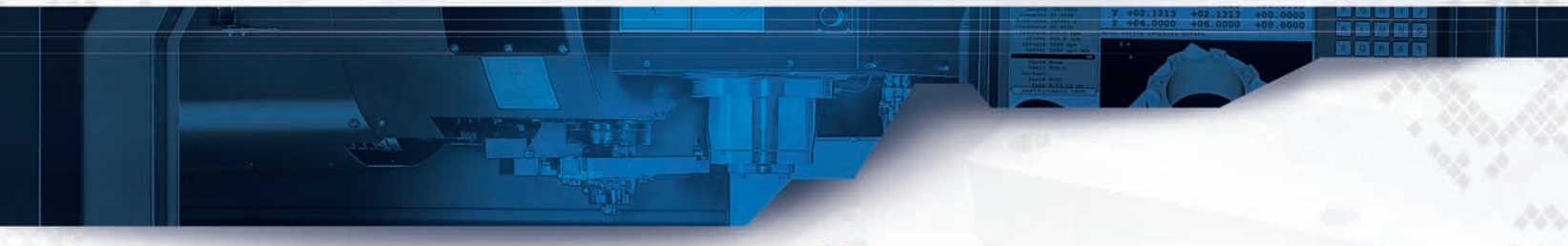
VR/VM XP

VR/VM EXTRA POWER SERIES. PERFORMANCE AND POWER, REINVENTED.



MILLTRONICS USA
LET'S INVENT

WHY MILLTRONICS? 10 REASONS.

1. EASY TO USE CONTROL

The Milltronics CNC control is straightforward and easy-to-use. Whether you choose Conversational programming, industry standard G&M code or use a CAD/CAM system, the 9000 CNC gives you the flexibility to use the most efficient program for each part.

2. MADE RIGHT

Using a machine design process that is ISO 9001 certified, Milltronics starts with FEA analysis and designs accurate, rigid and reliable machines built to last. There are no shortcuts taken here.

3. SUPERIOR COMPONENTS

Milltronics partners with top suppliers such as Yaskawa, Kenturn, Hiwin® and Grundfos. You can judge a machine tool builder by the company it keeps.

4. UPGRADEABLE

Milltronics controls are designed, built and supported by Milltronics. They are also designed to be upgradeable. With Milltronics CNC controls, you don't have to miss out on new software or hardware advancements as time marches on.

5. AVAILABILITY

We recognize that sometimes you need a machine fast. We work hard to make sure we have our most popular models in stock for quick shipment.

6. FASTEST LEARNING CURVE

Because Milltronics machines are so easy to learn and use, you'll be making chips quicker. And don't confuse easy with simple – the 9000 CNC is packed with advanced features and capabilities. Conversational programming, on screen help, intuitive menus, color graphics and prompted tool settings will help the operator train faster and become productive sooner.

7. SERVICE NETWORK

Support is a core value to Milltronics, and according to customer surveys Milltronics and our distributor network offer the best service and support in the industry. We do what it takes to provide reliable full life-cycle support you need to make great products.

8. COMPLETE SOLUTION

Milltronics offers 50 different models of milling and turning machines for toolroom and production environments. The lineup includes toolroom mills and lathes, general purpose and high performance vertical machining centers, CNC lathes, bridge mills and horizontal boring mills. Our versatile product line offers something for everyone.

9. GLOBAL AMERICAN COMPANY

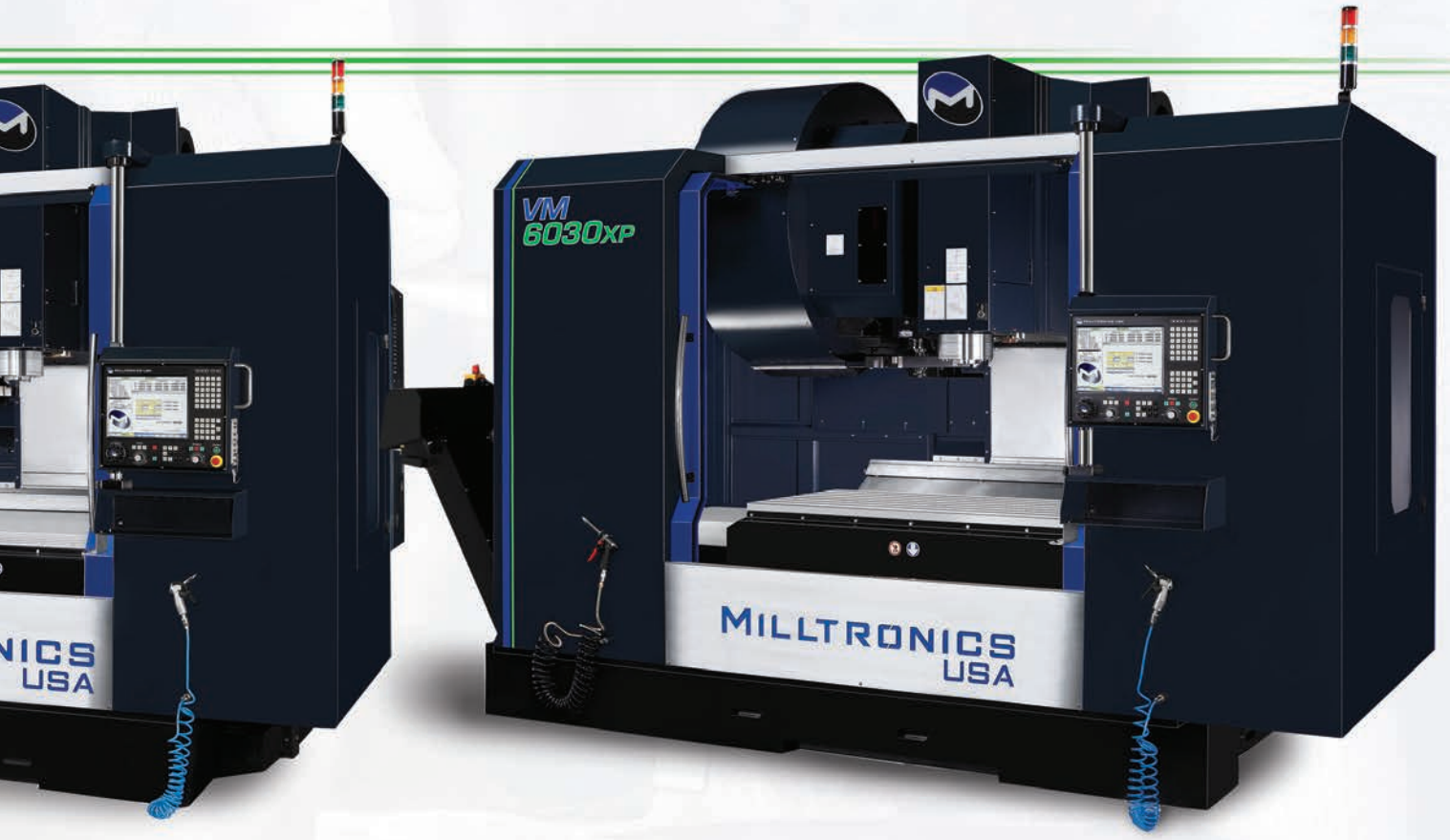
Milltronics is part of the Hurco Companies Machine Tool Group. We are publically traded with solid financials, we're in it for the long haul.

10. MORE FOR YOUR MONEY

Finally, Milltronics offers better built machines with more standard features for the price. We are continually working with our distribution partners innovating new ways to seamlessly surround manufacturers and machine shop owners with the reliable products they need.

