

## Abrasives



### ***New High Performance Abrasives from Caterpillar***

Choosing the correct abrasive product is very important in today's fast-paced work environment. Cat has combined a great selection of quality abrasive products which includes small and large cutting wheels, surface conditioning discs, grinding wheels, sanding discs, plus much more.

We now offer you the convenience of purchasing all your abrasives from one source. These new and exclusive products give you every reason to make Cat the source for all your abrasive needs.



## Caterpillar® New Abrasive Products



### 6" x 1/4" x 7/8" Grinding Wheels Type 27 Depressed Center

The 6" portable angle grinder is fast becoming a very popular size for most portable applications in today's commercial shops. We now offer both standard duty Aluminum Oxide and high performance Zirconia Alumina grinding wheels.

- Designed for rough grinding applications on ferrous metal such as grinding/smoothing weld seams, cleaning and shaping metal surfaces.

*Note: The high performance Zirconia offers much faster stock removal and longer life. See page 12.*

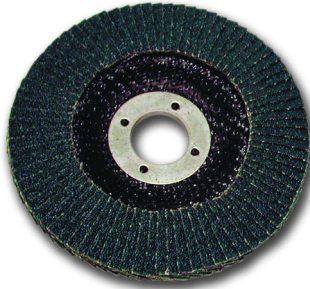


### Extra Thin Abrasive Cutting Wheels

Used on 4-1/2", 5" and 6" portable angle grinders. Available in 1/32" (.035) and 1/16" thickness.

- High quality treated grain for long life.
- Ideal for sheet metal, steel tubing and solid stock.
- Great for cutting off bolts and rusted fasteners.

*See page 12.*



### Zirconium Flap Discs Grind and Finish in One Operation

Good for heavy stock removal as well as finishing. Reduces downtime. Ideal for iron, aluminum, stainless steel, sheet metal, copper, brass, fiberglass, masonry and even wood. The Type 29 Zirconia Alumina wheel has a built in angle for less operator fatigue.

- 3 Popular Grits.
- Unique design allows for consistent sharp edge as wheel wears away.
- Long life Zirconia grain.

*See page 6.*



### PSA Sanding Discs

Ideally used on dual action (DA) air and electrical random orbit sanders. Used on metal, plastic, fiberglass, wood and painted surfaces.

- Anti-clog release agents are an additive process for long life.
- Quality full resin over resin bond.
- Each disc has protective backing to protect the adhesive in dusty environments before use.

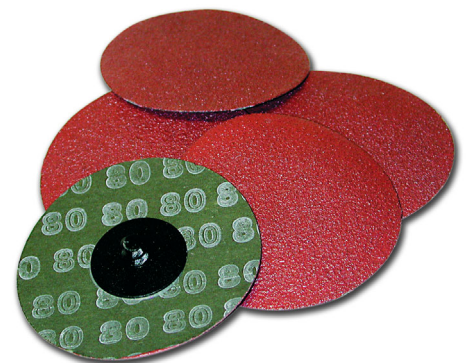
*\*priced per roll - Qty: 100  
See page 9.*

### R-Type Mini Grinding Discs

Our Aluminum Oxide mini resin fibre discs are manufactured with non-carcinogenic bonding agents, which are safer for the environment and dissipate heat while providing a cooler cut, resulting in extended product life. The more coarse grits 24/36 are best for weld removal, grinding and deburring. The 50 grit is best for blending and the finer grits for smooth sanding.

- Resists stretching, shedding and grain loss.
- Maintain their flexibility to work in contours.

*See page 9.*



### Carbide Rotary Burs

Ideally used on high speed die grinders. These "double cut" designed burs provide rapid stock removal in tough applications. Produces small chips. A variety of shapes for most applications.

*See back cover.*

### Aluma-Cut Burs

For use with non-ferrous metals and non-metallic materials The clearance and end mill type geometry of the flutes promotes fast stock removal with minimum loading.

*See back cover.*

## Brushes

### Abrasives — Safety and Storage

#### Safety

To avoid injury always wear impact-resistant protective glasses, full face shield, safety shoes, arm guards, leather gloves and apron for all grinding operations.

#### For Abrasive Disc Grinding:

- Never grind without a proper backup pad.
- Never use another grinding disc as backup pad.
- Never use a larger diameter disc than specified by manufacturer.
- Check all backup pads for signs of irregularities. Check for concentricity. Do not exceed maximum RPM.
- Always use the grinder's safety pad. Check spindle for wobble.
- Check disc retainer nut for thread wear. Check for snug fit and full three-thread contact (except with quick change or non-wrench systems).

#### For Abrasive Belt Grinding and Polishing:

- Never run an abrasive belt on unfamiliar machinery.
- Inspect for safe operating conditions: the abrasive belt, idler assembly and contact wheel should be enclosed within sheet metal hood; adjustable deflector should be installed within 1/4 inch of abrasive belt working surface; use adequate exhaust system; employ special precautions with inflammable or other hazardous materials.
- Use workpiece fixture whenever possible.
- Always check: grinder spindle for run-out (wobble); contact wheel for balance, face trueness and run-out; idler pulley spindle for run-out and balance.

#### Proper Storage of Coated Abrasives

Follow these guidelines to prolong life and maintain the efficiency of coated abrasives.

- Keep stockroom at constant levels of humidity (35-50%) and temperature [12.8-21.1°C (55-70°F)].
- Keep cartons away from damp or cold walls and floor where they may absorb moisture.
- Store coated abrasives away from any heat source.
- Keep products in original packages for easy handling and stacking.
- Store bulk rolls flat on shelves or pallets — not on edge.
- Belts removed from packing case should be rolled up and stood on edge on a clean shelf. They may be draped over a large cylinder but NEVER hang a belt from a nail or peg (the backing will crease and the abrasive may crack).
- Precondition coated abrasive product in a chamber of controlled temperature and humidity before use for maximum efficiency.

### Safety Requirements

All operators must read this information thoroughly and completely before using the brush.

#### Operators and Work Area

Osborn Power Brushes are built to rigid manufacturing specifications that combine the finest in design, materials and workmanship. The product you receive will give you maximum work performance, and safe operation if used properly.

**All power brushes, like other rotating cutting tools, demand that certain operating precautions be observed to assure operator and work area safety.**

#### Inspection

Brushes should be carefully checked when removed from original carton. Do not use if rusted or damaged.

#### Storage and Handling

Store brushes in original boxes. Wire brushes should not be exposed to heat, high humidity, acids, fumes or liquids that can result in deterioration of wire filaments, and subsequently, premature failure of the wires. Also, check for distortion of brush fill that can cause imbalance and excessive vibration when brush is run. Do not allow foreign material to accumulate in brush face.

#### Machine Condition

Proper maintenance of machines is essential to keep them in safe operating condition. Special operating instructions furnished with a machine should be closely followed. Hoods and safety guards must be kept in place at all times. Use adequate spindle diameter for the brush — do not use brush larger than the machine was designed for. Brushing machines should have sufficient power to maintain rated spindle speeds.

Provide proper ventilation and/or exhaust systems on all brushing operations.

#### Mounting Brushes

Brushes should be inspected for rust, oxidation and other damage. Do not use the brush if it is not in good condition. Check spindle speed RPM. Do not mount and operate brush if spindle RPM exceeds MAXIMUM SAFE FREE SPEED (MSFS) for which brush is rated.

Brush arbor hole and spindle diameter should be the same for free fit. Spindle length should be sufficient to permit a full nut mounting. Direction of spindle nut thread should be in such relation to the direction of rotation that the nut will tend to tighten as spindle revolves. When flanges are used, they should be identical in size and radial bearing surface to avoid cross-bending pressure on the brush.

#### Work Rest

On single or double end pedestal machines, work rests of rigid and adjustable design should be used to support the work piece while brushing. Adjust the work rest for a maximum opening of 1/8 inch to the brush face. This will prevent the work from being forced between the brush and rest. The work rest should be adjusted only when the brush is not in motion.

#### Speed

MAXIMUM SAFE FREE SPEED (MSFS) is the maximum RPM at which the brush should be operated with no work applied (spinning free). It is not the recommended operating speed. The application determines the recommended operating speed, which should never exceed the MSFS brush ratings marked on the brush and/or shown in this catalog. Periodic speed checks of the spindle are the responsibility of the operator and user.

In all cases where MSFS is not indicated, and on special brushes, contact your CSTG HOT-LINE for specific operating speed details.

#### Protective Equipment

The potential of serious injury exists for both the brush operator and others in the work area (possibly 50 or more feet from the brush). To protect against this hazard, before rotating the brush, during rotation, and until rotation stops operators and others in the area must wear SAFETY GOGGLES or FULL FACE SHIELDS WORN OVER SAFETY GLASSES WITH SIDE SHIELDS. Comply with the requirements of ANSI Z87.1-1979 "Occupational Eye and Face Protection."

Appropriate protective clothing and equipment (such as gloves, respirators, etc.) shall be used where there is probability of injury that can be prevented by such clothing or equipment.

Certain brushing operations, because of their nature and location, may require an enclosure to isolate the operation from other personnel.

#### Machine Guards

Rotating power brushes should be used only on machines that are equipped with safety guards, and these guards must be kept in place at all times.

#### Starting the Brush

Jog the machine before starting to determine if it is ready to use, and that the brush is fastened securely. Run the brush at operating speed with safety guards in place for at least one minute before applying work. Do not stand in front of or in line with the brush during this time.

#### Brush Pressure

Avoid excessive pressure against the work. This reduces the efficiency of the brush and could cause premature failure during operation.

Comply with the Safety Standards of the Industrial Division of the American Brush Manufacturers Association and the American National Standards Institute B 165.1-1985 "Safety Requirements for the Design, Care and Use of Power Driven Brushing Tools," and B 165.2-1982 "Safety Requirements for the Design, Care and Use of Power Driven Brushing Tools constructed with wood, plastic, or composition hubs and cores."

### Terminology Outside Diameter

A larger brush diameter results in a more efficient finishing tool. Production economies are obtained through lower end-of-service costs. Wire brushes 304.8 mm (12 in) O.D. are a practical size whereas 304.8 to 406.4 mm (12 in to 16 in) O.D. is usually best for non-metallic types. Sizes for portable tools (6,000 RPM maximum) should not exceed 152.4 mm (6 in) O.D. in any material.

#### Inside Diameter

Diameter of brush back. Increasing the inside diameter of a brush while maintaining the outside diameter results in a stiffer, less flexible brush face.

#### Trim Length

Length of fill material extending beyond brush back or face plates. A short trim makes a stiff fast cutting brush, while a long trim gives a brush the flexibility to contact irregular surfaces.

**Fill Density**

Brushes with high density are used to produce finer surface finishes, and also where fast cutting action is required; for example, burr removing operations. Brushes with low density offer greater brush flexibility. The relatively high degree of freedom of the brush wires makes for quick and efficient removal of rust, scale and other incrustations from surfaces by the impact resulting from the whip-like impingement of the wires on the surface.

**Flexibility**

That quality of a brush which determines resiliency and ability to reach into confined areas and conform to uneven or contoured surfaces.

