

# 50 Taper VMC Vertical Linear Roller Way Machining Center Pricing

Effective September 1, 2008



MACHINE MODEL	VMC22XP	VMC25XP	VMC30XP
Standard Travel (XYZ")	40 x 22 x 26	50 x 25 x 24	50 x 30 x 24
Extended Travel Option (XYZ")	N/A	60 x 25 x 24	60 x 30 x 24
Spindle Taper	#50	#50	#50
ATC Type	32 Arm	32 Arm	32 Arm
Linear Roller Ways – Standard	X, Y: 35 mm Z: 45 mm	X: 35 mm Y, Z: 45 mm	X: 35 mm Y, Z: 45 mm
Horsepower GE FANUC 1 minute / 30 minutes	Two Speed High Torque (HT) 26/20 hp 19/15 kw		
<b>MACHINE FEATURES</b>			
<ul style="list-style-type: none"> <li>• Two Year Parts Warranty</li> <li>• Swivel Operator's Station</li> <li>• Massive Heavily Ribbed Machine Grade Cast Iron Construction</li> <li>• Precision Ground Table, Rail and Rail Block Mounting Surfaces</li> <li>• Inverted Rail to Table Design Keeps Bearing Blocks Centered Under Spindle</li> <li>• Linear ROLLER Way Design with Rail Dampening Blocks for Improved Cutting Performance</li> <li>• Soft Start High Speed Way Covers Allows for 1000 ipm Rapid</li> <li>• Dampening Blocks on Z Axis</li> <li>• Arm Style 32 Pocket ATC</li> <li>• Heavy Duty Enclosure with Work Light and Overhead Loading Capability</li> <li>• Precision Ground Double Anchored Ball Screws With Dampening Couplings</li> <li>• Wide Side Doors for Cleaning or Over Sized Parts</li> <li>• Air Purged Spindle Cartridge Assembly</li> <li>• Chip Auger with Optional Conveyor</li> <li>• Flood Coolant System with 6 Adjustable Nozzles</li> <li>• Rigid Tapping</li> <li>• 8000 RPM Spindle</li> <li>• Chip Washdown Hose</li> <li>• Operator's Air Blast Hose</li> <li>• Electronic Spindle Orient</li> <li>• Pull Out PC Key Board Tray</li> <li>• LCD Hour Meter</li> <li>• End of Cycle Light</li> <li>• High Torque AC Digital Servo Drives</li> <li>• All Axes Laser Calibrated and Ballbar Inspected</li> <li>• Spindle Taper Blow-out and Tool Release Push Button</li> <li>• Optional Gear Box</li> </ul>			
<b>GE FANUC 0i-MC CONTROL FEATURES</b>			
<ul style="list-style-type: none"> <li>• ManualGuide™ Conversational Programming System</li> <li>• Dynamic Graphic Display</li> <li>• 256 Kb Program Storage</li> <li>• Macro Executor</li> <li>• 10.4" Color LCD Display</li> <li>• Scaling, Rotation &amp; Mirror Imaging</li> <li>• PCMCIA Slot</li> <li>• Electronic Handwheel</li> <li>• 8ms Block Processing Speed (4ms with AICC Option)</li> <li>• Manuals on CD ROM (Bound Manuals are Optional)</li> <li>• RS232 Port with DNC Capability</li> <li>• Ethernet Port</li> </ul>			
<b>ACCESSORY PRICING</b>			
<b>GE FANUC CONTROL OPTIONS</b>			
Data Server with 256 MB Parts Storage			
AICC – 4ms Block Processing			
Remote Electronic Handwheel			
<b>SPINDLE CONFIGURATIONS #50 – Standard spindle on all models is CT type</b>			
#50 BT Type Spindle			
Coolant Through Spindle – 300-PSI Low Pressure System Includes drawbar for ANSI retention knob and rotary coupling			