VR/VM - XP SERIES, EXTRA

POWER FOR THE TOUGH STUFF.



XP MACHINES FEATURE:

- #50 taper to accommodate large tools
- Up to 35 horsepower for maximum metal removal
- Larger servo motors to help power through heavier parts and tough materials
- Robust frame – either box ways or oversized rollerways – provides solid foundation
- Either gear head or heavy duty belt drive provides Extra Power

9000 CNC

9000 CNC: THE NEW STANDARD OF CONTROL.

Milltronics is constantly refining our controls to simplify operation, shorten setup times and to provide set features to reduce cycle times. The 9000 Series CNC is our newest and upgraded control offered on VM/XP Series machining centers. It features 120 GB disk storage, 4GB memory, mid-travel tactile keys and an enlarged 15" LCD touch screen. It's a Windows®-based platform and offers all the user-friendly features that Milltronics CNC controls are known for and more.

INTUITIVE

With its conversational programming, on screen help, intuitive menus, color graphics and prompted tool settings, the 9000 CNC helps new operators train faster and become more productive sooner. The 9000 CNC makes it the one machine in the shop that everyone can operate.

EFFICIENT

The 9000 CNC is packed with features that allow quick and confident operation of the CNC:

- **Solid modeling graphics allows the operator to see a completed part prior to cutting.**
- **Mid program restart allows the operator to start anywhere in a program by verifying the graphics and then switching to Run Mode. It's simple – no need for G&M code expertise!**
- **Handwheel run allows the operator to run a program in a controlled mode where motion only occurs while the handwheel is turning. This feature allows operators to verify programs with total control and complete confidence.**
- **The 9000 CNC features a dual-core processor and high speed motion control that is capable of executing 3,000 blocks per second. Execute the most demanding programs in the shortest time.**
- **The 9000 CNC is equipped with a 120 GB solid state drive, 4 GB RAM memory, USB ports and Ethernet connectivity.**

PRODUCTIVE

The 9000 CNC allows operators to run parts programmed conversationally or toolpaths generated by a CAM system. Coupled with a super-fast motion control system, feature packed CNC and interface designed to expedite setup and operation, the 9000 CNC is the solution to helping your operator make parts faster and better.

PERFORMANCE & SPECIFICATIONS

Essentials

Processor	Intel® Core i5-3610ME
Instruction Set	64-bit

Performance

Number of Cores	2
Processor Base Frequency	2.7 GHz
Max Turbo Frequency	3.3 GHz

Memory Specifications

System Memory Installed	4 GB
Disk Storage	120 GB

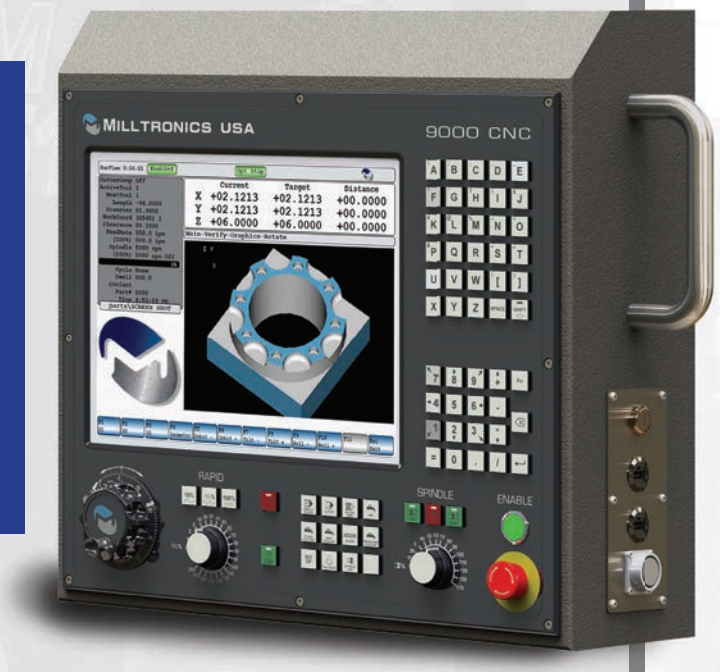
Graphics Specifications

GPU Core Speed	600MHz
Memory	1024

Operating System

Primary OS	Windows® Embedded 7
Real Time Extension	IntervalZero RTX

The new Milltronics 9000 CNC control is Windows® based and features a 15" color LCD touch screen.

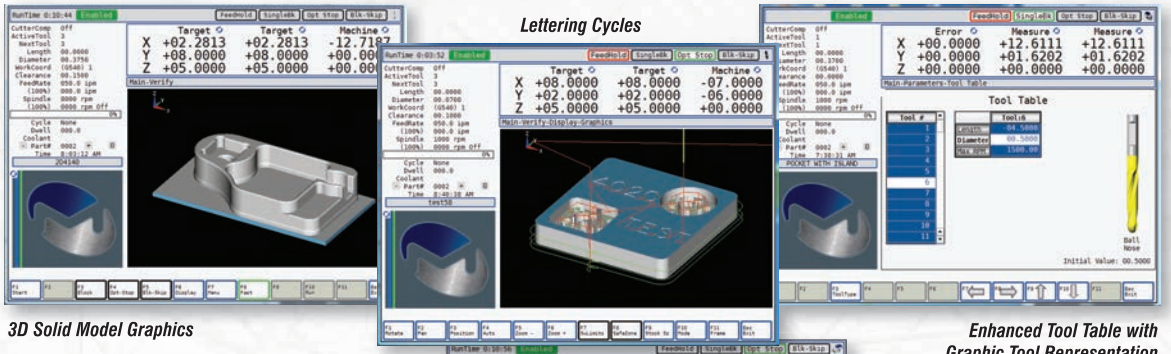


Display

Size	15"
Resolution	1024 x 768
Backlight Type	LED
Touchscreen	Resistive

Operator Panel

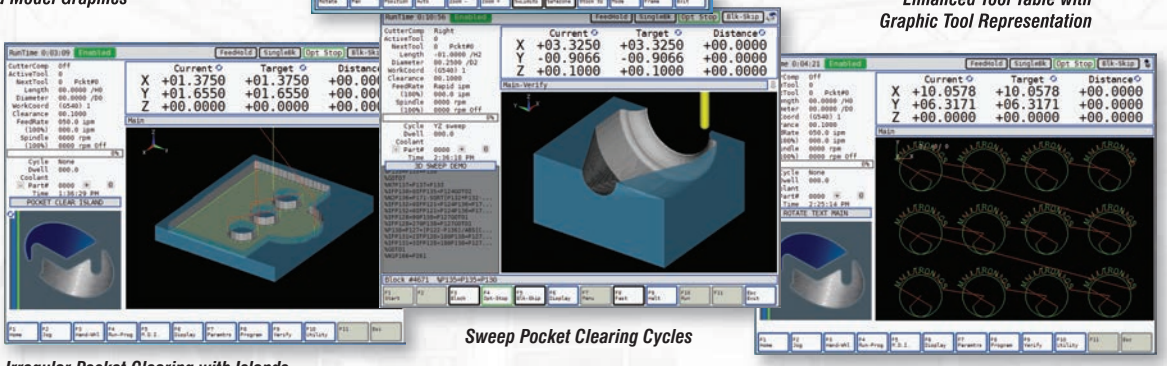
Keypad Type	ABS mid-travel with tactile feedback
Data Transfer	USB ports and Ethernet connectivity



