

## Special Purpose Tools



ARO has built a reputation on customer-oriented problem solving. A big factor is the continuing commitment to meet unique customer needs with Special Purpose Tools.

Special Purpose Tools are regular production models that fill applications outside of assembly and finishing roles. For example, the popular MARXAL™ marking pen can be used to scribe glass for cutting or to mark welds and other surfaces for identification. ARO electrode dressers extend the life and improve the performance of welding equipment. They eliminate the need to remove and recondition or replace electrodes by dressing them in position, in seconds. Once dressed, the electrode is restored to the proper shape for producing uniform, high quality results with reduced energy consumption. ARO offers the most complete line of electrode dressers, cutters, holders, and adapters in the industry. ARO also offers chisel and needle scaling hammers for removing weld flux, rust, or heavier material.

When unusual applications create the need for tailor-made solutions, ARO responds as well . . . through the Custom Tools department. ARO Custom Tools are modified versions of standard products that meet highly specialized assembly or finishing requirements. Some examples include laminate trimmers, short or small diameter pad orbital/random orbital sanders, extended buffing tools. Your ARO distributor or representative can provide more details on Custom Tools capabilities and existing designs.

After the Special Purpose Tools section, you'll find information on ARO general accessories, such as the exclusive Air Transfer Bail, service kits, grips and flanges, and more. Warranty information follows, along with a quick reference index for all tools covered in this catalog, and ARO Tool Products contact information.

<b>Marxal Marking Pen</b> .....	Pg. 88
A comfortable, easy to use tool for making products and tooling for identification.	
<b>Peening and Scaling Hammer</b> .....	Pg. 88
With Alloy-Steel hammer tip for surface preparation.	
<b>Laminate Trimmer</b> .....	Pg. 88
Excellent tool for fast, accurate trimming of plastic laminates.	
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The fast, economical solution to restoring worn electrode tips.	
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General accessories and ergonomic enhancements for optimum performance and productivity.	
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The ARO MARXAL marking pen can be used on all types of material for fast, convenient identification.



# Marxal Marking Pen Peening & Scaling Hammer

## Special Purpose Tools

### MARXAL™ Marking Pen

- Comfortable, easy-to-use tool for marking products or tooling for identification.
- A popular tool for marking welds for identification.
- Can be used to scribe a line on glass for cutting.
- Choice of fine, medium or coarse marking point.

#### Standard Equipment

- Medium Point
- 6' X 1/8" (1.8m X 3.2mm) Air Hose



8315

#### Marxal Marking Pen

Model No.	Throttle Type	Strokes per Minute	Standard Point Type	Exhaust Location	Tool Length in. mm	Tool Weight lbs kg	Air Consup. @ Free Speed cfm L/s	Standard Point Part No.
8315	Twist	36,000	Medium	Front	6.4 163	4.8 .13	1.5 .7	39862-2

- Most Popular Model Hose Inlet – 1/4" NPTM Recommended Air Pressure – 90 PSI (6.2 bar)

#### No Cost Options (Order "with" Options)

For Models	Part No.	Description	Substituted for Standard
8315	39862-1	Fine point	Medium point
8315	39862-3	Coarse point	Medium point

### Peening and Scaling Hammer

Furnished complete as illustrated with:

- 1/4" female N.P.F.T air inlet
- Alloy-Steel hammer tip

#### Peening and Scaling Hammer

Model No.	Throttle Type	Blows per Min.	Head Height	Tool Weight
7002	Button	5,000	2 1/2"	10 1/2 oz

Recommended Hose Size – 5/16"



7002

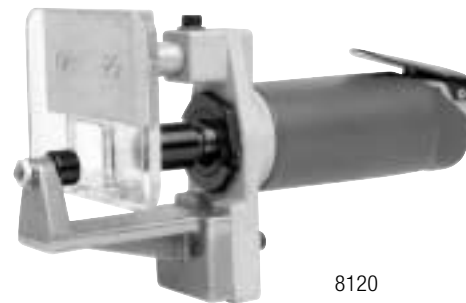
### Laminate Trimmer

20,000 rpm /0.5 hp (.34 kW)

- Excellent tool for fast, accurate trimming of plastic laminates.
- May be operated in either the vertical or horizontal plane.

