



AEROMAT

Aerospace grinding with maximum efficiency

Introducing the New AEROMAT by BLOHM

The BLOHM AEROMAT has been configured as a 5-axis production grinding system for the aerospace market. Applying the latest technology in machine design including linear drives, CNC technology, and automatic tool changing, the AEROMAT provides a flexible manufacturing solution for complex grinding applications.

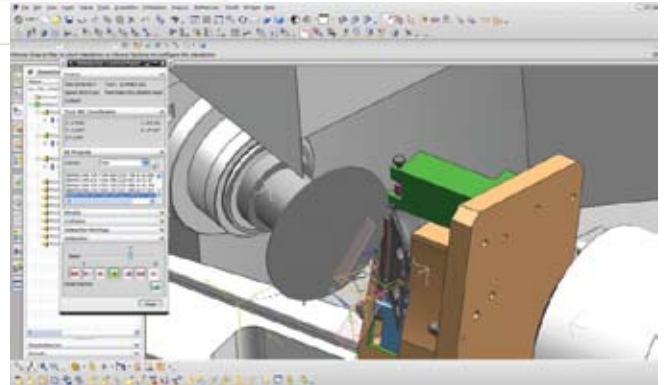
Center to the AEROMAT's design is the 12-position tool and nozzle changer that provides the optimum abrasive and coolant nozzle design for each grind feature. Coupled with a 33.5 hp direct drive spindle and integrated disk dresser the AEROMAT is the right machine for complex aero-engine parts.



More than Precision



Straightforward menus make it easy to manage the tool and the interface automatically performs optimum dressing calculations and presents them as a guide.



Fast setup and peace of mind: Simulate operations in virtual machine, including wheels, nozzles, workholding, dressing equipment, and the part in 3D. Review interferences and collision situations, and load compiled cutting paths to CNC.

Control

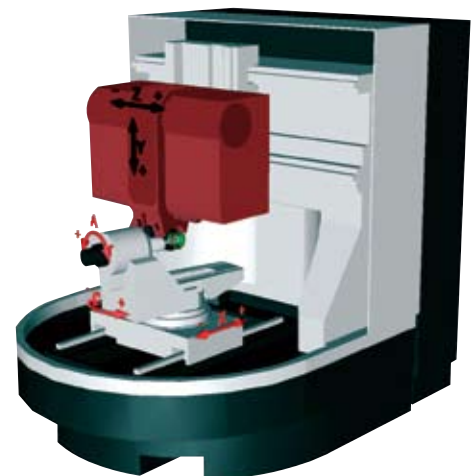
- Fanuc 310i machine control
- Powerful software with an operator-friendly interface
- Powerful, high-speed processor
- Detailed on-screen graphics and information display
- Options include: Pentium M processor, 15" color monitor, multiple USB ports, Windows XP Professional, and Ethernet interface

Pair stability with speed and you get a powerful combination that ensures exceptional accuracy, every time.

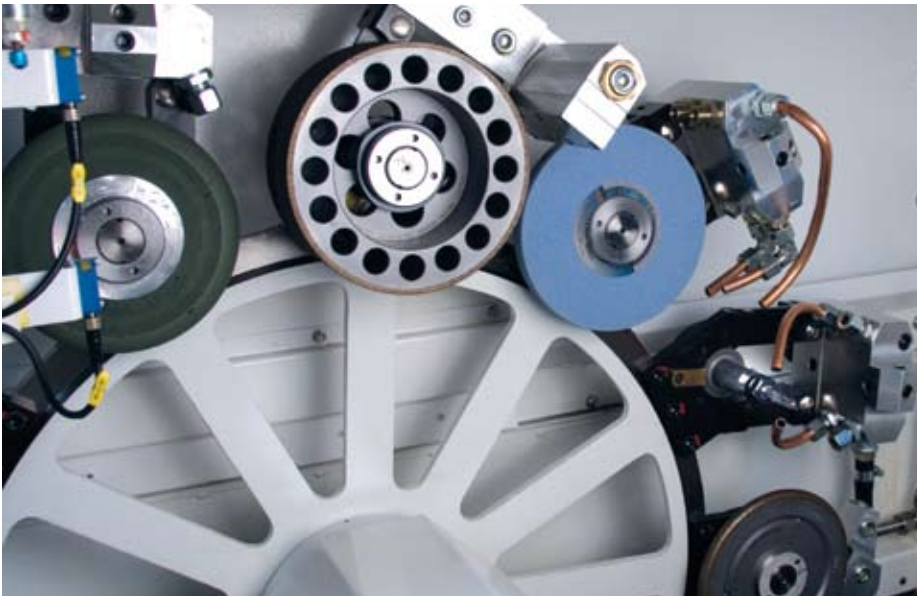
Linear Motors

The patented 3D gantry with a 14,000 pound mineral casting upon which the machine is built provides the ultimate in thermal stability and vibration dampening, yielding consistent quality parts and exceptional surface finish.

