



Product Summary

**Crimped Wire Wheels**

New and improved range of high quality, industrial grade crimped wire wheels brushes in narrow, medium and wide face. New brush design features improved balance, improved gangability, and patented new arbor hole system. Also features an increased selection of small diameter Tube-Center™ wheels, and a brand new selection of crimped wire wheels for bench applications. Filaments include carbon steel, stainless steel, brass filaments. Encapsulated wheels, brushes and accessories.



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**Knot Wheels (Unthreaded)**

ADVANCE unthreaded knot wheels are available in a variety of twist-types and knot configurations. Ranging from 3" to 16" in diameter, selection includes standard twist single and double row brushes for aggressive brushing action, as well as specialty brushes like short-trim wheel for high impact, heavy duty use, and long trim for a less aggressive brushing action and improved surface finish. Includes pipe cleaning and joint expansion brushes.



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**Threaded Wheels**

All wheel brushes equipped with thread are conveniently grouped together in this section. For use on angle grinders, and any machine with a threaded spindle to accommodate imperial or metric thread sizes. Choose from stringer bead, full-cable, standard twist and more. Featuring COMBITWIST® wheels, a new performance level in knot wheel brushes!



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**Cup Brushes**

ADVANCE cup brushes are available in diameters ranging from 2-3/4" up to 6". Diverse catalog range includes options of internal or external threads, bridles, crimped and knot wire types, and encapsulated cup brushes. Filament range includes heat treated, high carbon steel wire, stainless steel, brass, bronze, nylon abrasive filaments. Built for machine spindles and angle grinders, Advance cups offer top performance in application ranging from light cleaning to heavy-duty removal and deburring.



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**Minigrinder Brushes**

ADVANCE mini wheels, bevel brushes and cups are designed for use on high speed tools. Choose from 2-3/4" and 3-1/2" cups, 4" wheel and bevel brushes. Knot and crimped heat treated, high carbon steel wire, and stainless steel. Full range of knot wheels includes crimped, standard twist knot, full cable, stringer bead and encapsulated. Range also features new, patent-pending COMBITWIST® products, rounding out the most complete standard range of minigrinder accessories available in the industry.



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**End Brushes**

Choose between 2 basic cup shapes - Straight Cups for easy access into narrow holes and confined areas, and Flared Cups for better side action and less wire fatigue, resulting in longer service life. Knot and crimped wire types with heat treated, high carbon steel wire, and stainless steel. Also available with coated cups, banded, encapsulated, and in M-Brad™ abrasive filament, and metric shanks.



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Product Summary

**Shank Mounted Brushes**

ADVANCE offers a wide selection of brushes mounted on 1/4" shanks for use with collet-equipped high speed air and electric tools. Range includes crimped and knot wire wheel brushes, crimped cup brushes, flared cups, circular end brushes and specialty products. For spot facing applications, working in confined or recessed areas and I.D.'s. Filament availability includes high carbon steel wire and stainless steel, with many selections additionally offered in encapsulated and M-Brad nylon abrasive filament.



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**Miniature Brushes**

New Products! ADVANCE is pleased to offer a complete line of miniature stem-mounted brushes for precision polishing, buffing, light cleaning and light deburring. Diverse selection of Mounted Wheel, Cup and End Brushes in Carbon Steel, Stainless Steel, Brass and Bristle filaments with 1/8" Diameter shanks.



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**Power Tube Internal Cleaning Brushes**

Small diameter brushes for use in drill presses and power tools for internal cleaning. Range features Sydkleen rectangular internal brushes and holders for odd shaped holes and cavities, Spyrakleen Round Trim brushes for light duty cleaning, and a wide selection of standard and specialty tube brushes.



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**Encapsulated Brushes**

ECAP® encapsulation increases productivity by 25% or more. Choose ECAP® products for longer brush life, uniform performance, and precision-controlled contact areas. ADVANCE ECAP® product range includes wheel, cup, end, tube, stem mounted brushes and more. Encapsulated products are dispersed throughout the catalog within sections matching their form, and consolidated in this section for a complete product selection reference.



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**Abrasive Filament and Non-Wire Products**

M-BRAD™ is a nylon monofilament that evenly encapsulates abrasive grit particles. Used for surface preparation and conditioning, M-Brad is the ultimate flexible abrasive tool. Nylon abrasive brushes are available in a wide selection of brush forms including wheels, cup and disc brushes, end brushes, and tube brushes. Section also includes other non-wire filament power brushes including synthetic Prostran power scrub brushes, and Tampico wheel brushes for light and wet/dry cleaning and finishing applications.



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**Conveyor Cleaning Brushes and Strip Brushes**

72" strip brushes are available in carbon and stainless steel wire, Tampico, and a variety of synthetic materials including Prostran and M-Brad. Used for a variety of applications including dusting, spreading, guarding, chip removal, static elimination, etc. Also available is a wide selection of conveyor cleaning brushes that prevent build-up by removing the carryover of materials that stick to rubber and fabric conveyor belts.



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## General Information

### NEW PRODUCT



## Crimped Wire Wheel – Features and Benefits

- Heavy fill density for more wire points, which means more brushing action and longer life
- Oil Tempered, industrial quality wire
- Wheel adapters with built-in keyways for positive drive, eliminate slippage possibility
- Designed for seamless gang mounting without risk of face plate interference
- Ring and sleeve type construction
- Part number stamped on all narrow, medium and wide face brushes for easy identification/reorder
- Stainless Steel (302) Wire brushes identified by black oxide color
- Uniform wire disbursement for optimal balance and finish
- Standard and long trim options on popular diameters as catalog items

#### Narrow Face



Narrow face single section brushes for light to medium duty brushing action are designed for individual use in confined areas, or in assemblies mounted on a shaft. Best suited for brushing uneven surfaces and areas inaccessible to wider brushes. Ideal for removal of light scale, dirt, rust, corrosion and light burrs on non-ductile materials.

#### Bench



New range of bench brushes includes standard face (single section, solid center), and wide face (multiple section, adapter style). Available in high quality grade for production environments, and economy grade for occasional users. Brushes ship with multiple arbor hole configurations to accommodate spindle sizes of most bench grinders.

#### Medium Face



Medium Face Brushes are designed for medium to heavy duty use either individually or gang mounted. As with all ADVANCE crimped wire wheels, the metal components and adapters are designed for a flush fit when gang-mounted. This design ensures a consistent, seamless surface finish.

#### EZmount®



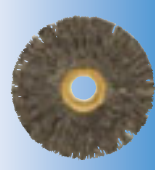
Easy Installation: the new EZmount® crimped wire wheel eliminates mounting problems commonly found with other bench brushes. It's designed with a non-contoured, flat side profile that matches all mounting flanges on pedestal and bench grinders for a correct fit without a need for adapters.

#### Wide Face



Wide face, multiple section brushes for all-purpose portable or stationary brushing are designed for maximum productivity. Engineered for professional use, the wide face brushes feature precision balance, high quality tempered wire, and dense wire fill for fast brushing action, superior surface finish and long service life.

#### Tube Center



These small diameter wire wheel brushes are designed for use in restricted or hard-to-reach areas. They are excellent tools for deburring, blending, and cleaning of surfaces.

## Crimped Wire Wheel Adapters

U.S. Patent No. 6,490,750 B2

#### For use with Solid Center Brushes

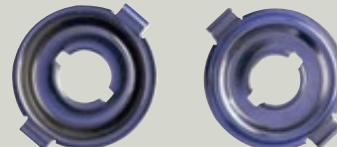
#### Style A



Reusable arbor adapters reduce 1-1/4" keyed arbor hole to 1" through 1/2" with keyways. Manufactured with a tough, synthetic material, the adapters interlock. This results in a wider load-bearing surface, and reduces scoring of the machine spindle. Use with solid center style brushes. Sold two to a package.

#### For use with Adapter Style Brushes

#### Style B

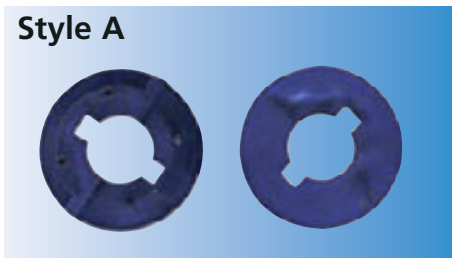


Reusable arbor adapters reduce 2" keyed arbor hole to 1-1/4" through 1/2" with keyways. These metal adapters feature tabs that lock into the brush keyways. Tabs may be removed with pliers to become compatible with 2" non-keyed arbor holes. Sold two to a package.

## Narrow Face



Used for light to medium duty brushing action, these wheels are designed for individual use in confined areas, or in assemblies mounted on a shaft. They are best suited for brushing uneven surfaces and areas inaccessible to wider brushes. Ideal for removal of light scale, dirt, rust, corrosion and light burs on non-ductile materials.



**Keyed Arbor Adapters - Style A** have built-in keyways to reduce all narrow face brushes manufactured to 1-1/4" arbor hole with dual keyways to common arbor hole sizes.

| Arbor Hole Dia. | Included Keyways (#) | Qty | EDP Number |
|-----------------|----------------------|-----|------------|
| 1/2             | 1/8 x 3/32 (2)       | 1   | 84605      |
| 5/8             | 3/16 x 1/8 (2)       | 1   | 84606      |
| 3/4             | 3/16 x 1/8 (2)       | 1   | 84607      |
| 7/8             | 3/16 x 1/8 (2)       | 1   | 84608      |
| 1               | 1/4 x 5/32 (2)       | 1   | 84609      |

### Plain Round Plastic Adapters

| Outside Dia. | Inside Dia. | Qty | EDP Number |
|--------------|-------------|-----|------------|
| 3/8          | 1/4         | 10  | 84600      |
| 1/2          | 3/8         | 10  | 84602      |
| 5/8          | 1/2         | 10  | 84603      |

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width on Arbor | MSFS Max. RPM | Qty  | EDP Number |           |       |
|---------------------|------------|-----------|-------------|------------|----------------|---------------|------|------------|-----------|-------|
|                     |            |           |             |            |                |               |      | Steel      | Stainless | Brass |
| 3                   | 1/2-3/8    | .006      | 3/4         | 9/16       | 7/16           | 10,000        | 2    | 80000      | 80330     | -     |
|                     |            | .008      |             |            |                |               |      | 80001      | 80331     | -     |
|                     |            | .010      |             |            |                |               |      | 80002      | 80332     | -     |
|                     |            | .014      |             |            |                |               |      | 80003      | 80333     | -     |
| 4                   | 1/2-3/8    | .006      | 3/4         | 9/16       | 13/32          | 12,500        | 2    | 80008      | 80338     | -     |
|                     |            | .008      |             |            |                |               |      | 80009      | 80339     | -     |
|                     |            | .010      |             |            |                |               |      | 80010      | 80340     | -     |
|                     |            | .012      |             |            |                |               |      | 80011      | 80341     | -     |
|                     |            | .014      |             |            |                |               |      | 80012      | 80342     | -     |
|                     |            | .020      |             |            |                |               |      | 80013      | 80343     | -     |
| 4                   | 5/8-1/2    | .006      | 3/4         | 1/2        | 13/32          | 12,500        | 2    | 80014      | 80344     | -     |
|                     |            | .008      |             |            |                |               |      | 80015      | 80345     | -     |
|                     |            | .010      |             |            |                |               |      | 80016      | 80346     | -     |
|                     |            | .012      |             |            |                |               |      | 80017      | 80347     | -     |
|                     |            | .014      |             |            |                |               |      | 80018      | 80348     | -     |
|                     |            | .020      |             |            |                |               |      | 80019      | 80349     | -     |
| 5                   | 5/8-1/2    | .006      | 1-1/4       | 7/8        | 7/16           | 10,000        | 2    | 80026      | 80356     | -     |
|                     |            | .008      |             |            |                |               |      | 80027      | 80357     | -     |
|                     |            | .010      |             |            |                |               |      | 80028      | 80358     | -     |
|                     |            | .012      |             |            |                |               |      | 80029      | 80359     | -     |
|                     |            | .014      |             |            |                |               |      | 80030      | 80360     | -     |
|                     |            | .020      |             |            |                |               |      | 80031      | 80361     | -     |
| 6                   | 5/8-1/2    | .006      | 1-1/8       | 5/8        | 7/16           | 8,000         | 10** | 80038      | 80368     | -     |
|                     |            | .008      |             |            |                |               |      | 80039      | 80369     | 80666 |
|                     |            | .010      |             |            |                |               |      | 80040      | 80370     | -     |
|                     |            | .012      |             |            |                |               |      | 80041      | 80371     | -     |
|                     |            | .014      |             |            |                |               |      | 80042      | 80372     | 80667 |
|                     |            | .020      |             |            |                |               |      | 80043      | 80373     | -     |
| 6                   | 1-1/4*     | .006      | 1-1/8       | 3/4        | 7/16           | 8,000         | 10** | 80062      | 80392     | -     |
|                     |            | .008      |             |            |                |               |      | 80063      | 80393     | -     |
|                     |            | .010      |             |            |                |               |      | 80064      | 80394     | -     |
|                     |            | .012      |             |            |                |               |      | 80065      | 80395     | -     |
|                     |            | .014      |             |            |                |               |      | 80066      | 80396     | -     |
|                     |            | .020      |             |            |                |               |      | 80067      | 80397     | -     |

\* 1-1/4" Arbor Hole with 1/4 x 1/8 Keyways (2)

\*\* Stainless Steel Box Quantity: 2

### Stainless Steel Wire Brushes

ADVANCE catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.

## Narrow Face



### Operating Speeds

The M.S.F.S. (Maximum Safe Free Speed) listed in the tables reflect the **MAXIMUM**, not the **OPTIMUM** operating speed for the brush. Running brushes at this speed will result in premature brush wear and poor surface finish. Please consult the "Recommended Surface Speeds" table on page 10 of this catalog to select the proper operating speed based on your application.

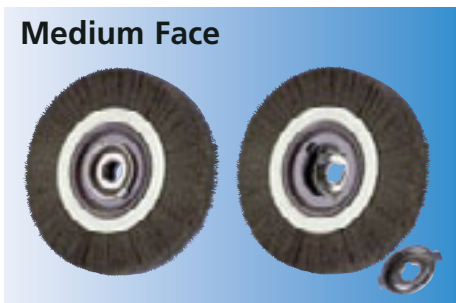
| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width on Arbor | MSFS Max. RPM | Qty | EDP Number |           |       |
|---------------------|------------|-----------|-------------|------------|----------------|---------------|-----|------------|-----------|-------|
|                     |            |           |             |            |                |               |     | Steel      | Stainless | Brass |
| 7                   | 5/8        | .006      | 1-5/16      | 5/8        | 9/16           | 7,500         | 2   | 80122      | 80452     | -     |
|                     |            | .008      |             |            |                |               |     | 80123      | 80453     | -     |
|                     |            | .010      |             |            |                |               |     | 80124      | 80454     | -     |
|                     |            | .012      |             |            |                |               |     | 80125      | 80455     | -     |
|                     |            | .014      |             |            |                |               |     | 80126      | 80456     | -     |
|                     |            | .020      |             |            |                |               |     | 80127      | 80457     | -     |
| 8                   | 5/8        | .006      | 1-1/2       | 5/8        | 5/8            | 6,000         | 2   | 80158      | 80488     | -     |
|                     |            | .008      |             |            |                |               |     | 80159      | 80489     | -     |
|                     |            | .010      |             |            |                |               |     | 80160      | 80490     | -     |
|                     |            | .012      |             |            |                |               |     | 80161      | 80491     | -     |
|                     |            | .014      |             |            |                |               |     | 80162      | 80492     | -     |
|                     |            | .020      |             |            |                |               |     | 80163      | 80493     | -     |
| 8                   | 1-1/4*     | .006      | 1-1/2       | 3/4        | 15/32          | 6,000         | 2   | 80164      | 80494     | -     |
|                     |            | .008      |             |            |                |               |     | 80165      | 80495     | 80682 |
|                     |            | .010      |             |            |                |               |     | 80166      | 80496     | -     |
|                     |            | .012      |             |            |                |               |     | 80167      | 80497     | -     |
|                     |            | .014      |             |            |                |               |     | 80168      | 80498     | 80683 |
|                     |            | .020      |             |            |                |               |     | 80169      | 80499     | -     |
| 8 Long Trim Version | 5/8        | .006      | 2-1/8       | 3/4        | 15/32          | 6,000         | 2   | 80188      | 80518     | -     |
|                     |            | .008      |             |            |                |               |     | 80189      | 80519     | -     |
|                     |            | .010      |             |            |                |               |     | 80190      | 80520     | -     |
|                     |            | .012      |             |            |                |               |     | 80191      | 80521     | -     |
|                     |            | .014      |             |            |                |               |     | 80192      | 80522     | -     |
|                     |            | .020      |             |            |                |               |     | 80193      | 80523     | -     |
| 8 Long Trim Version | 1-1/4*     | .006      | 2-1/8       | 3/4        | 15/32          | 6,000         | 2   | 80194      | 80524     | -     |
|                     |            | .008      |             |            |                |               |     | 80195      | 80525     | -     |
|                     |            | .010      |             |            |                |               |     | 80196      | 80526     | -     |
|                     |            | .012      |             |            |                |               |     | 80197      | 80527     | -     |
|                     |            | .014      |             |            |                |               |     | 80198      | 80528     | -     |
|                     |            | .020      |             |            |                |               |     | 80199      | 80529     | -     |
| 10                  | 3/4        | .006      | 1-7/8       | 1          | 13/16          | 4,200         | 2   | 80218      | 80548     | -     |
|                     |            | .008      |             |            |                |               |     | 80219      | 80549     | -     |
|                     |            | .010      |             |            |                |               |     | 80220      | 80550     | -     |
|                     |            | .012      |             |            |                |               |     | 80221      | 80551     | -     |
|                     |            | .014      |             |            |                |               |     | 80222      | 80552     | -     |
|                     |            | .020      |             |            |                |               |     | 80223      | 80553     | -     |
| 10                  | 1-1/4*     | .006      | 1-7/8       | 1          | 1/2            | 4,200         | 2   | 80224      | 80554     | -     |
|                     |            | .008      |             |            |                |               |     | 80225      | 80555     | 80692 |
|                     |            | .010      |             |            |                |               |     | 80226      | 80556     | -     |
|                     |            | .012      |             |            |                |               |     | 80227      | 80557     | -     |
|                     |            | .014      |             |            |                |               |     | 80228      | 80558     | 80693 |
|                     |            | .020      |             |            |                |               |     | 80229      | 80559     | -     |
| 12                  | 1-1/4*     | .008      | 2-7/8       | 1-1/4      | 11/16          | 3,400         | 2   | 80282      | 80612     | -     |
|                     |            | .012      |             |            |                |               |     | 80283      | 80613     | -     |
|                     |            | .014      |             |            |                |               |     | 80284      | 80614     | -     |
|                     |            | .020      |             |            |                |               |     | 80285      | 80615     | -     |
| 15                  | 1-1/4*     | .008      | 3-1/8       | 3/4        | 3/4            | 2,600         | 2   | 80318      | 80648     | -     |
|                     |            | .014      |             |            |                |               |     | 80319      | 80649     | -     |
|                     |            | .020      |             |            |                |               |     | 80320      | 80650     | -     |

\* 1-1/4" Arbor Hole with 1/4 x 1/8 Keyways (2)

### ANSI Standard B165.1

Please refer to the chart on page 10 of this catalog, for correlating minimum arbor hole and maximum face width standards.

## Medium Face



Medium Face Brushes are designed for medium to heavy duty use either individually or gang mounted. As with all ADVANCE crimped wire wheels, the metal components and adapters are designed for a flush fit when gang-mounted. This design ensures a consistent, seamless surface finish.



2" Keyed Arbor Adapters\*\* - Style B have built-in keyways to reduce all medium face and wide face brushes manufactured to 2" arbor hole with dual keyways to common arbor hole sizes.

(Note: Tabs must be removed for use on 6" and 7" diameter brushes, or order Style C (below), without keyways).

| Arbor Hole Dia. | Included Keyways (#) | Qty | EDP Number |
|-----------------|----------------------|-----|------------|
| 1/2             | 1/8 x 3/32 (2)       | 1   | 84620      |
| 5/8             | 3/16 x 1/8 (2)       | 1   | 84621      |
| 3/4             | 3/16 x 1/8 (2)       | 1   | 84622      |
| 7/8             | 3/16 x 1/8 (2)       | 1   | 84623      |
| 1               | 1/4 x 5/32 (2)       | 1   | 84624      |
| 1-1/4           | 1/4 x 5/32 (2)       | 1   | 84625      |

**Style C – 2" Round Arbor Adapters\*** - reduce all adapter style brushes manufactured to 2" round arbor hole to common arbor hole sizes.

| Wheel Arbor Hole | Shaft Size | Qty | EDP Number |
|------------------|------------|-----|------------|
| 2                | 1/2        | 1   | 84628      |
| 2                | 5/8        | 1   | 84629      |
| 2                | 3/4        | 1   | 84630      |
| 2                | 7/8        | 1   | 84631      |
| 2                | 1          | 1   | 84632      |
| 2                | 1-1/4      | 1   | 84633      |
| 2                | 1-1/2      | 1   | 84634      |

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width on Arbor | MSFS Max. RPM | Qty | EDP Number |           |       |
|---------------------|------------|-----------|-------------|------------|----------------|---------------|-----|------------|-----------|-------|
|                     |            |           |             |            |                |               |     | Steel      | Stainless | Brass |
| 4-1/4               | 2*         | .006      | 7/8         | 7/8        | 23/32          | 8,000         | 1   | 81100      | 81145     | -     |
|                     |            | .008      |             |            |                |               |     | 81101      | 81146     | 81190 |
|                     |            | .012      |             |            |                |               |     | 81103      | 81148     | -     |
|                     |            | .014      |             |            |                |               |     | 81104      | 81149     | 81191 |
| 6                   | 2*         | .006      | 1-1/8       | 1-1/16     | 13/16          | 6,000         | 1   | 81112      | 81157     | -     |
|                     |            | .008      |             |            |                |               |     | 81113      | 81158     | 81194 |
|                     |            | .010      |             |            |                |               |     | 81114      | 81159     | -     |
|                     |            | .012      |             |            |                |               |     | 81115      | 81160     | -     |
| 7                   | 2*         | .006      | 1-5/16      | 31/32      | 27/32          | 6,000         | 1   | 81118      | 81163     | -     |
|                     |            | .010      |             |            |                |               |     | 81120      | 81165     | -     |
|                     |            | .012      |             |            |                |               |     | 81121      | 81166     | -     |
|                     |            | .014      |             |            |                |               |     | 81122      | 81167     | -     |
| 8                   | 2**        | .006      | 1-1/2       | 1-1/16     | 1              | 4,500         | 1   | 81124      | 81169     | -     |
|                     |            | .008      |             |            |                |               |     | 81125      | 81170     | 81198 |
|                     |            | .010      |             |            |                |               |     | 81126      | 81171     | -     |
|                     |            | .012      |             |            |                |               |     | 81127      | 81172     | -     |
|                     |            | .014      |             |            |                |               |     | 81128      | 81173     | 81199 |
|                     |            | .020      |             |            |                |               |     | 81129      | 81174     | -     |
| 10                  | 2**        | .006      | 1-7/8       | 1-1/8      | 1              | 3,600         | 1   | 81130      | 81175     | -     |
|                     |            | .008      |             |            |                |               |     | 81131      | 81176     | -     |
|                     |            | .010      |             |            |                |               |     | 81132      | 81177     | -     |
|                     |            | .012      |             |            |                |               |     | 81133      | 81178     | -     |
|                     |            | .014      |             |            |                |               |     | 81134      | 81179     | -     |
| 12                  | 2**        | .008      | 2-7/8       | 1-3/4      | 1-5/16         | 3,000         | 1   | 81136      | 81181     | -     |
|                     |            | .010      |             |            |                |               |     | 81137      | 81182     | -     |
|                     |            | .012      |             |            |                |               |     | 81138      | 81183     | -     |
|                     |            | .014      |             |            |                |               |     | 81139      | 81184     | -     |
|                     |            | .020      |             |            |                |               |     | 81140      | 81185     | -     |
| 15                  | 2**        | .012      | 3-1/8       | 1-3/8      | 1-5/16         | 2,400         | 1   | 81142      | 81187     | -     |
|                     |            | .014      |             |            |                |               |     | 81143      | 81188     | -     |

\* 2" round Arbor. Use with Adapter Style "C."

\*\* 2" Arbor Hole with 1/2 x 1/4 Keyways (2).

## Stainless Steel Wire Brushes



ADVANCE catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.

## Wide Face




Wide face, multiple section brushes for all-purpose portable or stationary brushing are designed for maximum productivity. Engineered for professional use, the wide face brushes feature precision balance, high quality tempered wire, and dense wire fill for fast brushing action, superior surface finish and long service life. Available in a wide product range to fit every application, including: refining metal surfaces, preparing rubber in vulcanizing, blending surfaces, and removing light burrs, paint and corrosion.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width on Arbor | MSFS Max. RPM | Qty | EDP Number |           |       |
|---------------------|------------|-----------|-------------|------------|----------------|---------------|-----|------------|-----------|-------|
|                     |            |           |             |            |                |               |     | Steel      | Stainless | Brass |
| 4-1/4               | 2          | .006      | 7/8         | 1-1/8      | 1              | 8,000         | 1   | 81220      | 81264     | -     |
|                     |            | .010      |             |            |                |               |     | 81222      | 81266     | -     |
|                     |            | .012      |             |            |                |               |     | 81223      | 81267     | -     |
|                     |            | .014      |             |            |                |               |     | 81224      | 81268     | -     |
| 6                   | 2          | .006      | 1-1/8       | 1-1/8      | 1-3/32         | 6,000         | 1   | 81232      | 81276     | -     |
|                     |            | .008      |             |            |                |               |     | 81233      | 81277     | -     |
|                     |            | .010      |             |            |                |               |     | 81234      | 81278     | -     |
|                     |            | .012      |             |            |                |               |     | 81235      | 81279     | -     |
|                     |            | .014      |             |            |                |               |     | 81236      | 81280     | 81313 |
| 7                   | 2          | .008      | 1-5/16      | 1-7/16     | 1-3/8          | 6,000         | 1   | 81239      | 81283     | -     |
|                     |            | .012      |             |            |                |               |     | 81241      | 81285     | -     |
|                     |            | .014      |             |            |                |               |     | 81242      | 81286     | -     |
|                     |            | .020      |             |            |                |               |     | 81243      | 81287     | -     |
| 8                   | 2**        | .006      | 1-1/2       | 1-5/8      | 1-7/16         | 4,500         | 1   | 81244      | 81288     | -     |
|                     |            | .008      |             |            |                |               |     | 81245      | 81289     | -     |
|                     |            | .010      |             |            |                |               |     | 81246      | 81290     | -     |
|                     |            | .012      |             |            |                |               |     | 81247      | 81291     | -     |
|                     |            | .014      |             |            |                |               |     | 81248      | 81292     | 81317 |
|                     |            | .020      |             |            |                |               |     | 81249      | 81293     | -     |
| 10                  | 2**        | .010      | 1-7/8       | 2-1/8      | 1-3/4          | 3,600         | 1   | 81252      | 81296     | -     |
|                     |            | .012      |             |            |                |               |     | 81253      | 81297     | -     |
|                     |            | .014      |             |            |                |               |     | 81254      | 81298     | -     |
|                     |            | .020      |             |            |                |               |     | 81255      | 81299     | -     |
| 12                  | 2**        | .012      | 2-7/8       | 2-3/8      | 1-3/4          | 3,000         | 1   | 81257      | 81301     | -     |
|                     |            | .014      |             |            |                |               |     | 81258      | 81302     | -     |
|                     |            | .020      |             |            |                |               |     | 81259      | 81303     | -     |
| 15                  | 2**        | .008      | 3-1/8       | 2-1/2      | 1-3/4          | 2,400         | 1   | 81260      | 81304     | -     |
|                     |            | .012      |             |            |                |               |     | 81261      | 81305     | -     |
|                     |            | .014      |             |            |                |               |     | 81262      | 81306     | -     |
|                     |            | .020      |             |            |                |               |     | 81263      | 81307     | -     |

\*\* 2" Arbor Hole with 1/2 x 1/4 Keyways (2).

**ANSI Standard B165.1**  
Please refer to the chart on page 10 of this catalog, for correlating minimum arbor hole and maximum face width standards.

### Stainless Steel Wire Brushes



ADVANCE catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.



