

# SHARP

## SHARP MODELS RD-820 | 1230 | 1600 | 2000 | 2500 RADIAL DRILLS



**RD-1600**  
17" Column  
63" Arm  
7-1/2 HP Motor  
11,220 Lbs.



ASSOCIATE  
**AMTDA**

American  
Machine Tool Distributors  
Association

# SHARP

## SHARP MODELS

RD-820, RD-1230, RD-1600, RD-2000, RD-2500

## RADIAL DRILLS

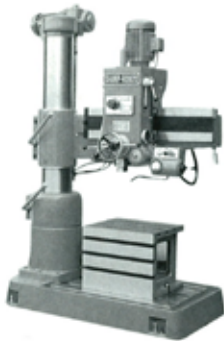
The SHARP heavy duty Radial Drilling Machines are designed for a wide range of machining operations to be used under the most demanding conditions. All major castings are made of closed grained fully ribbed iron to give maximum stability under stress. The headstock gears are made of hardened and ground nickel-chrome alloy steel. The arm is mounted with ground slideways and operated by electric control. It has a safety device that will prevent the arm from dropping due to unforeseen reasons. The rigidly ribbed casting base is provided with T-slots and drain channels. The spindle is designed for maximum speed, feed rate and depth.

Additional standard features on Model RD-1230 and RD-1600 include:

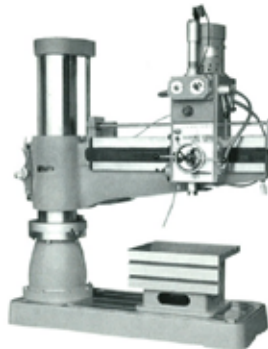
- Double Tube Column Construction
- Adjustable Counter Balanced Spindle
- Power Clamping on the Arm, Column and Gearbox

Model RD-1600 comes standard with a clutch in the spindle.

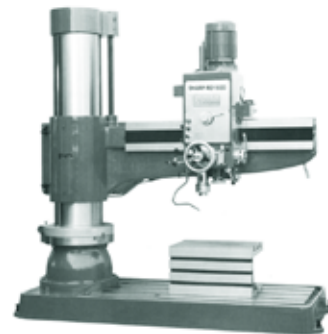
All models equipped with power arm elevation, coolant system, box table and tools.



**RD-820**  
8-14" Column  
25-9/16" Arm  
3 HP Motor  
3,080 Lbs.



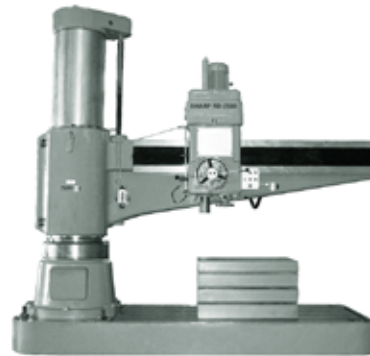
**RD-1230**  
11-13/16" Column  
34-5/8" Arm  
5 HP Motor  
4,950 Lbs.



**RD-1600**  
17" Column  
35-7/16" Arm  
7-1/2 HP Motor  
11,220 Lbs.



**RD-2000**  
17" Column  
43.31" Arm  
7-1/2 HP Motor  
15,620 Lbs.



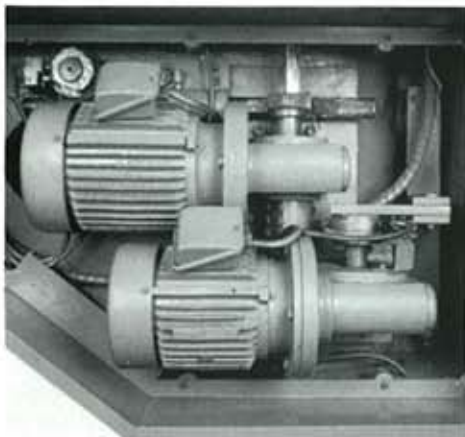
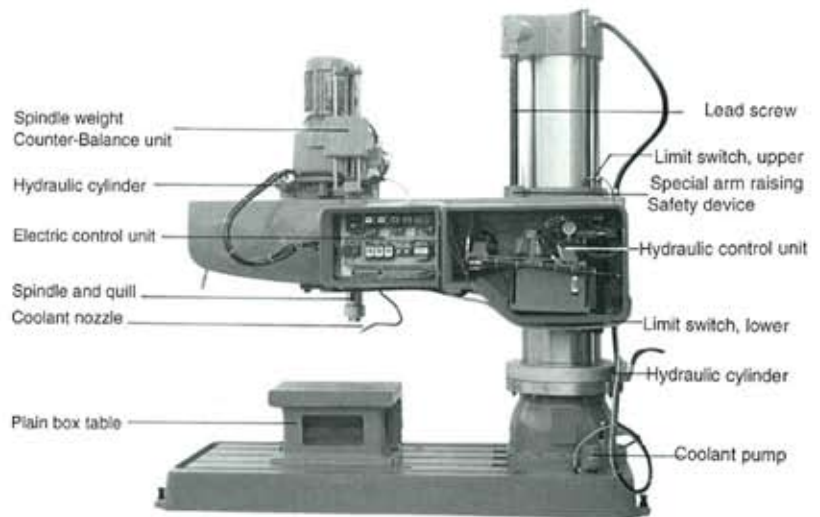
**RD-2500**  
21.65" Column  
39.37" Arm  
10 HP Motor  
27,500 Lbs.

