

DC-410 – 42 mm Cap. Double Column Allgeared Autofeed Radial Drill Machine

Specification of Machine:

No.	Description	DC – 410
Capacity	Drilling In Mild Steel	42 (1 5/8”)
	Drilling in Cast Iron	50
	Rough Boring in Mild Steel	60
	Tapping in Mild Steel	25
Drilling Head	Spindle Taper	MT-4 / MT-5
	Spindle Travel	225
	Spindle Speed (RPM x Steps)	12 steps 60, 90, 115, 165, 200, 290, 340, 480, 575, 825, 1005, 1510
	Diameter of RAM (Quill)	78
	No. of Spindle Auto feed Ranges (MM/REV)	6 steps 0.1, 0.15, 0.20, 0.27, 0.33, 0.52
	Working Range	Max / Min Distance Spindle Nose to Base
	Vertical Travel of Arm	775
	Max / Min Distance Spindle Center to Column	1025 / 275
	Horizontal Travel of Arm	750
	Max Drilling Radius	1137
	Machine Measurement (L x B x H)	1600 x 850 x 2270
	Diameter of Column	225
	Work Table	500 x 450 x 400
	Coolant Tank	770 x 430 x 145 50 Liters
Power	Drill Head Motor	2 HP(1.5 KW) 960/1440 RPM
	Elevating Motor	0.75 HP(0.56 KW) 960 RPM

- Left hand operation with ergonomic world class design.
- Independent locking of [Drill Head With Arm](#), [Arm With Sleeve And Sleeve With Column](#) for easy setting.
- Use of high grade - fine grain materials and precision manufacturing guarantee long life of machine.
- Easily accessible front panel arrangement of electrical and mechanical controls.

BASE:

- More Wider base for working area.
- Coolant tank of 50 liters.
- Rigid box type construction.
- More Wider Base for better work piece grip.

LIFTING NUT:

- 4 " long Lifting screw nut made up of brass.

COLUMN ASSEMBLY:

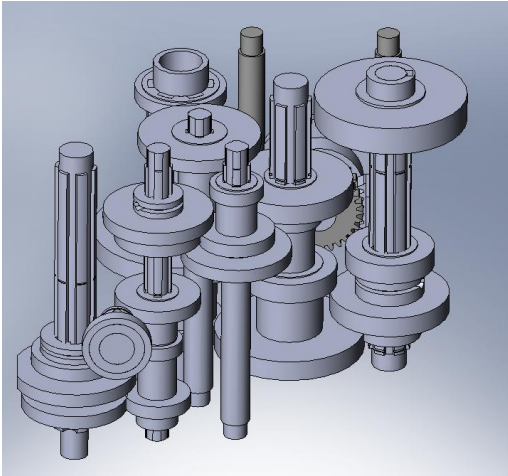
- Double column type structure with Dia 225 MM and INSIDE RIBS for more rigidity and smooth movement.

ARM:

- Arm and Column rigidly built with reinforcement ribs to reduce distortion, to give high capacity and lasting accuracy.

GEARBOX:

- Completely Oil bath gear box with 12 spindle speed steps with near geometric progression for the optimum use of machine.



GEARS:

- All gears gearbox are made up of NiCr Steel with hardness of 50-55 HRC with thickness of 15 mm.

SHAFTS OF GEARS:

- All shafts made of NiCr alloy steel with hardness 55 HRC.
- All Four splines and six splines of shafts are GROUND on Spilne Grinding Machine.

SPINDLE:

- Spildle & spindle ram(Quill) are made up OF NiCr Steel **WITH FINAL HARDNESS OF 55 HRC**

- Spindle is fitted with **PRECISION ANGULAR CONTACT BEARINGS** not the **TAPER ROLLER BEARINGS**.
- Bearing sizes are internal ground.
- Pinion supported through bearings.

RAM LINER BUSH:

- Head stock is provided with **HIGH GRADE CAST IRON LINER BUSH** like in automobile engines for easy sliding movement of RAM and very long life. Also it ensures interchangeability when replacing after wear out.

AUTO FEED SYSTEM:

- 6 auto feed near geometric progression for all processes to be done like drilling, reaming, boring, etc.
- **Overload Safety Clutch System** for tool protection and machine protection.
- Spindle auto-stop with travel adjustment.

SPRING:

- Heavy duty helical spring has replaced old conventional type coil spring. This ensures far more life than conventional springs.
- Limit safety devices are used to assure security while arm up-down, arm lock, spindle depth adjustment.