

# Drilling Machines

## Radial Arm Drills



**Ajax Machine Tools**

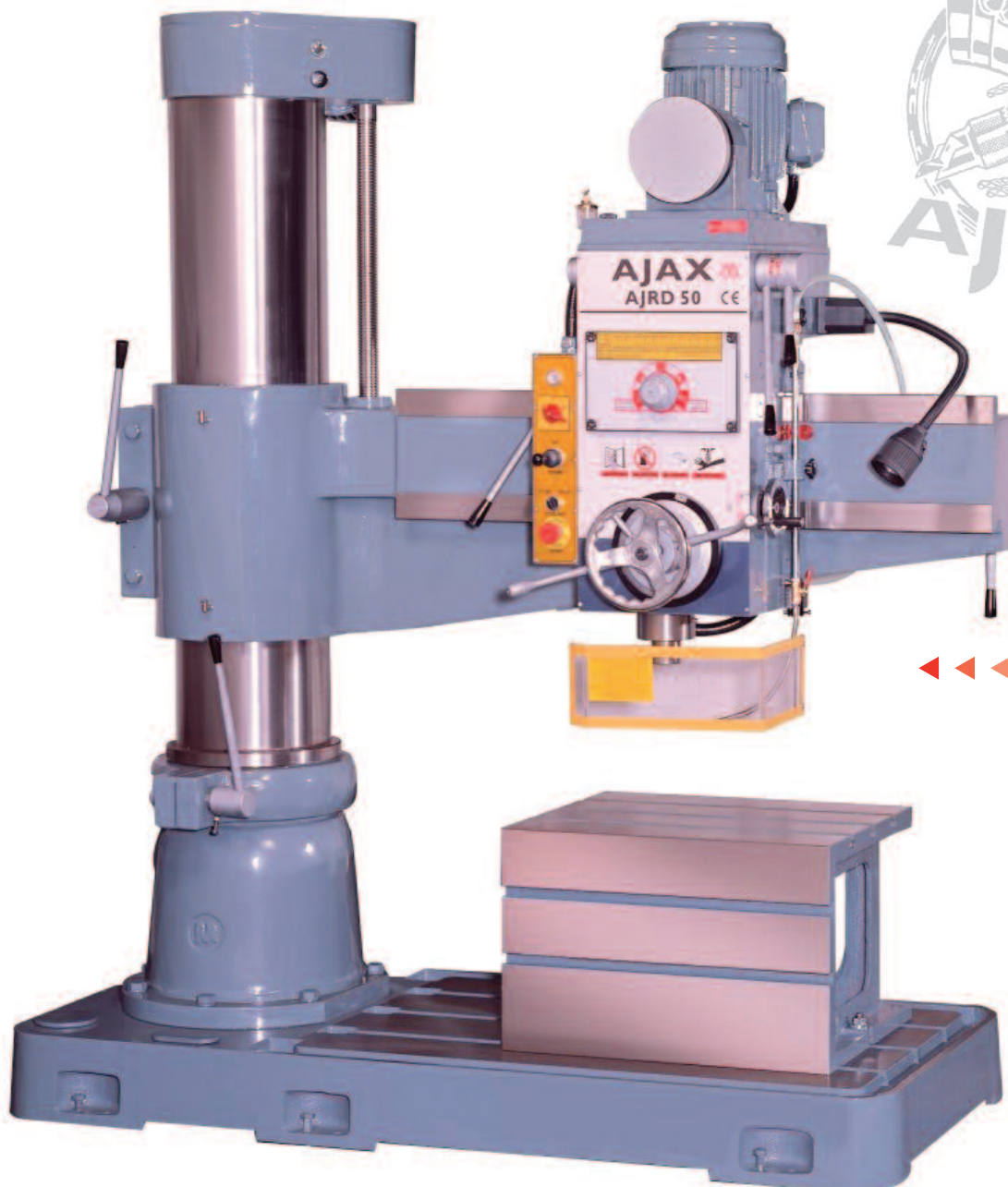
Machine Tool Exporters to the World

# ▶▶▶▶▶ Drilling Machines

## AJAX RADIAL ARM DRILLS

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.



◀◀◀◀◀ AJRD50

<b>CAPACITY</b>	<b>AJRD 38</b>	<b>AJRD 50</b>	<b>AJRD 50H</b>	<b>AJRD 65H</b>	<b>AJRD 80H</b>
Drilling capacity Cast Iron (mm)	42	60	60	70	100
Drilling capacity Mild steel (mm)	38	50	50	65	80
Threading fine pitch in steel or cast iron (mm)	25 - 20	30-25	55-45	60-50	75-65
Maximum distance from spindle to column (mm)	815	1150	1250 or 1600	1600 or 2000	2500
Horizontal Travel of Headstock	630	815	900 or 1250	1140 or 1510	2000
Maximum distance from spindle to base (mm)	1110	1220	1220	1500 or 1900	2000

<b>FEEDS AND SPINDLE</b>					
Spindle speeds	88-1500 Rpm(6)	44 - 1500 Rpm (12)	25 - 2000 Rpm (16)	40 - 1920 Rpm (12)	16 - 1250 Rpm (16)
Spindle feeds (mm/rev)	0.05 - 0.15	0.05 - 0.15	0.04 - 3.2	0.07 - 0.96	0.04 - 3.2
Spindle diameter (mm)					
Spindle taper (Morse taper)	4	4	5	5	6
Spindle travel (mm)	200	250	315	370	450

<b>MOTORS</b>					
Main spindle motor	2 Hp (1.5 kW)	3 Hp (2.2 kW)	5 Hp (3.7 kW)	7.5 Hp (5.5 kW)	10 Hp (7.45 Kw)

<b>WEIGHT AND DIMENSIONS</b>					
Floor space (mm)	1580 x 820	1970 x 1010	2230 or 2600 x 1220	2850 or 3100 x 1400	4000 x 1600 x 3850
Net weight (kg)	1175	2000	3000 or 3500	4600 or 5600	11,000

### **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 counter-weight providing uniform smoothness of the entire stroke, the quill over-travel is obviated 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.



**Ajax Machine Tools International Ltd**

Unit 360, Ampress Lane, Ampress Park,  
Lymington, Hampshire SO41 8JX

Tel: +44 (0)1590 676000

Fax: +44 (0)1590 676001

[www.ajax-mach.co.uk](http://www.ajax-mach.co.uk)

[sales@ajax-mach.co.uk](mailto:sales@ajax-mach.co.uk)

