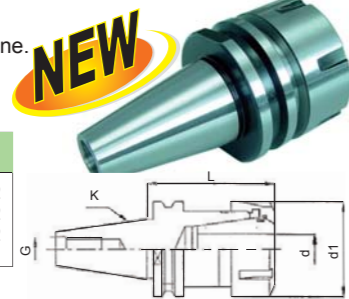


## Tooling 7:24 Collet Chuck ER Wood Working Line Machines

Features:  
Used in CNC wood - working machine.  
Accuracy: 0.01mm  
Hardness: HRC 50~55°



Model No.	d	d1	L	K	G
CD30ER16	Φ1-Φ10	Φ28	45	ISO30	M12
CD30ER25	Φ1-Φ16	Φ42	45	ISO30	M12
CD30ER32	Φ2-Φ20	Φ50	50	ISO30	M12
CD25ER16	Φ1-Φ10	Φ28	35	ISO25	M8

## Punch Formers & Radius Dressers

Features:

- For concave and convex radius
- Hardened tool steel construction
- Radius dresser standard with both models
- Compare to units costing 2 or 3 times as much
- Complete with fitted carrying case



With oscillating V-block for tangent dressing

Model No.: PGF

Grinding wheel Applications  
Punch Forming Applications



### Specification

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

## Visi-Dress Radius and Angle Dresser

Features:

- 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
- Dresser is tested and guaranteed for accuracy
- Furnished with 90° phonopoint diamond in 1/8" shank
- Case included

Specifications:

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



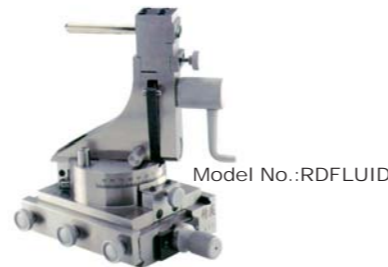
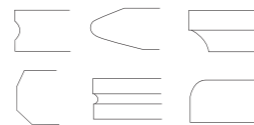
Model No.: RDFV

## Profile Wheel Dresser

Features:

- 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 setups without elaborate accessories; only tools needed are a micrometer and a hex key wrench
- Setup to dress 2 angles takes less than 15 seconds and 1 radius plus 2 angles approx. 3 minutes only
- 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, swivel on sealed bearings
- Wheel dresser is furnished complete with base featuring one-inch adjustment
- Graduated micrometer knob provides fine adjustment to accurately dress small radius

Profile Examples



Model No.: RDFLUID

### Specifications

Range of convex radius.....	0-1.500"
Range of concave radius.....	.030-1.500"
Wheel dressing capacity.....	8" dia.
Height to center of diamond.....	6-1/2"
Overall height.....	7"
Dimensions.....	4-3/4 x 3-1/2 x 1-1/4"H

## Radius & Angle Dressers

Features:

- Extremely accurate and versatile unit which may be used on all O.D., I.D. and surface grinding operations.
- Knob-A controls radius dressing and Knob-B controls angle dressing.
- At no time are the hands near the point of contact.
- All moving parts are tapped, and the unit has adjustable gibs for take-up of future wear.
- Accepts 3/8" diameter diamond dresser.

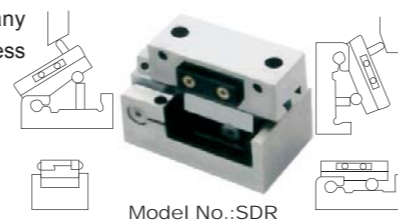


Accuracy:  
Squareness of faceplate to dress arm per 2" ..... .0005"  
Squareness of faceplate to base ..... .0006"  
Center runout of dovetail groove to wheel center ..... .0006"

Specification	Model No.: RAD-10	RAD-12
Max. dia. of wheel .....	10"	12"
Convex radii .....	0-1-3/16"	0-1-5/8"
Concave radii .....	0-1-3/16"	5/8-1-5/8"
Tangent travel either side of center .....	1.20"	2"
Center line of tool .....	3"	3.4"
Overall length .....	13.66"	16.61"

## Sine Dresser

- Dresses grinding wheels to any angle from 0-60° with smoothness and accuracy
- Cross feed up to 50mm, center distance .01mm
- Sine angle absolutely accurate
- Weight: 31 lbs



Model No.: SDR

## 5C End Mill Grinding Fixture

Features

- Grinds 2,3,4,5,8 and 12 flute end mill and shell end mills, faces only
- Clearance and relief handles are built into the base to assure accuracy
- Solid 2-1/2" x 4-1/2" base is ground on the bottom



