

Machine Model		RW15
Spindle Horsepower <i>1 minute / 30 minutes</i> , Diameter		12/10 9/7.5 kw, 60 mm
Optional Spindle Horsepower <i>1 minute / 30 minutes</i>		18/12 13/9 kw
Travel (XYZ)		25 x 15 x 20.5"
Tool Changer		16 Pocket Carousel
MACHINE FEATURES		CONTROL FEATURES
<ul style="list-style-type: none"> • Two Year Parts Warranty • Heavily Ribbed Solid Cast Iron Construction • All Box Way Construction with Turcite Surfaces • Precision Ground Ball Screws and Table Surface • RW15 has a 16 Pocket Carousel • Through Column Metal Way Covers in Front/Rear of Saddle • Chip Drawers with Optional Chip Auger, or Chip Conveyor • Oversized Side Doors for Cleaning and Long Pieces • Automatic Metered Lubrication with Low Lube Fault • Closed Loop High Torque Vector Spindle Drive System • #40, Five Bearing, Air Purged, 8000 RPM, 60 mm Spindle Cartridge • Rigid Tap • Programming & Machine Manuals in Electronic Format • Front Panel Mounted Electronic Handwheel & Handwheel Controlled Program Execution • LCD Hour Meter • Spindle Load Meter • Single Spare "M" Function with CNC "Wait" Channel 		<ul style="list-style-type: none"> • PC-based 7200 CNC includes 12 MB Parts Storage Memory • 12" LCD Active Matrix Color Display • Conversational plus G & M Code Programming including Coordinate Rotating, Scaling, Mirror Image, Thread Mill Engraving, Helical Interpolation, Auto Routines, & User definable Macros with Trig Assist, & Irregular Pocket Clearing • 3-D Part and Wire Frame Tool Path Graphics on Series 7200 Plus Solid Modeling Graphics on Series 8200 • 3.5" Floppy Drive / RS-232 with DNC Buffer (7200 CNC Only) • Large Program Management Software (Allows Editing of 10 MB Files) • High Speed Processor (7200 Series 1200 block/sec, 8200 Series 2000 blocks/sec) • Optional Four & Five Axis Simultaneous Interpolation • High Torque AC Digital Servo Drives • High Torque Closed Loop Vector Spindle Drive System • All Axes Laser Calibrated and Ballbar Inspected • Auto DXF File Import
CONVENIENCE PACKAGE		
Networking Option includes 30 Days Phone Support		
Six Nozzle High Volume Multi-Height Flood Control System with Through Head Cooling		
Remote Electronic Hand Wheel		
Edit Key Lock Out Switch		
Wash Down Hose <i>Requires Flood Coolant System</i>		
Off-line FastCAM Software for Programming and Training		
Work Light		
End of Cycle Light		
<i>Items may be purchased separately</i>		
PERFORMANCE PACKAGE		
Upgrade to 18/12 HP 13/9 kw Spindle Motor		
Upgrade from Chip Drawers to Chip Auger System		
<i>Items may be purchased separately</i>		
8200 CONTROL PACKAGE – Purchase as a Complete Package Only and Includes all the following:		
<ul style="list-style-type: none"> • Solid State Non-Volatile Memory Upgrade to 1 GB • Enhanced CPU Increases Block Processing Speed from 1200 to 2000 bps • Solid Model Graphics Functionality • USB Connectivity in lieu of 3.5" Floppy Disk Drive • High Speed Performance with Enhanced Jerk Control and Look Ahead • MT Connect Compliant 		
<p><i>3.5" Floppy Drive is replaced by USB. Do not combine with 256 MB Program Storage and Multi Format Flash Card Reader from other accessories. FastCAM Software replaced with 8200 Software. RS-232 Data transfer not available on 8200 control.</i></p>		

