

2-2 Machine Specifications

	MT12	MT25	MT20
• Max. swing			
Over adjacent tool			
with plane head	φ 146	φ 220	φ 200
with double bore head	φ 137	—	
Over turret face	φ 210	φ 300	φ 225
• Chuck size			
standard	φ 165 (6")	φ 254 (10")	φ 215 (8")
option	φ 215 (8")	—	φ 254 (option)
• Max. workpiece size guide line			
Max. diameter	φ 170	φ 290	φ 260
Max. length	220 mm	200 mm	170 mm
• Number of turret stations		15	
• Stroke			
X ₁ , X ₂ -axis (radius)	200 mm	250 mm	230 mm
Z ₁ -axis	200 mm	300 mm	250 mm
Z ₂ -axis	650 mm	920 mm	810 mm
Y-axis (option)	—	Y ₁ , Y ₂ : 120mm (±60)	Y ₁ , Y ₂ : 100mm (±50)
• Rapid traverse rate			
X ₁ , X ₂ -axis	24 m/min	16 m/min	20 m/min
Z ₁ , Z ₂ -axis	Z ₁ : 24 m/min Z ₂ : 32 m/min	Z ₁ : 18 m/min Z ₂ : 24 m/min	Z ₁ : 24 m/min Z ₂ : 32 m/min
Y-axis (option)	—	Y ₁ , Y ₂ : 10m/min	Y ₁ , Y ₂ : 20m/min
• Spindle speed (standard)	4500 rpm	3500 rpm	4200 rpm
• Standard tools			
Byte	□20 mm	□25 mm	
Boring bar (max.)		φ 40	
• Live tooling (option)			
Live tool motor	2.8 kW	4.4 kW	3.6 kW
Max. speed	4000 rpm	3000 rpm	3600 rpm
Spindle positioning		C-axis control (0.001deg)	
C-axis max. speed		200 rpm	
Max. live tool size	milling: φ 16 Tap: M12	milling: φ 20 Tap: M16	milling: φ 16 Tap: M12
Coolant tank capacity	200 ℓ	250 ℓ	200 ℓ
• Gross machine weight	approx.5500 kg	approx.10000kg	
• Required floor space (machine only)	L 2700mm × W 1850mm	L 3700mm × W 2250mm	L 2980mm × W 2100mm

2-3 Specifications of Loader System <Option>

Gantry

		MT12	MT25	MT20
Stroke	Y-axis	585 mm	850 mm	665 mm
	Z-axis	Left: 1930 mm	Left: 2730 mm	Left: 2250 mm
		Right: 270 mm	Right: 320 mm	Right: 400 mm
	X-axis	—	150 mm	
	α-axis (< > are optional.)	90° <270°>	270°	
Max. speed	Y-axis	100 m/min	70 m/min	100 m/min
	Z-axis	100 m/min		120 m/min
	X-axis	—	30 m/min	35 m/min
	α-axis	90°/0.8 sec		
Specifications of load/unload grippers (Air pressure)	Outer diameter	90 mm	215 mm	90 mm
	Jaw stroke (diameter range)	φ 30	φ 40	φ 33
	Gripping force	Air pressure 6 kgf/cm ²		
	Outside grip	180 kgf	240 kgf	180 kgf
	Inside grip	180 kgf	240 kgf	180 kgf