3D Solid Model Graphics

Lettering Cycles

Enhanced Tool Table with Graphic Tool Representation



Irregular Pocket Clearing with Islands

Sweep Pocket Clearing Cycles

Sub-Program Loops for Pattern Repeat Cycles

PROGRAMMING FEATURES

Trig Help Features
- Arc & Line Intersection Find
- Tangent Line & Arc Functions
- 3 Point Arc Generation
- Line Extend Back
- Cartesian & Polar Coordinates
- Corner Chamfering & Rounding

Single Page Auto-Routines
- Bolt Pattern, Drill, Tap & Bore Cycles
- Text Engraving on Arc or Line
- Thread Milling Cycle
- Circular Framing Cycle
- Rectangular Framing Cycle
- Polygon Framing Cycle
- Circular Pocket Cycle
- Rectangular Pocket Cycle
- Polygon Pocket Cycle
- Slot Cycle
- Facing Cycle

Canned Cycles
- Milling Cycles
- Drill, Tap & Bore Cycles
- Custom Drill Cycle
- Rotary Axis Cylindrical Mapping
- 3D Sweep Routine
- Irregular Pocket Clear with Islands

Conversational Programming
- DXF & IGES File Import
- Math Function Input Fields
- Macro Variable Programming
- Custom Conversational Screens
- Speed & Feed Calculator
- Prompting Help Screens

G&M Code Programming
- Macro Programming
- MDI
- EIA / ISO Code (Fanuc™) Compatibility

Programming Features
- Concurrent Programming
- Cutter Compensation
- Inch / Metric
- Mirror, Scale & Rotate
- Dwell
- Subprogram Call, Looping & Nesting
- Tapered & Round Walls
- Engraving with Serializing

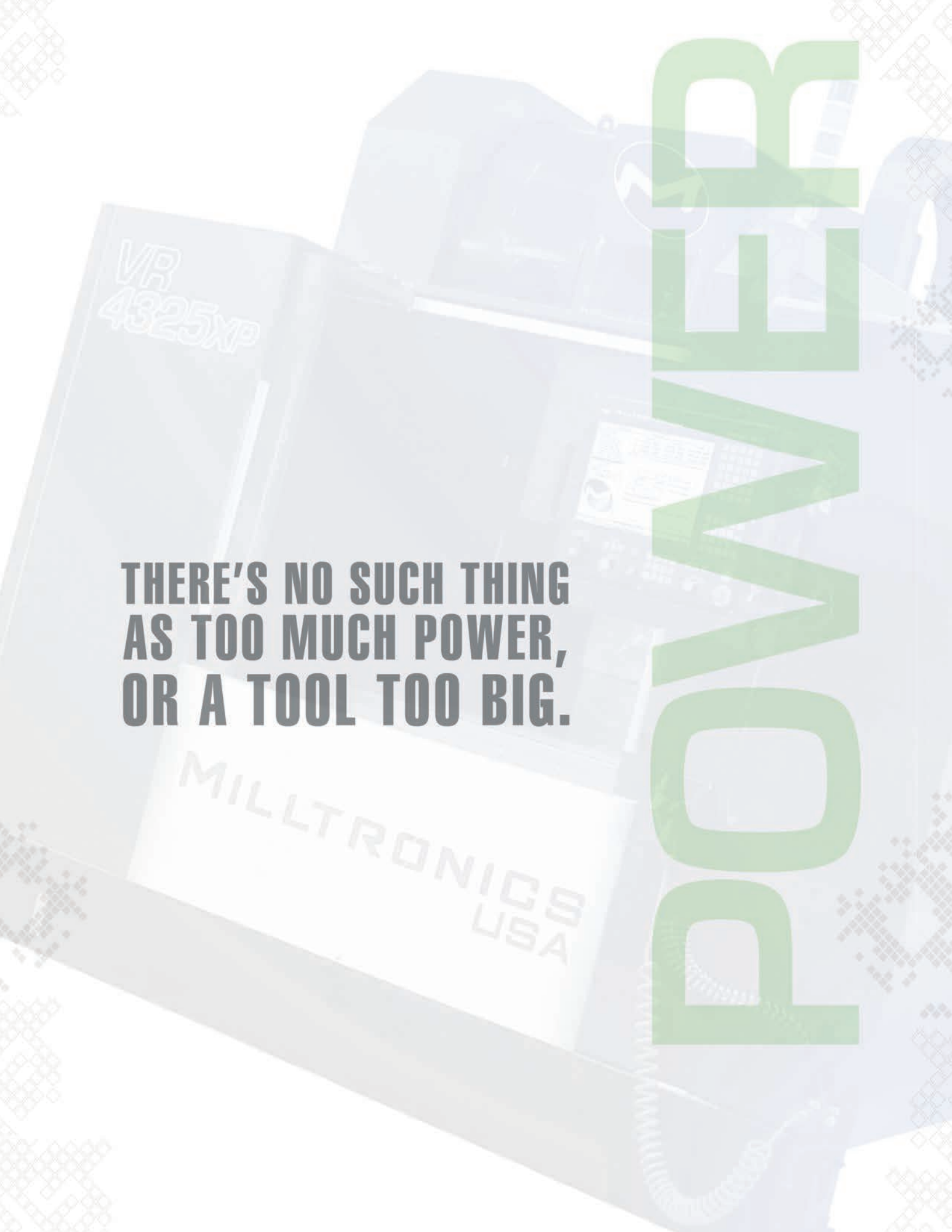
Run & Verify Features
- Handwheel Run
- Dry Run
- Block Skip, Optional Stop, Programmable Stop & Single Block
- Multiple Mid Program Start Options
- Mill Away / Jog Away
- Program Halt & Resume
- Tool Load Monitoring
- Tool Breakage Detection with Optional Tool Setter
- Estimated Cycle Time
- 10%, 100% & Variable Rapid Override Select
- Spindle Load Meter
- Fine Tune Feed & Spindle Override
- Machine Status Light
- Programmable Air, Mist & Coolant

Set-Up Features
- Automatic Tool Setting Program
- Single Button Tool / Fixture Offset Entry
- 60 Work Coordinates
- Continuous & Incremental Axis Jog
- Electronic Handwheel(s)
- Optional Probe & Tool Setter
- 199 Tool Diameter Length & Wear Offsets
- DRO Measure
- Safe Zone
- Hot Keys

Control Features
- Optional Four & Five Axis Simultaneous
- 3000 Blocks/Second High Speed Processor
- Absolute / Incremental
- 120 GB Solid State Hard Drive
- 4 GB Ram Memory
- 500 MB Text Editing with Cut, Copy, Move, Search & Replace
- Ball Screw Pitch Error Correction
- True S Curve Acceleration & Jerk Correction
- Feed Forward Error Correction
- Full Language Error Messages
- Backlash Compensation
- Linear, Circular, Helical & Interpolation
- Feed Per Rev, Minute, Inverse Time
- Custom I/O Screens
- Surface Finish Selection (SFS)
- Aux Keyboard Port
- Networking
- Calculator
- Service Diagnostics
- Parts Counter
- Program/Parameter (Edit Key)
- Remote Diagnostics
- Rigid Tapping
- Selectable Corner Accuracy
- Selectable Languages
- Handwheel Scroll through Menus
- 15˝ Color LCD Touch Screen Display
- Automatic Homing
- Two USB Ports
- Hour Meter

Edit Features
- Background Editing
- Cut, Copy, Paste & Move Editing
- Handwheel through Text
- Overwrite & Insert
- Global Find & Replace
- Printout a Program (Fastcam)

Display Features
- 3D Part & Wire Frame Tool Path Graphics
- Color Graphics – Tool Path & Part Profile
- Solid Model Graphics
- Wireframe over Solids
- Transparent Graphics
- Customizable DRO
- User Definable Image Display Window
- User Selectable Graphics in all Planes



THERE'S NO SUCH THING AS TOO MUCH POWER, OR A TOOL TOO BIG.