**Brushing Speed and Pressure**

RPM speed specified for Osborn power brushes are Maximum Safe Free Speeds. In most operations, a lower speed than that specified will prove more efficient for you. Lower speeds and lighter pressures give longer brush life, generate less heat in the work, and require less power. It is important to remember that the TIPS of the wire filaments do the actual work. Where high brush pressures and speeds are required, it is recommended that a more aggressive brush be used. This may be done by increasing wire size, decreasing trim length or in some instances changing to another brush type.



**Crimped Wire**

**Knot Style**

**Circular End**

**Brush and Operating Adjustments to Obtain the Desired Results**

**Observed Result:**

Brush works too slowly.

**Corrections Suggested:**

1. Increase surface speed by increasing O.D. or RPM.
2. Decrease trim length and increase fill density.
3. Increase filament diameter.

**Observed Result:**

Brush works too fast.

**Corrections Suggested:**

1. Reduce surface speed by reducing RPM of O.D.
2. Reduce filament diameter.
3. Reduce fill density.
4. Increase trim length.

**Observed Result:**

Action of brush peens burr to adjacent surfaces.

**Corrections Suggested:**

1. Decrease trim length and increase fill density.
2. If wire brush tests indicate metal too ductile (burr is peened rather than removed), change to non-metallic brush such as treated Tampico used with burring compound.

**Observed Result:**

Finer or smoother finish required.

**Corrections Suggested:**

1. Decrease trim length and increase fill density.
2. Decrease wire diameter.
3. Try treated Tampico or cord brushes with suitable compounds recommended speeds.
4. Use auxiliary buffing compound with brush.

**Observed Result:**

Finish too smooth and lustrous.

**Corrections Suggested:**

1. Increase trim length.
2. Reduce brush fill density.
3. Reduce surface speed.
4. Increase filament diameter.

**Observed Result:**

Brushing action not sufficiently uniform.

**Corrections Suggested:**

1. Increase trim length and decrease fill density.
2. Devise hand-held or mechanical fixture, or machine to avoid irregular offhand manipulation.

**9A-1593 Surface Texture Replica (Comparison)**

- Used as a reference tool for metal surface reconditioning during reuse and salvage of major components.
- Provides user with a physical representation of surface finish specifications that are called out in Reuse and Salvage Guidelines.
- Provides 12 examples of F, H, K, and N surface textures for cast iron and steel.

**Radial Knot Brushes — Stringer Bead-Type Wheels**

- Designed for heavy duty cleaning, scale, spatter and rust removal.
- High quality oil tempered wire gives long life on pipe and plate weld cleaning.

Part No.	Pkg. Qty.	Dia.	Arbor Hole (A.H) Threaded Size	Wire Size	Max Safe Free Speed RPM
1U-9957	1	76.2 mm (3 in)	9.5 mm (3/8 in) A.H.	.36 mm (.014 in)	25,000



**Bench Grinder Wire Brushes**

- General purpose wire brushes that provide fine to medium brushing action.
- Excellent for brushing uneven surfaces or areas not easily reached by wider brushes.
- Will remove light scale, dirt, rust, corrosion or light burrs.

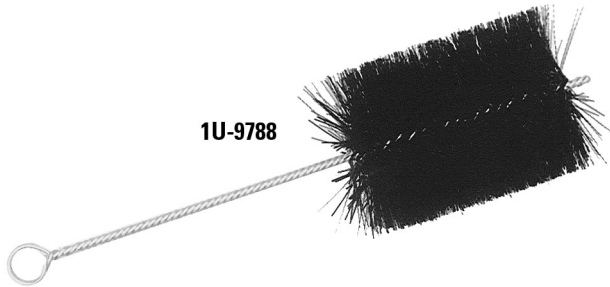
Part No.	Pkg. Qty.	Wheel Dia.	Arbor Hole	Wire Size	Face Width	Max. Safe Free Speed RPM
1U-9971	1	152.4 mm (6 in)	12.7-15.9 mm (1/2 in-5/8 in)	.36 mm (.014 in)	15.88 mm (5/8 in)	6,000
1U-9972	1	152.4 mm (6 in)	12.7-15.9 mm (1/2 in-5/8 in)	.36 mm (.014 in)	25.4 mm (1 in)	6,000
1U-9973	1	177.8 mm (7 in)	15.9 mm (5/8 in)	.36 mm (.014 in)	25.4 mm (1 in)	6,000
1U-9974	1	203.2 mm (8 in)	15.9 mm (5/8 in)	.36 mm (.014 in)	25.4 mm (1 in)	4,500

**End Wire Brushes, 6.4 mm (1/4 in) Shank**

- Suited for use on portable air and electric tools for jobs where space limitation is a factor.
- For a majority of operations, higher speeds are required for effective brushing action.

**NOTE:** As a safety precaution, end brush shanks must be fully inserted into the chuck or collet, and tightened securely.

Part No.	Pkg. Qty.	Description	Wire Size	Dia.	Max. Safe Free Speed RPM
1U-9939	1	Knot Style	.51 mm (.020 in)	25.4 mm (1 in)	20,000
1U-9940	1	Crimped Wire	.51 mm (.020 in)	25.4 mm (1 in)	20,000
1U-9941	1	Crimped Wire	.51 mm (.020 in)	19 mm (3/4 in)	20,000
1U-9942	1	Circular End	.51 mm (.020 in)	38.1 mm (1 1/2 in)	15,000
1U-9943	1	Knot Style	.51 mm (.020 in)	19 mm (3/4 in)	20,000
1U-9945	1	Gal. Coated Crimped Wire	.36 mm (.014 in)	76.2 mm (3 in)	5,000
1U-9946	1	Galvanized	.36 mm (.014 in)	76.2 mm (3 in)	5,000
4C-6153	1	Crimped Wire	.15 mm (.006 in)	25.4 mm (1 in)	20,000
4C-6154	1	Crimped Wire	.264 mm (.0104 in)	25.4 mm (1 in)	20,000
4C-6157	1	Crimped Encapsulated Flair-Flex	.264 mm (.0104 in)	38.1 mm (1 1/2 in)	25,000
4C-6158	1	Knot Style	.36 mm (.014 in)	25.4 mm (1 in)	20,000



**Cylinder Washing Brushes**

Part No.	Brush Diameter
4C-6342	88.9 mm (3 1/2 in)
4C-6343	101.6 mm (4 in)
1U-7429	114.3 mm (4 1/2 in)
1U-9788	127 mm (5 in)
4C-6344	139.7 mm (5 1/2 in)
4C-6345	152.4 mm (6 in)
4C-6346	165.1 mm (6 1/2 in)
4C-6347	177.8 mm (7 in)
4C-6348	190.5 mm (7 1/2 in)
4C-6349	203.2 mm (8 in)
4C-6350	241.3 mm (9 1/2 in)

**Tube Brushes**

Part No.	Pkg. Qty.	Description	O.D.	Wire
4C-6160	1	76.2 mm (3 in) Brush Face, 609.6 mm (24 in) O.A.L.	15.88 mm (5/8 in)	.15 mm (.006 in) Carbon Steel
4C-6161	1	76.2 mm (3 in) Brush Face, 609.6 mm (24 in) O.A.L.	9.53 mm (3/8 in)	.13 mm (.005 in) Carbon Steel

**Spindle Mounted Flap Brush**

- Used to clean curved and irregular shaped parts with hard to reach areas.
- Use in place of wire wheels, hand scrapers, and wire brushes.
- Typical applications include cleaning up both hydraulic cylinders and engine lower bores.
- Can also be used to clean rust, carbon deposits, adhesives, and tough coatings.

Part No.	Pkg. Qty.	Description	Diameter	Maximum Operating Speed	Optimum Operating Speed	Use with:
4C-8630	1	CPFB-S A Medium	76.2 mm x 44.5 mm x 6.35 mm (3 in x 1 3/4 in x 1/4 in)	8,500	8,500	Grinder/Hand Drill

**Discs**

**Surface Reconditioning Discs**

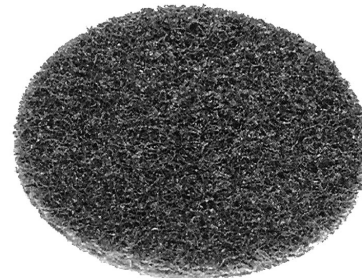
Conditioning surfaces with conventional abrasive discs often results in dimensioning, gouging, or undercutting. Wire brushes don't thoroughly remove contaminants which can lead to rework. Their wires can become loose, fly off, and injure an operator.

Surface reconditioning discs can help reduce or eliminate these problems. They deliver superior, consistent finishes when you need to clean, deburr, blend or finish.

- Use disc coming off the edge — better finish results.
- Aluminum Oxide.
- Use for gasket removal.
- Use for deburring, cleaning and rust removal.
- Use instead of wire brushes or sand paper when you don't want to remove any stock.

Part No.	Pkg. Qty.	Description	Diameter	Maximum Operating Speed	Optimum Operating Speed	Use With:
5P-9709	25	Surface Conditioning Disc, A-Coarse	177.8 mm (7 in)	6,000	4,500	Grinder
6V-0185	25	Surface Conditioning Disc, A-Coarse	127.0 mm (5 in)	10,000	10,000	Grinder
1U-7622	25	Surface Conditioning Disc, A-Coarse	101.6 mm (4 in)	13,000/18,000 <sup>1</sup>	10,000	Grinder/Hand Drill
4C-4384	25	Surface Conditioning Disc, A-Coarse	76.2 mm (3 in)	13,000	15,000	Grinder/Hand Drill
4C-4383	50	Surface Conditioning Disc, A-Coarse	50.8 mm (2 in)	13,000	18,000	Grinder/Hand Drill

<sup>1</sup>Maximum speed is 13,000 if used with 4C-4763 Disc Pad Holder or 4C-4764 Disc Pad Holder and 155-3595 Adapter; maximum speed is 18,000 if used with 1U-7623.



**Surface Reconditioning Discs — Superior Edge Wear**

- Surface reconditioning disc used on right angle tools.
- The edges of an abrasive on a right angle grinder tend to wear faster than the center and thus the disc is never fully used up. Superior edge wear discs have longer overall life than standard discs.
- Ideal for gasket removal, rust removal and general cleaning on steel parts.
- Retained by hook and loop type fasteners or 7/8 inch bolt thru application.
- Brown disc with gray backing.

Part No.	Pkg. Qty.	Description	Diameter	Maximum Operating Speed	Optimum Operating Speed	Use with:
9U-6921	10	SE Disc — A Coarse	177.8 mm (7 in)	6,000	4,500	Grinder
9U-6922	10	SE Disc — A Coarse	127.0 mm (5 in)	10,000	10,000	Grinder
9U-6923	10	SE Disc — A Coarse	127.0 mm x 22.23 mm center hole (5 in x 7/8 in)	10,000	10,000	Grinder
9U-6924	10	SE Disc — A Coarse	101.6 mm (4 in)	13,000/18,000 <sup>1</sup>	10,000/15,000	Grinder/ Hand Drill
9U-6925	10	SE Disc — A Coarse	101.6 mm x 22.23 mm center hole (4 in x 7/8 in)	13,000	10,000	Grinder/ Hand Drill
9U-6926	10	Roloc — A Coarse	76.2 mm (3 in)	18,000	15,000	Die Grinder/ Hand Drill
9U-6927	10	Roloc — A Coarse	50.8 mm (2 in)	25,000	21,000	Die Grinder/ Hand Drill

<sup>1</sup>Maximum speed is 13,000 if used with 4C-4763 Disc Pad Holder or 4C-4764 Disc Pad Holder and 155-3595 Adapter; maximum speed is 18,000 if used with 1U-7623.

