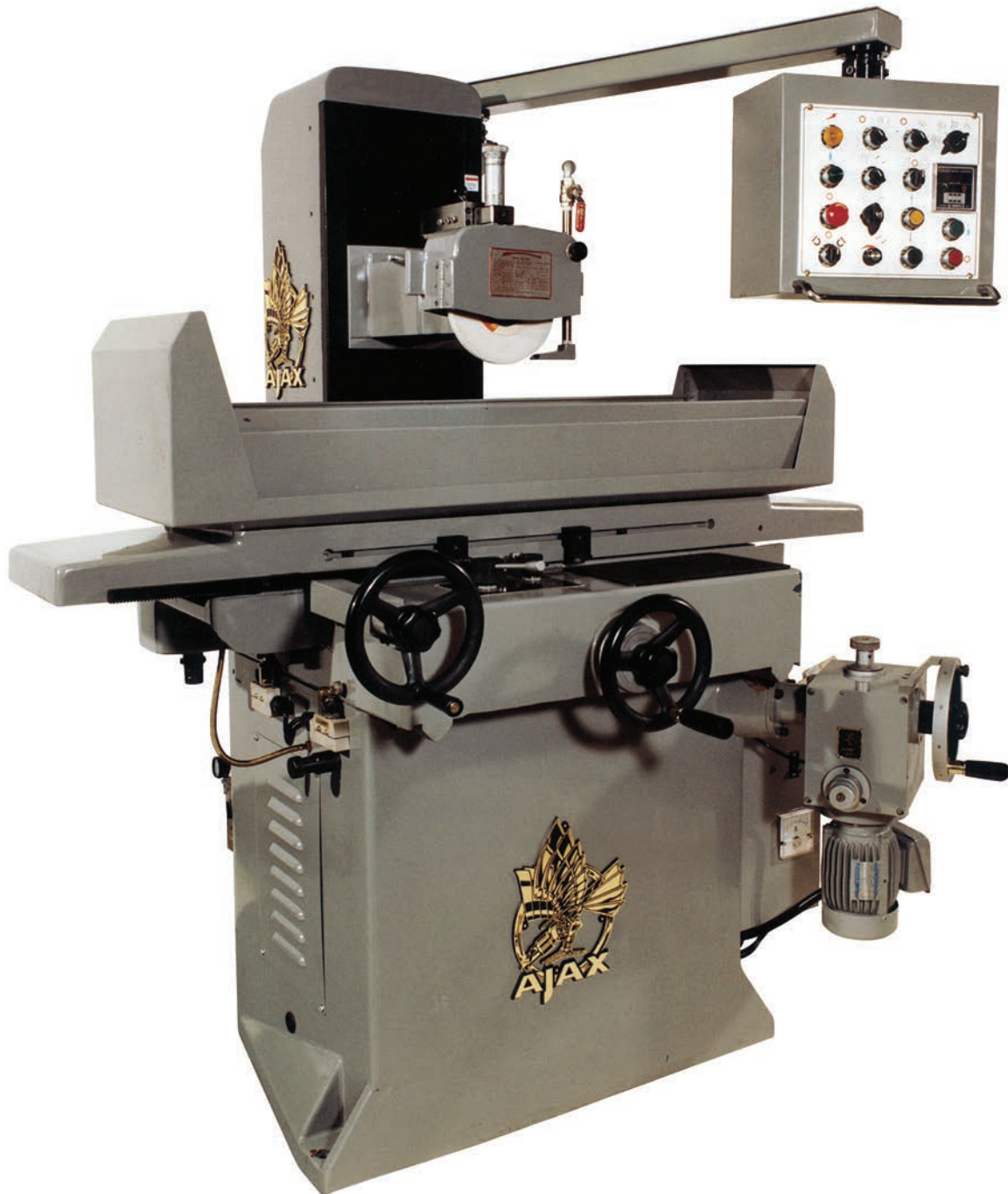




# SURFACE GRINDERS

AJ 500 - AJ 3200



Machine Tool Exporters to the World since 1940

# SURFACE GRINDERS

**AJ 500 - 3200**

There are numerous models of Ajax surface grinding machines with working areas up to 3200 x 850mm.