#### Standard Equipment

- Collet
- Collet Wrenches



8120

#### Laminate Trimmer

Model No.	Free Speed rpm	Throttle Style	Standard Collet Size in. mm	Exhaust Location	Tool Height in. mm	Tool Width in. mm	Tool Weight lbs kg	Air Consup @ Free Speed cfm L/s	Sound Level @ Free Speed dBA	Standard Collet Part No.
8120	20,000	Lever	1/4 6	Front	7.8 198	2.5 64	1.9 .86	27 13	84	33226-8

- Air Inlet – 1/4" NPTF Recommended Air Pressure – 90 PSI (6.2 bar) Recommended Hose Size – 3/8" (10 mm) i.D.

#### No Cost Options (Order "with" Options)

For Models	Part No.	Description	Substituted for Standard
8120	33226-()	Erickson Collet	Erickson Collet

# Portable Electrode Dressers

## Special Purpose Tools

### The Economical Solution to Dressing Worn Electrode Tips.

#### Dressing Electrodes vs. New Tips

Worn electrode tips produce either poor welds or no welds at all, limiting both quality and productivity. Two possible solutions to worn tips are to (1) replace them with new, or (2) recondition existing tips on either a lathe, drill press, or with a portable ARO Electrode Dresser.

Replacing tips is a costly and time consuming alternative. Reconditioning tips on standard machine shop equipment, although providing uniformly dressed electrodes, cuts valuable production time. Reconditioning worn tips with an ARO Electrode Dresser, however, is a convenient, economical solution that minimizes downtime.



7165-B (22 Series)



8040-E (2200 Series)

#### Dressing Electrodes with ARO's Portable Electrode Dresser

Reconditioning with an ARO pneumatic Electrode Dresser is a quick, easy, and accurate method of dressing worn electrodes. Downtime is virtually eliminated because each electrode is automatically dressed in seconds with precision, without removing the tip from the machine.

Once dressed, the electrode has a perfectly shaped tip for producing uniform, quality welds. Furthermore, a properly shaped electrode top reduces energy consumption during the welding process and greatly extends electrode life.

#### ARO Portable Electrode Dressers

ARO offers two models of electrode dressers in several speed options. Both models accept a wide variety of blade and solid-type cutters to accurately dress electrodes from 5/16" to 1 1/2" diameter. They are lightweight and easy to operate, requiring no special training for the operator.

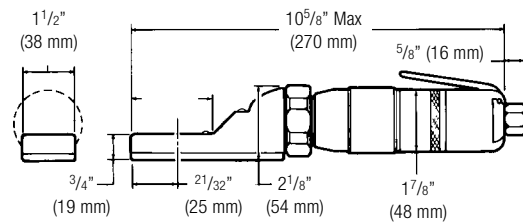
The "22" Series Electrode Dresser is the most popular model and provides adequate power to dress most electrode tips. For larger electrodes where a lot of material must be removed during the dressing operation, the "2200" Series Electrode Dresser is recommended. Three speed options are available in the "2200" Series, with the lower speeds providing more dressing power at a slower material removal rate.

To reduce production downtime, increase electrode tip life, reduce energy consumption, and maintain quality welds, recondition your worn electrode tips with an ARO Portable Electrode Dresser.

#### 22 Series

Model No.	rpm	Electrode Capacity	Air Inlet	Recommended Hose Size	Weight
7165-B	1500	5/16" D to 1 1/2" D	1/4" NPT(F)	5/16" I.D.	3.5 lbs

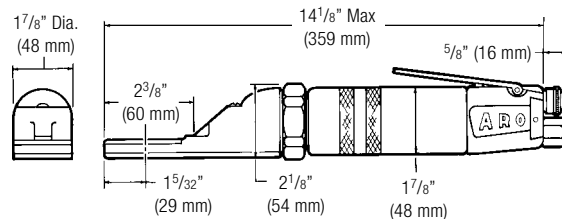
Extra Cost Options: Cutter blades and adapters. Order separate. See pages 89-92.