## Engineered Solutions

ADVANCE technicians have developed state-of-the-art manufacturing equipment to produce special brush configurations based on your application. The standard parameters are preset as listed in the tables below. If the catalog lacks the brush required, simply contact our technical support group at:

Tel: (800) 342-9015.  
 Fax: (978) 840-6421  
 E-mail: techsupport@pferdusa.com

We welcome the opportunity to provide technical service to assist you in your surface conditioning and finishing needs. Please have ready the information requested on page six, and keep this page handy as a reference point for discussions with our technical department.



| Dia. | Trim Version | Fixed Arbor Hole |       | Trim Length | Narrow Face (1 Section) |                    |
|------|--------------|------------------|-------|-------------|-------------------------|--------------------|
|      |              | Min.             | Max.  |             | Width on Arbor          | Approx. Face Width |
| 5    | Short        | 5/8-1/2          | 1-5/8 | 5/8         | 7/16                    | 7/16               |
| 5    | Standard     | 1/2              | 3/4   | 1-1/4       | 13/32                   | 23/32              |
| 6    | Short        | 5/8-1/2          | 1-5/8 | 13/16       | 7/16                    | 7/16               |
| 6    | Standard     | 5/8-1/2          | 1-5/8 | 1-1/8       | 7/16                    | 23/32              |
| 6    | Long         | 1/2              | 3/4   | 1-3/4       | 13/32                   | 27/32              |
| 7    | Short        | 5/8              | 3     | 1           | 15/32                   | 15/32              |
| 7    | Standard     | 5/8              | 1-5/8 | 1-5/16      | 7/16                    | 3/4                |
| 7    | Long         | 5/8              | 1-5/8 | 1-5/8       | 7/16                    | 27/32              |
| 8    | Short        | 3/4              | 4-1/4 | 7/8         | 1/2                     | 1/2                |
| 8    | Standard     | 5/8              | 3     | 1-1/2       | 15/32                   | 27/32              |
| 8    | Long         | 5/8              | 1-5/8 | 2-1/8       | 7/16                    | 31/32              |
| 10   | Standard     | 3/4              | 4-1/4 | 1-7/8       | 1/2                     | 31/32              |
| 10   | Long         | 3/4              | 3     | 2-1/2       | 15/32                   | 1-3/32             |
| 12   | Short        | 1                | 4-1/4 | 1-5/8       | 1/2                     | 1/2                |
| 12   | Standard     | 1                | 4-1/4 | 2-7/8       | 1/2                     | 1-7/32             |
| 12   | Long         | 1                | 3     | 3-1/2       | 15/32                   | 1-11/32            |

| Dia. | Trim Version | Arbor Holes |                | Trim Length | Med. Face (2 Sections) |                    | Wide Face (3 Sections) |                    |
|------|--------------|-------------|----------------|-------------|------------------------|--------------------|------------------------|--------------------|
|      |              | Bushed Min. | Center Opening |             | Width on Arbor         | Approx. Face Width | Width on Arbor         | Approx. Face Width |
| 5    | Short        | 1/2         | 2              | 5/8         | 25/32                  | 3/4                | 1-3/32                 | 1-3/32             |
| 5    | Standard     | 1/2         | 1-1/8          | 1-1/4       | 23/32                  | 1                  | 1                      | 1-5/16             |
| 6    | Short        | 1/2         | 2              | 13/16       | 25/32                  | 3/4                | 1-3/32                 | 1-3/32             |
| 6    | Standard     | 1/2         | 2              | 1-1/8       | 25/32                  | 1-1/32             | 1-3/32                 | 1-3/8              |
| 6    | Long         | 1/2         | 1-1/8          | 1-3/4       | 23/32                  | 1-1/8              | 1                      | 1-7/16             |
| 7    | Short        | 5/8         | 3-3/8          | 1           | 27/32                  | 13/16              | 1-7/32                 | 1-7/32             |
| 7    | Standard     | 5/8         | 2              | 1-5/16      | 25/32                  | 1-1/16             | 1-3/32                 | 1-13/32            |
| 7    | Long         | 5/8         | 2              | 1-5/8       | 25/32                  | 1-5/32             | 1-3/32                 | 1-1/2              |
| 8    | Short        | 5/8         | 4-5/8          | 7/8         | 15/16                  | 29/32              | 1-5/16                 | 1-5/16             |
| 8    | Standard     | 5/8         | 3-3/8          | 1-1/2       | 27/32                  | 1-3/16             | 1-7/32                 | 1-19/32            |
| 8    | Long         | 5/8         | 2              | 2-1/8       | 25/32                  | 1-9/32             | 1-3/32                 | 1-5/8              |
| 10   | Standard     | 3/4         | 4-5/8          | 1-7/8       | 15/16                  | 1-3/8              | 1-3/4                  | 2-1/8              |
| 10   | Long         | 3/4         | 3-3/8          | 2-1/2       | 27/32                  | 1-7/16             | 1-3/4                  | 2-3/8              |
| 12   | Short        | 1           | 4-5/8          | 1-5/8       | 15/16                  | 29/32              | 1-3/4                  | 2                  |
| 12   | Standard     | 1           | 4-5/8          | 2-7/8       | 15/16                  | 1-5/8              | 1-3/4                  | 2-1/2              |
| 12   | Long         | 1           | 3-3/8          | 3-1/2       | 27/32                  | 1-11/16            | 1-3/4                  | 2-5/8              |

## Bench Brushes

### Bench Brushes



High performance, general purpose wheel for bench or pedestal machines. Use for edge blending, flash removal, cleaning,

removing paint, removing rust and corrosion, roughening, matte finishing, and light deburring work.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width on Arbor | MSFS Max. RPM | Qty | EDP Number |         |
|---------------------|------------|-----------|-------------|------------|----------------|---------------|-----|------------|---------|
|                     |            |           |             |            |                |               |     | Quality    | Economy |

#### Standard Face – Carbon Steel Wire (Solid Center)\*\*

|    |                     |      |        |       |       |        |   |       |       |
|----|---------------------|------|--------|-------|-------|--------|---|-------|-------|
| 4  | 1/2, 3/8            | .008 | 3/4    | 1/2   | 13/32 | 12,500 | 2 | 81442 | 81420 |
|    |                     | .014 |        |       |       |        |   | 81443 | 81421 |
| 6  | 5/8, 1/2            | .008 | 1-1/8  | 5/8   | 1/2   | 8,000  | 2 | 81444 | 81422 |
|    |                     | .014 |        |       |       |        |   | 81445 | 81423 |
| 7  | 5/8                 | .008 | 1-7/16 | 19/32 | 1/2   | 7,500  | 2 | 81446 | 81424 |
|    |                     | .014 |        |       |       |        |   | 81447 | 81425 |
| 8  | 1-1/4*, 1, 3/4, 5/8 | .008 | 1-1/2  | 13/16 | 11/16 | 6,000  | 2 | 81448 | 81426 |
|    |                     | .014 |        |       |       |        |   | 81449 | 81427 |
| 10 | 1-1/4*, 3/4         | .014 | 1-7/8  | 1     | 13/16 | 4,200  | 2 | 81450 | –     |

#### Wide Face – Carbon Steel Wire (Adapter Style)\*\*\*

|    |    |      |        |       |       |       |   |       |       |
|----|----|------|--------|-------|-------|-------|---|-------|-------|
| 6  | 2  | .008 | 1-1/8  | 29/32 | 15/16 | 6,000 | 1 | 81456 | 81432 |
|    |    | .014 |        |       |       |       |   | 81457 | 81433 |
| 7  | 2  | .008 | 1-5/16 | 31/32 | 15/16 | 6,000 | 1 | 81458 | 81434 |
|    |    | .014 |        |       |       |       |   | 81459 | 81435 |
| 8  | 2* | .008 | 1-1/2  | 1-1/8 | 15/16 | 4,500 | 1 | 81460 | 81436 |
|    |    | .014 |        |       |       |       |   | 81461 | 81437 |
| 10 | 2* | .014 | 1-7/8  | 1-1/8 | 1     | 3,600 | 1 | 81462 | –     |

\* With double keyway.

\*\* Standard Face use with Adapter "A," on page 23.

\*\*\* Wide Face use with Adapter "B," on page 23.

### EZmount® Wheels



New EZmount® crimped wire wheel eliminates mounting problems commonly found with other bench brushes. It's designed with a non-contoured, flat side profile that matches all mounting flanges on pedestal and bench grinders for a correct fit without a need for adapters.

Easy installation takes seconds. Its telescoping bushing is self-sizing and makes full width contact to prevent it from falling into spindle threads.

| Brush Dia. (Inches) | Arbor Hole          | Wire Size | Trim Length | Face Width | Width on Arbor | MSFS Max. RPM | Qty | EDP Number |  |
|---------------------|---------------------|-----------|-------------|------------|----------------|---------------|-----|------------|--|
|                     |                     |           |             |            |                |               |     | Steel      |  |
| 6                   | 2, 1, 3/4, 5/8, 1/2 | .008      | 7/8         | 7/8        | 3/4            | 6,000         | 1   | 81473      |  |
|                     |                     | .014      |             |            |                |               |     | 81474      |  |
| 8                   | 2, 1, 3/4, 5/8      | .008      | 1-3/16      | 7/8        | 3/4            | 4,500         | 1   | 81477      |  |
|                     |                     | .014      |             |            |                |               |     | 81478      |  |

### EZmount® Adapters

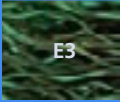
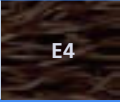
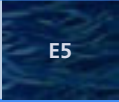


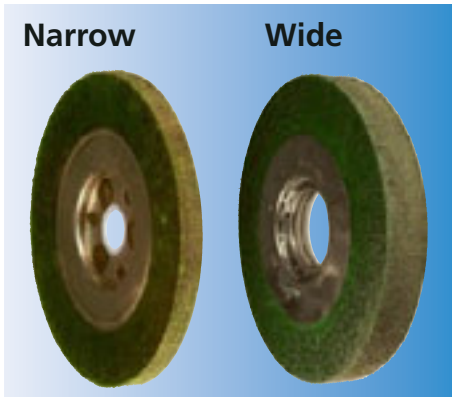
These adapter reducing rings are included with each EZmount for hole diameter variability. The 1/2" reducing ring is supplied

with 6" dia. brushes only. Also available in metric sizes.

| Outside Diameter | Size Range       | Qty | EDP Number |
|------------------|------------------|-----|------------|
| 2                | 1, 3/4, 5/8, 1/2 | 1   | 84615      |

## ECAP® Encapsulated Wheels - Narrow, Medium and Wide Face

| Encapsulated Brush Grades   |   | (For complete Encapsulated product information, see page 53.)                                 |  |
|---|---|---|--|
|  <b>E3</b> | Aggressive enough for most applications. Best grade for general use. Green color. |  <b>E4</b>   | For higher pressure applications and excessive heat. Black color.      |
|   |   |  <b>E5</b> | Super aggressive, tough cleaning, with narrow face wheels. Blue color. |

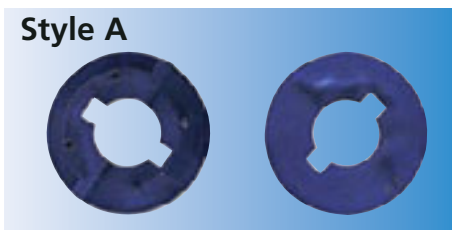


Encapsulation material gradually wears away to consistently maintain a short trim length for more aggressive brushing and long service life. Elastomer provides precision control of contact area on workpiece.

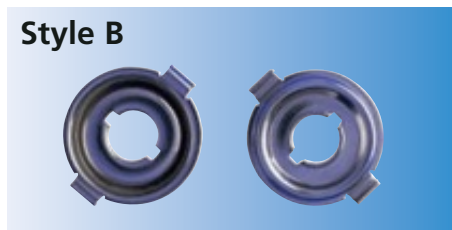
| Brush Dia. (Inches) | Arbor Hole | Wire Size | ECAP Grade | Trim Length | Face Width | MSFS RPM | Qty | EDP Number |
|---------------------|------------|-----------|------------|-------------|------------|----------|-----|------------|
| <b>Narrow Face</b>  |            |           |            |             |            |          |     |            |
| 4                   | 5/8-1/2    | .010      | E3         | 3/4         | 13/32      | 6,000    | 1   | 83526      |
|                     |            | .014      |            |             |            |          |     | 83527      |
| 6                   | 1-1/4*     | .006      | E3         | 1-1/8       | 7/16       | 6,000    | 1   | 83528      |
|                     |            | .008      |            |             |            |          |     | 83529      |
|                     |            | .010      |            |             |            |          |     | 83531      |
|                     |            | .014      |            |             |            |          |     | 83533      |
|                     | 5/8-1/2    | .010      | E3         | 1-1/8       | 7/16       | 6,000    | 1   | 83530      |
|                     |            | .014      |            |             |            |          |     | 83532      |
| 8                   | 1-1/4*     | .008      | E3         | 15/32       | 1-1/2      | 6,000    | 1   | 83534      |
|                     |            | .010      |            |             |            |          |     | 83535      |

|                    |     |      |    |       |        |       |   |       |
|--------------------|-----|------|----|-------|--------|-------|---|-------|
| <b>Medium Face</b> |     |      |    |       |        |       |   |       |
| 6                  | 2   | .012 | E3 | 1-1/8 | 13/16  | 4,500 | 1 | 83538 |
| 8                  | 2** | .012 | E3 | 1-1/2 | 1      | 4,500 | 1 | 83540 |
| 10                 | 2** | .012 | E3 | 1-7/8 | 1      | 3,600 | 1 | 83542 |
| 12                 | 2** | .012 | E3 | 2-7/8 | 1-5/16 | 3,000 | 1 | 83543 |

|                  |   |      |    |       |        |       |  |       |
|------------------|---|------|----|-------|--------|-------|--|-------|
| <b>Wide Face</b> |   |      |    |       |        |       |  |       |
| 4-1/4            | 2 | .012 | E3 | 7/8   | 1      | 6,000 |  | 83544 |
| 6                | 2 | .012 | E3 | 1-1/8 | 1-3/32 | 6,000 |  | 83546 |



**Keyed Arbor Adapters\* - Style A** have built-in keyways to reduce all narrow face brushes manufactured to 1-1/4" arbor hole with dual keyways to common arbor hole sizes.



**2" Keyed Arbor Adapters\*\* - Style B** have built-in keyways to reduce all medium face and wide face brushes manufactured to 2" arbor hole with dual keyways to common arbor hole sizes. (Note: Tabs must be removed for use on 6" and 7" diameter brushes, or order Style C, without keyways).

| Arbor Hole Dia.        | Included Keyways (#) | Qty | EDP Number |
|------------------------|----------------------|-----|------------|
| <b>Adapter Style A</b> |                      |     |            |
| 1/2                    | 1/8 x 3/32 (2)       | 1   | 84605      |
| 5/8                    | 3/16 x 1/8 (2)       | 1   | 84606      |
| 3/4                    | 3/16 x 1/8 (2)       | 1   | 84607      |
| 7/8                    | 3/16 x 1/8 (2)       | 1   | 84608      |
| 1                      | 1/4 x 5/32 (2)       | 1   | 84609      |

|                        |                |   |       |
|------------------------|----------------|---|-------|
| <b>Adapter Style B</b> |                |   |       |
| 1/2                    | 1/8 x 3/32 (2) | 1 | 84620 |
| 5/8                    | 3/16 x 1/8 (2) | 1 | 84621 |
| 3/4                    | 3/16 x 1/8 (2) | 1 | 84622 |
| 7/8                    | 3/16 x 1/8 (2) | 1 | 84623 |
| 1                      | 1/4 x 5/32 (2) | 1 | 84624 |
| 1-1/4                  | 1/4 x 5/32 (2) | 1 | 84625 |

| Wheel Arbor Hole                        | Shaft Size | Qty | EDP Number |
|---|------------|-----|------------|
| <b>Adapter Style C - 2" Round Arbor</b> |            |     |            |
| 2                                       | 1/2        | 1   | 84628      |
| 2                                       | 5/8        | 1   | 84629      |
| 2                                       | 3/4        | 1   | 84630      |
| 2                                       | 7/8        | 1   | 84631      |
| 2                                       | 1          | 1   | 84632      |
| 2                                       | 1-1/4      | 1   | 84633      |
| 2                                       | 1-1/2      | 1   | 84634      |

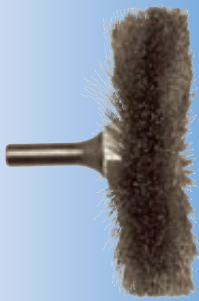
**Style C - 2" Round Arbor Adapters** - reduce all adapter style brushes manufactured to 2" round arbor hole to common arbor hole sizes.

### ANSI Standard B165.1

Please refer to the chart on page 10 of this catalog, for correlating minimum arbor hole and maximum face width standards.

## Tube Center Ring Brushes

### Tube Center Ring Brushes



These small diameter wire wheel brushes are designed for use in restricted or hard-to-reach areas. They are excellent tools for

deburring, blending, and cleaning of surfaces. See next page for listing of adapters and drive arbors.

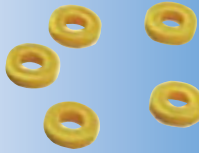
| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | MSFS Max. RPM | Qty   | EDP Number |           |       |       |
|---------------------|------------|-----------|-------------|------------|---------------|-------|------------|-----------|-------|-------|
|                     |            |           |             |            |               |       | Steel      | Stainless | Brass |       |
| 1                   | 1/4        | .003      | 1/4         | 3/16       | 20,000        | 10    | -          | 81560     | -     |       |
|                     |            | .006      |             |            |               |       | 81500      | 81562     | -     |       |
| 1-1/4               | 1/4        | .003      | 3/8         | 1/4        | 20,000        | 10    | 81502      | -         | -     |       |
|                     |            | .006      |             |            |               |       | 81503      | -         | -     |       |
|                     |            | .008      |             |            |               |       | 81504      | 81565     | -     |       |
|                     | 3/8        | .008      | 5/16        | 1/4        | 20,000        | 10    | 81505      | -         | -     |       |
| .014                |            |           |             |            |               |       | 81507      | -         | -     |       |
| 1-3/8               | 1/4        | .006      | 3/8         | 1/4        | 20,000        | 10    | 81508      | -         | -     |       |
|                     |            | .008      |             |            |               |       | 81509      | -         | -     |       |
|                     |            | .010      |             |            |               |       | 81510      | -         | -     |       |
|                     | 3/8        | .005      | 3/8         | 1/4        | 20,000        | 10    | -          | -         | 81600 |       |
| .008                |            |           |             |            |               |       | 81512      | -         | -     |       |
| 1-1/2               | 3/8        | .005      | 7/16        | 1/4        | 20,000        | 10    | -          | 81567     | -     |       |
|                     |            | .006      |             |            |               |       | 81514      | 81568     | -     |       |
|                     |            | .008      |             |            |               |       | 81515      | 81569     | -     |       |
|                     |            | .010      |             |            |               |       | 81516      | -         | -     |       |
|                     |            | .012      |             |            |               |       | 81517      | -         | -     |       |
|                     |            | .014      |             |            |               |       | 81518      | -         | -     |       |
|                     | 1/2-3/8    | .008      | 1/4         | 1/4        | 20,000        | 10    | 81520      | -         | -     |       |
| 2                   | 1/2        | .003      | 1/2         | 3/8        | 20,000        | 10    | 81525      | 81573     | -     |       |
|                     |            | .005      |             |            |               |       | -          | 81574     | 81601 |       |
|                     |            | .006      |             |            |               |       | 81526      | 81575     | -     |       |
|                     |            | .008      |             |            |               |       | 81527      | 81576     | -     |       |
|                     |            | .010      |             |            |               |       | 81528      | 81577     | -     |       |
|                     | 1/2-3/8    | .012      | 1/2         | 3/8        | 20,000        | 10    | 81529      | 81578     | -     |       |
|                     |            |           |             |            |               |       | .014       | 81530     | 81579 | 81602 |
| 9/16                | .012       | 1/2       | 3/8         | 20,000     | 10            | 81531 | -          | -         |       |       |
|                     |            |           |             |            |               |       |            |           |       |       |
| 2-1/2               | 1/2        | .006      | 3/4         | 1/2        | 20,000        | 10    | 81532      | -         | -     |       |
|                     |            | .008      |             |            |               |       | 81533      | 81581     | -     |       |
|                     | 1/2-3/8    | .012      | 3/4         | 1/2        | 20,000        | 10    | 81534      | 81582     | -     |       |
|                     |            |           |             |            |               |       | .014       | 81535     | -     | -     |
|                     |            |           |             |            |               |       |            |           |       |       |
|                     | 5/8        | .006      | 11/16       | 9/16       | 20,000        | 10    | 81536      | -         | -     |       |
|                     |            |           |             |            |               |       | .008       | 81537     | 81583 | -     |
|                     |            |           |             |            |               |       | .010       | 81538     | -     | -     |
| .012                |            |           |             |            |               |       | 81539      | 81584     | -     |       |
| .014                |            |           |             |            |               |       | 81540      | -         | -     |       |
| 3                   | 1/2        | .003      | 1           | 5/8        | 20,000        | 10    | 81541      | -         | -     |       |
|                     |            | .006      |             |            |               |       | 81542      | 81586     | -     |       |
|                     |            | .008      |             |            |               |       | 81543      | 81587     | -     |       |
|                     |            | .010      |             |            |               |       | 81544      | 81588     | -     |       |
|                     | 1/2-3/8    | .012      | 1           | 5/8        | 20,000        | 10    | 81545      | 81589     | -     |       |
|                     |            |           |             |            |               |       | .014       | 81546     | 81590 | -     |
|                     |            |           |             |            |               |       |            |           |       |       |
|                     | 5/8        | .003      | 15/16       | 5/8        | 20,000        | 10    | 81547      | -         | -     |       |
|                     |            |           |             |            |               |       | .005       | -         | -     | 81603 |
|                     |            |           |             |            |               |       | .006       | 81548     | 81592 | -     |
|                     |            |           |             |            |               |       | .008       | 81549     | 81593 | -     |
| .010                |            |           |             |            |               |       | 81550      | -         | -     |       |
| .012                |            |           |             |            |               |       | 81551      | -         | -     |       |
| .014                |            |           |             |            |               |       | 81552      | 81596     | 81604 |       |
| 4                   | 5/8        | .008      | 1-1/2       | 1/2        | 20,000        | 10    | 81553      | 81597     | -     |       |
|                     |            | .014      |             |            |               |       | 81554      | 81598     | -     |       |

Tube Center Ring Brushes are also available in a variety of filaments:

| Filament Type | Catalog Page |
|---------------|--------------|
| Encapsulated  | 54           |
| M-Brad        | 61           |
| Tampico       | 66           |
| Nylon         | 66           |

## Tube Center Ring Adapters and Accessories, and Platers Brush

### Snap-In Adapters



| Outside Dia. | Inside Dia. | Thickness | Qty | EDP Number |
|--------------|-------------|-----------|-----|------------|
| 5/8          | 1/2         | 5/32      | 10  | 84636      |
| 5/8          | 3/8         | 5/32      | 10  | 84637      |
| 5/8          | 1/4         | 5/32      | 10  | 84638      |

| Outside Dia. | Inside Dia. | Thickness | Qty | EDP Number |
|--------------|-------------|-----------|-----|------------|
| 1/2          | 3/8         | 5/32      | 10  | 84639      |
| 1/2          | 1/4         | 5/32      | 10  | 84640      |
| 3/8          | 1/4         | 5/32      | 10  | 84641      |

### Drive Arbors



Chuck Type



Flat Head Type



Nut Type

#### Chuck:

Countersunk head tightening-screw fits into a recessed flange washer for locking power. Allows brushes to reach edges without interference from arbor overhang. Change brush without removing arbor from collet. Unthreaded shaft.

#### Flat Head:

Brush mounts between a single washer and the flat head. Locked in place with a left-hand reverse threaded nut. Allows the brush to be close to the workpiece. Threaded shaft.

#### Nut:

Nut can be removed to replace worn brush while arbor is in chuck.

| Fits Brush ID | Wheel Width | Shank Dia | Head/Washer Dia | Overall Length | Qty | EDP Number |
|---------------|-------------|-----------|-----------------|----------------|-----|------------|
|---------------|-------------|-----------|-----------------|----------------|-----|------------|

#### Chuck

|     |            |     |       |       |   |       |
|-----|------------|-----|-------|-------|---|-------|
| 1/4 | 1/4 to 3/8 | 1/4 | 9/16  | 2-1/8 | 5 | 84650 |
| 3/8 | 1/4 to 3/8 | 1/4 | 11/16 | 2-1/8 | 5 | 84651 |
| 1/2 | 1/4 to 3/8 | 1/4 | 3/4   | 2-1/8 | 5 | 84652 |

#### Flat Head Type

|     |           |      |     |       |   |       |
|-----|-----------|------|-----|-------|---|-------|
| 1/4 | Up to 3/4 | 3/16 | 5/8 | 1-3/4 | 5 | 84653 |
| 3/8 | Up to 3/8 | 1/4  | 3/4 | 1-5/8 | 5 | 84654 |
| 1/2 | Up to 3/8 | 1/4  | 7/8 | 1-7/8 | 5 | 84655 |
| 5/8 | Up to 3/8 | 1/4  | 7/8 | 1-7/8 | 5 | 84656 |

#### Nut Type

|     |           |     |     |       |   |       |
|-----|-----------|-----|-----|-------|---|-------|
| 1/4 | Up to 3/4 | 1/4 | 1/2 | 2-1/2 | 5 | 84657 |
| 3/8 | Up to 3/4 | 1/4 | 3/4 | 2-1/2 | 5 | 84658 |
| 1/2 | Up to 1/4 | 1/4 | 7/8 | 1-3/4 | 5 | 84659 |

### Platers Brush



Special crimped wire wheel brush with fine brass wire. Features a wood hub, and a lead-filled center. Used for light deburring,

surface cleaning and finishing. Achieves a fine brush or satin finish.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Rows Wide | Trim Length | Face Width | MSFS Max. RPM | Qty | EDP Number |       |
|---------------------|------------|-----------|-----------|-------------|------------|---------------|-----|------------|-------|
|                     |            |           |           |             |            |               |     | Steel      | Brass |
| 3                   | 1/4        | .003      | 2         | 7/8         | 1/2        | 1,100         | 1   | 81615      | 81622 |
| 4                   | 1/4        | .004      | 2         | 1-1/4       | 15/16      | 1,100         | 1   | 81616      | 81623 |
| 6                   | 1/4        | .004      | 4         | 1-3/4       | 15/16      | 1,100         | 1   | 81617      | 81624 |
|                     |            | .005      |           |             |            |               |     | 81618      | 81625 |
|                     | 1/2        | .004      | 4         | 1-3/4       | 15/16      | 1,100         | 1   | 81619      | 81626 |
|                     |            | .005      |           |             |            |               |     | 81620      | 81627 |

## Standard Twist – Single Row



### About Knot Wheels

Knot-type brushes are comprised of filaments twisted together to act as a single unit. These filament groups strike the substrate with much more momentum and impact than individual filaments, providing far more aggressive cutting action.

The filaments are mechanically retained by inserting them through a hole or slot in a steel center disc, then twisting the individual strands together, in similar fashion to wire rope or cable. Several knot styles are available,

ranging from a tightly-wound, hard, solid mass to a loosely-twisted bundle. Knot configuration is tailored to meet the needs of the specific application.

Knot brushes are available only in wire fill material. Brushes can be ganged or stacked to obtain greater width.

Applications: Weld spatter removal, blending tool marks, cleaning and deburring, removal of scale and encrustations.



Standard twist has open knots and is ideal when heavy duty or severe cleaning is required. Especially recommended for weld cleaning, weld spatter removal, scale removal, cleaning, deburring, and flash removal.

