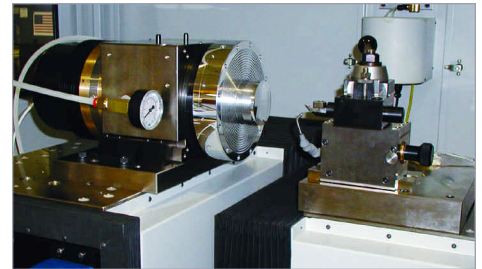




Heavy duty, two-axis, aspheric contouring machine designed for diamond turning, grinding, hard turning, linear grooving and precision machining.

Features & Benefits

- Capable of diamond turning optical quality form and finish in a wide range of non-ferrous metals, crystals and polymers.
- Optional heavy duty grinding system for direct grinding of lens molds in non-diamond machinable materials such as metals and ceramics.
- Built on a natural granite base utilizing an active vibration isolation system with auto self-leveling isolation mounts.
- Fully constrained, hydrostatic box ways arranged in a "T" configuration.
- Slideways provide 350mm (X-axis) and 250mm (Z-Axis) of travel with 350mm of swing capacity.
- 8.6nm resolution linear glass scales for positioning feedback.
- Linear motor activated oil hydrostatic precision slideways.
- Utilizes Precitech's Ultrapath™ Digital Signal Processor (DSP) based machine control system providing 1nm programming resolution, sub-count feedback signal interpolation, and industry standard M and G code programming format.
- Available with optional rotational and linear axes.



Configured with heavy duty spindle for single point diamond turning in aluminum.

Specifications

System / Control	Description
Configuration	Two-axis contouring machine, "T" configuration
Control System	Precitech Ultrapath™ DSP based machine control system
Base	Natural granite machine base supported in a fabricated steel frame
Vibration Isolation	Passive air isolation mounts
Machine Slides	X and Z Axes
Type	Fully constrained, hydrostatic box ways to maximize stiffness and accuracy
Travel	X axis 350mm, Z axis 250mm
Speed	0.001-1500mm/min w/1.4nm scales
Drive System	Linear AC synchronous motor
Workholding Spindle	Heavy Duty Spindle
Type	Preloaded air bearing design with front positioned thrust bearing and athermalized mount
Speed Range	10-7,000RPM
Load Capacity	57Kg (125lbs) at spindle nose
Swing Capacity	350mm (14") diameter 450mm (18") diameter w/ riser
Drive	Integral brushless DC motor
Machine Requirements	
Power	230VAC±10%/3.0KVA, 1 phase 50/60 Hz
Air	8 SCFM@100PSIG, 3.8l/s @ 7 bar
Floor Space	2596mm x 2958mm x 1887mm (101.8" x 116" x 74")

Options & Accessories

- Interchangeable Spindles
- General Purpose Vacuum Chucks
- Precision Grinding Attachments
- Optical and LVDT Tool Setting Systems
- On-Machine Form Measurement and Error Comp.
- Rotary "B" Axis
- 10mm "Y" Axis
- Adjustable Tool Holders
- Aspheric Programming Software
- Tool/Air Lube System
- Air Temperature Control System
- On-Machine Gage Head & Amplifier