

## Accuracy and blistering speed ... the only way to fly!

This model puts the "ZOOM" in high-speed machining. Our fastest and most accurate Raptor®, the VelociRaptor® provides blistering feed rates up to 1,000 i.p.m. When close tolerances and optimized cycle times are a necessity, the VelociRaptor is the only answer. A water-chilled 60,000 RPM spindle and a laser calibrated guidance system insures tight tolerances and accuracies within .0005" over a 30" x 40" working area. In high-volume production where seconds off a cycle time can make the difference in meeting production demands, the value of the VelociRaptor is very easily justified. Surprisingly, our top-of-the-line high-speed machining system is quite affordable — especially when compared to competing machining systems with similar specifications. This system is ideal for military, aerospace and medical industries. **Plus, with spindle runout of less than 5 microns, this machine is the clear choice for micro-drilling applications.**

### Fast, flexible ... flawless!

The VelociRaptor's 60,000 RPM spindle produces low force and superior quality with tooling 0.250" and under. Plus, an integrated Ethanol-Mist Coolant System™ provides superb surface finishes and eliminates secondary processes like de-burring or de-greasing to further speed production times!

The vibration-dampening concrete polymer machine table is equipped with a built-in 15-tool, Automatic Tool Management System™ (30-Tool optional) that is protected from chips and debris. A 26" knock-out for vertical clamping can be included as a free option. Other options include various spindles up to 4.5kw and up to 60,000 RPM, 4th and 5th axes, a pick and place system, several 3D probing options, integrated edge-finding capabilities and Z-height surface mapping.

### Workholding? It's in there.

The VelociRaptor is the first Datron machine to include the proprietary Quick-Pallets workholding technology as a built-in and standard feature — providing manufacturers with reduced job setup and job changeover times. A lightweight, manual pallet changer facilitates batch machining and unattended "lights-out" production rather than single-part production.

### Standard Features:

- Solid granite bed
- 2kW Spindle with 5/16" Collet
- 60,000 RPM (up to 1000"/min.)
- 15-tool Automatic Tool Management
- Windows®-based control software
- C3 1GHz, 256 MB RAM, 40 Gig Hard Drive
- 17" LCD monitor, keyboard & controller
- Full Enclosure with safety lock-out
- Chip Disposal Cart



### Next Generation

### Precision High-Speed CNC Machining:

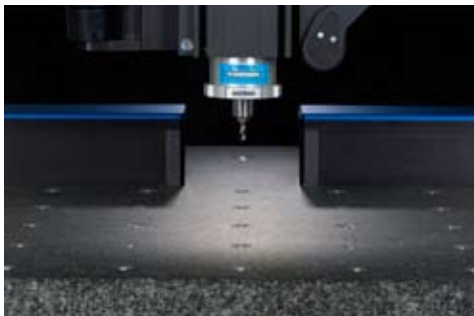
- ▶▶ Cut your production times in half
- ▶▶ Eliminate de-burring and de-greasing operations
- ▶▶ Increase your capabilities
- ▶▶ Superb surface finishes

**Presenting aggressive machining and real Velocity!**

**Call toll free 888.262.2833**

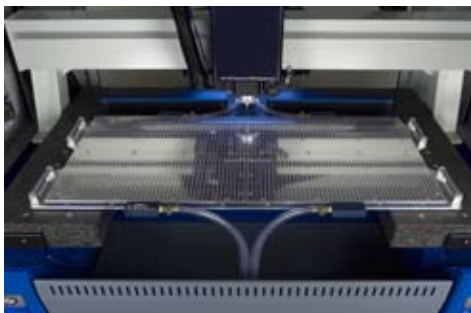
**WARNING:** Utilizing the power and flexibility of the ▶▶VelociRaptor may be hazardous to your competition.

# ▶ VelociRaptor®



## Precision and control at your fingertips.

Datron's Microsoft® Windows®-based controller works with virtually any CAD/CAM software and offers Ethernet networking capability, as well as remote monitoring and control, allowing the machine to seamlessly integrate into any manufacturing environment. Plus, it offers easy to use 'canned cycles', an intuitive control that utilizes look ahead buffers, and diagnostic features. The integrated, hand held pendant is designed for easy control and operation.



## The science of integrated workholding.

To insure X,Y,Z location repeatability, the VelociRaptor's standard Quick-Pallets™ are registered using a beveled-boss in cavity system. When placing the pallet on the machine bed, it will be located in exactly the same position every time. A standard feature, vacuum pump holds the pallet in place during machining operations. Changing a pallet requires no tooling or clamping, reducing setup time from an average of 30 minutes to 30 seconds — making the VelociRaptor ideal for frequent or interrupted job changes.

## Enjoy the future of high-speed, batch machining.

## You just can't hurt it.

Your operator can't bend the ball-screws or the ways. Our high-speed digital-servo drives constantly monitor the resistance of the axis. Should the load on a drive ever increase beyond what the machine would normally encounter during operation, the machine just stops. It is our efficient way to protect your investment. Even during "lights-out" production, if a tool breaks, it can be automatically replaced so that production quickly picks up where it left off — saving both time and costly blanks.



## Available Options:

- ▶▶ 26" bed knock-out (Free!)
- ▶▶ Z-Correction Probe™ (shown)
- ▶▶ Pneumatic quick clamp system
- ▶▶ Several spindle and 3D probing options
- ▶▶ Pick & place system
- ▶▶ Z-height surface mapping
- ▶▶ Integrated edge-finding capabilities
- ▶▶ 4th & 5th axis

Tech Specs	▶▶ VelociRaptor®
Coordinate Table	Solid granite table, fixed bridge design with precision linear guides
Machining Area (X x Y x Z)	40" x 27.5" x 9.5"
Portal Height	7.5"
Drive System	Digital servo drives, precision ball screw
CAD Interface	ISO G-Code (standard for NC machining code)
Control System	Microsoft Windows®-based control (open PC), 3-axis decentralized high-speed
Coolant System	Minimal quantity lubrication, electronically adjustable dispensing, Ethanol coolant
Machining Spindle	2kw high-frequency spindle, 7000 - 60,000 rpm 8mm collet, runout better than 5 microns
Tool Changer	15-tool changing unit with tool length sensor or 30-tool changing unit with tool length sensor
Accuracy	Resolution: ±0.00016" Absolute: ±0.0005" / Relative: ±0.00025"
Feed Rate	1,000" per minute
Footprint	69" x 57" x 77" (W x D x H)
Weight	1,760 lbs.
Power Requirement	208/220V, 7Amps (single phase)