

RADIAL ARM DRILLS

AJRD 38/50/55H/65H/80H/100H



Machine Tool Exporters to the World since 1940

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AJRD 38/50 55H/65H/80H/100H

The main castings of the Ajax AJRD radial arm drilling machines are high quality cast iron, reinforced by a system of crossed ribs and boxed sections. All castings are hardened to 200-220HB. The column for the AJRD 38 & 50 is a vertical rotating column with manual clamping as standard, hydraulic clamping being standard on all models above this size.

This system allows smooth rotation of the column and avoids angular deflection of the spindle axis when clamping is activated. A safety device prevents the arm from dropping in the event of excess wear of the arm raising nut and semi automatic lubrication system provides lubrication for both column and elevating screw.



Spindle

The spindle and quill are manufactured from special forged steel and are constructed to reduce vibration to a minimum. The quill is machined with utmost accuracy and the teeth cut from the solid, and is also ground to ensure maintained accuracy for the feed rate. The spindle is mounted in double row roller and thrust bearings protected by a grease seal. The spindle is secured by an anti-vibration lock-nut at the top of the spindle. The spindle and quill assembly are fitted with a counterweight providing uniform smoothness of the entire stroke, the quill over-travel is obliviated by a special safety device. An arm raising and lowering special safety device prevents over-travel.

Hydraulic Clamping

Hydraulic clamping on the model 38 & 50 is not available they have manual clamping, but supplied as standard on the rest. Clamping of the head, column and arm is actuated by a hydraulic unit operated by push buttons, the hydraulic system being divided to allow the operator to move the arm vertically without affecting the spindle alignment and similarly unlock the head or column independently.

Headstock

The headstock is a totally enclosed unit including the gearing for the spindle speeds and feeds.. The feed mechanism also provides a depth stop mechanism. All gears are made of nickel chrome steel and are hardened and ground, with lubrication provided by an automatic lubrication pump.

Electrical System

The electrical control panel is located on the back of the arm in compliance with the CE norm.

Coolant Equipment

Coolant equipment is supplied as standard and consists of a motor driven pump complete with piping to the drill point and return piping to the sump.

CAPACITY	AJRD 38	AJRD 50	AJRD 55H	AJRD 65H	AJRD 80H	AJRD 100H
Drilling Capacity						
Cast Iron (mm)	42	60	66	70	100	150
Drilling Capacity						
Mild Steel (mm)	38	50	55	65	80	100
Threading Pitch in						
Steel or Cast Iron	M20-25	M25-30	M50-60	M50-60	M65-75	M90-95
Maximum Distance from						
Spindle to Column (mm)	815	1,150	1,250 or 1,700	1,600 or 2,000	2,500	3,150
Horizontal Travel of Headstock	630	815	915 or 1,310	1,140 or 1,510	2,000	2,580
Maximum Distance from						
Spindle to Base (mm)	1,110	1,220	1230 or 1420	1,500 or 1,900	2,000	2,500
FEEDS AND SPINDLE						
Spindle Speeds RPM	88-1,500	44 - 1,500	36 - 1,250 or 25 - 1,300	40 - 1,920	16 - 1,250	8 - 1,000
Number of Speeds	6	12	12	12	16	22
Spindle Feeds (mm/rev)	0.05 - 0.15	0.05 - 0.15	0.05 - 0.306	0.07 - 0.96	0.04 - 3.2	0.06 - 3.2
Spindle Taper						
(Morse Taper)	4	4	5	5	6	6
Spindle Travel (mm)	200	250	250	370	450	500
MOTORS						
Main Spindle Motor	2 Hp	3 Hp	5 Hp	7.5 Hp	10 Hp	15 Hp
	(1.5 kW)	(2.2 kW)	(3.7 kW)	(5.5 kW)	(7.45 Kw)	(11.25 Kw)
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WEIGHT AND DIMENSIONS						
Floor space (mm)	1,580x820	1,970x1,010	2,290x1,100	2,850 or 3,100	4,000x1,600	4,780x1,630
		OI	r 2,850x1,210	x1,400	x3,850	x4,720
Net weight (kg)	1,175	2,000	2,150 or 3,150	4,600 or 5,600	11,000	20,000

TECHNICAL SPECIFICATIONS



AJRD 100H

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