polishing. Natural vegetable fibers such as Tampico hold abrasive compounds well and can be used for deburring, edge blending, and polishing applications.

APPLICATIONS

- Wet or dry cleaning and scrubbing
- Buffing and polishing non-ferrous and precious metals
- Removing burrs and blending edges with abrasive compounds

P **TAMPICO WHEELS** feature a durable vegetable fiber fill material that is chemical and heat resistant and also holds abrasive compounds well.



Diameter	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
2-1/2"	1/2"	1/2"	3/4"	20,000	10	17443
3"	1/2"	1/2"	1"	20,000	10	17453
6"	2"	5/8"	1-1/2"	6,000	10	20180
8"	2"	5/8"	2-1/2"	5,000	5	20190

For arbor hole reducing adapters, see Metal Adapter Table below and plastic adapters on page 75.



17453



20180

P **METAL ADAPTERS** for 6" & 8" Brushes. Used in pairs & priced per pair.

For Brush Arbor Hole Size	Adapted Arbor Hole Size	Standard Pack	Item Number
2"	1/2"	1 pair	03809
	5/8"	1 pair	03810
	3/4"	1 pair	03811
	7/8"	1 pair	03824
	1"	1 pair	03812
	1-1/4"	1 pair	03813
	1-1/2"	1 pair	03814



03809

KNOT WIRE CUP BRUSHES

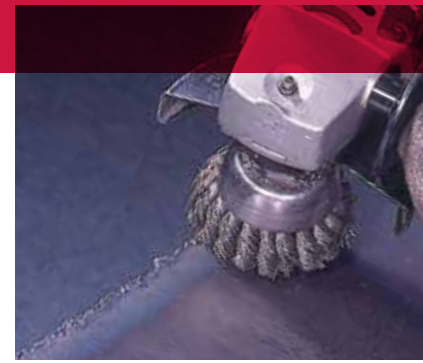
Cup brushes are for use on portable power tools for addressing larger surface areas more efficiently than a wheel brush. Cup brushes featuring a threaded nut are designed for smooth, efficient operation on angle grinders to make quick work of large jobs. Utility cup brushes featuring a permanently-attached 1/4" stem are more suitable for smaller jobs and are recommended for use on high-speed air tools for the most effective brushing action and longest life. Cup brushes are manufactured with individual knot hole and solid ring construction for high performance and long life.

APPLICATIONS

- Removal of slag from the edges of plasma-cut or flame-cut plates
- Removing paint and coatings
- Cleaning rust, scale, and corrosion
- Deburring
- Weld prep and cleaning

CUP BRUSH SIZE SELECTION GUIDE

Brush Sizes	Angle Grinder Size
2-3/4" & 3"	4"
2-3/4", 3" & 3-1/2"	4-1/2"
2-3/4", 3" & 3-1/2"	5"
3-1/2" & 4"	6"
4", 5" & 6"	7"
4", 5" & 6"	9"



Removing slag from a flame-cut steel plate.

DED ABRASIVES

COATED ABRASIVES

NON-WOVEN ABRASIVES

POWER BRUSHES

NYLON BRUSHES

PACKAGED ITEMS

MAINTENANCE

P **KNOT WIRE CUP BRUSHES - Single Row** - Provide heavy-duty brushing action with some flexibility; ideal for demanding cleaning applications on relatively flat surfaces.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
2-3/4"	.014	M10 x 1.25	1"	14,000	1	13015	-
		M10 x 1.50				13016	-
		M14 x 2.0				13020	-
		3/8"-24 UNF				13021	-
		5/8"-11 UNC				13025 ■	13009
2-3/4"	.020	M10 x 1.25	1"	14,000	1	13281 ■	13253
		M10 x 1.50				13282	13254
		M14 x 2.0				13283	13255
		3/8"-24 UNF				13284	13256
		1/2"-13 UNC				13285	13257
		5/8"-11 UNC				13286 ▲ ■	13258 ■
3-1/2"	.023	M10 x 1.25	7/8"	13,300	1	13150	-
		M10 x 1.50				13151	-
		M14 x 2.0				13152	13159
		3/8"-24 UNF				13153	13160
		1/2"-13 UNC				13155	-
		5/8"-11 UNC				13156 ■	13163 ■
3-1/2"	.014 .020	5/8"-11 UNC	1-1/4"	9,000	1	12736	-
						12746	-
4"	.014 .023 .035	5/8"-11 UNC	1-1/4"	10,200	1	12306 ▲	12406
						12316 ■	12416
						12326	-
4"	.023	5/8"-11 UNC	1-1/4"	10,200	1	12206 ❖	-
4"	.023	5/8"-11 UNC	1-1/4"	10,200	1	12826*	-
5"	.014 .023	5/8"-11 UNC	1-3/8"	7,000	1	12256*	-
						12276 ■*	-
6"	.014 .023 .035	5/8"-11 UNC	1-3/8"	6,600	1	12356 ■	12456
						12376 ■	12476
						12396	-
6"	.023	5/8"-11 UNC	1-3/8"	6,600	1	12816*	-
6"	.014 .023 .035	5/8"-11 UNC	1-5/8"	6,000	1	12846	-
						12856	12886
						12866	-

* With internal nut ❖ Cable Twist ■ Packaged product available. See pages 131-141 for details.

▲ Available in non-sparking bronze wire, see page 94-95 for details.



13016



13156



12276



13711

NOTE

If a different arbor hole is required (than listed in the tables) refer to Threaded Adapter Chart shown on Pg. 67.

P **KNOT WIRE CUP BRUSHES - Hurricane Twist** - Very smooth brushing action and extended life with reduced cleaning action.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number
						Steel
2-3/4"	.014	M10 x 1.25	3/4"	14,000	1	13715
		M10 x 1.50				13716
		M14 x 2.0				13717
		5/8"-11 UNC				13718
2-3/4"	.020	M10 x 1.25	3/4"	14,000	1	13709
		M10 x 1.50				13710
		M14 x 2.0				13711
		5/8"-11 UNC				13712



36244

V **VORTEC PRO® KNOT WIRE CUP BRUSHES - Single Row**

Provide an aggressive brushing action for general-purpose surface cleaning applications.



Dia.	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
3"	.020	5/8"-11 UNC	1"	14,000	1	36238 ■	36239 ■
4"	.025	5/8"-11 UNC	1-1/4"	10,200	1	36244 ■	—
6"	.025	5/8"-11 UNC	1-3/8"	6,600	1	36245 ■	—

■ Packaged product available. See pages 131-141 for details.



13301

P **KNOT WIRE CUP BRUSHES - Banded - Single Row** - Feature a removable metal band around fill material to reduce the exposed trim length and limit brush flaring at operating speed to provide a very aggressive, controlled brushing action.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
2-3/4"	.014	5/8"-11 UNC	5/8"	12,500	1	13300	—
	.020					13301	13302
4"	.023	5/8"-11 UNC	7/8"	10,200	1	12301	—
5"	.023	5/8"-11 UNC	7/8"	6,600	1	12120	—

P **KNOT WIRE CUP BRUSH - 1-1/2 Rows** - Features an internal nut for use on dedicated equipment such as line traveling machines that clean and prep OD of pipe prior to coating.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number
						Steel
4"	.023	5/8"-11 UNC	1-1/4"	7,000	1	94012



12556

P **KNOT WIRE CUP BRUSHES - Double Row** - Provide very aggressive brushing while still maintaining some flexibility; ideal for severe cleaning applications.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
4"	.014	5/8"-11 UNC	1-1/4"	9,000	1	12756	—
	.020					12766	12726
	.023					12536	—
6"	.014	5/8"-11 UNC	1-3/8"	6,600	1	12536	—
	.023					12556	12636
	.035					12576	—
6"	.014	5/8"-11 UNC	1-1/2"	6,000	1	12906	—
	.023					12916	—
	.035					12926	—



12676

P **KNOT WIRE CUP BRUSHES - Banded - Double Row** - Feature a removable metal band around fill material to reduce the exposed trim length and limit brush flaring to provide an extremely aggressive, controlled brushing action for the most severe applications.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number
						Steel
4"	.020	5/8"-11 UNC	7/8"	9,000	1	12796
6"	.023	5/8"-11 UNC	7/8"	6,600	1	12676
	.035					12686



35406

P **POLYFLEX™ ENCAPSULATED CRIMPED WIRE CUP BRUSHES** feature fill material that has been encapsulated in an elastomer that gradually wears away to keep only the wire tips exposed; ideal for applications on flat surfaces that require maximum aggression but no flexibility in the brushing action.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number
						Steel
3-1/2"	.014	5/8"-11 UNC	7/8"	12,000	1	35406
4"	.020	5/8"-11 UNC	1-1/8"	9,000	1	35186
6"	.020	5/8"-11 UNC	1-1/4"	6,000	1	35006
Orange Elastomer* - Heavy-Duty						
6"	.020	5/8"-11 UNC	1-1/4"	6,000	1	35530
Black Elastomer* - Heavy-Duty - Heat-Resistant						
6"	.020	5/8"-11 UNC	1-1/4"	6,000	1	35760

* See Elastomer Color Code Chart on page 57 for more information.

P **CRIMPED WIRE CUP BRUSHES** provide very flexible brushing action and the most consistent performance for demanding light-duty cleaning applications; feature a threaded nut for use on angle grinders.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
3"	.014	M10 x 1.25	1"	14,000	1	13240 ■▲	—
		M10 x 1.50				13241	—
		M14 x 2.0				13242	—
		3/8"-24 UNF				13243	—
		1/2"-13 UNC				13244	—
		5/8"-11 UNC				13245 ■	—
3-1/2"	.014	M10 x 1.25	7/8"	13,300	1	13175	13182
		M10 x 1.50				13176	—
		M14 x 2.0				13177	13184
		3/8"-24 UNF				13178	13185
		1/2"-13 UNC				—	13187
		5/8"-11 UNC				13181 ■	13188
4"	.0118 .014 .020	5/8"-11 UNC	1-3/8"	10,200	1	14016	—
						14026 ■	—
						14036 ■▲	14126
5"	.014 .020	5/8"-11 UNC	1-1/4"	9,000	1	14206 ■▲	—
						14216	14256
6"	.014 .020	5/8"-11 UNC	1-1/4"	6,600	1	14066 ■*	—
						14076 ■▲*	14166*

* With internal nut ▲ Available in non-sparking brass & bronze wire, see page 94-95 for details. ■ Packaged product available. See pages 131-141 for details.



