

MULTI-SURFACE MACHINING

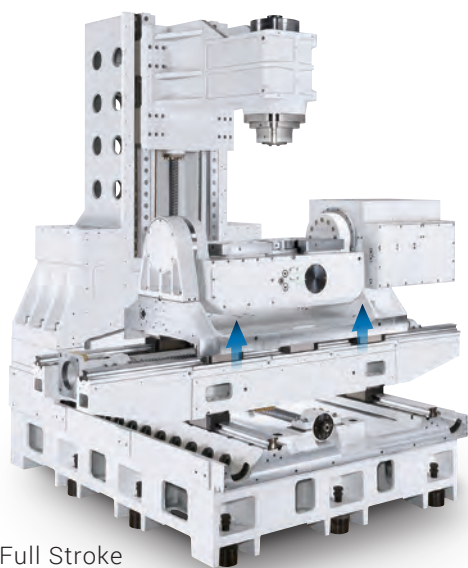
MAXIMUM FLEXIBILITY

TERA 50VT

#40

4+1 AXIS

40T



Full Stroke
Support

COMPLETE PROCESS IN 1 CYCLE

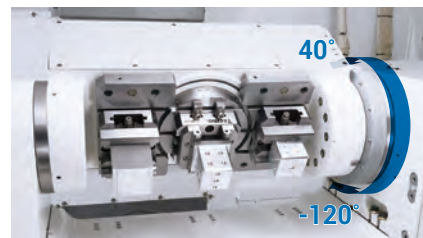


Machine 6 Sides In One Load

- Left vise: cut dove tail.
- Central vise: 5-side machining.
- Right vise: finish dove tail.



Rotary axis motion ranges

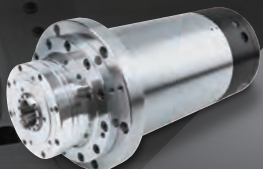


Tilting axis motion ranges

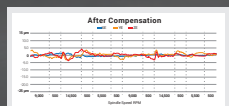
MEGA / TERA SERIES STANDARD EQUIPMENT

BUILT-IN SPINDLE

- Speed: 15,000 rpm
- Power: 31 kW
- Torque: 141 Nm



DYPEC® DYNAMIC PREDICTIVE ERROR COMPENSATION



Thermal
Compensation
 $\pm 5\mu\text{m}$



MICRO DYNAMICS HMI



PART SETUP



TOOL SETUP



MICRO MILL®



MAGAZINE MONITOR



COLLISION DETECTION

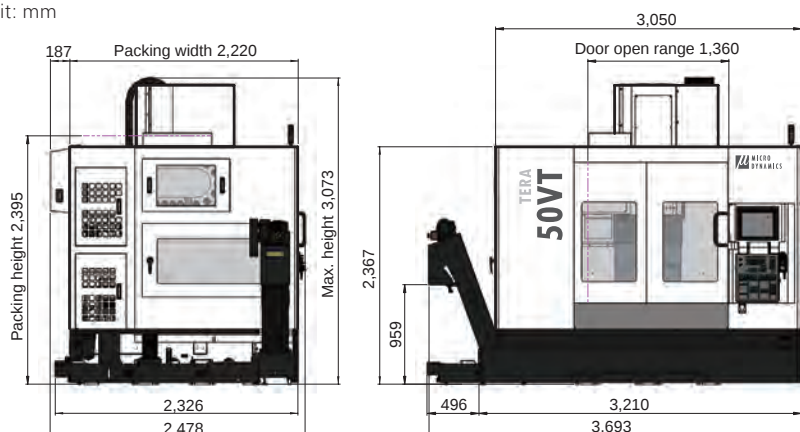
SPECIFICATIONS

MODEL	TERA 50VT
TRAVEL	
X Axis	970 mm
Y Axis	710 / 650 (90°)
Z Axis	500 mm
A Axis (Tilting Axis)	40° ~ -120°
C Axis (Rotary Axis)	360°
Spindle Nose to Table Surface	50 ~ 550 mm
Spindle Center to Column Front	733.5 mm
TABLE	
Table Size	ø320 (720 x 400)
Min. Table Index Unit	0.001°
Max. Table Load	300 kg
Table Height (from the Ground)	1,205 mm
SPINDLE	
Spindle Taper	40 Taper Dual Contact (BBT / CAT / DIN / HSK-63A)
I.D. of Spindle Bearing	ø70 mm
Spindle Speed	50 ~ 15,000 rpm
Max. Power	31 kW
Max. Cutting Torque	141 Nm
Clamping Force	1,200 kgf
Max. Speed for Rigid Tapping	6,000 rpm
FEEDRATE	
Rapid Feedrate - X Axis	48,000 mm/min
Rapid Feedrate - Y Axis	48,000 mm/min
Rapid Feedrate - Z Axis	48,000 mm/min
Rapid Feedrate - A (Tilting) Axis	33
Rapid Feedrate - C (Rotary) Axis	66
Cutting Feedrate	20,000 mm/min
ATC	
Magazine Capacity	40T
Tool Selection	Bi-Direction / Random
Tool Shank Type	JIS6339 (BT40) / DIN69871 (DIN40) / ANSI B5.50 (CAT40)
Pull Stud Type	JIS6339 / DIN69872 / CAT40DIN
Max. Tool Diameter x Length	ø75 x 300 mm
Without Adjacent Tool	ø150 mm
Max. Tool Weight	7 kg
PERIPHERAL	
Power Consumption (220V/3PH)	50 KVA
Pneumatic Supply	300 (0.6 MPa) L/min (ANR)
Cutting Coolant Pump Motor	1.1 kW
Base Wash Pump Motor	1.1 kW
CTS Pump Motor (opt)	3 kW
Coolant Tank Capacity	400 L
Foot Print Size (W x D)	3,693 x 2,478 mm
Machine Height (H)	3,073 mm
Packing Size (W x D x H)	3,400 x 2,30 x 2,550 mm
Machine Net Weight	9,560 kg
Machine Gross Weight	9,910 kg
ACCURACY	
Positioning Accuracy / Full Stroke	0.005 (VDI 3441) mm
Repeatability Accuracy	±0.0025 mm

Note: Specifications subject to change without notice.

MACHINE DIMENSIONS

Unit: mm



EQUIPMENT

STANDARD EQUIPMENT

- 15,000 rpm Built-In Spindle
- DYPEC® Thermal Compensation
- Mitsubishi CNC 830VW
- 15" Touchscreen Display
- Micro Dynamics® HMI
- 8 M-Codes (M20 ~ M27)
- Automatic Power Off
- 40 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

- 18,000 & 20,000 rpm Built-In Spindle
- 24,000 rpm Built-In Spindle: HSK-63A
- X / Y / Z Axis Linear Scale
- A / C Axis Rotary Scale
- Mitsubishi CNC 850VW
- 19" Touchscreen Display
- Tool Measurement / Workpiece Measurement
- Additional 8 M-Codes (M130 ~ M137)
- 60 / 90 / 120 Tools(*)
- Servo Tool Magazine(*)
- ATC Auto Door(*)
- Metal Coolant Ring
- Spinning Window
- 20-Bar (290 psi) / 40-Bar (580 psi) / 70-Bar (1,000 psi) CTS
- Chain Type Chip Conveyor
- Drum Type Chip Conveyor
- Rear Type Chip Conveyor(*)
- Disc Type Oil Skimmer
- Oil Mist Collector
- 500 / 630 mm Diameter face table
- CE-Conformity Package
- Transformer
- Automatic Door (Pneumatic / Servo)

(*) Factory order

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