#### Snap-In Plastic Adapter for Single Row Knot Wheels Standard and Full Cable Twist

| Outside Dia. | Inside Dia. | Qty | EDP Number |
|--------------|-------------|-----|------------|
| 1/2          | 3/8         | 10  | 84602      |
| 5/8          | 1/2         | 10  | 84603      |

#### Advance Knot Wheel Adapters for 8" diameter wheels and larger

| Arbor Hole (Inches) | EDP Number |
|---------------------|------------|
| 1-1/4 to 3/4        | 84612      |
| 1-1/4 to 7/8        | 84613      |
| 1-1/4 to 1          | 84614      |

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width On Arbor | MSFS Max RPM | Qty  | EDP Number |           |       |
|---------------------|------------|-----------|-------------|------------|----------------|--------------|------|------------|-----------|-------|
|                     |            |           |             |            |                |              |      | Steel      | Stainless |       |
| 3                   | 1/2-3/8    | .012      | 3/4         | 7/16       | 7/16           | 25,000       | 10   | 81650      | 81800     |       |
|                     |            | .014      |             |            |                |              |      | 81651      | 81801     |       |
|                     |            | .020      |             |            |                |              |      | 81652      | 81802     |       |
| 4                   | 1/2-3/8    | .012      | 3/4         | 5/8        | 7/16           | 20,000       | 10   | 81656      | 81806     |       |
|                     |            | .014      |             |            |                |              |      | 81657      | 81807     |       |
|                     |            | .020      |             |            |                |              |      | 81658      | 81808     |       |
|                     | 5/8-1/2    | 3/4       | .012        | 5/8        | 7/16           | 20,000       | 10   | 81659      | 81809     |       |
|                     |            |           | .014        |            |                |              |      | 81660      | 81810     |       |
|                     |            |           | .020        |            |                |              |      | 81661      | 81811     |       |
| 6                   | 5/8-1/2    | .012      | 1-1/8       | 5/8        | 9/16           | 9,000        | 10   | 81665      | 81815     |       |
|                     |            | .014      |             |            |                |              |      | 81666      | -         |       |
|                     |            | .016      |             |            |                |              |      | 81667      | 81816     |       |
|                     |            | .023      |             |            |                |              |      | 81668      | -         |       |
| 7                   | 5/8        | .014      | 1-5/8       | 5/8        | 9/16           | 9,000        | 2    | 81694      | -         |       |
| 8                   | 3/4        | .014      | 1-5/8       | 5/8        | 5/8            | 7,000        | 2    | 81698      | -         |       |
|                     |            | .012      |             |            |                |              |      | 81702      | 81829     |       |
|                     | 5/8        | 1-5/8     | 5/8         | 5/8        | 7,000          | 2            | 2    | .014       | 81703     | -     |
|                     |            |           |             |            |                |              |      | .016       | 81704     | 81830 |
|                     |            |           |             |            |                |              |      | .020       | 81705     | -     |
| 1-1/4               | 1-5/8      | 5/8       | 5/8         | 7,000      | 2              | 2            | .023 | 81706      | -         |       |
|                     |            |           |             |            |                |              | .014 | 81708      | -         |       |
| 10                  | 3/4        | .014      | 2-1/8       | 3/4        | 5/8            | 5,400        | 2    | 81711      | -         |       |
|                     |            | .012      |             |            |                |              |      | 81723      | -         |       |
| 12                  | 1-1/4      | 2         | 3/4         | 5/8        | 4,500          | 2            | 2    | .014       | 81727     | -     |
|                     |            |           |             |            |                |              |      | .016       | 81728     | -     |
|                     |            |           |             |            |                |              |      | .016       | 81729     | -     |
|                     |            |           |             |            |                |              |      | .020       | 81752     | -     |
| 15                  | 1-1/4      | 3-1/2     | 7/8         | 5/8        | 3,600          | 2            | 2    | .014       | 81753     | -     |
|                     |            |           |             |            |                |              |      | .016       | 81754     | -     |
|                     |            |           |             |            |                |              |      | .020       | 81755     | -     |
| 2                   | 3/4        | 5/8       | 4,500       | 2          | 2              | 2            | .014 | 81763      | 81861     |       |
|                     |            |           |             |            |                |              | .023 | 81766      | -         |       |
|                     |            |           |             |            |                |              | .016 | 81773      | -         |       |
| 15                  | 2          | 3-1/2     | 7/8         | 5/8        | 3,600          | 2            | 2    | .016       | 81777     | -     |
|                     |            |           |             |            |                |              |      | .023       | 81778     | -     |

## Standard Twist Long Flag, Double Row, and Short Trim Knot Wheel Brushes

### Standard Twist – Long Flag



Extended flag length provides a better surface finish than standard twist knot brushes, while brushing more aggressively than crimped wire wheels.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width On Arbor | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|-------------|------------|----------------|--------------|-----|------------|-----------|
|                     |            |           |             |            |                |              |     | Steel      | Stainless |
| 6                   | 5/8-1/2    | .012      | 1-1/8       | 5/8        | 9/16           | 9,000        | 10  | 81880      | 81960     |
|                     |            | .014      |             |            |                |              |     | 81881      | -         |
|                     |            | .016      |             |            |                |              |     | -          | 81961     |
|                     |            | .020      |             |            |                |              |     | 81883      | -         |
| 8                   | 5/8        | .012      | 1-5/8       | 5/8        | 5/8            | 7,000        | 2   | -          | 81974     |
|                     |            | .014      |             |            |                |              |     | 81889      | -         |
|                     |            | .016      |             |            |                |              |     | -          | 81975     |
|                     |            | .020      |             |            |                |              |     | 81891      | -         |
| 10                  | 3/4        | .014      | 2-1/8       | 3/4        | 5/8            | 5,400        | 2   | 81898      | -         |
|                     | 1-1/4      | .012      |             |            |                |              |     | 81902      | -         |
|                     |            | .014      |             |            |                |              |     | 81903      | -         |
|                     |            | .016      |             |            |                |              |     | 81904      | -         |
| 12                  | 1-1/4      | .012      | 2           | 3/4        | 5/8            | 4,500        | 2   | 81927      | -         |
|                     |            | .014      |             |            |                |              |     | 81928      | -         |
|                     |            | .016      |             |            |                |              |     | 81929      | -         |
|                     |            | .020      |             |            |                |              |     | 81930      | -         |
|                     | 2          | .014      | 2           | 3/4        | 5/8            | 4,500        | 2   | 81938      | -         |
|                     |            |           |             |            |                |              |     | .020       | 81940     |

### Standard Twist – Heavy Duty Double Row



For deflashing/cleaning of insert molded rubber parts, removing heavy surface contamination, and heavy deburring of machine parts.

| Brush Dia. (Inches) | Arbor Hole* | Wire Size | Trim Length | Face Width | Width On Arbor | MSFS Max RPM | Qty | EDP Number |
|---------------------|-------------|-----------|-------------|------------|----------------|--------------|-----|------------|
|                     |             |           |             |            |                |              |     | Steel      |
| 3                   | 1/2-3/8     | .012      | 3/4         | 3/4        | 3/4            | 20,000       | 5   | 82030      |
|                     |             | .020      |             |            |                |              |     | 82031      |
| 4                   | 5/8-1/2     | .014      | 3/4         | 1          | 1-1/8          | 20,000       | 5   | 82032      |
| 6                   | 2           | .012      | 1-1/8       | 1          | 1-1/8          | 7,800        | 5   | 82033      |
|                     |             | .016      |             |            |                |              |     | 82034      |
| 8                   | 2           | .012      | 1-5/8       | 1-1/8      | 1-1/8          | 6,000        | 1   | 82035      |
|                     |             | .016      |             |            |                |              |     | 82036      |
|                     |             | .023      |             |            |                |              |     | 82037      |
| 10                  | 2           | .012      | 2-1/8       | 1-1/4      | 1-1/4          | 4,800        | 1   | 82038      |
|                     |             | .016      |             |            |                |              |     | 82039      |
|                     |             | .023      |             |            |                |              |     | 82040      |
| 12                  | 2           | .012      | 2           | 1-5/8      | 1-1/4          | 4,000        | 1   | 82041      |
|                     |             | .016      |             |            |                |              |     | 82042      |
|                     |             | .023      |             |            |                |              |     | 82043      |

\*Use Style C – 2" Round Arbor Adapters to reduce to smaller arbor hole sizes. See page 23 for listing.

### Short Trim – Heavy Duty



Extremely heavy duty removal. Maximum brushing action.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width On Arbor | MSFS Max RPM | Qty | EDP Number |
|---------------------|------------|-----------|-------------|------------|----------------|--------------|-----|------------|
|                     |            |           |             |            |                |              |     | Steel      |
| 10                  | 2          | .020      | 1-1/8       | 3/4        | 1/2            | 5,400        | 1   | 82053      |
| 12                  | 2          | .014      | 1-1/2       | 1/2        | 1/2            | 4,300        | 1   | 82055      |
| 14                  | 1-1/4*     | .014      | 1-1/2       | 1/2        | 1/2            | 3,850        | 1   | 82059      |
|                     |            | .016      |             |            |                |              |     | 82060      |
|                     |            | .020      |             |            |                |              |     | 82061      |
| 15                  | 2**        | .014      | 1-1/2       | 1/2        | 1/2            | 3,850        | 1   | 82062      |
|                     |            | .016      |             |            |                |              |     | 82063      |
| 15                  | 2**        | .020      | 2-1/8       | 3/4        | 5/8            | 3,500        | 1   | 82069      |

\* With double keyway 1/4" x 1/8"

\*\* With double keyway 1/2" x 1/4"

## Full Cable Twist, Expansion Joint, and Pipe Cleaning Brushes

### Full Cable Twist – Single Row



For the toughest applications, full cable twist wire tufts provide low flex, high impact cleaning action and narrow face widths.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width On Arbor | MSFS Max RPM | Qty | EDP Number |  |
|---------------------|------------|-----------|-------------|------------|----------------|--------------|-----|------------|--|
|                     |            |           |             |            |                |              |     | Steel      |  |
| 4                   | 1/2-3/8    | .014      | 3/4         | 3/8        | 7/16           | 20,000       | 10  | 82100      |  |
|                     |            | .020      |             |            |                |              |     | 82101      |  |
|                     | 5/8-1/2    | .014      | 3/4         | 3/8        | 7/16           | 20,000       | 10  | 82102      |  |
|                     |            | .020      |             |            |                |              |     | 82103      |  |
| 6 (24kt)            | 5/8-1/2    | .023      | 1-1/4       | 3/8        | 9/16           | 10,000       | 10  | 82109      |  |
| 6 (30kt)            | 5/8-1/2    | .023      | 1-1/4       | 1/2        | 9/16           | 10,000       | 10  | 82113      |  |
| 8                   | 5/8        | .023      | 1-5/8       | 3/8        | 5/8            | 7,000        | 2   | 82118      |  |
| 10                  | 3/4        | .023      | 2-5/8       | 3/8        | 5/8            | 5,400        | 2   | 82120      |  |
|                     | 1-1/4      | .023      | 2-5/8       | 3/8        | 5/8            | 5,400        | 2   | 82121      |  |
| 12                  | 1-1/4      | .023      | 2           | 1/2        | 5/8            | 4,500        | 2   | 82123      |  |

### Snap-In Plastic Adapter for Standard and Full Cable Twist

| Outside Dia. | Inside Dia. | Qty | EDP Number |
|--------------|-------------|-----|------------|
| 1/2          | 3/8         | 10  | 84602      |
| 5/8          | 1/2         | 10  | 84603      |

### Advance Knot Wheel Adapters for 10" diameter wheels and larger

| Outside Dia. | Inside Dia. | Qty | EDP Number |
|--------------|-------------|-----|------------|
| 1-1/4        | 3/4         | 10  | 84612      |
| 1-1/4        | 7/8         | 10  | 84613      |
| 1-1/4        | 1           | 10  | 84614      |

### Expansion Joint Cleaning Brush



Long trim for joint penetration, and finer wire for extended life. Used for removing road joint material. 3/8" drive pin hole.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width On Arbor | MSFS Max RPM | Qty | EDP Number |  |
|---------------------|------------|-----------|-------------|------------|----------------|--------------|-----|------------|--|
|                     |            |           |             |            |                |              |     | Steel      |  |
| 10                  | 1          | .028      | 2-1/4       | 3/8        | 1/2            | 4,500        | 2   | 82075      |  |
|                     |            | .035      |             |            |                |              |     | 82076      |  |
| 12                  | 1          | .028      | 3-1/4       | 3/8        | 1/2            | 4,500        | 2   | 82077      |  |
|                     |            | .035      |             |            |                |              |     | 82078      |  |

### Pipe Cleaning Brush – Single and Multi-Section



Tightly knotted, long-lasting, aggressive multi-section wheel is easy to install. Works

hard removing rust and protective coating from pipe ends, before beveling or welding.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | Trim Length | Face Width | Width On Arbor | MSFS Max RPM | Qty | EDP Number |  |
|---------------------|------------|-----------|-------------|------------|----------------|--------------|-----|------------|--|
|                     |            |           |             |            |                |              |     | Steel      |  |
| 10                  | 1-1/4*     | .020      | 2-1/4       | 3/4        | 3/4            | 5,400        | 1   | 82083      |  |
| 10+                 | 2          | .020      | 2-1/4       | 2-3/8      | 2              | 4,800        | 1   | 82084      |  |

\* With double keyway 1/4" x 1/8"  
+ Multi-Section Brush

#### ANSI Standard B165.1

Please refer to the chart on page 10 of this catalog, for correlating minimum arbor hole and maximum face width standards.



## Knot Wheels - Standard and Full Cable Twist

### Standard Twist



For general applications, knotted construction provides high-impact brushing.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | Face Width | MSFS Max. RPM | Qty | EDP Number |           |       |
|---------------------|-------------|-----------|-------------|------------|---------------|-----|------------|-----------|-------|
|                     |             |           |             |            |               |     | Steel      | Stainless | Brass |
| 4                   | 5/8-11      | .014      | 7/8         | 5/8        | 20,000        | 10  | 82153      | 82283     | 82366 |
|                     |             | .020      |             |            |               |     | 82154      | 82284     | -     |
| 5                   | 5/8-11      | .020      | 5/8         | 5/8        | 15,000        | 10  | 82470      | 82596     | -     |
| 6                   | 5/8-11      | .014      | 1-1/8       | 5/8        | 9,000         | 10  | 82471      | -         | -     |
|                     |             | .016      |             |            |               |     | 82472      | 82597     | -     |
|                     |             | .023      |             |            |               |     | 82473      | 82598     | -     |

### Full Cable Twist



For the toughest applications, full cable twist wire tufts provide low flex, high impact cleaning action.

| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty    | EDP Number |           |       |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|--------|------------|-----------|-------|
|                     |             |           |              |             |            |              |        | Steel      | Stainless |       |
| 4                   | 5/8-11      | .014      | 24           | 3/4         | 3/8        | 20,000       | 10     | 82165      | 82295     |       |
|                     |             | .020      |              |             |            |              |        | 82166      | 82296     |       |
| 5                   | 5/8-11      | .023      | 24           | 3/4         | 3/8        | 15,000       | 10     | 82474      | 82599     |       |
| 6                   | 5/8-11      | .016      | 24           | 1-1/4       | 3/8        | 10,000       | 10     | 82475      | 82600     |       |
|                     |             | .016      |              |             |            |              |        | 30         | 1-1/4     | 1/2   |
|                     |             | .023      |              | 24          | 1-1/4      | 3/8          | 10,000 | 10         | 82477     | 82602 |
|                     |             | .023      |              |             |            |              |        |            | 30        | 1-1/4 |

## NEW PRODUCT – COMBITWIST®



COMBITWIST® (For additional product information, see page 36.)

- More Aggressive Brushing
- Superior Rotational Balance
- Reduced Operator Fatigue
- Longer Brush Life
- Faster Stock Removal
- Better Surface Finish

### COMBITWIST® Standard Twist



| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | Face Width | MSFS Max. RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|------------|---------------|-----|------------|-----------|
|                     |             |           |             |            |               |     | Steel      | Stainless |
| 4                   | 5/8-11      | .014      | 7/8         | 5/8        | 20,000        | 10  | 82383      | 82412     |
|                     |             | .020      |             |            |               |     | 82384      | 82413     |
| 5                   | 5/8-11      | .020      | 5/8         | 5/8        | 15,000        | 10  | 82680      | 82749     |
| 6                   | 5/8-11      | .014      | 1-1/8       | 5/8        | 9,000         | 10  | 82681      | -         |
|                     |             | .016      |             |            |               |     | 82682      | 82752     |
|                     |             | .023      |             |            |               |     | 82683      | 82753     |

### COMBITWIST® Full Cable



| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty    | EDP Number |           |       |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|--------|------------|-----------|-------|
|                     |             |           |              |             |            |              |        | Steel      | Stainless |       |
| 4                   | 5/8-11      | .014      | 24           | 3/4         | 3/8        | 15,000       | 10     | 82387      | 82416     |       |
|                     |             | .020      |              |             |            |              |        | 82388      | 82417     |       |
| 5                   | 5/8-11      | .023      | 24           | 3/4         | 3/8        | 15,000       | 10     | 82684      | 82754     |       |
| 6                   | 5/8-11      | .016      | 24           | 1-1/4       | 3/8        | 10,000       | 10     | 82685      | 82755     |       |
|                     |             | .016      |              |             |            |              |        | 30         | 1-1/4     | 1/2   |
|                     |             | .023      |              | 24          | 1-1/4      | 3/8          | 10,000 | 10         | 82687     | 82757 |
|                     |             | .023      |              |             |            |              |        |            | 30        | 1-1/4 |

## Knot Wheels - Stringer Bead Twist, Encapsulated Stringer Bead

### Stringer Bead Twist



Fastest cutting action. 5-25% more productivity power than competitive brushes, more knots, better value.

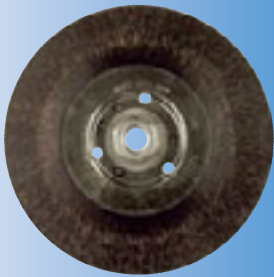
| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty   | EDP Number |           |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|-------|------------|-----------|
|                     |             |           |              |             |            |              |       | Steel      | Stainless |
| 4                   | 5/8-11      | .020      | 32           | 3/4         | 3/16       | 20,000       | 10    | 82186      | 82307     |
| 4-7/8               | 5/8-11      | .020      | 38           | 1-1/16      | 3/16       | 15,000       | 10    | 82479      | 82604     |
|                     |             |           | 48           |             |            |              | 10    | 82483      | 82608     |
|                     | 7/8         | .020      | 38           | 1-1/16      | 3/16       | 15,000       | 10    | 82480      | 82605     |
|                     | M14x2.0     | .020      | 38           | 1-1/16      | 3/16       | 15,000       | 10    | 82481      | 82606     |
| .020                |             | 48        |              |             |            | 10           | 82484 | 82609      |           |
| 6                   | 5/8-11      | .020      | 40           | 3/4         | 3/16       | 12,500       | 10    | 82486      | 82611     |
|                     |             |           | 48           |             |            |              | 10    | 82487      | 82612     |
|                     |             |           | 56           |             |            |              | 10    | 82488      | 82613     |
|                     |             |           | 72           |             |            |              | 10    | 82489      | 82614     |
| 6-7/8               | 5/8-11      | .020      | 56           | 1-1/8       | 3/16       | 9,000        | 10    | 82494      | 82619     |
|                     |             |           | 72           |             |            |              | 10    | 82495      | 82620     |

### COMBITWIST® Stringer Bead



| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|-----|------------|-----------|
|                     |             |           |              |             |            |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .020      | 48           | 3/4         | 3/16       | 15,000       | 10  | 82689      | 82759     |
|                     | M14x2.0     | .020      | 48           | 3/4         | 3/16       | 15,000       | 10  | 82690      | 82760     |
| 6                   | 5/8-11      | .020      | 40           | 1-1/4       | 3/16       | 12,500       | 10  | 82692      | 82762     |
|                     |             |           | 48           |             |            |              | 10  | 82693      | 82763     |
|                     |             |           | 56           |             |            |              | 10  | 82694      | 82764     |
|                     |             |           | 72           |             |            |              | 10  | 82695      | 82765     |
| 6-7/8               | 5/8-11      | .020      | 56           | 1-1/8       | 3/16       | 9,000        | 10  | 82700      | 82770     |
|                     |             |           | 72           |             |            |              | 10  | 82701      | 82771     |

### Encapsulated Stringer Bead

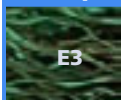


Ideal for large diameter pipe construction. Extra heavy duty E5 grade resists deflection, fracture and crumbling, providing a shorter, more aggressive trim length.

| Brush Dia. (Inches) | Thread Size | Wire Size | ECAP Grade | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|------------|-------------|------------|--------------|-----|------------|-----------|
|                     |             |           |            |             |            |              |     | Steel      | Stainless |
| <b>Knot Wire</b>    |             |           |            |             |            |              |     |            |           |
| 4                   | 5/8-11      | .020      | E4         | 7/8         | 3/16       | 9,000        | 10  | 83511      | -         |
|                     | 1/2-13      |           |            |             |            |              |     | 83512      | -         |
| 6-7/8               | 5/8-11      | .020      | E4         | 1-9/16      | 3/16       | 9,000        | 10  | 83513      | -         |
|                     | 7/8         |           |            |             |            |              |     | 83514      | -         |
| <b>Crimped Wire</b> |             |           |            |             |            |              |     |            |           |
| 6                   | 5/8-11      | .014      | E4         | 1-1/16      | 3/16       | 9,000        | 10  | 83507      | -         |
|                     | 7/8         |           |            |             |            |              |     | 83508      | -         |
| 7                   | 5/8-11      | .014      | E4         | 1-9/16      | 3/16       | 9,000        | 10  | 83509      | -         |
|                     |             |           | E5         |             |            |              |     | 83517      | 83520     |
|                     | 7/8         | .014      | E4         | 1-9/16      | 3/16       | 9,000        | 10  | 83510      | -         |
|                     |             |           | E5         |             |            |              |     | 83518      | 83521     |

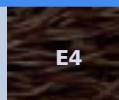
### Encapsulated Brush Grades

(For complete Encapsulated product information, see page 53.)



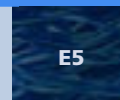
E3

Aggressive enough for most applications. Best grade for general use. Green color.



E4

For higher pressure applications and excessive heat. Black color.



E5

Super aggressive, tough cleaning, with narrow face wheels. Blue color.

## Bevel Wheels

### Crimped Bevel Wire Brush



Tapered shape is ideal for reaching into corners and inside edges. Crimped wire provides light brushing action and superior surface finish.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |  |
|---------------------|-------------|-----------|-------------|------------|--------------|-----|------------|--|
|                     |             |           |             |            |              |     | Steel      |  |
| 4                   | 5/8-11      | .014      | 3/4         | 1/2        | 15,000       | 5   | 82213      |  |

### Knot Bevel Wire Brush



Ideal for working in hard-to-reach areas. Knot wire provides a more aggressive abrasive action than crimped wire. For deburring, weld scale removal, and edge blending of fillets, grooves and inside edges.

| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|-----|------------|-----------|
|                     |             |           |              |             |            |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .014      | 22           | 3/4         | 1/2        | 20,000       | 5   | 82201      | 82317     |
|                     |             | .020      |              |             |            |              |     | 82202      | 82318     |
|                     | M14x2.0     | .014      | 22           | 3/4         | 1/2        | 20,000       | 5   | 82211      | 82327     |
|                     |             | .020      |              |             |            |              |     | 82212      | 82328     |
| 4-1/2               | 5/8-11      | .014      | 24           | 1           | 1/2        | 15,000       | 1   | 82500      | 82625     |
|                     |             | .020      |              |             |            |              |     | 82501      | 82626     |
|                     | M14x2.0     | .014      | 24           | 1           | 1/2        | 15,000       | 1   | 82502      | 82627     |
|                     |             | .020      |              |             |            |              |     | 82503      | 82628     |
| 5                   | 5/8-11      | .014      | 28           | 3/4         | 1/2        | 15,000       | 1   | 82504      | 82629     |
|                     |             | .020      |              |             |            |              |     | 82505      | 82630     |
|                     | M14x2.0     | .014      | 28           | 3/4         | 1/2        | 15,000       | 1   | 82506      | 82631     |
|                     |             | .020      |              |             |            |              |     | 82507      | 82632     |
| 7                   | 5/8-11      | .014      | 28           | 1-1/8       |            | 10,000       | 1   | 82508      | 82633     |
|                     |             | .020      |              |             |            |              |     | 82509      | 82634     |

### Stainless Steel Wire Brushes



ADVANCE catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.

## Crimped and Standard Twist Knot Cups

ADVANCE cup brushes are designed for heavy-duty cleaning, deburring, roughening and corrosion removal. Designed for use on production equipment, angle grinders, portable power tools, sander/ polishers, etc. Available in a range of cup diameters and filament styles

to properly fit your application requirements, including pipe cleaning, structural steel, weld cleaning, tank car and ship fabrication and nuclear power plant construction. ADVANCE cup brushes offer high cutting action with flexibility, excelling on large flat and curved surfaces.

### Crimped Cup Brushes External Thread



Ideal for general purpose use. Light to medium duty applications. Leaves superior finish.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |             |           |             |              |     | Steel      | Stainless |
| 3-1/2               | 5/8-11      | .014      | 7/8         | 12,500       | 1   | 82249      | 82359     |
|                     |             | .020      |             |              |     | 82255      | 82365     |
| 4                   | 5/8-11      | .014      | 1-1/4       | 9,000        | 1   | 82510      | –         |
|                     |             | .020      |             |              |     | 82511      | 82635     |
|                     | M14x2.0     | .014      | 1-1/4       | 9,000        | 1   | 82512      | –         |
|                     |             | .020      |             |              |     | 82513      | 82636     |
| 5                   | 5/8-11      | .014      | 1-1/4       | 8,000        | 1   | 82514      | –         |
|                     |             | .020      |             |              |     | 82515      | 82637     |
| 6                   | 5/8-11      | .014      | 1-3/8       | 6,000        | 1   | 82516      | –         |
|                     |             | .020      |             |              |     | 82517      | 82638     |

### Single Row Internal Thread



Suitable for mounting on production equipment or angle grinders. Used for deburring and surface cleaning.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |  |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|--|
|                     |             |           |             |              |     | Steel      |  |
| 3-1/2               | 5/8-11      | .014      | 1-3/8       | 7,000        | 1   | 82537      |  |
|                     |             | .020      |             |              |     | 82538      |  |
| 4                   | 5/8-11      | .014      | 1-1/2       | 7,000        | 1   | 82539      |  |
|                     |             | .023      |             |              |     | 82540      |  |
|                     | M14x2.0     | .014      | 1-1/2       | 7,000        | 1   | 82541      |  |
|                     |             | .023      |             |              |     | 82542      |  |
| 5                   | 5/8-11      | .014      | 1-1/2       | 7,000        | 1   | 82543      |  |
|                     |             | .023      |             |              |     | 82544      |  |
| 6                   | 5/8-11      | .014      | 1-5/8       | 6,000        | 1   | 82545      |  |
|                     |             | .023      |             |              |     | 82546      |  |

### Standard Twist Single Row External Thread



Knotted construction provides high-impact brushing. Heavy-duty brushing action for faster removal rates on tougher jobs.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |       |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|-----------|-------|
|                     |             |           |             |              |     | Steel      | Stainless | Brass |
| 3-1/2               | 5/8-11      | .014      | 7/8         | 12,500       | 1   | 82231      | 82341     | 82368 |
|                     |             | .020      |             |              |     | 82232      | 82342     | –     |
| 4                   | 5/8-11      | .014      | 1-1/4       | 9,000        | 1   | 82522      | 82647     | –     |
|                     |             | .023      |             |              |     | 82523      | 82648     | –     |
|                     |             | .035      |             |              |     | 82524      | –         | –     |
|                     | M14x2.0     | .014      | 1-1/4       | 9,000        | 1   | 82525      | 82649     | –     |
|                     |             | .023      |             |              |     | 82526      | 82650     | –     |
|                     |             | .035      |             |              |     | 82527      | –         | –     |
| 5                   | 5/8-11      | .014      | 1-3/8       | 7,000        | 1   | 82528      | 82651     | –     |
|                     |             | .023      |             |              |     | 82529      | 82652     | –     |
| 6                   | 5/8-11      | .014      | 1-1/2       | 6,000        | 1   | 82530      | 82653     | –     |
|                     |             | .023      |             |              |     | 82531      | 82654     | –     |
|                     |             | .035      |             |              |     | 82532      | –         | –     |

COMBITWIST® Double Row and Bridled Knot Cups

**NEW PRODUCT – COMBITWIST®**



COMBITWIST® (For additional product information, see page 36.)

- More Aggressive Brushing
- Superior Rotational Balance
- Reduced Operator Fatigue
- Longer Brush Life
- Faster Stock Removal
- Better Surface Finish

**COMBITWIST®  
Single Row  
External Thread**



Premium knot cup featuring maximum service life, improved balance and fastest removal rates.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |             |           |             |              |     | Steel      | Stainless |
| 2-3/4               | 5/8-11      | .014      | 7/8         | 14,000       | 5   | 82750      | 82855     |
|                     |             | .020      |             |              | 5   | 82751      | 82856     |
| 3-1/2               | 5/8-11      | .014      | 7/8         | 12,500       | 1   | 82401      | 82430     |
|                     |             | .020      |             |              | 1   | 82402      | 82431     |
| 4                   | 5/8-11      | .014      | 1-1/4       | 9,000        | 1   | 82716      | 82789     |
|                     |             | .023      |             |              | 1   | 82717      | 82790     |
|                     |             | .035      |             |              | 1   | 82718      | –         |
|                     | M14x2.0     | .014      | 1-1/4       | 9,000        | 1   | 82719      | 82791     |
|                     |             | .023      |             |              | 1   | 82720      | 82792     |
|                     |             | .035      |             |              | 1   | 82721      | –         |
| 5                   | 5/8-11      | .014      | 1-3/8       | 7,000        | 1   | 82722      | 82793     |
|                     |             | .023      |             |              | 1   | 82723      | 82794     |
| 6                   | 5/8-11      | .014      | 1-1/2       | 6,000        | 1   | 82724      | 82795     |
|                     |             | .023      |             |              | 1   | 82725      | 82796     |
|                     |             | .035      |             |              | 1   | 82726      | –         |

**COMBITWIST®  
Double Row  
External Thread**



Choose these double row knot cups for the most severe applications. Very aggressive, high impact brushing action. Optimal removal rates and service life.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |             |           |             |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .014      | 1-3/8       | 9,000        | 1   | 82552      | –         |
|                     |             | .023      |             |              | 1   | 82553      | 82657     |
|                     | M14x2.0     | .014      | 1-3/8       | 9,000        | 1   | 82554      | –         |
|                     |             | .023      |             |              | 1   | 82555      | 82658     |
| 6                   | 5/8-11      | .014      | 1-1/2       | 6,000        | 1   | 82556      | –         |
|                     |             | .023      |             |              | 1   | 82557      | 82659     |
|                     |             | .035      |             |              | 1   | 82558      | –         |

**Bridled Knot  
Double Row**



Removable band creates a shorter trim length for extra heavy duty applications.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|
|                     |             |           |             |              |     | Steel      |
| 4                   | 5/8-11      | .014      | 7/8         | 9,000        | 1   | 82562      |
|                     |             | .020      |             |              | 1   | 82563      |
| 5                   | 5/8-11      | .023      | 7/8         | 7,000        | 1   | 82564      |
| 6                   | 5/8-11      | .023      | 7/8         | 6,600        | 1   | 82565      |
|                     |             | .035      |             |              | 1   | 82566      |

## Full Cable Twist and Encapsulated Cups

### Full Cable Twist Cups Single Row



Designed for most aggressive brushing action on large, rough surfaces where heavy removal is desired.

Solid construction is beneficial in removing surface contaminants such as weld scale, concrete, and slag.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |             |           |             |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .014      | 1-3/8       | 7,000        | 1   | –          | 82663     |
|                     |             | .020      |             |              |     | 82567      | 82664     |
|                     |             | .023      |             |              |     | 82568      | –         |
|                     |             | .035      |             |              |     | 82569      | –         |
| 5                   | 5/8-11      | .023      | 1-3/8       | 6,000        | 1   | 82570      | 82665     |
| 6                   | 5/8-11      | .014      | 1-1/2       | 6,000        | 1   | –          | 82666     |
|                     |             | .023      |             |              |     | 82571      | 82667     |
|                     |             | .035      |             |              |     | 82572      | –         |

### Full Cable Twist Cups Double Row



High-impact full cable twist cup brush with two rows of knots. Achieves the most

aggressive brushing action with longest service life.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |             |           |             |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .020      | 1-3/8       | 7,000        | 1   | 82573      | 82668     |
| 6                   | 5/8-11      | .023      | 1-1/2       | 6,000        | 1   | 82574      | 82669     |
|                     |             | .035      |             |              |     | 82575      | –         |

### Encapsulated Brush Grades

(For complete Encapsulated product information, see page 53.)

