

VKM – 3 Axis CNC Pricing The Knee Mill with MillSlide



Effective September 1, 2010

Spindle Types – Direct Drive with Inverter for Programmable RPM	R8 or #30 or #40
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STANDARD ACCESSORIES

<ul style="list-style-type: none"> • Two Year Parts Warranty • Heavily Ribbed Cast Iron Construction • Fully Ground Solid Ways with Turcite Surfaces • Precision Ground Double Anchored Ball Screws • Precision Ground Table Surface • High Torque 8:1 Back Gear • Box Ways on Column and Base • Manual Quill Operation Retained • Automatic Metered Lubrication with Low Lube Fault • Safety Ring for Drive Dog on #40 Spindles • All Axes Laser Calibrated and Ballbar Inspected • High Torque AC Digital Servo Drives • High Torque Vector Spindle Drive System 	<ul style="list-style-type: none"> • PC-based CNC includes 2 MB Parts Storage Memory • 12" LCD Active Matrix Color Display • Conversational plus G & M Code Programming • 3-D Part and Wire Frame Tool Path Graphics on Series 7200 Plus Solid Modeling Graphics on Series 8200 • 6 MB Virtual Disk / RS-232 with DNC Buffer • High Speed Processor (7200 Series 1200 block/sec, 8200 Series 2000 blocks/sec) • Optional Four & Five Axis Simultaneous Interpolation Software & Interface • High Torque AC Digital Servo Drives • High Torque Closed Loop Vector Spindle Drive System • All Axes Laser Calibrated and Ballbar Inspected • Spindle Load Meter • Fully Programmable Accessories including Spindle On/Off, Spindle RPM, and Accessories
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SOFTWARE PACKAGE A

<p>Additional 10 MB Parts Storage (Total of 12 MB) Coordinate Rotating, Scaling, Mirror Image, Thread Mill 3.5" Floppy Drive Engraving, Helical Interpolation, Auto Routines, & User Definable Macros with Trig Assist, & Irregular Pocket Clearing Front Panel Mounted Electronic Handwheel plus Handwheel Controlled Program Execution 24 MB Program Execution Memory with Large Program Management Software (Allows editing of 10 MB files) LCD Hour Meter Auto DXF File Import</p> <p style="text-align: center;"><i>Items may be purchased separately</i></p>

CONVENIENCE PACKAGE B

<p>Rigid Tap Flood Coolant System with Programmable On/Off Coolant Drip Pan Work Lamp Rear Splash Guards Power Drawbar System Off-line FastCAM Software for Programming & Training (Supports 7200 Series or 8200 Series with Interpreter) Networking Option Includes 30 Days Phone Support</p> <p style="text-align: center;"><i>Items may be purchased separately</i></p>

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OTHER ACCESSORIES

Upgrade to Solid State Non-Volatile Memory 256 MB Flash Card – 7200 Controls only		
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OTHER ACCESSORIES CONTINUED

Specify Spindle Type for VKM4	CT40	
	R8, CT/BT30, BT40 NMTB40, DIN2080	
Quill Position Readout		
Newall MHG Quill Scale Position Readout with CNC Feedback to Update Tool Length Offsets		

Spray Mist Programmable On/Off	
Removable Table Chip Guard	
CE Removable Table Chip Guard <i>Required for European Union countries</i>	
Edit Key Lock-out Switch	
Upgrade Mechanical Handwheels to Larger Dia. with Retractable Handles <i>Limits Rapids to 200 IPM</i>	
Rotary Tables	6.5" (165 mm)
<i>Includes 4th Axis Amp & Motor</i>	5C Collet Table
Tail Stock for Rotary Table	
4 th Axis Servo Amplifier & Motor (Electrics only) <i>Included with Rotary Table Accessory</i>	
Dual Electronic Handwheels	
End of Cycle Light	
Spare "M" Functions – Block of 4 <i>Maximum 2 blocks; price is for each block</i>	
<i>Digiscan Digitizing 3-D Software, Probe, Manuals</i>	
RS-232 Cable, 50' 15 Meters	
Additional Programming Manual	
Programming Manual in Electronic Format on CD	
Additional Machine Manual	
Power Requirements 208-240 VAC, 50 – 60 hz, 3Ø	
Optional Voltage 208-240 VAC, 50 – 60 hz, 1Ø <i>May reduce spindle power by up to 20%</i>	
380-480 Transformer (Reduces Voltage to 208-240) – 20 kVA	
<i>Factory recommended sizes. Consult local electrical codes for proper transformer sizing.</i>	
CE Code <i>Required for European Union countries</i>	
International Packaging	
UL/CUL Compliant	
Two Year Parts Warranty ^{<i>See Note</i>}	
Factory Start-up and Training On Site, U.S. only <i>Does not include airfare</i>	
Training at Milltronics <i>Includes lunches, training, materials and manual</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</i></p> <p><i>F.O.B Waconia, MN USA</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>Prices do not include taxes, duties, transportation, rigging or start-up.</i></p> <p><i>All sales of equipment, parts, software and service are subject to Milltronics' Standard Terms and Conditions of Sale.</i></p>	