POWER

VR4325XP

MACHINE SPECIFICATIONS

CAPACITY	
Travels	43 x 25.5 x 23.6" (1100 x 650 x 600 mm)
Table Size	51 x 25.5" (1300 x 650 mm)
Allowable Table Load	2500 lbs. (1100 kg)
T-Slot Size	.71" (18 mm)
SPINDLE	
Spindle Nose To Table Distance	5.9-29.5" (150-750 mm)
Column To Spindle Center	27.5" (700 mm)
Spindle Taper	ISO No. 50
Spindle Speed	6,000 RPM
Spindle Transmission	Two-Speed Geared Head
AC Spindle Motor	35/25 HP (26/18 kW)
Spindle Torque	1177 ft-lbs (1597 N.m)
AUTOMATIC TOOL CHANGER	
Number of Tools	24 Double Arm
Tool Shank	CT50
Pull Stud	ANSI 45° Retention Knob Style CT-Flange 50 Taper
Max. Tool Diameter	4" (100 mm)
Max. Tool Length	10" (250 mm)
Max. Tool Weight	33 lbs. (15 kg)
MOTION	
XY, Z Axis Rapid Traverse Rate	800, 550 IPM (20/14 m/min)
Max. Cutting Feed Rate	500 IPM (12.7 m/min)
Least Command Increment	0.0001" (0.001 mm)
Positioning Accuracy	+/- 0.0002" (+/- 0.005mm)
Repeatability	+/- 0.0002" (+/- 0.005mm)
Axis Thrust Force XY,Z	5280, 8065 lbs (2395, 3660 kg)
GENERAL	
Machine Height	124" (3150 mm)
Floor Space Required (W x D) Without Auger	121 x 122" (3075 x 3000 mm)
Additional Width for Auger	29" (763 mm)
Machine Weight	20,000 lbs. (0100 kg)
Power Required	48 KVA / 125 Amps
Voltage Required	208-240 Volts / 3 Phase

VR4325XP machine shown with options

MACHINE OPTIONS

- Coolant through spindle system
- Programmable spray mist coolant
- Tool and part probes
- 4th axis options
- Auxiliary industrial grade keyboard
- Electronic spindle chiller
- BT style tooling

MACHINE FEATURES

MACHINE STANDARDS

- Heavily ribbed one piece fine grain cast iron construction
- Fully enclosed machine guard with side doors
- Solid box ways
- Precision ground supported on both ends ball screws
- Precision ground table surface
- Telescopic metal way covers
- 24 pocket double arm ATC
- Two-speed geared head
- Automatic positive displacement lubrication system
- High torque AC digital servo drives
- High torque closed loop vector spindle drive system
- LED work light
- LCD hour meter
- Spindle taper blow-out and tool release push button
- Single spare "M" function with CNC "wait" channel
- Programmable on/off flood coolant system
- Rigid tap
- Edit key lockout switch
- Spindle load meter
- Feedrate and spindle speed overrides
- Spindle air purge
- End of cycle light
- Chip auger and washdown chip removal system
- Remote handwheel
- Air gun
- Coolant wash down gun

VM5025XP

MACHINE SPECIFICATIONS

CAPACITY	
Travels	50 x 25 x 24" (1270 x 635 x 610 mm)
Table Size	54 x 25" (1372 x 635 mm)
Allowable Table Load	3000 lbs. (1360 kg)
T-Slot Size	.71" (18 mm)
SPINDLE	
Spindle Nose To Table Distance	6-30" (152-762 mm)
Column To Spindle Center	28.7" (729 mm)
Spindle Taper	ISO No. 50
Standard Spindle Speed	8,000 RPM
AC Spindle Motor	24/15 HP (18/11 kW)
Optional AC Spindle Motor	35/25 HP (26/18 kW)
Spindle Torque	255 ft-lbs (345 N.m)
Optional Spindle Torque	365 ft-lbs (495 N.m)
AUTOMATIC TOOL CHANGER	
Number of Tools	30 Double Arm
Tool Shank	CT50
Pull Stud	ANSI 45° Retention Knob Style CT-Flange 50 Taper
Max. Tool Diameter	4.9" (125 mm)
Max. Tool Length	11.8" (300 mm)
Max. Tool Weight	33 lbs. (15 kg)
MOTION	
XY, Z Axis Rapid Traverse Rate	1000, 787 IPM (25, 20 m/min)
Max. Cutting Feed Rate	500 IPM (12.7 m/min)
Least Command Increment	0.0001" (0.001 mm)
Positioning Accuracy	+/- 0.0002" (+/- 0.005mm)
Repeatability	+/- 0.0002" (+/- 0.005mm)
Axis Thrust Force XY,Z	6065, 9531 lbs (2750, 4325 kg)
GENERAL	
Machine Height	123" (3124 mm)
Floor Space Required (W x D)	128" x 108" (3251 x 2667 mm)
Additional Width for Conveyor	38" (965 mm)
Machine Weight	20,100 lbs. (9136 kg)
Power Required	38 KVA / 100 Amps
Optional Power Required	48 KVA / 125 Amps
Voltage Required	208-240 Volts / 3 Phase

VM5025XP machine shown with options

MACHINE OPTIONS

- Coolant through spindle system
- Programmable spray mist coolant
- Tool and part probes
- 4th axis options
- Auxiliary industrial grade keyboard
- Electronic spindle chiller
- BT style tooling
- 35/25 HP upgrade

MACHINE FEATURES

MACHINE STANDARDS

- Heavily ribbed one piece fine grain cast iron construction
- Fully enclosed machine guard with side doors
- 45 mm roller linear way technology
- Precision ground supported on both ends ball screws
- Precision ground table surface
- Telescopic metal way covers
- 30 pocket double arm ATC
- Heavy-duty belt drive
- Automatic positive displacement lubrication system
- High torque AC digital servo drives
- High torque closed loop vector spindle drive system
- Dual work lights
- LCD hour meter
- Spindle taper blow-out and tool release push button
- Single spare “M” function with CNC “wait” channel
- Programmable on/off flood coolant system
- Rigid tap
- Edit key lockout switch
- Spindle load meter
- Feedrate and spindle speed overrides
- Spindle air purge
- End of cycle light
- Chip conveyor and washdown chip removal system
- Remote handwheel
- Air gun
- Coolant wash down gun

VM6030XP

MACHINE SPECIFICATIONS

CAPACITY	
Travels	60 x 30 x 24" (1524 x 762 x 610 mm)
Table Size	66 x 30" (1680 x 762 mm)
Allowable Table Load	3000 lbs. (1360 kg)
T-Slot Size	.71" (18 mm)
SPINDLE	
Spindle Nose To Table Distance	4-28" (100-710 mm)
Column To Spindle Center	31.5" (800 mm)
Spindle Taper	ISO No. 50
Standard Spindle Speed	8,000 RPM
AC Spindle Motor	24/15 HP (18/11 kW)
Optional AC Spindle Motor	35/25 HP (26/18 kW)
Spindle Torque	255 ft-lbs (345 N.m)
Optional Spindle Torque	365 ft-lbs (495 N.m)
AUTOMATIC TOOL CHANGER	
Number of Tools	30 Double Arm
Tool Shank	CT40
Pull Stud	ANSI 45° Retention Knob Style CT-Flange
Max. Tool Diameter	4.9" (125 mm)
Max. Tool Length	11.8" (300 mm)
Max. Tool Weight	33 lbs (15 kg)
MOTION	
XY, Z Axis Rapid Traverse Rate	1000, 787 IPM (25, 20 m/min)
Max. Cutting Feed Rate	500 IPM (12.7 m/min)
Least Command Increment	0.0001" (0.001 mm)
Positioning Accuracy	+/- 0.0002" (+/- 0.005mm)
Repeatability	+/- 0.0002" (+/- 0.005mm)
Axis Thrust Force XY, Z	6065, 9531 lbs (2750, 4325 kg)
GENERAL	
Machine Height	123" (3124 mm)
Floor Space Required (W x D)	150 x 115" (3810 x 2921 mm)
Additional Width for Conveyor	38" (965 mm)
Machine Weight	22,267 lbs. (10,100 kg)
Power Required	38 KVA / 100 Amps
Optional Power Required	48 KVA / 125 Amps
Voltage Required	208-240 Volts / 3 Phase