All machines are traditional in design with easy access for complete, accurate and efficient control and are suitable for toolroom and production work. The longitudinal table movement is hydraulically driven and the cross traverse and wheelhead feeds electrically driven. All have infinitely variable speed control.

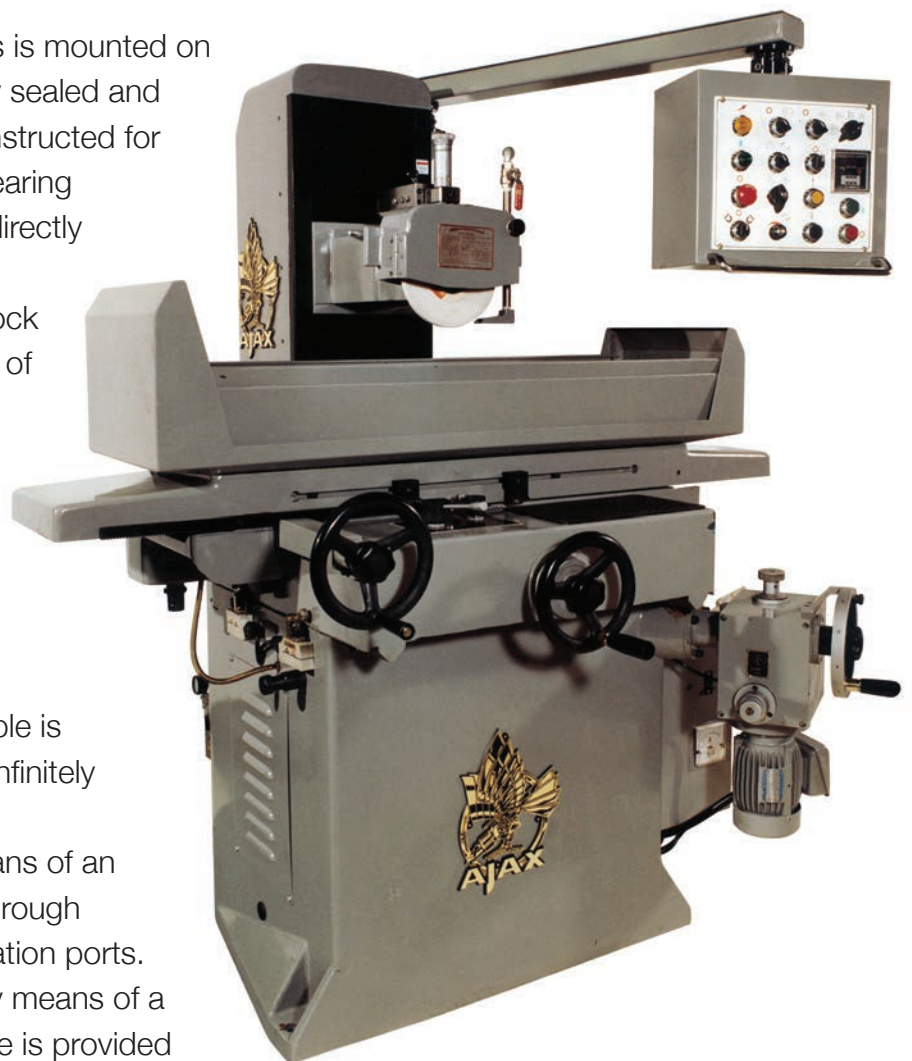
All models are available with manual downfeed of the wheelhead and/or automatic downfeed which can be incrementally pre-set. Machines with the 'H' suffix indicate automatic longitudinal and cross feed as standard. Suffix 'HD' indicates that machines are also equipped with automatic downfeed.

