



HEAVY DUTY VERTICAL MACHINING CENTRES

AJMCV 1400/1600



Machine Tool Exporters to the World since 1940

HEAVY DUTY VERTICAL MACHINING CENTRES

**AJMCV 1400
/1600**

This range of machines are heavy weights in their field, weighing in at 12 tonnes and having solid box ways in all axes, designed to take a big cut without vibration. Other machines are just not built this way.

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 & price.



AJMCV 1600

Solid box ways last longer and work harder on hard materials. Ergonomically designed to save space and power, these machines make an excellent tool in any machine shop.

| MODEL | AJMVCV 1400 | | AJMVCV 1600 | |
|-----------------------------------|--|------------------------------|---------------------------------------|---------------------------------------|
| Travel | | | | |
| X-Axis | 1400 mm (55.1") | | 16000 mm (63") | |
| Y-Axis | | | 760 mm (29.9") | |
| Z-Axis | | | 680 mm (26.8") | |
| Spindle Nose to Table | | | 125 ~ 805 mm (4.9 ~ 31.7") | |
| Table | | | | |
| Table Size | 1600 X 700 mm (63 X 27.5") | | 1800 X 700 mm (70.9 X 27.5") | |
| Floor to Table | | | 960 mm (37.8") | |
| Max. Table Loading Capacity | 2,500 kgs (5,511Lbs) | | 3,000 kgs (6,614Lbs) | |
| T-Slot (number x width x pitch) | | | 5 X 22 mm X 125 mm (5 X 0.86" X 4.9") | |
| Spindle Center to Column | | | 760 mm (29.9") | |
| Feed System | | | | |
| Rapid Traverse Speed | X/Y: 24 M/min(944.8"/min) , Z:20 M/min(787.4"/min) | | | |
| Feed Motor (FANUC) | Alpha 22-3000i | | | |
| Ball Screw Diameter & Pitch | X / Y / Z : 50mm / 10mm (2/0.4") | | | |
| 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) | 8,000 / 10,000 | 6,000 / 8,000 | 8,000 / 10,000 | 6,000 / 8,000 |
| Spindle Motor | Alpha 12-7000i 11/15 Kw | Alpha 12-7000i 15/18.5 Kw | Alpha 12-7000i 11/15 Kw | Alpha 12-7000i 11/15 Kw 15/18.5 Kw |
| Type of Transmission | Belt | | | |
| Automatic Tool Changer | | | | |
| Tool Storage Capacity | 24 / 32 or 40 (opt) | 24 / 30 or 40 (opt) | 24 / 32 or 40 (opt) | 24 / 30 or 40 (opt) |
| ATC Type | Arm type | | | |
| Max. Tool Diameter | 90 / 76 mm (3.5 / 3") | 110 / 127 mm (4.3 / 5") | 90 / 76 mm (3.5 / 3") | 110 / 127 mm (4.3 / 5") |
| Without Adjacent Tool | 170 / 127 mm (6.7 / 5") | 200 / 228 mm (7.9 / 9") | 170 / 127 mm (6.7 / 5") | 200 / 228 mm (7.9 / 9") |
| Max. Tool Length | 300mm(11.8") | 300mm(11.8") | 300mm(11.8") | 300mm(11.8") |
| Max. Tool Weight | 7 kg(15 Lbs) | 15 kgs(33Lbs) | 7 kg(15 Lbs) | 15 kgs(33Lbs) |
| Tool Changing Time (Tool to Tool) | 1.8 / 1.5 / 1.5 sec | 2.9 sec | 1.8 / 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 | 650 L | | | |
| Coolant Capacity | 105 L / min | | | |
| Chip Flush Capacity | 125 L / min | | | |
| Machine size | | | | |
| Machine Height | 2,940 mm(115.7") | | 2,940 mm(115.7") | |
| Floor Space | 3,600 X 2,750 mm(141.7X108.3") | | 4,000 X 2,750 mm(157.5X108.3") | |
| Weight | 11980 kgs(5434Lbs) | 12340 kgs(5597Lbs) | 12040 kgs(5461Lbs) | 12400 kgs(5625Lbs) |
| Power Source | | | | |
| Electrical Power Supply | 25 KVA / 3PH / 220V / 50 / 60HZ | | | |
| Compressed Air Supply | 6.0 kgf/cm ² (85PSI) (0.6MPa) | | | |
| Controller | | | | |
| FANUC / HEIDENHAIN / SIEMENS | | | | |

TECHNICAL SPECIFICATIONS

STANDARD ACCESSORIES

- Armless type ATC (20Tools) (ISO40)
- Arm type ATC (24 tools) (ISO50)
- Fully enclosed splash guard
- Chip flush system
- Coolant system
- 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 (24 or 32 or 40 tools) (ISO40)
- Arm type ATC (30 tools) (ISO50)
- Bigger spindle motor 11/15kW, 15/18kW (ISO40)
- Spindle chiller
- Coolant through spindle system
- Air blow system for dry cutting
- Flat type chip conveyor
- 4th or 4+5th axis rotary table
- High precision linear scale
- Work piece measurement system
- Tool length measurement system
- Heat exchanger on electrical cabinet



AJMVCV 1600

Solid construction with box ways



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