VM6030XP machine shown with options

MACHINE OPTIONS

- Coolant through spindle system
- Programmable spray mist coolant
- Tool and part probes
- 4th axis options
- Auxiliary industrial grade keyboard
- Electronic spindle chiller
- BT style tooling
- 35/25 HP upgrade

MACHINE FEATURES

MACHINE STANDARDS

- Heavily ribbed one piece fine grain cast iron construction
- Fully enclosed machine guard with side doors
- 45 mm roller linear way technology
- Precision ground supported on both ends ball screws
- Precision ground table surface
- Telescopic metal way covers
- 30 pocket double arm ATC
- Heavy-duty belt drive
- Automatic positive displacement lubrication system
- High torque AC digital servo drives
- High torque closed loop vector spindle drive system
- Dual work lights
- LCD hour meter
- Spindle taper blow-out and tool release push button
- Single spare “M” function with CNC “wait” channel
- Programmable on/off flood coolant system
- Rigid tap
- Edit key lockout switch
- Spindle load meter
- Feedrate and spindle speed overrides
- Spindle air purge
- End of cycle light
- Chip conveyor and washdown chip removal system
- Remote handwheel
- Air gun
- Coolant wash down gun

QUALITY COMPONENTS

VM4325XP FRAME

Hardened and ground box ways for long-term rigidity and accuracy

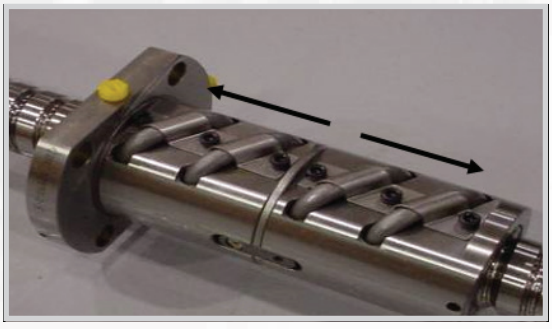
VM5025XP FRAME AND
(VM6030XP NOT SHOWN)

Oversized and widely spaced linear cross roller ways for rigidity and accuracy—provide 40% more rigidity than standard ball ways

- Heavily ribbed and supported fine grain cast iron optimized with Finite Element Analysis (FEA) provides superior dampening characteristics and added rigidity for heavy machining applications.
- 6,000/8,000 RPM geared/belt drive spindle cartridge using ABEC class 7 bearings is air purged to eliminate contaminants in the spindle and provide excellent cutting performance.
- Preloaded and ground ball screws supported at both ends reduces backlash with high inertial loads and fast rapid traverse rates.
- Automatic lubrication is provided by an electric positive displacement pump with metered lines to each lubrication point ensuring proper lubrication of ball screws and ways/linear rails.

BALL SCREWS

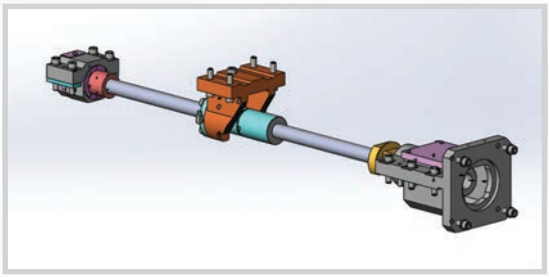
The XP Series of machines feature direct coupled Hiwin® premium grade pre-loaded ball screws, supported at both ends as well as Hiwin® linear motion guides. The ball screws are also pre-tensioned, providing greater rigidity and help to negate the effects of thermal growth.



Double nut preloaded ball screw.

DIRECT COUPLED BALL SCREWS

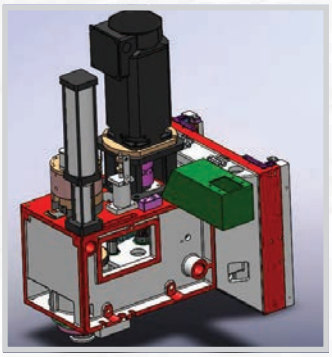
No belts or pulleys means zero backlash and no adjustment required. Milltronics uses direct coupled ball screws for faster response, accuracy and better surface finish.



Direct coupled ball screws.

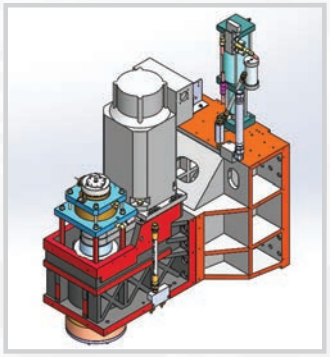
VR4325XP SPINDLE

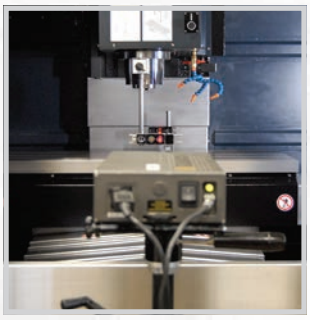
Milltronics uses a two-speed gear box on the VR4325XP with a dual wound spindle motor to offer maximum cutting power.



VM5025XP AND VM6030XP SPINDLE

The VM5025XP and VM6030XP from Milltronics use a heavy-duty belt drive with a dual wound spindle motor for power and flexibility.





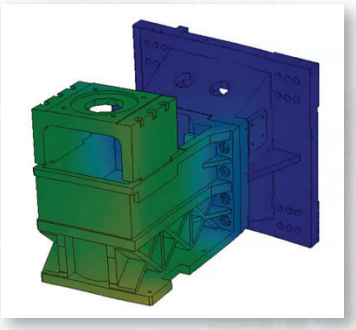
LASER INTERFEROMETER

After assembly, Milltronics XP machines are tested, including the use of a laser interferometer. The laser interferometer provides comprehensive accuracy assessment of machine alignment and any roll-pitch-yaw errors in machine.

SERVOS AND DRIVES

Milltronics uses state-of-the-art premium servos and drives from Yaskawa the world's largest manufacturer of motors and drives. Some of the features of the Yaskawa drives include:

- Yaskawa Sigma V digital drives .625 millisecond velocity loop frequency response time (1.6 kHz)
- Encoders: 1,048,576 pulses per revolution
- Enhanced vibration suppression delivers 5G resistance
- Faster speed acceleration and deceleration



FINITE ELEMENT ANALYSIS

Finite Element Analysis (FEA) is used to evaluate structural rigidity, torsional stiffness, thermal characteristics and natural frequency to achieve the best frame design. This is critical with today's high velocities and accelerations – machine performance must be carefully optimized in order to maintain party quality.

