



HIGH SPEED VERTICAL MACHINING CENTRES

AJV 33/43



Machine Tool Exporters to the World since 1940

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AJV 33/43

The AJV 33 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 and 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 and price.



AJV 43

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	AJV 33		AJV 43	
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 (rpm)	10,000 / 15,000 or 20,000 (opt)	6,000 or 8,000 (opt)	10,000 / 15,000 or 20,000 (opt)	6,000 or 8,000 (opt)
Spindle Motor (opt)	11/15 / 7.5/11 or 15/17.5 (opt)	15/18.5 / 22/26 (opt)	11/15 / 7.5/11or 15/17.5 (opt)	15/18.5 / 22/26 (opt)
Type of Transmission	Direct			
Automatic Tool Changer				
Tool Storage Capacity	24 / 32 (opt) / 40 (opt)			
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 Change 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 Change 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	445 L		486 L	
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				

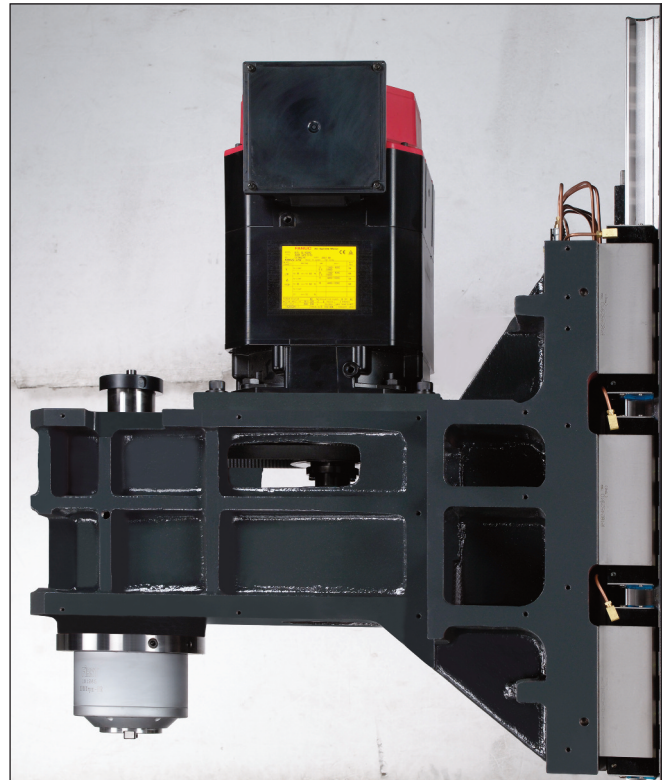
TECHNICAL SPECIFICATIONS

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

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



Solid spindle construction



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