

INTRODUCING

The New **Diamond Cut Series**

Vertical Machining Center

DV Series

Direct Drive 15k Spindle

- Travel size range:
DV-800 (31.5 x 19.7 x 21.3)
DV-2000 (78.7 x 35.4 x 31.5)
- CAT-40 Tool Taper
- 24-Position ATC standard
(30-Position for 1600 & 2000 size)

- **High Rigidity**

Robust structure design based on Meehanite cast iron with enhanced ribs in the major construction areas provide super rigidity for heavy duty cutting or high speed finishing.

- **High Speed**

Direct drive double anchored ball screws combined with heavy duty linear guide ways provide high rigidity, low noise and low friction.

- **High Accuracy**

The spindle is designed with an isolated direct drive (IDD) transmission which uses no belt or gear in the motor/spindle connection. The spindle is free from the thermal effect of the main motor while a surrounding jacket of oil circulated through a chiller system further stabilizes spindle temperature.

- **High Efficiency**

The ATC is a very fast cam driven Arm Type and combined with rapid speeds of up to 945"/min. in the X, Y. axes and 787"/min. in the Z-axis, saves on non-cutting time.



DV Series

Standard Machine Features

Full Enclosure
 15,000-RPM Direct Drive Spindle
 Spindle Oil Chiller
 24-Position Automatic Tool Changer
 CAT-40 Tool Taper
 Coolant Thru Spindle Prep (1000psi)
 LM Guideways
 Auto Oil Lube System
 Chips Auger
 Air Gun
 Water Gun
 Oil / Coolant Separator
 Automatic Power Shut Down Circuit
 Three Stage Patrol Lamp
 Machine Lamp
 Leveling Bolts and Pads
 Instruction Manuals
 Electrical Schematics
 Accuracy Test Documentation
 Spindle Load Meter

Mitsubishi M70-V Standard Package

300 Block Look Ahead
 Editable Data Server (Flashcard type)
 Ethernet with TCP/IP Protocol &
 RS232 Communications
 512 KB Machine Memory
 Parts Count & Run Hour Display
 Inch/Metric Switching
 Helical Interpolation
 Coordinate Rotation
 Rigid Tapping
 Tool Life Management
 Additional Work Offsets
 Navi (Conversational)
 Programming
 Workpiece Pickup Routines
 Graphic's Display
 Inch/Metric Switching



Model Size	Axis Travels X-Y-Z inch	Table Size X-Y inch	Max Table Cap. lbs	Spindle Speed	Spindle HP (cont/30 min)	Spindle Nose to Table inch	Arm Type ATC Tool Count Tool Taper	Max Tool Dia. w / wo Adj. Tool	Max Tool Length / Weight	X, Y, (Z) Rapid Speed	Cutting Feedrate inch/min.	Machine Weight lbs.	Power KVA	Coolant Cap. Gal.	Mach Dimensions W-D-H inch
DV-800	31.5 x 19.7 x 21.3	35.8 x 19.6	1100	15,000	15-Oct	5.9 ~ 27.2	24 / Cat-40	3.1 / 4.9	12.0 / 15.4	945 (787)	0.04 ~ 394	11,700	25	77	82.6 x 76.2 x 100.7
DV-1000	40.2 x 22.0 x 23.6	39.3 x 22.0	1650	15,000	10 / 15	5.3 ~ 28.9	24 / Cat-40	3.1 / 4.9	12.0 / 15.4	945 (787)	0.04 ~ 394	15,400	25	77	88.2 x 76.2 x 103.0
DV-1200	47.2 x 23.6 x 26.6	48.0 x 24.4	2200	15,000	10 / 15	5.3 ~ 28.9	24 / Cat-40	3.1 / 4.9	12.0 / 15.4	945 (787)	0.04 ~ 394	17,600	25	95	113.4 x 85.8 x 110.2
DV-1400	55.1 x 31.5 x 29.1	59.1 x 33.5	3520	15,000	10 / 15	3.9 ~ 33.1	24 / Cat-40	3.3 / 5.9	12.0 / 15.4	787 (787)	0.04 ~ 315	29,800	40	132	136.6 x 110.8 x 126.4
DV-1600	63.0 x 35.4 x 31.5	66.9 x 33.5	4410	15,000	10 / 15	3.9 ~ 35.4	30 / Cat-40	3.3 / 5.9	12.0 / 15.4	787 (590)	0.04 ~ 315	41,900	40	132	151.2 x 126.2 x 127.8
DV-2000	78.7 x 35.4 x 31.5	82.7 x 33.5	6610	15,000	10 / 15	3.9 ~ 35.4	30 / Cat-40	3.3 / 5.9	12.0 / 15.4	787 (590)	0.04 ~ 315	46,300	40	145	187.4 x 126.2 x 127.8

Optional Accessories

Automatic Centering Probe (Blum Infrared TC50 Probe)
 Tool Length Touch Pre-setter (Blum Z Nano)
 Tool Length Laser Pre-setter (Blum NT)
 Programmable Coolant Nozzle
 Paper Filter for CTS System
 Mist Collector
 Mist Pump (for hard milling)
 Chip Conveyor
 Chip Blaster (J30)
 Chip Blaster (JV40)
 Transformer – 30kVA
 Linear Glass Scales
 Mitsubishi M720 CNC Control Unit
 *4th and 5th Axis Unit including interfacing
 Pallet Changer System



15,000-RPM
 Direct Drive Spindle



24-Position Arm Type ATC Standard



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