## FEATURES: (RD1600 only)

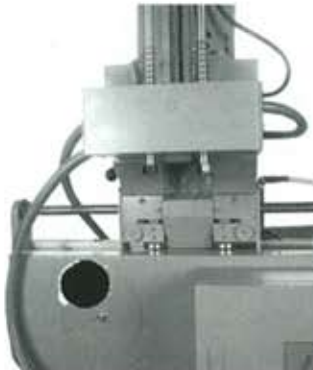
- Using hydraulic clamping device, the arm, column and gears can be clamped or released independently by means of a push button switch. This function ensures easy operation and accurate positioning after tool changes.
- Built-in lubrication system inside the gear box.
- All drive units of the gear box are protected by a friction type disc clutch that can absorb vertical impact force due to spindle movement. Together with quick spindle return, this clutch also helps speed up the tapping operation.
- Built-in Automatic Tool Ejector for easy tool changes.
- A special arm raising safety device is equipped to prevent the arm from falling due to unforeseen reasons.



Individual Arm Elevation Motor  
with adjustment cams and  
column/gearbox clamping motor.  
(Model RD-1230 only.)



Drill Head mounted on  
anti-friction bearings. Spindle  
equipped with preset depth stop.



Electric Panel





## STANDARD FEATURES:

- Box table
- Coolant system
- Work light
- Tools

MODELS	RD-820	RD-1230	RD-1600	RD-2000	RD-2500
Diameter of Column	8-1/4"	11-13/16"	17"	17"	21.65"
Distance from column surface to spindle center, Max.	33-1/2"	48-1/2"	63"	78.74"	98.42"
Distance from column surface to spindle center, Min.	8-5/8"	13-3/8"	13-3/8"	16.93"	19.68"
Travel of spindle head	24-7/8"	35"	49-5/8"	61.81"	78.74"
Distance from base surface to spindle end, Max.	47-5/8"	54"	63"	72.83"	78.74"
Distance from base surface to spindle end, Min.	13-3/4"	19-3/8"	13"	15.34"	21.65"
Elevating height of Arm	25-9/16"	34-5/8"	35-7/16"	43.31"	39.37"
Effective area of table	19-3/4" x 15-3/4" x 15-3/8"	27-5/8" x 19-5/8" x 15-3/4"	27-5/8" x 19-5/8" x 15-3/4"	40" x 32" x 20"	39.37" x 31.49" x 22.04"
Dimensions of base	49-5/8" x 25-3/16" x 6-9/32"	67-11/16" x 27-15/16" x 6-1/2"	97-5/8" x 41-11/32" x 8-1/4"	115" x 45" x 10"	138.58" x 55.12" x 12.60"
Taper hole in spindle	#4 MT	#4 MT	#5 MT	#5 MT	#6 MT
Stroke of spindle	8-1/4"	9-7/8"	14-9/16"	14.57"	17.72"
RPM of spindle (rpm range x steps)	88-1500 x 6 steps	44-1500 x 12 steps	40-1920 x 12 steps	40-1920 x 12 steps	16-1250 x 16 steps
Feed of spindle (1PR x steps)	0.002"-0.006" x 3 steps	0.002"-0.006" x 3 steps	0.003"-0.038" x 6 steps	0.007"-0.96" x 6 steps	0.04"-3.20" x 16 steps
Main Motor (HP)	3 HP	5 HP (2 speed motor)	7-1/2 HP	7-1/2 HP	10 HP
Elevating Motor (HP)	1 HP	1 HP	2 HP	3 HP	5 HP
Clamping Motor for column and gear-box (HP)	Manual Clamp	1 HP	1 HP	1 HP	Hydraulic
Clamping Motor for arm (HP)	Manual Clamp	1 HP	1/2 HP	1/2 HP	Hydraulic
Coolant pump (HP)	1/8 HP	1/8 HP	1/8 HP	1/8 HP	1/4 HP
Machine height from floor, Max.	91-3/8"	109-1/2"	124-56/64"	136.61"	157.09"
Measurement (LxWxH)	66" x 32" x 86"	80" x 39" x 89"	114" x 56" x 115"	130" x 59" x 123.6"	157" x 63" x 151"
Approximate shipping weight	3,080 Lbs.	4,950 Lbs.	11,220 Lbs.	15,620 Lbs.	27,500 Lbs.

Optional: Tilt Tables  
 Uni-tilt table tilts a full 90 degrees.  
 Calibrated indicator shows degree of tilt  
 and has an accurate top plane.



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