SWING ARM ATC

Milltronics uses electric swing arm automatic tool changers on the XP Series. The ATC is bi-directional random pot, features 24 or 30 stations and is side mounted on the column.

ITX TECHNOLOGY

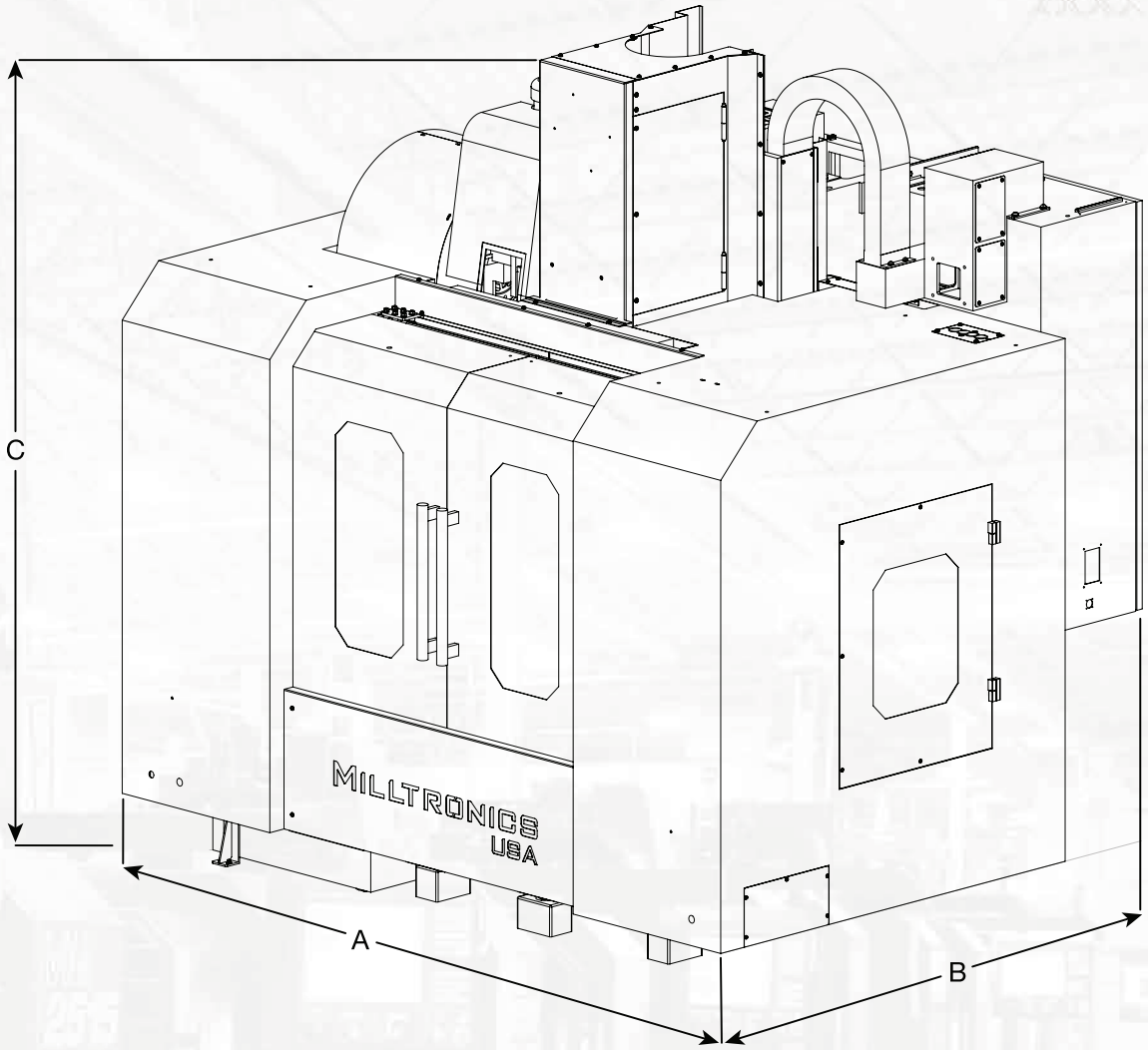
The modular design of the ITX rack provides highly reliable CNC operation as it uses fewer parts and features reduced connections. The CPU module uses less power and runs cooler for dependable operation.

CHIP MANAGEMENT

Milltronics XP Series are equipped standard with a coolant ring, wash down system and either chip auger (VR4325XP) or chip conveyor (VM5025XP & VM6030XP). The wash down system features separate Grundfos© pumps for cutting coolant and wash down as well as a generous coolant tank with sight levels.

SPECIFICATIONS

	SPECIFICATIONS	VR4325XP	VM5025XP	VM6030XP
CAPACITY	TRAVELS	43 x 25.5 x 23.6″ (1100 x 650 x 600 mm)	50 x 25 x 24″ (1270 x 635 x 610 mm)	60 x 30 x 24″ (1524 x 762 x 610 mm)
	TABLE SIZE	51 x 25.5″ (1300 x 650 mm)	54 x 25″ (1372 x 635 mm)	66 x 30″ (1676 x 762 mm)
	ALLOWABLE TABLE LOAD	2500 lbs (1100 kg)	3000 lbs (1360 kg)	3000 lbs (1360 kg)
	T-SLOT SIZE	.7″ (18 mm)	.7″ (18 mm)	.7″ (18 mm)
	NUMBER OF T-SLOTS	5	6	7
	T-SLOT DISTANCE	3.94″ (100 mm)	3.94″ (100 mm)	3.94″ (100 mm)
SPINDLE	SPINDLE NOSE TO TABLE DISTANCE	5.9-29.5″ (150-750 mm)	6-30″ (152-762 mm)	4-28″ (100-710 mm)
	COLUMN TO SPINDLE CENTER	27.6″ (700 mm)	28.7″ (729 mm)	31.5″ (800 mm)
	SPINDLE TAPER	ISO No. 50	ISO No. 50	ISO No. 50
	STANDARD SPINDLE SPEED	6,000 RPM	8,000 RPM	8,000 RPM
	STANDARD AC SPINDLE MOTOR	35/25 HP (26/18 kW)	24/15 HP (18/11 kW)	24/15 HP (18/11 kW)
	OPTIONAL AC SPINDLE MOTOR	– –	35/25 HP (26/18 kW)	35/25 HP (26/18 kW)
	STANDARD SPINDLE TORQUE	1,177 ft-lbs (1597 N.m)	255 ft-lbs (345 N.m)	255 ft-lbs (345 N.m)
	OPTIONAL SPINDLE TORQUE	– –	365 ft-lbs (495 N.m)	365 ft-lbs (495 N.m)
ATC	NUMBER OF TOOLS	24 Double Arm	30 Double Arm	30 Double Arm
	TOOL SHANK	CT50	CT50	CT50
	PULL STUD	ANSI 45° Retention Knob Style CT-Range	ANSI 45° Retention Knob Style CT-Range	ANSI 45° Retention Knob Style CT-Range
	MAXIMUM TOOL DIAMETER	4″ (100 mm)	4.9″ (125 mm)	4.9″ (125 mm)
	MAXIMUM TOOL LENGTH	10” (250 mm)	11.8” (300 mm)	11.8” (300 mm)
	MAXIMUM TOOL WEIGHT	33 lbs (15 kg)	33 lbs (15 kg)	33 lbs (15 kg)
MOTION	XY/Z AXIS RAPID TRAVERSE RATE	800/550 IPM (20/14 m/min)	1000/787 IPM (25/20 m/min)	1000/787 IPM (25/20 m/min)
	MAXIMUM CUTTING FEED RATE	500 IPM (12.7 m/min)	500 IPM (12.7 m/min)	500 IPM (12.7 m/min)
	LEAST COMMAND INCREMENT	0.0001″ (0.001 mm)	0.0001″ (0.001 mm)	0.0001″ (0.001 mm)
	POSITIONING ACCURACY	+/- 0.0002″ (+/- 0.005 mm)	+/- 0.0002″ (+/- 0.005 mm)	+/- 0.0002″ (+/- 0.005 mm)
	REPEATABILITY	+/- 0.0002″ (+/- 0.005 mm)	+/- 0.0002″ (+/- 0.005 mm)	+/- 0.0002″ (+/- 0.005 mm)
	AXIS THRUST FORCE X/Y/Z	5280/8065/8065 lbs (2395/3660/3660 kg)	6065/6065/9531 lbs (2750/2750/4325 kg)	6065/6065/9531 lbs (2750/2750/4325 kg)
GENERAL	MACHINE HEIGHT	124″ (3150 mm)	123″ (3124 mm)	123″ (3124 mm)
	FLOOR SPACE REQUIRED (W x D)	121 x 122″ (3075 x 3000 mm)	128 x 108″ (3251 x 2627 mm)	150 x 115″ (3810 x 2921 mm)
	ADDITIONAL WIDTH FOR AUGER/CONVEYOR	29″ (736 mm)	38″ (965 mm)	38″ (965 mm)
	MACHINE WEIGHT	20,000 lbs. (9100 kg)	20,100 lbs (9136 kg)	22,267 lbs (10,100 kg)
	POWER REQUIRED	48 KVA/125 Amps	38 KVA/100 Amps	38 KVA/100 Amps
	OPTIONAL POWER REQUIRED	–	48 KVA/125 Amps	48 KVA/125 Amps
	VOLTAGE REQUIRED	208-240 Volts/3 Phase	208-240 Volts/3 Phase	208-240 Volts/3 Phase



