

RACER

Revolutionizing Manufacturing Processes with Cutting-Edge CNC Technology

MTX SERIES

MODELS AVAILABLE: MTX 500/MTX 720/MTX 1000/MTX 1200



ABOUT RACER

ESTABLISHED 1983

Racer Machinery International Inc. (RACER) manufactures innovative turnkey solution CNC machine tools, metal cutting engine lathes and industrial saws providing high-quality North American built products to production operations worldwide.

As one of the remaining few machine tool builders and the only engine lathe manufacturer in North America, our technologically advanced machine tool manufacturing process and diverse experience give us the capability to handle projects of a variety of scope and scale.

Our growing success stems from the ongoing commitment to research and development, engineering experience and dedication from our team. Our goal is to develop products that help our customers achieve their company goals while providing innovation and quality in all our products.

Capitalizing on the recent successes of RACER's brands, the company expanded its capabilities further when it acquired the assets and manufacturing rights for Standard Modern™ lathes.

With over 17,000 Standard Modern™ installations in North America, Standard Modern™ lathes are being used extensively in repair shops onboard military ships and military shops as well as tech colleges and trade schools.

Bringing over 80 years of experience to Racer Machinery's portfolio, Standard Modern™ lathes are one of the most trusted in the machine tool industry.

The two companies have been working closely together since 1983, making this acquisition a welcomed addition to the RACER family. Still proudly produced in North America, Racer Machinery now manufactures the Standard Modern™ lathes with the same level of quality that is expected for all of its products.



Our vision is to provide our customers with creative and high-quality solutions for their production.

OUR VISION

PHANTOM MACHINE TECHNOLOGY

... THE KEY TO SUCCESS

Racer Machinery International Inc. and its team of experts have developed a technology so advanced that it redefines all aspects of the machine tool industry. This includes everything from the production of the equipment to the end users machining time, tooling requirements, tool savings and workplace noise pollution.



BENEFITS

- Harmonized assembly allows for high quality finishing.
- Dramatically reduced machining time.
- Environmentally friendly manufacturing process.
- Extensive reduction in tooling costs; increase in tooling life.



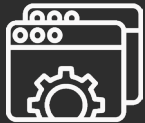
CAPABILITIES

- Astounding cutting performance.
- Versatility in performance.
- Easy setup and use.
- Remarkable reduction in noise pollution.



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SINUMERIK ONE CONTROL
ENABLES A CONSISTENT
“DIGITAL-FIRST” STRATEGY.



FEATURES

- Measurement Cycle for Improving Accuracy of Rotation & Swiveling Axes (Measure Kinematics)
- Spline Interpolation (A,B & C Splines)
- TANSIT/Cylinder for Drilling/Milling
- Key-operated Switch and USB and Ethernet interface
- 19inch TFT Colour Flat Screen
- 5 Axis Transformation Machining and Tilted Workplane Function
- Machining Package 5 Axes Contains
- Multi-axis Interpolation
- ShopMill
- Residual Material Detection and Machining for Contour Measurement
- Cycle Improving Accuracy of Rotation & Swiveling Axes (Measure Kinematics)
- Measuring Cycles for Drilling/Milling

SIEMENS SINUMERIK ONE CONTROL

The result is faster communication with customers about deadlines, more accurate planning and job preparation, and increased productivity, even with smaller batch sizes and an increasing range of variants.

Key manufacturing processes are always simulated first using digital twins; in other words, detailed virtual images of the controls and machining.

SIEMENS | RACER
SINUMERIK ONE LAUNCH PARTNER IN NORTHAMERICA

COMPREHENSIVE SUPPORT

FOR THE ULTIMATE PEACE OF MIND



RACER provides the highest level of training service, and support in the industry. Training includes three days of programming/ applications training at a local university. Additionally, the customer's maintenance personnel are invited for the last week of assembly and run off at our plant.

After installation at the customer's facility, RACER service personnel and engineers, work with three groups of customer personnel, namely, maintenance, operators and high level engineers to ensure understanding of the equipment to make in house support as effective as possible.

Technical support is available at 519-498-6118. Both our local dealer and our internal field service group are available to assist when required.

- RACER's team of experts are here to service you in times of need.
- Our service team can assist with machine troubleshooting issues, preventative maintenance, increasing the productivity of your machine, programming issues, other technical issues, or spare parts.
- In some cases, support can be provided over the phone but otherwise our team is ready to provide support at your facility.
- Assistance includes but not limited to: Programming, Machine Service & Maintenance, Operator Training, and Customer Training.