Removing paint from a steel surface with a crimped wire cup brush.



13245



36236

NOTE

If a different arbor hole is required (than listed in the tables) refer to Threaded Adapter Chart shown on Pg. 59.

V **VORTEC PRO® CRIMPED WIRE CUP BRUSHES** provide flexible brushing action and cost-effective performance in general purpose cleaning applications.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
3"	.014	5/8"-11 UNC	1"	14,000	1	36231 ■	—
		1/2"-13 UNC				36232 ■	—
4"	.020	5/8"-11 UNC	1-1/8"	9,000	1	36236 ■	—
6"	.020	5/8"-11 UNC	1-1/2"	6,600	1	36237 ■	—

■ Packaged product available. See pages 131-141 for details.

CUP BRUSHES WITH STEM

Designed primarily for use on high speed die grinders, cup brushes with permanently attached stems can also be used on drills.

P **UTILITY CRIMPED WIRE CUP BRUSHES** are smaller diameter cup brushes which provide flexible brushing action and consistent performance for more demanding light-duty cleaning applications; featuring a 1/4" stem for use on air tools.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1-3/4"	.006 .0118	3/4"	2-5/16"	13,000	10	14300 ▲	14303
						14301 ▲■	14304
2"	.008 .0118	5/8"	2-7/8"	13,000	10	14313	14318
						14306	14319
2-1/2"	.008 .014	7/8"	3-1/8"	13,000	10	14315	14320
						14317	14321
2-3/4"	.0118	7/8"	2-1/2"	6,000	1	14302 ▲■	—

■ Packaged product available. See pages 131-141 for details. ▲ Available in non-sparking brass wire, see page 94-95 for details.



14301

V **VORTEC PRO UTILITY CRIMPED WIRE CUP BRUSH** is a flexible and economic small diameter brushing tool for a broad range of general purpose applications using air tools or drills. 1/4" Stem.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
3"	.014	1"	3-1/4"	13,000	1	36230 ■	—

■ Packaged product available. See pages 131-141 for details.



36230

COATED ABRASIVES

NON-WOVEN ABRASIVES

POWER BRUSHES

NYLON BRUSHES

PACKAGED ITEMS

MAINTENANCE

STEM-MOUNTED END BRUSHES



Cleaning hard-to-reach fillet welds on a gusseted base plate.

Wire end brushes are for use on high-speed portable power tools for addressing smaller surfaces and recessed areas. End brushes feature an integral 1/4" steel stem for safe operation at high speed and quick mounting into the collet or chuck of either electric or pneumatic die grinders.

End brushes are available in a variety of knot wire and crimped wire configurations for use in a broad range of applications, and they are manufactured with the highest quality construction for smooth, efficient performance and long life. Weiler's end brushes are available in heat-treated steel, Type 302 stainless steel, and bronze or brass wire.

APPLICATIONS

- Cleaning ID's, internal passages and recessed areas
- Deburbing internal edges and crosshole intersections
- Removal of die flash and excess molded material
- Spot facing

P **KNOT WIRE END BRUSHES** feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1/2"	.006	1-1/8"	2-7/8"	20,000	10	-	10215
	.0104					10208	10216
	.014					10217	10218
3/4"	.006	1-1/8"	2-7/8"	20,000	10	-	10220
	.0104					10210	10211
	.014	7/8"	2-5/8"	22,000	10025 ■	10029 ■	
	.020				10026 ■	10030	
1-1/8"	.006	1-1/8"	2-9/16"	20,000	10	10141 ■	10142 •
	.0104		2-7/8"			10212	10213
	.0118		-			10187	-
	.014	7/8"	2-5/8"	22,000	10027 ■	10031 ■	
	.020				10028 ▲ ■	10032	

• Coated cup ■ Packaged product available. See pages 131-141 for details. ▲ Available in non-sparking bronze wire, see page 94-95 for details.

P **KNOT WIRE END BRUSHES - Nickel-plated Cup compliant with DOD MIL STD 2041D(SH)** Feature a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
3/4"	.014	7/8"	2-5/8"	22,000	10	10387	10388
	.020					10392	10393
1-1/8"	.014	7/8"	2-5/8"	22,000	10	10392	10393

V **VORTEC PRO® KNOT WIRE END BRUSHES** feature similar hollow-end construction and heavy-duty brushing action, but they have been engineered to provide cost-effective use for less demanding applications.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
3/4"	.014	7/8"	2-5/8"	22,000	10	36286	36287
	.020		2-9/16"			36250 ■	-
1"	.014	7/8"	2-5/8"	22,000	10	36288	36289
	.020		2-9/16"			36251 ■	-

■ Packaged product available. See pages 131-141 for details.

P **KNOT WIRE END BRUSHES - Banded** - Feature a pair of bands around the fill to reduce the exposed trim length and limit brush flaring to provide a very aggressive, controlled brushing action.



Diameter	Wire Size	Trim* Length	Overall Length	Max. RPM	Standard Pack	Item Number
						Steel
1-1/8"	.014	3/8"	2-5/8"	18,000	10	11140
	.020					11141

* Trim length from bands

P **CRIMPED WIRE END BRUSHES** feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
3/8"	.0118	7/8"	2-1/2"	20,000	10	10188	-
1/2"	.006	7/8"	2-9/16"	25,000	10	10001 ▲ ■	10013 ■
	.0104					10002	10014
	.014					10003	10015
	.020					10004	10016
3/4"	.006	7/8"	2-9/16"	22,000	10	10005 ■	10017 ■
	.0104					10006	10018
	.014					10007	10019
	.020					10008 ■	10020
1"	.006	1"	2-3/16"	22,000	10	10009 ▲ ■	10021 ■
	.0104					10010 ■	10022 ■
	.014	10011 ▲				10023	
	.020	1-1/8"				2-15/16"	10012 ■

■ Packaged product available. See pages 131-141 for details. ▲ Available in non-sparking brass wire, see page 94-95 for details.



Cleaning the exhaust port of a gasoline engine.



10002

P **CRIMPED WIRE END BRUSHES - Coated Cup** - Feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas. The plastic sleeve covering the cup protects the work surface from being scratched or marked.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1/2"	.006	7/8"	2-9/16"	25,000	10	11000	11010
	.0104					11001	11011
3/4"	.006	7/8"	2-9/16"	22,000	10	11003	11013
	.0104					11004	11014
1"	.006	7/8"	2-3/4"	22,000	10	11006	11016
	.0104	1"				11007	11017



11013

P **CRIMPED WIRE END BRUSHES - Nickel-plated Cup** - Feature a solid end construction and very flexible brushing action ideal for more demanding light-duty cleaning applications in corners and hard-to-reach areas. The nickel-plated cup is compliant with DOD MIL STD 2041D(SH).



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1/2"	.006	7/8"	2-9/16"	25,000	10	10370	
	.0104					10371	
	.014					10372	
	.020					10373	
3/4"	.006	7/8"	2-9/16"	22,000	10	10374	
	.0104					10375	
	.014					10376	
	.020					10377	
1"	.006	1"	2-7/8"	22,000	10	10378	
	.0104					10379	
	.014	1-1/8"	2-15/16"			10380	
	.020					10381	



10374

V **VORTEC PRO® CRIMPED WIRE END BRUSHES** feature similar solid end construction and flexible brushing action, but they have been engineered to provide cost-effective use for less demanding applications.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1/2"	.0104	7/8"	2-9/16"	25,000	10	36282	-
3/4"	.006	7/8"	2-9/16"	22,000	10	-	36283
	.0104					36247 ■	-
	.014					36246 ■	-
1"	.006	7/8"	2-3/4"	22,000	10	36284	36285
	.0104					36249 ■	-
	.014					36248 ■	-

■ Packaged product available. See pages 131-141 for details.



36247

ED ABRASIVES

COATED ABRASIVES

NON-WOVEN ABRASIVES

POWER BRUSHES

NYLON BRUSHES

PACKAGED ITEMS

MAINTENANCE



11112

P **CRIMPED WIRE END BRUSHES - Banded** - Feature bands around the fill to reduce the exposed trim length and limit brush flaring at operating speed to provide an aggressive, controlled brushing action.



Diameter	Wire Size	Trim Length*	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1/2"	.006	9/16"	2-9/16"	20,000	10	11100	11110
	.0104			25,000		11101	-
3/4"	.006	7/16"	2-11/16"	20,000	10	11102	11112
	.0104	3/8"				11103	11113
1"	.006	3/8"	2-5/8"	13,000	10	-	11114
	.0104					11105	11115

* Trim length from bands



10310

P ***CONTROLLED FLARE END BRUSHES** feature uniquely trimmed crimped wire fill for more effective brushing action and greatly enhanced durability when cleaning corners and fillet welds.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1/2"	.0104	7/8"	2-9/16"	25,000	10	10301	10313
	.014					10302	10314
	.020					10303	10315
3/4"	.0104	7/8"	2-9/16"	22,000	10	10305	10317
	.014					10306	-
	.020					10307	10319
1"	.0104	1"	2-7/8"	22,000	10	10309	10321
	.014					10310	10322
1"	.020	1-1/8"	2-15/16"	22,000	10	10311	10323

* Patent #8,186,000 B2

The unique trim of a controlled flare end brush is designed specifically to address hard-to-reach areas, reducing filament fatigue and breakage typically associated with a standard end brush when cleaning corners and fillet welds.