FOOTPRINT DIMENSIONS

MODEL	A (Width)	B (Depth)	C (Height)
VM4325XP	110″ (2800 mm)	89″ (2260 mm)	124″ (3150 mm)
VM5025XP	128″ (3251 mm)	108″ (2627 mm)	123″ (3124 mm)
VM6030XP	150″ (3810 mm)	115″ (2921 mm)	123″ (3124 mm)

Note: some options may change floor space requirements.

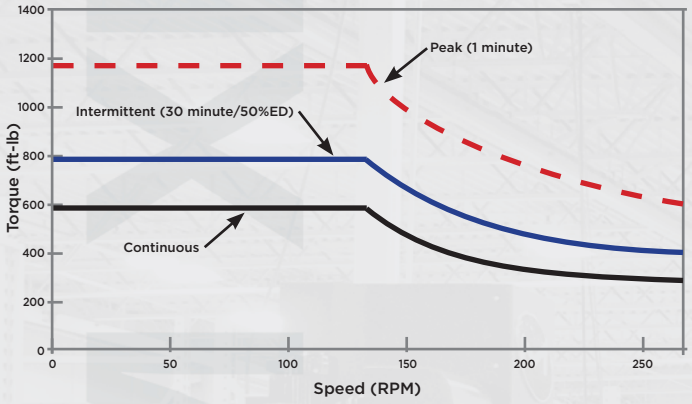
OPTIONAL ACCESSORIES

- 300 PSI coolant thru spindle
- Programmable spray mist
- BT tooling
- Spindle chiller
- Rotary tables
- Tool and part probes
- Auxiliary keyboard
- Offline software
- 35/25 HP upgrade (available on VM5025XP and VM6030XP only)

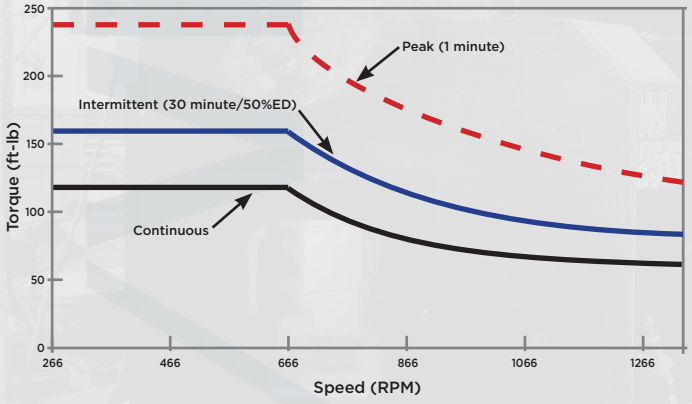
VR4325XP

TORQUE

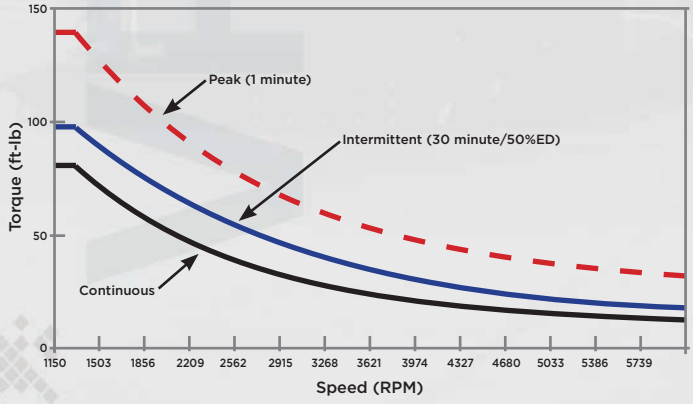
TORQUE CHARACTERISTICS OF YASKAWA 35/25 HP 6,000 RPM GEARED HEAD DELTA/WYE MOTOR — LOW RANGE