#### 2200 Series

Model No.	rpm	Electrode Capacity	Air Inlet	Recommended Hose Size	Weight
8038-E	250	5/16" D to 1 1/2" D	1/4" NPT(F)	5/16" I.D.	5.5 lbs
8039-E	450	5/16" D to 1 1/2" D	1/4" NPT(F)	5/16" I.D.	5.5 lbs
8040-E	1000	5/16" D to 1 1/2" D	1/4" NPT(F)	5/16" I.D.	4.6 lbs

Extra Cost Options: Cutter blades and adapters. Order separate. See pages 89-92.



# Portable Electrode Dressers

## Special Purpose Tools

### Electrode Tip Cutters and Cutter Accessories

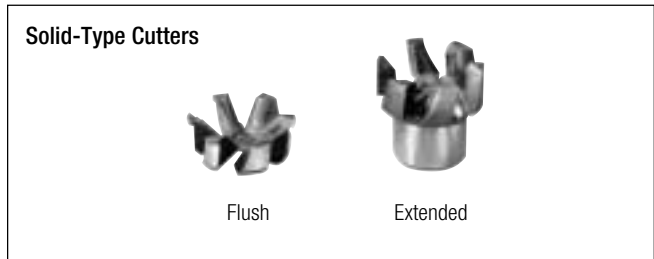
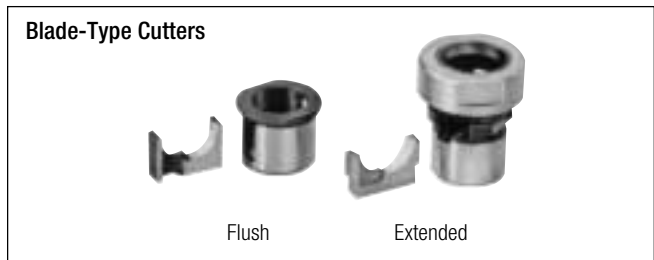
In addition to portable electrode dressers, ARO also offers a wide selection of both blade and solid-type cutters (pages 89-92), as well as cutter holders, extensions and trimmers (page 92) to accommodate a variety of electrode tips and welding machine set-ups. See the illustration below for the various cutter mounting options.

Both blade and solid cutters are available for flush or extended mounting on ARO Electrode Dressers. Flush style cutters allow access in confined areas, requiring a minimum clearance of only  $\frac{3}{4}$ " between welding faces. Extended style cutters are ideal where the center-to-center distance between electrodes is less than 1", as is the case in many multiple-point and short-stroke stationary welders, but require a minimum clearance of  $1\frac{1}{2}$ " between welding faces. A 1" extension adapter is also available to mount either flush or extended style cutters. For electrodes that have become "mushroomed" with extensive use, preventing a cutter from completely dressing the entire tip, trimmer-type blade holders are available.

### Blade vs. Solid-Type Cutters

Blade-type cutters produce the most accurate reconditioned tip since they are honed to the exact profile of the electrode tip and float in a guide that automatically centers the blade on the electrode. They are more economical than solid cutters in that they are lower priced and easily factory resharpened. Recommended for use on straight electrodes and at higher operating speeds.

Solid-type cutters are of a rugged, one-piece construction, with a series of permanent cutting edges shaped to the electrode tip's contour. Their cutting action is much faster than the blade-type's, thus, minimizing the time of the actual dressing operation. Limitations of the solid cutter, however, include their high cost and the difficulty of resharpening the cutting edges. Recommended for use on tapered electrodes and at lower operating speeds.

