

## R40G – 40mm Cap. Allgeared Finefeed Radial Drill Machine

### Specification of Machine

	Description	R40G
<b>Capacity</b>	Drilling In M.S.	40
	Drilling in C.I.	45
	Tapping in M.S.	25
<b>Drilling Head</b>	Spindle Hole Taper	MT-4
	Spindle Travel	250
	Spindle Speed (RPM x Steps)	58-936 x 9
	Diameter of RAM	78
	Spindle Auto feed Range	Fine Feed
	<b>Working Range</b>	Max / Min Distance Spindle Nose to Base
Max / Min Distance Spindle Center to Column		920/385
Max. Drilling Radius		1005
Machine Measurement (L x B x H)		1350 x 850 x 1825
Diameter Of Column		170
Work Table		300 x 300 x 385
<b>Power</b>	Drill-Head Motor	1.5 HP/960RPM
	Elevating Motor	0.5 HP/1440 RPM
	Lifting Motor V-Belt	B-25/B-26

### Gear box:

- Gear box is having Flange Mounted Motor to give the drive to the Gearbox. Speeds are changed through gears only.
- Gear box with 9 speed and all 9 gears of hardened NiCr steel up to RC-50 to 60 is completely oil bath drive. Thus oil bath drive and hardened gears give very long life to the machine with no need for lubrication.
- Sliding of gears through bearings makes easy sliding. Also it has long life due to bearings.
- Gears are internally splined and shafts are externally splined. This system totally eliminates problem of key wearage.

- Two pairs of three gears each are made from one-piece as a cluster gear eliminating slipping problem of press fitted gears.

### Spindle assembly:

- 78 mm dia steel RAM with 9 DP heavy teeth.
- Pinion with 9 DP heavy teeth is supported through bearing.
- 250 mm spindle travel

### Lifting gear box:

- New oil bath lifting gear box is having its shaft supported through bearings not bushes and the screw is supported through taper roller bearing. Thus bearings and oil bath gives smooth running of worm-gear with extended life. Also the heavy duty screw of 35 mm dia and gunmetal nut is having 3" long guide.

### Structure:

- Column bracket is having 440 mm (approx 17 1/4") long guide on heavy duty 170 mm column. Column is having through rib inside with long bottom for greater rigidity.
- Base plate is heavily ribbed at the bottom side for making sturdy foundation.
- Drill head is made 250 mm (10") wide to suit 225 mm long spindle travel for giving wide support on arm and making best combination of length and width.
- Better design of arm as complete rectangular cross section of (230mm X 140mm) (9 1/4 X 5 1/2") works as highly rigid channel eliminating vibration easily.
- Overall Weight of the machine is approximately 950/- Kg giving far most rigidity to the machine.