SPINDLE CONFIGURATIONS		
Specify Tool Holder CT-40		Standard
Optional Tool Holder BT-40 or DIN 69871		Optional
Upgrade to 15,000 RPM Ceramic Bearing Spindle		Optional
ROTARY TABLE ACCESSORIES		
Rotary Tables <i>Includes 4th axis amp & motor</i> <i>Application may require riser</i>	6.5" (165 mm)	Optional
	9.0" (228 mm)	Optional
	5C Collet Table	Optional
Tail Stock for Rotary Table	6.5" (165 mm) - Optional	9.0" (228 mm) - Optional
4 th Axis Servo Amplifier & Motor (Electrics only 0.9 kw motor, larger tables may require a larger motor) – Contact factory for 5 axes <i>Included with Rotary Table Accessory</i>		Optional
<i>Milltronics will charge an engineering fee to interface a customer provided rotary table with the electrics only package. Charge will depend on table and engineering requirements</i>		
OTHER ACCESSORIES		
Upgrade to Solid State Non-Volatile Memory 256 MB Flash Card – 7200 Controls only		Optional
Multi Format Flash Card Reader – 7200 Controls only		Optional
Chip Wash Down		Optional
Chip Bucket For Auger or Conveyor System		Optional
Programmable Air Blast		Optional
Programmable Spray Mist <i>On/Off</i>		Optional
Spare “M” Functions – Block of 4 <i>Maximum 2 blocks; price is for each block</i>		Optional
Contact Tool Offset Probing with Macros		Optional
Work Offset Probing with Macros		Optional
Combo Pack – Contact & Work Tool Offset Probing with Macros		Optional
Laser Tool Setter		Optional
<i>Digiscan Digitizing 3-D Software, Probe, Manuals - Not available with 8200 Control Package</i>		Optional
RS-232 Cable, 50' 15 Meters		Optional
Printed Programming Manual (Electronic Format Standard)		Optional
Printed Machine Manual (Electronic Format Standard)		Optional
Power Requirements 208-240 VAC, 50 – 60 hz, 3Ø		Standard
380-480 Transformer (Reduces Voltage to 208-240) 20 kVA <i>Factory recommended sizes. Consult local electrical codes for proper transformer sizing.</i>		Optional
UL/CUL Compliance		Optional
CE Code <i>Required for European Union Countries</i>		Optional
Export Handling Fee		Consult Factory
Crating Charge		Consult Factory
Two Year Parts Warranty ^{<i>See Note</i>}		Standard
Factory Start-up and Training On Site, U.S. only		Optional
Training at Milltronics <i>Includes lunches, training, materials and manual</i>		Optional
<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 FCA Waconia, Minnesota USA; Prices do not include taxes, duties, transportation, insurance, 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>		