**E3** Aggressive enough for most applications. Best grade for general use. Green color.

**E4** For higher pressure applications and excessive heat. Black color.

**E5** Super aggressive, tough cleaning, with narrow face wheels. Blue color.

### Encapsulated Cup



Encapsulated cups offer more productive cleaning action due to the short trim effect

of encapsulation. Used for removing weld slags and scale in pipeline fabrication.

| Brush Dia. (Inches) | Thread Size | Wire Size | ECAP Grade | Trim Length | MSFS Max RPM | Qty | EDP Number |  |
|---------------------|-------------|-----------|------------|-------------|--------------|-----|------------|--|
|                     |             |           |            |             |              |     | Steel      |  |
| 4                   | 5/8-11      | .020      | E3         | 1-1/8       | 7,000        | 1   | 83564      |  |
|                     |             |           | E4         |             |              |     | 83570      |  |
| 6                   | 5/8-11      | .020      | E3         | 1-1/4       | 6,000        | 1   | 83566      |  |
|                     |             |           | E4         |             |              |     | 83571      |  |
|                     |             |           | E5         |             |              |     | 83574      |  |

## Knot Wheels - Standard and Standard COMBITWIST®

### Standard Twist



For roughing, weld scale and spatter removal, surface conditioning and deburring.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | Face Width | MSFS Max RPM | Qty   | EDP Number |           |       |
|---------------------|-------------|-----------|-------------|------------|--------------|-------|------------|-----------|-------|
|                     |             |           |             |            |              |       | Steel      | Stainless | Brass |
| 3                   | M10x1.25    | .014      | 5/8         | 7/16       | 25,000       | 10    | 82149      | 82279     | –     |
|                     | 3/8-24      | .014      |             |            |              |       | 82150      | 82280     | –     |
| 4                   | 5/8-11      | .014      | 7/8         | 5/8        | 20,000       | 10    | 82153      | 82283     | 82366 |
|                     |             | .020      |             |            |              |       | 82154      | 82284     | –     |
|                     | 1/2-13      | .014      |             |            |              |       | 82155      | 82285     | –     |
|                     |             | .020      |             |            |              |       | 82156      | 82286     | –     |
|                     | 3/8-24      | .014      |             |            |              |       | 82157      | 82287     | –     |
|                     |             | .020      |             |            |              |       | 82158      | 82288     | –     |
|                     | M10x1.50    | .014      |             |            |              |       | 82159      | 82289     | –     |
|                     |             | .020      |             |            |              |       | 82160      | 82290     | –     |
|                     | M10x1.25    | .014      |             |            |              |       | 82161      | 82291     | –     |
|                     |             | .020      |             |            |              |       | 82162      | 82292     | –     |
| M14x2.0             | .014        |           |             |            |              | 82163 | 82293      | –         |       |
|                     | .020        |           |             |            |              | 82164 | 82294      | –         |       |

### COMBITWIST® Standard Twist



### NEW PRODUCT – COMBITWIST®

COMBITWIST® (For additional product information, see page 36.)



- More Aggressive Brushing
- Longer Brush Life
- Superior Rotational Balance
- Faster Stock Removal
- Reduced Operator Fatigue
- Better Surface Finish

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | Face Width | MSFS Max. RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|------------|---------------|-----|------------|-----------|
|                     |             |           |             |            |               |     | Steel      | Stainless |
| 4                   | 5/8-11      | .014      | 7/8         | 5/8        | 20,000        | 10  | 82383      | 82412     |
|                     |             | .020      |             |            |               |     | 82384      | 82413     |

### Minigrinder Adapter Insert



| Adapter Inserts          | Qty | EDP Number |
|--------------------------|-----|------------|
| 5/8-11 UNC to M10 x 1.25 | 5   | 84645      |
| 5/8-11 UNC to M10 x 1.5  | 5   | 84646      |
| 5/8-11 UNC to 3/8-24     | 5   | 84647      |

### Stainless Steel Wire Brushes



ADVANCE catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.

## Full Cable Twist Wheel Brushes



**Full Cable Twist**

| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|-----|------------|-----------|
|                     |             |           |              |             |            |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .014      | 22           | 3/4         | 3/8        | 15,000       | 10  | 82165      | 82295     |
|                     |             | .020      |              |             |            |              |     | 82166      | 82296     |
|                     | 1/2-13      | .014      | 22           | 3/4         | 3/8        | 15,000       | 10  | 82167      | 82297     |
|                     |             | .020      |              |             |            |              |     | 82168      | 82298     |
|                     | 3/8-24      | .014      | 22           | 3/4         | 3/8        | 15,000       | 10  | 82169      | 82299     |
|                     |             | .020      |              |             |            |              |     | 82170      | 82300     |
| M10x1.25            |             | .014      | 22           | 3/4         | 3/8        | 15,000       | 10  | 82171      | 82301     |
|                     |             | .020      |              |             |            |              |     | 82172      | 82302     |
| M10x1.50            |             | .014      | 22           | 3/4         | 3/8        | 15,000       | 10  | 82173      | 82303     |
|                     |             | .020      |              |             |            |              |     | 82174      | 82304     |
| M14x2.0             |             | .014      | 22           | 3/4         | 3/8        | 15,000       | 10  | 82175      | 82305     |
|                     |             | .020      |              |             |            |              |     | 82176      | 82306     |

For cap pass weld cleaning and heavy build-up removal.



**Full Cable COMBITWIST®**

| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|-----|------------|-----------|
|                     |             |           |              |             |            |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .014      | 24           | 3/4         | 3/8        | 15,000       | 10  | 82387      | 82416     |
|                     |             | .020      |              |             |            |              |     | 82388      | 82417     |

Aggressive brushing, longer brush life.

## NEW PRODUCT

### COMBITWIST®

Innovative COMBITWIST® knot design dramatically improves brush performance over conventional products.

Knots maintain their form longer, even when used on edges and in corners.



#### Product Highlights:

- More Aggressive Brushing
- Longer Brush Life
- Superior Rotational Balance
- Faster Stock Removal
- Reduced Operator Fatigue
- Better Surface Finish



## Stringer Bead, Encapsulated, and Crimped Wheels

### Stringer Bead Twist Knot Wheel



Narrow face for weld cleaning. Root and hot pass weld cleaning to ensure a successful pass of the filler weld.

| Brush Dia. (Inches) | Arbor/Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------------|-----------|--------------|-------------|------------|--------------|-----|------------|-----------|
|                     |                   |           |              |             |            |              |     | Steel      | Stainless |
| 4                   | 5/8-11            | .020      | 32           | 3/4         | 3/16       | 12,000       | 10  | 82186      | 82307     |
|                     | 1/2-13            | .020      |              |             |            |              |     | 82187      | 82308     |
|                     | 3/8-24            | .020      |              |             |            |              |     | 82188      | 82309     |
|                     | M10x1.50          | .020      |              |             |            |              |     | 82189      | 82310     |
|                     | M10x1.25          | .020      |              |             |            |              |     | 82190      | 82311     |
|                     | M14x2.0           | .020      |              |             |            |              |     | 82191      | 82312     |
|                     | 5/8               | .020      |              |             |            |              |     | 82192      | 82313     |
|                     | 1/2               | .020      |              |             |            |              |     | 82193      | 82314     |

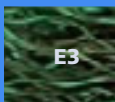
### COMBITWIST® Stringer Bead



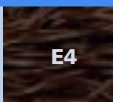
| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|-----|------------|-----------|
|                     |             |           |              |             |            |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .020      | 32           | 3/4         | 3/16       | 20,000       | 10  | 82391      | 82420     |

### Encapsulated Brush Grades

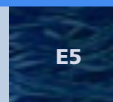
(For complete Encapsulated product information, see page 53.)



**E3** Aggressive enough for most applications. Best grade for general use. Green color.



**E4** For higher pressure applications and excessive heat. Black color.



**E5** Super aggressive, tough cleaning, with narrow face wheels. Blue color.

### Encapsulated Stringer Bead Knot Wheel



| Brush Dia. (Inches) | Thread Size | Wire Size | ECAP Grade | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |
|---------------------|-------------|-----------|------------|-------------|------------|--------------|-----|------------|
|                     |             |           |            |             |            |              |     | Steel      |
| 4                   | 5/8-11      | .020      | E4         | 7/8         | 3/16       | 20,000       | 10  | 83511      |
|                     | 1/2-13      | .020      | E4         | 7/8         | 3/16       | 20,000       | 10  | 83512      |

### High Speed Crimped Wheel



| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |        |
|---------------------|-------------|-----------|-------------|------------|--------------|-----|------------|-----------|--------|
|                     |             |           |             |            |              |     | Steel      | Stainless | Brass  |
| 4                   | 5/8-11      | .014      | 11/16       | 1/2        | 12,500       | 10  | 82195      | 82316     | 82367* |
|                     | 1/2-13      | .014      |             |            |              |     | 82196      | –         | –      |
|                     | 3/8-24      | .014      |             |            |              |     | 82197      | –         | –      |
|                     | M10x1.25    | .014      |             |            |              |     | 82198      | –         | –      |
|                     | M10x1.50    | .014      |             |            |              |     | 82199      | –         | –      |
|                     | M14x2.0     | .014      |             |            |              |     | 82200      | –         | –      |

\* Brass wire is .012 wire

For general surface cleaning.

## Knot Cups

### Mini Knot Cup



For use on hard-to-reach areas such as angles and corners, curved surfaces, and pipe bevel cleaning. Weld cleaning, scale removal, and heavy deburring.

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |       |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|-----------|-------|
|                     |             |           |             |              |     | Steel      | Stainless | Brass |
| 2-3/4               | 5/8-11      | .014      | 7/8         | 14,000       | 5   | 82219      | 82329     | -     |
|                     |             | .020      |             |              |     | 82220      | 82330     | -     |
|                     | 1/2-13      | .014      |             |              | 5   | 82221      | 82331     | -     |
|                     |             | .020      |             |              |     | 82222      | 82332     | -     |
|                     | 3/8-24      | .014      |             |              | 5   | 82223      | 82333     | -     |
|                     |             | .020      |             |              |     | 82224      | 82334     | -     |
|                     | M10x1.50    | .014      |             |              | 5   | 82225      | 82335     | -     |
|                     |             | .0120     |             |              |     | 82226      | 82336     | -     |
|                     | M10x1.25    | .014      |             |              | 5   | 82227      | 82337     | -     |
|                     |             | .020      |             |              |     | 82228      | 82338     | -     |
|                     | M14x.20     | .014      |             |              | 5   | 82229      | 82339     | -     |
|                     |             | .020      |             |              |     | 82230      | 82340     | -     |
| 3-1/2               | 5/8-11      | .014      | 7/8         | 12,500       | 1   | 82231      | 82341     | 82368 |
|                     |             | .020      |             |              |     | 82232      | 82342     | -     |
|                     | 1/2-13      | .014      |             |              | 1   | 82233      | 82343     | -     |
|                     |             | .020      |             |              |     | 82234      | 82344     | -     |
|                     | 3/8-24      | .014      |             |              | 1   | 82235      | 82345     | -     |
|                     |             | .020      |             |              |     | 82236      | 82346     | -     |
|                     | M10x1.50    | .014      |             |              | 1   | 82237      | 82347     | -     |
|                     |             | .020      |             |              |     | 82238      | 82348     | -     |
|                     | M10x1.25    | .014      |             |              | 1   | 82239      | 82349     | -     |
|                     |             | .020      |             |              |     | 82240      | 82350     | -     |
|                     | M14x.20     | .014      |             |              | 1   | 82241      | 82351     | -     |
|                     |             | .020      |             |              |     | 82242      | 82352     | -     |

### COMBITWIST® Mini Knot Cup



#### NEW PRODUCT – COMBITWIST®

COMBITWIST® (For additional product information, see page 36.)



- More Aggressive Brushing
- Longer Brush Life
- Superior Rotational Balance
- Faster Stock Removal
- Reduced Operator Fatigue
- Better Surface Finish

| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |             |           |             |              |     | Steel      | Stainless |
| 2-3/4               | 5/8-11      | .014      | 7/8         | 14,000       | 5   | 82750      | 82855     |
|                     |             | .020      |             |              |     | 82751      | 82856     |
| 3-1/2               | 5/8-11      | .014      | 7/8         | 12,500       | 1   | 82401      | 82430     |
|                     |             | .020      |             |              |     | 82402      | 82431     |

### Minigrinder Adapter Insert



| Adapter Inserts | Qty | EDP Number |
|-----------------|-----|------------|
|-----------------|-----|------------|

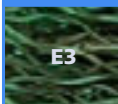
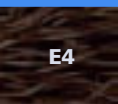
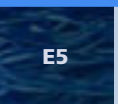
#### Minigrinder Adapter Inserts

|                        |   |       |
|------------------------|---|-------|
| 5/8-11 UNC to M10x1.25 | 5 | 84645 |
| 5/8-11 UNC to M10x1.50 | 5 | 84646 |
| 5/8-11 UNC to 3/8-24   | 5 | 84647 |

## Encapsulated and Crimped Cups

### Encapsulated Brush Grades

(For complete Encapsulated product information, see page 53.)

|   |   |   |   |   |  |
|---|---|---|---|---|--|
|  <b>E3</b> | Aggressive enough for most applications. Best grade for general use. Green color. |  <b>E4</b> | For higher pressure applications and excessive heat. Black color. |  <b>E5</b> | Super aggressive, tough cleaning, with narrow face wheels. Blue color. |
|---|---|---|---|---|--|

### Mini Encapsulated Cup



Controlled area cleaning. Long life, increased aggressiveness. Uniform brushing action. Reduced wire breakage.

| Brush Dia. (Inches) | Thread Size | Wire Size | ECAP Grade | Trim Length | MSFS Max RPM | Qty | EDP Number |       |
|---------------------|-------------|-----------|------------|-------------|--------------|-----|------------|-------|
|                     |             |           |            |             |              |     | Steel      |       |
| 3-1/2               | 5/8-11      | .014      | E3         | 7/8         | 12,000       | 1   |            | 83559 |
|                     | M10x1.25    |           |            |             |              |     |            | 83561 |
|                     | M14x2.0     |           |            |             |              |     |            | 83562 |
|                     | 3/8-24      |           |            |             |              |     |            | 83563 |

### Mini Crimped Cup



2-3/4" for light duty application and surface cleaning. Flat brushing, edge cleaning, and flash removal.

3-1/2" for effective, fast, heavy-duty cleaning of large metal surfaces. Suitable for use on portable power tools to remove weld scale, paint, burrs, and corrosion.

| Brush Dia. (Inches) | Arbor/Thread Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |                   |           |             |              |     | Steel      | Stainless |
| 2-3/4               | 5/8-11            | .014      | 7/8         | 14,000       | 5   | 82243      | 82353     |
|                     | 1/2-13            |           |             |              |     | 82244      | 82354     |
|                     | 3/8-24            |           |             |              |     | 82245      | 82355     |
|                     | M10x1.50          |           |             |              |     | 82246      | 82356     |
|                     | M10x1.25          |           |             |              |     | 82247      | 82357     |
|                     | M14x2.0           |           |             |              |     | 82248      | 82358     |
| 3-1/2               | 5/8-11            | .014      | 7/8         | 12,500       | 1   | 82249      | 82359     |
|                     |                   |           |             |              |     |            | 82255     |
|                     | 1/2-13            |           |             |              |     | 82250      | 82360     |
|                     | 3/8-24            |           |             |              |     | 82251      | 82361     |
|                     | M10x1.50          |           |             |              |     | 82252      | 82362     |
|                     | M10x1.25          |           |             |              |     | 82253      | 82363     |
|                     | M14x2.0           |           |             |              |     | 82254      | 82364     |

### Stainless Steel Wire Brushes



ADVANCE catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.

## Bevel Cups

### Knot



| Brush Dia. (Inches) | Thread Size | Wire Size | No. of Knots | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|--------------|-------------|------------|--------------|-----|------------|-----------|
|                     |             |           |              |             |            |              |     | Steel      | Stainless |
| 4                   | 5/8-11      | .014      | 22           | 3/4         | 1/2        | 20,000       | 5   | 82201      | 82317     |
|                     |             | .020      |              |             |            |              |     | 82202      | 82318     |
|                     | 1/2-13      | .014      | 82203        | 82319       |            |              |     |            |           |
|                     |             | .020      | 82204        | 82320       |            |              |     |            |           |
|                     | 3/8-24      | .014      | 82205        | 82321       |            |              |     |            |           |
|                     |             | .020      | 82206        | 82322       |            |              |     |            |           |
|                     | M10x1.50    | .014      | 82207        | 82323       |            |              |     |            |           |
|                     |             | .020      | 82208        | 82324       |            |              |     |            |           |
|                     | M10x1.25    | .014      | 82209        | 82325       |            |              |     |            |           |
|                     |             | .020      | 82210        | 82326       |            |              |     |            |           |
|                     | M14x2.0     | .014      | 82211        | 82327       |            |              |     |            |           |
|                     |             | .020      | 82212        | 82328       |            |              |     |            |           |

Beveled shape is ideal for work in hard-to-reach areas. For deburring, weld scale removal, edge blending of fillets, grooves and inside edges.

### Crimped



| Brush Dia. (Inches) | Thread Size | Wire Size | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |  |
|---------------------|-------------|-----------|-------------|------------|--------------|-----|------------|--|
|                     |             |           |             |            |              |     | Steel      |  |
| 4                   | 5/8-11      | .014      | 3/4         | 1/2        | 15,000       | 5   | 82213      |  |
|                     |             | .014      |             |            |              |     | 82214      |  |
|                     | 3/8-24      | .014      | 82215       |            |              |     |            |  |
|                     | M10x1.50    | .014      | 82216       |            |              |     |            |  |
|                     | M10x1.25    | .014      | 82217       |            |              |     |            |  |
|                     | M14x2.0     | .014      | 82218       |            |              |     |            |  |

Bevel crimped wheel is best for light work, and jobs requiring superior surface finish.

### Stainless Steel Wire Brushes



Advance catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.

## General Information

### Minigrinder Adapter Insert



Adapter Inserts



EDP Number

#### Minigrinder Adapter Inserts

|                        |   |       |
|------------------------|---|-------|
| 5/8–11 UNC to M10x1.25 | 5 | 84645 |
| 5/8–11 UNC to M10x1.50 | 5 | 84646 |
| 5/8–11 UNC to 3/8–24   | 5 | 84647 |

### High Speed Grinder Reference Chart

For proper power brush selection, the following table may be used to determine the spindle thread and maximum free speed based on the power tool manufacturer and model number. If the make and

model are not listed, please consult the documentation provided with the power tool when purchased, or consult the manufacturer of the tool for additional information.

| Manufacturer            | Model          | Spindle Thread | Model Description              | No Load Speed       |
|-------------------------|----------------|----------------|--------------------------------|---------------------|
| AEG                     | WS601          | 5/8-11         | 4-1/2" Angle Grinder           | 10,000              |
| Black & Decker          | 6246           | M10x1.50       | 4" Angle Grinder               | 10,000              |
|                         | 2750/27506     | 5/8-11         | 4-1/2" Angle Grinder           | 10,000              |
|                         | 4252           | 5/8-11         | 5" Angle Grinder               | 10,000              |
|                         | Bosch          | 1347           | M14x2.0                        | 4-1/2" Mini Grinder |
| Bosch                   | 1347A          | 5/8-11         | 4-1/2" Mini Grinder            | 11,000              |
|                         | 1348(E)        | M14 x 2.0      | 5" Mini Grinder (Electronic)   | 11,000              |
|                         | 1348AE         | 5/8-11         | 5" Electronic Mini Grinder     | 11,000              |
|                         | 7352-111       | M14x2.0        | 4-1/2" Air Mini Grinder        | 12,000              |
|                         | Hitachi        | GIOSDI         | M10x1.50                       | 4" Disc Grinder     |
| Hitachi                 | G12SA          | 5/8-11         | 4-1/2" Disc Grinder            | 10,000              |
|                         | G12SI          | 5/8-11         | 4-1/2" Disc Grinder            | 11,000              |
|                         | G13SC          | 5/8-11         | 5" Disc Grinder                | 11,000              |
|                         | Ingersoll      | AG230P64       | 3/8-24                         | 4" Air Grinder      |
| Rand                    | AG230P1045     | 5/8-11         | 4-1/2" Air Grinder             | 12,000              |
|                         | AG230P105      | 5/8-11         | 5" Air Grinder                 | 12,000              |
| Jepson                  | 4204N          | M10x1.50       | 4" Disc Grinder                | 12,000              |
|                         | 4145N          | 5/8-11         | 4-1/2" Disc Grinder            | 10,000              |
|                         | 4105           | 5/8-11         | 5" Disc Grinder                | 10,000              |
| Makita                  | N9501 BZ       | M10x1.50       | 4" Disc Grinder                | 10,000              |
|                         | N9514B         | M10x1.50       | 4" Disc Grinder                | 11,000              |
|                         | 9503BHZ        | 5/8-11         | 4-1/2" Disc Grinder            | 10,000              |
|                         | 9505BHZ, 9005B | 5/8-11         | 5" Disc Grinder                | 10,000              |
| Metabo                  | 6014           | 5/8-11         | 4-1/2" Angle Grinder           | 10,000              |
|                         | 7010           | M14x2.0        | 4-1/2" Angle Grinder           | 10,000              |
|                         | 7016           | 5/8-11         | 4-1/2" Angle Grinder           | 1,700-8,500         |
|                         | 10125          | 5/8-11         | 5" Angle Grinder               | 8,500               |
|                         | 9025           | 5/8-11         | 5" Angle Grinder               | 10,000              |
|                         | 11025          | 5/8-11         | 4-1/2", 5" Angle Grinder       | 10,000              |
| Milwaukee Electric Tool | 6145, 6140     | 1/2-13         | 4-1/2" Hvy Duty Sander/Grinder | 10,000              |
|                         | 6142(KIT)      | 5/8-11         | 4-1/2" Hvy Duty Sander/Grinder | 10,000              |
|                         | 6141           | 5/8-11         | 5" Hvy Duty Sander/Grinder     | 10,000              |
| Porter Cable            | 7405           | 5/8-11         | 5" Angle Grinder               | 10,000              |
| Ryobi                   | SG-1000        | 3/8-16         | 4" Grinder                     | 11,000              |
|                         | G-1155C        | 5/8-11         | 4-1/2" Grinder                 | 11,000              |
|                         | G-1255         | 5/8-11         | 5" Grinder                     | 10,000              |
| Sioux                   | 1240A          | M10x1.25       | 4-1/2" Electric Grinder        | 11,000              |
|                         | 1245           | 5/8-11         | 4" Electric Grinder            | 10,000              |
|                         | 1967           | 3/8-24         | 4" Air Grinder                 | 12,000              |
| Skill                   | 9310, 9415     | M10x1.50       | 4-1/2" Disc Grinder            | 11,000              |
|                         | HD9611         | 5/8-11         | 4-1/2" Disc Grinder            | 12,000              |

Crimped Wire Brushes – Standard, Coated Cup, and Banded

**Crimped Wire End Brush**



General purpose for working hard to reach places. For use on portable 1/4" dia. air and electric tools. Used for rubber and plastic flash removal, paint and rust removal, die, mold and tool polishing.

| Brush Dia. (Inches) | Shank Dia.* | Wire Size | Trim Length | Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|---------|-----|------------|-----------|
|                     |             |           |             |         |     | Steel      | Stainless |
| 1/2                 | 1/4         | .006      | 1           | 25,000  | 10  | 82962      | 82981     |
|                     |             | .008      |             |         |     | 82963      | 82982     |
|                     |             | .010      |             |         |     | 82964      | 82983     |
|                     |             | .014      |             |         |     | 82965      | 82984     |
|                     |             | .020      |             |         |     | 82966      | 82985     |
| 3/4                 | 1/4         | .006      | 1           | 22,000  | 10  | 82967      | 82986     |
|                     |             | .008      |             |         |     | 82968      | 82987     |
|                     |             | .010      |             |         |     | 82969      | 82988     |
|                     |             | .014      |             |         |     | 82970      | 82989     |
|                     |             | .020      |             |         |     | 82971      | 82990     |
| 1                   | 1/4         | .006      | 1           | 20,000  | 10  | 82972      | 82991     |
|                     |             | .008      |             |         |     | 82973      | 82992     |
|                     |             | .010      |             |         |     | 82974      | 82993     |
|                     |             | .014      |             |         |     | 82975      | 82994     |
|                     |             | .020      |             |         |     | 82976      | 82995     |

**Crimped Coated Cup End Brush**



Elastomer sleeve on the metal cup helps protect the part being brushed. Improved performance for mold and die cleaning.

| Brush Dia. (Inches) | Shank Dia.* | Wire Size | Trim Length | Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|---------|-----|------------|-----------|
|                     |             |           |             |         |     | Steel      | Stainless |
| 1/2                 | 1/4         | .006      | 1           | 25,000  | 10  | 83035      | 83050     |
|                     |             | .008      |             |         |     | 83036      | 83051     |
|                     |             | .010      |             |         |     | 83037      | 83052     |
|                     |             | .014      |             |         |     | 83038      | -         |
|                     |             | .020      |             |         |     | 83039      | -         |
| 3/4                 | 1/4         | .006      | 1           | 22,000  | 10  | 83040      | 83053     |
|                     |             | .008      |             |         |     | 83041      | 83054     |
|                     |             | .010      |             |         |     | 83042      | 83055     |
|                     |             | .014      |             |         |     | 83043      | -         |
|                     |             | .020      |             |         |     | 83044      | -         |
| 1                   | 1/4         | .006      | 1           | 20,000  | 10  | 83045      | 83056     |
|                     |             | .008      |             |         |     | 83046      | 83057     |
|                     |             | .010      |             |         |     | 83047      | 83058     |
|                     |             | .014      |             |         |     | 83048      | -         |
|                     |             | .020      |             |         |     | 83049      | -         |

**Banded Crimped End Brush**



Banding reduces wire filament flare and enhances filament action.  
 \*\*Trim length is 5/8" with ring, 1" without ring for all Banded Crimped End Brushes.

| Brush Dia. (Inches) | Shank Dia.* | Wire Size | Trim Length | Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|-------------|---------|-----|------------|-----------|
|                     |             |           |             |         |     | Steel      | Stainless |
| 1/2                 | 1/4         | .006      | 5/8, 1**    | 15,000  | 10  | 83005      | 83024     |
|                     |             | .008      |             |         |     | 83006      | 83025     |
|                     |             | .010      |             |         |     | 83007      | 83026     |
|                     |             | .014      |             |         |     | 83008      | -         |
|                     |             | .020      |             |         |     | 83009      | -         |
| 3/4                 | 1/4         | .006      | 5/8, 1**    | 15,000  | 10  | 83010      | 83027     |
|                     |             | .008      |             |         |     | 83011      | 83028     |
|                     |             | .010      |             |         |     | 83012      | 83029     |
|                     |             | .014      |             |         |     | 83013      | -         |
|                     |             | .020      |             |         |     | 83014      | -         |
| 1                   | 1/4         | .006      | 5/8, 1**    | 12,500  | 10  | 83015      | 83030     |
|                     |             | .008      |             |         |     | 83016      | 83031     |
|                     |             | .010      |             |         |     | 83017      | 83032     |
|                     |             | .014      |             |         |     | 83018      | -         |
|                     |             | .020      |             |         |     | 83019      | -         |

## Knot End Brushes

### Flared Cup Knot End Brush



Flared cup style provides best performance and longest brush life.

| Brush Dia. (Inches) | Shank Dia.* | Wire Size | Trim Length | MSFS RPM | Qty | EDP Number |           |       |
|---------------------|-------------|-----------|-------------|----------|-----|------------|-----------|-------|
|                     |             |           |             |          |     | Steel      | Stainless | Brass |
| 1/2                 | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83063      | 83085     | –     |
|                     |             | .010      |             |          |     | 83064      | 83086     | –     |
|                     |             | .014      |             |          |     | 83065      | 83087     | –     |
| 3/4                 | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83070      | 83090     | –     |
|                     |             | .010      |             |          |     | 83071      | 83091     | –     |
|                     |             | .014      |             |          |     | 83072      | 83092     | –     |
|                     |             | .020      |             |          |     | 83073      | 83093     | –     |
| 1                   | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83077      | 83096     | –     |
|                     |             | .010      |             |          |     | 83078      | 83097     | –     |
|                     |             | .014      |             |          |     | 83079      | 83098     | 83104 |
|                     |             | .020      |             |          |     | 83080      | 83099     | 83105 |

### Straight Cup Knot End Brush



Straight cup ideal for reaching into holes and confined areas.

| Brush Dia. (Inches) | Shank Dia.* | Wire Size | Trim Length | MSFS RPM | Qty | EDP Number |           |       |
|---------------------|-------------|-----------|-------------|----------|-----|------------|-----------|-------|
|                     |             |           |             |          |     | Steel      | Stainless | Brass |
| 1/2                 | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83123      | 83145     | –     |
|                     |             | .010      |             |          |     | 83124      | 83146     | –     |
|                     |             | .014      |             |          |     | 83125      | 83147     | –     |
| 3/4                 | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83130      | 83150     | –     |
|                     |             | .010      |             |          |     | 83131      | 83151     | –     |
|                     |             | .014      |             |          |     | 83132      | 83152     | –     |
|                     |             | .020      |             |          |     | 83133      | 83153     | –     |
| 1                   | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83137      | 83156     | –     |
|                     |             | .010      |             |          |     | 83138      | 83157     | –     |
|                     |             | .014      |             |          |     | 83139      | 83158     | –     |
|                     |             | .014      | 1           | 20,000   | 10  | –          | –         | 83164 |
|                     |             | .020      | –           | –        | –   | –          | –         | 83165 |
|                     |             | .020      | 1-1/8       | 20,000   | 10  | 83140      | 83159     | –     |

### Coated Cup Knot End Brush



Coated cup protects and helps prevent damage to workpiece from metal brush components.

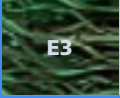
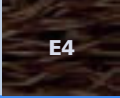
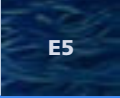
| Brush Dia. (Inches) | Shank Dia.* | Wire Size | Trim Length | MSFS RPM | Qty | EDP Number |
|---------------------|-------------|-----------|-------------|----------|-----|------------|
|                     |             |           |             |          |     | Stainless  |
| 1/2                 | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83175      |
|                     |             | .010      |             |          |     | 83176      |
|                     |             | .014      |             |          |     | 83177      |
| 3/4                 | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83178      |
|                     |             | .010      |             |          |     | 83179      |
|                     |             | .014      |             |          |     | 83180      |
|                     |             | .020      |             |          |     | 83181      |
| 1                   | 1/4         | .006      | 1-1/8       | 20,000   | 10  | 83182      |
|                     |             | .010      |             |          |     | 83183      |
|                     |             | .014      |             |          |     | 83184      |
|                     |             | .020      |             |          |     | 83185      |

\* All ADVANCE end brushes are available in 6 mm shank. Please call for price and delivery.

