Lens System Design & Assembly
Our Customers

About 60% of our products are exported to Japan, United States, Germany, France, Australia and Spain. We are one of the leading optics suppliers in China.
Shanghai Optics provides a variety of designs (imaging, illumination and opto-mechanical systems) for all different types of applications.

- Precision optical system design and optimization
- Powerful optical and illumination analysis
- Fully integrated system including CCD/CMOS and circuit board integration
- Timely communication with customers
- Capability to provide model light sources, mechanical parts, and optical components
Lens System Design

Shanghai Optics offers mechanical designs to fit our customers’ current and standard interfaces.

With second-to-none processing technology, we are confident in our ability to complete the most efficient mechanical design along with secure optical performance.

(3D projector metrology on site)

- Diameter tolerance: +/-0.025mm
- Aperture tolerance: +/-0.020mm
- Various outer surface finishing available
- Logo etching, curving, and pad printing
- Materials: aluminum, stainless steel
Lens Design Portfolio:

Projector Zoom Lens
Lens Design Portfolio:

Micro-Scanning Lens
Lens Design Portfolio:

Rear Bending TV Projector Lens
Vertically Integrated Capabilities

- Optical systems design
- Lens design
- Mechanical/Electrical/Systems design, modeling, and analysis
- Coating design
- Precision lens assembly
- Metrology including Zygo NewView, ZMI, VeriFire systems, Zygo proprietary distortion tester, multi-axis MTF (large aperture and multispectral), Aspheric null and metering mirror systems, vertical tower system test benches, CMM's, microscopes, autocollimators, spectrophotometers, profilers, and other advanced measurement equipment.
Shanghai Optics offers a wide range of lens system assembly services covering visible to UV & IR wavelengths. We serve customers ranging from biomedical, imaging & illumination, to industrial and military applications. With extensive experience in manufacturing optical components, we have an excellent understanding between manufacturability and design expectations.
Lens Assembly

- **High Quality Manufacturing Capability**
  
  With connections and support from domestic materials & accessories suppliers, SO can often propose affordable solutions without sacrificing performance.

- **Ever-Expanding Metrology Capabilities**
  
  SO is well equipped and constantly looking to expand its metrologies to ensure we can fully meet and measure our customers’ specifications.
**Large glass material inventories**

We have over 800 types of glass materials in stock for daily usage. Special materials can be arranged per the customer’s request.
Capability Highlights

We have built up a collection of more than 5,000 types of high end test plates. They are all sorted and classified, ready for the customer’s selection.
Metrology Equipment

- **Zygo Interferometer 6’**
- **Parallel photocell**
- **Goniometer**
- **TriOptics MTF**
Metrology Equipment
Why Shanghai Optics

- Reduce risks associated with handling optics
- Reduce the potential distortion of optics within the assembly and ensure the optimal accuracy
- Inspect and test mounted optics
DFM Input from SO

The Cutting-Edge Advantages SO Offers:

- **Cost-Effective Philosophy**
  
  Our experienced optical designers and engineering team can help you achieve the most cost-saving solution for your application.

- **System Optimization**
  
  With over 50 years of manufacturing experience, SO can offer precise analysis to each single element in your system, preventing unnecessary specs that drive up the overall system cost.
Production Highlights

Bonding

Components Quality Inspection
Production Highlights

Optical Assembly
Production Highlights

High grade cleaning room for optical assembly

Focus and centering testing
Thank you!