Thorlabs is a vertically integrated photonics company that offers end-to-end optical design and manufacturing services. Our highly skilled team leverages our in-house expertise and capabilities to continuously expand our offering of stocked optics, as well as to provide specialized components and assemblies to meet the unique needs of custom and OEM applications.

For OEM optics, our experienced optical design and manufacturing engineers will work closely with you to design a solution that achieves the performance requirements of your application. Our responsive team is committed to reducing your time to market by tailoring a fabrication process that minimizes manufacturing time and expense. We invite you to partner with us on your next project.
Optical Substrates Optimized for Your Application

The combined transmission range of our wide selection of optical substrates extends from the UV into the MIR, making it possible to produce optics and assemblies that are ideal for use in numerous applications.

Our facilities are capable of producing optics of many different shapes and sizes, from plano filters, windows, and mirrors to off-axis parabolic mirrors, spherical lenses, and aspherical lenses. Select optics can be precision polished to <0.5 μm wavefront error utilizing Magnetorheological Finishing (MRF).

Stock items can be modified upon request to meet your specific criteria. If our vast catalog does not contain a solution for your application, our team of application engineers and OEM specialists will work with you to create an item or assembly that will.

### Available Services
- Customization of Catalog Optics
- Precision Mounting
- Spectral Scans
- Certified Optical Performance Data
- Optical and Mechanical Schematics
- Comprehensive Interferometric Characterization

For more information regarding custom optics or special services, contact our team of OEM project managers by email at OEMSales@thorlabs.com.
Spectral, Anti-Reflective, and Highly Reflective Coatings

Reflective or Absorptive Neutral Density Coatings
Choose from a range of fixed attenuations. We also produce continuously variable, step-variable, and apodizing filters.

Polarizing and Non-Polarizing Beamsplitter Coatings
Various coatings can be deposited on the surfaces of our polarizing and non-polarizing beamsplitters, including broadband, laser line, and high-power options.

Narrowband, Broadband, and Edgepass Coatings
Our filters can be optimized for passband transmission, stopband suppression, or specific environmental or experimental requirements in various bandwidths.

Broadband Dielectric and Metallic Mirror Coatings
Deposited metals include gold, silver, aluminum, nickel, Inconel, and chromium on a variety of plano and curved substrates. Dielectric mirrors with >99% reflectance are available.

Substrates
- Aluminum
- Ceramics
- Copper
- Crystals
- Integrated Optical Devices
- Laser Rods
- Optical Fiber
- Optical Glass
- Polymers

HR Coating Ranges: UV to MIR

AR Coating Ranges: UV to MIR
Optics Manufacturing Facilities at a Glance

Optical Coating
- Ion Beam and Magnetron Sputter Deposition
- E-Beam Deposition With or Without Ion Assist
- Resistive Heating Evaporation Deposition
- In-Process Spectral Characterization
- Coatings Ranging from UV to MIR Wavelengths
- Class 1,000 Clean Room

Metrology & Inspection
- Spherical and Aspherical Optics with Sub-Nanometer Surface Precision
- Ångström-Level Surface Roughness Evaluation
- Transmitted and Reflected Wavefront Error
- Focal Length and Radius of Curvature
- Parallelism, Surface Analysis, Center Thickness, and Centration Error
- Precision Contact and Noncontact Profilometry
- Laser Alignment of Optical Assembly
- MIL-PRF-13830B Component Inspection

Shaping & Finishing
- Spherical/Aspherical Grinders and Polishers
- Single Point Diamond Turning Machines
- Mills, Dicing Saws, and Coring Drills
- Automated Edging Machines
- Large-Volume, Double-Side Polishers
- Magneto rheological Finishing (MRF)
- Conventional Grinders, Polishers, and Saws

For more information contact us at techsupport@thorlabs.com or OEMSales@thorlabs.com.