## Specialty End Brushes

### Encapsulated Brush Grades

(For complete Encapsulated product information, see page 53.)

|  |   |   |   |   |  |
|--|---|---|---|---|--|
|  <b>E3</b> | Aggressive enough for most applications. Best grade for general use. Green color. |  <b>E4</b> | For higher pressure applications and excessive heat. Black color. |  <b>E5</b> | Super aggressive, tough cleaning, with narrow face wheels. Blue color. |
|--|---|---|---|---|--|

### Hollow Center End Brush



Encapsulation provides excellent tip control, reduced flare, and aggressive brushing action.

| Brush Dia. (Inches) | Shank Dia. | Wire Size | Grade | Trim Length | Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|-------|-------------|---------|-----|------------|-----------|
|                     |            |           |       |             |         |     | Steel      | Stainless |
| 1/2                 | 1/4        | .006      | E3    | 7/8         | 18,000  | 10  | 83579      | -         |
|                     |            | .010      | E3    |             |         |     | 83580      | 83590     |
|                     |            | .014      | E4    |             |         |     | 83594      | -         |
|                     |            | .020      | E3    |             |         |     | 83581      | -         |
| 3/4                 | 1/4        | .006      | E3    | 7/8         | 15,000  | 10  | 83582      | -         |
|                     |            | .010      | E3    |             |         |     | 83583      | 83591     |
|                     |            | .010      | E4    |             |         |     | 83595      | -         |
| 1                   | 1/4        | .006      | E3    | 7/8         | 13,000  | 10  | 83585      | -         |
|                     |            | .010      | E3    |             |         |     | 83586      | -         |
|                     |            | .010      | E4    |             |         |     | 83596      | -         |
|                     |            | .014      | E3    |             |         |     | 83587      | -         |

### Pilot Bonding Brush



Essential for cleaning rivet holes in air craft and aerospace industries.

\*Trim length measured from ring.

| Brush Dia. (Inches) | Shank Dia. | Pilot Dia. | Wire Size | Trim Length* | MSFS RPM | Qty | EDP Number |           |
|---------------------|------------|------------|-----------|--------------|----------|-----|------------|-----------|
|                     |            |            |           |              |          |     | Steel      | Stainless |
| 1/2                 | 1/4        | 3/32       | .004      | 1/8          | 20,000   | 10  | 83187      |           |
|                     |            | 1/8        |           |              |          |     | 83188      |           |
|                     |            | 5/32       |           |              |          |     | 83189      |           |
|                     |            | 3/16       |           |              |          |     | 83190      |           |
|                     |            | 1/4        |           |              |          |     | 83191      |           |

### Pencil End Brush



Small brushes designed for cleaning blind holes and small crevices. Ideal for aircraft maintenance.

| Brush Dia. (Inches) | Shank Dia. | Wire Size | Trim Length | Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|-------------|---------|-----|------------|-----------|
|                     |            |           |             |         |     | Steel      | Stainless |
| 3/16                | 1/4        | .012      | 3/8         | 3-3/8   | 10  | 82941      | 82942     |

### Coil Spring Brush



Flexible heavy cleaning action. Spring may be trimmed as brush wears. Ideal for cleaning deep cavities, tubing, and more.



**WARNING:** Do not run the coil spring brush free of contact with the work. Insert it into the work to be brushed before turning on power. If run free, the brush may whip, break, and fly off tooling, endangering personnel in the area.

| Brush Dia. (Inches) | Shank Dia. | Overall Length | Wire Size | Max RPM | Qty | EDP Number |           |
|---------------------|------------|----------------|-----------|---------|-----|------------|-----------|
|                     |            |                |           |         |     | Steel      | Stainless |
| 3/8                 | 1/4        | 6-1/4          | .014      | 1,800   | 12  | 82943      |           |
| 1/2                 | 1/4        | 6-1/4          | .014      | 1,800   | 12  | 82944      |           |



## Specialty End Brushes

### Circular End



Conforms to contours of the workpiece providing a light deburring action. Used for cleaning rubber and plastic molds, light removal of flashing, carbon, rust and paint.

| Brush Dia. (Inches) | Stem Dia.* | Wire Size | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|--------------|-----|------------|-----------|
|                     |            |           |              |     | Steel      | Stainless |
| 1-1/4               | 1/4        | .006      | 20,000       | 10  | 82925      | –         |
|                     |            | .008      |              |     | 82926      | –         |
| 1-1/2               | 1/4        | .008      | 14,000       | 10  | 82927      | 82935     |
|                     |            | .020      |              |     | 82928      | –         |
| 2                   | 1/4        | .010      | 14,000       | 10  | 82929      | 82936     |
|                     |            | .014      |              |     | 82930      | 82937     |
| 3                   | 1/4        | .006      | 14,000       | 10  | 82931      | –         |
|                     |            | .008      |              |     | 82932      | 82938     |
|                     |            | .014      |              |     | 82933      | 82939     |
|                     |            | .020      |              |     | 82934      | 82940     |
| 4                   | 1/4        | .008      | 14,000       | 10  | 82949      | 82950     |

### Side and Bottom Cleaning



Square-trimmed wire brushes, used for cleaning internal surfaces. Mount in drill press or portable tool.

| Square Dia. (Inches) | Stem Dia. | Wire Size | Square Trim Length | Face Width | Overall Length | MSFS Max RPM | Qty | EDP Number |
|----------------------|-----------|-----------|--------------------|------------|----------------|--------------|-----|------------|
|                      |           |           |                    |            |                |              |     | Steel      |
| 1                    | 1/4       | .006      | 3/8                | 3/8        | 3-5/8          | 4,500        | 10  | 82880      |
| 1-1/16               | 1/4       | .006      | 13/32              | 3/8        | 3-5/8          | 4,500        | 10  | 82881      |
| 1-1/4                | 1/4       | .006      | 1/2                | 1/2        | 3-3/4          | 4,500        | 10  | 82882      |
| 1-1/2                | 1/4       | .006      | 9/16               | 1/2        | 4              | 4,500        | 10  | 82883      |
| 1-7/8                | 1/4       | .006      | 13/16              | 1/2        | 4-1/8          | 4,500        | 10  | 82884      |

### Knot Wire Mounted Wheel Standard Twist



More aggressive brushing action than crimped wire for faster removal. For deburring, cleaning, rust removal, and weld seam conditioning.

| Brush Dia. (Inches) | Stem Dia.* | Wire Size | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|-------------|------------|--------------|-----|------------|-----------|
|                     |            |           |             |            |              |     | Steel      | Stainless |
| 3                   | 1/4        | .012      | 3/4         | 7/16       | 25,000       | 10  | 82915      | –         |
|                     |            | .014      |             |            |              |     | 82916      | 82921     |
|                     |            | .020      |             |            |              |     | 82917      | –         |
| 3-1/4               | 1/4        | .012      | 3/4         | 1/2        | 25,000       | 10  | 82945      | –         |
|                     |            | .014      |             |            |              |     | 82946      | 82948     |
|                     |            | .020      |             |            |              |     | 82947      | –         |
| 4                   | 1/4        | .012      | 3/4         | 5/8        | 20,000       | 10  | 82918      | –         |
|                     |            | .014      |             |            |              |     | 82919      | 82922     |
|                     |            | .020      |             |            |              |     | 82920      | –         |

### Stainless Steel Wire Brushes



ADVANCE catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.

## Crimped and Encapsulated Wheels

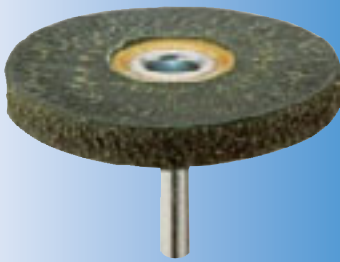
### Crimped Wire Mounted Wheel



Crimped brushes provide lighter brushing action and superior finish when cleaning, removing rust and paint, smoothing, descaling, cleaning fettling from cast seams, light deburring.

| Brush Dia. (Inches) | Stem Dia.* | Wire Size | Trim Length | Face Width | MSFS Max. RPM | Qty | EDP Number |           |       |
|---------------------|------------|-----------|-------------|------------|---------------|-----|------------|-----------|-------|
|                     |            |           |             |            |               |     | Steel      | Stainless | Brass |
| 1-1/2               | 1/4        | .006      | 7/16        | 1/4        | 20,000        | 10  | 82890      | 82905     | –     |
|                     |            | .008      |             |            |               |     | 82891      | –         | –     |
|                     |            | .012      |             |            |               |     | 82892      | 82906     | –     |
| 2                   | 1/4        | .008      | 1/2         | 3/8        | 20,000        | 10  | 82893      | 82907     | –     |
|                     |            | .012      |             |            |               |     | 82894      | 82908     | –     |
| 2-1/2               | 1/4        | .008      | 3/4         | 1/2        | 20,000        | 10  | 82895      | 82909     | –     |
|                     |            | .012      |             |            |               |     | –          | 82910     | –     |
|                     |            | .014      |             |            |               |     | 82896      | –         | –     |
| 3                   | 1/4        | .006      | 1           | 5/8        | 20,000        | 10  | 82897      | 82911     | –     |
|                     |            | .008      |             |            |               |     | 82898      | 82912     | –     |
|                     |            | .012      |             |            |               |     | 82899      | –         | –     |
|                     |            | .014      |             |            |               |     | 82900      | 82913     | 82914 |
|                     |            | .020      |             |            |               |     | 82901      | –         | –     |

### Encapsulated Mounted Wheel



Encapsulated for maximum brushing action.

| Brush Dia. (Inches) | Stem Dia.* | Wire Size | Grade | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |
|---------------------|------------|-----------|-------|-------------|------------|--------------|-----|------------|
|                     |            |           |       |             |            |              |     | Steel      |
| 2                   | 1/4        | .010      | E3    | 1/2         | 1/4        | 20,000       | 10  | 83612      |
| 3                   | 1/4        | .008      | E3    | 1           | 1/4        | 20,000       | 10  | 83613      |
|                     |            | .012      | E3    | 1           | 1/4        | 20,000       | 10  | 83614      |

### Crimped Wire Flared Cup

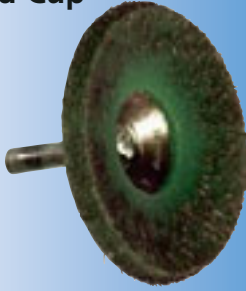


Concave shape provides effective side cleaning action and offers high flexibility to follow contours and intricate surface patterns. Use on inside edges, fillets and grooves without scoring bottom areas. Especially for light deburring, scale and rust removal, weld seam cleaning, etc.

| Brush Dia. (Inches) | Stem Dia.* | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |            |           |             |              |     | Steel      | Stainless |
| 1-1/2               | 1/4        | .006      | 5/16        | 20,000       | 10  | 82850      | 82870     |
|                     |            | .008      |             |              |     | 82851      | –         |
|                     |            | .012      |             |              |     | 82852      | 82871     |
| 2                   | 1/4        | .008      | 7/16        | 20,000       | 10  | 82854      | –         |
|                     |            | .014      |             |              |     | 82878      | 82873     |
|                     |            | .020      |             |              |     | 82879      | –         |
|                     |            |           |             |              |     | 82860      | –         |
| 2-1/2               | 1/4        | .006      | 11/16       | 20,000       | 10  | 82857      | –         |
|                     |            | .008      |             |              |     | 82858      | –         |
|                     |            | .014      |             |              |     | 82859      | 82875     |
|                     |            | .020      |             |              |     | 82860      | –         |
| 3                   | 1/4        | .006      | 7/8         | 20,000       | 10  | 82861      | 82876     |
|                     |            | .008      |             |              |     | 82862      | –         |
|                     |            | .014      |             |              |     | 82863      | 82877     |
|                     |            | .020      |             |              |     | 82864      | –         |
| 4                   | 1/4        | .008      | 1-3/8       | 20,000       | 10  | 82866      | –         |
|                     |            | .014      |             |              |     | 82867      | –         |

## Encapsulated Flared Cup, Circular End, Mounted Cup

### Encapsulated Flared Cup



Concave shape provides effective side cleaning action without scoring bottom areas. Encapsulation for maximum aggression.

| Brush Dia. (Inches) | Stem Dia.* | Wire Size | Grade | Cup Size | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|-------|----------|--------------|-----|------------|-----------|
|                     |            |           |       |          |              |     | Steel      | Stainless |
| 1-3/4               | 1/4        | .006      | E3    | 3/4      | 20,000       | 10  | 83598      | -         |
|                     |            | .010      |       |          |              |     | 83599      | 83608     |
|                     |            | .020      |       |          |              |     | 83600      | -         |
| 2                   | 1/4        | .006      | E3    | 3/4      | 17,000       | 10  | 83601      | -         |
|                     |            | .010      |       |          |              |     | 83602      | 83609     |
| 2-3/4               | 1/4        | .010      | E3    | 1        | 14,000       | 10  | 83605      | 83610     |

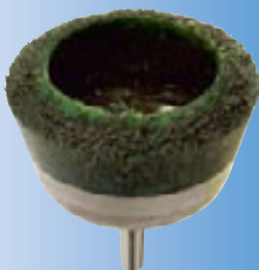
### Crimped Wire Mounted Cup



Designed for use on easily accessible, level surfaces. For weld and mold cleaning, light deburring, rust, paint and flash removal.

| Brush Dia. (Inches) | Stem Dia.* | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|-------------|--------------|-----|------------|-----------|
|                     |            |           |             |              |     | Steel      | Stainless |
| 1-1/4               | 1/4        | .014      | 1           | 13,000       | 10  | 82820      | -         |
|                     |            | .020      |             |              |     | 82821      | -         |
| 1-3/4               | 1/4        | .006      | 11/16       | 13,000       | 10  | 82822      | 82835     |
|                     |            | .012      |             |              |     | 82823      | 82836     |
| 2                   | 1/4        | .008      | 7/8         | 13,000       | 10  | 82824      | 82837     |
|                     |            | .010      |             |              |     | -          | 82838     |
|                     |            | .012      |             |              |     | 82826      | -         |
| 2-1/2               | 1/4        | .008      | 7/8         | 13,000       | 10  | 82828      | -         |
|                     |            | .012      |             |              |     | 82830      | -         |

### Encapsulated Mounted Cup



Encapsulated for maximum brushing action.

| Brush Dia. (Inches) | Stem Dia.* | Wire Size | Grade | Trim Length | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|-------|-------------|--------------|-----|------------|-----------|
|                     |            |           |       |             |              |     | Steel      | Stainless |
| 2-1/2               | 1/4        | .010      | E3    | 5/8         | 13,000       | 10  | -          | 83618     |
|                     |            | .014      |       |             |              |     | 83616      | -         |

\*All Advance end brushes are available in 6 mm shank. Please call for price and delivery.

## Stem Mounted – Wheels and Cups

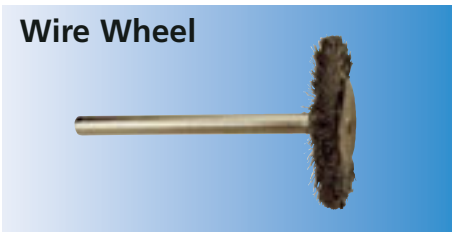
### NEW PRODUCT



### Miniature Brushes

The new line of ADVANCE stem-mounted miniature brushes is perfect for precision applications required in many industries including jewelry, electronics and aerospace. A wide selection of filaments includes: carbon steel wire, stainless steel wire and brass wire, M-BRAD™ aluminum oxide impregnated nylon filament, and a variety of natural bristles. All brushes are mounted on 1/8" stems, and are suitable for use with flexible shaft tools and straight grinders.

#### Wire Wheel



Precision miniature wheel brush in carbon steel, stainless steel, and brass, for cleaning and light deburring.

| Brush Dia. (Inches) | Stem Size | Wire Size | Trim Length | MSFS Max RPM | Qty | EDP Number |           |       |
|---------------------|-----------|-----------|-------------|--------------|-----|------------|-----------|-------|
|                     |           |           |             |              |     | Steel      | Stainless | Brass |
| 5/8                 | 1/8       | .005      | 1/8         | 25,000       | 36  | 83200      | 83209     | -     |
| 3/4                 | 1/8       | .003      | 3/16        | 25,000       | 36  | 83201      | -         | 83216 |
|                     |           | .005      |             |              |     | 83202      | 83210     | -     |
| 1                   | 1/8       | .003      | 1/4         | 25,000       | 36  | 83203      | 83211     | 83217 |
|                     |           | .005      |             |              |     | 83204      | 83212     | 83218 |
| 1-1/4               | 1/8       | .005      | 3/8         | 25,000       | 36  | 83205      | -         | -     |
| 1-1/2               | 1/8       | .005      | 1/2         | 18,000       | 36  | 83206      | -         | -     |
|                     |           |           |             |              |     | -          | 83213     | -     |

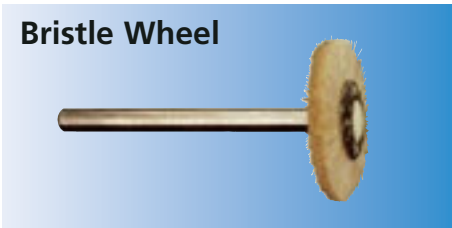
#### M-BRAD™ Wheel



Precision miniature nylon filament wheel brush impregnated with aluminum oxide, for deburring and finishing.

| Brush Dia. (Inches) | Stem Size | Grit Size | Trim Length | MSFS Max. RPM | Qty | EDP Number     |  |
|---------------------|-----------|-----------|-------------|---------------|-----|----------------|--|
|                     |           |           |             |               |     | Aluminum Oxide |  |
| 3/4                 | 1/8       | 600       | 3/16        | 6,000         | 36  | 83221          |  |
|                     |           | 1000      |             |               |     | 83222          |  |
| 1                   | 1/8       | 600       | 1/4         | 6,000         | 36  | 83223          |  |
|                     |           | 1000      | 3/16        |               |     | 83224          |  |
| 1-1/4               | 1/8       | 600       | 3/8         | 6,000         | 36  | 83225          |  |
|                     |           | 1000      |             |               |     | 83226          |  |
| 1-1/2               | 1/8       | 600       | 1/2         | 6,000         | 36  | 83227          |  |
|                     |           | 1000      | 3/8         |               |     | 83228          |  |

#### Bristle Wheel



Precision miniature wheel brush in soft and stiff natural bristle for light cleaning, and

polishing. May be used with abrasive or polishing pastes.

| Brush Dia. (Inches) | Stem Size | Trim Length | MSFS Max. RPM | Qty | EDP Number |       |
|---------------------|-----------|-------------|---------------|-----|------------|-------|
|                     |           |             |               |     | Stiff      | Soft  |
| 3/4                 | 1/8       | 3/16        | 25,000        | 36  | 83231      | 83232 |

#### Wire Cup



Precision miniature cup brush in carbon steel, stainless steel, and brass.

| Brush Dia. (Inches) | Stem Size | Wire Size | Trim Length | MSFS Max. RPM | Qty | EDP Number |           |       |
|---------------------|-----------|-----------|-------------|---------------|-----|------------|-----------|-------|
|                     |           |           |             |               |     | Steel      | Stainless | Brass |
| 9/16                | 1/8       | .003      | 1/4         | 25,000        | 36  | 83235      | -         | 83243 |
|                     |           | .005      |             |               |     | 83236      | 83240     | -     |

## Stem Mounted – Cups and End Brushes



Precision miniature nylon filament cup brush impregnated with aluminum oxide.

| Brush Dia. (Inches) | Stem Size | Grit Size | Trim Length | MSFS Max. RPM | Qty | EDP Number     |  |  |
|---------------------|-----------|-----------|-------------|---------------|-----|----------------|--|--|
|                     |           |           |             |               |     | Aluminum Oxide |  |  |
| 9/16                | 1/8       | 600       | 1/4         | 6,000         | 36  | 83247          |  |  |



Precision miniature cup brush in soft and stiff natural bristle.

| Brush Dia. (Inches) | Stem Size | Trim Length | MSFS Max. RPM | Qty | EDP Number |       |
|---------------------|-----------|-------------|---------------|-----|------------|-------|
|                     |           |             |               |     | Stiff      | Soft  |
| 9/16                | 1/8       | 1/4         | 25,000        | 36  | 83250      | 83252 |



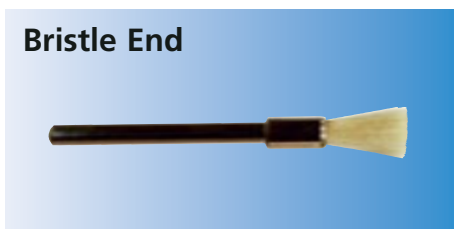
Precision miniature end brush in carbon steel, stainless steel, and brass.

| Brush Dia. (Inches) | Stem Size | Wire Size | Trim Length | MSFS Max. RPM | Qty | EDP Number |           |       |
|---------------------|-----------|-----------|-------------|---------------|-----|------------|-----------|-------|
|                     |           |           |             |               |     | Steel      | Stainless | Brass |
| 3/16                | 1/8       | .003      | 5/16        | 25,000        | 36  | 83256      | 83261     | 83266 |
| 1/4                 | 1/8       | .005      | 7/16        | 25,000        | 36  | 83257      | 83262     | 83267 |
| 5/16                | 1/8       | .005      | 1/2         | 25,000        | 36  | 83258      | 83263     | –     |



Precision miniature end brush in aluminum oxide impregnated nylon filament.

| Brush Dia. (Inches) | Stem Size | Grit Size | Trim Length | MSFS Max. RPM | Qty | EDP Number     |  |  |
|---------------------|-----------|-----------|-------------|---------------|-----|----------------|--|--|
|                     |           |           |             |               |     | Aluminum Oxide |  |  |
| 3/16                | 1/8       | 600       | 5/16        | 6,000         | 36  | 83270          |  |  |
|                     |           | 1000      | 1/4         |               |     | 83271          |  |  |
| 1/4                 | 1/8       | 600       | 7/16        | 6,000         | 36  | 83272          |  |  |
|                     |           | 1000      | 9/16        |               |     | 83273          |  |  |
| 5/16                | 1/8       | 600       | 1/2         | 6,000         | 36  | 83274          |  |  |
|                     |           | 1000      | 3/16        |               |     | 83275          |  |  |



Precision miniature end brush in soft and stiff natural bristle.

| Brush Dia. (Inches) | Stem Size | Trim Length | MSFS Max. RPM | Qty | EDP Number |       |
|---------------------|-----------|-------------|---------------|-----|------------|-------|
|                     |           |             |               |     | Stiff      | Soft  |
| 3/16                | 1/8       | 5/16        | 25,000        | 36  | 83278      | 83281 |
| 1/4                 | 1/8       | 7/16        | 25,000        | 36  | 83279      | –     |
| 5/16                | 1/8       | 1/2         | 25,000        | 36  | 83280      | –     |

## SpyraKleen™ Brushes



Single spiral, round-trim, light duty power tube brush for round, eccentric and rectangular holes. Achieves optimal performance when fully chucked on drill presses and collet-equipped portable tools. Flexible brushing action conforms well to threads and contours. Features a stainless steel stem for strength and stiffness.

| Brush Dia. (Inches) | Stem Dia. | Wire Size | Brush Part Length | Overall Length | Qty | EDP Number |           |       |
|---------------------|-----------|-----------|-------------------|----------------|-----|------------|-----------|-------|
|                     |           |           |                   |                |     | Steel      | Stainless | Brass |
| 1/4                 | 1/8       | .004      | 1                 | 3-1/2          | 36  | 83350      | 83386     | 83411 |
|                     |           | .005      |                   |                |     | 83351      | 83387     | –     |
| 5/16                | 1/8       | .005      | 1                 | 3-1/2          | 36  | 83352      | –         | –     |
| 3/8                 | 1/8       | .004      | 1                 | 3-1/2          | 36  | 83353      | 83388     | 83412 |
|                     |           | .005      |                   |                |     | 83354      | 83389     | –     |
|                     |           | .006      |                   |                |     | 83355      | –         | –     |
|                     |           | .008      |                   |                |     | 83356      | 83390     | –     |
| 7/16                | 1/8       | .005      | 1                 | 3-1/2          | 36  | 83357      | 83391     | –     |
| 1/2                 | 5/32      | .005      | 1                 | 3-1/2          | 36  | 83358      | 83392     | 83413 |
| 9/16                | 5/32      | .005      | 1                 | 3-1/2          | 36  | 83359      | 83393     | –     |
|                     |           | .010      |                   |                |     | –          | 83394     | –     |
| 5/8                 | 5/32      | .005      | 1                 | 3-1/2          | 36  | 83360      | 83395     | 83414 |
|                     |           | .008      |                   |                |     | 83361      | –         | –     |
| 11/16               | 5/32      | .005      | 1                 | 3-1/2          | 36  | 83362      | 83396     | –     |
| 3/4                 | 1/4       | .005      | 1                 | 3-1/2          | 36  | 83363      | 83397     | –     |
|                     |           | .006      |                   |                |     | 83364      | 83398     | 83415 |
|                     |           | .008      |                   |                |     | 83365      | –         | –     |
| 13/16               | 1/4       | .005      | 1                 | 3-1/2          | 36  | 83366      | 83399     | –     |
| 7/8                 | 1/4       | .005      | 1                 | 3-1/2          | 36  | 83367      | 83400     | –     |
|                     |           | .006      |                   |                |     | 83368      | 83401     | 83416 |
|                     |           | .008      |                   |                |     | 83369      | –         | –     |
| 15/16               | 1/4       | .005      | 1                 | 3-1/2          | 36  | 83370      | –         | –     |
| 1                   | 1/4       | .005      | 1                 | 3-1/2          | 36  | 83371      | 83402     | –     |
|                     |           | .008      |                   |                |     | 83372      | 83403     | 83417 |
| 1-1/8               | 1/4       | .005      | 1                 | 3-1/2          | 36  | 83373      | 83404     | –     |
|                     |           | .008      |                   |                |     | 83374      | 83405     | 83418 |
| 1-1/4               | 1/4       | .005      | 1                 | 3-1/2          | 36  | 83375      | 83406     | –     |
|                     |           | .008      |                   |                |     | 83376      | 83407     | –     |
| 1-1/2               | 1/4       | .008      | 1                 | 3-1/2          | 36  | 83377      | –         | 83419 |
|                     |           | .010      |                   |                |     | 83378      | –         | –     |
| 2-1/4               | 1/4       | .008      | 1                 | 3-1/2          | 36  | 83379      | –         | –     |

### Power Tube Brush Safety



Improper use of internal cleaning or flue-type power brushes is hazardous. Consult your local factory representative for recommended mounting, operating, and M.S.F.S. instructions for your specific application and/or requirement.