### Surface Conditioning Disc - Hook & Loop

- Ideal for work requiring less pressure such as grind marks, surface rust and mild coatings.
- Also used when the very fine surface condition material is not quite aggressive enough.

Part No.	Pkg. Qty.	Grade	Size
236-8092	25	Medium	3"

### Abrasive Flap Disc Type 29 Zirconia

- Good for heavy stock removal as well as finishing. Reduces downtime.
- 3 popular grits.
- Unique design allows for consistent sharp edge as wheel wears away.
- Long life Zirconia grain.

Part No.	Pkg. Qty.	Grade	Size
236-8105	10	ZIR 24	4-1/2"x7/8"
236-8106	10	ZIR 36	4-1/2"x7/8"
236-8107	10	ZIR 60	4-1/2"x7/8"
236-8109	10	ZIR 80	4-1/2"x7/8"
236-8111	10	ZIR 120	4-1/2"x7/8"
236-8112	10	ZIR 24	6"x7/8"
236-8113	10	ZIR 36	6"x7/8"
236-8114	10	ZIR 60	6"x7/8"
236-8115	10	ZIR 80	6"x7/8"
236-8116	10	ZIR 120	6"x7/8"

### 7" Zirconium Resin Fiber Disc

- Outlasts aluminum oxide and runs cooler.
- Faster stock removal.
- Longer life means fewer disc changes.
- Excellent performance on stainless steel and high tensile alloys.

Part No.	Pkg. Qty.	Grade	Size
236-8069	25	36	7"x5/8"-11"

### Disc Pad Holders

#### Safety Tip

Place holder on table before turning tool on — prevents pad from flying off.

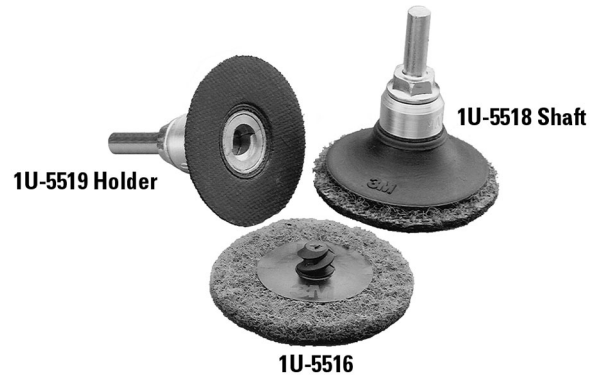
Part No.	Pkg. Qty.	Use With:	Description	Diameter	Hub/Shank	Maximum Operating Speed
5P-9718	1	5P-9709	Holder	177.8 mm (7 in)	5/8 in-11	6,000
6V-0186 <sup>1</sup>	1	6V-0185	Holder	127.0 mm (5 in)	5/8 in-11	10,000
4C-4763	1	1U-7622	Pad Holder	101.6 mm (4 in)	M14 x 2	13,000
4C-4764	1	1U-7622	Pad Holder	101.6 mm (4 in)	5/8 in-11	13,000
1U-7623	1	1U-7622	Pad Holder	101.6 mm (4 in)	6.35 mm shaft (1/4 in)	18,000
4C-4382	1	4C-4384	Pad Holder	76.2 mm (3 in)	6.35 mm shaft (1/4 in)	20,000
4C-4381	1	4C-4383	Pad Holder	50.8 mm (2 in)	6.35 mm shaft (1/4 in)	20,000

Pkg. Part No.	Qty.	Use With:	Description	Diameter	Maximum Hub/Shank	Operating Speed
1U-5520	1	9U-6926	R-style Disc Holder	76.2 mm (3 in)		18,000
1U-5519	1	9U-6927	R-style Disc Holder	50.8 mm (2 in)		25,000
1U-5518	1	1U-5519/ 1U-5520	R-style Threaded Shaft			

<sup>1</sup>Female, 5/8 in-11; use 1U-9381 to adapt it.

### R-style Surface Conditioning Discs

- Use a more positive retention method than the "hook and loop" fasteners system.
- R-style discs have a quarter turn male fastener embedded into the disc. The disc holder has the corresponding female fastener.
- Typically used at smaller sizes where the higher maximum operating speed requires a more positive retention system.
- The disadvantage of this system is that the surface conditioning operation must always be conducted in one direction only. Reversing the tool will "unspin" the disc from the holder.
- Aluminum oxide.
- Use for gasket removal, deburring, cleaning, and rust removal.
- Use instead of wire brushes or sand paper when you don't want to remove any stock.



### Roloc Surface Conditioning Discs

Part No.	Pkg. Qty.	Description	Diameter	Maximum Operating Speed	Optimum Operating Speed	Use With
1U-5516	25	R-style Surface Conditioning Disc— use with 1U-5519 and 1U-5518	50.8 mm (2 in)	25,000	18,000	Die Grinder, Hand Drill
1U-5517	25	R-style Surface Conditioning Disc— use with 1U-5520 and 1U-5518	76.2 mm (3 in)	15,000	15,000	Die Grinder, Hand Drill

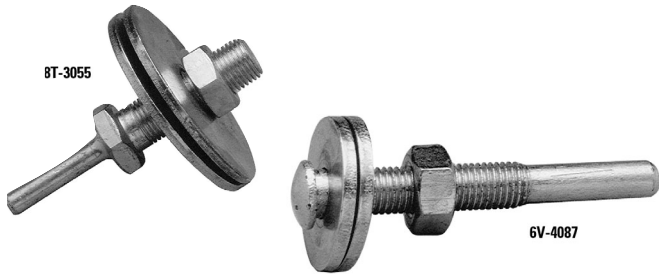
### Disc Holders

Part No.	Pkg. Qty.	Description	Diameter	Maximum Operating Speed	Use With
1U-5520	1	R-style Disc Holder, use with 1U-5518	76.2 mm (3 in)	15,000	Die Grinder/ Hand Drill
1U-5519	1	R-style Disc Holder, use with 1U-5518	50.8 mm (2 in)	25,000	Die Grinder/ Hand Drill
1U-5518	1	R-style Threaded Shaft, use with 1U-5519 or 1U-5520	6.35 mm (1/4 in)		Die Grinder/ Hand Drill

### Discs and Holders

- Flexible discs can be used to remove corrosion and surface deposits.
- Clean/strip designation indicates a coarse version of cutting/ polishing disc.
- Typical applications are clean up of hydraulic cylinders and engine lower bores.
- Can be used in stacks of two or three, for whatever width is required to clean the surface in the most efficient manner.
- Aluminum oxide.
- Use for gasket removal, deburring, cleaning, and rust removal.
- Use instead of wire brushes or sand paper when you don't want to remove any stock.

Part No.	Pkg. Qty.	Description	Diameter	Maximum Operating Speed	Optimum Operating Speed	Use With:
6V-4086	1	Cutting and Polishing Disc, A-Medium	152.4 mm x 6.35 mm (6 in x 1/4 in)	4,000	3,200	Straight Grinder and Hand Drill
8T-3054	1	Clean 'N Strip Disc, Extra Coarse	152.4 mm x 12.7 mm (6 in x 1/2 in)	4,000	3,200	Straight Grinder and Hand Drill
4C-3868	1	Clean 'N Strip Disc, Extra Coarse	101.6 mm x 6.35 mm (4 in x 1/4 in)	6,000	4,500	Straight Grinder and Hand Drill



**Holders**

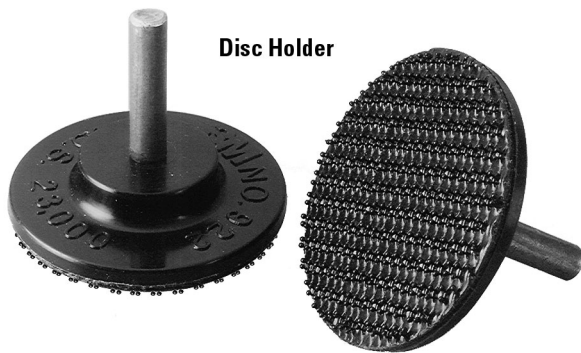
Part No.	Pkg. Qty.	Use With:	Description	Diameter	Hub/Shank	Maximum Operating Speed
8T-3055	1	8T-3054	Mandrel #934	12.7 mm (1/2 in)	6.35 mm x 70.5 mm Dia. (1/4 in x 2 1/2 in)	4,000
6V-4087	1	6V-4086/ 4C-3868	Mandrel #933	6.35 mm (1/4 in)	6.35 mm shank x 25.4 mm Dia. (1/4 in x 1 in)	6,000

**Surface Reconditioning Discs for Aluminum Surfaces**

- The ideal disc for aluminum.
- Very fine grade minimizes the chance of changing the surface profile.
- Uses the same holders and grinders as other surface reconditioning discs.
- Identified by blue/green color both front and back of disc.

Part No.	Pkg. Qty.	Description	Diameter	Maximum Operating Speed	Optimum Operating Speed	Use with:
150-1197	10	Scuffing Disc A Fine, N.H.	177.8 mm (7 in)	6,000	4,500	Grinder
150-1244	10	Scuffing Disc A Fine, N.H.	127.0 mm (5 in)	10,000	10,000	Grinder
150-1246	10	Scuffing Disc A Fine	101.6 mm (4 in)	13,000/18,000 <sup>1</sup>	10,000/15,000	Grinder/ Hand Drill
150-1248	10	Roloc Scuffing Disc A Fine	76.2 mm (3 in)	18,000	15,000	Die Grinder/ Hand Drill
150-1250	10	Roloc Scuffing Disc	50.8 mm (2 in)	25,000	21,000	Die Grinder/ Hand Drill

<sup>1</sup> Maximum speed is 13,000 if used with 4C-4763, (4C-4764, 155-3595); maximum speed is 18,000 if used with 1U-7623.



