2. Specifications

2.1 Machining Center Main Unit Specifications (450V)

2.1.1 Machining Center Specifications 450V (#40)

Item	Description	Unit: mm (inch)
A-0 Travel Amount		
A-1 X axis (longitudinal stroke, table)	800mm (31.5")	
A-2 Y axis (transverse stroke, saddle)	450mm (17.7")	
A-3 Z axis (vertical stroke, spindle head)	510mm (20.0")	
A-4 Distance from table top to spindle	160-670mm (6.3"-26.4")	
A-5 Distance from column front to spindle center	500mm (19.7")	
B-0 Table		
B-1 Table size for work area	1100mm x 450mm (43.3" x17.7")	
B-2 Maximum allowable weight of work	700kg (1540lbs)	
B-3 Shape of table top surface	18mm (0.7") T-slots x 5	
C-0 Spindle		
C-1 Spindle speeds	20-6000min^{-1} (rpm)	
C-2 Spindle speed changes	2 stages	
C-3 Spindle nose taper	7/24 Taper No. 40	
C-4 Spindle bearing diameter	85mm (3.3")	
D-0 Feed Rate		
D-1 Rapid feed rate	18000 (X) x 18000 (Y) x 15000 (Z) mm/min (708.7" x708.7" x 590.6")	
D-2 Cutting feed rate	1-5000mm/min.(0.04"-196.9")	
D-3 Jog feed rate	0-4000mm/min (21 stages) (157.5")	
E-0 Automatic Tool Changer		
E-1 Tool shank type	MAS BT40	
E-2 Pull stud type	MAS P50T-1 (45°)	
E-3 Magazine tool capacity	25 tools	
E-4 Maximum tool diameter	90 (145)mm (3.5" (5.7"))	
E-5 Maximum tool length	300mm (11.8")	
E-6 Maximum tool weight	8kg (17.6lbs)	
E-7 Tool selection method	Shortcut random	
E-8 Tool exchange time (tool-to-tool)	2.2s	
E-9 Tool exchange time (tip-to-tip)		
F-0 Automatic Pallet Changer		
F-1 No. of pallets		
F-2 Pallet exchange method		
F-3 Pallet exchange time		
G-0 Drive Motors		
G-1 Spindle drive motor	AC7.5kW (10HP) (30 min)/5.5kW (7.5HP) (continuous)	
G-2 Axis feed motors	X, Y, Z: AC 1.8kW(2.3HP)	
G-3 Hydraulic pump motor	1.5kW	
G-4 Lubrication pump motor	17W	
G-5 Cutting fluid motor	0.25kW	
G-6 ATC arm motor	0.4kW	

Item	Description
H-0 Indicated Power Supply	
H-1 Power supply	200/220VAC ±10%, 50/60Hz±2%, 22.4kVA
H-2 Air pressure supply	0.4-0.8MPa (5-8kgf/cm^2) 450L/min (atmospheric)
I-0 Tank Capacity	
I-1 Hydraulic unit tank capacity	40L (10.6 gal)
I-2 Lubrication oil tank capacity	6L (1.6 gal)
I-3 Cutting fluid tank capacity	160L (42.3 gal)
J-0 Machining Center Dimensions	
J-1 Machining center height	2665mm (104.9")
J-2 Floor space occupied	3227mm x 3740mm(127.0" x 147.2")
J-3 Machine weight (incl. NC device)	7,000kg (15,400lbs)