## Tube and Valve Internal Brushes

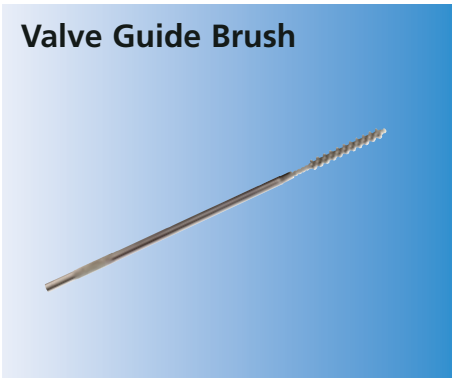
### Power-Type Tube for Through-holes



Double stem, double spiral power tube brushes for heavy-duty cleaning and deburring of I.D.'s: Threads, pipes, holes, keyways, etc. Heavy-duty construction offers long service life and most effective brushing action. Achieves optimal performance when fully chucked on drill presses and collet-equipped portable tools.

| Brush Dia. (Inches) | Stem Dia. | Wire Size | Brush Part Length | Overall Length | Qty | EDP Number |           |       |
|---------------------|-----------|-----------|-------------------|----------------|-----|------------|-----------|-------|
|                     |           |           |                   |                |     | Steel      | Stainless | Brass |
| 1/4                 | 1/8       | .005      | 2                 | 6              | 36  | –          | –         | 83455 |
|                     |           | .006      |                   |                |     | 83420      | –         | –     |
| 3/8                 | 1/8       | .003      | 2                 | 6              | 36  | 83421      | –         | –     |
|                     |           | .005      |                   |                |     | –          | –         | 83456 |
|                     |           | .006      |                   |                |     | 83422      | –         | –     |
| 1/2                 | 5/32      | .004      | 2                 | 6              | 36  | 83423      | 83440     | –     |
|                     |           | .005      |                   |                |     | –          | –         | 83457 |
|                     |           | .006      |                   |                |     | 83424      | 83441     | 83458 |
|                     |           | .010      |                   |                |     | 83425      | –         | –     |
| 5/8                 | 5/32      | .005      | 2                 | 5              | 36  | 83426      | 83442     | 83459 |
|                     |           | .008      |                   |                |     | 83427      | 83443     | 83460 |
|                     |           | .010      |                   |                |     | 83428      | –         | –     |
| 3/4                 | 1/4       | .006      | 2-1/2             | 5-1/2          | 36  | 83430      | 83445     | 83461 |
|                     |           | .008      |                   |                |     | 83431      | –         | –     |
|                     |           | .010      |                   |                |     | 83432      | 83446     | –     |
| 7/8                 | 1/4       | .006      | 2-1/2             | 5-1/2          | 36  | 83434      | 83447     | 83462 |
|                     |           | .010      |                   |                |     | 83435      | 83448     | –     |
| 1                   | 1/4       | .006      | 2-1/2             | 5-1/2          | 36  | 83436      | 83449     | 83463 |
|                     |           | .010      |                   |                |     | 83437      | 83450     | –     |
| 1-1/4               | 1/4       | .006      | 2-1/2             | 5-1/2          | 36  | 83438      | 83451     | –     |
|                     |           | .010      |                   |                |     | 83439      | 83452     | –     |
| 1-1/2               | 1/4       | .014      | 2-1/2             | 5-1/2          | 36  | –          | 83453     | –     |

### Valve Guide Brush



Single stem, single spiral tube brushes built to precision accuracy. Designed for use on drill presses and collet-equipped portable tools. Equipped with a knurled handle for hand use.

| Brush Dia. (Inches) | Brush Length | Wire Size | Overall Length | Qty | EDP Number |
|---------------------|--------------|-----------|----------------|-----|------------|
|                     |              |           |                |     | Steel      |
| 1/4                 | 2            | .010      | 10             | 10  | 83465      |
| 5/16                | 2            | .010      | 10             | 10  | 83466      |
| 11/32               | 2            | .010      | 10             | 10  | 83467      |
| 3/8                 | 2            | .010      | 10             | 10  | 83468      |
| 7/16                | 2            | .010      | 10             | 10  | 83469      |
| 1/2                 | 2            | .010      | 10             | 10  | 83470      |

## SydKleen™ Internal Brush and Holder

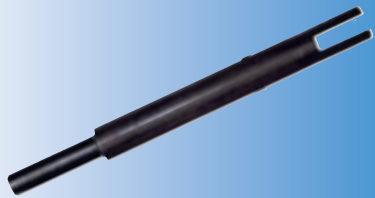
### Rectangular SydKleen™ Internal Cleaning



Rectangular internal cleaning brush offering most effective side-action brushing. Effective for cleaning odd-shaped holes, hard-to-reach interior surfaces, cleaning and deburring threads and internal bores. Removes chips, scale, dirt and burrs. Surface preparation tool for welding, soldering, or brazing.

| Brush Dia. (Inches) | Stem Dia. | Wire Size | Brush Part Length | Overall Length | Qty | EDP Number |           |
|---------------------|-----------|-----------|-------------------|----------------|-----|------------|-----------|
|                     |           |           |                   |                |     | Steel      | Stainless |
| 1/4                 | 3/32      | .003      | 9/16              | 2-1/8          | 36  | 83300      | 83315     |
|                     |           | .005      |                   |                |     | 83301      | 83316     |
| 5/16                | 3/32      | .003      | 9/16              | 2-1/8          | 36  | 83302      | -         |
| 3/8                 | 3/32      | .003      | 9/16              | 2-1/8          | 36  | 83303      | 83317     |
|                     |           | .005      |                   |                |     | 83304      | 83318     |
|                     |           | .008      |                   |                |     | 83305      | -         |
|                     | 1/8       | .003      | 5/8               | 2-1/4          | 36  | 83325      | -         |
| 7/16                | 3/32      | .003      | 9/16              | 2-1/8          | 36  | 83306      | -         |
|                     |           | .005      |                   |                |     | 83307      | -         |
| 1/2                 | 3/32      | .003      | 5/8               | 2-1/4          | 36  | 83308      | -         |
|                     |           | .005      |                   |                |     | 83309      | 83319     |
|                     |           | .008      |                   |                |     | 83310      | -         |
| 5/8                 | 1/8       | .005      | 5/8               | 2-1/4          | 36  | 83326      | 83340     |
| 3/4                 | 1/8       | .003      | 5/8               | 2-1/4          | 36  | 83327      | -         |
|                     |           | .005      |                   |                |     | 83328      | 83341     |
|                     |           | .008      |                   |                |     | 83329      | -         |
| 7/8                 | 1/8       | .005      | 5/8               | 2-1/4          | 36  | 83330      | 83342     |
| 1                   | 1/8       | .005      | 5/8               | 2-1/4          | 36  | 83331      | 83343     |
|                     |           | .008      |                   |                |     | 83332      | -         |
| 1-1/8               | 1/8       | .005      | 5/8               | 2-1/4          | 36  | 83333      | -         |
| 1-1/4               | 1/8       | .005      | 5/8               | 2-1/4          | 36  | 83334      | 83344     |
|                     |           | .008      |                   |                |     | 83335      | -         |

### SydKleen™ Brush Holder



For use with SydKleen™ brushes.

| Stem Dia. (Inches) | Shank Dia. | Holder Dia. | Overall Length | Qty | EDP Number |  |
|--------------------|------------|-------------|----------------|-----|------------|--|
|                    |            |             |                |     | Steel      |  |
| 3/32               | 1/4        | 1/4         | 3-3/8          | 1   | 83348      |  |
| 1/8                | 1/4        | 3/8         | 3-3/8          | 1   | 83349      |  |

### Stainless Steel Wire Brushes

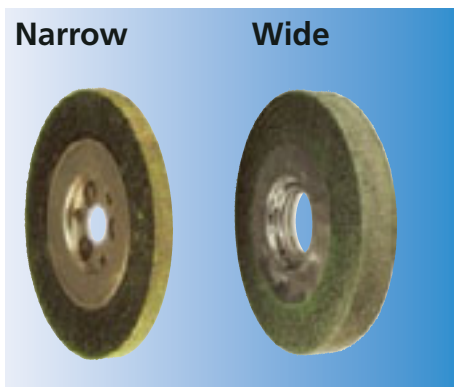


Advance catalog items are produced using Type 302 Stainless Steel wire. Additional types are available as special production. Products are clearly marked "SS" or "Stainless" directly on the brush where possible. Most Stainless Steel power brushes also feature a black oxide coat for easy visual identification.

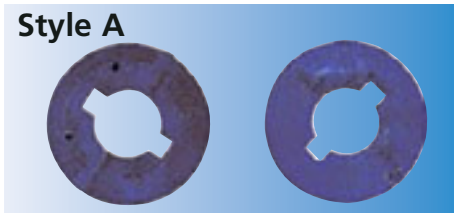


## Narrow, Medium and Wide Face Standard Duty Wheels

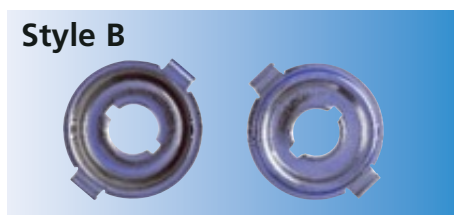
| Encapsulation Guide   | Encapsulated (ECAP®) Brush Grades |   |
|---|-----------------------------------|---|
|   | Grade                             | Description   |
| Encapsulated products (ECAP®) are composed of a synthetic compound which is molded into the finished wire wheel and cured to a specified hardness, starting with standard grade E3. Harder grades are available as E4 and E5. Some of the built-in features include: <ul style="list-style-type: none"> <li>Increases standard wheel performance by 25% or more.</li> <li>ECAP® brush life is up to 100% longer for equivalent service.</li> <li>ECAP® 's more consistent brushing is due to its short trim urethane material.</li> <li>Encapsulation material reduces long wire breakage and early failure of the working filaments, offering much greater operator safety.</li> </ul> |                                   | Aggressive enough for most applications. Best grade for general use. Green color. |
|   |                                   | For higher pressure applications and excessive heat. Black color.                 |
|   |                                   | Super aggressive, tough cleaning, with narrow face wheels. Blue color.            |



Encapsulation material gradually wears away to consistently maintain a short trim length for more aggressive brushing and long service life. Elastomer provides precision control of contact area on workpiece.



**Keyed Arbor Adapters\* - Style A** have built-in keyways to reduce all narrow face brushes manufactured to 1-1/4" arbor hole with dual keyways to common arbor hole sizes.



**2" Keyed Arbor Adapters\*\* - Style B** have built-in keyways to reduce all medium face and wide face brushes manufactured to 2" arbor hole with dual keyways to common arbor hole sizes.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | ECAP Grade | Trim Length | Face Width | MSFS RPM | Qty | EDP Number |
|---------------------|------------|-----------|------------|-------------|------------|----------|-----|------------|
| Steel               |            |           |            |             |            |          |     |            |

### Narrow Face

|   |         |      |    |       |       |       |   |       |
|---|---------|------|----|-------|-------|-------|---|-------|
| 4 | 5/8-1/2 | .010 | E3 | 3/4   | 13/32 | 6,000 | 1 | 83526 |
|   |         | .014 |    |       |       |       |   | 83527 |
| 6 | 1-1/4*  | .006 | E3 | 1-1/8 | 7/16  | 6,000 | 1 | 83528 |
|   |         | .008 |    |       |       |       |   | 83529 |
|   |         | .010 |    |       |       |       |   | 83531 |
|   |         | .014 |    |       |       |       |   | 83533 |
|   | 5/8-1/2 | .010 | E3 | 1-1/8 | 7/16  | 6,000 | 1 | 83530 |
| 8 | 1-1/4*  | .014 | E3 | 1-1/2 | 15/32 | 6,000 | 1 | 83532 |
|   |         | .008 |    |       |       |       |   | 83534 |
|   |         | .010 |    |       |       |       |   | 83535 |

### Medium Face

|    |     |      |    |       |        |       |   |       |
|----|-----|------|----|-------|--------|-------|---|-------|
| 6  | 2   | .012 | E3 | 1-1/8 | 13/16  | 4,500 | 1 | 83538 |
| 8  | 2** | .012 | E3 | 1-1/2 | 1      | 4,500 | 1 | 83540 |
| 10 | 2** | .012 | E3 | 1-7/8 | 1      | 3,600 | 1 | 83542 |
| 12 | 2** | .012 | E3 | 2-7/8 | 1-5/16 | 3,000 | 1 | 83543 |

### Wide Face

|       |   |      |    |       |        |       |   |       |
|-------|---|------|----|-------|--------|-------|---|-------|
| 4-1/4 | 2 | .012 | E3 | 7/8   | 1      | 6,000 | 1 | 83544 |
| 6     | 2 | .012 | E3 | 1-1/8 | 1-3/32 | 6,000 | 1 | 83546 |

| Arbor Hole Dia. | Included Keyways (#) | Qty | EDP Number |
|-----------------|----------------------|-----|------------|
|-----------------|----------------------|-----|------------|

### Adapter Style A

|     |                |   |       |
|-----|----------------|---|-------|
| 1/2 | 1/8 x 3/32 (2) | 1 | 84605 |
| 5/8 | 3/16 x 1/8 (2) | 1 | 84606 |
| 3/4 | 3/16 x 1/8 (2) | 1 | 84607 |
| 7/8 | 3/16 x 1/8 (2) | 1 | 84608 |
| 1   | 1/4 x 5/32 (2) | 1 | 84609 |

### Adapter Style B

|       |                |   |       |
|-------|----------------|---|-------|
| 1/2   | 1/8 x 3/32 (2) | 1 | 84620 |
| 5/8   | 3/16 x 1/8 (2) | 1 | 84621 |
| 3/4   | 3/16 x 1/8 (2) | 1 | 84622 |
| 7/8   | 3/16 x 1/8 (2) | 1 | 84623 |
| 1     | 1/4 x 5/32 (2) | 1 | 84624 |
| 1-1/4 | 1/4 x 5/32 (2) | 1 | 84625 |

| Wheel Arbor Hole | Shaft Size | Qty | EDP Number |
|------------------|------------|-----|------------|
|------------------|------------|-----|------------|

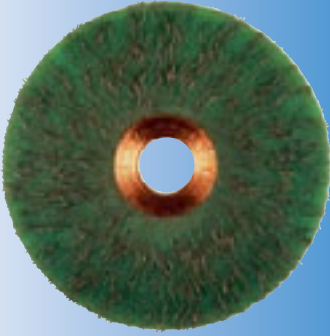
### Adapter Style C - 2" Round Arbor

|   |       |   |       |
|---|-------|---|-------|
| 2 | 1/2   | 1 | 84628 |
| 2 | 5/8   | 1 | 84629 |
| 2 | 3/4   | 1 | 84630 |
| 2 | 7/8   | 1 | 84631 |
| 2 | 1     | 1 | 84632 |
| 2 | 1-1/4 | 1 | 84633 |
| 2 | 1-1/2 | 1 | 84634 |

**Style C - 2" Round Arbor Adapters** - reduce all adapter style brushes manufactured to 2" round arbor hole to common arbor hole sizes.

## Tube Center and Threaded Wheels

### Tube Center Wheel

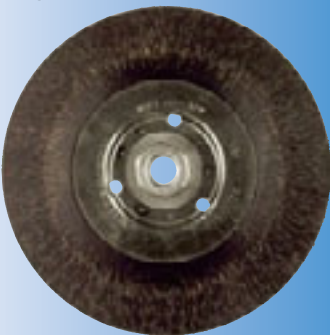


Encapsulated small-diameter wheel brush offers aggressive brushing performance, longer service life, and controlled surface contact area.

See drive arbors and adapters on page 25.

| Brush Dia. (Inches) | Arbor Hole | Wire Size | ECAP Grade | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|------------|-------------|------------|--------------|-----|------------|-----------|
|                     |            |           |            |             |            |              |     | Steel      | Stainless |
| <b>Crimped Wire</b> |            |           |            |             |            |              |     |            |           |
| 1-1/4               | 3/8        | .008      | E3         | 1/4         | 1/4        | 20,000       | 10  | 83481      | -         |
|                     |            | .014      |            |             |            |              |     | 83482      | -         |
| 1-1/2               | 3/8        | .008      | E3         | 3/8         | 1/4        | 20,000       | 10  | 83486      | -         |
|                     |            | .012      |            |             |            |              |     | 83488      | -         |
|                     |            | .014      |            |             |            |              |     | 83489      | -         |
| 2                   | 1/2        | .006      | E3         | 1/2         | 1/4        | 20,000       | 10  | 83490      | -         |
|                     |            | .008      |            |             |            |              |     | 83491      | -         |
|                     |            | .012      |            |             |            |              |     | 83493      | -         |
|                     |            | .014      |            |             |            |              |     | 83494      | -         |
| 2-1/2               | 1/2        | .010      | E3         | 3/4         | 1/4        | 20,000       | 10  | 83495      | -         |
|                     | 5/8        | .014      |            | 11/16       |            |              |     | 1/4        | 20,000    |
| 3                   | 1/2        | .008      | E3         | 1           | 1/4        | 20,000       | 10  | 83499      | -         |
|                     |            | .012      |            |             |            |              |     | 83500      | -         |
|                     |            | .014      |            |             |            |              |     | 83501      | 83505     |
|                     | 5/8        | .014      | E3         | 15/16       | 1/4        | 20,000       | 10  | 83503      | -         |

### Encapsulated Stringer Bead



Ideal for large diameter pipe construction. Extra heavy duty E5 grade resists deflection, fracture and crumbling, providing a shorter, more aggressive trim length.

| Brush Dia. (Inches) | Thread Size | Wire Size | ECAP Grade | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|-------------|-----------|------------|-------------|------------|--------------|-----|------------|-----------|
|                     |             |           |            |             |            |              |     | Steel      | Stainless |
| <b>Knot Wire</b>    |             |           |            |             |            |              |     |            |           |
| 4                   | 5/8-11      | .020      | E4         | 7/8         | 3/16       | 9,000        | 10  | 83511      | -         |
|                     | 1/2-13      |           |            |             |            |              |     | 83512      | -         |
| 6-7/8               | 5/8-11      | .020      | E4         | 1-9/16      | 3/16       | 9,000        | 10  | 83513      | -         |
|                     | 7/8         |           |            |             |            |              |     | E4         | 83514     |
| <b>Crimped Wire</b> |             |           |            |             |            |              |     |            |           |
| 6                   | 5/8-11      | .014      | E4         | 1-1/16      | 3/16       | 9,000        | 10  | 83507      | -         |
|                     | 7/8         |           |            |             |            |              |     | 83508      | -         |
| 7                   | 5/8-11      | .014      | E4         | 1-9/16      | 3/16       | 9,000        | 10  | 83509      | 83520     |
|                     |             |           | E5         |             |            |              |     | 83517      | -         |
|                     | 7/8         | .014      | E4         | 1-9/16      | 3/16       | 9,000        | 10  | 83510      | 83521     |
|                     |             |           | E5         |             |            |              |     | 83518      | -         |

## Cups

### Encapsulated Minigrinder Cup



Controlled area cleaning. Long life, increased aggressiveness. Uniform brushing action. Reduced wire breakage.

| Brush Dia. (Inches) | Thread Size | Wire Size | ECAP Grade | Trim Length | MSFS Max RPM | Qty | EDP Number |
|---------------------|-------------|-----------|------------|-------------|--------------|-----|------------|
|                     |             |           |            |             |              |     | Steel      |
| 3-1/2               | 5/8-11      | .014      | E3         | 7/8         | 12,000       | 1   | 83559      |
|                     | M10x1.25    |           |            |             |              |     | 83561      |
|                     | M14x2.0     |           |            |             |              |     | 83562      |
|                     | 3/8-24      |           |            |             |              |     | 83563      |

### Minigrinder Adapter Insert



| Adapter Inserts        | Qty | EDP Number |
|------------------------|-----|------------|
| 5/8-11 UNC to M10x1.25 | 5   | 84645      |
| 5/8-11 UNC to M10x1.5  | 5   | 84646      |
| 5/8-11 UNC to 3/8-24   | 5   | 84647      |

### Encapsulated Cup



Encapsulated cups offer more productive cleaning action due to the short trim effect of encapsulation. Used for removing weld slag and scale in pipeline fabrication.

| Brush Dia. (Inches) | Thread Size | Wire Size | ECAP Grade | Trim Length | MSFS Max RPM | Qty | EDP Number |
|---------------------|-------------|-----------|------------|-------------|--------------|-----|------------|
|                     |             |           |            |             |              |     | Steel      |
| 4                   | 5/8-11      | .020      | E3         | 1-1/8       | 7,000        | 1   | 83564      |
|                     |             |           | E4         |             |              |     | 83570      |
| 6                   | 5/8-11      | .020      | E3         | 1-1/4       | 6,000        | 1   | 83566      |
|                     |             |           | E4         |             |              |     | 83571      |
|                     |             |           | E5         |             |              |     | 83574      |

## Shaft Mounted, Tube and End Brushes

### Shaft Mounted



Wheels fit popular grinders for more productive groove cleaning. Flared cups feature concave shape for effective side cleaning action without scoring bottom areas. Encapsulation provides maximum brush aggression.

| Brush Dia. (Inches) | Shank Dia. | Wire Size | ECAP Grade | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |  |
|---------------------|------------|-----------|------------|-------------|------------|--------------|-----|------------|--|
|                     |            |           |            |             |            |              |     | Steel      |  |

#### Shaft Mounted Wheels

|   |     |      |    |     |     |        |    |  |       |
|---|-----|------|----|-----|-----|--------|----|--|-------|
| 2 | 1/4 | .012 | E3 | 1/2 | 1/4 | 20,000 | 10 |  | 83612 |
| 3 | 1/4 | .008 | E3 | 1   | 1/4 | 20,000 | 10 |  | 83613 |
|   |     | .012 |    |     |     |        |    |  | 83614 |

| Brush Dia. (Inches) | Shank Dia. | Wire Size | ECAP Grade | Cup Size | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|------------|----------|--------------|-----|------------|-----------|
|                     |            |           |            |          |              |     | Steel      | Stainless |

#### Shaft Mounted Cups

|       |     |      |    |     |       |    |   |       |
|-------|-----|------|----|-----|-------|----|---|-------|
| 2-1/2 | 1/4 | .010 | E3 | 5/8 | 4,500 | 10 | - | 83637 |
|       |     | .014 |    |     |       |    |   | 83635 |

| Brush Dia. (Inches) | Shank Dia. | Wire Size | ECAP Grade | Cup Size | MSFS Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|------------|----------|--------------|-----|------------|-----------|
|                     |            |           |            |          |              |     | Steel      | Stainless |

#### Shaft Mounted Flared Cups

|       |     |      |    |     |        |    |       |       |
|-------|-----|------|----|-----|--------|----|-------|-------|
| 1-3/4 | 1/4 | .006 | E3 | 3/4 | 25,000 | 10 | 83598 | -     |
|       |     | .010 |    |     |        |    | 83599 | 83608 |
|       |     | .020 |    |     |        |    | 83600 | -     |
| 2     | 1/4 | .006 | E3 | 3/4 | 20,000 | 10 | 83601 | -     |
|       |     | .010 |    |     |        |    | 83602 | 83609 |
| 2-3/4 | 1/4 | .010 | E3 | 1   | 15,000 | 10 | 83605 | 83610 |

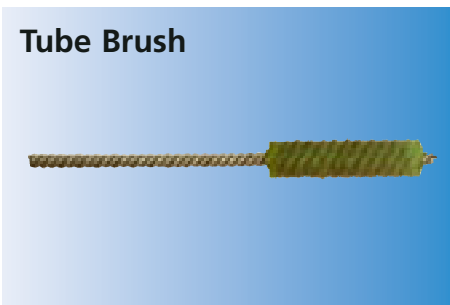
### Hollow Center End Brush



Encapsulation provides excellent tip control, reduced flare, and aggressive brushing action.

| Brush Dia. (Inches) | Shank Dia. | Wire Size | ECAP Grade | Trim Length | Max RPM | Qty | EDP Number |           |
|---------------------|------------|-----------|------------|-------------|---------|-----|------------|-----------|
|                     |            |           |            |             |         |     | Steel      | Stainless |
| 1/2                 | 1/4        | .006      | E3         | 7/8         | 18,000  | 10  | 83579      | -         |
|                     |            | .010      |            |             |         |     | 83580      | 83590     |
|                     |            | .014      | E4         |             |         |     | 83594      | -         |
|                     |            | .020      | E3         |             |         |     | 83581      | -         |
| 3/4                 | 1/4        | .006      | E3         | 7/8         | 15,000  | 10  | 83582      | -         |
|                     |            | .010      |            |             |         |     | 83583      | 83591     |
|                     |            | .010      | E4         |             |         |     | 83595      | -         |
| 1                   | 1/4        | .006      | E3         | 7/8         | 13,000  | 10  | 83585      | -         |
|                     |            | .010      |            |             |         |     | 83586      | -         |
|                     |            | .010      | E4         |             |         |     | 83596      | -         |
|                     |            | .014      | E3         |             |         |     | 83587      | -         |

### Tube Brush



Encapsulated tube brush provides maximum service life and aggressive internal brushing action.

| Brush Dia. (Inches) | Stem Dia. | Wire Size | ECAP Grade | Brush Length | Overall Length | Qty | EDP Number |           |
|---------------------|-----------|-----------|------------|--------------|----------------|-----|------------|-----------|
|                     |           |           |            |              |                |     | Steel      | Stainless |
| 1/2                 | 5/32      | .006      | E3         | 2            | 5              | 10  | 83621      | -         |
| 5/8                 | 7/32      | .010      | E3         | 2            | 5              | 10  | 83622      | 83627     |
| 3/4                 | 1/4       | .010      | E3         | 2-1/2        | 5              | 10  | 83623      | 83628     |
| 7/8                 | 1/4       | .010      | E3         | 2-1/2        | 5              | 10  | 83624      | -         |
| 1                   | 1/4       | .010      | E3         | 2-1/2        | 5              | 10  | 83625      | -         |



Abrasive Filament  
and  
Non-Wire Products



## M-Brad Abrasive Filament Products – Technical Information



### M-Brad Product – Features and Benefits

M-Brad abrasive filament brushes combine the flexibility of wire brushes with the cutting action of coated abrasive cloth or other finishing products such as greaseless compounds, set-up wheels, honing stones, files, steel wool, abrasive belts, fiber wheels, abrasive flap wheels and non-woven abrasive products. M-Brad is a nylon monofilament that evenly encapsulates abrasive grit particles. Filaments flex to all angles, conforming to the workpiece as it is conditioned. The flexibility of strands flowing over, around and

into contours makes it uniquely effective. Consistent, gradual cutting action lets you precisely control the degree of surface conditioning. You get the exact finish you want – from cosmetic surface preparation on wood or soft aluminum to edge-blending materials as tough as titanium. And, M-Brad won't degrade the dimensions of the workpiece, which reduces scrap and fill welding. You get blend and finish corner radiuses with even, highly-controlled abrading, a true radius.

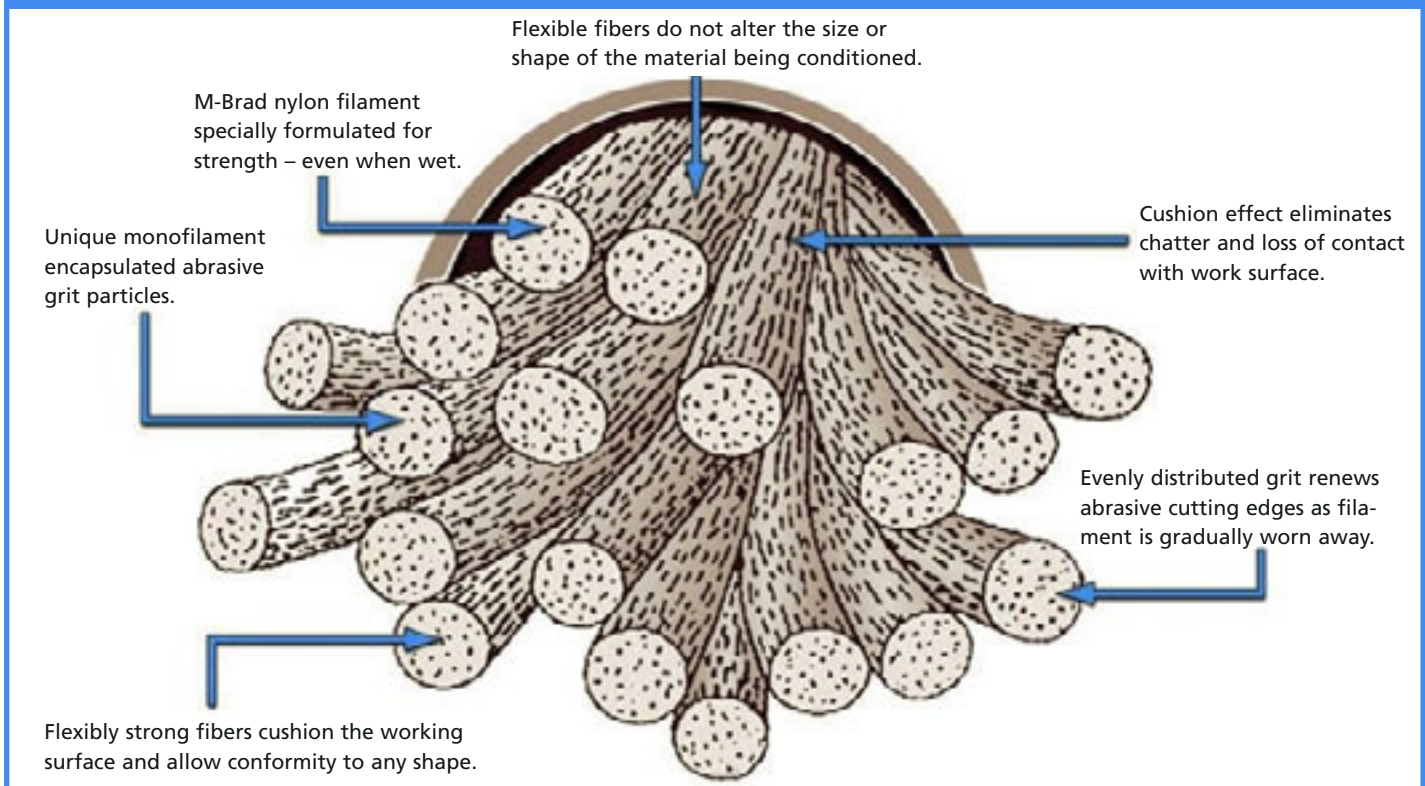
#### M-Brad Advantages – Quality

- Predictable surface abrading action with exceptional control.
- Conforms to irregular surfaces.
- Works without changing basic dimensions.
- Microscopic parallel surface etching action relieves tensile stress.
- Increases effective surface area for improved coatability and mechanical bonding.
- Uniform distribution of abrasive grit in each filament ensures consistent finish.

#### M-Brad Advantages – Durability

- Longer life than non-woven synthetic abrasive products.
- Light work pressure for reduced operator fatigue and longer brush life.
- Will not tear - rides over projections.
- No dressing required in normal use.
- Works without compounds; No cleaning required.

### Unique M-Brad Composite Filaments



## M-Brad Abrasive Filament Products – Technical Information

### Selection Criteria

The criteria for selecting grit and filament size depends on what action and finish you desire. For a finer finish, use a smaller grit size - but remember, with smaller grit sizes, it will take longer to complete the work.

Suggested method: start by running .040/120 grit silicon carbide at the recommended speed with minimum pressure. If the final surface finish is not sufficiently fine, adjust to a smaller grit size to give you the micro-finish you require.

### Performance Dynamic Variables for Optimal Brushing Performance

| Variable             | Increase  | Decrease   |
|----------------------|---|--|
| <b>Diameter</b>      | <ul style="list-style-type: none"> <li>Increasing outside diameter at a constant RPM increases surface speed: SFPM (Surface Feet Per Minute). Increasing surface speed increases work accomplished.</li> </ul>  | <ul style="list-style-type: none"> <li>Assuming constant RPM, a decrease in tool diameter decreases surface speed - a solution for reducing heat and smearing problems.</li> </ul>                             |
| <b>RPM</b>           | <ul style="list-style-type: none"> <li>Increasing RPM at a constant outside diameter increases surface speed.</li> </ul>  | <ul style="list-style-type: none"> <li>Assuming same diameter brush, decreasing RPM decreases surface speed - another solution for reducing heat and smearing problems.</li> </ul>                             |
| <b>Trim Length</b>   | <ul style="list-style-type: none"> <li>Increasing trim length allows the filament to be more flexible, and to conform more readily to irregular surfaces.</li> </ul>  | <ul style="list-style-type: none"> <li>Decreasing trim length stiffens filament action, thereby increasing work accomplished.</li> </ul>   |
| <b>Filament Size</b> | <ul style="list-style-type: none"> <li>Increasing filament size provides faster cutting action and thereby increases work accomplished. CAUTION: Coarser filament/grit sizes work faster than finer filament/grit sizes, with faster wear.</li> </ul> | <ul style="list-style-type: none"> <li>Decreasing filament diameter will provide superior surface finish and maximize tool life. For best results, choose minimum diameter, and increase as needed.</li> </ul> |
| <b>Grit Size</b>     | <ul style="list-style-type: none"> <li>Increasing grit size provides faster cutting action and thereby increases work accomplished. CAUTION: Coarser filament/grit sizes work faster than finer filament/grit sizes, with faster wear.</li> </ul>     | <ul style="list-style-type: none"> <li>Decreasing filament size will provide superior surface finish and maximize tool life. For best results, choose minimum grit size, and increase as needed.</li> </ul>    |
| <b>Density</b>       | <ul style="list-style-type: none"> <li>Increasing filament density provides more filament to do work, thereby increasing work accomplished.</li> </ul>  | <ul style="list-style-type: none"> <li>Decreasing filament density provides greater brush flexibility; leaving more room for individual filaments to conform to irregular workpieces.</li> </ul>               |

### Recommended RPM for M-Brad Product Longevity (Dry Applications)

| Wheel Size Outside Diameter (Inches) | Maximum Speed RPM |
|--------------------------------------|-------------------|
| 3                                    | 3200              |
| 4                                    | 2400              |
| 6                                    | 1600              |
| 8                                    | 1200              |
| 10                                   | 950               |
| 12                                   | 800               |
| 14                                   | 700               |

Surface Speed in excess of 2500 feet per minute may produce a condition known as "nylon smear" and should be avoided. Coolants and lubrication may allow the use of somewhat higher speeds. Listed above are the maximum recommended operating speeds without the use of coolants or lubrication.

