

TT24 - Twin Table Machining Center Specifications

Effective June 1, 2011



MACHINE MODEL		TT24		
Standard Control Type	Milltronics 7200 CNC			
Optional Control Type	Milltronics 8200 CNC			
Software	Dual Table Control			
Number of Axes	4 (X, X ¹ , Y, Z)			
Configuration	Bridge Design with Dual Tables on One Set of Ways			
CAPACITY				
Table Size – Two Tables	22 x 26" 559 x 660 mm			
Table Travel in Work Zone X and X ¹ Axes	23" 585 mm			
Saddle Travel - Y Axis	25" 635 mm			
Head Travel - Z Axis	20" 510 mm			
Spindle to Table Top	4 - 24" 100 – 610 mm			
Maximum Table Load	2,000 lb 900 kg			
Machine Weight	16,000 lb 7250 kg			
Hole Matrix of Table Surface	T-Slots .63" 16mm			
Ball Screw Size (X/Y/Z on TT60)	1.25" 32 mm			
Ball Screw Grade	C5 Precision Ground			
Ball Screw Pitch (X/Y/Z on TT60)	16 mm			
Linear Ways	35 mm Ball (Roller Option)			
SPINDLE – Direct Drive In-line Spindle/Motor Assembly				
#40 70 mm Spindle Cartridge (Excludes TT40XP)	CT or Opt BT 40			
#50 90 mm Spindle Cartridge for TT40XP	N/A			
Spindle Horsepower 1 minute / 30 minutes Reference Torque Chart:	Two Speed 24/15 HP 18/11 kw 24/15/2/I/M			
Optional Spindle Horsepower 1 minute / 30 minutes Reference Torque Chart:	Two Speed 35/25 HP 26/18 kw 35/25/2/I/M			
Standard RPM for #40 Spindle	50 – 10,000			
Standard RPM for #50 Spindle (TT40XP)	N/A			
Optional Ceramic Duplex Bearing Spindle RPM Requires balanced tooling, recommend horsepower upgrade	100 - 15,000			
Balanced Tooling Requirements	Tools Should Be Balanced to 2.5 G's at 15,000 RPM			
PERFORMANCE				
Servo Type	AC Digital			
Rapid Traverse X, X ¹ /Y, Z	1600/1600 ipm 40/40 mpm			
Maximum Feedrate	500 ipm 12.7 mpm			
Position Accuracy <i>See note</i>	±0.0002" .005mm			
Position Accuracy – Full Travel	N/A			
Repeatability <i>See note</i>	.00015" .0038mm			
Resolution	.00004" .001mm			
Spindle Range with Optional Gearbox	N/A			

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Thrust, Machine Duty Rating		X, X ¹ , Y: 1000 lb 450 kg Z: 2000 lb 900 kg			
Table Shuttle Time Slide to Slide		15 Sec			
AUTOMATIC TOOL CHANGER					
ATC for #40 Spindle		Standard 24 Pocket Double Arm			
Tool Change Time for #40 Spindle		3.5 Seconds			
Maximum Tool Diameter for #40 Spindle		4" 100mm			
Maximum Tool Length / Weight for #40 Spindle		9" / 15 lb 230 mm / 7 kg			
ATC for #40 Spindle		Optional 40 Pocket Double Arm			
Tool Change Time for #40 Spindle		3.5 Seconds			
Maximum Tool Diameter for #40 Spindle		4" 100mm			
Maximum Tool Length / Weight for #40 Spindle		11" / 15 lb 280 mm / 7 kg			
Standard ATC for #50 Spindle		N/A			
Tool Change Time for #50 Spindle		N/A			
Maximum Tool Diameter for #50 Spindle		N/A			
Maximum Tool Length / Weight for #50 Spindle		N/A			
COOLANT THROUGH SPINDLE					
Coolant Through Spindle Options (CTS) Requires ANSI Style Retention Knobs	High Pressure	700 psi 48 bar			
	Low Pressure	300 psi 21 bar			
CTS – Pump Filtration		11 Micron			
CTS – Additional Coolant Capacity Standard flood tank capacity with 300 psi system		118 gal 450 L			
CTS – Flow Rate		5 gal/min 19 l/min			
CTS – Pump HP		5 HP 3.7 kw			
MISCELLANEOUS					
1/4 HP Flood Pump Capacity (Opt in Convenience Pkg)		75 Gal 285 L			
Drawbar Air Pressure Required		100 psi 6.8 bar			
CUSTOMER’S INCOMING VOLTAGE		NOT TO EXCEED 235 VOLTS			
Power 208-235 VAC 50-60hz, 3Ø 24/15 HP 18/11 kw		100 amps 38 kVA			
Power 208-235 VAC, Single Phase		N/A			
Power 400-440 VAC		Req. Transformer			
Floor Space Requirement		140" x 128" 3560 x 3250 mm			
Warranty		Parts: Two years or 4200 hours, whichever occurs first on all normal failures. Service: One year or 2100 hours (whichever occurs first) from distributor.			
Measurements performed with Renishaw laser and ballbar systems. Measurements are linear over entire travel Temperature changes and table loads may affect tolerances. Tolerances are guaranteed over 10" sq. area. Centurion features covered under separate literature. For machine duty rating, see "Truth in Specifications" on www.milltronics.net. Milltronics reserves the right to change specifications at any time without incurring obligation.					