

**LARGER
WORKPIECES**
AND HIGHER LOADS

**TERA
60V/50**



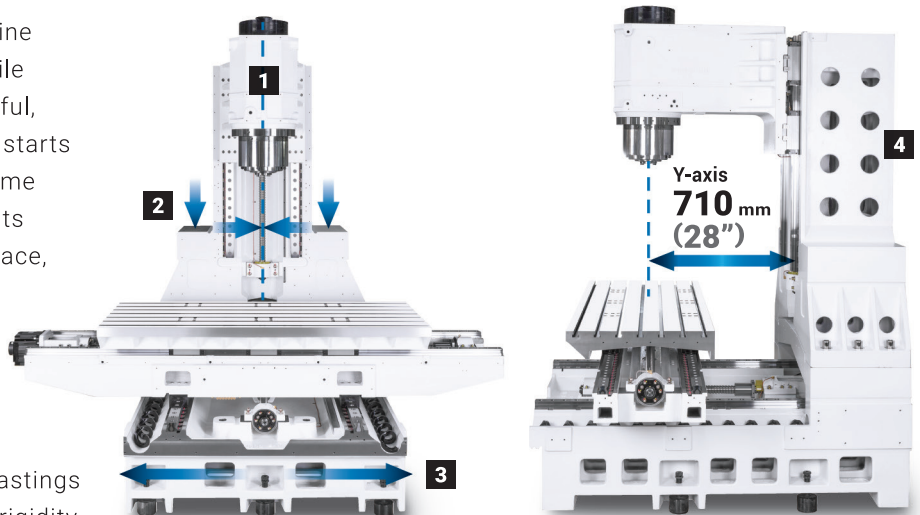
50
Taper

3
Axis

32
Tools

Micro Dynamics Vertical Machining Center Line opens a new era in multi-purpose and versatile machining centers. Compact, durable, powerful, strong and accurate, the MEGA/TERA Series starts a revolution in the market: the smallest C-frame machines provide powerful and precise results for manufacturers of dies and molds, aerospace, automotive, semi-conductor, job shops and general machine sectors.

The heavily ribbed structure is made of FC300 Meehanite® casting that has been FEA analyzed for strength and stability. All castings are designed to reach the maximum level of rigidity for the best machining performance.



- 1. Symmetric Design
- 2. Supporting Shoulders

- 3. Wide Base
- 4. Honeycomb Ribbed

MEGA SERIES STANDARD EQUIPMENT

BUILT-IN SPINDLE

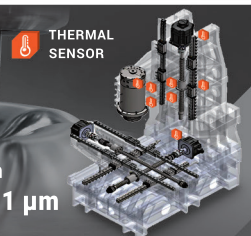
Taper	50 Taper Dual Contact (BBT / CAT / DIN / HSK-100A)
Speed	12,000 rpm
Power	34 kW (45 HP)
Torque	570 Nm (420 ft-lb)



DYPEC® DYNAMIC PREDICTIVE ERROR COMPENSATION



Thermal
Compensation
Resolution 0.1 μm



MICRO DYNAMICS HMI

Micro Dynamics features
Mitsubishi CNC M830VW /
CNC M850VW (opt) Control.

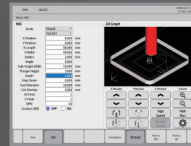
- 5,400 block look ahead.
- 60 GB data server.
- Tilted work planes (G68.2)
- TCP control.