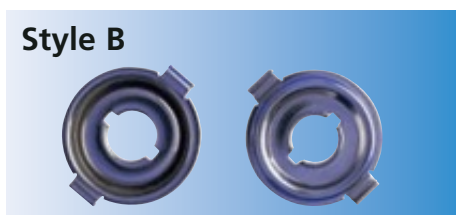
If brushing action is inadequate try one of our recommended suggestions. Try one at a time for best troubleshooting. Then try several at once, if none individually make a difference.

## M-BRAD Wheels



**Silicon Carbide Filaments**

For deburring, edge radiusing, light cleaning, and polishing.



**Style B**

2" Keyed Arbor Adapters\*\* - Style B have built-in keyways to reduce all medium face and wide face brushes manufactured to 2" arbor hole with dual keyways to common arbor hole sizes.

(Note: Tabs must be removed for use on 6" and 7" diameter brushes, or order Style C (below), without keyways).

| Arbor Hole Dia. | Included Keyways (#) | Qty | EDP Number |
|-----------------|----------------------|-----|------------|
| 1/2             | 1/8 x 3/32 (2)       | 1   | 84620      |
| 5/8             | 3/16 x 1/8 (2)       | 1   | 84621      |
| 3/4             | 3/16 x 1/8 (2)       | 1   | 84622      |
| 7/8             | 3/16 x 1/8 (2)       | 1   | 84623      |
| 1               | 1/4 x 5/32 (2)       | 1   | 84624      |
| 1-1/4           | 1/4 x 5/32 (2)       | 1   | 84625      |

**Style C – 2" Round Arbor Adapters\*** - reduce all adapter style brushes manufactured to 2" round arbor hole to common arbor hole sizes.

| Wheel Arbor Hole | Shaft Size | Qty | EDP Number |
|------------------|------------|-----|------------|
| 2                | 1/2        | 1   | 84628      |
| 2                | 5/8        | 1   | 84629      |
| 2                | 3/4        | 1   | 84630      |
| 2                | 7/8        | 1   | 84631      |
| 2                | 1          | 1   | 84632      |
| 2                | 1-1/4      | 1   | 84633      |
| 2                | 1-1/2      | 1   | 84634      |

| Brush Dia. (Inches) | Arbor Hole | SiC Filament* |      | Trim Length | Face Width | MSFS Max RPM | Qty    | EDP Number |       |
|---------------------|------------|---------------|------|-------------|------------|--------------|--------|------------|-------|
|                     |            | Dia.          | Grit |             |            |              |        |            |       |
| <b>Narrow Face</b>  |            |               |      |             |            |              |        |            |       |
| 3                   | 1/2-3/8    | .040          | 80   | 3/4         | 7/16       | 10,000       | 2      | 83670      |       |
|                     |            | .035          | 180  |             |            |              |        | 83671      |       |
|                     |            | .022          | 320  |             |            |              |        | 83672      |       |
| 4                   | 1/2-3/8    | .040          | 80   | 3/4         | 13/32      | 12,500       | 2      | 83673      |       |
|                     |            | .035          | 180  |             |            |              |        | 83674      |       |
|                     |            | .022          | 320  |             |            |              |        | 83675      |       |
|                     | 5/8-1/2    | 5/8-1/2       | .040 | 80          | 3/4        | 13/32        | 12,500 | 2          | 83680 |
|                     |            |               | .040 | 120         |            |              |        |            | 83681 |
|                     |            |               | .035 | 180         |            |              |        |            | 83682 |
|                     |            | .022          | 320  |             |            |              |        | 83683      |       |

| <b>Wide Face</b> |                  |      |     |       |     |        |   |       |
|------------------|------------------|------|-----|-------|-----|--------|---|-------|
| 3                | 5/8              | .040 | 80  | 5/8   | 7/8 | 5,000  | 1 | 83689 |
|                  |                  | .040 | 120 |       |     |        |   | 83690 |
|                  |                  | .035 | 180 |       |     |        |   | 83691 |
|                  |                  | .022 | 320 |       |     |        |   | 83692 |
| 4                | 5/8              | .040 | 80  | 7/8   | 3/4 | 12,000 | 1 | 83693 |
|                  |                  | .040 | 120 |       |     |        |   | 83694 |
|                  |                  | .035 | 180 |       |     |        |   | 83695 |
|                  |                  | .022 | 320 |       |     |        |   | 83696 |
| 6                | 2*               | .040 | 80  | 1-1/8 | 7/8 | 6,000  | 1 | 83699 |
|                  |                  | .040 | 120 |       |     |        |   | 83700 |
|                  |                  | .035 | 180 |       |     |        |   | 83701 |
|                  |                  | .022 | 320 |       |     |        |   | 83702 |
| 8                | 2** with keyways | .040 | 80  | 1-1/2 | 1   | 4,500  | 1 | 83703 |
|                  |                  | .040 | 120 |       |     |        |   | 83704 |
|                  |                  | .035 | 180 |       |     |        |   | 83705 |
|                  |                  | .022 | 320 |       |     |        |   | 83706 |
| 10               | 2** with keyways | .040 | 80  | 1-7/8 | 1   | 3,600  | 1 | 83707 |
|                  |                  | .040 | 120 |       |     |        |   | 83708 |
|                  |                  | .035 | 180 |       |     |        |   | 83709 |
|                  |                  | .022 | 320 |       |     |        |   | 83710 |
| 12               | 2** with keyways | .040 | 80  | 2-7/8 | 1   | 3,000  | 1 | 83711 |
|                  |                  | .040 | 120 |       |     |        |   | 83712 |
|                  |                  | .035 | 180 |       |     |        |   | 83713 |
|                  |                  | .022 | 320 |       |     |        |   | 83714 |
| 14               | 2** with keyways | .040 | 80  | 2-5/8 | 1   | 2,400  | 1 | 83715 |
|                  |                  | .040 | 120 |       |     |        |   | 83716 |
|                  |                  | .035 | 180 |       |     |        |   | 83717 |
|                  |                  | .022 | 320 |       |     |        |   | 83718 |

\* 2" round Arbor. Use with Adapter Style "C."

\*\* 2" Arbor Hole with 1/2 x 1/4 Keyways (2).

### M-BRAD Operating Speeds

The M.S.F.S. (Maximum Safe Free Speed) listed in the tables reflect the **MAXIMUM**, not the **OPTIMUM** operating speed for the brush. Running brushes at this speed will result in premature brush wear and nylon smearing. Please consult the "Recommended RPM" table on page 59 of this catalog to select the proper operating speed based on your application.



## M-Brad T-C Wheels, and M-Brad Cup Brushes

### M-BRAD T-C Wheel Brush



For use as a high-speed brush in small confined areas. Recommended operating speed of 5,000 RPM or less. See drive arbors and adapters on page 25.

| Brush Dia. (Inches) | Arbor Hole | SiC Filament |      | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |
|---------------------|------------|--------------|------|-------------|------------|--------------|-----|------------|
|                     |            | Dia.         | Grit |             |            |              |     |            |
| 1-1/2               | 1/2        | .035         | 180  | 7/16        | 3/8        | 10,000       | 10  | 83782      |
| 2                   | 1/2        | .040         | 120  | 1           | 5/8        | 10,000       | 10  | 83784      |
|                     |            | .022         | 320  |             |            |              |     | 83785      |
|                     |            | .018         | 500  |             |            |              |     | 83786      |
| 2-1/2               | 5/8        | .022         | 320  | 11-16       | 3/8        | 10,000       | 10  | 83792      |
| 3                   | 1/2        | .040         | 120  | 15/16       | 5/8        | 10,000       | 10  | 83793      |
|                     |            | .035         | 180  |             |            |              |     | 83794      |
|                     |            | .022         | 320  |             |            |              |     | 83795      |

### M-BRAD Cup Brush



Designed for use on hand-held right-angle tools or stationary machine spindles. Ideal for flat surfaces with numerous holes and low projections. Cup brushes are especially effective on aluminum, cast iron, brass, copper and hardened steels.

| Brush Dia. (Inches) | Arbor Hole | SiC Filament* |      | Trim Length | MSFS Max RPM | Qty | EDP Number |
|---------------------|------------|---------------|------|-------------|--------------|-----|------------|
|                     |            | Dia.          | Grit |             |              |     |            |
| 3-1/2               | 5/8-11     | .040          | 120  | 1-1/2       | 12,000       | 1   | 83810      |
|                     |            | .035          | 180  |             |              |     | 83811      |
|                     |            | .022          | 320  |             |              |     | 83812      |
| 4                   | 5/8-11     | .040          | 80   | 1-1/2       | 6,000        | 1   | 83813      |
|                     |            | .040          | 120  |             |              |     | 83814      |
|                     |            | .035          | 180  |             |              |     | 83815      |
|                     |            | .030          | 240  |             |              |     | 83816      |
|                     |            | .022          | 320  |             |              |     | 83817      |
| 6                   | 5/8-11     | .040          | 80   | 1-1/2       | 5,000        | 1   | 83821      |
|                     |            | .040          | 120  |             |              |     | 83822      |
|                     |            | .035          | 180  |             |              |     | 83823      |
|                     |            | .030          | 240  |             |              |     | 83824      |
|                     |            | .022          | 320  |             |              |     | 83825      |

Also available with bridle - please contact your Advance support technician for information

### M-BRAD Mounted Cup Brush



| Brush Dia. (Inches) | Stem Dia. | SiC Filament* |      | Trim Length | MSFS Max RPM | Qty | EDP Number |
|---------------------|-----------|---------------|------|-------------|--------------|-----|------------|
|                     |           | Dia.          | Grit |             |              |     |            |
| 2-3/4               | 1/4       | .040          | 120  | 1-1/4       | 5,000        | 1   | 83829      |
|                     |           | .035          | 180  |             |              |     | 83830      |
|                     |           | .022          | 320  |             |              |     | 83831      |
| 3                   | 1/4       | .035          | 180  | 1           | 5,000        | 1   | 83832      |

\* All catalog items are Silicon Carbide (SiC) filament. Aluminum Oxide is available by special order.

## M-Brad Composite Disc Brushes

### New! - ADVANCE Disc Brushes

Our new disc brushes feature M-BRAD nylon abrasive filaments in a variety of brush and grit sizes. Disc brushes are ideal for use in a variety of industries, including automotive, aerospace/aircraft, and woodworking.

Disc brushes are available in round and rectangular M-BRAD filament, as well as in banded versions to reduce filament flare during use. All disc brushes must be used in conjunction with disc brush drive arbors, shown below.

Excellent for...

- Deburring of extrusions, tubing, gears, die cast parts, aluminum wheels, etc.
- Blending tool marks and finishing of machined surfaces
- Precision edge radiusing of gear teeth, clutch plates, and other metal edges
- Ideal for use with custom-designed machines or CNC machinery

### M-BRAD Disc Brush Drive Arbor



| Arbor Size (Inches) | For Brush Dia. | Inside Dia. | Drive Hole | Bolt Circle | Qty | EDP Number |
|---------------------|----------------|-------------|------------|-------------|-----|------------|
| 3                   | 3-4            | 7/8         | 1/4 (2)    | 1.25        | 1   | 83978      |
| 5                   | 5-6            | 7/8         | 1/4 (2)    | 1.25        | 1   | 83979      |
| 7                   | 7-8            | 7/8         | 1/4 (3)    | 3           | 1   | 83980      |
| 9                   | 9-10           | 7/8         | 1/4 (3)    | 3           | 1   | 83981      |

#### Disc Brush Drive Arbors

### M-BRAD High Density Disc Brush - Round Filament



| Brush Dia. (Inches)                  | Arbor Hole | Trim Length | MSFS Max. RPM | Qty | SiC Filament*     |                    |                    |
|--------------------------------------|------------|-------------|---------------|-----|-------------------|--------------------|--------------------|
|                                      |            |             |               |     | .040 Dia. 80 Grit | .040 Dia. 120 Grit | .022 Dia. 320 Grit |
| <b>High Density - Round Filament</b> |            |             |               |     |                   |                    |                    |
| 3                                    | 7/8        | 1           | 10,000        | 1   | 83835             | 83836              | 83838              |
| 4                                    | 7/8        | 1           | 10,000        | 1   | 83843             | 83844              | 83846              |
| 6                                    | 7/8        | 1           | 6,000         | 1   | 83851             | 83852              | 83854              |
| 8                                    | 7/8        | 1           | 2,000         | 1   | 83858             | 83859              | 83861              |
| 9                                    | 7/8        | 1           | 2,000         | 1   | 83863             | 83864              | 83865              |

#### High Density - Round Filament Banded

|   |     |   |        |   |       |       |       |
|---|-----|---|--------|---|-------|-------|-------|
| 3 | 7/8 | 1 | 10,000 | 1 | 83880 | 83881 | 83883 |
| 4 | 7/8 | 1 | 10,000 | 1 | 83888 | 83889 | 83891 |

### M-BRAD High Density Disc Brush - Rectangular Filament



| Brush Dia. (Inches)                        | Arbor Hole | Trim Length | MSFS Max. RPM | Qty | SiC Filament*          |
|--|------------|-------------|---------------|-----|------------------------|
|  |            |             |               |     | .045x.090 Dia. 80 Grit |
| <b>High Density - Rectangular Filament</b> |            |             |               |     |                        |
| 3  | 7/8        | 1           | 6,000         | 1   | 83899                  |
| 4  | 7/8        | 1           | 6,000         | 1   | 83903                  |
| 6  | 7/8        | 1           | 6,000         | 1   | 83909                  |
| 8  | 7/8        | 1           | 2,000         | 1   | 83914                  |
| 9  | 7/8        | 1           | 2,000         | 1   | 83917                  |

#### High Density - Rectangular Filament Banded

|   |     |   |       |   |       |
|---|-----|---|-------|---|-------|
| 3 | 7/8 | 1 | 6,000 | 1 | 83929 |
| 4 | 7/8 | 1 | 6,000 | 1 | 83933 |

\* All catalog items are Silicon Carbide (SiC) filament. Aluminum Oxide is available by special order.

## M-Brad Disc and End Brushes

### M-BRAD V-Tuft Disc Brush Round Filament



| Brush Dia. (Inches) | Arbor Hole | Trim Length | MSFS Max. RPM | Qty | SiC Filament*     |                    |                    |                    |
|---------------------|------------|-------------|---------------|-----|-------------------|--------------------|--------------------|--------------------|
|                     |            |             |               |     | .040 Dia. 80 Grit | .040 Dia. 120 Grit | .035 Dia. 180 Grit | .022 Dia. 320 Grit |

#### V-Tuft Round Filament

|    |     |       |       |   |       |       |       |       |
|----|-----|-------|-------|---|-------|-------|-------|-------|
| 3  | 7/8 | 1-1/2 | 6,000 | 1 | 83941 | 83942 | 83943 | 83944 |
| 4  | 7/8 | 1-1/2 | 6,000 | 1 | 83945 | 83946 | 83947 | 83948 |
| 6  | 7/8 | 1-1/2 | 6,000 | 1 | 83949 | 83950 | 83951 | 83952 |
| 8  | 7/8 | 1-1/2 | 2,000 | 1 | 83953 | 83954 | 83955 | 83956 |
| 10 | 7/8 | 1-1/2 | 2,000 | 1 | 83957 | 83958 | 83959 | 83960 |

### M-BRAD V-Tuft Disc Brush Rectangular Filament



| Brush Dia. (Inches) | Arbor Hole | Trim Length | MSFS Max. RPM | Qty | SiC Filament*           |                          |
|---------------------|------------|-------------|---------------|-----|-------------------------|--------------------------|
|                     |            |             |               |     | .040 x .90 Dia. 80 Grit | .040 x .90 Dia. 120 Grit |

#### V-Tuft Rectangular Filament

|    |     |       |       |   |       |       |
|----|-----|-------|-------|---|-------|-------|
| 3  | 7/8 | 1-1/2 | 6,000 | 1 | 83966 | 83967 |
| 4  | 7/8 | 1-1/2 | 6,000 | 1 | 83968 | 83969 |
| 6  | 7/8 | 1-1/2 | 2,000 | 1 | 83970 | 83971 |
| 8  | 7/8 | 1-1/2 | 2,000 | 1 | 83972 | 83973 |
| 10 | 7/8 | 1-1/2 | 2,000 | 1 | 83974 | 83975 |

### M-BRAD End Brushes



End brushes eliminate secondary burrs left by chamfer drills or cutting tools. Use for cleaning and deburring bottoms and insides of mold cavities, bore holes and irregular small areas.

| Brush Dia. (Inches) | Shank Dia. | SiC Filament* |      | Trim Length | MSFS Max RPM | Qty | EDP Number |
|---------------------|------------|---------------|------|-------------|--------------|-----|------------|
|                     |            | Dia.          | Grit |             |              |     |            |

#### M-BRAD End Brushes

|     |     |      |     |   |        |    |       |
|-----|-----|------|-----|---|--------|----|-------|
| 1/2 | 1/4 | .040 | 120 | 1 | 20,000 | 10 | 83986 |
|     |     | .035 | 180 |   |        |    | 83987 |
|     |     | .022 | 320 |   |        |    | 83988 |
| 3/4 | 1/4 | .040 | 120 | 1 | 20,000 | 10 | 83989 |
|     |     | .035 | 180 |   |        |    | 83990 |
|     |     | .022 | 320 |   |        |    | 83991 |
| 1   | 1/4 | .040 | 120 | 1 | 20,000 | 10 | 83992 |
|     |     | .035 | 180 |   |        |    | 83993 |
|     |     | .022 | 320 |   |        |    | 83994 |

#### M-BRAD End Brushes - Bridled

|     |     |      |     |     |        |    |       |
|-----|-----|------|-----|-----|--------|----|-------|
| 1/2 | 1/4 | .040 | 120 | 3/8 | 20,000 | 10 | 83996 |
|     |     | .035 | 180 |     |        |    | 83997 |
|     |     | .022 | 320 |     |        |    | 83998 |
| 3/4 | 1/4 | .040 | 120 | 3/8 | 20,000 | 10 | 84000 |
|     |     | .035 | 180 |     |        |    | 84001 |
|     |     | .022 | 320 |     |        |    | 84002 |
| 1   | 1/4 | .040 | 120 | 3/8 | 20,000 | 10 | 84004 |
|     |     | .035 | 180 |     |        |    | 84005 |
|     |     | .022 | 320 |     |        |    | 84006 |

\* All catalog items are Silicon Carbide (SiC) filament. Aluminum Oxide is available by special order.

## M-Brad Power Tube Brushes



Cutting action is non-destructive to the part and will not alter bore dimensions or disturb delicate surface finishes. Suitable for conditioning internal bore holes or tubes as well as cleaning threads and burrs at cross-hole intersections. Side action removes cross-holes sharp edges and corners, as well as slivers produced when drilling close-tolerance hard metallic and non-metallic parts.

| Brush Dia. (Inches) | Brush Part Length | SiC Filament* |      | Stem Dia. | Overall Length | Qty | EDP Number |
|---------------------|-------------------|---------------|------|-----------|----------------|-----|------------|
|                     |                   | Dia.          | Grit |           |                |     |            |
| 1/4                 | 2                 | .022          | 320  | 5/32      | 5              | 36  | 84011      |
| 5/16                | 2                 | .022          | 320  | 5/32      | 5              | 36  | 84012      |
| 3/8                 | 2                 | .022          | 320  | 5/32      | 5              | 36  | 84013      |
| 7/16                | 2                 | .022          | 320  | 5/32      | 5              | 36  | 84014      |
| 1/2                 | 2                 | .022          | 320  | 3/16      | 5              | 36  | 84018      |
| 5/8                 | 2                 | .022          | 320  | 7/32      | 5              | 36  | 84022      |
| 11/16               | 2                 | .022          | 320  | 7/32      | 5              | 36  | 84023      |
| 3/4                 | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84024      |
|                     |                   | .040          | 120  |           |                |     | 84025      |
|                     |                   | .035          | 180  |           |                |     | 84026      |
|                     |                   | .022          | 320  |           |                |     | 84027      |
| 13/16               | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84028      |
|                     |                   | .040          | 120  |           |                |     | 84029      |
|                     |                   | .035          | 180  |           |                |     | 84030      |
|                     |                   | .022          | 320  |           |                |     | 84031      |
| 7/8                 | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84032      |
|                     |                   | .040          | 120  |           |                |     | 84033      |
|                     |                   | .035          | 180  |           |                |     | 84034      |
|                     |                   | .022          | 320  |           |                |     | 84035      |
| 15/16               | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84036      |
|                     |                   | .040          | 120  |           |                |     | 84037      |
|                     |                   | .035          | 180  |           |                |     | 84038      |
|                     |                   | .022          | 320  |           |                |     | 84039      |
| 1                   | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84040      |
|                     |                   | .040          | 120  |           |                |     | 84041      |
|                     |                   | .035          | 180  |           |                |     | 84042      |
|                     |                   | .022          | 320  |           |                |     | 84043      |
| 1-1/8               | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84044      |
|                     |                   | .040          | 120  |           |                |     | 84045      |
|                     |                   | .035          | 180  |           |                |     | 84047      |
|                     |                   | .022          | 320  |           |                |     | 84048      |
| 1-1/4               | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84049      |
|                     |                   | .040          | 120  |           |                |     | 84050      |
|                     |                   | .035          | 180  |           |                |     | 84052      |
|                     |                   | .022          | 320  |           |                |     | 84053      |
| 1-1/2               | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84054      |
|                     |                   | .040          | 120  |           |                |     | 84055      |
|                     |                   | .035          | 180  |           |                |     | 84056      |
|                     |                   | .022          | 320  |           |                |     | 84057      |
| 1-3/4               | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84059      |
|                     |                   | .040          | 120  |           |                |     | 84060      |
|                     |                   | .035          | 180  |           |                |     | 84061      |
|                     |                   | .022          | 320  |           |                |     | 84062      |
| 2                   | 2-1/2             | .040          | 80   | 1/4       | 5-1/2          | 36  | 84063      |
|                     |                   | .040          | 120  |           |                |     | 84064      |
|                     |                   | .035          | 180  |           |                |     | 84065      |
|                     |                   | .022          | 320  |           |                |     | 84066      |

\* All catalog items are Silicon Carbide (SiC) filament. Aluminum Oxide is available by special order.

## Non-Wire Pencil End Brushes and Microabrasive Brushes

### Non-Wire Pencil End Brushes



Small brushes designed for cleaning blind holes and small crevices. Ideal for aircraft maintenance.

| Brush Dia. (Inches) | Shank Dia. | SiC Filament* |      | Trim Length | Overall Length | Qty | EDP Number |
|---------------------|------------|---------------|------|-------------|----------------|-----|------------|
|                     |            | Dia.          | Grit |             |                |     |            |
| 3/16                | 1/4        | .040          | 120  | 3/8         | 3-3/8          | 12  | 84007      |
|                     |            | .022          | 320  |             |                |     | 84008      |
|                     |            | .018          | 500  |             |                |     | 84009      |

### Microabrasive Tube Brushes



Effective cleaning action removes sharp cross-hole edges, metal sliver residues and sharp corners that result from drilling close-tolerance hard metallic and non-metallic parts. Cleaning and very light deburring will not alter critical dimensions or hole geometry.

| Brush Dia. (Inches)      | Brush Part Length | Stem Dia. | For Hole Diameters |         |       | Overall Length | Qty | EDP Number |
|--------------------------|-------------------|-----------|--------------------|---------|-------|----------------|-----|------------|
|                          |                   |           | Inches             | Decimal | MM    |                |     |            |
| <b>Silicate Filament</b> |                   |           |                    |         |       |                |     |            |
| .030                     | 1/2               | .015      | 1/32               | 0.031   | 0.787 | 4              | 36  | 84071      |
| .050                     | 1/2               | .022      | 3/64               | 0.047   | 1.191 | 4              | 36  | 84072      |
| .075                     | 3/4               | .033      | 1/16               | 0.063   | 1.588 | 4              | 36  | 84073      |
| .090                     | 3/4               | .041      | 5/64               | 0.078   | 1.984 | 4              | 36  | 84074      |
| .105                     | 1                 | .041      | 3/32               | 0.094   | 2.381 | 4              | 36  | 84075      |
| .125                     | 1                 | .064      | 7/64               | 0.109   | 2.778 | 4              | 36  | 84076      |
| .135                     | 1                 | .075      | 1/8                | 0.125   | 3.175 | 4              | 36  | 84077      |

| Brush Dia. (Inches)                     | Brush Part Length | Stem Dia. | For Hole Diameters |         |        | Overall Length | Qty | EDP Number |
|---|-------------------|-----------|--------------------|---------|--------|----------------|-----|------------|
|   |                   |           | Inches             | Decimal | MM     |                |     |            |
| <b>600 Grit Aluminum Oxide Filament</b> |                   |           |                    |         |        |                |     |            |
| .165                                    | 1                 | .087      | 5/32               | 0.156   | 3.962  | 5              | 36  | 84078      |
| .190                                    | 1                 | .087      | 3/16               | 0.188   | 4.763  | 5              | 36  | 84079      |
| .260                                    | 1                 | .115      | 1/4                | 0.250   | 6.350  | 5              | 36  | 84080      |
| .325                                    | 1                 | .115      | 5/16               | 0.313   | 7.938  | 5              | 36  | 84081      |
| .385                                    | 1                 | .147      | 3/8                | 0.375   | 9.525  | 5              | 36  | 84082      |
| .515                                    | 1                 | .168      | 1/2                | 0.500   | 12.700 | 5              | 36  | 84083      |
| .640                                    | 1                 | .168      | 5/8                | 0.625   | 15.870 | 5              | 36  | 84084      |
| .765                                    | 1                 | .221      | 3/4                | 0.750   | 19.050 | 5              | 36  | 84085      |
| .890                                    | 1                 | .221      | 7/8                | 0.875   | 22.225 | 5              | 36  | 84086      |
| 1.015                                   | 1                 | .248      | 1                  | 1       | 25.400 | 5              | 36  | 84087      |

\* All catalog items are Silicon Carbide (SiC) filament. Aluminum Oxide is available by special order.