Training



Applications



Installation



Customer Support

TECHNICAL COMPONENTS

MULTI-AXIS MILL/TURN CENTER- MTX SERIES

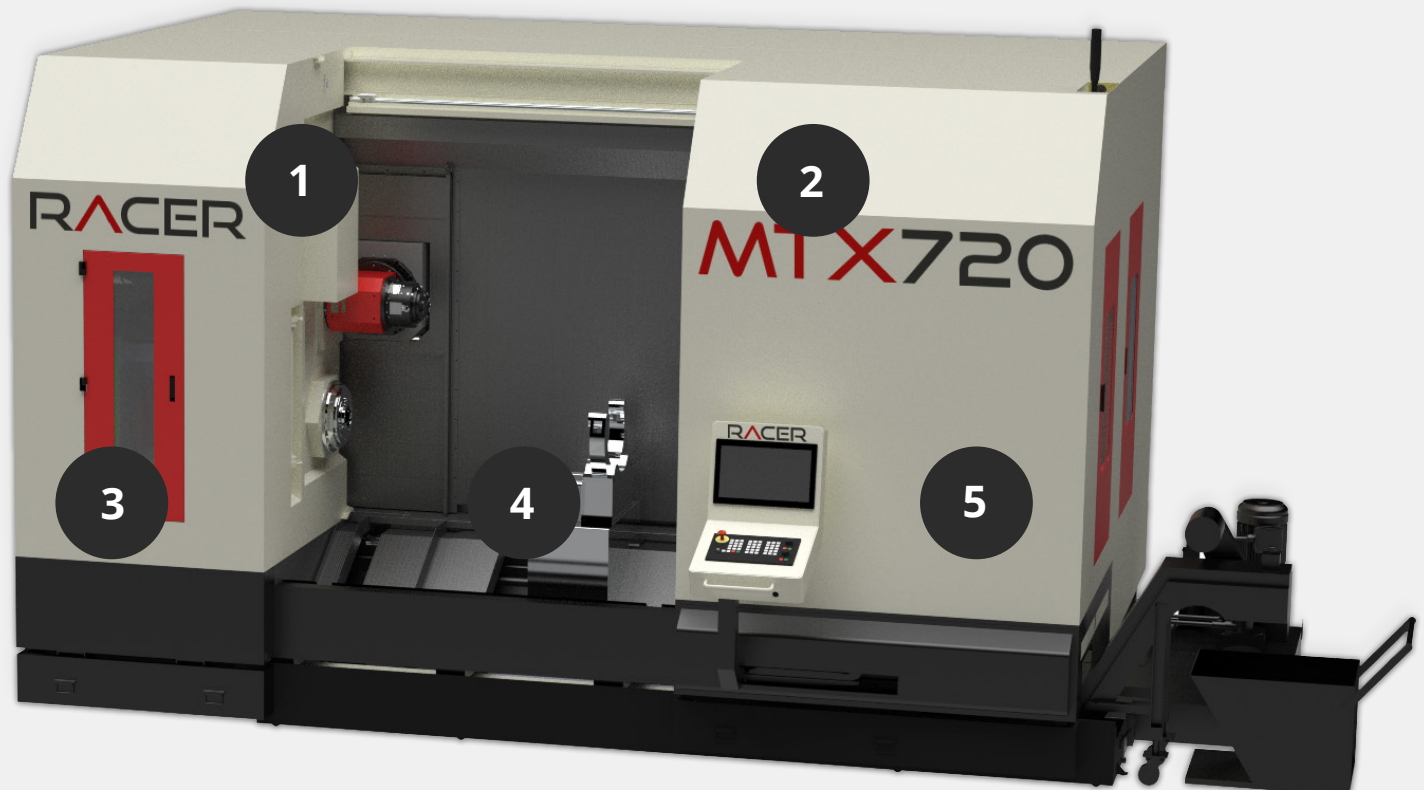
1 Our patented Phantom Machine Technology enables the construction of a massive frame that offers maximum rigidity and minimal vibration, resulting in the attainment of high levels of accuracy.