**Disc Holder**

**Holders**

Part No.	Qty.	Use with:	Description	Diameter	Actual Diameter	Max Hub/Shank	Max Oper. Speed	Optimum Oper. Speed
5P-9718	1	150-1197	Holder	177.8 mm (7 in)	174.63 mm (6 7/8 in)	5/8 in-11	6,000	4,500
6V-0186	1	150-1244	Holder	127.0 mm (5 in)	120.65 mm (4 3/4 in)	5/8 in-11	10,000	10,000
4C-4763	1	150-1246	Holder 914	101.6 mm (4 in)	95.25 mm (3 3/4 in)	M14 x 2	13,000	10,000
4C-4764	1	150-1246	Holder 914	101.6 mm (4 in)	95.25 mm (3 3/4 in)	5/8 in-11	13,000	10,000
4C-4765	1	150-1246	Holder 925	101.6 mm (4 in)	95.25 mm (3 3/4 in)	3/8 in-24	13,000	10,000
1U-7623	1	150-1246	Holder 925	101.6 mm (4 in)	98.43 mm (3 7/8 in)	1/4 in Shaft	18,000	10,000
1U-5520	1	150-1248	Roloc Disc Holder	76.2 mm (3 in)	69.85 mm (2 3/4 in)		20,000	15,000
1U-5519	1	150-1250	Roloc Disc Holder	50.8 mm (2 in)	44.45 mm (1 3/4 in)		25,000	20,000
1U-5518	1	1U-5519/ 1U-5520	Roloc Threaded Shaft					
4C-4382	1	150-1252	Velcro Holder 923	76.2 mm (3 in)	78.03 mm (2 7/8 in)		20,000	15,000
4C-4381	1	150-1251	Velcro Holder 922	50.8 mm (2 in)	44.45 mm (1 3/4 in)		23,000	20,000

**Surface Reconditioning Discs — Bolt-On Style**

- Holders for these discs have a velcro type fastening system; not all the grinders in the shop will accept this kind of holder.
- For Blue Point AT425A Right Angle Grinder or similar model, a 7/8 inch center hole is needed.

Part No.	Pkg. Qty.	Description	Dia. x Center Hole	Maximum Operating Speed	Optimum Operating Speed	Use with:
9U-6928	10	Disc A Coarse	127.0 mm x 22.23 mm (5 in x 7/8 in)	10,000	10,000	Grinder
9U-6929	10	Disc A Coarse	101.6 mm x 22.23 mm (4 in x 7/8 in)	13,000	10,000	Grinder

**Roloc Holders and Threaded Shaft Bristle Discs**

- Bristle design and 3-dimensional abrasives enable Bristle Disc to remove carbon buildup, coatings, sealants, gaskets and weld discoloration quickly, leaving a clean surface ready for subsequent operations or inspection.
- Used with rotary tool such as drill or small angle grinder.
- Designed to compete with crimped wire and bristle cup brushes.
- Extends range of surface reconditioning operations where conformability and flexibility are most critical.
- Provides exceptional finish, outstanding performance and a safer workplace by eliminating flying metal wires.
- Come in 3 sizes and 3 grades.
- All R-style holders use 1U-5518 Threaded Shaft.

Shaft size	6.4 mm (.25 in)
Disc package quantity	10
50 grit discs	carbon removal, weld discoloration clean up or where coating removal discs are used
80 grit discs	corrosion removal, sealant removal and general maintenance repair operations
120 grit discs	aluminum parts

**Roloc Bristle Discs**

Item	Part No.	Description	Diameter	Pkg. Size	Qty.	Grit	Color	Maximum Operating Speed	Optimum Operating Speed
1	138-4523	Bristle Disc	25 mm (1.0 in)	1	10	50	Green	30,000	25,000
1	138-4524	Bristle Disc	25 mm (1.0 in)	1	10	80	Yellow	30,000	25,000
1	151-8101	Bristle Disc	25 mm (1.0 in)	1	10	120	White	30,000	25,000
1	138-4528	Bristle Disc	51 mm (2.0 in)	2	10	50	Green	25,000	18,000
1	138-4529	Bristle Disc	51 mm (2.0 in)	2	10	80	Yellow	25,000	18,000
1	138-4530	Bristle Disc	51 mm (2.0 in)	2	10	120	White	25,000	18,000
1	138-4534	Bristle Disc	76 mm (3.0 in)	3	10	50	Green	20,000	15,000
1	138-4535	Bristle Disc	76 mm (3.0 in)	3	10	80	Yellow	20,000	15,000
1	138-4536	Bristle Disc	76 mm (3.0 in)	3	10	120	White	20,000	15,000

Item	Part No.	Description	Diameter
2	151-8102	Holder for Bristle Discs	25 mm (1.0 in)
2	1U-5519	Holder for Bristle Discs	51 mm (2.0 in)
2	1U-5520	Holder for Bristle Discs	76 mm (3.0 in)
3	1U-5518	Threaded Shaft	
Not shown	150-5431	Holder for Bristle Discs	51 mm (2.0 in)



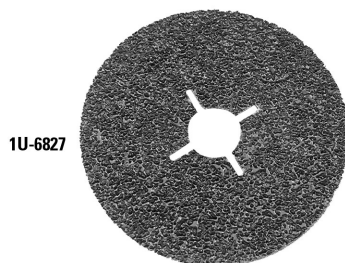
## Bristle Discs

- Bristle design and 3-dimensional abrasive filled fingers enable bristle disc to remove carbon buildup, coatings, sealants, gaskets, and weld discoloration quickly, leaving a clean surface ready for subsequent operations or inspection.
- Used with rotary tool such as drill or right angle grinder — can be used with 141-6993 Heavy-Duty Angle Grinder.
- Used for coating removal, weld preparation, and general cleaning.
- Increased safety during use — bristles are mounted securely to backing, virtually eliminate flying wires common with wire brushes.
- Flexible, abrasive-filled bristles conform to part's surface and clean without removing base material, helping reduce damage and rework.
- Unique bristle shape resists excessive edge wear and loading with coatings, dirt, and debris to extend disc life and performance.
- Resists heat build-up to reduce potential tempering or work surface damage.
- Threaded 5/8-11 inch core quickly threads onto shaft of an electric or pneumatic right angle grinder.
- Color coding makes abrasive grade selection quick and easy.



Maximum operating speed	12,000 rpm
Internal thread	5/8-11

Part No	Size	Grit	Color	Maximum Operating Speed	Optimum Operating Speed	Application
165-3945	4 1/2	50	Green	12,000	10,000	Carbon removal, weld discoloration cleaning, coating removal
165-3946	4 1/2	80	Yellow	12,000	10,000	Corrosion removal, sealant removal, general maintenance repair operations
165-3947	4 1/2	120	White	12,000	10,000	Aluminum parts



## Fiber Discs

- Used for medium and heavy stock removal on right angle sanding equipment such as:
  - Cutting down and blending weld lines.
  - Cutting down filler metal, rust and scale removal as well as deburring.
- Used with air cooled rubber back up pads.

Part No.	Grit	Size Dia x Hole	Pkg. Qty.
1U-6827	24	114.3 mm x 22.23 mm (4 1/2 in x 7/8 in)	25
1U-6828	36	114.3 mm x 22.23 mm (4 1/2 in x 7/8 in)	25
1U-6829	50	114.3 mm x 22.23 mm (4 1/2 in x 7/8 in)	25
1U-6830	60	114.3 mm x 22.23 mm (4 1/2 in x 7/8 in)	25
1U-6831	80	114.3 mm x 22.23 mm (4 1/2 in x 7/8 in)	25
1U-6832	100	114.3 mm x 22.23 mm (4 1/2 in x 7/8 in)	25
1U-6833	120	114.3 mm x 22.23 mm (4 1/2 in x 7/8 in)	25
1U-6834	24	127 mm x 22.23 mm (5 in x 7/8 in)	25
1U-6835	36	127 mm x 22.23 mm (5 in x 7/8 in)	25
1U-6836	50	127 mm x 22.23 mm (5 in x 7/8 in)	25
1U-6837	60	127 mm x 22.23 mm (5 in x 7/8 in)	25
1U-6838	80	127 mm x 22.23 mm (5 in x 7/8 in)	25
1U-6839	100	127 mm x 22.23 mm (5 in x 7/8 in)	25
1U-6840	120	127 mm x 22.23 mm (5 in x 7/8 in)	25
1U-6841	24	177.8 mm x 22.23 mm (7 in x 7/8 in)	25
1U-6842	36	177.8 mm x 22.23 mm (7 in x 7/8 in)	25
1U-6843	50	177.8 mm x 22.23 mm (7 in x 7/8 in)	25
1U-6844	60	177.8 mm x 22.23 mm (7 in x 7/8 in)	25
1U-6845	80	177.8 mm x 22.23 mm (7 in x 7/8 in)	25
1U-6846	100	177.8 mm x 22.23 mm (7 in x 7/8 in)	25
1U-6847	120	177.8 mm x 22.23 mm (7 in x 7/8 in)	25

## Discs

- Excellent for cleaning welds, removing tough coatings, carbon deposits, adhesives and rust.
- Conformable so there is less chance of under-cutting or gouging.
- Open web resists loading even from soft coatings and is non-metallic so it will not contaminate the surface with metallic residues.
- Will work at low RPM's, such as on a 6.35 mm (1/4 in) drill @ 1750 RPM.
- Works well on other substrates such as wood, aluminum and even plastic.



Part No.	Pkg. Qty.	Description	Diameter	Max. Oper. Speed	Optimum Oper. Speed	Use with:
4C-8637	1	Clean 'N Strip 6.35 mm (1/4 in) Spindle Mounted Disc (CSD1-S)	101.6 mm x 12.7 mm x 6.35 mm (4 in x 1/2 in x 1/4 in)	8,000	8,000	Straight Grinder and Hand Drill
4C-8638	1	Clean 'N Strip 6.35 mm (1/4 in) Spindle Mounted Disc (CSD2-S)	101.6 mm x 25.4 mm x 6.35 mm (4 in x 1 in x 1/4 in)	8,000	8,000	Straight Grinder and Hand Drill

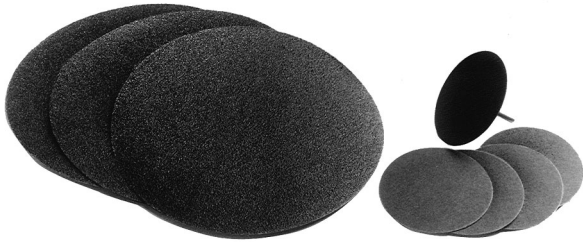
## PSA Discs, Glue Backed, PSA/No Hole

- These discs have glue on the back and are used with backup pads to deburr, blend, etc.
- Pressure sensitive adhesive on disc back makes changes fast and easy.
- Efficient on flat and contoured metal surfaces and hard to reach areas.

Part No.	Grit	Description	Size Dia. x Hole	Pkg. Qty.
4C-3809	36	Cloth Backed Disc	50.8 mm (2 in)	50
4C-3810	50	Cloth Backed Disc	50.8 mm (2 in)	50
4C-3811	60	Cloth Backed Disc	50.8 mm (2 in)	50
4C-3813	100	Cloth Backed Disc	50.8 mm (2 in)	50



Part No.	Grit	Description	Size Dia. x Hole	Pkg. Qty.
4C-3817	80	Cloth Backed Disc	76.2 mm (3 in)	50
4C-3819	60	Cloth Backed Disc	101.6 mm (4 in)	50
4C-3821	100	Cloth Backed Disc	101.6 mm (4 in)	50
4C-3822	120	Cloth Backed Disc	101.6 mm (4 in)	50
4C-3824	80	PSA — Paper Disc Rolls	127 mm (5 in)	50
4C-3834	80	Cloth Backed Disk	304.8 mm (12 in)	25



**Backup Pads for PSA Discs**

- Use stick and sand disc backup pads with all PSA discs.
- Made of flexible rubber that tapers at the edge.
- Come with 6.4 mm (1/4 in) steel shank for fast mounting into portable tool chunks.