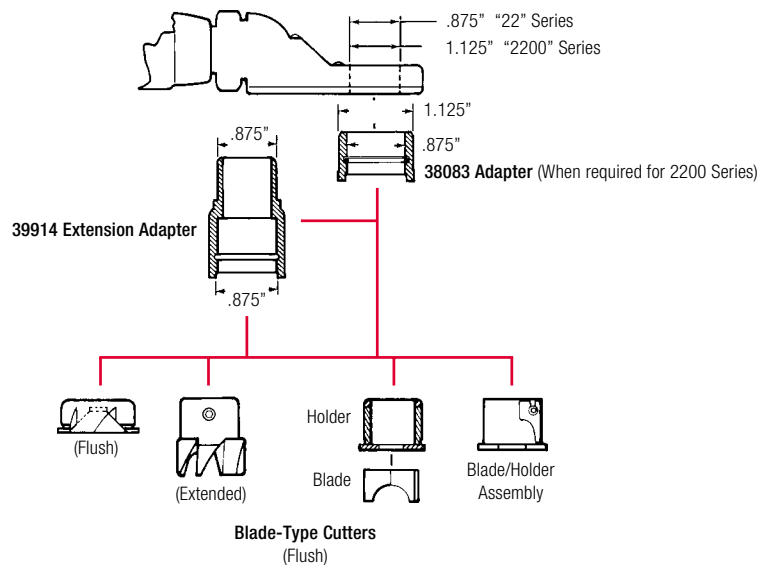


### How To Order Electrode Cutters

To order electrode cutters, locate the diameter electrode to be dressed on pages 89-92, the type of cutter desired (solid or blade), and the electrode tip contour. The electrode tip profiles are drawn to scale, so they can be used as a convenient reference when exact contour measurements are not known. The chart directly below each profile shows the cutter, holder, adapter (where required) to be used for the 22 and 2200 Series Electrode Dressers. Cutter numbers in regular type are flush style; those in italics are extended style. Holders and/or adapters where required must be ordered separately.

Note: Consult factory about cutters for electrode tips not shown here.

### Cutter / Holder / Adapter Arrangements

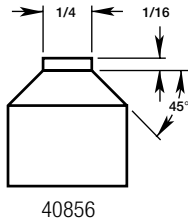


# Portable Electrode Dressers

## Special Purpose Tools

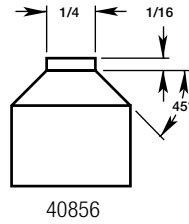
### Solid-Type - 0.3625 Dia. (9.2 mm)

Series	Cutter
2200	40856



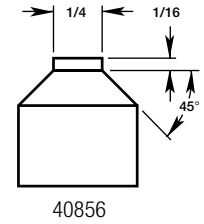
### Solid-Type - 0.437 Dia. (11.1 mm)

Series	Cutter
2200	40856



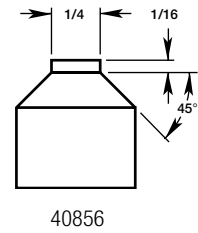
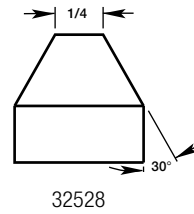
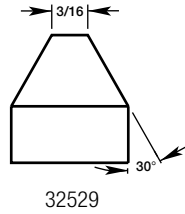
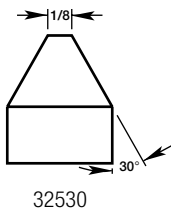
### Solid-Type - 0.460 Dia. (11.7 mm)

Series	Cutter
2200	40856



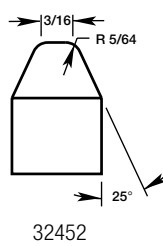
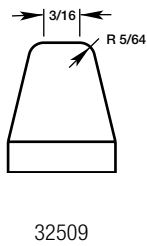
### Solid-Type - 0.482 Dia. (12.2 mm)

Series	Cutter	Adapter	Cutter	Adapter	Cutter	Adapter	Cutter
22	32530	-	32529	-	32528	-	-
2200	32530	38083	32529	38083	32528	38083	40856



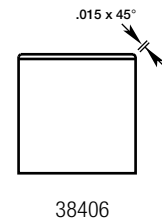
### Blade-Type - 0.482 Dia. (12.2 mm)

Series	Cutter	Adapter	Cutter	Holder	Adapter
22	32509	-	32452	38409	-
2200	32509	38083	32452	38409	38083