## The Wheelhead

The wheelhead spindle on all models is mounted on super precision bearings, completely sealed and maintenance free. The casting is constructed for extreme rigidity of the spindle and bearing assemblies. The grinding spindle is directly coupled to a dynamically balanced, flange-mounted motor through a shock absorbing coupling. The wheel head of all HD models is provided with rapid power positioning with fine positioning carried out by means of a 0.0025mm incremented handwheel.

## Table

The longitudinal movement of the table is hydraulic and the rate of traverse is infinitely variable between ranges. Lubrication of all slideways is by means of an electronically controlled pump unit through metering valves to the various lubrication ports. Hand traverse of the work table is by means of a handwheel rack and pinion. The table is provided with ample operator splash protection.



**AJV 500HD**

Model	AJ 500 H/HD	AJ 600 H/HD	AJ 750 H/HD	AJ 800 HD	AJ 1000 HD	AJ 1500 HD	AJ 2000 HD	AJ 3200 HD
Working Surface (mm)	500 x 230	600 x 260	750 x 260	800 x 400	1,000 x 500	1,500 x 500	2,000 x 600	3,200 x 850
Maximum Longitudinal Traverse (mm)	565	690	840	960	1,160	1,650	2,150	3,350
Longitudinal Speed (m/min)	6-25	6-25	6-25	6-25	5-25	5-25	5-25	5-25
Maximum Grinding Length & Width (mm)	508 x 254	609 x 304	762 x 305	813 x 406	1,000 x 500	1,500 x 500	2,000 x 600	3,200 x 850
Maximum Table Loading (kg)	335	335			1,000	1,200	1,500	2,400

#### GRINDING HEAD

Grinding Wheel Size (mm)	200 x 13 x 31.5	355 x 32 x 127	355 x 32 x 127	335 x 50 x 127	406 x 50 x 127	406 x 50 x 127	510 x 50 x 127	510 x 50 x 127
Spindle Speed (rpm)	2,900	1,450	1,450	1,450	1,450	1,450	960	960
Maximum Height of Spindle Centre (mm)	500	600	600	620	600	600	850	950
Vertical Positioning	Hand (H) Power (HD)	Hand (H) Power (HD)	Hand (H) Power (HD)	Power	Power	Power	Power	Power
Vertical Downfeed (HD model only)	Auto	Auto	Auto	Auto	Auto	Auto	Auto	Auto
Vertical Traverse (mm)								
Handwheel Graduation	0.01	0.01	0.01	0.005	0.002	0.002	0.002	0.002
Cross Feed Handwheel Graduation (mm)	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Cross Feed Travel (mm)	0-254	0-304	0-304	0-406	0-550	0-550	0-600	0-850
Automatic Cross Traverse (mm)	0-9	0.9	0.9	0.12	0.25	0.25	0.38	0.38

#### HYDRAULIC SYSTEM

Working Pressure (kg/cm <sup>2</sup> )	18-22	18-22	18-22	18-22	18-22	18-22	18-22	18-22
Tank Capacity (l)	60	60	60	80	80	80	120	160

#### MOTORS

Grinding Spindle Power	2Hp (1.5kW)	5Hp (3.7kW)	5Hp (3.7kW)	7.5Hp (5.6kW)	10Hp (7.5kW)	10Hp (7.5kW)	10Hp (7.5kW)	15Hp (11.2kW)
Cross Feed	0.2Hp (0.15kW)	0.2Hp (0.15kW)	0.2Hp (0.15kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)
Vertical Positioning / Downfeed	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	1Hp (0.75kW)	DC Servo
Hydraulic Pump	1Hp (0.75kW)	2Hp (1.5kW)	2Hp (1.5kW)	3Hp (2.2kW)	5Hp (3.7kW)	5Hp (3.7kW)	7.5Hp (5.5kW)	15Hp 11kW
Coolant Pump	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)	0.25Hp (0.18kW)
Coolant Flow Rate (l/min)	25	25	25	25	40	40	40	40