Part No.	Size Dia.	Shank	Pkg. Qty.
4C-3837	50.8 mm (2 in)	6.4 mm (1/4 in)	1
4C-3838	76.2 mm (3 in)	6.4 mm (1/4 in)	1
4C-3840	127 mm (5 in)	5/16 in-24 Thread Shank	1

**PSA Sanding Discs**

- Anti-clog release agents are an additive process for long life.
- Quality full resin over resin bond.
- Each disc has protective backing to protect the adhesive in dusty environments before use.

Part No.	Size Dia.	Grit	Pkg. Qty.
236-8039	5"	A/O 60	100
236-8040	5"	A/O 80	100
236-8041	5"	A/O 100	100
236-8042	5"	A/O 120	100
236-8043	5"	A/O 150	100
236-8044	5"	A/O 180	100
236-8045	5"	A/O 220	100
236-8046	5"	A/O 320	100
236-8047	5"	A/O 400	100
236-8048	6"	A/O 60	100
236-8049	6"	A/O 80	100
236-8050	6"	A/O 100	100
236-8051	6"	A/O 120	100
236-8052	6"	A/O 150	100
236-8053	6"	A/O 180	100
236-8054	6"	A/O 220	100
236-8055	6"	A/O 320	100
236-8056	6"	A/O 400	100

**R-Type Mini Grinding Disc - Aluminum Oxide**

- Resists stretching, shedding and grain loss.
- Maintain their flexibility to work in contours.

Part No.	Size Dia.	Grit	Pkg. Qty.
236-8072	2"	24	50
236-8073	2"	36	50
236-8074	2"	50	50

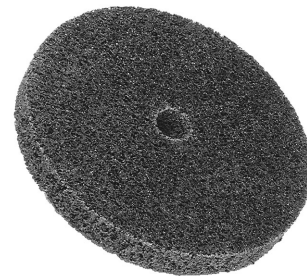
Part No.	Size Dia.	Grit	Pkg. Qty.
236-8075	2"	80	50
236-8076	2"	120	50
236-8078	3"	24	25
236-8079	3"	36	25
236-8081	3"	50	25
236-8082	3"	80	25
236-8083	3"	120	25

**Wheels**

**Clean 'N Strip Unitized Wheels**

- Constructed of the most advanced material, Clean 'N Strip Unitized Wheels meet the demand for aggressive and durable cleaning products.
- Designed to compete with power tool wire brushing, this product provides a cleaner, burr-free surface quicker than any wire fiber product.
- Constructed of a non-woven nylon web, there is no opportunity for metal contamination or rusting in this product. It can be used on a variety of ferrous and non-ferrous metal surfaces.
- Used extensively in weld cleaning and conditioning applications to provide the proper surfaces for high integrity welding and cleaned polish surfaces for non-destructive testing.
- Use this product for heavy-duty cleaning of rust, corrosion and coatings of all types.
- Aluminum oxide.
- Use for gasket removal, deburring, cleaning, and rust removal.
- Clean up to 4 times faster than wire brushes, runs smoothly and resists loading.
- Use instead of wire brushes or sand paper when you don't want to remove any stock.

Density	7
Mineral type	S
Color	Black
Grade	XCS



**Clean 'N Strip Unitized Wheels**

Part No.	Pkg. Qty.	Wheel Size	Hole Size	Maximum Operating Speed	Optimum Operating Speed	Use With:
8T-7769	40	38.1 x 25.4 mm (1 1/2 in x 1 in)	4.8 mm (3/16 in)	18,000	16,000	Die Grinder with 8T-7768



**8T-7768 Mandrell #936**

Maximum operating speed	18,000
Package quantity	5
Use with	8T-7769

## Light Deburring Wheel

- Widely used for fine deburring and polishing applications.
- Designed to allow for removal of burrs without changing the dimension of the workpiece.
- An excellent blending and radiusing tool.
- Used in a variety of hand and automatic deburring and finishing applications including centerless polishing.

Density	6
Mineral type	S
Color	Gray
Grade	Fine

Part No.	Pkg. Qty.	Description	Wheel Size	Hole Size	Max. Oper. Speed	Optimum Oper. Speed	Use With:
8T-7748	3	Light Deburring Wheel	203.2 x 25.4 mm (8 in x 1 in)	76.2 mm (3 in)	4,500	4,500	Bench and Stand Grinder
<b>6V-2032 Adapter</b>							
Maximum operating speed				4,000			
Number required				2			



## SST Deburring Wheels

- Designed to be a clean, safe, economical tool.
- Advanced construction results in long unit life.
- Use for deburring, radiusing and polishing stainless steel and titanium as well as other ferrous and non-ferrous metals.

Density	8
Mineral type	S
Color	Gray
Grade	Fine

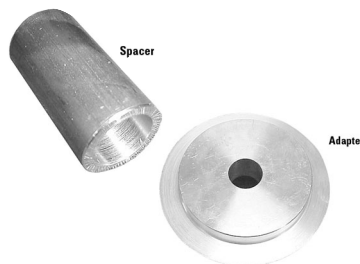
Part No.	Pkg. Qty.	Wheel Size	Hole Size	Maximum Operating Speed	Optimum Operating Speed	Use With:
8T-7749	1	203.2 x 25.4 mm (8 in x 1 in)	76.2 mm (3 in)	4,500	4,500	Bench and Stand Grinder
<b>6V-2032 Adapter</b>						
Maximum operating speed				4,000		
Number required				2		

## 187-3977 Spacer

## 187-3978 Adapter

SMCS Code: 0684-063

- Used to adapt a deburring wheel to a 3/4 inch shaft bench grinder.
- Used with 4C-8296 Bench Grinder and 8T-7749 Deburr Wheel.
- Deburring wheel can be used in many applications including deburring permanent hose couplings.
- Requires one spacer and two adapters.



<b>Spacer</b>	
Material	steel
Weight	0.33 kg (.15 lb)

<b>Adapter</b>	
Material	aluminum
Weight	1.65 kg (.75 lb)
Maximum operating speed	4000 rpm
Hole diameter	3/4 inch

## Level Cut Unitized Wheel

- Made from an advanced material.
- An excellent blending and polishing tool.
- Used frequently in weld cleaning where high quality surface appearance is desirable.

Density	5
Mineral type	A
Color	Tan
Letter color	Red
Grade	Fine



Part No.	Pkg. Qty.	Wheel Size	Hole Size	Maximum Operating Speed	Optimum Operating Speed	Use With:
8T-7767	50	25.4 x 25.4 mm (1 in x 1 in)	4.8 mm (3/16 in)	35,100	22,000	Die Grinder

<b>8T-7768 Mandres #936</b>						
Maximum operating speed				22,000		
Package quantity				5		

## Finishing Flap Brush Wheel

- Fine grade flap brush replaces fine wire power brushes for removing carbon buildup, light rust and corrosion.

Density	5
Mineral type	A
Color	Maroon
Grade	Fine



Part No.	Pkg. Qty.	Wheel Size	Hole Size	Maximum Oper. Speed	Optimum Oper. Speed	Typical Application
6V-2033	2	203.2 x 50.8 mm (8 in x 2 in)	76.2 mm (3 in)	3,200	3,200	Bench Grinder, Stand Grinders, Straight Grinders

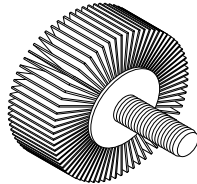
<b>6V-2032 Adapter</b>						
Maximum operating speed				4,000		
Number required				2		

**Flap Wheels**

- Flap wheels consist of a series of coated abrasive pieces (forming the spokes of the wheel) which are mounted around a steel hub.
- Supplied with a 1/4 in-20 thread mandrel designed for fast mounting.
- Can be used on higher speed machines popular in today's market.
- Delivers smooth, chatter-free grinding.
- Use with portable and benchstand grinders.

Part No.	Pkg. Qty.	Size	Grit	Max. RPM
4C-8511	10	1 in x 1 in	60	25,000
4C-8512	10	1 in x 1 in	120	25,000
4C-8513	10	1 in x 1 in	180	25,000
4C-8514	10	2 in x 1 in	60	20,000
4C-8515	10	2 in x 1 in	120	20,000
4C-8516	10	2 in x 1 in	180	20,000
4C-8517	10	3 in x 1 in	60	20,000
4C-8518	10	3 in x 1 in	120	20,000
4C-8519	10	3 in x 1 in	180	20,000

Optimum Surface Feet per Minute Speed	Type Material
5500	Aluminum
4000	Hardwood
5000	Non-ferrous metals
5000	Steel (alloy)
5000	Steel (mild)
6500	Steel (stainless)



**NOTE:** Best speed ranges from 6,000 to 9,000 SFPM (Surface feet per minute). Wheels should be operated in direction of arrow. Never exceed maximum operating speed.

Adapters		
Part No.	Description	Size
4C-8520	Adapter	1/4 inch x 1 inch
4C-8521	Adapter	1/4 inch x 4 inch

**Raised Hub Wheels**

- Designed for use on electrical or air powered right angle or vertical shaft grinders.
- Designed for rough grinding applications, including:
  - grinding/smoothing weld seams
  - cleaning metal surfaces
- Wheels fit 114.3 mm, 177.8 mm and 228.6 mm (4 1/2 in, 7 in and 9 in) grinders.
- Type 28 wheels have built-in 15° angle for out of position work.
- Wheels comply with ANSI safety code B-7.1.

Type 27					
Part No.	Type	Grit Spec.	Max RPM	Wheel Size OD x Thick x ID/Thread	Pkg. Qty.
1U-6788	Std.	A24	15,300	101.6 mm x 3.18 mm x 15.88 mm (4 in x 1/8 in x 5/8 in)	10
1U-6789	Std.	A24	15,300	101.6 mm x 6.35 mm x 15.88 mm (4 in x 1/4 in x 5/8 in)	10
1U-6790	Std.	A24	13,300	114.3 mm x 3.18 mm x 22.23 mm (4 1/2 in x 1/8 in x 7/8 in)	10
1U-6791	Std.	A24	13,300	114.3 mm x 6.35 mm x 22.23 mm (4 1/2 in x 1/4 in x 7/8 in)	10
9U-6382	Std.	A24	12,220	127 mm x 6.35 mm x 5/8 in-11 (5 in x 1/4 in x 5/8 in-11)	1
1U-6792	Std.	A24	8,500	177.8 mm x 3.18 mm x 22.23 mm (7 in x 1/8 in x 7/8 in)	10
1U-6793	Std.	A24	8,500	177.8 mm x 6.35 mm x 22.23 mm (7 in x 1/4 in x 7/8 in)	10
1U-6794	Std.	A24	8,500	177.8 mm x 6.35 mm x 5/8 in-11 (7 in x 1/4 in x 5/8 in-11)	10
1U-6795	Std.	A24	6,600	228.6 mm x 6.35 mm x 22.23 mm (9 in x 1/4 in x 7/8 in)	10
1U-6796	Std.	A24	6,600	228.6 mm x 6.35 mm x 5/8 in-11 (9 in x 1/4 in x 5/8 in-11)	10
9U-6383	Hi Perf.	Z/A24 <sup>1</sup>	12,220	127 mm x 6.35 mm x 5/8 in-11 (5 in x 1/4 in x 5/8 in-11)	1
4C-3769	Hi Perf.	Z/A24 <sup>1</sup>	8,500	177.8 mm x 6.35 mm x 22.23 mm (7 in x 1/4 in x 7/8 in)	5
4C-3770	Hi Perf.	Z/A24 <sup>1</sup>	8,500	177.8 mm x 6.35 mm x 5/8 in-11 (7 in x 1/4 in x 5/8 in-11)	5
4C-3772	Hi Perf.	Z/A24 <sup>1</sup>	6,600	228.6 mm x 6.35 mm x 5/8 in-11 (9 in x 1/4 in x 5/8 in-11)	5