RW Box Way Machining Center Specifications

Effective June 1, 2011



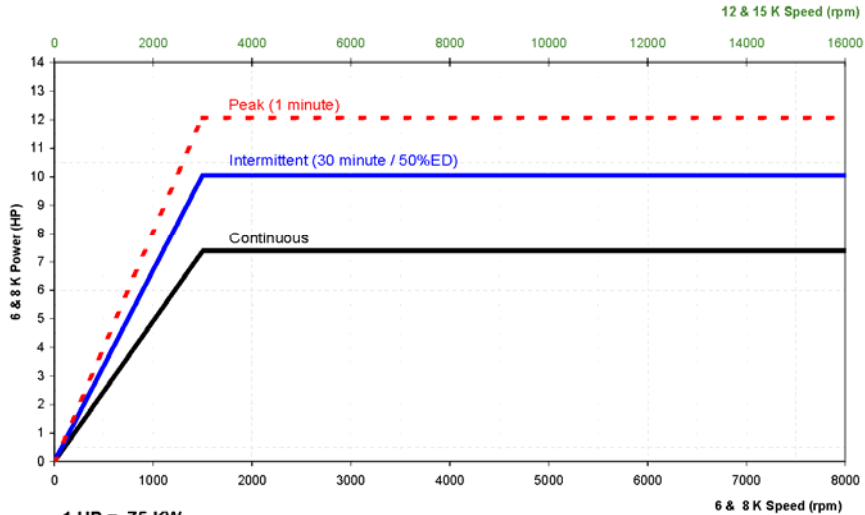
Machine Model	RW15
Standard Control Type	Milltronics 7200 CNC
Optional Control Type	Milltronics 8200 CNC
Number of Axes	3 (Opt 4 or 5)
Functions: <i>Automatic</i>	Auto spindle start/stop, mist, flood, RPM
CAPACITY	
Standard Table Size	30 x 14" <i>760 x 355 mm</i>
Table Travel - X Axis	25" <i>635 mm</i>
Saddle Travel - Y Axis	15" <i>380 mm</i>
Head Travel - Z Axis	20.5" <i>520 mm</i>
Throat Distance <i>Spindle to Column</i>	16" <i>405 mm</i>
Spindle to Table Top	4- 24.5" <i>100 - 620 mm</i>
Maximum Table Load	750 lb <i>340 kg</i>
Machine Weight	6500 lb <i>2950 kg</i>
T Slots	(4) .63" <i>16 mm</i>
Saddle Width	30" <i>760 mm</i>
Ball Screw Size: X,Y,Z Axis	32mm
Ball Screw Grade	C5
Ball Screw Pitch X,Y,Z <i>Lead</i>	10 mm
SPINDLE	
Heavy Duty Spindle Cartridge Assembly, Triplex Bearing Design	60 mm
Spindle Horsepower <i>1 minute / 30 minutes</i>	12/10 HP <i>9/7.5 kw</i> Reference Torque Chart 12/10/1/B/Y
Optional Spindle Horsepower <i>1 minute / 30 minutes</i>	18/12 HP <i>13/9 kw</i> Reference Torque Chart 18/12/1/B/Y
Standard Triplex Bearing Spindle RPM	50 - 8000
Optional Ceramic Duplex Bearing Spindle RPM <i>Req. Balanced Tooling</i>	100 - 15,000
Balanced Tooling Requirements	***** 15,000 RPM Spindle Tools Should Be Balanced to 2.5 G's at 15,000 RPM*****
PERFORMANCE	
Servo Type	AC Digital
Rapid Traverse X,Y/Z	1000/800 ipm <i>25.4/20.3 mpm</i>
Maximum Feedrate	300 ipm <i>7620 mm/m</i>
Position Accuracy <i>See note</i>	±0.00039" <i>.01 mm</i>
Repeatability <i>See note</i>	.0002" <i>.005 mm</i>
Resolution	.00004" <i>.001 mm</i>
Thrust, Machine Duty Rating	X, Y: 1500 lbs <i>680 kg</i> Z: 2000 lbs <i>900 kg</i>
AUTOMATIC TOOL CHANGER	
ATC Type	Carousel
Number of Pockets	16
Tool Change Time	7 Sec
Maximum Tool Diameter / Length / Weight	4" / 11" / 10 lb <i>100mm / 280 mm / 4.5kg</i>

Machine Model	RW15
MISCELLANEOUS	
1/4 HP Flood Pump Capacity <i>Optional in Convenience Package</i>	50 Gal <i>190 L</i>
Drawbar Air Pressure Required	100 psi <i>6.8 bar</i>
Power 208-240 VAC 50-60hz, 3Ø w / 12 HP	40 amps 15 kVA
Power 208-240 VAC 50-60hz, 3Ø w / 18 HP	50 amps 19 kVA
Floor Space Requirement	73" x 73" <i>1850 x 1850 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 distributor.
<p><i>Measurements performed with Renishaw laser and ballbar systems. Measurements are linear over entire travel.</i></p> <p><i>Temperature changes and table loads may affect tolerances. Tolerances are guaranteed over 10" sq. area.</i></p> <p><i>Centurion features covered under separate literature. For machine duty rating, see "Truth in Specifications" on www.milltronics.net.</i></p> <p><i>Milltronics reserves the right to change specifications at any time without incurring obligation.</i></p>	