<b>SPINDLE CONFIGURATIONS #50 – Standard spindle on all models is CT type Continued</b>		
Coolant Through Spindle – 700 PSI High Pressure System Includes drawbar for ANSI retention knob and rotary coupling		
Coolant Through Spindle Ready Kit - Includes drawbar assembly for ANSI retention knobs and rotary coupling. <i>Does not include pumps or external coolant tank.</i>		
<b>SPINDLE CONFIGURATIONS #50 – Standard spindle on all models is CT type</b>		
#50 BT Type Spindle		
Coolant Through Spindle – 300-PSI Low Pressure System Includes drawbar for ANSI retention knob and rotary coupling		
Coolant Through Spindle – 700 PSI High Pressure System Includes drawbar for ANSI retention knob and rotary coupling		
Coolant Through Spindle Ready Kit - Includes drawbar assembly for ANSI retention knobs and rotary coupling. <i>Does not include pumps or external coolant tank.</i>		
ZF Automatic Shift Gear Box		
<b>GRAPHITE AND ABRASIVE MATERIAL ACCESSORIES</b>		
Pressurized Air/Oil Purge System for Ball Screws and Bearing Blocks		
Torit Vacuum System <i>Consider environmental noise</i>		
Dust Collection System Including Guard and Hose		
<b>THERMAL CONTROL SYSTEM</b>		
Spindle Chiller Loop		
<b>ROTARY TABLE ACCESSORIES</b>		
Rotary Tables - Includes 4 <sup>th</sup> axis amp & motor Application may require riser	10.0" (254 mm)	
Rotary Table Tail Stock	10.0" (254 mm)	
4 <sup>th</sup> Axis Servo Amplifier & Motor (Electrics only) –Included with Rotary Table Accessory		
<b>OTHER ACCESSORIES</b>		
Coolant Tank Oil Skimmer		
Automatic Door Opener		
Programmable Air Blast		
Spray Mist <i>Programmable On/Off</i>		
Chip Washdown System		
Chip Conveyor in Lieu of Chip Auger		
Chip Bucket for Auger or Conveyor		
Column Riser Block - <i>Not Removable</i>	Column Riser 4" <i>100 mm</i>	
	Column Riser 6" <i>150 mm</i>	
Contact Tool Offset Probing with Macros		
Work Offset Probing with Macros		
Combo Pack – Contact & Work Tool Offset Probing with Macros		
Laser Tool Setter		
RS-232 Cable, 50' 15 Meters		
Bound Programming, Maintenance or Operational Manual(s) - <i>each</i>		
Additional Machine Manual		
Fanuc Power Requirements 208-240 VAC, 50 – 60 hz, 3Ø		

380-480 Transformer (Reduces Voltage to 208-240) <i>Factory recommended sizes. Consult local electrical codes for proper transformer sizing.</i>	40 KVA	
UL/CUL Compliance		
CE Code Required for European Union Countries		
International Packaging		
Two Year Parts Warranty <i>See Note</i>		
On Site Factory Installation, U.S. only <i>Does not include airfare – Training available through Fanuc</i>		
<p><i>Terms within USA: Cash or terms with approved credit; down payment due with order. Terms outside USA: Cash or approved Letter of Credit. F.O.B Waconia, MN USA. Prices do not include taxes, duties, transportation, rigging or start-up.</i></p> <p><i>Milltronics reserves the right to amend or change without notice without incurring obligation; not responsible for typographical errors.</i></p> <p><i>Consult Written Warranty Statement for Details of Two Year Parts Warranty</i></p> <p><i>All sales of equipment, parts, software and service are subject to Milltronics' Standard Terms and Conditions of Sale.</i></p>		