The X, Y and Z axes utilize linear motor technology that produce linear travel speeds up to 1,181 inches/minute--**5 times faster than the competition!** With direct glass scale feedback and no ball screw, the linear system provides smooth and accurate positioning with .000004 inch resolution. The rotary A- and C-axis feature gearless drive systems that minimize backlash and chatter.



- Linear drive technology cuts non-grinding time to an absolute minimum due to incredible acceleration and speed
- Up to **30% more productive** than machines with conventional ball-lead screws
- Up to 50% better surface finishes
- No wear parts
- 1,181 inch/minute travel speed
- Excellent vibration dampening qualities
- Quiet



Tool & Nozzle Changer

- 12-position tool and nozzle changer
- 6" OD wheels
- HSK-50 taper system
- Change time of 10 seconds for wheel and nozzle set
- Utilizes all abrasive types and mill/drill tools



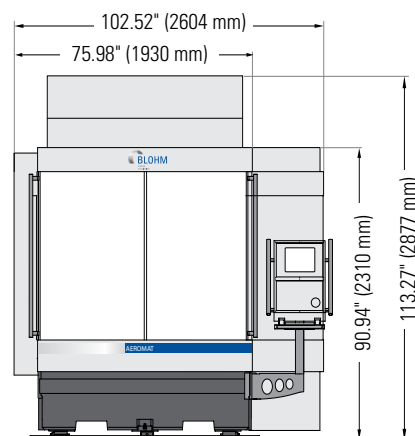
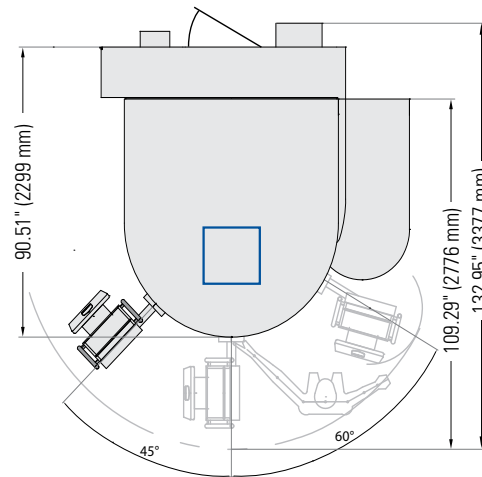
Motorized Diamond Disk Dresser



In-Process Inspection

The power that you need and the precision you demand wrapped up in a small package.

General Specifications	
Machine weight	16,755 lbs (7,600 kg)
Power requirement	460V/3 phase/60 Hz/35kVA
Floor space	143" W x 98" D x 98" H
Grinding Spindle	
Spindle	33.5 hp (25 kW)
RPM range	max. 12,000 rpm
Spindle adaptor	HSK-50
Grinding wheel dimensions	6" OD, 3.5" width, 2" bore
Automatic Tool Changer	
Wheel positions	12 wheel stations
Wheel mounting	HSK-50
Nozzle positions	12 nozzle stations
Axes	
X-axis longitudinal travel	18.9" (480 mm)
Y-axis vertical travel	12.6" (320 mm)
Z-axis cross travel	48.2" (1,225 mm)
Rapid traverse X/Y/Z	1,181.1/787.4/1,181.1 in./min. (30,000/20,000/30,000 mm/min.)
C-axis rotary table travel	+/- 200 degrees
A-axis rotational axis	∞
A-axis rotation speed	750 rpm
Resolution - Linear	.000004"
Resolution - Rotational	.0001 degrees



United Grinding Is Your Turn-Key Solutions Provider

United Grinding offers you more than just a machine. We provide turn-key solutions for your unique application as well as world-class support. The AEROMAT can be integrated into virtually any existing process, making you more profitable.



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