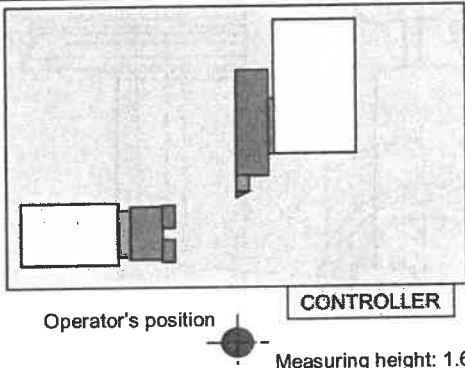


2. QTN250-II M, MS

Item			Unit	Machine model and specification		
				QTN250-II M		QTN250-II MS
				500U	1000U	
Capacity	Chuck size		in.	10		
	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.)	φ77 (3.03)		
	Distance between spindle end and turret end face		mm (in.)	115 - 690 (4.53 - 27.17)	115 - 1200 (4.53 - 47.24)	—
	Distance between chuck jaws of both spindles		mm (in.)	—		541 (21.30)
	Max. support weight (Chuck included) *3		kgf (lbs)	400 (880) [Chuck work] 700 (1540) [Shaft work]		400 (880) [Main SP] 150 (330) [Sec. SP]
Main spindle	Spndle speed *2		min ⁻¹ (rpm)	35 - 4000		
	Spindle nose			A2-8		
	Acceleration and deceleration time *4		sec	2.3		
	Bore		mm	φ88 (3.46)		
	Motor output [half-hourly rating]		kW (HP)	26 (35)		
	Maximum torque		kgf·m (ft·lbs)	47.4 (342.7)		
Secondary spindle	Chuck size		in.	—		6
	Spndle speed		min ⁻¹ (rpm)	—		35 - 6000
	Spindle nose			—		A2-5
	Acceleration and deceleration time *4		sec	—		2.2
	Motor output [25% ED]		kW (HP)	—		11 (15)
	Maximum torque [15% ED]		kgf·m (ft·lbs)	—		9.1 (65.8)
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.)		M20 × 2.5		
		End-mill		Max. φ20 (0.79)		
	Indexing time	Next/opposite pos.	sec	0.2/0.6		
	Milling spindle speed		min ⁻¹ (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)		
Feed axes	Rapid traverse	X/Z/W [MS]	m/min (ft/min)	30/33 (98/108)		30/33/30 (98/108/98)
		C	min ⁻¹ (rpm)	555		
	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)	190 (50.2)
	Power requirement	Cont./30-min. rating	kVA	41.0/46.8		

Item			Unit	Machine model and specification			
				QTN250-II M		QTN250-II MS	
				500U	1000U		
Total	Overall dimensions	Center height	mm (in.)	1020 (40.16)			
		Length *2		USA, Asia: 2700 (106.30) Europe: 2583 (101.70) Japan: 2700 (106.30)	3480 (137.01)	USA, Asia: 2930 (115.35) Europe: 2813 (110.75) Japan: 2930 (115.35)	
				1780 (70.08)		1908 (75.12)	1780 (70.08)
				1840 (72.44)		1870 (73.62)	1840 (72.44)
	Width						
	Height						
	Floor space required	*2	m ² (ft ²)	USA, Asia: 4.81 (51.77) Europe: 4.60 (49.51) Japan: 4.81 (51.77)	6.64 (71.47)	USA, Asia: 5.22 (56.19) Europe: 5.01 (53.93) Japan: 5.22 (56.19)	
Machine weight		kgf (lbs)	5000 (11000)	5700 (12540)	5200 (11440)		
Noise	Noise level (L _{WA})		dB	79.8			
	Unconfirmed level (K)			4			
	Measuring conditions		1. Spindle speed: 4000 min ⁻¹ (During workpiece gripping by chuck) 2. Feed axis to be driven. 3. Turret to be indexed. 4. Chip conveyor to be ON. 5. Tailstock not to be used.				
	Measuring method		EN-12415/12417/12478, ISO230-5				
	Measuring position		 <p>Operator's position</p> <p>Measuring height: 1.6 m (5.25 ft)</p> <p>(Note) The main sources of the noise air-conducted from the machine will include the following:</p> <ul style="list-style-type: none">- Spindle drive- Turret index unit- Feed axis drive- Chip conveyor				
	Remarks: The figures quoted are emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of the work-force include the characteristics of the work room, the other sources of noise, etc. i.e. the number of machines and other adjacent processes, and the length of time for which an operator is exposed to the noise. Also the permissible exposure level can vary from country to country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.						

*1: For the use of a hollow chuck (B-210A0815X).

*2: Depends upon the type of the chuck used.

*3: The rigidity and holding force of the workpiece support are not allowed for.

*4: Time required for the acceleration from 0 to 85% of the maximum speed (for the hollow chuck). Depends on the load inertia.

Note: The figures indicated on the machine plates shall be applied if different from the manual.