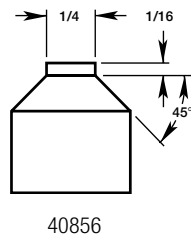
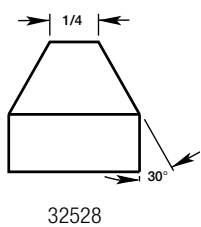
### Blade-Type - 0.482 Dia. (12.2 mm)

Series	Cutter	Adapter
22	38406	-
2200	38406	38083



### Solid-Type - 0.490 Dia. (12.4 mm)

Series	Cutter	Adapter	Cutter
22	32528	-	-
2200	32528	38083	40856

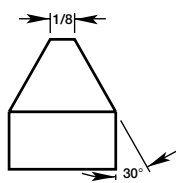


# Portable Electro Dressers

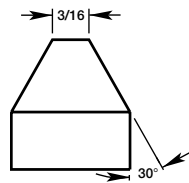
## Special Purpose Tools

### Solid-Type - 0.500 Dia. (12.7 mm)

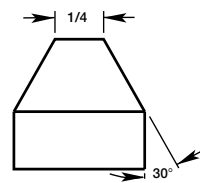
Series	Cutter	Adapter	Cutter	Adapter	Cutter	Adapter	Cutter
22	32530	-	32529	-	32528	-	-
2200	32530	38083	32529	38083	32528	38083	40856



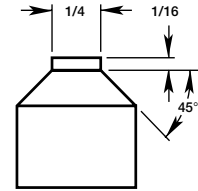
32530



32529



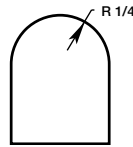
32528



40856

### Blade-Type - 0.500 Dia. (12.7 mm)

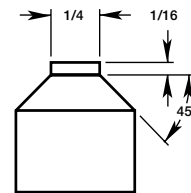
Series	Cutter	Holder	Adapter
22	32283	32288	-
2200	32283	32288	38083



32283

### Solid-Type - 0.588 Dia. (14.9 mm)

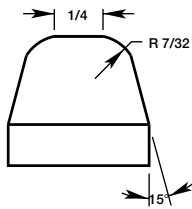
Series	Cutter
2200	40856



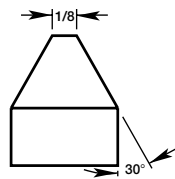
40856

### Solid-Type - 0.625 Dia. (15.9 mm)

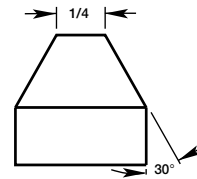
Series	Cutter	Adapter	Cutter	Adapter	Cutter	Adapter
22	40278	-	32530	-	32528	-
2200	40278	38083	32530	38083	32528	38083



40278



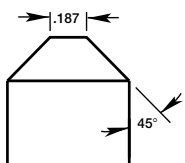
32530



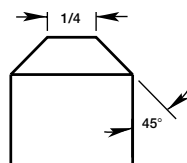
32528

### Solid-Type - 0.625 Dia. (15.9 mm) Continued

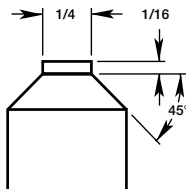
Series	Cutter	Cutter	Cutter	Cutter	Cutter
2200	38417-1	38417-2	40856	38419-2	38171



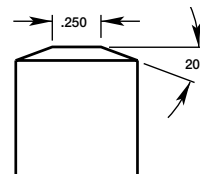
38417-1



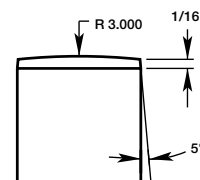
38417-2



40856



38419-2

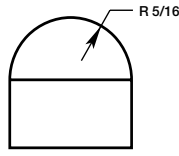


38171

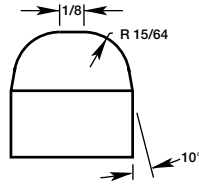
Portable Electrode Dressers  
**Special Purpose Tools**