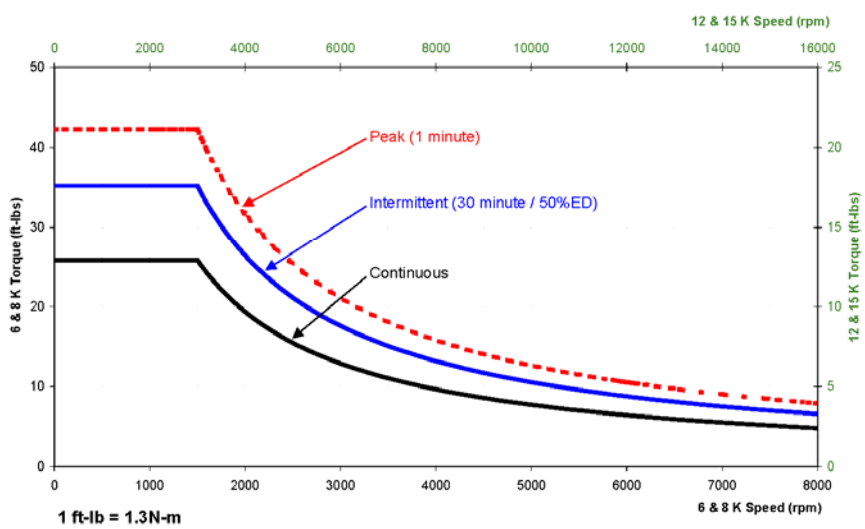
Yaskawa Torque Chart 12/10/1/B/Y – Belted Spindle

Used on: Standard RW15
Optional N/A

Power Characteristics of 12/10 HP Single Winding Motor
for 6,000 and 8,000 RPM or 12,000 and 15,000 RPM



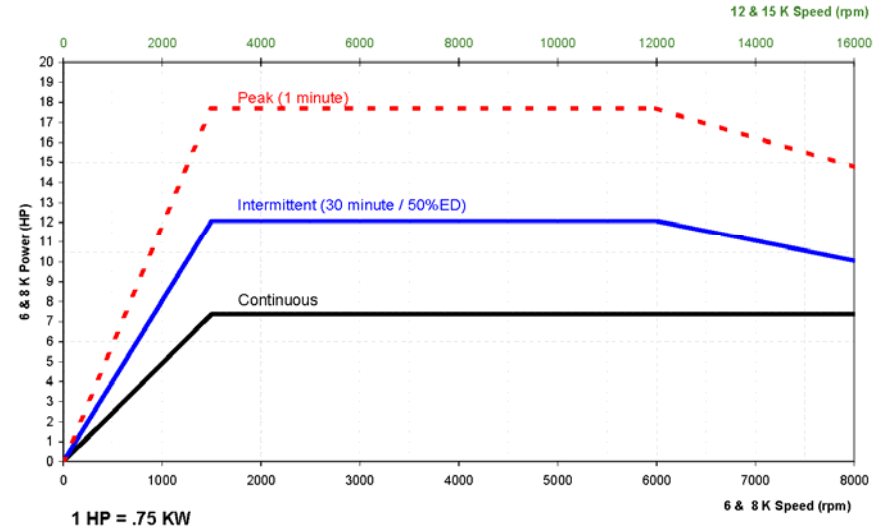
Torque Characteristics of 12/10 HP Single Winding Motor
for 6,000 and 8,000 RPM or 12,000 and 15,000 RPM



Yaskawa Torque Chart 18/12/1/B/Y – Belted Spindle

Used on: Standard N/A
Optional RW15

Power Characteristics of 18/12 HP Single Winding Motor
for 6,000 and 8,000 RPM or 12,000 and 15,000 RPM



Torque Characteristics of 18/12 HP Single Winding Motor
for 6,000 and 8,000 RPM or 12,000 and 15,000 RPM