Type 28 (built-in 15° angle)					
Part No.	Type	Grit Spec.	Max RPM	Wheel Size OD x Thick x ID/Thread	Pkg. Qty.
4C-3863	Std.	A24	6,600	228.6 mm x 6.35 mm x 5/8 in-11 (9 in x 1/4 in x 5/8 in-11)	10
4C-3773	Hi Perf.	Z/A24 <sup>1</sup>	8,500	177.8 mm x 6.35 mm x 22.23 mm (7 in x 1/4 in x 7/8 in)	5
4C-3774	Hi Perf.	Z/A24 <sup>1</sup>	8,500	177.8 mm x 6.35 mm x 5/8 in-11 (7 in x 1/4 in x 5/8 in-11)	5
4C-3776	Hi Perf.	Z/A24 <sup>1</sup>	6,600	228.6 mm x 6.35 mm x 5/8 in-11 (9 in x 1/4 in x 5/8 in-11)	5

<sup>1</sup>Zirconia-Alumina

**Cut-Off Wheels**

- Fully reinforced cut-off wheels for heavy-duty cut off jobs on ferrous metals.
- Wheels comply with ANSI Safety Code B-7.1.
- Use A60 for burr-free, cool cutting of metal.
- Use A36 for rough cutting applications.
- Offer quality at a competitive price.

Part No.	Grit Spec.	Max RPM	Wheel Size OD x Thick x ID	Pkg. Qty.
174-8900	A60	20,375	76.2 mm x .89 mm x 6.35 mm (3 in x .035 in x 1/4 in)	25
174-8901	A60	20,375	76.2 mm x .89 mm x 9.53 mm (3 in x .035 in x 3/8 in)	25
174-8902	A36	20,375	76.2 mm x 1.59 mm x 6.35 mm (3 in x 1/16 in x 1/4 in)	25
174-8903	A36	20,375	76.2 mm x 1.59 mm x 9.53 mm (3 in x 1/16 in x 3/8 in)	25
174-8904	A36	20,375	76.2 mm x 3.2 mm x 6.35 mm (3 in x 1/8 in x 1/4 in)	25
174-8905	A36	20,375	76.2 x 3.2 x 9.53 mm (3 in x 1/8 in x 3/8 in)	25
174-8906	A60	20,375	101.6 mm x .89 mm x 6.35 mm (4 in x .035 in x 1/4 in)	25
174-8907	A60	15,280	101.6 mm x .89 mm x 9.53 mm (4 in x .035 in x 3/8 in)	25
174-8908	A36	15,280	101.6 mm x 1.59 mm x 6.35 mm (4 in x 1/16 in x 1/4 in)	25
174-8909	A36	15,280	101.6 mm x 1.59 mm x 9.53 mm (4 in x 1/16 in x 3/8 in)	25
174-8910	A36	15,280	101.6 mm x 3.2 mm x 6.35 mm (4 in x 1/8 in x 1/4 in)	25
174-8911	A36	15,280	101.6 mm x 3.2 mm x 9.53 mm (4 in x 1/8 in x 3/8 in)	25
1U-6809	A36	5,095	304.8 mm x 2.8 mm x 25.4 mm (12 in x 7/64 in x 1 in)	25
1U-6810	A36	4,365	355.6 mm x 2.8 mm x 25.4 mm (14 in x 7/64 in x 1 in)	25
1U-6811	A24	3,820	406.4 mm x 3.97 mm x 25.4 mm (16 in x 5/32 in x 1 in)	10



**Drill Sharpening Wheels (Type 1)**

- Used on drill sharpening machines to form or resharpen drills.
- Use aluminum oxide for all types of steel.
- Use silicone carbide for tungsten carbide, non-ferrous metals such as brass, bronze and aluminum.

Part No.	Grit Spec.	Wheel Size OD x Thick x ID	Pkg. Qty.
4C-3766	A100-H Aluminum Oxide	152.4 mm x 19 mm x 15.88 mm (6 in x 3/4 in x 5/8 in)	1
4C-3768 <sup>1</sup>	C80-I Silicon Carbide	152.4 mm x 19 mm x 15.88 mm (6 in x 3/4 in x 5/8 in)	1

<sup>1</sup>Used to sharpen cobalt or carbide drill bits and tools

**Portable Wheels — Reinforced (Type 1)**

- These reinforced wheels are to be used on grinders to clean up and blend.
- Straight wheels are to be used on portable horizontal shaft or straight shaft machines.

Part No.	Grit Spec.	Max RPM	Wheel Size OD x Thick x ID	Pkg. Qty.
4C-3777	A36	18,145	50.8 mm x 12.7 mm x 9.53 mm (2 in x 1/2 in x 3/8 in)	10
4C-3864	A24	18,145	50.8 mm x 12.7 mm x 9.53 mm (2 in x 1/2 in x 3/8 in)	10
4C-3865	A36	12,095	76.2 mm x 9.53 mm x 9.53 mm (3 in x 3/8 in x 3/8 in)	10

## Bench and Pedestal Wheels (Type 1)

- Cover a broad range of general bench grinding jobs.
- Offer custom quality.
- Choose aluminum oxide wheels for all types of steel.
- 152.4 mm, 177.8 mm, 203.2 mm, and 254 mm (6 in, 7 in, 8 in and 10 in) wheels are supplied with additional arbor bushings so one specification can meet the needs of several machines with different arbor sizes.



Part No.	Grit Spec.	Max RPM	Wheel Size OD x Thick x ID	Pkg. Qty.
1U-6780	A36	4,140	152.4 mm x 12.7 mm x 25.4 mm (6 in x 1/2 in x 1 in)	1
1U-6781	A60	4,140	152.4 mm x 12.7 mm x 25.4 mm (6 in x 1/2 in x 1 in)	1
1U-6782	A36	4,140	152.4 mm x 25.4 mm x 25.4 mm (6 in x 1 in x 1 in)	1
1U-6783	A60	4,140	152.4 mm x 25.4 mm x 25.4 mm (6 in x 1 in x 1 in)	1
1U-6784	A36	3,600	177.8 mm x 25.4 mm x 25.4 mm (7 in x 1 in x 1 in)	1
1U-6786	A36	3,600	203.2 mm x 25.4 mm x 25.4 mm (8 in x 1 in x 1 in)	1
1U-6787	A60	3,600	203.2 mm x 25.4 mm x 25.4 mm (8 in x 1 in x 1 in)	1
1U-8285	A36	2,485	254 mm x 25.4 mm x 31.75 mm (10 in x 1 in x 1 1/4 in)	1
1U-8286	A60	2,485	254 mm x 25.4 mm x 31.75 mm (10 in x 1 in x 1 1/4 in)	1
1U-8289	A36	2,070	304.8 mm x 50.8 mm x 31.75 mm (12 in x 2 in x 1 1/4 in)	1
1U-8290	A60	2,070	304.8 mm x 50.8 mm x 31.75 mm (12 in x 2 in x 1 1/4 in)	1

### Arbor Adapter Bushings included (Stock one size — use it on two different grinding machines.)

Diameter	Center Hole	12.7 mm (1/2 in)	15.88 mm (5/8 in)	19 mm (3/4 in)	22.23 mm (7/8 in)	25.4 mm (1 in)
152.4 mm (6 in)	25.4 mm (1 in)	•	•	•		
177.8 mm (7 in)	25.4 mm (1 in)	•	•	•		
304.8 mm (8 in)	25.4 mm (1 in)		•	•	•	
254 mm (10 in)	31.75 mm (1 1/4 in)			•		•

## Flaring Cup Snagging Wheels (Type 11)

- Use on right angle or vertical machines.
- Use for grinding welds, cleaning castings, or grinding fins and parting lines from rough castings.
- Use for smoothing of weld seams and metal preparations prior to plating/painting.

Part No.	Grit Spec.	Max RPM	Large OD/Small OD x Thick x ID	Pkg. Qty.
1U-6817	A16	9,075	101.6/76.2 mm x 50.8 mm x 5/8 in-11 (4/3 in x 2 in x 5/8 in-11)	10
1U-6818	A16	7,260	127/95.3 mm x 50.8 mm x 5/8 in-11 (5/3 3/4 in x 2 in x 5/8 in-11)	10
1U-6819	A16	6,000	152.4/120.7 mm x 50.8 mm x 5/8 in-11 (6/4 3/4 in x 2 in x 5/8 in-11)	5

1U-6817



## Zirconium 4" Grinding Wheels - Type 27

- Ideal for the toughest applications and providing extremely long life.
- Very fast stock removal.
- Cooler running.
- Smoother, more consistent performance for operator.
- The best choice for stainless, castings, welding seams and hard metal grinding.

Part No.	Pkg. Qty.	Grade	Size
236-8070	50	Z/A 24	4"x1/4"x3/8"
236-8071	50	Z/A 24	4"x1/4"x5/8"
237-3653	50	Z/A 24	4"x1/4"x7/8"

## Zirconium 6" Grinding Wheels

- Designed for rough grinding applications on ferrous metal such as grinding/smoothing weld seams, cleaning and shaping metal surfaces.
- The high performance Zirconia offers much faster stock removal and longer life.

Part No.	Pkg. Qty.	Grade	Size
236-8061	1	A/O 24	6"x1/4"x7/8"
236-8062	1	ZIR 24	6"x1/4"x7/8"

## Thin Cut Abrasive Cutting Wheels

- High quality treated grain for long life.
- Ideal for sheet metal, steel tubing and solid stock.
- Great for cutting off bolts and rusted fasteners.

Part No.	Pkg. Qty.	Grade	Size
236-8066	1	A60	4-1/2"x.035"x7/8"
236-8067	1	A60	5"x.035"x7/8"
236-8068	1	A60	6"x.035"x7/8"

## Mandrel for Small Abrasive Wheels

- Flush head for confined work.
- Simple, quick change design.

Part No.	Pkg. Qty.	Dimension
236-8038	1	2" OALx1/4" Shank

## Miscellaneous

### Sanding Sheets

- Every workplace has uses for non-woven industrial hand pads—whenever surfaces must be conditioned by hand to make the surface look better or work better.
- Non-woven nylon abrasive webs are cut into 152.4 x 228.6 mm (6 in x 9 in) sheets to offer four grades of hand pads from heavy duty to ultra fine.
- Clean surfaces — remove rust, oxides, paint discoloration and other surface contaminants.
- Impart and blend cosmetic finishes on metal, or highlight wood finishes.
- Hand deburr metals and plastics quickly and economically with non-woven industrial hand pads.
- Shop rags, emery cloth, steel wool, and wire brushes can be replaced with industrial hand pads to save time, improve productivity, reduce costs and improve quality.
- Optional part: 4C-4175 Hand Pad Holder.



