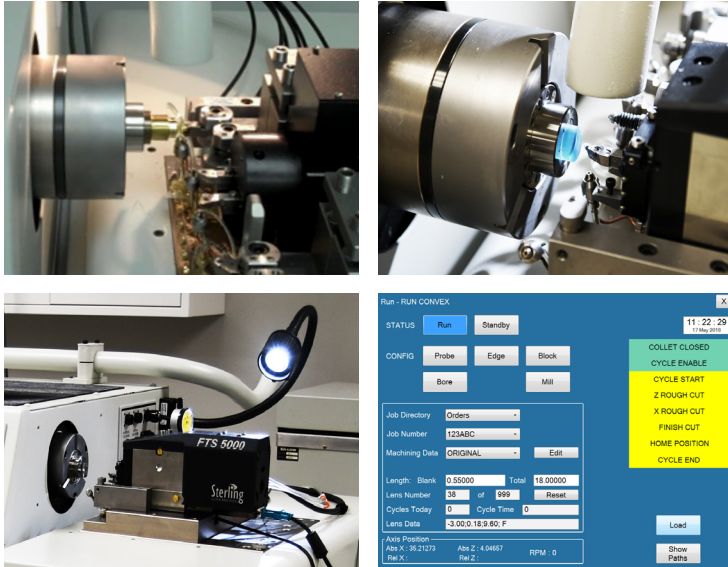


The world's most technically advanced ophthalmic lathe for production of intraocular lenses (IOLs) and contact lenses. Its unique architecture enables the production of no-polish surfaces critical in the manufacturing of lens mold inserts and diffractive multifocal contact lenses.

All the leading manufacturers of molded contact lenses are using the Optoform 80 or Nanoform series lathes to produce mold tools used in the production of polypropylene lens molds.



- ▶ **High speed lathing of spherical, multi-curve, aspherical, and non-rotationally symmetric contact lenses and intraocular lenses**
- ▶ **Number 1 choice of mold tool (insert) manufacturers for non-ferrous metals**
- ▶ **Form accuracy of < 0.15 μm and surface finish of 4-6 nm Ra**
- ▶ **Built on a natural granite base and utilizes a 3-point pneumatic vibration isolation system**
- ▶ **User defined edge configurations including asymmetric edge can be specified, incorporated into the lens/mold, and directly machined**
- ▶ **Slides provide stiff 190 mm (X) and 100 mm (Z) of travel with linear motor technology**
- ▶ **< 10 nm resolution linear laser scales for positioning feedback**
- ▶ **Ergonomic and intuitive controls on a high-quality touch screen**
- ▶ **Can hold up to 6 diamond tools**
- ▶ **Separate dual tool holders, front surface probe come standard**
- ▶ **Task light and vacuum chip extraction**

System / Control	Description
Configuration	Two-axis contouring machine, inverted "T" configuration
Control System	On-board computer, PMAC servo control of linear motors, nanometer position feedback, with ergonomic menu type interface on a flat panel high quality touch screen, MS Windows operating system
Base	Natural granite supported on a welded steel frame
Vibration Isolation	Passive 3-point pneumatic vibration isolation system
Machine Capability	Spherical, Aspherical Non-rotationally symmetric with FTS 5000 attachment
Machine Slides	X and Z axis
Type	Preloaded hydrostatic oil bearing design
Travel	X axis: 190 mm (7.5 in.) Z axis 100 mm (4 in.)
Speed	0.001 - 3000 mm/min (120 in./min)
Drive System	Linear AC synchronous motor
Workholding Spindle	HS 75 High Speed Heavy Duty Spindle
Type	Air bearing
Speed Range	100 - 15000 RPM with standard chiller (included)
Stiffness	Axial: 105 N/μm Radial: 35 N/μm
Workplace Chucking	Air actuated collet mechanism or vacuum chucking
Acc / Dec Time	< 5 sec
Swing Capacity	25 mm (1 in.) with collets, 50 mm (2 in.) with vacuum chuck
Machine Requirements	
Power	208 - 230 VAC, 1 phase 50/60 Hz, 3.0 kVA
Air	6 SCFM @ 90 PSIG 3 l/s @ 6 bar
Floor Space	1300 x 1050 mm (51 x 41 in.)