



# CNC CONTROLLED MACHINING CENTRES

**AJV 550/760/800/1000**



Machine Tool Exporters to the World since 1940

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800/1000**

**The Ajax V range of machining centres are linear rail high speed and high feed machines, having substantial design construction giving rigid vibration free cutting.**

Supplied as standard with swarf conveyor and bin, coolant and air guns for easy cleaning down and high speed tool changes. With rapid speeds of 36 m/min and spindle speeds of 10 or 12,000 rpm. These machines make formidable production centres, outperforming the competition.



**AJV 1000**

<b>MODEL</b>	<b>AJV 550</b>	<b>AJV 760</b>	<b>AJV 800</b>	<b>AJV 1000</b>
<b>Table</b>				
Working surface	700 x 400mm	900 x 500mm	900 x 500mm	1200 x 500mm
"T" Slots (number & width)	3 x 18mm	3 x 18mm	5 x 18mm	5 x 18mm
Distance between "T" Slots	100mm	100mm	100mm	100mm
Maximum weight over table	400Kgs	500Kgs	700Kgs	800Kgs
Spindle Nose to Table	110 ~ 610mm	110 ~ 610mm	110 ~ 610mm	110 ~ 610mm
<b>Traverses</b>				
X-Axis	550mm	760mm	800mm	1,000mm
Y-Axis	400mm	450mm	500mm	500mm
Z-Axis	500mm	500mm	500mm	500mm
<b>Feed system</b>				
Working Feed Rate (X,Y,Z)	1-10,000 mm/min	1-10,000 mm/min	1-10,000 mm/min	1-10,000 mm/min
Rapid Feed Rate (X,Y, Z)	36,000 mm/min	36,000 mm/min	36,000 mm/min	36,000 mm/min
Ball Screws	X, Y & Z = 32x12mm	X, Y & Z = 32x12mm	X, Y & Z = 32x12mm	X, Y & Z = 32x12mm
Drive System	Direct Drive	Direct Drive	Direct Drive	Direct Drive
Spindle Taper	MAS-403 BT.40	MAS-403 BT.40	MAS-403 BT.40	MAS-403 BT.40
Spindle Speeds	8,000-12,000 RPM	8,000-12,000 RPM	8,000-12,000 RPM	8,000-12,000 RPM
<b>Automatic Tool Changer</b>				
Tool storage capacity	16 or 24	24 or 30	24 or 30	24 or 30
Tool selection system	Bi directional	Bi directional	Bi directional	Bi directional
Max. tool Ø x length	90 x 300mm	90 x 300mm	90 x 300mm	90 x 300mm
Pull stud	MAS P40T-1	MAS P40T-1	MAS P40T-1	MAS P40T-1
Air pressure required	6-7 kg/cm <sup>2</sup> 85psi	6-7 kg/cm <sup>2</sup> 85psi	6-7 kg/cm <sup>2</sup> 85psi	6-7 kg/cm <sup>2</sup> 85psi
Tool change time (tool to tool)		2.5 sec	2.5 sec	2.5 sec
Tool change time (chip to chip)		3.6 sec	3.6 sec	3.6 sec
<b>Motors</b>				
Main spindle motor Heidenhaim	7.5Kw 15min 5.5Kw cont	13Kw 15 min 7.5Kw cont	17Kw 15 min 10Kw cont	17Kw 15min 10Kw cont
Feed motors (X, Y, Z)	2.4 / 3.5 / 5Kw	2.4 / 3.5 / 5Kw	2.4 / 3.5 / 5Kw	3 / 4 / 5.5Kw
Coolant motor	0.96Kw	0.96Kw	0.96Kw	0.96Kw
Lubrication pump	0.1Kw	0.1Kw	0.1Kw	0.1Kw
<b>Machine Performance</b>				
Positioning accuracy	+/- 0.010mm	+/- 0.010mm	+/- 0.010mm	+/- 0.010mm
Repeatability	+/- 0.007mm	+/- 0.007mm	+/- 0.007mm	+/- 0.007mm
System resolution	+/- 0.001mm	+/- 0.001mm	+/- 0.001mm	+/- 0.001mm
<b>Machine Size</b>				
Dimensions (mm)	2,004 x 1,960 x 2,350	2,280 x 2,260 x 2,350	2,380 x 2,280 x 2,850	2,700 x 2,250 x 2,850
Net Weight	3,200Kgs	3,900Kgs	4,600Kgs	4,950Kgs
<b>Total Power Consumption</b>	27 Kva	27 Kva	32 Kva	32 Kva
<b>Communications Port</b>	RS-232C, RJ45 & USB			
<b>Controller</b>	HEIDENHAIN, SIEMENS, FANUC OR FAGOR			

# TECHNICAL SPECIFICATIONS



## STANDARD ACCESSORIES

High speed linear guideways  
Brushless A.C. Main Motor  
Telescopic protection guideways.  
Complete Coolant System.  
Electronic Hand wheel.  
Tool Storage capacity 16, 24 or 30  
Coolant capacity 200 L  
RS.232C Interface. USB & RJ45 on Heidenhain  
High accuracy Ball Screws (C-3)  
Pneumatic Tool Clamping System.  
Automatic lubrication system.  
Full enclosure & safety guarding.  
Test Sheet.  
Introduction Manuals, CNC Unit Manuals & Spares  
Parts List.  
C.E. Safety regulation conformity  
Spiral swarf conveyor & bin  
Air blow to spindle to blow swarf when dry cutting.  
Wash down gun



## OPTIONAL ACCESSORIES

Fanuc Oi MD control  
Fanuc Oi MD manual guide i  
Heidenhain TNC controls  
Flat swarf conveyor  
Through spindle coolant  
30 ATC  
10,000 RPM spindle with chiller  
12,000 RPM spindle with chiller  
4th axis options  
5th axis options



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