Hand Pad Holder

Part No.	Pkg. Qty.	Description	Color	Use With
8T-7752	20	High Productivity Sheet	Tan	Hand application, with or without 4C-4175. Hand Pad Holder.
8T-7753	20	Blending Hand Pad, Fine	Gray	Hand application, with or without 4C-4175. Hand Pad Holder.
8T-7751	20	Heavy Duty Hand Pad	Green	Hand application, with or without 4C-4175. Hand Pad Holder.
8T-7765	20	General Purpose Hand Pad	Maroon	Hand application, with or without 4C-4175. Hand Pad Holder.

### Cutting and Polishing Rolls

- A unique and aggressive material for cleaning, finishing deburring.
- Ideal as a utility bench roll.
- Used in similar application as Emery Rolls, but does not load up with material.

Mineral type	Aluminum oxide
Color	Tan
Grade	Very fine, medium



Part No.	Pkg. Qty.	Size	Grade	Use With
1U-5514	1	51 mm x 9 m (2 in x 30 ft)	Very Fine	Hand application or hand drill with 8T-7766 mandrel
1U-5515	1	51 mm x 9 m (2 in x 30 ft)	Medium	Hand application or hand drill with 8T-7766 mandrel
1U-5512	1	25.4 mm x 9 m (1 in x 30 ft)	Very Fine	Hand application or hand drill with 8T-7766 mandrel
1U-5513	1	25.4 mm x 9 m (1 in x 30 ft)	Medium	Hand application or hand drill with 8T-7766 mandrel



### Adapter — 8T-7766 Mandrel #935

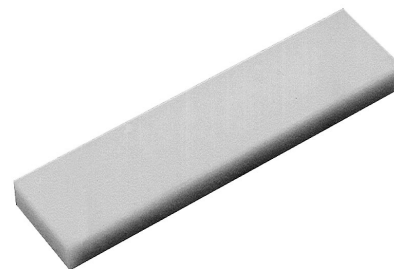
- Tear off strip and insert in the mandrel to use in corners and other hard to reach areas.
- Use on air drills.

Maximum operating speed	6,000 RPM with 25.4 x 38.1 mm (1 in x 1 1/2 in) flat stock (roll or hand pad)
Package quantity	5

### Emery Polishing Paper

- High quality, emery polishing paper which is required for salvage or cleaning of numerous Caterpillar parts.
- Light duty/fine polishing.

Part No.	Description	Dimension	Pkg. Qty.
6V-0083	4/0 grit	12.7 mm x 45.7 m (12 in x 50 yd)	1 roll
4C-3731	2/0 grit	12.7 mm x 45.7 m (12 in x 50 yd)	1 roll



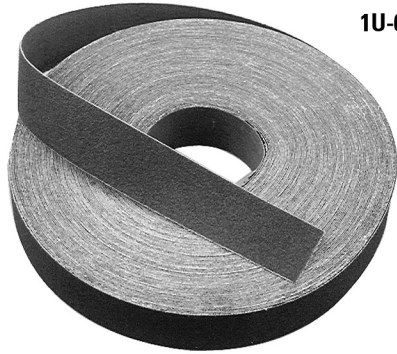
### 6V-2010 Polishing Stone

- Use this fine grade polishing stone to remove the sharp, raised edges of nicks and burrs on machine components.
- More useful than the emery paper where a burr or raised edge is large.
- Should always be used with a lightweight oil.

Dimensions	100 mm x 25 mm x 6 mm (4 in x 1 in x .25 in)
Package quantity	1

## Cloth Shop Rolls

- These cloth shop rolls are cut in various widths and can be torn to the desired length for hand deburring.
- For contour sanding, stripping, deburring, rust removal, cutdown prior to polishing, and all general maintenance work.



1U-6848

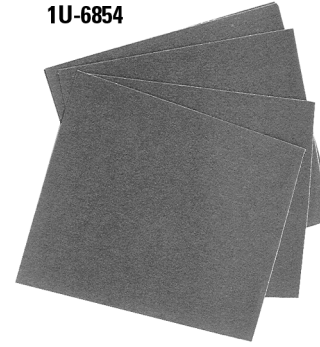
Part No.	Grit	Size Width x Length	Pkg. Qty.
1U-6848	60J	38.1 mm x 45.7 m (1 1/2 in x 50 yd)	1
4C-8522	80J	38.1 mm x 22.7 m (1 1/2 in x 25 yd)	1
4C-8523	120J	38.1 mm x 22.7 m (1 1/2 in x 25 yd)	1
4C-8524	180J	38.1 mm x 22.7 m (1 1/2 in x 25 yd)	1
1U-6849	80J	38.1 mm x 45.7 m (1 1/2 in x 50 yd)	1
1U-6850	120J	38.1 mm x 45.7 m (1 1/2 in x 50 yd)	1
1U-6851	180J	38.1 mm x 45.7 m (1 1/2 in x 50 yd)	1
1U-6852	240J	38.1 mm x 45.7 m (1 1/2 in x 50 yd)	1
1U-6853	320J	38.1 mm x 45.7 m (1 1/2 in x 50 yd)	1
1U-8274	60J	50.8 mm x 45.7 m (2 in x 50 yd)	1
1U-8275	80J	50.8 mm x 45.7 m (2 in x 50 yd)	1
1U-8276	100J	50.8 mm x 45.7 m (2 in x 50 yd)	1
1U-8277	120J	50.8 mm x 45.7 m (2 in x 50 yd)	1
1U-8278	180J	50.8 mm x 45.7 m (2 in x 50 yd)	1
1U-8279	240J	50.8 mm x 45.7 m (2 in x 50 yd)	1
1U-8280	320J	50.8 mm x 45.7 m (2 in x 50 yd)	1

## Sheets

- These sheets are used for sanding and metal surface preparation.
- Engineered for maximum economy, fast cutting and smoothing action.
- Excellent for scouring, deburring, scale and rust removal.

Part No.	Grit	Abrasive	Size	Pkg. Qty.
1U-6854	60J	Aluminum Oxide	228.6 x 279.4 mm (9 in x 11 in)	25
1U-6855	80J	Aluminum Oxide	228.6 x 279.4 mm (9 in x 11 in)	25
1U-6856	120J	Aluminum Oxide	228.6 x 279.4 mm (9 in x 11 in)	50
1U-6857	180J	Aluminum Oxide	228.6 x 279.4 mm (9 in x 11 in)	50

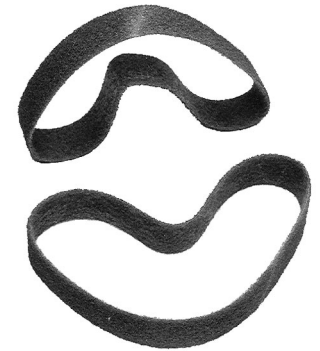
1U-6854



Part No.	Grit	Abrasive	Size	Pkg. Qty.
1U-6858	240J	Aluminum Oxide	228.6 x 279.4 mm (9 in x 11 in)	50
1U-6859	320J	Aluminum Oxide	228.6 x 279.4 mm (9 in x 11 in)	50
1U-8281	400A	Silicon Carbide	228.6 x 279.4 mm (9 in x 11 in)	50
1U-8282	500A	Silicon Carbide	228.6 x 279.4 mm (9 in x 11 in)	50
1U-8283	600A	Silicon Carbide	228.6 x 279.4 mm (9 in x 11 in)	50
4C-8510	Crocus	Ferrous Oxide	228.6 x 279.4 mm (9 in x 11 in)	50

## Surface Conditioning Belts

- Excellent tool to polish crankshafts.
- Ideal for high tension applications.
- Unique, reinforced construction delivers a uniform, consistent finish that can be applied with abrasive belt machinery.
- Surface conditioning belts are reinforced which allows the material to be spliced into a continuous belt.
- Their open construction resists loading and heat buildup that normally affects belt life and performance.
- As it wears, the surface conditioning material exposes fresh abrasive mineral to the work surface, providing consistent results throughout the belt's life.

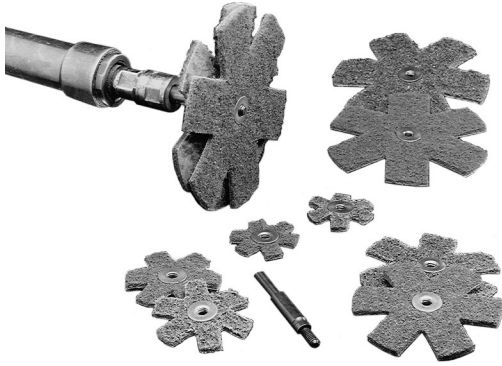


Density	5
Color	Tan
Grade	Super fine

Part No.	Pkg. Qty.	Wheel Size	Maximum Operating Speed	Optimum Operating Speed	Use With
6V-3044	12	25.4 mm x 165.1 cm (1 in x 65 in)	6,500 SFPM	5,500 SFPM	Abrasive belt machinery

## Cleaning and Polishing Stars

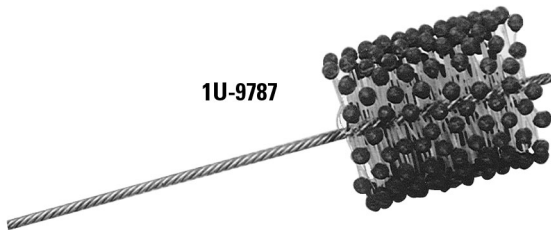
- Perfect choice for cleaning and polishing the inside diameters of pipe, tubing, cylinders and other interior spaces.
- Star shape allows the star tips to provide constant outward pressure on the walls to produce uniform and consistent results.
- Can be mounted singly or in multiples for efficient inside diameter cleaning and polishing operations.
- Adapter: 4C-8629 Mandrel.



Part No.	Pkg. Qty.	Diameter	Maximum Operating Speed	Optimum Operating Speed	Use With:
4C-8624	25	38.1 mm (1 1/2 in)	24,000	18,000	Straight-shaft Tools
4C-8625	25	50.8 mm (2 in)	24,000	18,000	Straight-shaft Tools
4C-8626	10	76.2 mm (3 in)	18,000	15,000	Straight-shaft Tools
4C-8627	10	101.6 mm (4 in)	18,000	15,000	Straight-shaft Tools
4C-8628	10	114.3 mm (4 1/2 in)	18,000	15,000	Straight-shaft Tools

**Surface Reconditioning Flex Hone Tools**

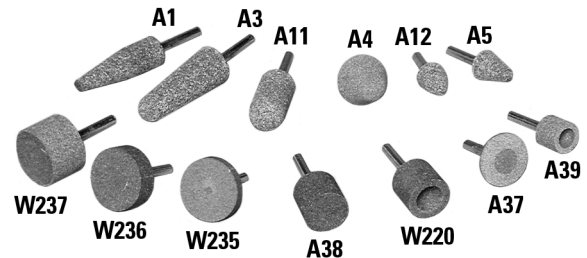
- The FLEX-HONE process (Superfinishing) produces a controlled surface condition that will result in:
  - Lowered oil consumption
  - Less blow-by
  - Less friction
  - Plateaued finish over 50%
  - Finish free from cut, and folded metal
- All abrasive is silicone carbide.
- Resilient, flexible, honing tool with soft cutting action.
- Abrasive (points) globules each have independent suspension that assures the hone to be self-centering, self-aligning to the bore, and self-compensating for wear.
- A low temperature abrading process that exposes the undisturbed base metal structure to produce a long wearing surface.
- Method of developing a surface on a metal part which is optically smooth and metallurgically free of any fragmented, amorphous or smeared metal from previous operations.
- Accomplished at a low pressure where the “stones” float.
- Hone crosshatch is extremely efficient in providing a multiplicity of oil grooves or valleys for oil retention as opposed to the uni-directional or uneven valleys common to the conventional type rigid hone. A crosshatch that usually remains as the cylinder wall has been wear-reduced by the hone.