Model No.: EMGF

## Precision Duplex Dresser

- Dress any custom width up to 1-9/16"
- Designed to simultaneously dress both sides of a grinding wheel, precisely and without deformation
- Useful for thinning grinding wheels or dressing thin wheels



Model No.: DDP

Specifications

Max. Width of Wheel.....	40mm (1-9/16")
Max. Dressing Depth.....	40mm (1-9/16")
Min. Dressing Width.....	0.2mm (0.0079")
Graduation.....	.02mm (0.0001")
Weight.....	.72 lbs

## Brake Turning Unit

- Use for dressing diamond and CBN wheels
- Axis part is fixed with shaft bearing and rotates at high speed with great precision
- Surface is treated with blaze-dried lacquer
- N.W 4kg

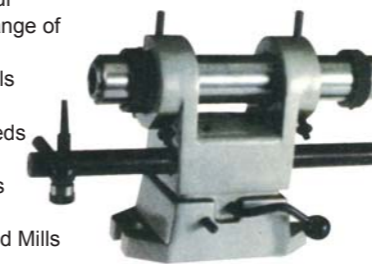


Model No.: FWD

## End Mill Cutter/Sharpener

Dia of shank of end mill	Out dia of cutter	Overall length	Width	Height of center
3/16, 3/8, 1/2"	11.81	330	146	152

- Complete with all attachments, such as spindles, bushings, etc., to cover the full range of 3/16" up to 1-1/4" shank end mills
- The end Mill sharpening Unit will accept cutters up to 12"
- You can quickly sharpen cutters and end mills right in your own shop on your regular tool or surface grinder
- Only two spindles and four bushings cover the full range of 3/16, 3/8, 1/2, 5/8, 3/4, 7/8, 1 and 1-1/4" shank end mills
- One unit can handle the complete sharpening needs for the shop
- No need to send out tools for sharpening
- Accepts Double - End End Mills



Model No.: SFEM

## Boring Heads & Sets

### Boring Heads

Features

- Design assures superior rigidity for chatter-free boring and precise hole size accuracy
- Bar holder moves freely and smoothly
- When in place, it holds firmly against tool cutting pressures
- Rugged construction and maximum bearing surface between the sliding gib and the body



Model No.	Head Size	Tool Capacity	Thread Mount	Offset
BH-2	2"	1/2"	7/8"-20	5/8"
BH-3	3"	3/4"	1-1/2"-18	3/4"
BH-4	4"	1"	1-1/2"-18	1-5/8"

### Boring Head Shanks

Shanks For 2" Boring Heads With 7/8"-20 Thread (Bh-2)

Shanks For 3" & 4" Boring Heads With 1-1/2"-18 Thread

Model	Diameter	Model	Diameter
SKA-1/2	1/2" Straight Shank	SKB-7/8	7/8" Straight Shank
SKA-5/8	5/8" Straight Shank	SKB-1	1" Straight Shank
SKA-3/4	3/4" Straight Shank	SKB-1-1/4	1-1/4" Straight Shank
SKA-7/8	7/8" Straight Shank	SKB-1-1/2	1-1/2" Straight Shank
SKA-1	1" Straight Shank	SKB-R8	R8 Bridgeport Shank
SKA-R8	R8 Bridgeport Shank		

### Boring Head Sets

- All Sets Include:
- Boring Head
  - Choice of Shank From Below
  - C6 Carbide-Tipped Boring Bar Set



Model No.	Head Size	Tool Capacity	Shank Type	Boring Bar Set
BHS-2	2"	1/2"	R8 3/4" Straight	9 Pc.
BHS-3	3"	3/4"	R8 1" Straight	12 Pc.
BHS-4	4"	1"	R8 1" Straight	7 Pc.

## Universal Facing And Boring Head



Model No.	F212A	F213A	F214A
Max. facing and boring dia (mm)	150	350	450
Dia. of tool post holes in slide (mm)	18	22	22
Fine feed per graduation (mm)	0.005	0.005	0.005
Weight of head without shank (kg)	2.9	6.1	7.8
Max. stroke of slide (mm)	± 15	± 25	± 50
Self-acting feed per revolution (mm)	0.02 0.04 0.06	0.03 0.06 0.09	
	0.08 0.10 0.12	0.12 0.15 0.18	
Max. dia. of slide (mm)	90	120	168
Height of head without shank	87.5	118	
The length of sliding block (mm)	75	105	160
The width of sliding block (mm)	70	90	90
Type of taper shank	R8, MT3/MT6/MW3/MW6, TZ10, ISO30, 40, 45, 50, etc..		