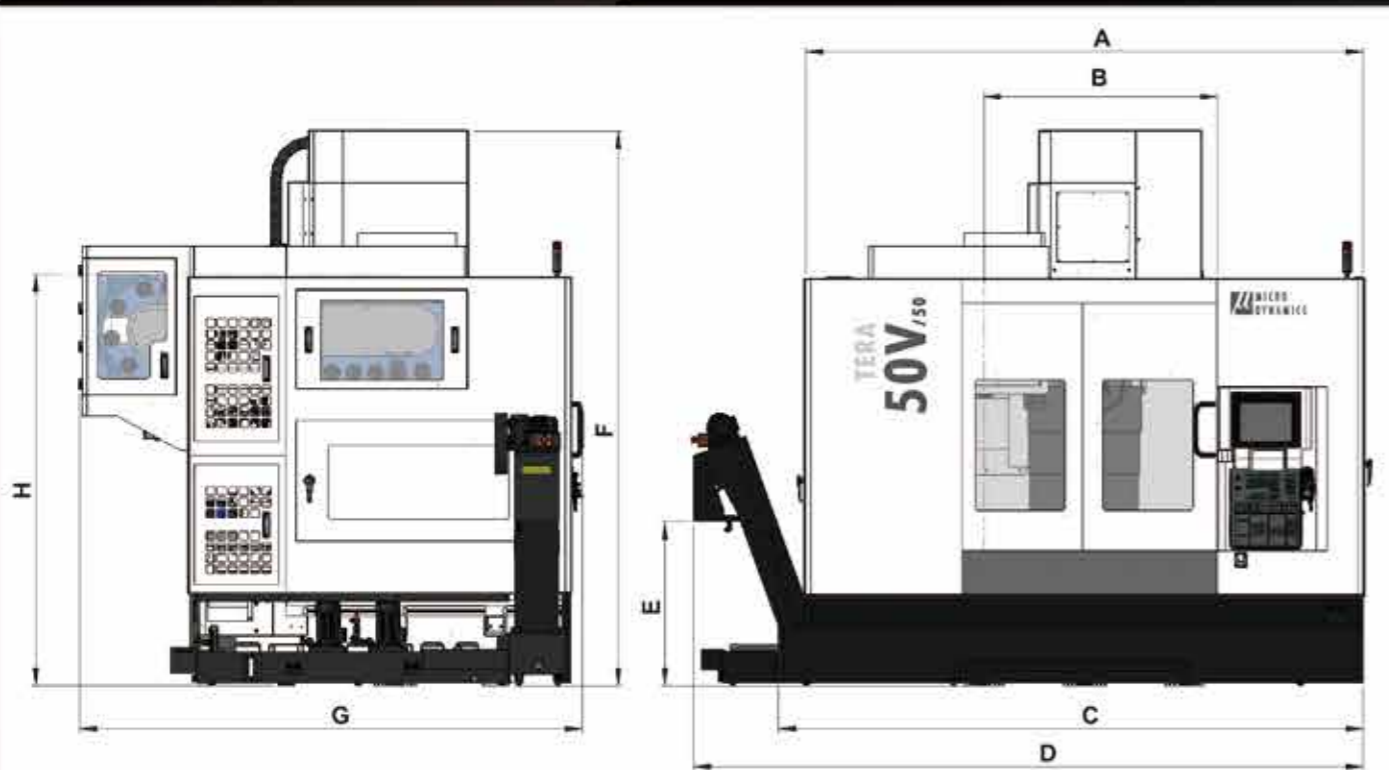


## STANDARD EQUIPMENT

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



## MACHINE DIMENSIONS



MODEL	TERA 50V <sub>/50</sub>	TERA 60V <sub>/50</sub>	TERA 50VT <sub>/50</sub>
A Width	3,250 mm	3,640 mm	3,250 mm
B Door Open Range	1,360 mm	1,600 mm	1,360 mm
C Front Water Tank Width	3,410 mm	3,830 mm	3,410 mm
D Max. Width	3,904 mm	4,322 mm	3,904 mm
E Chip Conveyor Height	959 mm	959 mm	959 mm
F Max. Height	3,237 mm	3,237 mm	3,344 mm
G Max. Depth	2,936 mm	2,936 mm	2,936 mm
H Packing Height	2,395 mm	2,395 mm	2,395 mm

Note: Specifications subject to change without notice.