PART SETUP



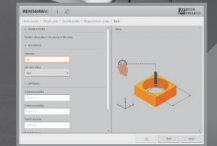
TOOL SETUP



MICRO MILL®



MAGAZINE MONITOR

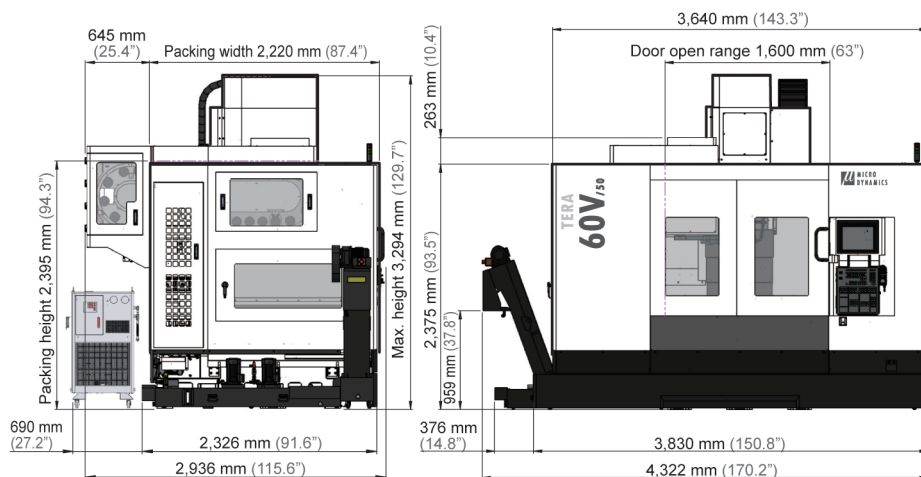


RENISHAW SET & INSPECT

SPECIFICATIONS

MODEL	TERA 60V ⁵⁰
TRAVEL	
X Axis	1,524 mm (60")
Y Axis	710 mm (28")
Z Axis	635 mm (25")
Spindle Nose to Table Surface	150 ~ 785 mm (5.9" ~ 30.9")
Spindle Center to Column Front	733.5 mm (28.9")
TABLE	
Table Size	1,724 x 700 mm (67.9" x 27.6")
Max. Table Load	2,000 kg (4,409 lb)
Table Height (from the Ground)	900 mm (35.4")
SPINDLE	
Spindle Taper	50 Taper Dual Contact (BBT / CAT / DIN / HSK-100A)
I.D. of Spindle Bearing	Ø100 mm (Ø3.93")
Spindle Speed	50 ~ 12,000 rpm
Max. Power	34 kW (45 HP)
Max. Cutting Torque	570 Nm (420 ft-lb)
Clamping Force	2,100 kgf (4,630 lbf)
Max. Speed for Rigid Tapping	3,000 rpm
FEEDRATE	
Rapid Feedrate - X Axis	52,000 mm/min (2,047 ipm)
Rapid Feedrate - Y Axis	52,000 mm/min (2,047 ipm)
Rapid Feedrate - Z Axis	32,000 mm/min (1,260 ipm)
Cutting Feedrate	20,000 mm/min (787 ipm)
ATC	
Magazine Capacity	32T
Tool Selection	Bi-Direction / Random
Tool Shank Type	JIS6339 (BT50) / DIN69871 (DIN50) / ANSI B5.50 (CAT50)
Pull Stud Type	JIS6339 / DIN69872 / CAT50DIN
Max. Tool Diameter x Length	Ø125 x 350 mm (Ø5" x 13.8")
Without Adjacent Tool	Ø229 mm (Ø9")
Max. Tool Weight	15 kg (33.1 lb)
PERIPHERAL	
Power Consumption (220V/3PH)	55 KVA
Pneumatic Supply	300 L/min (10.6 cfm) [0.6 MPa, ANR]
Cutting Coolant Pump Motor	1.1 kW (1.5 HP)
Base Wash Pump Motor	1.1 kW (1.5 HP)
CTS Pump Motor (opt)	3 kW (4 HP)
Coolant Tank Capacity	400 L (106 gal)
Foot Print Size (W x D)	4,322 x 2,936 mm (170.2" x 115.6")
Machine Height (H)	3,294 mm (129.7")
Packing Size (W x D x H)	4,900 x 2,310 x 2,550 mm (192.9" x 90.9" x 100.4")
Machine Net Weight	10,170 kg (22,421 lb)
Machine Gross Weight	10,560 kg (23,281 lb)
ACCURACY	
Positioning Accuracy / Full Stroke	0.005 mm (0.0002") [VDI 3441]
Repeatability Accuracy	±0.0025 mm (±0.0001")

MACHINE DIMENSIONS



Note: Specifications subject to change without notice.

EQUIPMENT

STANDARD EQUIPMENT

- 12,000 rpm Built-In Spindle (50 Taper)
- DYPEC® Thermal Compensation
- Mitsubishi CNC 830VW
- 15" Touchscreen Display
- Micro Dynamics® HMI
- 8 M-Codes (M20 ~ M27)
- Automatic Power Off
- 32 Tools(*)
- ATC Magazine Panel
- Tool Magazine LED
- CTS Preparation (without Rotary Union)
- Coolant Gun & Air Gun
- Scraper Type Chip Conveyor
- Twin Chip Augers
- Full Chip Enclosure
- Safety Door
- Manuals / Tool Kit / Foundation Kit

OPTIONAL EQUIPMENT

- X / Y / Z Axis Linear Scale (Renishaw)
- Mitsubishi CNC 850VW
- 19" Touchscreen Display
- Tool / Workpiece Measurement
- Additional 8 M-Codes (M130 ~ M137)
- Servo Tool Magazine(*)
- ATC Auto Door(*)
- Metal Coolant Ring
- Spinning Window
- 20-bar / 40-bar / 70-bar CTS (290 psi / 580 psi / 1,000 psi)
- Chain Type Chip Conveyor
- Drum Type Chip Conveyor
- Rear Type Chip Conveyor(*)
- Disc Type Oil Skimmer
- Oil Mist Collector
- CE-Conformity Package
- Transformer
- Automatic Door (Pneumatic / Servo)

(*) Factory order

MICRO DYNAMICS
Precision Performance

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Website

Youtube

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