Standard Crimped Wire End Brush



Controlled Flare End Brush



10059

P **CRIMPED WIRE PILOT BONDING BRUSHES - Banded - Solid end.** Originally designed to clean around rivet holes in aluminum aircraft panels but may be used in other similar applications.



Diameter	Wire Size	Trim Length	Overall Length	Pilot Diameter	Max. RPM	Standard Pack	Item Number	
							Steel	Stainless
1/2"	.005	3/8"	2-1/4"	3/32"	20,000	10	10056	
				1/8"			10057	
				5/32"			10058	
				3/16"			10059	



35350

P **POLYFLEX® ENCAPSULATED CRIMPED WIRE END BRUSHES**
Burgundy Elastomer* - Feature fill material that has been encapsulated in an elastomer that gradually wears away to keep only the wire tips exposed; ideal for applications such as spot facing that may require maximum aggression and no flaring.



Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1/2"	.0104	7/8"	2-9/16"	18,000	10	35340	35500
3/4"	.0104	7/8"	2-9/16"	16,000	10	35345	35505
1"	.0104	7/8"	2-3/4"	14,000	10	35350	-
Orange Elastomer* - Heavy-Duty							
1/2"	.0104	7/8"	2-9/16"	18,000	10	35535	-
3/4"	.0104	7/8"	2-9/16"	16,000	10	35540	-
1"	.0104	7/8"	2-3/4"	14,000	10	35545	-

* See Elastomer Color Code Chart on page 57 for more information.

P CIRCULAR FLARED END BRUSHES feature crimped wire fill that has been “pre-flared” to match the working angle of the brush at operating speed; suited for addressing broad and slightly contoured surfaces.



Diameter	Wire Size	Max. RPM	Standard Pack	Item Number	
				Steel	Stainless
1"	.006	25,000	1	10033	10042
	.008			10034	10043
	.020			10099	—
1-1/4"	.006	20,000	1	10076	—
	.008			10035	—
	.020			10038	10047
1-1/2"	.006	20,000	1	10044	10045
	.008			10037	10046
	.020			10038	10047
2"	.014	25,000	2	11142	—
2-3/4"	.008	16,000	2	10039	10048
	.020			10040	—
	.014			10150	10151
3"	.006	16,000	2	10041	10050
	.008			10134	—
	.014			10073	10074
	.020			—	96705
4"	.008	15,000	1	—	—

■ Packaged product available. See pages 131-141 for details.



10035



10041

P POLYFLEX® ENCAPSULATED CIRCULAR FLARED END BRUSHES

Black Elastomer* - Crimped wire fill that has been encapsulated in a heavy-duty elastomer that gradually wears away to keep only the wire tips exposed. Their saucer-shape, narrow face, and aggressive brushing action make them suitable for addressing edges, corners, and confined areas.



O.D. Diameter	Wire Size	Cup Size	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1-3/4"	.006	3/4"	2"	25,000	2	35222	—
	.0104					35223	35226
	.020					35224	—
2"	.0104	3/4"	1-1/8"	20,000	2	35233	—
	.020					35234	—

* See Elastomer Color Code Chart on page 57 for more information.



35233

P PENCIL END BRUSHES contain straight wire fill material retained in a small diameter steel tube. They provide a light-duty brushing action suitable for very small recessed areas.



Tube Diameter	Wire Size	Trim Length	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel	Stainless
1/4"	.0104	3/4"	3-3/4"	8,000	10	99825	99823



99825

When brushing a recessed area or the inside diameter of a tube, use an End Brush in the following manner: Insert the brush, start the brush rotating. Turn off the power before removing the brush. This will prevent the brush from flaring out and enable it to fit into the recessed area again.



1. Insert Brush 2. Apply Power 3. Shut-Off Power 4. Remove Brush



MOUNT END BRUSHES SAFELY

When mounting end brushes, the amount of overhang from the tool should be minimized by clamping on as much of the straight portion of the stem as possible. However, the collet or chuck should NOT clamp on the radius at the base of the stem to insure a secure hold before use. See photo above for the correct brush orientation.

BORE-RX™ CROSSHOLE DEBURRING BRUSHES



Deburring intersecting oil passages in an engine block.

Designed for automated use in CNC machining centers and dedicated equipment. They are densely filled for high aggression and long tool life and feature a 3/8" diameter steel stem with a flat for use in a collet or end-mill holder.

Bore-Rx brushes are ideal tools for removing burrs from internal edges. Since they can eliminate manual deburring operations, these internal brushing tools help to improve part-to-part consistency and reduce direct labor costs. Bore-Rx brushes are available in sizes ranging from 3/4" to 4" in diameter, and they are designed to be interpolated within bore sizes that are larger than the brush diameter.

Operating Parameters For Wire Bore-Rx Brushes

Brush Diameter	Recommended RPM	Recommended Feed Rate
5/8" - 7/8"	8,000	20"/min
1" - 1-1/2"	8,000	20"/min
2" - 2-1/2"	6,000	20"/min
3" - 4"	3,000	20"/min

Tool Paths for Crosshole Deburring

An effective tool path for most crosshole deburring jobs is circular interpolation using the following guidelines to determine diameter of interpolation. The interpolation should be performed at a depth where the center of the brush face is at the center of the intersecting hole.

- Diameter of Interpolation = Hole Diameter - Brush Diameter



BORE-RX BRUSHING TOOLS - Crimped wire fill - Feature dense wire fill for aggressive deburring action on ductile metals and other hard-to-deburr materials.

Diameter	Wire Size	Face Width	Overall Length	Max. RPM	Standard Pack	Item Number	
						Steel*	
3/4"	.005	3/8"	4-3/8"	8,000	1		17202
		3/4"	4-3/4"				17203
7/8"	.006	3/4"	4-3/4"	8,000	1		17205
1"	.006	3/4"	5"	8,000	1		17207
1-1/4"	.006	3/4"	4-3/4"	8,000	1		17209
1-1/2"	.006	1"	5"	8,000	1		17211
2"	.006	1"	4-1/4"	6,000	1		17214
2-1/2"	.008	1"	4-3/4"	6,000	1		17216
3"	.008	1"	5-1/4"	6,000	1		17218
4"	.0118	1"	6-1/4"	6,000	1		17219

* Stainless Steel fill is available by special order.

Note: All Bore-Rx brush stems have a 2" long flat for use in end mill holders. Alternatively, they can be mounted in 3/8" collets. Bore-Rx extension holder is available. Contact Application Engineering at 888-299-APPS (2777).



17205



17218

CUSTOMIZABLE CROSSHOLE DEBURRING SOLUTIONS

Replacement Bore-Rx Brush Heads and Reusable Bore-Rx Arbors

In high production applications, reusable arbors reduce manufacturing costs by allowing the use of inexpensive brush head replacements. Brush heads are made-to-order in diameters ranging from 3/4" to 1-1/2" with face widths of 1/4" to 1". They are available on 3/16" and 1/4" pins. The pin diameter is based on the application and determines brush density. Contact Application Engineering at 888-299-APPS (2777) for more information.



Replacement Head



Reusable Extension 03991



Reusable Arbor

POWER AND HAND TUBE BRUSHES

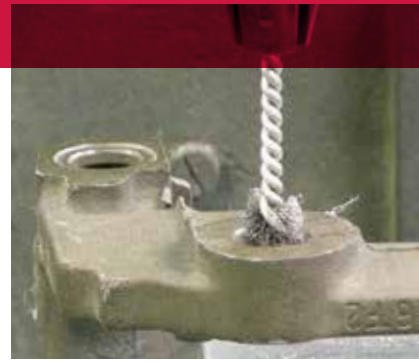
Weiler offers a comprehensive line of power and hand tube brushes for internal cleaning and deburring applications in tubing, pipe, drilled-and-tapped holes, and machined bores and passages. Due to their twisted-in-wire construction, the use of power tube brushes is limited to low-speed power tools such as drills and drill presses and to CNC and manual machine tools in which the RPM can be precisely programmed or set. In addition, they should not be used in reverse rotation to prevent unraveling of the stem wire. Available in a wide variety of brush configurations and fill materials, Weiler can supply a tube brush for any application. If you do not see what you need in this catalog, see the Special Tube Brush Design Specification Sheet on page 83, or call our toll-free Application Engineering Hotline at 888-299-APPS (2777) for assistance.

APPLICATIONS

- Deburring and cleaning drilled-and-tapped holes and other internal threads
- Cleaning and finishing the ID of tubing and pipe
- Crosshole deburring
- Removing burrs and chips from internal keyways, slots, and grooves
- Removing paint, coatings, and build-up other foreign material from the surfaces of bores and passages

POWER AND HAND TUBE BRUSH SELECTION TIPS

- A flat burr style tube brush is most effectively used with a holder on blind, threaded holes.
- A round tube brush is most effectively used fully chucked on smooth or threaded blind holes.
- A single stem, single spiral tube brush is most effectively used for manual or hand cleaning applications.
- A double stem, double spiral tube brush is most effectively used with power tools for heavy-duty cleaning and deburring.
- A polyflex encapsulated double stem, double spiral tube brush is most effectively used on power tools for very aggressive cleaning and deburring applications.



Removing zinc coating from holes in a brake bracket.

P **DOUBLE STEM, DOUBLE SPIRAL** feature four stem wires and a double spiral of straight wire fill material to provide aggressive cleaning and deburring action.



Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Max. RPM	Standard Pack	Item Number	
							Steel	Stainless
3/8"	.003	1-1/2"	1/8"	4"	2,000	10	21342	—
	.006	2-1/8"		6"			21232	—
1/2"	.004	2"	5/32"	5"	2,000	10	21106	21116
	.006						21107 ▲ ■	21117
	.0104						21252	—
5/8"	.005	2"	7/32"	5"	2,000	10	21108 ■	21118
	.008						21109 ▲	21119
	.0104						21184	—
3/4"	.006	2-1/2"	1/4"	5-1/2"	2,000	10	21110 ▲ ■	21120
	.008						21247	—
	.0104						21111	21121
7/8"	.006	2-1/2"	1/4"	5-1/2"	2,000	10	21112	21122
	.0104						21113	21123
1"	.006	2-1/2"	1/4"	5-1/2"	2,000	10	21114 ▲ ■	21124
	.0104						21115	21125
1-1/4"	.006	2-1/2"	1/4"	5-1/2"	2,000	10	21164	21245
	.0104						21167 ★	21236
1-1/2"	.014	2-1/2"	1/4"	5-1/2"	2,000	10	—	21413

■ Packaged product available. See pages 131-141 for details. ★ 5" Overall length

▲ Available in non-sparking brass wire, see page 94-95 for details.



WED ABRASIVES

COATED ABRASIVES

NON-WOVEN ABRASIVES

POWER BRUSHES

NYLON BRUSHES

PACKAGED ITEMS

MAINTENANCE

P POLYFLEX™ ENCAPSULATED DOUBLE STEM, DOUBLE SPIRAL

Burgundy Elastomer* - Encapsulated with an elastomer that leaves only the sharp wire tips exposed for maximum aggression and a very rigid brushing action.



35825

Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Max. RPM	Standard Pack	Item Number	
							Steel	
1/2"	.006	2"	5/32"	5"	2,000	10	35821	
5/8"	.0104	2"	7/32"	5"	2,000	10	35822	
3/4"	.0104	2-1/2"	1/4"	5-1/2"	2,000	10	35823	
1"	.0104	2-1/2"	1/4"	5-1/2"	2,000	10	35825	

* See Elastomer Color Code Chart on page 57 for more information.

P ROUND - Feature a single continuous length of stainless steel stem wire and a single spiral of crimped wire fill for a more flexible brushing action; for use on smooth or threaded blind holes.



21074

Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Max. RPM	Standard Pack	Item Number	
							Steel	Stainless
1/4"	.004	1"	1/8"	3-1/2"	2,000	10	21072 ▲	21081 ■
5/16"	.005	1"	1/8"	3-1/2"	2,000	10	21175	—
3/8"	.004	1"	1/8"	3-1/2"	2,000	10	21073 ■	21082
	.006						—	
	.008						21264	21240
7/16"	.005	1"	1/8"	3-1/2"	2,000	10	21142	21181
1/2"	.005	1"	3/16"	3-1/2"	2,000	10	21074 ▲ ■	21083
							—	—
9/16"	.005	1"	3/16"	3-1/2"	2,000	10	21143	—
							.0104	—
5/8"	.005	1"	3/16"	3-1/2"	2,000	10	21075 ■	21084
							.008	—
11/16"	.005	1"	3/16"	3-1/2"	2,000	10	21144	—
3/4"	.006	1"	7/32"	3-1/2"	2,000	10	21076	21085
							.008	—
13/16"	.005	1"	7/32"	3-1/2"	2,000	10	21146	—
7/8"	.006	1"	7/32"	3-1/2"	2,000	10	21077 ■	21086
							.008	—
15/16"	.005	1"	7/32"	3-1/2"	2,000	10	21148	—
1"	.005	1"	1/4"	3-1/2"	2,000	10	21149	21340
							.008	—
1-1/8"	.005	1"	1/4"	3-1/2"	2,000	10	21150	—
.008							—	21079
1-1/4"	.008	1"	1/4"	3-1/2"	2,000	10	21080	21089
1-1/2"	.008	1"	1/4"	3-1/2"	2,000	10	21203 ▲	—
							.0104	—
2-1/4"	.008	1"	1/4"	3-1/2"	2,000	10	21322	—

■ Packaged product available. See pages 131-141 for details. ▲ Available in non-sparking brass wire, see page 94-95 for details.

Correct Mounting
in Chuck



Incorrect
Mounting in Chuck



TUBE BRUSH OPERATING RECOMMENDATIONS

The stems in power tube brushes are not as strong as the stems in most other brushes. Therefore, it is very important to avoid any load conditions and brush speeds that can cause excessive stem deflections and destructive bending.

A suggested guideline to avoid this unsafe condition is minimizing the overhang of the stem to under an inch, and running the brush at speeds below 2,000 RPM.

Increasing overhang could decrease the safe speed at which the brush can operate. To reach into deeper holes, use drill extension rods instead of increasing stem overhang.

BEFORE STARTING THE BRUSH:

- Secure brush in chuck.
- Ensure clockwise brush rotation (running the brush counter-clockwise could cause the brush to fall apart.)
- Clamp work securely.
- Position all guards in place.
- Align brush with the work so the brush rotates on its true centerline to prevent any stem deflections.
- Guide the brush into the hole before starting the brush rotation.
- Always wear eye protection.

P

BURRITE - Feature a single continuous length of stainless steel stem wire and filled with a tuft of crimped wire to provide an aggressive flat side action; ideal for cleaning and deburring internal threads.



Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Max. RPM	Standard Pack	Item Number	
							Steel	Stainless
1/4"	.003	9/16"	3/32"	2-1/8"	2,000	10	21000	-
	.005						21001	21050
5/16"	.003	9/16"	3/32"	2-1/8"	2,000	10	21004	-
	.005						21005	-
3/8"	.003	9/16"	3/32"	2-1/8"	2,000	10	21008	-
	.005		1/8"				21009	21051
	.005		1/8"				21023	-
7/16"	.003	9/16"	3/32"	2-1/8"	2,000	10	21014	-
	.005						21015	-
1/2"	.003	9/16"	3/32"	2-1/8"	2,000	10	21020	-
	.005		1/8"				21021	21053
	.005		1/8"				21025	-
9/16"	.003	5/8"	1/8"	2-1/4"	2,000	10	21027	-
	.005						21028	-
5/8"	.003	5/8"	1/8"	2-1/4"	2,000	10	21030	-
	.005						21031	21055
3/4"	.005	5/8"	1/8"	2-1/4"	2,000	10	21034	21056
	.008						21035	-
7/8"	.005	5/8"	1/8"	2-1/4"	2,000	10	21036	21057
1"	.005	5/8"	1/8"	2-1/4"	2,000	10	21040	21058
	.008						21041	-
1-1/8"	.005	5/8"	1/8"	2-1/4"	2,000	10	21044	-



Deburring the threads of a tapped hole using a burrite brush in a holder.



21014



21040

P

BURRITE HOLDERS - Feature a 1/4" stem for convenient mounting into the chuck of a drill or the collet of a machine tool and allow the brush to be used in either direction of rotation. They allow the brush to be used in a standard tapping cycle for deburring threaded holes in CNC machining centers.



For Brush Stem Dia.	Holder Diameter	Overall Length	Standard Pack	Item Number
3/32"	1/4"	3-1/8"	5	95202
1/8"	3/8"	3-3/8"	5	95203



95203

P

SINGLE STEM, SINGLE SPIRAL - Feature a single continuous length of galvanized steel stem wire with a formed eye loop for convenient hand use. The single spiral of straight wire fill allows for easy manual insertion into the ID.

Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Standard Pack	Item Number	
						Steel	Stainless
1/8"	.003	1"	3/32"	6"	10	21246	21249
3/16"	.003	1-1/2"	3/32"	7"	10	21090 ▲	21098
	.005					21091	21099
1/4"	.003	1-1/2"	3/32"	7"	10	21092 ▲	21100
	.005					21093 ▲	21101
	.006					21161	-
	.006					21094 ▲	21414
3/8"	.004	2"	1/8"	8"	10	21095	21103
	.006					21096 ▲	21104
1/2"	.004	2"	1/8"	8"	10	21097	21105
	.006					21162	-
	.008					21233	-
9/16"	.005	2-1/2"	5/32"	9"	10	21233	-

▲ Available in non-sparking brass wire, see page 94-95 for details.



21095

Key:

P

PERFORMANCE LINE
Industrial Grade

V

VALUE LINE
Professional Grade

LED ABRASIVES
COATED ABRASIVES
NON-WOVEN ABRASIVES
POWER BRUSHES
NYLON BRUSHES
PACKAGED ITEMS
MAINTENANCE

P NYLON HAND TUBE BRUSHES feature a single continuous length of galvanized steel stem wire with a formed eye loop for convenient hand use. The single spiral of straight nylon fill allows for easy manual insertion and scratch-free cleaning of the ID.



44113

Diameter	Fill Diameter	Brush Part	Stem Diameter	Overall Length	Standard Pack	Item Number
						Nylon
1/4"	.005	2"	3/32"	6-1/4"	36	44110
3/8"	.005	2"	3/32"	6-1/4"	36	44213
1/2"	.010	3"	1/8"	8-1/2"	36	44111
3/4"	.012	3"	1/8"	8-1/2"	36	44112
1"	.014	4"	5/32"	12-1/4"	36	44113
1-1/4"	.014	4"	5/32"	13"	36	44114
2"	.014	5"	3/16"	16-3/4"	36	44115

P PERCOLATOR BRUSH features single stem, single spiral construction with an eye loop and straight white nylon fill. Intended for cleaning the internal passages in coffee percolators, this brush can be also be used in other similar manual cleaning applications.



44316

Diameter	Fill Diameter	Brush Part	Stem Diameter	Overall Length	Standard Pack	Item Number
						Nylon
7/16"	.010	3-1/2"	5/32"	11-1/2"	10	44316

P VALVE GUIDE BRUSHES are made with single stem, single spiral construction and have a permanently-attached 1/4" diameter long steel handle for convenient hand use or for mounting into a chuck. Intended for removing heavy deposits from valve guides in gas and diesel engines, these brushes can also be used in a range of other similar applications.