**50 TAPER**  
VERTICAL MACHINING CENTER  
Compact, Durable, Powerful,  
Strong and Accurate



sales@microdynamicsfa.com  
www.microdynamicsfa.com



MD202403E

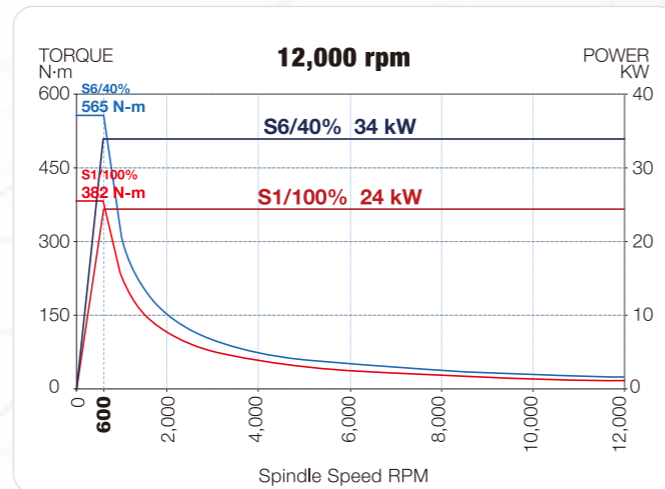


# 50 TAPER

## BUILT-IN SPINDLE

- Powerful integrated 50 taper dual contact spindle.
- Maintenance free 12,000 rpm spindle requires no added oil or grease.
- ATE® motor integrated with hybrid ceramic angular contact bearings.
- Micro Dynamics drawbar has been rigorously tested to sustain more than 2 million cycles.
- For all applications, from heavy duty to high speed machining.
- Highest productivity under any conditions and complexities.
- CTS (Coolant Through Spindle) designed to sustain up to 70 bar (1,000 psi).(\*\*)

(\*\*) CTS preparation is standard equipment.  
CTS system is optional.



## MACHINING CAPACITY ON 1050 STEEL



Performance	750 cc/min	368 cc/min	756 cc/min	M42
Spindle Load	97%	20%	70%	18%
Tool	160 mm Face Mill	32 mm End Mill	60 mm Drill	42 x 3 mm Tap
Cut	100 x 5 mm	32 x 5 mm	ø60 x 45 mm Depth	-
Feedrate	1,500 mm/min	2,300 mm/min	280 mm/min	432 mm/min
Spindle Speed	450 rpm	3,800 rpm	1,100 rpm	144 rpm

Note: Factory Conditions

## SPECIFICATIONS

ITEM	UNIT	TERA 50V/50	TERA 60V/50	TERA 50VT/50	
TRAVEL	X Axis	mm	1,270	970	
	Y Axis	mm	710	710 / 650 (90°)	
	Z Axis	mm	635	635	
	A Axis (Tilting Axis)	deg	N/A	N/A	40° ~ -120°
	C Axis (Rotary Axis)	deg	N/A	N/A	360°
	Spindle Nose to Table Surface	mm	150 ~ 785	150 ~ 785	50 ~ 550
	Spindle Center to Column Front	mm	733.5	733.5	733.5
	Table Size	mm	1,420 x 700	1,724 x 700	ø320 (720 x 400)
TABLE	Min. Table Index Unit	deg	N/A	N/A	0.001°
	Max. Table Load	kg	1,500	2,000	250 (0°~45°) / 150 (45°~90°)
	Table Height (from the Ground)	mm	900	900	1,205
	Positioning Accuracy / Full Stroke	mm	0.005 (VDI 3441)		
Repeatability Accuracy	mm	0.0025			
SPINDLE	Spindle Taper		50 Taper Dual Contact		
	I.D. of Spindle Bearing	mm	ø100		
	Spindle Speed	rpm	50 ~ 12,000		
	Max. Power	kW	34		
	Max. Cutting Torque	Nm	565		
	Max. Speed for Rigid Tapping	rpm	3,000		
FEEDRATE	Rapid Feedrate - X / Y / Z Axis	m/min	52 / 52 / 36		48 / 48 / 36
	Rapid Feedrate - A (Tilting) Axis	rpm	N/A		33
	Rapid Feedrate - C (Rotary) Axis	rpm	N/A		36
	Cutting Feedrate	m/min	0 ~ 20		
ATC	Magazine Capacity		32		
	Tool Selection		Bi-Direction / Random		
	Max. Tool Diameter x Length	mm	ø125 x 300	ø125 x 300	ø125 x 300
	Without Adjacent Tool	mm	ø229		
Max. Tool Weight	kg	15			
PERIPHERAL	Power Consumption (220V/3PH)	KVA	55		
	Pneumatic Supply	L/min (ANR)	300 (0.6MPa)		
	Coolant Tank Capacity	L	350	400	350
	Machine Dimensions (W x D x H)	mm	3,904 x 2,936 x 3,237	4,322 x 2,936 x 3,237	3,904 x 2,936 x 3,344
Machine Net Weight	kg	9,600	10,170	10,600	

Note: Specifications subject to change without notice.

## RETENSION KNOB

