

High Speed Vertical Machining Centres

AJV33/43



Ajax Machine Tools

Machine Tool Exporters to the World

▶ ▶ ▶ ▶ ▶ Vertical Machining Centres AJV33/43

The AJV33 and 43 machines are designed to cut as hard as the solid way machines but have better accuracy and quicker rapids. This is achieved by using much larger linear roller rails which have a much bigger surface contact area, hence giving faster and more accurate machining.

Machining processes can be achieved at high speed with reliable repeatability and quality. All the range are built on cast columns & bases to eliminate vibration and enable a better cutting finish. Rigid tapping is standard, as is pneumatic counterbalance. On the random toolchanger, an air blast is used to clean the spindle prior to the next one entering, air blast is also used to clean the work piece while machining. Thus bringing together the perfect balance of quality reliability & price.



AJV43



The V Series machines are built to do the job not to a price. Weighing in at over 8 tonnes these are very solid powerful partners in any machine shop.



MODEL	AJV33	AJV43
Travel		
X-Axis	850 mm (33.5 ")	1,100 mm (43.3 ")
Y-Axis	600 mm (23.6 ")	
Z-Axis	510 mm (20.1 ")	
Spindle nose to table	120 - 630 mm(4.7 X 24.8")	

Table		
Table size	1,050 X 600 mm (41.3 X 23.6 ")	1,300 X 600 mm (51.2 X 23.6 ")
Floor to table	855 mm (33.7 ")	
Max. table loading capacity	1,000 kgs(2200 Lbs)	
T-slot (number x width x pitch)	6 X 18 mm X 100 mm (6 X 0.7 X 3.9 ")	
Spindle center to column	600 mm (23.6 ")	

Feed system		
Rapid traverse speed	32 M/min (1259.8 " /min)	
Feed motor (FANUC)	X/Y: 3.0kW (12 Nm) , Z: 7.0kW (30 Nm)	
Ball screw diameter & pitch	X, Y : 45 mm (1.8 ") Z:50 mm (2.0") / 12mm (0.5")	
Cutting feed rate	1 - 10,000 mm/min (0.04-393.7 " /min)	
Type of transmission	Direct drive	

Spindle				
Type of tool shank	BT 40 / CAT 40 / DIN 69871A	BT 50 / CAT 50 / DIN 69871A	BT 40 / CAT 40 / DIN 69871A	BT 50 / CAT 50 / DIN 69871A
Max. spindle speed	10,000 / 15,000 or 20,000 rpm (Op)	6,000 or 8,000 rpm (Op)	10,000 / 15,000 or 20,000 rpm (Op)	6,000 or 8,000 rpm (Op)
Spindle motor	11/15 kW / 7.5/11kW or 15/1.5kW (Op)	15/18.5 kW / 22/26 kW (Op)	11/15 kW / 7.5/11kW or 15/1.5kW (Op)	15/18.5 kW / 22/26 kW (Op)
Type of transmission	Direct			

ATC				
Tool storage capacity	24 / 32 (Op) / 40 (Op)			
ATC type	Arm type			
Max. tool diameter	95 / 76 / 76 mm (3.1 / 3.0 / 3.0 ")	110 / 127 / 127 mm (4.3 / 5 / 5 ")	95 / 76 / 76 mm (3.1 / 3.0 / 3.0 ")	110 / 127 / 127 mm (4.3 / 5 / 5 ")
Without adjacent tool	185 / 127 / 127 mm (7.3 / 5.0 / 5.0 ")	200 / 228 / 228 mm (7.9 / 9 / 9 ")	185 / 127 / 127 mm (7.3 / 5.0 / 5.0 ")	200 / 228 / 228 mm (7.9 / 9 / 9 ")
Max. tool length	300 mm (11.8 ")	350 mm (13.8 ")	300 mm (11.8 ")	350 mm (13.8 ")
Max. tool weight	7 kgs (15 Lbs)	15 kgs (32 Lbs)	7 kgs (15 Lbs)	15 kgs (32 Lbs)
Tool changing time (Tool to Tool)	2.8 / 1.5 / 1.5 sec	2.9 sec	2.8 / 1.5 / 1.5 sec	2.9 sec
Tool changing time (Chip to Chip)	5.5 sec	6 sec	5.5 sec	6 sec
Method of tool selection	Random selection / Bi-directional magazine rotation			
Tool display	Yes			
Special tool management	Yes			

Coolant system		
Coolant tank size	445L	486L
Coolant capacity	105 L / min	
Chip Flush capacity	125 L / min	

Machine size		
Machine height	2,920 mm (115.0 ")	
Floor space	3,955 mm (155.7 "(W) X 2,250 mm (88.6 ") (D)	4,395 mm (173.0 ") (W) X 2,250 mm (88.6 ") (D)
Weight	8,200 kgs (18040 Lbs)	8,500 kgs (18700 Lbs)

Power source	
Electrical power supply	25 KVA / 3PH, 220V 50/60HZ
Compressed air supply	6.0 kgf/cm ² (85psi)

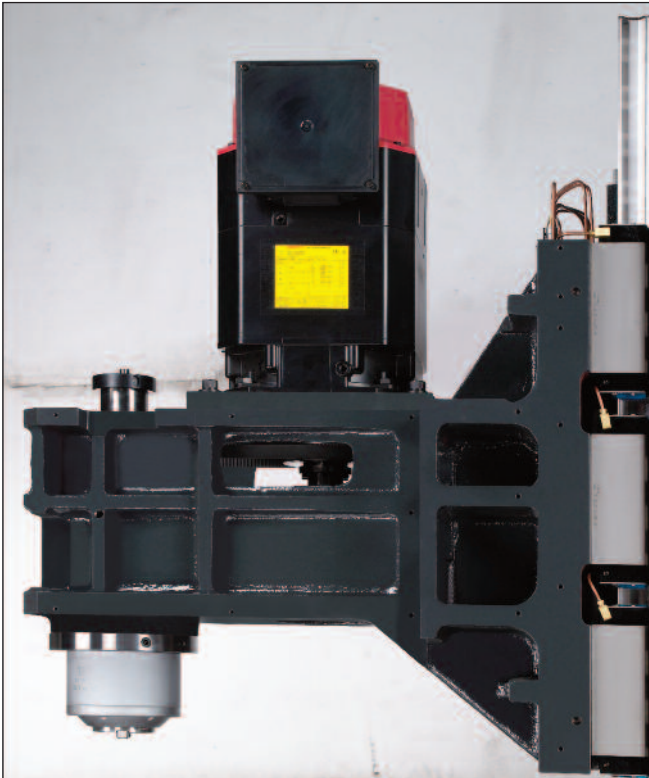
Controller	FANUC / HEIDENHAIN / SIEMENS
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STANDARD ACCESSORIES

Arm type ATC (24 tools)
Fully enclosed splash guard
Chip flush system
Coolant system
Spindle chiller
flat type chip conveyor
Coolant tank & chip collector
Automatic lubrication system
Telescopic covers
Portable electronic handwheel (FANUC)
Working light Alarm light
Tool box
Operator's manual and parts list
Leveling bolts, pads and nuts
CE

OPTIONAL ACCESSORIES

Arm type ATC (32 or 40 tools)
High-speed Spindle 15,000 / 20,000 rpm
Bigger spindle motor
Coolant through spindle system
Air blow system for dry cutting
coolant through tool arbor
4th or 4+5th axis rotary table
High precision linear scale
Work piece measurement system
Tool length measurement system
Heat exchanger on electrical cabinet
Power transformer



Solid spindle construction



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