



VERTICAL MACHINING CENTER

Compact, Durable, Powerful,
Strong and Accurate



MEGA TERA SERIES

Specifications

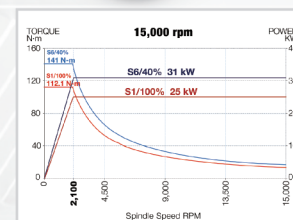
MEGA / TERA SERIES

BUILT-IN SPINDLE

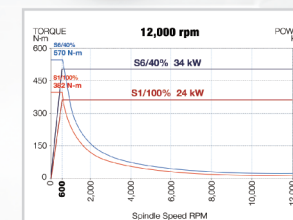
Powerful Integrated **Dual Contact** Spindles.



40 Taper



50 Taper



BBT30 / CAT30 / DIN30 / HSK-40A

30,000 rpm / 18 kW / 25 Nm

MEGA 20VT Option

BBT40 / CAT40 / DIN40 / HSK-63A

15,000 rpm / 31 kW / 141 Nm

20,000 rpm / 35 kW / 119 Nm

24,000 rpm / 35 kW / 119 Nm

(Standard HSK-63A)

Standard

Option

Option

BBT50 / CAT50 / DIN50 / HSK-100A

12,000 rpm / 34 kW / 570 Nm

Standard

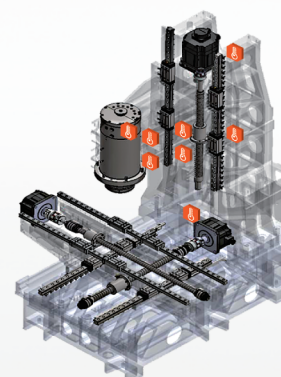


CTS + ATS
(Coolant Through Spindle
+ Air Through Spindle)

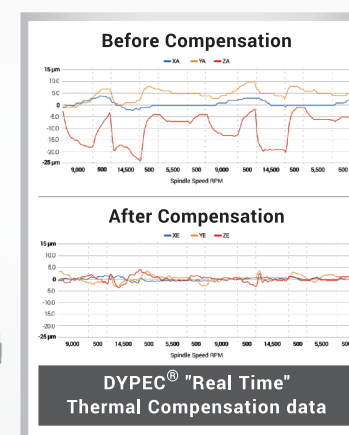
- 20-Bar (290 psi)
- 40-Bar (580 psi)
- 70-Bar (1,000 psi)

DYPEC® Thermal Compensation

Dynamic Predictive
Error Compensation
(resolution 0.1µm)



THERMAL SENSORS

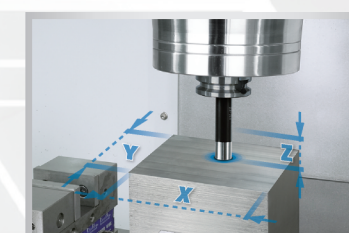


X/Y/Z axis static in micron error
before and after DYPEC®
compensation (48 hours test).

MICRO DYNAMICS VERTICAL MACHINING CENTER

MICRO DYNAMICS HMI

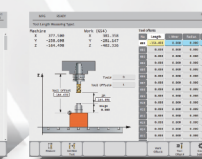
Micro Dynamics HMI Apps.



AUTO PART SETUP with HARD PROBE.



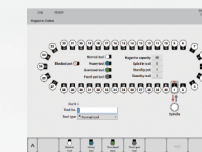
PART SETUP



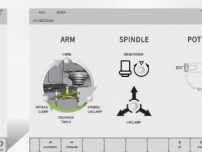
TOOL SETUP



MICRO MILL®



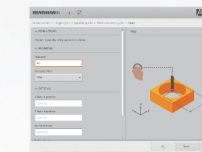
MAGAZINE MONITOR



ATC RECOVERY



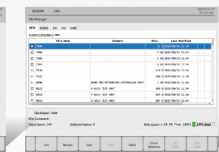
APC RECOVERY



RENISHAW
SET & INSPECT



COLLISION DETECTION



FILE MANAGER

MITSUBISHI CNC M830VW / CNC M850VW(*)

- 15" / 19"(*) touchscreen display.
- 5,400 block look ahead.
- 60 GB data server.
- 54 sets work offsets.
- 400 sets tool life management.
- 8,000 sets macro variable.
- 64 bit microprocessor.
- Programs can be run from the front side USB or the hard drive.
- 3D circular interpolation.
- NURBS interpolation.(**)
- 4G SSS control (Super Smooth Surface).
- Tool center point control.
- Workpiece position offset for rotary axis.
- Upgradable to 5 axes simultaneous control.(**)

(*) Optional (**) for authorized regions



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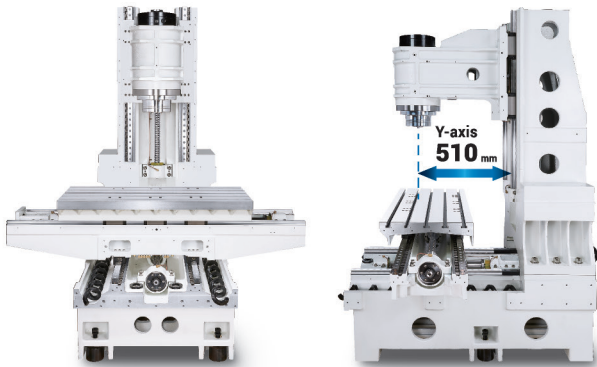