# 50 Taper VMC Vertical Linear Roller Way Machining Center Specifications

Effective September 1, 2008

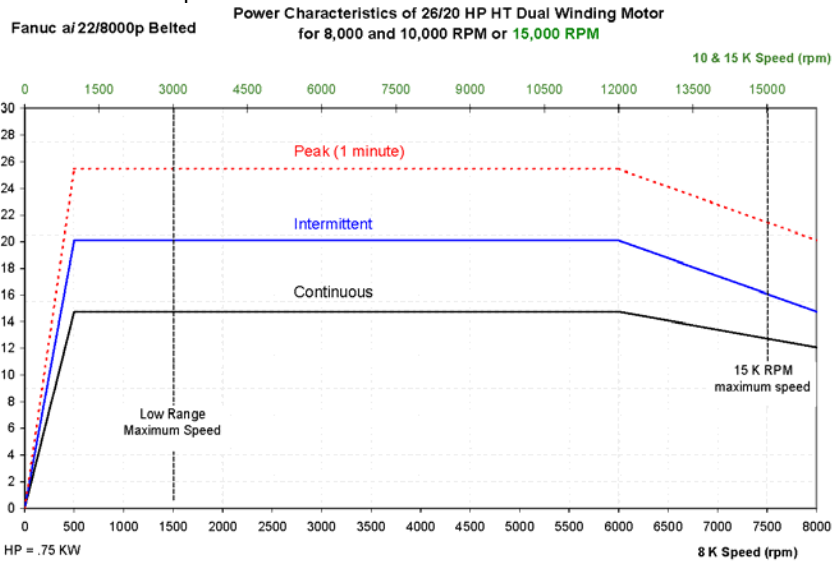


MACHINE MODEL	VMC22XP	VMC25XP	VMC30XP
Table Size	45" x 24" <i>1150 x 610 mm</i>	56" x 24" <i>1420 x 610 mm</i>	56" x 24" <i>1420 x 610 mm</i>
Option Table Size – Extended Travel	N/A	66" x 26" <i>1680 x 660 mm</i>	66" x 26" <i>1680 x 660 mm</i>
Standard Table Travel X	40" <i>1015 mm</i>	50" <i>1270 mm</i>	50" <i>1270 mm</i>
Optional Extended Table Travel – X	N/A	60" <i>1524 mm</i>	60" <i>1524 mm</i>
Saddle Travel Y	22" <i>560 mm</i>	25" <i>635 mm</i>	30" <i>760 mm</i>
Head Travel Z	26" <i>660 mm</i>	24" <i>610 mm</i>	24" <i>610 mm</i>
Throat Distance – Spindle to Column	23" <i>580 mm</i>	25" <i>635 mm</i>	30" <i>760 mm</i>
Spindle To Table Top - <i>Optional Column Risers increase dimensions by 4" 100 mm or 6" 150 mm</i>	4.25" - 30.25" <i>110 - 770 mm</i>	4" - 28" <i>100 - 710 mm</i>	4" - 28" <i>100 - 710 mm</i>
Maximum Table Load	4000 lb <i>1360 kg</i>	5000 lb <i>1580 kg</i>	5000 lb <i>1580 kg</i>
Machine Weight	18,000 lb <i>8170 kg</i>	21,000 lb <i>9500 kg</i>	22,000 lb <i>10,000 kg</i>
T Slots	(5) .63 <i>16 mm</i>	(5) .63 <i>16 mm</i>	(5) .63 <i>16 mm</i>
Ball Screw Grade	C5	C5	C5
Ball Screw Diameter: X, Y, Z	1.25"	1.5"	1.5"
Ball Screw Pitch: X, Y, Z Lead	10 mm	10 mm	10 mm
Linear Way Size and Type	X, Y 35 mm Roller Z 45mm Roller	X 35 mm Roller Y, Z 45mm Roller	X 35 mm Roller Y, Z 45mm Roller
<b>SPINDLE</b>			
Standard Belted Horsepower GE FANUC <i>1 minute / 30 minutes</i> Reference Torque Chart:	Two Speed 26/20 HTHP <i>19/15 kw</i> 26/20/2/B/FHT	Two Speed 26/20 HTHP <i>19/15 kw</i> 26/20/2/B/FHT	Two Speed 26/20 HTHP <i>19/15 kw</i> 26/20/2/B/FHT
Optional Gear Box Horsepower GE FANUC <i>1 minute / 30 minutes</i> Reference Torque Chart:	Two Speed 26/20 HTHP <i>19/15 kw</i> 26/20/2/G/FHT	Two Speed 26/20 HTHP <i>19/15 kw</i> 26/20/2/G/FHT	Two Speed 26/20 HTHP <i>19/15 kw</i> 26/20/2/G/FHT
Standard Spindle Size	90 mm	90 mm	90 mm
Standard Belted Spindle RPM	50 – 8,000	50 – 8,000	50 – 8,000
Optional Gear Box Low Range RPM – 4:1	25 – 2,000	25 – 2,000	25 – 2,000
Optional Gear Box High Range RPM – 1:1	2,000 – 8,000	2,000 – 8,000	2,000 – 8,000
Tool Holder Type	CT50 or BT50	CT50 or BT50	CT50 or BT50
<b>COOLANT THROUGH SPINDLE</b>			
Coolant Through Spindle Option <i>Requires ANSI Retention Knob and 70 mm Spindle</i>	300 or 700 psi <i>20 or 48 bar</i>	300 or 700 psi <i>20 or 48 bar</i>	300 or 700 psi <i>20 or 48 bar</i>
Pump Filtration	11 Micron	11 Micron	11 Micron
Additional Coolant Capacity on 700 psi System	118 Gal <i>450 L</i>	118 Gal <i>450 L</i>	118 Gal <i>450 L</i>
Flow Rate	5 gal/min <i>19 L/min</i>	5 gal/min <i>19 L/min</i>	5 gal/min <i>19 L/min</i>
Pump HP	5 HP <i>3.7 kw</i>	5 HP <i>3.7 kw</i>	5 HP <i>3.7 kw</i>
<b>AUTOMATIC TOOL CHANGER</b>			
Double Arm ATC – Number of Pockets	32	32	32
Tool Change Time	7.5 Seconds	7.5 Seconds	7.5 Seconds
Maximum Tool Diameter – <i>Over 4" diameter tool requires adjacent empty pockets</i>	4" <i>75 mm</i> or 5" <i>125 mm</i>	4" <i>75 mm</i> or 5" <i>125 mm</i>	4" <i>75 mm</i> or 5" <i>125 mm</i>
Maximum Tool Length / Width	9" / 25 lb <i>230 mm / 11 kg</i>	11" / 25 lb <i>280 mm / 11 kg</i>	11" / 25 lb <i>280 mm / 11 kg</i>
<b>PERFORMANCE</b>			
Servo Type (Fanuc or Siemens throughout)	Digital, AC Brushless	Digital, AC Brushless	Digital, AC Brushless
Rapid Traverse Rate	1000 ipm <i>25 mpm</i>	1000 ipm <i>25 mpm</i>	1000 ipm <i>25 mpm</i>

