miniRaptor™

DATRON
DYNAMICS, INCORPORATED

Gigantic capabilities, mini price tag.

It's true. The only thing that's small about the miniRaptor™ its price tag. And maybe its 51" x 51" footprint too. But, with features like a 60,000 RPM spindle, a 3-tool changer, controlling PC and Windows®-based control software — all standard — there just isn't a deal out there that can beat this one. Plus, the miniRaptor's 20" x 20" x 8" working envelope provides a larger machining area than CNC's twice its size. All that combined with feed rates up to 400" per minute, means that this little bugger ***saves you time, space and money.*** Add in an optional Heavy Duty Upgrade (with a granite bed, aged steel gantry and our 600W spindle) and you're ready to leave your footprint on the world of industrial machining with ***small tools.***

A big CNC in a small CNC's body.
if you've ever owned a dachshund you know that these little German-engineered dogs just don't know their own size ... and they're aggressive as can be. Well, the miniRaptor is the second thing to come out of Germany with that disposition. Sporting the industry's fastest spindle the miniRaptor tears through aluminum and nonferrous materials at feeds of up to 400" per minute.

Cost-effective doesn't mean cheap.
The construction of the miniRaptor makes use of components and technology used on larger Datron machines ... simply served up in a smaller package in order to save you money. So, while features like the Automatic Tool Management System™ have been scaled back (in this case to 3 tools), they haven't been eliminated. In fact, due to the smaller size of this model we're actually able to offer an optional solid granite machining bed — to provide you with increased rigidity. And unlike our competitor's entry-level machines, where everything but the start button is optional, we include the following as ***standard features***:

- 60,000 RPM high-frequency spindle
- Aluminum bed with 20" x 20" work area
- 3-tool Automatic Tool Management System
- Windows®-based control software
- PC, 15" monitor, keyboard & controller
- Ethernet capability, CD-ROM & 3 1/2" drive
- Full Enclosure & Chip Disposal Tray

Give the miniRaptor a "hard hat" with the Heavy Duty Upgrade.

This upgrade delivers the added power, strength and accuracy required by some. It includes a 600W spindle with a 1/4" collet (replacing the standard 290W spindle), a solid granite bed, a heat-treated, aged, steel gantry for added rigidity and laser calibration for absolute accuracy of 0.001" and relative accuracy of 0.0005".

Jump In!
High-Speed CNC Machining at Low Cost:

- Small footprint & robust capability ideal for rapid prototyping
- Optional granite table provides rigidity for 3D engraving
- High-speed, high-feed rips out burr-free, front panels
- Fully enclosed machining area blows away any benchtop CNC
- **Add Heavy Duty Upgrade for increased stability & accuracy**

Priced to move (you into high-speed machining).

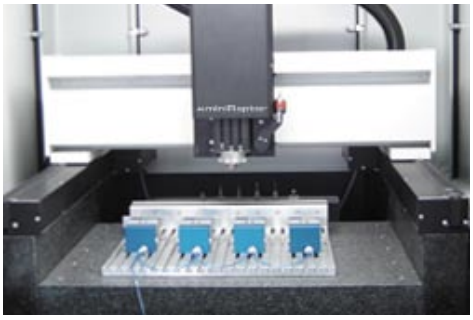
Call toll free 888.262.2833

WARNING: Utilizing the power and flexibility of the miniRaptor™ may be hazardous to your competition.

miniRaptor™

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.



Rock solid!

With the Heavy Duty Upgrade a solid slab of dense granite provides the miniRaptor with vibration-free rigidity. Combine that with standard feature, double-sided Y-drive precision guides and you have the recipe for sure-fired positioning accuracy and repeatability. Add in a mix of optional workholding solutions like pneumatic clamps or Datron's proprietary Vacumate™ (vacuum table), and you have a system that is both powerful and versatile. It's big enough for small production runs and small enough for rapid prototyping in an office environment.

Microtooling? Try mini-tooling with miniRaptor.

Look, it's real simple. If you use tooling of ⅛" or under to produce intricate, small parts, you need Datron. Because high-speed micro-machining is all we do. Our machines are made for it. And we'd never tell you to put a 3" diameter tool in our machine — we just don't have the brut strength to run it. But, our competitors, on the other hand, may try to sell you on the idea of using their conventional CNC to run small tools. Here's why that just doesn't work. Their motor is designed with the power to turn a huge spindle holding 3" diameter tools. So when you put a small, fragile tool in their hulking spindle, you have two options — 1) either break tons of expensive tools, or 2) crawl along at a snail's pace to avoid breaking them. So come to Datron for ***"Efficiency with Small Tools".***

Tech Specs	miniRaptor™
Coordinate Table	Solid aluminum bed (granite optional), steel base, gantry, and double-sided Y-drive precision guides
Machining Area (X x Y x Z)	20" x 20" x 9.5"
Portal Height	8"
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
Lubrication & Cooling	Minimal quantity lubrication, electronically adjustable dispensing, Ethanol coolant
Machining Spindle	290W high-frequency spindle, 7,000 - 60,000 rpm 1/8" collet, hybrid ceramic bearings
Tool Changer	3-tool changing unit with tool length sensor or 10-tool changing unit with tool length sensor
Accuracy Accuracy (w/ Heavy Duty Upgrade)	Absolute: ±0.002" / Relative: ±0.001" Absolute: ±0.001" / Relative: ±0.0005"
Feed Rate	400" per minute
Footprint	51" x 51" x 77" (W x D x H)
Weight	1,760 lbs.
Power Requirement	208/220V, 7Amps (single phase)

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