Part No.	Pkg. Qty.	Engine Bore Size	Grit
4C-6322	1	101.6 mm (4 in)	180
4C-6323	1	107.95 mm (4 1/4 in)	180
4C-6324	1	117.3 mm (4 1/2 in)	180
1U-9787	1	120.65-127 mm (4 3/4 in-5 in)	180
4C-6325	1	133.5-137.16 mm (5 1/4 in-5.4 in)	180
4C-6326	1	146.05-152.4 mm (5 3/4 in-6 in)	180
4C-6327	1	158.75 mm (6 1/4 in)	180
4C-6328	1	169.92-177.8 mm (6.69 in-7 in)	180
4C-6329	1	190.5 mm (7 1/2 in)	180
4C-6330	1	203.2 mm (8 in)	180
4C-6331	1	241.3 mm (9 1/2 in)	180
4C-6332	1	60.33 mm (2 3/8 in)	240
4C-6333	1	79.38 mm (3 1/8 in)	240
4C-6334	1	92.08 mm (3 5/8 in)	240
1U-7428	1	101.6 mm (4 in)	240
4C-6335	1	104.78 mm (4 1/8 in)	240
4C-6336	1	114.3 mm (4 1/2 in)	240
4C-6337	1	12.7 mm (1/2 in)	320
4C-6338	1	15.88 mm (5/8 in)	320
4C-6339	1	19 mm (3/4 in)	320
4C-6340	1	25.4 mm (1 in)	320
4C-6341	1	38.1 mm (1 1/2 in)	320

**Mounted Points**

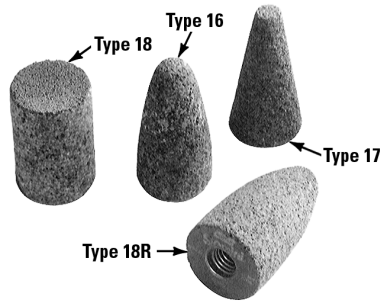
- Mounted wheels are used with horizontal or straight shaft, die and pencil grinders on jobs where larger wheels will not fit.
- Offer maximum performance for grinding ferrous metals.
- Accurate spindles ensure precision grinding and minimize run-out.
- A-shaped wheels are for medium to heavy-duty blending and contouring.
- W-shaped wheels are for off-hand and precision grinding of medium to heavy stock.



Part No.	Shape	Grit Spec.	Size Dia. x Length	Mandrel Dia.	Pkg. Qty.
1U-6820	A1	A36	19 mm x 63.5 mm (3/4 in x 2 1/2 in)	6.35 mm (1/4 in)	25
1U-6821	A1	A60	19 mm x 63.5 mm (3/4 in x 2 1/2 in)	6.35 mm (1/4 in)	25
1U-6822	A3	A36	25.4 mm x 69.85 mm (1 in x 2 3/4 in)	6.35 mm (1/4 in)	25
1U-6823	A3	A60	25.4 mm x 69.85 mm (1 in x 2 3/4 in)	6.35 mm (1/4 in)	25
4C-3845	A4	A60	31.75 mm x 31.75 mm (1 1/4 in x 1 1/4 in)	6.35 mm (1/4 in)	25
4C-3846	A5	A36	19 mm x 28.58 mm (3/4 in x 1 1/8 in)	6.35 mm (1/4 in)	25
1U-6824	A11	A36	22.23 mm x 50.8 mm (7/8 in x 2 in)	6.35 mm (1/4 in)	25
1U-6825	A11	A60	22.23 mm x 50.8 mm (7/8 in x 2 in)	6.35 mm (1/4 in)	25
4C-3849	A12	A36	26.9 mm x 31.75 mm (11/16 in x 1 1/4 in)	6.35 mm (1/4 in)	25
4C-3850	A12	A60	26.9 mm x 31.75 mm (11/16 in x 1 1/4 in)	6.35 mm (1/4 in)	25
6V-4802	A37	A60	31.75 mm x 31.75 mm (1 1/4 in x 1 1/4 in) (with hub)	6.35 mm (1/4 in)	25
1U-6826	A38	A60	25.4 mm x 25.4 mm (1 in x 1 in)	6.35 mm (1/4 in)	25
4C-3852	A39	A60	19 mm x 19 mm (3/4 in x 3/4 in)	6.35 mm (1/4 in)	25
4C-3853	W220	A60	25.4 mm x 25.4 mm (1 in x 1 in)	6.35 mm (1/4 in)	25
4C-3854	W235	A60	38.1 mm x 6.35 mm (1 1/2 in x 1/4 in) (with hub)	6.35 mm (1/4 in)	25
4C-3855	W236	A60	38.1 mm x 12.7 mm (1 1/2 in x 1/2 in) (with hub)	6.35 mm (1/4 in)	25
4C-3856	W237	A60	38.1 mm x 25.4 mm (1 1/2 in x 1 in)	6.35 mm (1/4 in)	25

## Cones and Plugs

- Use on horizontal shaft and vertical shaft grinders.
- Choose these for welding shop jobs such as:
  - Grinding and smoothing fillets and corners
  - Internal grinding
  - Blending contours
  - Work in confined areas
- Center holes have molded-in bushings, available in 5/8 inch-11 threads to fit most popular grinder spindles.



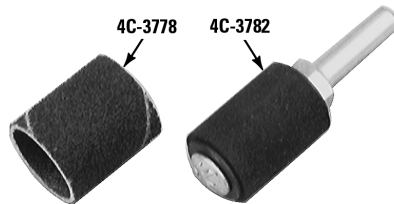
Available in four shapes:

- Type 16 with rounded tip for grinding mild contours or flat surfaces.
- Type 17 with square tip for beveling workpiece edges prior to welding.
- Type 18 square plugs for use on straight shaft grinders for work on flat surfaces.
- Type 18R also called pot balls, for work requiring straight sides and rounded tips.

Item	Part No.	Grit Spec.	Size OD x Length x Thread	Pkg. Qty.
Type 18	1U-6814	A24	38.1 mm x 63.5 mm x 5/8 in-11 (1 1/2 in x 2 1/2 in x 5/8 in-11)	10
Type 18R	1U-6815	A24	38.1 mm x 63.5 mm x 5/8 in-11 (1 1/2 in x 2 1/2 in x 5/8 in-11)	10
Type 16	1U-6812	A24	38.1 mm x 76.2 mm x 5/8 in-11 (1 1/2 in x 3 in x 5/8 in-11)	10
Type 18R	1U-6816	A24	50.8 mm x 76.2 mm x 5/8 in-11 (2 in x 3 in x 5/8 in-11)	10
Type 17	1U-6813	A24	63.5 mm x 76.2 mm x 5/8 in-11 (2 1/2 in x 3 in x 5/8 in-11)	10

## Spira Bands and Mandrels

- Ideal for grinding, blending, deburring, finishing and polishing flat and contoured surfaces.
- Design eliminates lap bumping marks, provides chatter free operation.
- Good alternative tools for flap wheels.



Part No.	Grit	Size	Pkg. Qty.
4C-3778	60	19 mm x 25.4 mm (3/4 in x 1 in)	1
4C-3779	60	25.4 mm x 25.4 mm (1 in x 1 in)	1
4C-3780	60	38.1 mm x 38.1 mm (1 1/2 in x 1 1/2 in)	1
4C-3781	60	50.8 mm x 25.4 mm (2 in x 1 in)	1
4C-3782	Mandrel 1/4 in	19 mm x 25.4 mm (3/4 in x 1 in)	1
4C-3783	Mandrel 1/4 in	25.4 mm x 25.4 mm (1 in x 1 in)	1
4C-3784	Mandrel 1/4 in	38.1 mm x 38.1 mm (1 1/2 in x 1 1/2 in)	1
4C-3785	Mandrel 1/4 in	50.8 mm x 25.4 mm (2 in x 1 in)	1

## Screen-Bak Durite Rolls

- Use for superfast make-ready of copper pipe joints.
- Removes scale, corrosion and oxidations without clogging — sanding residue falls through the backing.
- Long abrasive life and clean, tight connections are ensured.
- Silicon carbide abrasive grain is coated on both sides of an open weave, cloth backing.

4C-8522	1 1/2 in x 25 ft (Grit 80)
4C-8523	1 1/2 in x 25 ft (Grit 120)
4C-8524	1 1/2 in x 25 ft (Grit 180)

## Decal Removal Eraser

- Fast and easy method to remove vinyl decals, graphics, tapes, films and adhesives without damaging paint — no fire danger because the disc is non combustible.
- Unique construction of eraser assures long life and allows easy conformability to contours.
- Eraser is flexible and has no sharp edges — will not damage acrylic, enamel or urethane paint.



- (not recommended for use on acrylic lacquer paints or plexiglass)
- Faster and cleaner to use than solvent or chemical adhesive removers.
- RPM is critical for product performance — Maximum RPM is 2000; recommended RPM is 400 to 2,000.

Part No.	Description	Pkg. Qty.	Diameter	Use with:
226-0125	Decal Removal Eraser	1	101.6 mm x 12.70 mm (4 in x 1/2 in)	Electric or air Drill
226-0126	Retainer Arbor with 1/4 inch Shank	1	25.4 mm x 6.35 mm (1 in x 1/4 in)	

## Carbide Burs - Made in the U.S.A.

- Ideally used on high speed die grinders. These “double cut” designed burs provide rapid stock removal in tough applications. Produces small chips. A variety of shapes for most applications.
- Excellent for grinding and shaping most metallic and non-metallic materials.

Part No.	Pkg. Qty.	Shape	Size
236-8093	1	Egg	3/8" x 5/8"
236-8094	1	Ball	3/8"
236-8095	1	Pointed Tree	3/8" x 3/4"
236-8096	1	Cylindrical	3/8" x 3/4"
236-8097	1	Round Nose	3/8" x 3/4"
236-8098	1	Cone Radius End	3/8" x 1-1/16"
236-8099	1	Round Nose	1/4" x 5/8"
236-8100	1	Flat End Cut	1/8" x 9/16"
236-8101	1	Round End	1/8" x 9/16"

## Aluminum Carbide Burs

- For use with non-ferrous metals and non-metallic materials. The wide clearance and end mill type geometry of the flutes promotes fast stock removal with minimum loading.

Part No.	Pkg. Qty.	Shape	Size
236-8103	1	Round Nose	3/8" x 3/4"
236-8104	1	Cylindrical	3/8" x 3/4"