**Blade-Type - 0.625 Dia. (15.9 mm)**

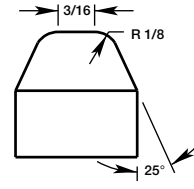
Series	Cutter	Holder	Adapter	Cutter	Holder	Adapter	Cutter	Holder	Adapter
22	32284	32282-2	-	32455	32282-2	-	-	-	-
2200	32284	32282-2	38083	32455	32282-2	38083	32453	32282-2	38083



32284



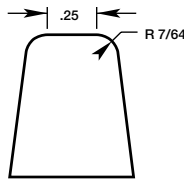
32455



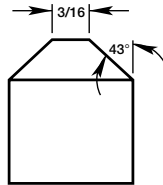
32453

**Blade-Type - 0.625 Dia. (15.9 mm) Continued**

Series	Cutter	Adapter	Cutter	Holder	Adapter
22	32510	-	33090	32282-2	-
2200	32510	38083	33090	32282-2	38083



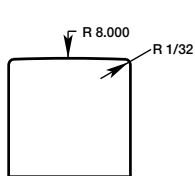
32510



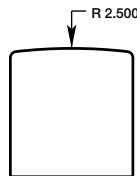
33090

**Blade-Type - 0.625 Dia. (15.9 mm) Continued**

Series	Cutter	Holder	Adapter	Cutter	Holder	Adapter
22	40907	32282-2	-	32491	32282-2	-
2200	40907	32282-2	38083	32491	32282-2	38083



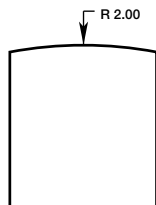
40907



32491

**Blade-Type - 0.625 Dia. (15.9 mm) Continued**

Series	Cutter	Holder	Adapter
22	38408	-	-
2200	32447	32282-2	38083
2200	38408	-	38083



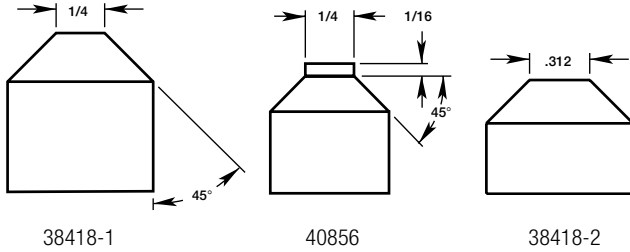
38408  
32447

# Portable Electrode Dressers

## Special Purpose Tools

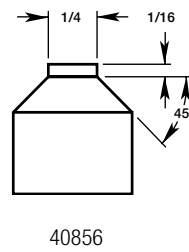
### Solid-Type - 0.750 Dia. (19.1 mm)

Series	Cutter	Cutter	Cutter
2200	38418-1	40856	38418-2



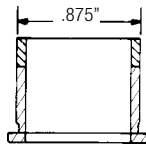
### Solid-Type - 0.875 Dia. (22.2 mm)

Series	Cutter
2200	40856

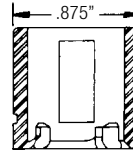


### Flush-Type

For use on both "22" and "2200" Series Electrode Dressers. Requires 38083 adapter for "2200" Series tools.



Standard-Type  
Blade Holder

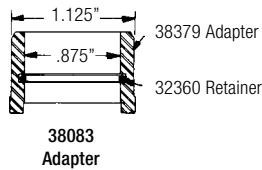


Trimmer-Type  
Blade Holder

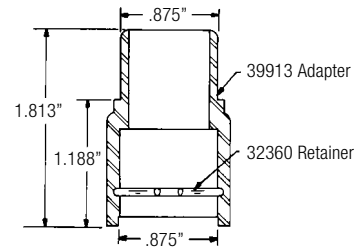
Electrode Dia.	Holder No.	Type
0.482	38409	Trimmer
0.500	32288	Standard
0.625	32282-2	Standard

### Adapters

To permit "2200" Series tools, which normally drive 1.125" O.D. cutters and holders, to utilize all .875" O.D. cutters and holders.



38083  
Adapter



39914 Extension  
Adapter

Use when a .875 O.D. holder or cutter is required in an extended position from the tool. 38083 adapter is required for use on "2200" Series tools.