Control Type	Milltronics CNC
Software	CNC or SLS
Number of Axes	3 (Opt 4)
Functions: <i>Automatic</i>	Auto operation of spindle start/stop, mist, flood, RPM
Functions: <i>Manual</i>	All functions operate both manually or automatically, except back gear is manual shift
CAPACITY	
Standard Table Size	53" x 12" <i>1350 x 305 mm</i>
Table Travel - <i>X Axis</i>	30" <i>760 mm</i>
Saddle Travel - <i>Y Axis</i>	15" <i>380 mm</i>
Heavy Duty MillSlide™ Travel - <i>Z Axis</i>	5.25" <i>133 mm</i>
Quill Travel <i>Worm gear style quill feed not available</i>	6" <i>152 mm</i>
Knee Travel	18" <i>450 mm</i>
Throat <i>Spindle to column, adjustable</i>	15.3 - 27.5" <i>390 - 700 mm</i>
Spindle to Table Top <i>Quill up</i>	0 - 21" <i>0 - 535 mm</i>
Maximum Table Load	1500 lb <i>680 kg</i>
Machine Weight	4600 lb <i>2100 kg</i>
T Slots	(4) .63" <i>16 mm</i>
Saddle Width	24.5, 15.5" <i>622, 393 mm</i>
Ball Screw Size: <i>X,Y,Z Axis</i>	1.25"
Ball Screw Grade	C5
Ball Screw Pitch <i>X,Y,Z</i>	X/Y .2"; Z .25"
Head Swivel	Rigid
SPINDLE	
Horsepower <i>1 minute / 30 minutes</i>	7.5 / 5 HP <i>5.5 / 3.7 kw</i>
High Torque Type (Manual Shift)	Back Gear
Spindle Speeds: <i>Low (CNC Programmable)</i>	60-500 RPM
Spindle Speeds: <i>High (CNC Programmable)</i>	500-4000 RPM
Standard Tool Holder Type	CT40
Optional Tool Holder Type	R8, CT/BT30, BT40, NMTB40, DIN2080
Quill Size	4.125" <i>104 mm</i>
PERFORMANCE	
Servo Type	AC Digital
Rapid Traverse (<i>Reduced to 200 IPM with Upgraded Larger Handwheels</i>)	400 ipm <i>10.1 mpm</i>
Maximum Feedrate	200 ipm <i>5080 mmpm</i>
Position Accuracy <i>See note</i>	±0.00039" <i>.01 mm</i>
Repeatability	.0002" <i>.005 mm</i>
Resolution	.00004" <i>.001 mm</i>
Thrust, Machine Duty Rating	X, Y: 2000 lb <i>900 kg</i> Z: 3000 lb <i>1360 kg</i>
MISCELLANEOUS	
1/8 HP Flood Pump Capacity <i>Optional in Package B</i>	7.5 gal. <i>28 L</i>
Drawbar Air Pressure Required	80 psi <i>5.5 bar</i>
Power Requirements 208-240 VAC, 50 – 60 hz, 3Ø	30 amps, 11 kVA
Power 208-240 VAC, Single Phase	Optional
Power 380-480 VAC, 50 – 60 hz, 3Ø	Requires Transformer
Floor Space Requirement	98" x 72" <i>249 x 1830 mm</i>

Warranty	Parts: 2 Year (or 4200 hours, whichever occurs first) on all normal failures. Service: 1 Year (or 2100 hours, whichever occurs first) from dealer or available from distributor.
<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. 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.</i></p>	