

## SECTION 1 SPECIFICATIONS

### 1. Machine Specifications (MX40HA)

Item	Unit	Description
		With APC
MAX. MACHINING CAPACITY	mm (in.)	560 × 610 × 560 (22.05 × 24.02 × 22.05)
TRAVEL		
X-axis (column right/left)	mm (in.)	560 (22.05)
Y-axis (spindle up/down)	mm (in.)	610 (24.02)
Z-axis (table traverse)	mm (in.)	560 (22.05)
Spindle center to table (pallet) upper surface	mm (in.)	50 - 600 (1.97 - 23.62)
Spindle end to table (pallet) center	mm (in.)	150 - 710 (5.91 - 27.95)
TABLE		
Table (pallet) size	mm (in.)	400 × 400 (15.75 × 15.75)
Index positions		
Standard		360 positions (increments, direct command)
Optional		360000 positions (0.001° increments, direct command)
Max. load capacity	kg (lb)	400 (880)
SPINDLE		
Spindle speed range [standard (wide range, high speed)]	min <sup>-1</sup> {rpm}	50 to 7,000 (50 - 12,000, 50 - 25,000)
Number of spindle speed ranges		Infinitely variable
Taper hole		NT No. 40
Spindle diameter (at front bearing) [standard (wide range, high speed)]	mm (in.)	Ø70 (2.76) [(Ø85(3.35) Ø60(2.36)]
FEEDRATE		
Rapid feedrate (X-/Y-/Z-axis)	mm/min (ipm)	30,000 (1181.10)
Jog feedrates (X-/Y-/Z-axis) *2	mm/min (ipm)	1 to 20,000 (0.04 to 787.40)

\*1 The 100-tool ATC uses a matrix magazine.

\*2 The 100-tool ATC stores the tools at fixed addresses.

Item	Unit	Description
<b>ATC</b>		
		With APC
Tool shank system		MAS BT40
Pull-stud bolt type		MAS Type 2
Tool magazine capacity		
Standard		30 tools
Optional		40/60/100 tools *1
Max. tool diameter		
With adjacent tools	mm (in.)	Ø100 (3.94)
Without adjacent tools	mm (in.)	Ø150 (5.91)
Max. tool length	mm (in.)	300 (11.81)
Max. tool weight	kg (lb)	10 (22)
Tool selection		Memory random
<b>MOTOR</b>		
Spindle drive [standard (wide range, high speed)]	kW (hp)	15/11/7.5 (20/15/10) [15/11 (20/15 15/11 (20/15))] *1 (3min/10min/cont.)
Hydraulic power unit	kW (hp)	AC 2.2 (3)
X-axis feed	kW (hp)	AC 6.0 (8) servomotor
Y-axis feed	kW (hp)	AC 6.0 (8) servomotor
Z-axis feed	kW (hp)	AC 6.0 (8) servomotor
Table indexing		
Standard	kW (hp)	AC 2.0 (2.7) (1°)
Optional	kW (hp)	AC 2.8 (3.7) (0.001°)
Magazine indexing (30-tool ATC)	kW (hp)	AC 2.0 (2.7) servomotor
APC drive (rotary type 2-pallet)	kW (hp)	AC 2.0 (2.7) servomotor
MACHINE HEIGHT	mm (in.)	2,730 (107.48)
FLOOR SPACE	mm (in.)	2,490 × 3,990 (98.03 × 157.09)
MACHINE WEIGHT	kg (lb)	10,000 (22,000)