Solutions for the Intraocular and Contact Lens Industry

A Clear Vision for the Future of IOL and Contact Lens Manufacturing

www.aerotech.com
Dedicated to the Science of Motion
Your Process, Our Components

LensPro-HP Series

Networked open-control platform allows for easy expansion
Standard commercial PC technology running latest Windows® software
Lens profile manager software creates programs in easily editable G-code programs
Three standard and up to seven tool posts with micro-height adjustment; optional LVDT front surface probe, additional tool posts, TLG-4000 fast tool servo, and marking/milling spindles
Toric milling/drilling spindle, LVDT, and fixed tool posts support a wide range of lens geometries
Closed-loop air-bearing spindle with unique bearing configuration greatly improves surface finish
Granite mounting surface with passive or air isolation provides a stable platform for lathing process

Increasing Part Quality and System Accuracy

Configuration Flexibility at Price Points that are Unmatched in the Industry

Part quality comparable to competitive hydrostatic bearings

- Air-bearing slides
- Spherical, aspherical, toric, and diffractive profiles
- Air isolation
- Based on ABL1500 series stages

Part quality comparable to competitive hydrostatic bearings
Our Components

Component Solutions

Good
ALS2200
- Smooth, reliable crossed-roller bearings capable of making lenses with minimal polishing times
- Compact size reduces machine footprint in space-constrained cleanroom environments
- The ideal stage solution for high volume, low-cost lens turning platforms

Better
ALS5000CR
- High-precision crossed-roller bearing stage capable of producing polish-free surfaces
- Large tabletop easily accommodates multiple tools and measurement devices
- Larger stage cross-section provides adequate stiffness for toric lens profiling

Best
ABL1500
- Air-bearing stage completely eliminates mechanical noise sources for the best possible lens quality
- Friction-free bearing allows for small step sizes making it the ideal platform for diffractive lens manufacturing
- The high-accuracy linear encoder operating at picometer resolution minimizes profile errors when turning complex lens profiles

Toric Lens Generator
- Oscillating tool post designed specifically for toric lens profile
- 4 mm of total travel has adequate travel for the most complex profiles
- Compact drive technology can be mounted inside the lathe machine base
- Non-proprietary, open programming language allows for complete customization of the lens surface profile
- Significant cost and space savings over competitive solutions
Digital Automation Platform

- PC-based
- 1 to 32 axes of coordinated motion
- Up to 32 tasks
- RS-274 (G-code)
- Advanced features for demanding applications
- PWM or linear drives (up to 150 A)
- Scanner control for marking
- Tightly integrated laser functionality
- Retrofit package for old controls
- Integrated PLC and Motion – MotionPAC