## Tampico and Nylon Filament Wheel Brushes

### Tampico Wheels (Untreated)



Tampico natural fiber provides highly effective dry or wet cleaning and refining of surfaces, with or without compounds. It is also highly effective for dusting, cleaning, finishing, removing burrs, tool marks, excess stain in woodworking, and many other applications where a gradual, highly-controllable surface cleaning action is desirable.

| Brush Dia. (Inches)       | Arbor Hole | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |
|---------------------------|------------|-------------|------------|--------------|-----|------------|
| <b>Tube Center</b>        |            |             |            |              |     |            |
| 2                         | 1/4        | 11/16       | 1/8        | 20,000       | 1   | 84319      |
| 2-1/2                     | 1/2        | 3/4         | 1/2        | 20,000       | 1   | 84320      |
| 3                         | 1/2        | 1           | 1/2        | 20,000       | 1   | 84321      |
| <b>Narrow Face Wheels</b> |            |             |            |              |     |            |
| 6                         | 1-1/4*     | 1-1/2       | 5/8        | 6,000        | 1   | 84324      |
| 8                         | 1-1/4*     | 1-5/8       | 5/8        | 4,500        | 1   | 84327      |
| 10                        | 1-1/4*     | 2-3/8       | 7/8        | 4,250        | 1   | 84330      |
| 12                        | 1-1/4*     | 3-3/8       | 1          | 3,600        | 1   | 84332      |
| 14                        | 1-1/4*     | 4-3/8       | 5/8        | 3,000        | 1   | 84333      |
| 16                        | 1-1/4*     | 3-7/8       | 3/4        | 2,400        | 1   | 84335      |

### Nylon Filament Wheels



For scrubbing and brushing contaminants from surfaces, but versatile for low-abrasion cleaning. Excellent for light cleaning action with solution-dependent applications. These brushes may be used individually or gang-mounted to any desired width. Highly abrasion resistant, highly chemical resistant, also heat stabilized.

| Brush Dia. (Inches)      | Arbor Hole | Filament Dia. | Trim Length | Face Width | MSFS Max RPM | Qty | EDP Number |
|--------------------------|------------|---------------|-------------|------------|--------------|-----|------------|
| <b>Tube Center</b>       |            |               |             |            |              |     |            |
| 1-1/2                    | 3/8        | .010          | 7/16        | 1/4        | 20,000       | 10  | 84338      |
| 2                        | 1/2        | .010          | 1/2         | 3/8        | 20,000       | 10  | 84339      |
| 2                        | 1/2        | .014          | 1/2         | 3/8        | 20,000       | 10  | 84340      |
| 3                        | 1/2        | .010          | 1           | 3/8        | 20,000       | 10  | 84342      |
| 3                        | 1/2        | .016          | 1           | 3/8        | 20,000       | 10  | 84343      |
| <b>Standard Diameter</b> |            |               |             |            |              |     |            |
| 6                        | 1-1/4*     | .016          | 1-1/2       | 3/4        | 6,000        | 2   | 84344      |
| 8                        | 1-1/4*     | .016          | 1-7/8       | 3/4        | 4,800        | 2   | 84345      |

### Style A



**Keyed Arbor Adapters\* - Style A** have built-in keyways to reduce all narrow face brushes manufactured to 1-1/4" arbor hole with dual keyways to common arbor hole sizes.

| Arbor Hole Dia.        | Included Keyways (#) | Qty | EDP Number |
|------------------------|----------------------|-----|------------|
| <b>Adapter Style A</b> |                      |     |            |
| 1/2                    | 1/8 x 3/32 (2)       | 1   | 84605      |
| 5/8                    | 3/16 x 1/8 (2)       | 1   | 84606      |
| 3/4                    | 3/16 x 1/8 (2)       | 1   | 84607      |
| 7/8                    | 3/16 x 1/8 (2)       | 1   | 84608      |
| 1                      | 1/4 x 5/32 (2)       | 1   | 84609      |

## Non-Wire Filament Characteristics

| Characteristic          | Prostran | 6 Nylon   | 6.6 Nylon | 6.12 Nylon | Polypropylene | Horse-hair | Tampico |
|-------------------------|----------|-----------|-----------|------------|---------------|------------|---------|
| Heat Distortion (°F)    | 225      | 250       | 300       | 250        | 225           | 370        | 283     |
| Melting Point           | 330      | 410       | 500       | 405        | 330           | -          | -       |
| Bend Recovery (%)       | Fair     | 90        | 90        | 90         | 70-80         | Fair       | Poor    |
| Shelf Life              | Fair     | Excellent | Excellent | Excellent  | Good          | Poor       | Fair    |
| Abrasion Resistance     |          | Good      | Excellent | Excellent  | Good          | Good       | Poor    |
| Specific Gravity (G/CC) |          | 1.13-4    | 1.13-4    | 1.04-5     | .90-1         |            |         |
| Tensile Strength (PSI)  |          | 50-60M    | 60-70M    | 50-60M     | 50-80M        |            |         |

## Strip Brushes and Holders

### Galvanized No. 8 Strip Brush



Versatile, in a choice of filaments. Strips can be custom constructed into cup, oval, coil, helical and straight strip shapes. Used for cleaning, dusting, spreading, guarding, chip removal, static elimination, and many other applications.

| Brush Height (Inches) | Brush Length | Filament Dia./Grit | Fill Material   | Qty | EDP Number |
|-----------------------|--------------|--------------------|-----------------|-----|------------|
| 2-1/2                 | 72           | .008               | Carbon Steel    | 1   | 84369      |
|                       |              | .014               | Carbon Steel    |     | 84370      |
|                       |              | .008               | Stainless Steel |     | 84371      |
|                       |              | M-Brad 120 Grit    | Silicon Carbide |     | 84372      |
|                       |              | M-Brad 320 Grit    | Silicon Carbide |     | 84373      |
|                       |              | .008               | Prostran™       |     | 84374      |
|                       |              | .012               | Prostran™       |     | 84375      |
|                       |              | .016               | Prostran™       |     | 84376      |
|                       |              | .028               | Prostran™       |     | 84377      |
|                       |              | -                  | White Tampico   |     | 84378      |

### Strip Brush Holder



Heavily-formed channel clips designed to be welded 8 to 10 inches apart along the length of the strip brush mounting. Available in carbon or stainless steel.

| Strip Height (Inches) | Strip Length | Material  | Strip Depth | Qty | EDP Number |
|-----------------------|--------------|-----------|-------------|-----|------------|
| 11/16                 | 1/2          | Carbon    | 2           | 1   | 84379      |
|                       |              | Stainless | 2           | 1   | 84380      |

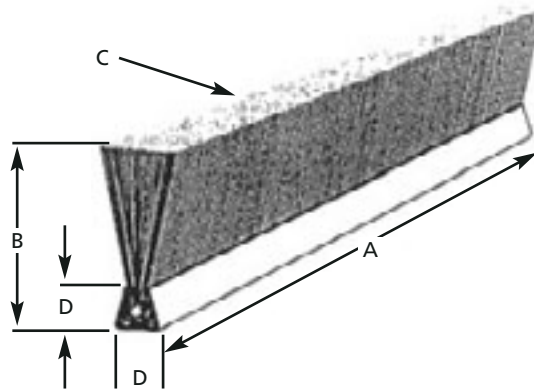
ADVANCE BRUSH also offers helix strip conveyor cleaning cores in 6" and 11" diameters with standard or customer arbor hole configurations. Choose ADVANCE conveyor cleaning brushes and replacement

strips to clean all rubber and fabric conveyor belts easily and efficiently.

Please contact your ADVANCE sales representative for additional information.

## Non-Wire Filament Chemical and Environmental Resistance

| Characteristic        | Prostran | 6 Nylon   | 6.6 Nylon | 6.12 Nylon | Polypropylene | Horse-hair | Tampico |
|-----------------------|----------|-----------|-----------|------------|---------------|------------|---------|
| Dilute Alkalis        | -        | Excellent | Excellent | Excellent  | Excellent     | -          | -       |
| Dilute Acids          | Good     | Poor      | Fair      | Good       | Excellent     | Poor       | Good    |
| Strong Acids          | Fair     | Fair      | Good      | Good       | Good          | G-Poor     | G-Poor  |
| Alcohols              | Good     | Good      | Good      | Good       | Excellent     | Poor       | Good    |
| Petroleum Distillates | -        | Excellent | Excellent | Excellent  | Good          | -          | -       |
| Hot Water             | -        | Fair      | Good      | Good       | Fair          | Poor       | -       |



A. BRUSH LENGTH: \_\_\_\_\_  
 B. OVERALL TRIM: \_\_\_\_\_  
 C. BRUSH FILLING: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Filament: \_\_\_\_\_  
 Color: \_\_\_\_\_ crimped  level

D. METAL CHANNEL SIZE#:

width x height

- #4 3/16 x 3/16
- #5 1/4 x 1/4
- #6 11/32 x 11/32
- #7 5/16 x 5/16
- #10 7/16 x 7/16

E. CHANNEL MATERIAL

- Galvanized (most common)
- Stainless steel
- Aluminum

F. WET OR DRY USE: \_\_\_\_\_

G. FILAMENT DENSITY:  
 light  medium  heavy

H. ENDS DEBURRED? Yes / No

I. QUANTITY PER ORDER: \_\_\_\_\_

J. ANNUAL USAGE: \_\_\_\_\_

K. BRUSH APPLICATION AND/OR  
 COMMENTS:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* If brush is to fit a holder, please indicate to assure a proper fit.

\* Please indicate any critical tolerances.

QUOTATION REQUESTED BY:

Company: \_\_\_\_\_

Address: \_\_\_\_\_  
 \_\_\_\_\_

City, State Zip: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Telephone No: \_\_\_\_\_

Fax No.: \_\_\_\_\_

**ADVANCE BRUSH CONTACT INFORMATION**

Customer Service: (800) 342-9015  
 (978) 840-6420

Fax: (978) 840-6421

Internet: <http://www.pferdusa.com>

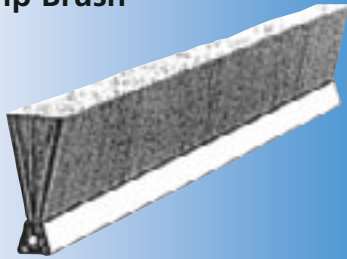
E-mail: [mail@pferdusa.com](mailto:mail@pferdusa.com)



ADVANCE BRUSH is proud to offer a wide variety of manufactured-to-order Wide Face brushes. Our brushes can be designed and produced to be used in almost any application. Please copy and fill out the appropriate quotation request form for the brush you require.

In addition to the products listed below, our new, state-of-the-art manufacturing facility is dynamic and flexible. We will be happy to quote additional custom brushes to your specifications.

## Metal Channel Strip Brush



METAL CHANNEL STRIP BRUSHES are available in a variety of natural, wire, and synthetic filaments set in a metal channel. These brushes are commonly used for industrial dusting or to guard against flying debris from grinding and cutting machinery. Strip brushes are initially built as straight strips, but can be bent and formed into a number of shapes, such as helical strips to be mounted on a shaft (for conveyor cleaning), discs, and cups.

Please see our Strip Brush Quotation Form on the previous page to help us design the strip brush that is perfect for your needs.

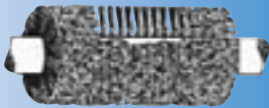
## Coil Wound Brush - Open Wound



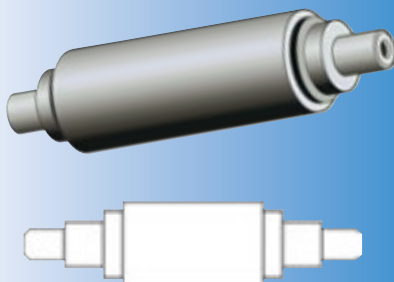
COIL WOUND CYLINDRICAL BRUSHES are strip brushes which are wound into a coiled shape to be mounted on a shaft or disposable tubing. They can be tightly wound to achieve maximum brushing performance, and may also be open wound, with a lead, which decreases brush aggressiveness, and provides more flexibility.

Please send details on your coil brush requirements by completing the quotation form on page 70.

## Close Wound



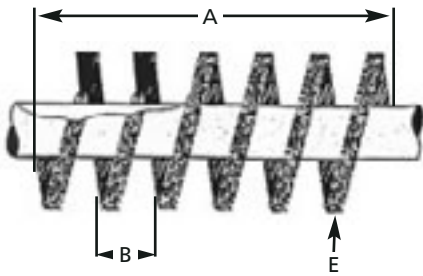
## Cylinder Brush



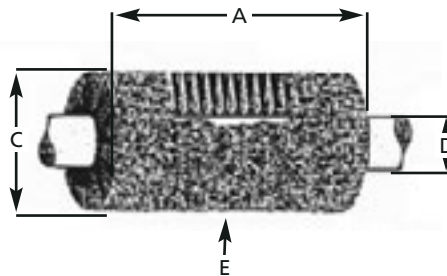
CYLINDER BRUSHES are wide face brushes that are custom manufactured to suit your specific application and equipment. Available in a wide selection of wire, synthetic and natural fibers, cylinder brushes offer the most diverse selection of customizable parameters to suit all industrial applications. Cylinder Brushes are commonly used in metalworking, textile, printed circuit board, agriculture & food, glass and steel mill industries for applications including conveyor cleaning, circuit board cleaning, sheet metal scrubbing, leather hide buffing, food preparation. They are also commonly used as augers for material handling.

Please send details on your cylinder brush requirements and core specifications by completing the quotation form on page 71.

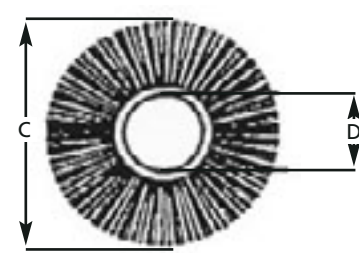
**Open Wound Coil Brush**



**Close Wound Coil Brush**



**Coil Brush Side View**



A. BRUSH FACE: \_\_\_\_\_

B. LEAD (Open Wound Only): \_\_\_\_\_

C. OUTSIDE DIAMETER: \_\_\_\_\_

D. INSIDE DIAMETER: \_\_\_\_\_

E. BRUSH FILLING:

Nylon     Polypropylene

Tampico    Horsehair

Other: \_\_\_\_\_

Bristle Diameter: \_\_\_\_\_

Color: \_\_\_\_\_

Crimped    Level

F. Metal Channel Size:     #4    #7    Other  
width x height

#4   3/16 x 3/16

#7   5/16 x 5/16

G. CHANNEL MATERIAL

Galvanized (most common)

Stainless Steel

Aluminum

H. APPROXIMATE RPM: \_\_\_\_\_

I.  WET OR  DRY USE

J. BRISTLE DENSITY:

light    medium    heavy

K. MOUNTING CLIPS: YES / NO

L. QUANTITY PER ORDER: \_\_\_\_\_

M. ANNUAL USAGE: \_\_\_\_\_

N. BRUSH APPLICATION AND/OR COMMENTS:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\* Please indicate any critical tolerances.

\* We manufacture the brush to fit "snug" on the customer's shaft unless otherwise specified.

\* Coil brushes are wound right-hand unless otherwise specified.

\* Brushes are supplied unmounted. We are able to mount them on customer shafts.

**QUOTATION REQUESTED BY:**

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City, State Zip: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Telephone No: \_\_\_\_\_

Fax No.: \_\_\_\_\_

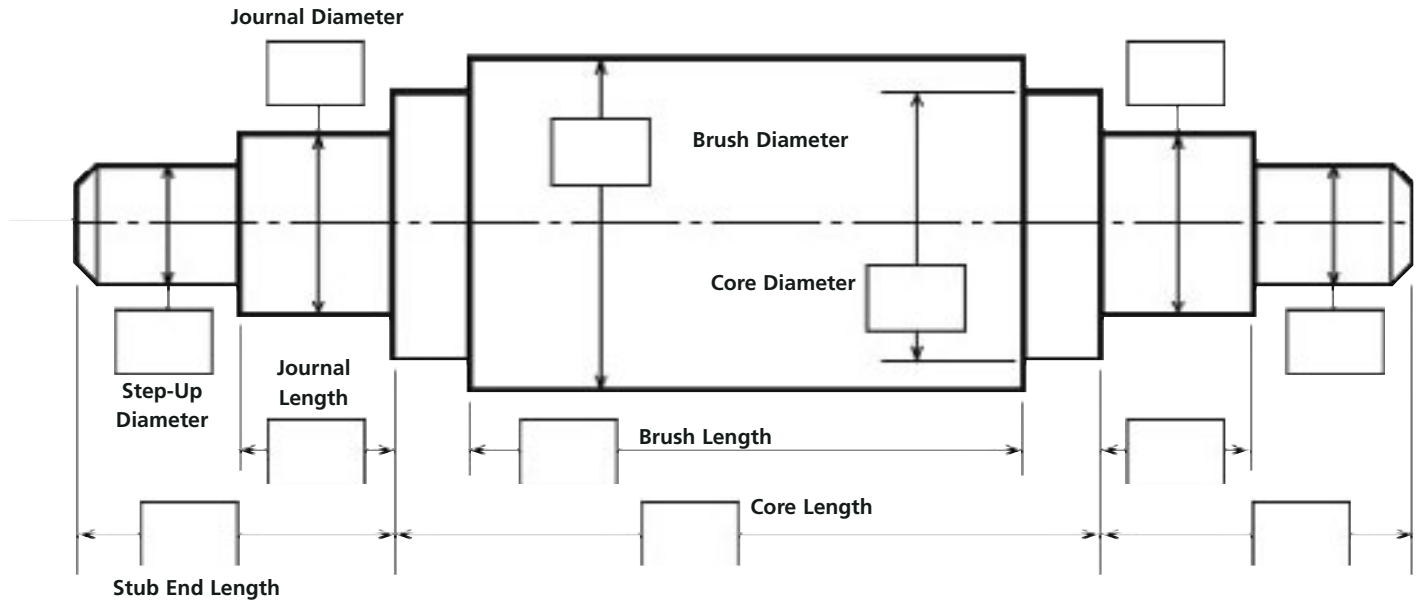
**ADVANCE BRUSH CONTACT INFORMATION**

Customer Service: (800) 342-9015  
(978) 840-6420

Fax: (978) 840-6421

Internet: <http://www.pferdusa.com>

E-mail: [mail@pferdusa.com](mailto:mail@pferdusa.com)



**ARBOR HOLE, KEYWAYS**

- Single
- Dual (180°)
- Square
- Hex
- Round
- Other

Other Keyway:

**APPLICATION:**

- Dry  Wet
- OPERATING TEMP.: \_\_\_\_\_  °F  °C

**MOUNTING:**

- Refill
- Customer's shaft or core
- Disposable Core
- Refillable Core
- Shaft

**OPTIONS:**

- Stainless  Aluminum
- Steel  Other: \_\_\_\_\_
- Flow Thru

**FILAMENT INFORMATION**

- Material: \_\_\_\_\_
- Diameter: \_\_\_\_\_
- Color: \_\_\_\_\_
- Crimped
- Amplitude \_\_\_ Frequency

**BRUSH DETAIL:**

- Close Wound Brush
- Open Wound Brush
- Space between coils:

**WINDING:**

- Left  Right

**DENSITY**

- High  Medium  Low

Operating RPM: \_\_\_\_\_

Quantity per order: \_\_\_\_\_

Additional Information:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**QUOTATION REQUESTED BY:**

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City, State Zip: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Telephone No: \_\_\_\_\_

Fax No.: \_\_\_\_\_

**ADVANCE BRUSH CONTACT INFORMATION**

Customer Service: (800) 342-9015  
(978) 840-6420

Fax: (978) 840-6421

Internet: <http://www.pferdusa.com>

E-mail: [mail@pferdusa.com](mailto:mail@pferdusa.com)

## Conveniently packaged for Industry, Welding, Farm, Automotive and Do-It-Yourself

A range of the most commonly purchased ADVANCE power brushes is available in sales-promoting individual packaging. Each brush is enclosed in a transparent, recyclable plastic clamshell, allowing the customer to judge the brush and its properties without removing the packaging. The label shows all key technical data as well as the UPC barcode. In addition, a multi-language instruction sheet, enclosed with each brush, provides information on the safe use of ADVANCE power brushes.

In addition to new and improved, stronger clamshells, ADVANCE wooden handled scratch brushes are now imprinted with the ADVANCE BRUSH logo. They can be displayed attractively along with the power brush line on your ADVANCE wall display. Please contact ADVANCE customer service for details on ordering the 4' headers for your display rack on your next purchase of display packaged brushes.



## Mini Grinder Brushes - Wheels and Cups



Mini Stringer Bead Wheel

### 4" Wheels - Knot, Crimped

| Fill Configuration | Wire Size | Wire Type    | Trim Length | Max. RPM | EDP - Arbor Hole |        |          |          |         |
|--------------------|-----------|--------------|-------------|----------|------------------|--------|----------|----------|---------|
|                    |           |              |             |          | 5/8-11           | 1/2-13 | M10x1.25 | M10x1.50 | M14x2.0 |
| Stringer Bead      | .020      | Carbon Steel | 3/4         | 20,000   | 84825            | 84826  | 84827    | 84828    | 84829   |
|                    | .020      | Stainless    | 3/4         | 20,000   | 84831            | 84832  | 84833    | 84834    | 84835   |
| Full Cable Knot    | .020      | Carbon Steel | 3/4         | 20,000   | 84844            | 84845  | 84846    | -        | -       |
| Standard Knot      | .014      | Carbon Steel | 3/4         | 20,000   | 84865            | -      | -        | -        | -       |
|                    | .014      | Stainless    | 3/4         | 20,000   | 84867            | -      | -        | -        | -       |
| Crimped            | .014      | Carbon Steel | 3/4         | 12,500   | 84869            | 84870  | 84871    | 84872    | 84873   |



Knot Mini Cup - Standard 2-3/4"

### 2-3/4" Cups - Standard

| Style   | Wire Size | Wire Type    | Trim Length | Max. RPM | EDP - Arbor Hole |        |          |          |
|---------|-----------|--------------|-------------|----------|------------------|--------|----------|----------|
|         |           |              |             |          | 5/8-11           | 1/2-13 | M10x1.25 | M10x1.50 |
| Knot    | .020      | Carbon Steel | 3/4         | 14,000   | 84906            | 84907  | 84908    | 84909    |
|         | .020      | Stainless    | 3/4         | 14,000   | 84924            | 84925  | 84926    | 84927    |
| Crimped | .014      | Carbon Steel | 7/8         | 14,000   | 84912            | 84913  | 84914    | 84915    |
|         | .014      | Stainless    | 7/8         | 14,000   | 84930            | 84931  | 84932    | 84933    |



Knot Mini Cup - Heavy Duty 3-1/2"

### 3-1/2" Cups - Heavy Duty

| Style   | Wire Size | Wire Type    | Trim Length | Max. RPM | EDP - Arbor Hole |        |          |          |
|---------|-----------|--------------|-------------|----------|------------------|--------|----------|----------|
|         |           |              |             |          | 5/8-11           | 1/2-13 | M10x1.25 | M10x1.50 |
| Knot    | .020      | Carbon Steel | 3/4         | 12,500   | 84936            | 84937  | 84938    | 84939    |
|         | .020      | Stainless    | 3/4         | 12,500   | 84948            | 84949  | 84950    | 84951    |
| Crimped | .014      | Carbon Steel | 7/8         | 12,500   | 84942            | 84943  | 84944    | 84945    |
|         | .014      | Stainless    | 7/8         | 12,500   | 84954            | 84955  | 84956    | 84957    |



Knot Bevel Brush

### 4" Bevel Cups

| Style   | Wire Size | Wire Type    | Trim Length | Max. RPM | EDP    |
|---------|-----------|--------------|-------------|----------|--------|
|         |           |              |             |          | 5/8-11 |
| Knot    | .014      | Carbon Steel | 3/4         | 20,000   | 84960  |
|         | .020      | Carbon Steel | 3/4         | 20,000   | 84966  |
|         | .020      | Stainless    | 3/4         | 20,000   | 84978  |
| Crimped | .014      | Carbon Steel | 3/4         | 15,000   | 84984  |
|         | .014      | Stainless    | 3/4         | 15,000   | 84990  |

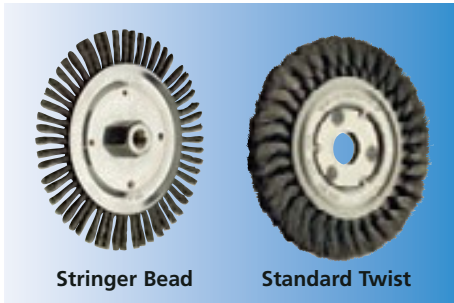
### WARNING! OPERATORS MUST:

Keep machine guards in place. Wear eye protection. Observe speed restrictions. Use protective equipment and clothing. Comply with safety standards ANSI B165.1 2000. Observe safety requirements enclosed with products. This warning applies to all personnel in brush operating area.

### Arbor Adapters

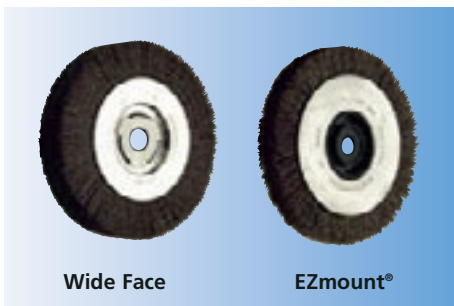
| Description    | Size                        | EDP   |
|----------------|-----------------------------|-------|
| Shank Adapter  | 1/2 Arbor Hole to 1/4 Shank | 84999 |
| SAE Adapter    | 5/8-11 to 3/8-24            | 84998 |
| Metric Adapter | 5/8-11 to M10x1.25          | 84996 |
| Metric Adapter | 5/8-11 to M10x1.5           | 84997 |

### FAILURE TO OBSERVE SAFETY PRECAUTIONS MAY RESULT IN INJURY



### Knot Wheel Brushes

| Twist            | Brush Dia. | Wire Size | Wire Type    | Arbor Hole | Face Width | Trim Length | Max. RPM | EDP   |
|------------------|------------|-----------|--------------|------------|------------|-------------|----------|-------|
| Stringer Bead    | 5          | .020      | Carbon Steel | 5/8-11     | 3/16       | 3/4         | 15,000   | 84875 |
|                  | 5          | .020      | Stainless    | 5/8-11     | 3/16       | 3/4         | 15,000   | 84880 |
|                  | 6          | .020      | Carbon Steel | 5/8-11     | 3/16       | 1-1/4       | 10,000   | 84877 |
|                  | 6          | .020      | Stainless    | 5/8-11     | 3/16       | 1-1/4       | 10,000   | 84881 |
| Full Cable Twist | 5          | .023      | Carbon Steel | 5/8-11     | 3/8        | 3/4         | 15,000   | 84884 |
|                  | 5          | .023      | Stainless    | 5/8-11     | 3/8        | 3/4         | 15,000   | 84889 |
|                  | 6          | .023      | Carbon Steel | 5/8-11     | 1/2        | 1-1/4       | 10,000   | 84885 |
| Standard Twist   | 6          | .014      | Carbon Steel | 5/8-1/2    | 5/8        | 1-1/8       | 9,000    | 84893 |
|                  | 6          | .016      | Carbon Steel | 5/8-1/2    | 1          | 1-1/8       | 7,800    | 84894 |
|                  | 8          | .016      | Carbon Steel | 5/8        | 5/8        | 1-5/8       | 7,000    | 84895 |

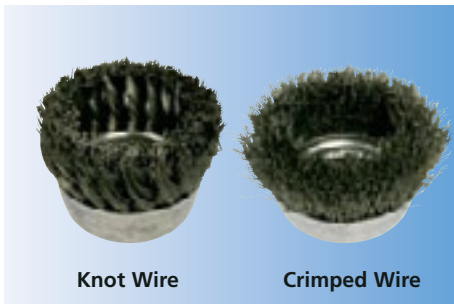


### Crimped Wheel Brushes

| Style       | Brush Dia. | Wire Type    | Arbor Hole | Face Width | Trim Length | Max. RPM | EDP - Wire Size |       |
|-------------|------------|--------------|------------|------------|-------------|----------|-----------------|-------|
|             |            |              |            |            |             |          | .008            | .014  |
| Narrow Face | 4          | Carbon Steel | 1/2-3/8    | 1/2        | 13/16       | 6,000    | -               | 84701 |
|             | 6          | Carbon Steel | 5/8-1/2    | 9/16       | 1-1/4       | 6,000    | 84704           | 84705 |
|             | 7          | Carbon Steel | 5/8-1/2    | 9/16       | 1-3/4       | 6,000    | 84706           | 84707 |
|             | 8          | Carbon Steel | 5/8        | 9/16       | 2-1/4       | 4,500    | 84708           | 84709 |
| Wide Face   | 6          | Carbon Steel | 5/8-1/2*   | 7/8        | 1-1/8       | 6,000    | 84712           | 84713 |
|             | 7          | Carbon Steel | 5/8-1/2*   | 1          | 1-5/8       | 6,000    | 84714           | 84715 |
|             | 8          | Carbon Steel | 5/8*       | 1          | 2-1/8       | 6,000    | 84716           | 84717 |
| EZmount®    | 6          | Carbon Steel | 2 to 1/2** | 7/8        | 7/8         | 6,000    | 84720           | 84721 |
|             | 8          | Carbon Steel | 2 to 5/8** | 7/8        | 1           | 4,500    | 84722           | 84723 |

\* Includes adapter(s) to reduce from 2" Arbor Hole

\*\* Adapts to 5/8", 3/4", 1" and 2" Arbor Hole



### Cup Brushes

| Style   | Brush Diameter | Wire Size | Wire Type    | Arbor Hole | Trim Length | Max. RPM | EDP   |
|---------|----------------|-----------|--------------|------------|-------------|----------|-------|
| Knot    | 4              | .020      | Carbon Steel | 5/8-11     | 1-1/2       | 7,000    | 84739 |
|         | 6              | .023      | Carbon Steel | 5/8-11     | 1-3/4       | 6,000    | 84755 |
| Crimped | 4              | .014      | Carbon Steel | 5/8-11     | 1-1/4       | 6,000    | 84742 |
|         | 6              | .014      | Carbon Steel | 5/8-11     | 1-1/2       | 6,000    | 84759 |



### End Brushes

| Style   | Brush Dia. | Wire Type    | Trim Length | Shank Size | Max. RPM | EDP - Wire Size |       |       |       |
|---------|------------|--------------|-------------|------------|----------|-----------------|-------|-------|-------|
|         |            |              |             |            |          | .006            | .010  | .014  | .020  |
| Knot    | 3/4        | Carbon Steel | 1           | 1/4        | 20,000   | -               | -     | 84772 | 84773 |
|         | 3/4        | Stainless    | 1           | 1/4        | 20,000   | -               | -     | 84774 | -     |
|         | 1          | Carbon Steel | 1           | 1/4        | 20,000   | -               | -     | 84780 | 84781 |
|         | 1          | Stainless    | 1           | 1/4        | 20,000   | 84782           | -     | 84783 | -     |
| Crimped | 1/2        | Carbon Steel | 1           | 1/4        | 22,000   | 84770           | -     | -     | 84771 |
|         | 3/4        | Carbon Steel | 1           | 1/4        | 20,000   | 84775           | -     | 84776 | 84777 |
|         | 3/4        | Stainless    | 1           | 1/4        | 20,000   | 84778           | 84779 | -     | -     |
|         | 1          | Carbon Steel | 1           | 1/4        | 20,000   | 84784           | -     | 84785 | 84786 |
|         | 1          | Stainless    | 1           | 1/4        | 20,000   | 84787           | 84788 | 84789 | 84790 |



### Crimped Mounted Cup Brushes

| Style      | Brush Diameter | Wire Type    | Shank Size | Trim Length | Max. RPM | EDP - Wire Size |       |
|------------|----------------|--------------|------------|-------------|----------|-----------------|-------|
|            |                |              |            |             |          | .012            | .014  |
| Flared Cup | 1-1/2          | Carbon Steel | 1/4        | 1/4         | 20,000   | 84813           | -     |
|            | 2              | Carbon Steel | 1/4        | 1/2         | 20,000   | -               | 84814 |
|            | 3              | Carbon Steel | 1/4        | 7/8         | 15,000   | -               | 84816 |
| Cup        | 1-1/2          | Carbon Steel | 1/4        | 9/16        | 13,000   | 84818           | -     |
|            | 2              | Carbon Steel | 1/4        | 5/8         | 13,000   | 84819           | -     |
|            | 2-1/2          | Carbon Steel | 1/4        | 11/16       | 13,000   | 84820           | -     |