95567

Diameter	Fill Diameter / Material	Brush Part	Overall Length	Max. RPM	Standard Pack	Item Number
1/4"	.0104 Steel	2"	10"	2,000	10	95563
5/16"						95027
11/32"						95566
3/8"						95028
7/16"						95665
1/2"	95029					
11/32"	.008 Nylon	2-1/2"	10"	2,000	10	95660
3/8"	.012 Nylon					95567

P GUN CLEANING BRUSHES - Rifle Brushes - Constructed using a continuous piece of stem wire and fine bronze wire fill for a scratch-free cleaning action in gun barrels, these flexible tube brushes are designed to be attached to extension rods using the 8-32 male coupling.



95301

Caliber	Brush Part	Overall Length	Coupling Size	Standard Pack	Item Number
					Bronze
22	2-1/4"	3-1/4"	8-32	10	95301
30	2-1/4"	3-1/4"	8-32	10	99786
35	2-1/4"	3-1/4"	8-32	10	99788
45	2-1/4"	3-1/4"	8-32	10	99791

P GUN CLEANING BRUSHES - Shotgun Brushes - Constructed using a continuous piece of stem wire and fine bronze wire fill for a scratch-free cleaning action in gun barrels, these flexible tube brushes are designed to be attached to extension rods using the 5/16"-27 male coupling.



99714

Gauge	Brush Part	Overall Length	Coupling Size	Standard Pack	Item Number
					Bronze
12	1-5/8"	2-7/8"	5/16-27	10	99714
16	1-5/8"	2-7/8"	5/16-27	10	99694
20	1-5/8"	2-7/8"	5/16-27	10	95084
410	1-5/8"	2-7/8"	5/16-27	10	95129

SPECIAL BRUSH DESIGNS - Design a power tube brush for your specific application.

SPECIAL TUBE BRUSH SPECIFICATION SHEET:

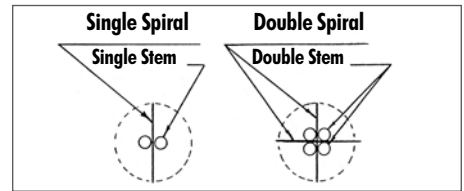
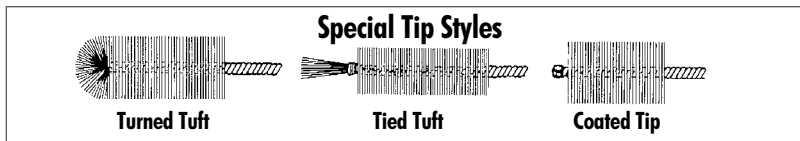
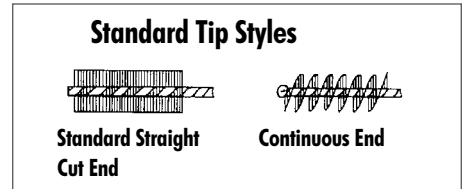
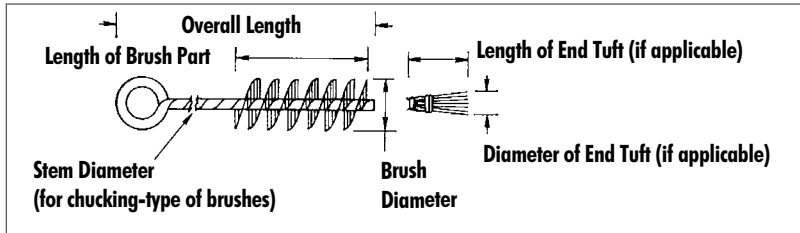
(Use the illustration on this page as a guide)

- | | |
|---|--|
| <p>1. Brush diameter _____</p> <p>2. Length of brush part _____</p> <p>3. Overall brush length _____</p> <p>4. Special stem diameter (if required) _____</p> <p>5. Stem material:
 <input type="checkbox"/> Galvanized Steel <input type="checkbox"/> Stainless <input type="checkbox"/> Other</p> <p>6. Application _____
 _____</p> | <p>7. Brush fill material:
 <input type="checkbox"/> Steel wire <input type="checkbox"/> Stainless wire
 <input type="checkbox"/> Nylon Abrasive Filament (Nylox®)
 <input type="checkbox"/> Brass wire <input type="checkbox"/> Other _____</p> <p>8. Fill material diameter _____</p> <p>9. Special tip style (if required) _____</p> <p>10. <input type="checkbox"/> Single stem <input type="checkbox"/> Double stem</p> <p>11. Order Quantity _____</p> |
|---|--|

* Special tube brushes are not returnable, as they are manufactured to order.

Name: _____
 Company Name: _____
 Address: _____
 Phone: (____) _____
 Fax: (____) _____
 E-mail: _____

End-User Name: _____
 City: _____
 State: _____ Zip: _____



FOR ADDITIONAL INFORMATION CALL:
 Weiler's Application Engineering
 Hotline toll free at:
 888-299-APPS (2777)

FAX SPECIFICATION SHEET TO:
 Application Engineering
 Fax: 800-635-3615

WHY WEILER BONDED ABRASIVES COATED ABRASIVES NON-WOVEN ABRASIVES POWER BRUSHES NYLOX BRUSHES PACKAGED ITEMS MAINTENANCE

MINIATURE BRUSHES



Removing galled spots from a metal forming die.

THE WEILER FAMILY began producing miniature brushes for the jewelry industry in 1898, and their tradition of providing the highest quality, most cost-effective products continues to this day.

Weiler's line of miniature brushes are designed for precision cleaning, light deburring, and finishing applications in a variety of crafts, trades, and industries. In addition to use in jewelry production and in dental and optical labs, miniature brushes have many applications in modern industries such as electronics and instrumentation production, aerospace and aircraft manufacture, and precision tool and die shops. They are permanently mounted on 1/8" or 3/32" stems for quick mounting and efficient use on high-speed electric rotary tools and air-powered pencil die grinders.

APPLICATIONS

- Decorative finishing
- Light deburring and edge blending
- Buffing and polishing of small parts
- Light-duty cleaning

P WIRE WHEEL BRUSHES - Fine crimped wire fill for light-duty cleaning and deburring.



99554



26144

Diameter	Wire Size	Trim Length	Stem Size	Stem Length	Max. RPM	Standard Pack	Item Number		
							Steel	Stainless	Brass
5/8"	.005	1/8"	1/8"	1-1/2"	37,000	144	—	99554	—
3/4"	.003	3/16"	1/8"	1-1/2"	37,000	144	26000	—	26001
	.005	3/16"	1/8"	1-1/2"			26003	26005	26004
3/4"	.003	3/16"	3/32"	1-1/2"	37,000	144	26140	—	26141
	.005	3/16"	3/32"	1-1/2"			26143	—	26144
1"	.003	5/16"	1/8"	1-1/2"	37,000	144	26012	26014	—
	.005	5/16"	1/8"	1-1/2"			26015	26017	26016
	.005	5/16"	3/32"	1-1/2"			26155	—	—
1-1/4"	.005	3/8"	1/8"	1-1/2"	37,000	144	26021	—	—
1-1/2"	.005	1/2"	1/8"	1-1/2"	25,000	144	26296	26294	—

P BRISTLE WHEEL BRUSHES - Natural hair fill for scratch-free cleaning of small parts or for buffing and polishing of features such as slots and grooves using abrasive compounds.



26041

Diameter	Fill Type	Trim Length	Stem Size	Stem Length	Max. RPM	Standard Pack	Item Number
3/4"	Stiff Hair	3/16"	3/32"	1-1/2"	37,000	144	26041
	Soft Hair						26042
	Stiff Hair*						26043
	Stiff Hair						26059

* Double thick

P WIRE CUP BRUSHES - Fine crimped wire fill for light-duty cleaning or deburring in confined areas.



26074

Dia.	Wire Size	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number		
								Steel	Stainless	Brass
5/8"	.003	1/4"	1/8"	1-1/2"	2"	37,000	144	26071	—	26072
	.005							26074	26076	26075

P BRISTLE CUP BRUSHES - Natural hair fill for scratch-free cleaning of confined areas or for buffing and polishing of small recessed surfaces using abrasive compounds.



26095

Dia.	Fill Type	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number
1/2"	Stiff Hair	7/32"	3/32"	1-1/2"	2"	37,000	144	26091
9/16"	Stiff Hair	1/4"	1/8"	1-1/2"	2"	37,000	144	26093
	Soft Hair							26094
1"	Stiff Hair	7/16"	1/8"	1-1/2"	2-3/8"	25,000	144	26095
	Soft Hair							26096

P WIRE END BRUSHES - Fine crimped wire fill for light-duty cleaning or deburring in very small recessed areas or ID's.



Dia.	Wire Size	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number		
								Steel	Stainless	Brass
3/16"	.003	1/4"	1/8"	1-1/4"	1-7/8"	37,000	144	26098	26099	26097
			3/32"					-	-	
1/4"	.005	7/16"	1/8"	1-1/4"	2-1/8"	37,000	144	26107	26108	26106
5/16"	.005	9/16"	1/8"	1-1/4"	2-3/8"	25,000	144	26113	26114	-



P BRISTLE END BRUSHES - Natural hair fill for scratch-free cleaning or for buffing and polishing of very small recesses using abrasive compounds.



Dia.	Fill Type	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number
3/16"	Stiff Hair	1/4"	1/8"	1-1/4"	1-7/8"	37,000	144	26115
	Soft Hair		26122					
	Stiff Hair		3/32"					26116
1/4"	Stiff Hair	3/8"	1/8"	1-1/4"	2-1/8"	37,000	144	26119
5/16"	Stiff Hair	9/16"	1/8"	1-1/4"	2-3/8"	25,000	144	26121



P BRISTLE END BRUSHES - Plastic Ferrule
Feature a plastic ferrule or cup to protect internal surfaces during use.



Dia.	Fill Type	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number
3/16"	Stiff Hair	1/4"	1/8"	1-1/4"	1-7/8"	37,000	144	26128
1/4"	Stiff Hair	3/8"	1/8"	1-1/4"	2-1/8"	37,000	144	26131
5/16"	Stiff Hair	9/16"	1/8"	1-1/4"	2-3/8"	25,000	144	26133



P ABRASIVE NYLON END BRUSHES - Plastic Ferrule - Nylox® abrasive nylon fill for buffing and polishing without compounds. They can also be used in automated applications for precision deburring and finishing of small part features.



