

Compact, machining center – made just for graphite.

This compact machining system is the same as the excelsior[®] accept with an added protection kit for machining abrasive materials like graphite. Covered linear guidances and ballscrews with positive air flow ensures that no abrasive or harmful materials can get into the motion mechanics of the machine. Sealed housings for all motion control electronics and motors also protects against contamination of the machine control system. The full enclosure complete with safety lock is equipped with a connection to an air flow system for dust extraction. This machining system is ideal for machining materials such as graphite, glass-fiber composites, ceramics or any abrasive material.

Have a need for speed?

With a 60,000 RPM spindle, the excelsior[®] GR is designed to machine graphite with tooling of 0.250" or under – delivering awe-inspiring speed and intricate detail.

An Automatic Tool Management System™ is standard and the excelsior GR is equipped with an integrated tool-length sensor to ease tooling set-up.

Designed for high speed machining with intricate tools, the excelsior GR is also compatible with standard carbide tools. Datron offers a complete line of micro tooling, created specifically for high-speed CNC machining.

Compact design.

Designed with limited floor space in mind, the excelsior GR has a compact footprint of 53" x 57". The generous working envelope of 15.75" x 15.75" x 7.8" offers an open height of 11.8". Optimizing your workflow, the compact design, together with the 208V-7 Amps power requirement, allows the excelsior GR to be placed right next to your ram EDM machine.

Features:

- ◆ 60,000 RPM spindle
- ◆ Compact 53" x 57" footprint
- ◆ Machining volume of 15.75" x 15.75" x 7.8"
- ◆ Massive cast steel construction
- ◆ Ultra-low tool vibration and run-out
- ◆ Covered and protected 18-tool changer
- ◆ Automatic tool-length measurement
- ◆ 4th & 5th rotary axis option
- ◆ User-friendly, Windows[®]-based control
- ◆ DC-servo controlled with look-ahead buffer
- ◆ Optional Z-Probe maps contoured surfaces
- ◆ Best service & support in the industry
- ◆ Smoothing (NURBSTechnology)



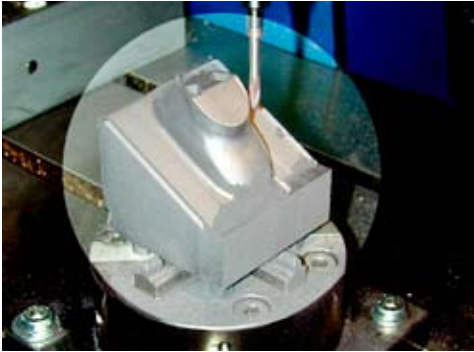
Next Generation Precision High-Speed Machining:

- ◆ Accurate
- ◆ Affordable
- ◆ Compact
- ◆ Easy to maintain

Finally, a machine designed for your industry.

Call toll free 888.262.2833

WARNING: Utilizing the power and flexibility of the ◆excelsior[®] GR may be hazardous to your competition.



User-friendly, PC-based control.

The excelsior GR[®] comes with a Pentium-based PC operating system which offers easy to use 'canned cycles', with an intuitive control that utilizes look ahead buffers. The integrated, hand-held pendant is designed for easy control and operation.



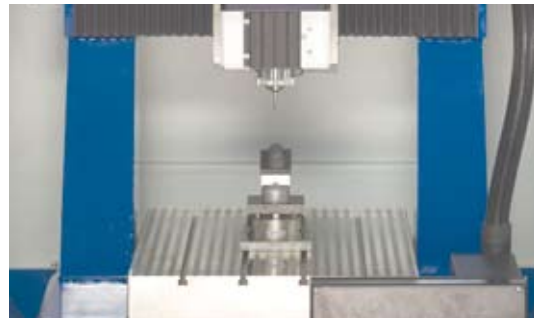
Enjoy the future of efficient graphite machining.

If you are using conventional VMC technology with tooling of 0.250" or less, you are probably red-lining your spindle frequently. With the excelsiorGR, you can lighten the load on your VMC. You will be surprised how much faster you can turn work around by using the excelsiorGR. Considering the savings in time, energy, and graphite, the excelsiorGR pays for itself in short order.

Protect your VMC investment and call us today for a sample. Let us demonstrate the abilities and machining quality of the new excelsiorGR.

Tackling dust head on!

The excelsior GR fully protects itself against abrasive dust. The linear guide ways and precision ground ball screws are covered and feature positive airflow as well as an automatic greasing system. The 60,000 RPM spindle is pressurized to prevent any dust from entering the bearings. In order to keep airborne dust in check, the excelsior GR requires external dust collection. The excelsior GR's enclosure is designed for optimized airflow and can easily be fitted with a dust collector or your existing dust collection system.



Your tool-holding becomes our work-holding.

Your standard graphite tool-holding systems can be used for workholding on the excelsior GR. This allows electrodes to be machined and redressed with exceptional speed and quality. You can efficiently redress your ram EDM electrodes on your shop floor — to leverage your CNC investment and minimize graphite material costs.

Tech Specs	◆ excelsior [®] GR
Coordinate Table	Cast steel fixed bridge design with software-corrected precision linear guides
Machining Area (X x Y x Z)	15.75" x 15.75" x 7.8"
Portal Height	11.8"
Drive System	Digital servo drives, extra low-pitch 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, 7,000 - 60,000 rpm 6mm collet
Tool Changer	9-tool changing unit with tool length sensor or 18-tool changing unit with tool length sensor
Accuracy (with pitch compensation)	Resolution: ±0.00008" Absolute: ±0.0003" / Relative: ±0.0001"
Feed Rate	475" per minute
Footprint	53" x 57" x 77" (W x D x H)
Weight	1,584 lbs.
Power Requirement	208/220V, 7Amps (single phase)