



MATSUURA VERTICAL MACHINING CENTER

MODEL LV-500 with L-Tech 30IB Control (TABLE SPEC.)

Version-3

BASIC SPECIFICATION

1. TRAVERSES

1. Travel	: X-axis	500 mm	(19.68")
	: Y-axis	350 mm	(13.77")
	: Z-axis	300 mm	(11.81")
2. Table Surface to Spindle End		150 ~ 450 mm	(5.90" ~17.71")

2. TABLE

1. Table Work Surface	: (X x Y)	540 x 350 mm	(21.25 x 13.77")
2. Table Loading Capacity		100 kg	(220 lbs)
3. Table Surface	: T-slot (Size x No. x pitch)	18 (H8) x 3 x 100	(11/16 x 3 x 4")
4. Distance from Floor to Table Surface	(B-axis = 0 deg.)	780 mm	(30.70")

3. SPINDLE

1. Spindle Speed Range		400 – 46,000min ⁻¹	
2. Spindle Drive		S5 Direct Drive System	
3. Spindle Taper		7/24 Taper #30 Big-PLUS	
4. Spindle Bearing Inner Diameter		40 mm	(1.57")
5. Max Spindle Torque		8.68 Nm/15,000 min ⁻¹	
6. Spindle Air Blow		Standard	
7. Spindle Orientation		Standard	
8. Tool Clamping Force		2.2 kN	

4. FEEDRATE

1. Rapid Traverse Rate	: (X/Y/Z)	90/90/90 m/min	(3,543.3"/3,543.3"/3,543.3")
2. Rapid Feed Acc./Dec.	: (X/Y/Z)	0.96/ 1.10/ 1.22 G	
3. Feedrate	: (X/Y/Z)	35,000 mm/min	(0.01 - 1377.95")
4. Feedrate Acc./Dec.	: (X/Y/Z)	0.2 G	
5. Jog Feedrate	: (X/Y/Z)	0 - 4,000 mm/min	(0-157.48")
6. Minimum Command	: (X/Y/Z)	0.0001mm	(0.0000039")

5. AUTOMATIC TOOL CHANGER

1. Type of Tool Shank		JIS B 6339 Tool shank 30T	
2. Type of Retention Knob		JIS B 6339 Pullstud 30P	
3. Tool Storage Capacity		10 Tools (Drum Type)	
4. Max. Tool Diameter		46 mm	(1.81")
5. Max. Tool Length		150 mm	(5.9")
6. Max. Tool Mass (incl. Holder)		1.5 kg	(3.7 lbs)
7. Tool Changing Time (Tool to Tool)		2.2 sec	
8. Tool Changing Time (Chip to Chip)		5.2 sec	
9. Tool Selection		Address Code	

6. MOTOR

1. Spindle Motor	: Bii60S/50000 TYPE M	AC 7.5/15kW	(No Range Switch: Contin/15%)
2. Feed Motors			
	X Axis – Model : L4500B2/21S	AC 7.2/9.6 kW	
	Y Axis – Model : L3000B2/21S	AC 4.8/6.8 kW	
	Z Axis – Model : L3000B2/21S	AC 4.8/6.8 kW	
4. ATC Motor	: Beta is 1/6000	AC 0.4 kW	
3. Hydraulic Pump Motor	:	AC 0.75 kW	
4. Coolant Pump Motor	:	AC 0.73/1.21 kW	
5. Chip Flush Motor	:	AC 0.73/1.21 kW	
6. Chip Flow	:	AC 0.40 kW	
7. Oil Cooler (for Spindle, Linear Motor)		AC 0.75 kW	

7. POWER SOURCES

1. Electrical Power Supply	AC 200/220V +/-10%
2. Power Requirement	35 KVA
Frequency Required	50/60Hz +/- 1 Hz
3. Compressed Air Supply	0.54 – 0.93 MPA
4. Compressed Air Volume Supplied	430 NL/min

8. TANK CAPACITIES

1. Coolant Tank	320 L
2. Oil Cooler Tank	9.5 L
3. Oil Air Unit Tank	1.8 L
4. Hydraulic Unit Tank	25 L

9. MACHINE SIZE

1. Machine Height (approx)	2646 mm	(104.17")
2. Floor Area		
Incl. Maintenance Area	2700 W x 5500 D	(106.29" W x 216.53" D)
3. Machine Weight (approx)	5500 kg	(Incl. NC and ATC magazine)
4. Machine Color	Matsuura Standard 3 Tone	

10. ACCURACY

1. Positioning : X/Y/Z	+/-0.001 mm	(0.000039")
2. Repeatability : X/Y/Z	+/-0.0005 mm	(0.000019")

11. MACHINE CAPABILITIES

1. Axis Thrust at Continuous Rating : X/Y/Z	1.8/1.2/1.2 kN
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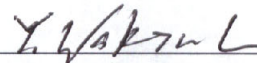
12. STANDARD ACCESSORIES

1. Total Splash Guard
2. ATC Magazine Guard
3. ATC Auto Door
4. Spindle Oil Cooler
5. Auto Grease Supply for Guideways
6. Air Drier
7. Synchronised Tapping
8. AD-TAP Function
9. IPC Function
10. Scale Feedback (X/Y/Z)
11. Coolant Unit
12. Chip Flush
13. Chip Flow
14. Linear Motor Cooler
15. Spindle Overload Protect
16. Workpiece Counter (9 Sorts of M Function)
17. Work Light
18. Standard Mechanical Tools & Tool Box
19. Machine Color Paint
20. Levelling Plates and bolts (not Utilised for the Foundation)
21. PC tool for memory card program operation and editing
22. MIMS (Matsuura Intelligent Meister System)
23. Integrating Spindle Run Hour Meter (inside MIMS)
24. Automatic Operation Run Hour Display Unit (inside MIMS)

SPC-0569E

Checked by S. Uchiyama 20120830

Signed



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