Dia.	Filament Dia./Grit	Trim Length	Stem Size	Stem Length	Overall Length	Max. RPM	Standard Pack	Item Number
3/16"	.018/500	1/4"	1/8"	1-1/4"	1-7/8"	37,000	144	26136
1/4"	.018/500	3/8"	1/8"	1-1/4"	2-1/8"	37,000	144	26138
5/16"	.018/500	9/16"	1/8"	1-1/4"	2-3/8"	25,000	144	26146



Deburring the I.D. of a small machined part with miniature wire end brush.



Key:

P PERFORMANCE LINE Industrial Grade **V** VALUE LINE Professional Grade

WHY WEILER
BONDED ABRASIVES
COATED ABRASIVES
NON-WOVEN ABRASIVES
POWER BRUSHES
NYLOX BRUSHES
PACKAGED ITEMS
MAINTENANCE

NON-SPARKING BRUSHES



Creating an antique finish on a brass plate.

Weiler offers an assortment of wire non-sparking brushes featuring high-quality bronze or brass wire that offer a very soft brushing action in comparison to steel and stainless steel and will not generate a spark when used on metal surfaces. These products are available in a variety of knot wire and crimped wire configurations for use in a broad range of surface cleaning applications, and they are manufactured with individual knot hole and solid ring construction for high performance and long life. Weiler's non-sparking power brushes are available with plain arbor holes, nuts, and permanently-attached stems for use on a variety of tools.

APPLICATIONS

- Light to medium duty cleaning of surfaces, recesses, and ID's
- Deburring component parts machined from soft, non-ferrous metals
- Cleaning molds and dies in the injection-molding and extrusion of plastics
- Maintenance activities in areas where flammable or potentially explosive materials are present, such as refineries and petrochemical plants.



13121

P STANDARD TWIST WHEELS provide a heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications.



Dia.	Wire Size	Arbor Hole	No. of Knots	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Std. Pack	Item Number
										Bronze
3"	.020	1/2" - 3/8"	20	3/8"	5/8"	1/2"	7/16"	25,000	10	08271
4"	.020	5/8" - 11	24	1/2"	7/8"	-	7/16"	20,000	5	13121

For threaded arbor hole adapters see page 67.



01475

P CRIMPED WIRE WHEELS provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications.



Diameter	Wire Size	Arbor Hole	Face Width	Trim Length	Max. AH Avail.	Thickness at Face Plates	Max. RPM	Standard Pack	Item Number
									Brass
6"	.005	5/8" - 1/2"	1/2"	1-7/16"	1-1/4"	7/16"	6,000	2	01415
	.0118								01475

For arbor hole adapters see page 72. For other available arbor holes, see Arbor Hole Variations Table on page 57.



29078

P SMALL DIAMETER CRIMPED WIRE WHEELS provide a flexible brushing action and consistent performance for light-duty cleaning and deburring applications requiring a small wheel.



Diameter	Wire Size	Arbor Hole	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
							Brass
1-1/2"	.005	3/8"	1/4"	7/16"	20,000	10	29178
2"	.005	1/2"	3/8"	1/2"	20,000	10	29059
	.0118						29086
3"	.014	1/2"	5/8"	1"	20,000	10	29078

For adapters and drive arbors see page 75.



17641

P CONFLEX BRUSH - Small diameter wheels permanently mounted onto a 1/4" stem to provide a very flexible brushing action.



Diameter	Wire Size	Face Width	Trim Length	Max. RPM	Standard Pack	Item Number
						Brass
3"	.0118	1/2"	1"	20,000	10	17641 ■

■ Packaged product available. See pages 131-141 for details.



13299

P KNOT WIRE CUP BRUSHES provide heavy-duty brushing action with some flexibility for more demanding cleaning applications on relatively flat surfaces.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number
						Bronze
2-3/4"	.020	5/8"-11 UNC	1"	14,000	1	13299
4"	.020	5/8"-11 UNC	1-1/4"	10,200	1	12776

For threaded arbor hole adapters see page 67.

P **CRIMPED WIRE CUP BRUSHES** provide a very flexible brushing action for light-duty cleaning applications on somewhat irregular surfaces.



Diameter	Wire Size	Arbor Hole	Trim Length	Max. RPM	Standard Pack	Item Number	
						Bronze	Brass
3"	.020	5/8"-11 UNC	7/8"	14,000	1	13231	—
4"	.020	5/8"-11 UNC	1-3/8"	10,200	1	14616	—
5"	.014	5/8"-11 UNC	1-1/4"	8,000	1	—	14606
6"	.020	5/8"-11 UNC	1-1/4"	6,600	1	14316*	—

* With internal nut. For threaded arbor hole adapters see page 67.



14316

P **UTILITY CRIMPED WIRE CUP BRUSHES** - Smaller diameter cup brushes that provide a flexible brushing action for light-duty cleaning applications.



Diameter	Wire Size	Trim Length	Stem Diameter	Overall Length	Max. RPM	Standard Pack	Item Number
							Brass
1-3/4"	.006	3/4"	1/4"	2-5/16"	13,000	10	14310
							14314
2-3/4"	.0118	7/8"	1/4"	2-1/2"	6,000	1	14311



14314

P **KNOT WIRE END BRUSH** features a hollow end and heavy-duty brushing action with some flexibility; ideal for more demanding cleaning applications in recessed areas.



Diameter	Wire Size	Trim Length	Stem Diameter	Overall Length	Max. RPM	Standard Pack	Item Number
							Bronze
1-1/8"	.020	7/8"	1/4"	2-5/8"	22,000	10	10067



10067

P **CRIMPED WIRE END BRUSHES** feature a solid end and very flexible brushing action ideal for light-duty cleaning applications in corners and hard-to-reach areas.



Diameter	Wire Size	Trim Length	Stem Diameter	Overall Length	Max. RPM	Standard Pack	Item Number
							Brass
1/2"	.005	7/8"	1/4"	2-9/16"	25,000	10	10158
1"	.005	7/8"	1/4"	2-5/8"	20,000	10	10128
1"	.0118	1"	1/4"	2-5/8"	22,000	10	10091



10158

P **DOUBLE STEM, DOUBLE SPIRAL POWER TUBE BRUSHES** - Constructed with four stem wires and a double spiral of straight wire fill material to provide a more aggressive internal cleaning action.



Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Standard Pack	Item Number
						Brass
1/2"	.006	2"	5/32"	5"	10	21178
5/8"	.008	2"	7/32"	5"	10	21219
3/4"	.006	2-1/2"	1/4"	5-1/2"	10	21179
1"	.006	2-1/2"	1/4"	5-1/2"	10	21218



21178

P **ROUND POWER TUBE BRUSHES** feature a single continuous length of stainless steel stem wire and a single spiral of crimped wire fill for a more flexible brushing action; suitable for use on smooth or threaded blind holes.



Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Standard Pack	Item Number
						Brass
1/4"	.004	1"	1/8"	3-1/2"	10	21332
1/2"	.005	1"	3/16"	3-1/2"	10	21182
1-1/2"	.008	1"	1/4"	3-1/2"	10	21152



21332

P **SINGLE STEM, SINGLE SPIRAL HAND TUBE BRUSHES** - Constructed using a single continuous length of galvanized steel stem wire and feature a formed eye loop for convenient hand use. The single spiral of straight wire fill allows for easy manual insertion into the ID.

Diameter	Wire Size	Brush Part	Stem Diameter	Overall Length	Standard Pack	Item Number
						Brass
3/16"	.003	1-1/2"	3/32"	7"	10	21221
1/4"	.003	1-1/2"	3/32"	7"	10	21270
						21139
3/8"	.004	2"	1/8"	8"	10	21191
1/2"	.004	2"	1/8"	8"	10	21165



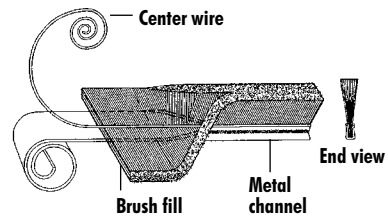
21191

STRIP BRUSHES



Straight strip brush used as a guard to prevent chips from flying.

METAL CHANNEL STRIP BRUSHES consist of natural, synthetic or wire bristles, held securely in place by a U-shaped metal channel and center wire, as illustrated. All Weiler brushes are first manufactured into a straight strip brush. The strip can then be coiled into cylinder brushes, or other shapes such as discs and cups. There are a variety of brush fills and virtually an infinite number of brush specifications within each metal channel size. All strip brushes are manufactured to our customers' individual requirements. This provides the proper filament stiffness, and allows for customers' unique modification of length and trim, enabling us to provide the ideal brush for the application.



APPLICATIONS

- Spreading powdered materials
- Dusting tires, tile, paper, etc.
- Splash guard on grinders and machine tools
- Conveyor belt cleaning - assembled on hubs to form rotary brushes
- Lag brushes
- Eliminating static electricity
- Curtains to prevent chips from flying



GENERAL FIBER CHARACTERISTICS

Characteristic	6.6 Nylon	6.12 Nylon	Polypropylene	Horse Hair	Tampico
Heat Distortion (°F)	300	250	225	370	283
Melting Point	500	405	330	—	—
Bend Recovery (%)	90	90	70-80	excellent	poor
Shelf Life	excellent	excellent	good	poor	fair
Abrasion Resistance	excellent	excellent	good	good	poor
Specific Gravity (G/CC)	1.13-4	1.04-5	.90-1	1.3	.6
Tensile Strength (PSI)	60-70M	50-60M	50-80M	—	—

CHEMICAL AND ENVIRONMENTAL RESISTANCE

Characteristic	6.6 Nylon	6.12 Nylon	Polypropylene	Horse Hair	Tampico
Dilute Alkali	excellent	excellent	excellent	poor	good
Dilute Acids	good	good	excellent	poor	good
Strong Acids	fair	good	good	good-poor	good-poor
Alcohols	good	good	excellent	poor	good
Petroleum Distillates	excellent	excellent	good	poor	good
Hot Water	good	good	fair	poor	good
Alcohols, Vegetable Oils	good	good	excellent	poor	good

STRIP BRUSHES - STRAIGHT

Can be mounted on metal or wood back-up plates or on rotary hubs with machine or wood screws.