TORQUE CHARACTERISTICS OF YASKAWA 35/25 HP 6,000 RPM GEARED HEAD DELTA/WYE MOTOR — MEDIUM RANGE

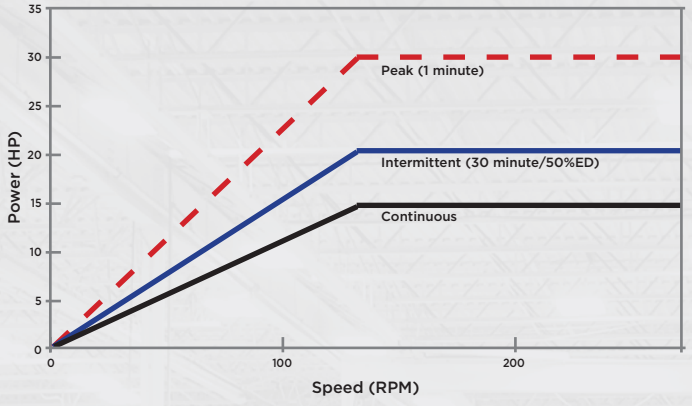


TORQUE CHARACTERISTICS OF YASKAWA 35/25 HP 6,000 RPM GEARED HEAD DELTA/WYE MOTOR — HIGH RANGE

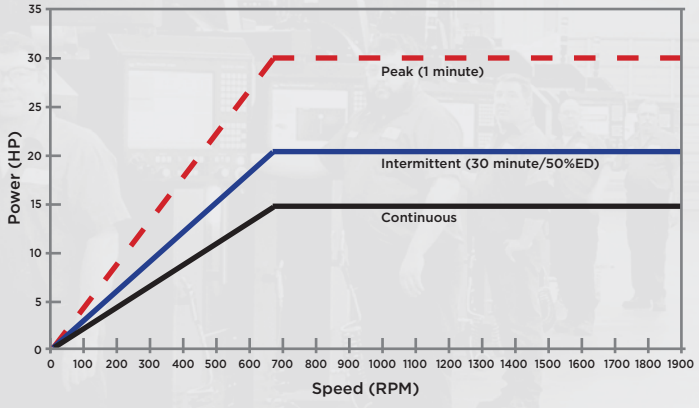


HORSEPOWER

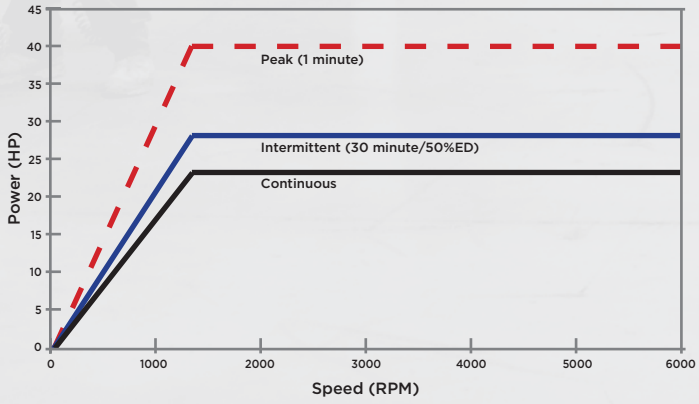
POWER CHARACTERISTICS OF YASKAWA 35/25 HP 6,000 RPM GEARED HEAD DELTA/WYE MOTOR — LOW RANGE



POWER CHARACTERISTICS OF YASKAWA 35/25 HP 6,000 RPM GEARED HEAD DELTA/WYE MOTOR — MEDIUM RANGE

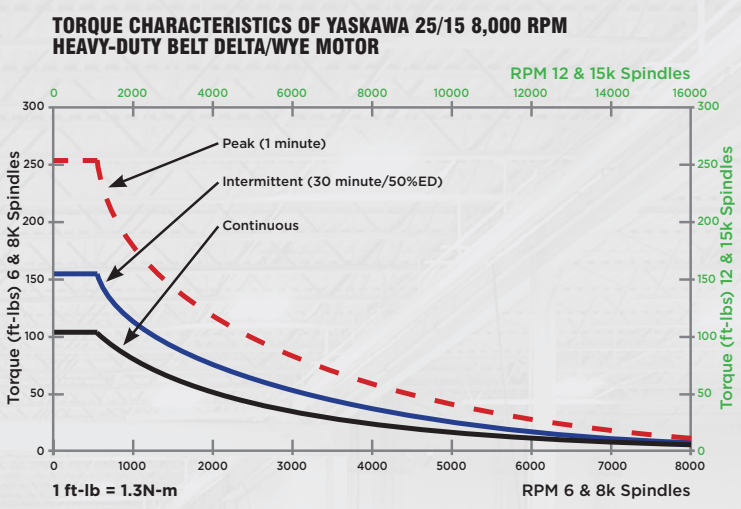


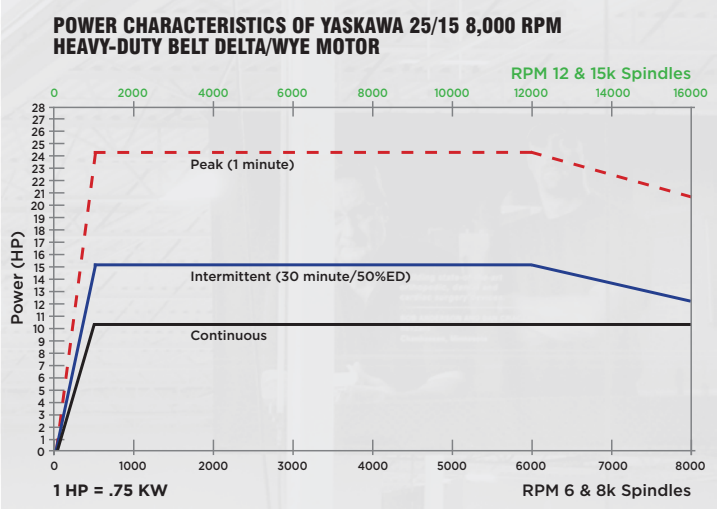
POWER CHARACTERISTICS OF YASKAWA 35/25 HP 6,000 RPM GEARED HEAD DELTA/WYE MOTOR — HIGH RANGE

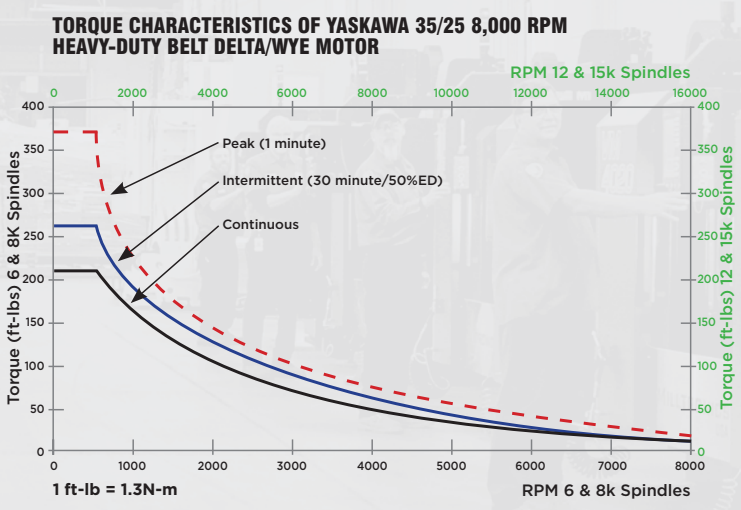


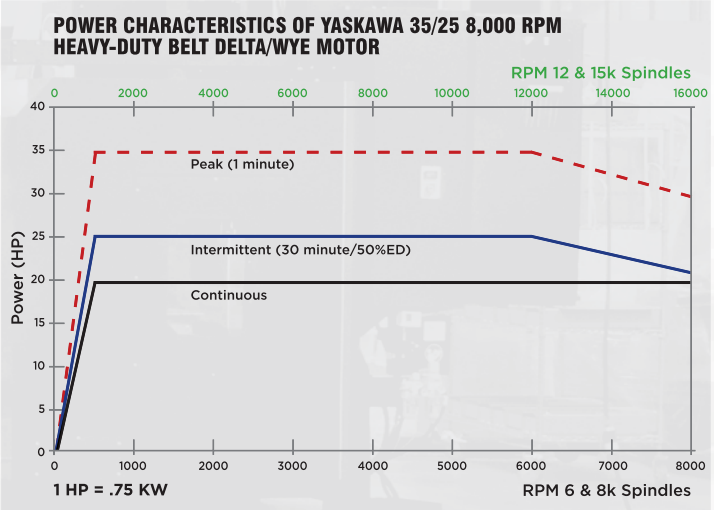
25HP/35HP

TORQUE









HORSEPOWER

WHO WE ARE

Milltronics is a growing manufacturer of CNC machines designed for the metal cutting industry. We manufacture over 50 models of machines and our own CNC. Milltronics is an industry leader in advanced CNC technology, operating out of a 100,000 sq. ft. state-of-the-art facility in a suburb of Minneapolis, Minnesota. We offer customers increased productivity with our innovative concept of a powerful CNC control with an easy-to-use operator interface designed around quality-built machine tools for a global market.
Check out Milltronics full product line and service offering at www.milltronics.com.

MILLTRONICS USA
LET'S INVENT

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