2 The column is guided by linear roller bearings on three sides, the column is a robust weldment.

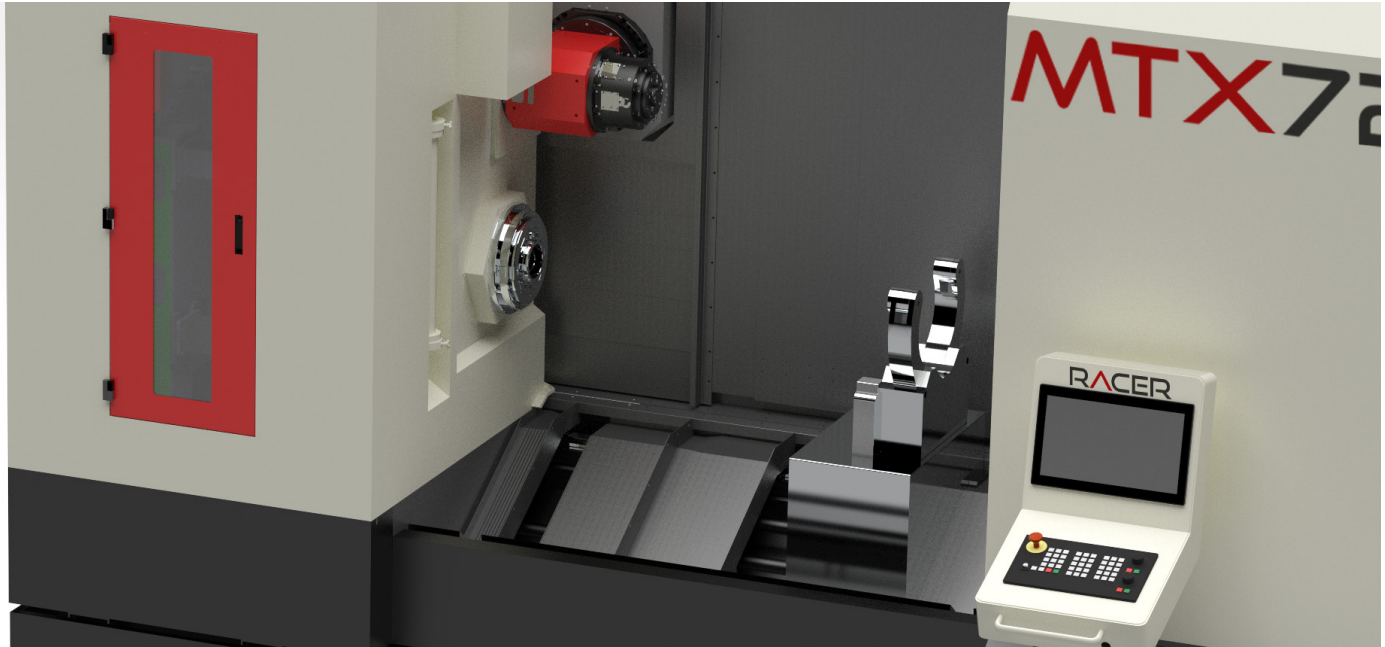
3 RACER's utilization of roller guide bearings ensures both high rigidity and rapid traverse, resulting in the attainment of high accuracies.

4 The five axes spindles are selected from a group manufactured to maintain alignment and correct any deviation from temperature variance.

5 RACER employs state-of-the-art CNC control technology that enables seamless integration of its machines into your facility, as it supports the technology of several major manufacturers. Additionally, all controls are equipped with digital twin, IoT, and Industry 4.0 capabilities. As well as, many other features that monitor the machines operation.



SPECIFICATIONS



Feature/Model	MTX-500	MTX-720
Machine Capacity		
Max. Turning Diameter	500	720
Max. Machinable Length	Up to 6000 mm	
Tool Spindle		
RPM	15000	
KW	30	60
X1 Axis (mm)	620	840
Y1 Axis (mm)	540	760
Z1 Axis (mm)	Up to 6000	
B Axis	+/- 120	
Tool Holder	HSK-63T	

SPECIFICATIONS

Feature/Model	MTX-500	MTX-720
Turning Spindle RPM	5000	3000
KW	30	40
Bar Capacity (mm)	65	102
Chuck Diameter (mm)	254	304.8
Tool Change Capacity	60	80
Lower Turret		
Number Tools	12	
Live Tools	Up to 12	
Speed RPM	3000	
X2 (mm)	220	
Z2 (mm)	Up to 6000	
Tailstock		
Travel (mm)	Up to 6000	
Accuracy		
Linear Positioning (mm)	0.0002"	
Linear Repeatability (mm)	0.00012"	
Rotational Positioning	8 Arcsecs	
Rotational Repeatability	4 Arcsecs	
Dynamic Machine Rigidity		
Axial N/ μ m	350	
Radial N/ μ m	275	

RACER

TO LEARN MORE ABOUT THE MTX SERIES VISIT:

www.racerinternational.com