MD202603 Metric (E)

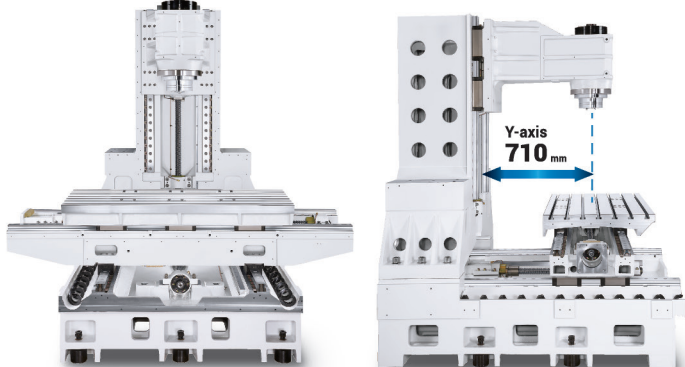
VERTICAL MACHINING CENTER

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 start 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.

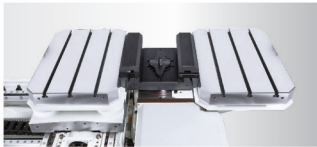
MEGA SERIES



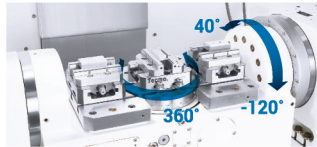
TERA SERIES



VAPC Type - Auto Pallet Changer



VT Type - Vertical Trunnion



TRUNNION TABLE FACE PLATE

MODEL	Standard	Option (Field interchangeable)	
	220 mm	300 mm	350 mm
MEGA 30VT			
	320 mm	500 mm	630 mm
TERA 50VT			



SERIES		MEGA series					TERA series						
ITEM / MODELS	UNIT	MEGA 30V	MEGA 40V	MEGA 20VAPC	MEGA 20VT ^(*)	MEGA 30VT	TERA 40V	TERA 50V	TERA 60V	TERA 50VT	TERA 50V/50	TERA 60V/50	TERA 50VT/50
X Axis	mm	760	1,020	600	760	780	1,020	1,270	1,524	970	1,270	1,524	970
Y Axis	mm	510	510	510	510	510	710	710	710	710 / 650 (90°)	710	710	710 / 650 (90°)
Z Axis	mm	510	510	510	451	441	635	635	635	500	635	635	500
Table Size	mm	860 x 500	1,120 x 500	560 x 400	ø200	ø220 (500 x 300)	1,120 x 700	1,420 x 700	1,724 x 700	ø320 (720 x 400)	1,420 x 700	1,724 x 700	ø320 (720 x 400)
A Axis (Tilting Axis)	deg	N/A	N/A	N/A	40° ~ -120°	40° ~ -120°	N/A	N/A	N/A	40° ~ -120°	N/A	N/A	40° ~ -120°
C Axis (Rotary Axis)	deg	N/A	N/A	N/A	360°	360°	N/A	N/A	N/A	360°	N/A	N/A	360°
Spindle Taper		40 Taper Dual Contact (BBT / CAT / DIN / HSK-63A)									50 Taper Dual Contact (BBT / CAT / DIN / HSK-100A)		
Spindle Motor Power	kW	31									34		
Max. Cutting Torque	Nm	141									570		
Spindle Speed	rpm	50 ~ 15,000									50 ~ 12,000		
Rapid Feedrate (X / Y / Z axis)	m/min	52 / 52 / 48	52 / 52 / 48	52 / 52 / 48	48 / 48 / 48	48 / 48 / 48	52 / 52 / 48	52 / 52 / 48	52 / 52 / 48	48 / 48 / 48	52 / 52 / 32	52 / 52 / 32	48 / 48 / 32
Tool Magazine Capacity		30T	40T	40T	40T	40T	40T	40T	40T	40T	32T	32T	32T
Foot Print Size (W x D)	mm	2,389 x 2,245	3,044 x 2,293	2,561 x 2,972	2,479 x 2,293	3,044 x 2,293	3,137 x 2,478	3,606 x 2,478	4,322 x 2,478	3,693 x 2,478	3,904 x 2,936	4,322 x 2,936	3,904 x 2,936
Machine Height	mm	2,823	2,823	2,921	2,975	2,975	2,953	2,953	2,953	3,073	3,294	3,294	3,402
Machine Net Weight	kg	4,890	5,610	6,400	6,350	6,350	8,040	8,600	9,170	9,560	9,600	10,170	10,600

Note: Specifications subject to change without notice.

(*)Optional 30,000 rpm spindle (BBT30 / HSK-40A)