For 30 years Precision Optics Corporation (POC) has been a leader in the design, development and realization of advanced optical applications and in the volume production of specialized medical optical systems. POC has a long history of developing breakthrough technologies and cutting edge products including 3D endoscopes for robotic and hand-held surgery, microprecision™ optics with dimensions as small as 200 microns and miniature endoscopes, some incorporating CMOS camera chips.

- Domestic OEM manufacturer
- Products are approved for CE marking
- Optical, thin film, and mechanical components and systems
- Turnkey supplier from design to production
- Proprietary patented microprecision™ optics technology
- Rapid prototyping and state of the art optical testing

Selected areas of expertise include the design and production of components and integrated systems for endoscopes, endocouplers, fiberoptic adapters and illumination systems, stereo endoscopes, precision optical registration devices, UV, visible and IR laser processing, optical microscopy, biomedical sensing, single-molecule microscopy, fluorescence devices, OCT Systems and distal camera endoscopes.
**Precision Optics Corporation**

**DESIGN CAPABILITIES**
- Integrated design of complex systems including optical / micro optical elements, thin films, mechanical hardware
- Design for optimal performance, “produceability” & production cost
  - Diffraction limited (if appropriate)
  - > 95% of all POC lens designs have been realized in hardware
- State-of-the-art computer based design tools including CodeV, Zemax, AutoCAD, Solid Works

**PROTOTYPE CAPABILITIES**
- Rapid prototyping due to comprehensive onsite capabilities
- In-house optical, thin film, machining resources
- Extensive communication with the customer for efficient, accurate prototyping reduces cost and development time
- Extensive experience (> 30 years) in proof of concept & prototypes

**OPTICAL FABRICATION**
- Scratch/dig: 10 / 5 (20 / 10 typical)
- Flatness: λ / 20; Parallelism: < 30 arc sec. (1–3 arc mins. typical)
- Diameter: +/- 0.01 mm; Thickness: +/- 0.01 mm
- Sizes: < 1mm – 150 mm; as thin as 0.2 mm
- Specialize in complex prisms and micro-optics
  - lenses with < 1 mm diameter; prisms with < 1 mm sides
  - Diffraction limited assemblies with multiple components typical
- Off shore resources for very high volumes of multi-element optics

**PRECISION ASSEMBLY**
- Simple & multi-element, complex assemblies
- Integrated optical, electro-optical, thin film, mechanical
- Prototype to production volumes (1000s / month)
- Class 100 assembly facilities
- Registered with U.S. State Department (ITAR)