

# 1 STANDARD SPECIFICATION OF THE MACHINE

## 1-1 Principal Specification

### 1. QTN-200M/200MS

Item		Unit	Machine model and specification		
			QTN-200M		QTN-200MS
			500U	1000U	
Capacity	Chuck size	in.	8		
	Maximum swing	mm (in.)	φ675 (26.57)		
	Standard machining diameter	mm (in.)	φ276 (10.87)		
	Maximum machining diameter	mm (in.)	φ380 (14.96)		
	Bar work capacity *1	mm (in.)	φ65 (2.56)		
	Distance between spindle end and turret end face	mm (in.)	135 - 710 (5.31 - 27.95)	135 - 1220 (5.31 - 48.03)	—
	Distance between chuck jaws of both spindles	mm (in.)	—		575 (22.64)
	Max. support weight (Chuck included) *3	kgf (lbs)	300 (660) 700 (1540)	[Chuck work] [Shaft work]	300 (660) [Main SP] 150 (330) [Sec. SP]
Main spindle	Spindle speed *2	min <sup>-1</sup> (rpm)	35 - 5000		
	Spindle nose		A2-6		
	Acceleration and deceleration time *4	sec	2.3 [For Asia: 3.2]		
	Bore	mm	φ76 (2.99)		
	Motor output [half-hourly rating]	kW (HP)	26 (35) [For Asia: 18.5 (25)]		
	Maximum torque	kgf·m (ft·lbs)	36.0 (260.3) [For Asia: 33.3 (240.8)]		
Secondary spindle	Chuck size	in.	—		6
	Spindle speed	min <sup>-1</sup> (rpm)	—		35 - 6000
	Spindle nose		—		A2-6
	Acceleration and deceleration time *4	sec	—		3.6
	Motor output [5/10-min. rating]	kW (HP)	—		7.5 (10)
	Maximum torque [5-min. rating]	kgf·m (ft·lbs)	—		7.7 (55.7)
Tailstock	Center bore	MT	5	4	—
	Travel [Tailstock]	mm (in.)	550 (21.65)	1050 (41.34)	—
	Maximum thrust	kgf (lbs)	700 (1540)		—
Turret	Number of tools (milling tools)		pieces	12 (12)	
	Tool size	Outside turning	mm (in.)	□25 (□1)	
		Inside turning		φ40 (1.5)	
		Milling drill		Max. φ20 (0.79)	
		Milling tap (Max.)		M12 (1/2 UNC)	[Main SP] M12 (1/2 UNC) [Sec. SP] M10 (3/8 UNC)
		End-mill		Max. φ20 (0.79)	
	Indexing time	Next/opposite pos.	sec	0.2/0.6	
	Milling spindle speed		min <sup>-1</sup> (rpm)	25 - 4500 (optional: 6000)	
	Milling motor output [10-min. rating]		kW (HP)	5.5 (7.5)	
Maximum torque of the milling spindle		kgf·m (ft·lbs)	3.6 (26.0)		

1

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Feed axes	Rapid traverse	X/Z/W [MS]	m/min (ft/min)	30/33 (98/108)		30/33/30 (98/108/98)
		C	min <sup>-1</sup> (rpm)	400		
	Travel	X	mm (in.)	230 [225 + 5] (9 [8.875 + 0.125])		
		Z		575 [570 + 5] (22.75 [22.5 + 0.25])	1085 [1080 + 5] (42.5 [42.25 + 0.25])	575 [420 + 155] (22.625 [16.5 + 6.125])
W	—			585 [580 + 5] (23 [22.875 + 0.125])		
Others	Coolant tank capacity		L (gal (US))	160 (42.3)	230 (60.8)	160 (42.3)
	Power requirement	Cont./30-min. rating	kVA	40.34/46.20 [For Asia: 30.65/35.90]		
Total	Overall dimensions	Center height	mm (in.)	1020 (40.16)		
		Length *2		USA: 2650 (104.33)	3290 (129.53)	USA: 2930 (115.35)
				Europe: 2485 (97.83)		Europe: 2765 (108.86)
				Asia: 2430 (95.67)		Asia: 2765 (108.86)
	Width	1780 (70.08)				
	Height	1840 (72.44)				
Floor space required	*2	m <sup>2</sup> (ft <sup>2</sup> )	USA: 4.72 (50.81)	5.86 (63.08)	USA: 5.22 (56.19)	
			Europe: 4.42 (47.58)		Europe: 4.92 (52.96)	
			Asia: 4.33 (46.61)		Asia: 4.92 (52.96)	
Machine weight		kgf (lbs)	4900 (10780)	5600 (12320)	5100 (11220)	