FILL MATERIALS

- Hair (horse, goat, etc.)
- Carbon steel
- Type 302 stainless steel
- Non-ferrous metals (brass, bronze, etc.)
- Nylon abrasive filament (Nylox®)
- Natural fibers (tampico)
- Synthetics (nylon, polypropylene)

STRIP BRUSHES - STRAIGHT

Metal Channel Size	Before Forming	After Forming (width x height)	Channel Materials			Max. OAH	Max. Bristle Diameter (nylon)	Max. Bristle Diameter (wire)
			Galvanized Steel	Stainless Steel				
				400 Seres	300 Seres			
#2.5	5/16" x .025	1/8 (.125) x 1/8" (.125)	XXX	XXX	—	1-1/2"	.012	.006*
#3	3/8" x .025	5/32" (.156) x 5/32" (.156)	XXX	XXX	—	3-1/2" **	.014	.006*
#4	1/2" x .030	3/16" (.187) x 3/16" (.187)	XXX	XXX	XXX	4"	.025	.008
#5	5/8" X .040	7/32" (.218) X 1/4" (.250)	XXX	XXX	—	4-1/2"	.030	.008
#7	7/8" X .040	5/16" (.312) X 5/16" (.312)	XXX	XXX	XXX	6"	.050	.020
#10	1-1/4" X .050	7/16" (.437) X 7/16" (.437)	XXX	XXX	—	6"	.060	.020

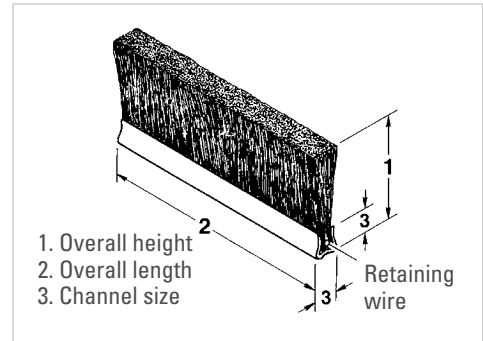
* Available in brass or bronze only.

** Max. wire OAH 1-1/2".

STRAIGHT STRIP BRUSHES SPECIFICATIONS:

(Use the illustration on this page as a guide)

1. Overall brush height: _____
2. Overall brush length: _____
3. Channel size:
 - #2.5 #3 #4
 - #5 #7 #10
4. Channel material: Galvanized Steel Stainless Steel
5. Brush fill material:
 - Horsehair Nylon Carbon Steel Bronze
 - Polypropylene Brass 302 Stainless Tampico
 - Nylon Abrasive Filament (Nylox) Other _____
6. Fill material: Crimped Straight
 Diameter: _____ Color (if applicable): _____
7. Application: Wet Dry Operating Temp.: _____ °F
8. Quantity required: _____



* Strip brushes are not returnable, as they are manufactured to order.

Name: _____
 Company Name: _____
 Address: _____
 Phone: (_____) _____
 Fax: (_____) _____
 E-mail: _____

End-User Name: _____
 City: _____
 State: _____ Zip: _____

FOR ADDITIONAL INFORMATION CALL:

Weiler's Application Engineering
 Hotline toll free at:
 888-299-APPS (2777)

FAX SPECIFICATION SHEET TO:

Application Engineering
 Fax: 800-635-3615

STRIP BRUSHES - COIL WOUND

Can be supplied as an unmounted refill coil, mounted on disposable tubing or wound on a customer's shaft.

FILL MATERIALS

- Hair (horse, goat, etc.)
- Carbon steel
- Type 302 stainless steel
- Non-ferrous metals (brass, bronze, etc.)
- Nylon abrasive filament (Nylox®)
- Natural fibers (tampico)
- Synthetics (nylon, polypropylene)

ALLIGATOR CLIPS - Use on #7 channel only. Coil Wound Strip Brushes can be supplied with alligator clips that have tabs at each end to be attached to customers' mandrel.



STRIP BRUSHES - COIL WOUND

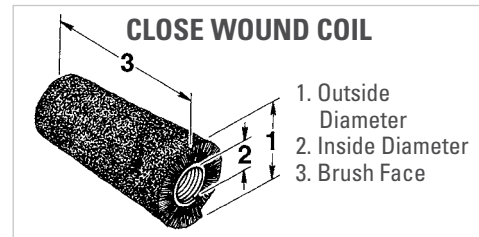
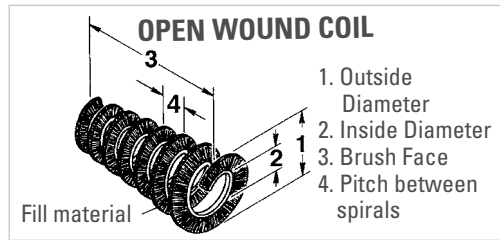
Metal Channel Size	Before Forming	After Forming (width x height)	Channel Materials			Min. I.D.	Max. O.D.	Max. Bristle Dia. (nylon)	Max. Bristle Dia. (wire)
			Galvanized Steel	Stainless Steel					
				400 Seres	300 Seres				
#2.5	5/16" x .025	1/8 (.125) x 1/8" (.125)	XXX	XXX	-	3/8"	3-3/8"	.012	.006*
#3	3/8" x .025	5/32" (.156) x 5/32" (.156)	XXX	XXX	-	3/8"	7"	.014	.006*
#4	1/2" x .030	3/16" (.187) x 3/16" (.187)	XXX	XXX	XXX	1/2"	7"	.025	.008
#7	7/8" X .040	5/16" (.312) X 5/16" (.312)	XXX	XXX	XXX	1"	11"	.050	.020

* Available in brass or bronze only.

COIL WOUND STRIP BRUSHES SPECIFICATIONS:

(Use the illustration on this page as a guide)

- Outside diameter size _____
- Inside diameter size _____
- Brush face _____
- Channel size:
 - #2.5 #3 #4 #7
- Channel material: Galvanized Steel Stainless Steel
- Brush fill material:
 - Horsehair Nylon Carbon Steel Bronze
 - Polypropylene Brass 302 Stainless Tampico
 - Nylon Abrasive Filament (Nylox) Other _____
- Fill material: Crimped Straight
Diameter: _____ Color (if applicable): _____
- Close wound Open wound Specify pitch between spirals _____
- Mounting Clips: Yes No
- Application: Wet Dry Operating Temp.: _____ °F
- Quantity required: _____



* Strip brushes are not returnable, as they are manufactured to order.

Name: _____
 Company Name: _____
 Address: _____
 Phone: (_____) _____
 Fax: (_____) _____
 E-mail: _____

End-User Name: _____
 City: _____
 State: _____ Zip: _____

FOR ADDITIONAL INFORMATION CALL:
 Weiler's Application Engineering
 Hotline toll free at:
 888-299-APPS (2777)

FAX SPECIFICATION SHEET TO:
 Application Engineering
 Fax: 800-635-3615



STRIP BRUSHES - DISC BRUSHES

Outside Disc: A circular single loop brush with the bristles facing OUTWARD, and the metal channel on the inside.

Inside Disc: A circular single loop brush with the bristles facing INWARD, and the metal channel on the outside.

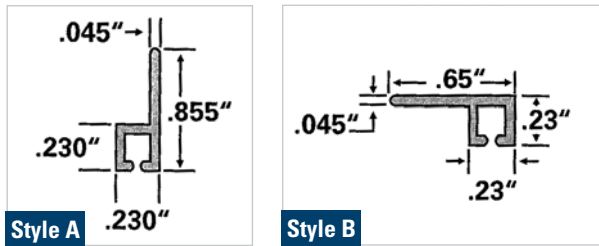
STRIP BRUSHES - FORMED CUPS

These strip brushes are formed into a circle with the bristles facing down, commonly found in vacuum cleaning applications.



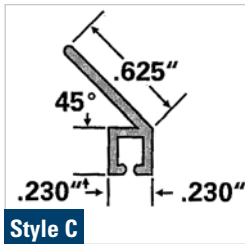
HOLDERS FOR METAL CHANNEL SIZE #2.5

Max. length 12'



Style A

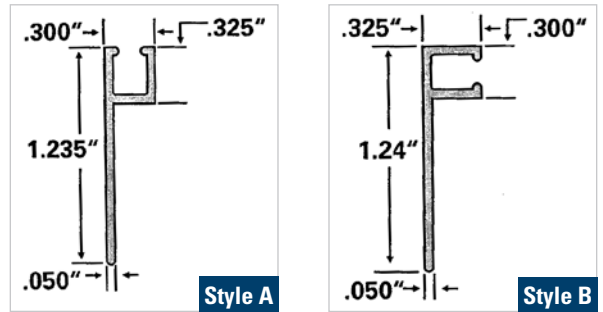
Style B



Style C

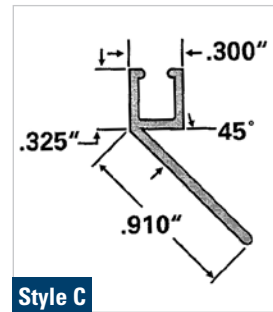
HOLDERS FOR METAL CHANNEL SIZE #4

Max. length 12'