#### WEIGHT AND DIMENSIONS

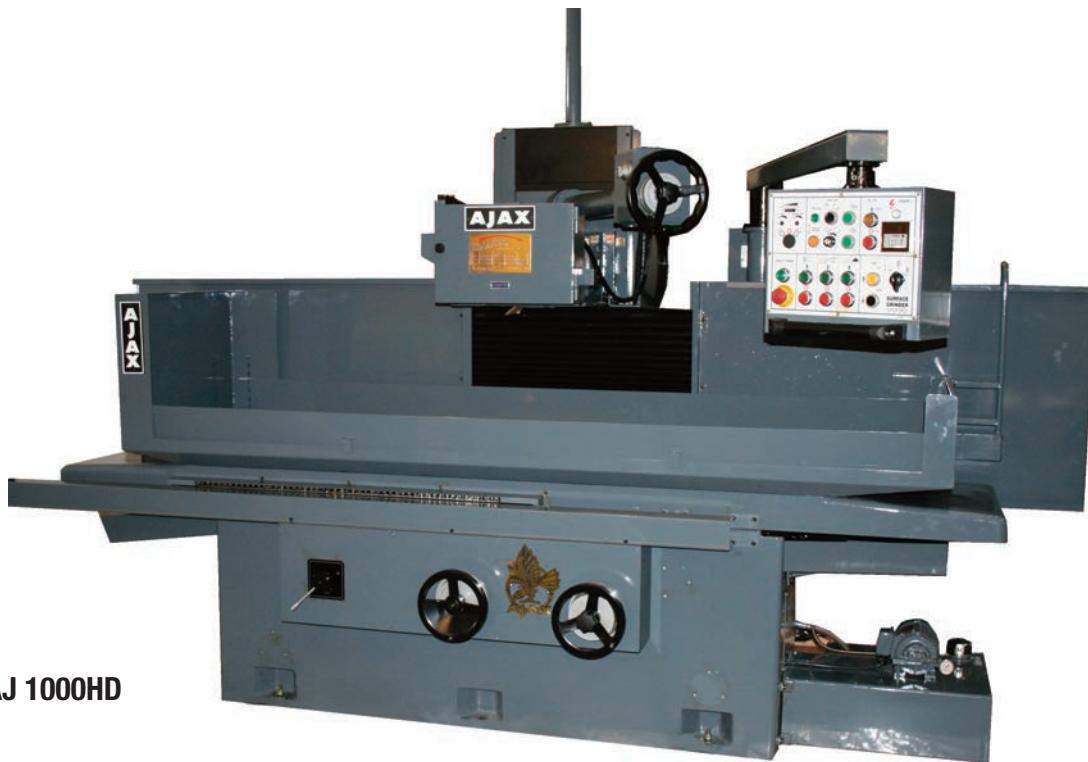
Net weight of machine kg	1,350	1,850	1,950	2,800	4,500	5,000	8,500	15,500
Gross weight (kg)	1,600	2,150	2,250	3,150	5,200	5,800	9,600	18,000
Dimensions (mm)	1,524x914 x1,740	1,850x1,076 x1,880	2,149x1,076 x1,880	2,502x1,422 x2,000	3,760x2,235 x2,235	4,648x2,235 x2,235		
Shipping Case Dimensions (mm)	2,060x1,680 x2,050	2,260x1,740 x2,210	2,260x1,730 x2,160	2,680x1,740 x2,250	3,370x2,280 x2,220	5,180x2,640 x2,300	7,000x2,800 x2,740	10,500x3,300 x3,000

# TECHNICAL SPECIFICATIONS



### OPTIONAL ACCESSORIES

1. Inclinable magnetic chuck
2. Sine Bar
3. Coolant quipment, free standing tank
4. Angle forming attachment
5. Permanent magnetic chuck
6. Wheel flange (standard)
7. Precision vice
8. Radius forming attachment
9. Dust Control equipment
10. Cool duster
11. Electro demagnetising equipment (not illustrated)
12. Parallel dressing attachment (standard)



**AJ 1000HD**

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