<b>MACHINE MODEL</b>	<b>VMC22XP</b>	<b>VMC25XP</b>	<b>VMC30XP</b>
Feedrate Range – Part Dependent	.1 - 500 ipm <i>2 - 12.7 mpm</i>	.1 - 500 ipm <i>2 - 12.7 mpm</i>	.1 - 500 ipm <i>2 - 12.7 mpm</i>
Positioning Accuracy <sup>See Note</sup>	±0.0002" <i>.005 mm</i>	±0.0002" <i>.005 mm</i>	±0.0002" <i>.005 mm</i>
Positioning Repeatability <sup>See Note</sup>	.00015" <i>.0038 mm</i>	.00015" <i>.0038 mm</i>	.00015" <i>.0038 mm</i>
<b>MISCELLANEOUS</b>			
Flood Capacity	70 gal. <i>266 L</i>	70 gal. <i>266 L</i>	70 gal. <i>266 L</i>
Optional Electrical Cabinet Air Conditioning Unit	4000 BTU	4000 BTU	4000 BTU
Drawbar Air Pressure Required	100 psi <i>6.8 bar</i>	100 psi <i>6.8 bar</i>	100 psi <i>6.8 bar</i>
Fanuc Power Requirements 208-240 VAC, 50 – 60 hz, 3Ø	100 Amp 38 kVA	100 Amp 38 kVA	100 Amp 38 kVA
Floor Space Requirement – Standard	125" x 119" <i>3175 x 3025 mm</i>	144" x 121" <i>3660 x 3075 mm</i>	144" x 126" <i>3660 x 3200 mm</i>
Floor Space Requirement – Extended Travel	N/A	192" x 121" <i>4875 x 3075 mm</i>	192" x 126" <i>4875 x 3200 mm</i>
Warranty	Parts: Two years or 4200 hours, whichever occurs first on all normal failures. Service: One year or 2100 hours, whichever occurs first, from dealer.		
<p><i>Note: 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. For machine duty rating, see "Truth in Specifications" on <a href="http://www.milltronics.net">www.milltronics.net</a>. Milltronics reserves the right to change specifications at any time without incurring obligation.</i></p>			

### Fanuc Torque Chart 26/20/2/B/FHT – Belted Spindle

Used on: Standard VMC22XP, VMC25XP, VMC30XP  
 Optional N/A



### Fanuc Torque Chart 26/20/2/G/FHT – Optional Gear Box

Used on: Standard N/A  
 Optional VMC22XP, VMC25XP, VMC30XP

Fanuc a/22/8000p With 4:1 Gearbox

Power Characteristics of 26/20 HP HT Dual Winding Motor for 2,000 RPM In LOW Gear