Style A

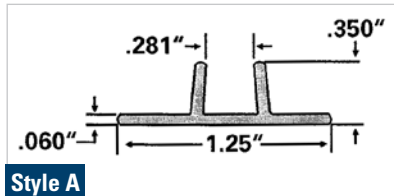
Style B



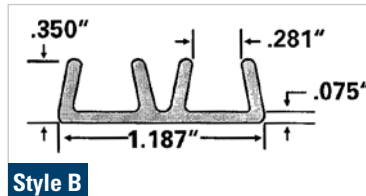
Style C

HOLDERS FOR METAL CHANNEL SIZE #7

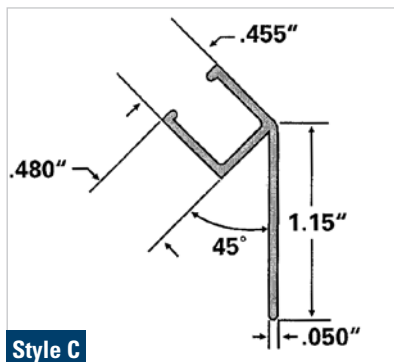
Max. length 12'



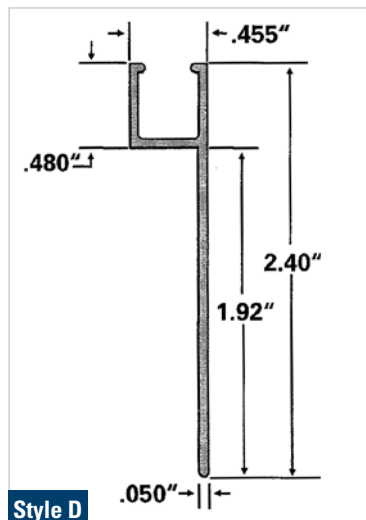
Style A



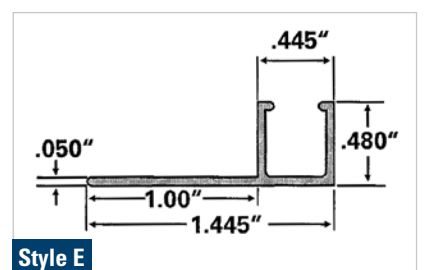
Style B



Style C



Style D



Style E

NOTE

All holder styles are constructed of aluminum

WIDE FACE BRUSHES



Removing light corrosion and mill scale from coiled steel.



Cylindrical brush assemblies have proven to be reliable and economical tools for a wide variety of industrial surface conditioning applications. In addition to gang-mounting a series of individual wheel brushes onto a shaft or reusable arbor, one-piece wide face brush units can be manufactured to cover broad surfaces or provide maximum brushing action in a minimum amount of space.

Cylindrical brushes can be manufactured using several different styles of construction, and the characteristics of each style of construction can significantly affect brush performance. Weiler will custom-design a wide face brush in the most appropriate type of construction for your specific application. Please call our Application Engineering Team at 888-299-APPS (2777) to discuss your requirements.

APPLICATIONS

- Scrubbing debris from the surface of material during processing
- Removing corrosion, surface contamination, mill scale, or heat discoloration
- Roughening surfaces to promote adhesion or bonding
- Removing applied finishes and coatings
- Producing decorative surface finishes
- Deburring or finishing cylindrical parts
- Deburring the cut ends of tubing and extrusions

DISPOSABLE BRUSH ASSEMBLIES - Wide face assemblies for brushing flat surfaces can be manufactured as disposable units with a variety of available fill materials depending on the specific application. Available fills include; metallic filaments such as steel, stainless steel, or brass crimped wire; Nylox® nylon abrasive filaments; synthetic filaments such as nylon or heat-stabilized polypropylene; or natural fibers such as tampico.

Disposable mountings can be constructed of carbon steel or stainless steel components, and “flow-through” mountings which allow coolant to be circulated through the core and out the face of the brush are available for wet applications.

REFILLABLE BRUSH ASSEMBLIES - Wide face assemblies for brushing flat surfaces can also be manufactured as a replaceable brush unit wound onto a permanent and reusable arbor. Depending on the specific application and production environment, refilling reusable arbors may be a more economical option than using disposable units. Reusable mountings can be designed by Weiler or supplied by the customer.

In addition to the secondary operations such as nibbling and grinding of the brush face and dynamic balancing of the completed unit, Weiler also offers maintenance services on mounting hardware like collars and bearings.

TUBE END DEBURRING BRUSHES - Cylindrical rotary brushes are an ideal media for production applications involving the batch deburring of the ends of tubing that has been cut-to-length. Automated brushing systems are readily available and considerably less expensive to purchase and operate than chamfering machines.

Brush deburring machines can be integrated with cut-off operations to eliminate work-in-process and increase throughput, and they are flexible enough to be quickly adjusted for various shapes, sizes, and lengths of tubing. Unlike chamfering operations, brush deburring does not leave secondary burrs, brushing equipment is more tolerant of slight variations in machine set-up and tube length, and quality brushes last much longer than cutting inserts on double-end finishers.

Tube end deburring brushes are most commonly manufactured as disposable assemblies that are then mounted onto keyed shafts. High-tensile steel, hard-drawn steel, and Type 302 stainless steel wire are the most common fill materials used in tube end deburring brushes. Weiler offers high quality brushes with wire sizes from .006 to .020 and four available levels of fill density so that the brushing performance can be tailored to the material, burr condition, and budget of the end-user.

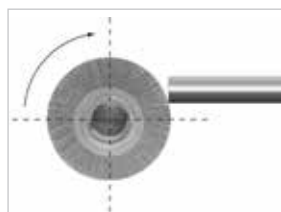
CUSTOM TUBE END DEBURRING BRUSHES - Please use the appropriate specification sheet on the next page when requesting a quotation on a custom tube end deburring brush.

NEED HELP?

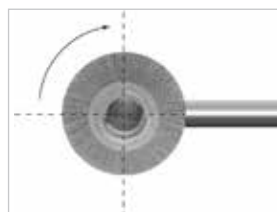
Call our Application Engineering Hotline at 888-299-APPS (2777). If the problem is too complex to be solved over the phone, we will determine if an evaluation should be conducted at our in-house lab or your facility. Either way, Weiler will provide the most cost-effective solution for your specific application.

BRUSH-TUBE ORIENTATION

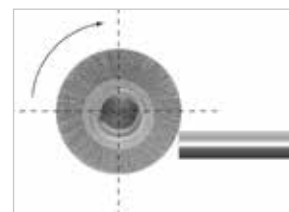
Brush-tube orientation determines which edges of the tube are deburred. The illustrations below show three orientations and the target edge.



Deburring Tube I.D.



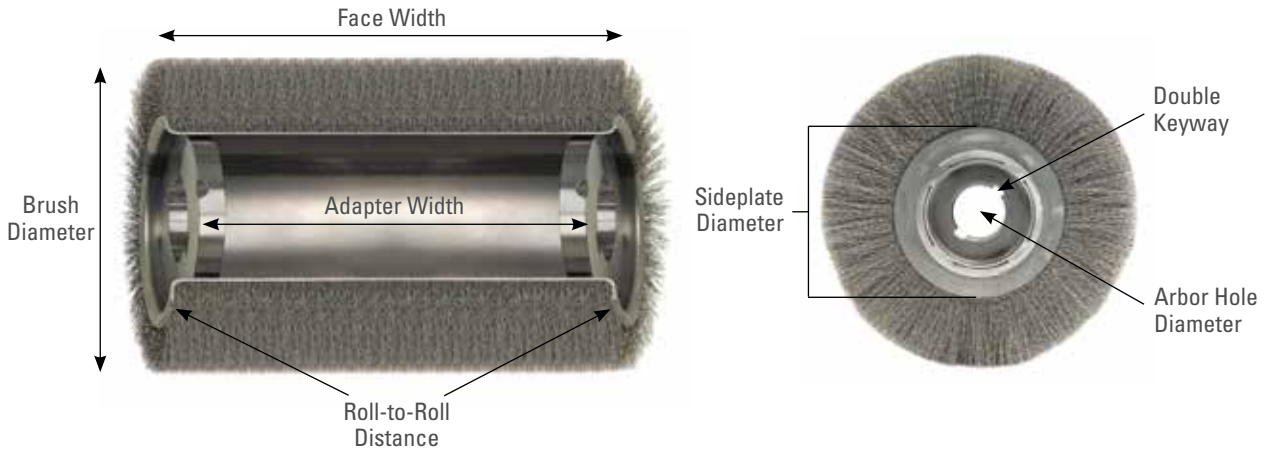
Deburring Tube I.D. and O.D.



Deburring Tube O.D.

WIDE FACE BRUSH SPECIFICATION SHEET:

To help us accurately quote a wide face brush for your application, please provide the following information:



_____ Brush Diameter (Note: Tolerance is +/- 1/16")

_____ Fill Material _____ Fill Diameter

Fill Density: Economy General Purpose Heavy-Duty High Performance

_____ Face Width (Note: Tolerance is +/- 1/4")

_____ Roll-to-Roll Distance - Through Arbor Dimension (Note: Tolerance is +/- 1/8")

Brush can be manufactured holding the face width dimension or the roll-to-roll distance, not both.

_____ Sideplate Diameter

Standard sizes:

6" brush = 3-3/4" O.D.

8" brush = 5-1/4", 5-1/2" or 6-1/2" O.D.

>8" brush = 5-1/2" or 6-1/2" O.D.

_____ Maximum Operating RPM

_____ Adapter Width (Note: Adapters are 1/2" thick, tolerance on width spacing is +/- 1/8")

_____ Arbor Hole Diameter (Note: Clearance of 0.003" with additional tolerance of + 0.004" - 0 will be added)

Keyway(s) Required Single Double Keyway Width _____ Keyway Depth _____

Intended Brush Use: _____

Name: _____

End-User Name: _____

Company Name: _____

City: _____

Address: _____

State: _____ Zip: _____

Phone: (_____) _____

Fax: (_____) _____

E-mail: _____

FOR ADDITIONAL INFORMATION CALL:

Weiler's Application Engineering
Hotline toll free at:
888-299-APPS (2777)

FAX SPECIFICATION SHEET TO:

Application Engineering
Fax: 800-635-3615