## STAR TOOL SUPPLY / GRAND TOOL SUPPLY

## **GRINDING WHEEL DRESSERS SERIES 191:**







Sturdy construction. Made of cast iron. These dressers will quickly remove the load from grinding wheels and present a new and fast grinding surface.

For use on wheels		Order	
Diameter	Face	No.	Price
Up to 10	2	1910000	
10-16	3	1910001	
16-36	3-1/2	1910002	

#### **EXTRA CUTTERS FOR GRINDING WHEEL DRESSERS**

For use with	Order No.	Price
1910000	1911000	
1910001	1911001	
1910002	1911002	



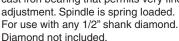
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Superior Import

## RADIUS DRESSER

**SERIES 191:** For Surface Grinders

This radius dresser shapes and dresses grinding wheels from below so that there is no need to remove the grinder wheel guard. The shaft is of hardened ground steel, turning in a cast iron bearing that permits very fine



Capacity ..... 7" Convex radii up to..... 1-3/4" Concave radii up to..... 4" Width..... 2-1/4" Length..... 7" Height ..... 5" Weight ..... 6lbs.

Order No. 1425007 **Price** 

## PROFILE WHEEL DRESSER **SERIES 465:**

• Extremely accurate, this radius and angle dresser can dress 2 angles tangent to a radius in one continuous motion to within .0001" (0.002mm).

- Fast and easy set-ups without elaborate accessories: only tools needed are a micrometer and a hex key wrench.
- Precise and sharp contours, concave or convex, are consistently obtained at a full 180° range.
- Made from hardened, ground and lapped alloy tool steel.
- No exposed wear surfaces. Swivels on sealed bearings.
- · Wheel dresser is furnished complete with base featuring one inch adjustment.
- Graduation micrometer knob provides fine adjustment to accurately dress small radii.

Overall Height 7"
Dimensions 4-3/4 x 3-1/2 x 1-1/4"H
Range of Convex Radii 0 - 1.500"
Range of Concave Radii030 - 1.500"
Wheel dressing capacity 8" diameter
Height to center of diamond 6- 1/2"
Weight 23 lbs.

Order No. 4651012 **Price** 

Tel: 201-518-8461 / Fax: 201-596-3427 650 Huyler St / So. Hackensack, NJ 07606 USA

### **PUNCH FORMER**

**SERIES 465:** 



For dressing grinding wheel into various cross sections or flat or curved shapes.

#### **Optional Accessory**

Oscillating V-block for tangent dressing



Max. dia. workpiece..... 1-1/4" V-Block..... 1-3/16' Tangential Travel (either side of center)..... 25/32" V-Block Adjusting System..... Rack & pinion Center Height..... 3-1/2" Indexing Div...... 24 every 15° ± 10 sec. Roundness.......0001"

> Parallelism..... within .0001" in 4" Squareness..... within .0002" in 4" Graduation..... 360°

Order No. 4651015 **Price** 

(Includes optional V-block)

# RADIUS AND ANGLE DRESSER

SERIES 465:



Suitable for all O.D., I.D., and surface grinding operations. Included center line gage ensures accurate setting of diamond. Critical parts are hardened and ground to close tolerances. Both radius and angle dressing are controlled by a knob so that the operator's hands remain far from the point of contact. Uses standard 3/8" shank diamonds. Diamond included.



Maximum dia. of wheels ..... 12"\* Internal Radii ..... 5/8" - 1-5/8"\*\* External Radii ..... 0 - 1-5/8" Height of Center ..... 4" Tangent travel from center ..... 1-5/8" Overall Length ..... 13-1/2" Weight ..... 20lbs.

**Included Accessories:** 

\*15" with extension \*\* 1/32" - 1-5/8" with Rat-Tail Adaptor

Order No. 2580000 **Price** 

# **VISI-DRESS RADIUS AND** ANGLE DRESSER



- 1° Vernier markings for dressing angles.
- Magnification, through hole in the spindle, makes it possible for the operator to see how to dress the form on the grinding wheel.
- Fixed Focus Lens (3X)
- · Wheel form grinding done easily and accurately
- Furnished with 90° phonopoint diamond
- Compact design

• Case	Overall Height 4"
	Length 8-1/4"
	Swing Arm 180°
	Max. Size Grinding Wheel 8"
Max. 0	Outside Radius (on wheel) 5/8" approx
Max	. Inside Radius (on wheel) 1" approx.
	Spindle 1" O.D.
	Maight 11 lbs

Weight ...... 11 lbs. Order No. 4651014 Price





## **END MILL GRINDING FIXTURE**

**SERIES 355:** 







For grinding FACES ONLY. Solid ball stops with 15 1/2° spacing allows fast and easy set ups for sharpening 2, 3, 4, 6 and 8 flute end mills. Fixture uses 5-C collets so that all end mills with shank diameters from 1/16" through 1-1/8" can be ground. Clearance and relief angles are built into solid 2-1/2" x 4-1/4" base having a ground bottom.

Meda Order No. 2085000

**Price** 

Eagle Rock Order No. 3550205

**Price** 

# END MILL SHARPENER

SERIES 355:





- Quickly and accurately sharpen
- 2, 3, 4, 6 and 8 fluted end mills in your own plant.
- Built in clearance and relief angles
- Column is spring loaded for constant bearing with base.
- Precision ground base (5" x 5") for use on magnetic chucks
- Includes 1 each; 3/8", 1/2", and 5/8" bushings; others available

Order No. 3450000

**Price** 

### Optional accessories:

3/4" I.D. Bushing

Order No. 3550048

**Price** 

1" I.D. Bushing

Order No. 3550064

**Price** 

## DRILL GRINDING ATTACHMENT **SERIES 356:**





- Accurately sharpens all drill bits with diameters from .1181 thru .750"
- Dial drill point angle and unit automatically adjusts to give correct clearance angle.
- For use with bench or surface grinders

Order No. 3560000 **Price** 

Tel: 201-518-8461 / Fax: 201-596-3427 650 Huyler St / So. Hackensack, NJ 07606 USA

### CUTTER GRINDING FIXTURE

SERIES 356:





For sharpening standard cutters and for grinding angles and radii.

Quickly and easily converts your surface grinder into a grinder for cutters up to 6" diameter and 1" width. Bore diameters of 7/8", 1-1/4", and 1-1/2" are accommodated.

Order No. 3750206

**Price** 

## **WOODRUFF CUTTER GRINDING FIXTURE**

**SERIES 356:** 





A fast and easy way to regrind any size Woodruff Cutters with 1/2" shank

Order No. 2095000

**Price** 

### **ENDMILL & CUTTER SHARPENER**

**SERIES 354:** 





- Carbide ball bearings for minimum wear and vibration.
- Spindle bearings require no air, hydraulic, or delicate adjustments.
- Rigid finger holder and bar for best precision finish.
- Micrometer Dial for setting adjusting finger for cutting edge clearance.
- Nearly point contact assures no surface for dirt or grit to accumulate.
- Rocker Arm enables fast indexing and brings cutter to wheel. Accepts cutters with diameters up to 12" when using riser blocks.
- Includes 2 spindles and 4 bushings to cover 3/16" through 1-1/4" shank end mills.

Weight: 35 lbs.

Order No. 2080000

**Price**