

# Manufacturer of Custom Optics & Thin-Film Coatings

Optics for High Performance Optical Solutions



Reynard Corporation has all the facilities necessary to design, fabricate and qualify state of the art coatings for numerous applications. Our precision optics are found in high performance systems that operate under extreme conditions.

We pride ourselves on being a leading producer of build-to-print optical components. Our facility includes environmental testing equipment and state-of-the-art quality inspection equipment to measure against the most stringent MIL spec standards. We offer our customers support, solutions and top-quality products.

Our experience with ultraviolet, visible, infrared, and broad-spectrum highresolution optics will be applied to your specifications to help meet defense challenges.

Reynard Corporation was selected on various programs and SBIR's due to our experience, manufacturing expertise and our stringent Quality Control Department.

Companies have put their trust in Reynard Corporation knowing that they will get their demanding specifications met.

## **APPLICATIONS:**

- Beam Shaping
- Military Aircrafts
- Spectroscopy
- LIDAR Systems
- Thermal Imaging
- Gas sensing
- Remote Sensing
- · Wildlife Detection
- Research & Development
- Missile Tracking
- Night Vision
- Agricultural Inspection
- Image Intensifiers
- Laser Range Finding
- Space Programs
- Space Lighting Systems
- Astronomy
- Healthcare Detection
  Systems

# **GENERAL INFORMATION:**

- Established in 1984 by Forrest Reynard
- Custom built optical coating, diamond turning & fabrication facility in San Clemente, California USA
- All design & development work processed in-house
- Build to print optical coating and fabrication
- Prototype to large volumes

- ISO 9001:2015 Certified
- ITAR Registered & Cybersecurity Compliant
- > 20 coating systems & > 20 fabrication machines
- 3 Diamond Point Turning machines
- 150+ years of coating design expertise
- Cage Code: 1EB07 | NAICS: 333314

Contact us today to see how we can help YOUR system achieve the high levels of performance!

### **CUSTOM COATINGS**



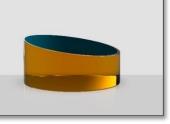
- UV-IR ( $\sim$ 230nm > 15 $\mu$ m)
- BP, LP, SP, BS, DC, HRS, Ars, Order Sorting, Sweet Spot: 1.5µm to 15µm
- Conductive: ITO and Thin Au
- Metallic: Pt, Cr, Ti, Au, Al, Ni, Alloys + more
- 1-20 microns Spectral Range
- Mirrors: Au, Al, Ag, Hybrid (rad hard)
- · Gradients: CVND, LVND, Apodizers and Black ND

#### **DIAMOND TURNING**



- Aspheric, Axicon, Cylindrical, Freeform, IR, Spherical + more
- · Infrared, Exotic, III-V Crystal, and Metal Materials
- Manufacture and Coat Reverse Axicons with 360° Windows
- · Axis Symmetric and Rotary B-axis Grinding, Polygon Flycutting, Spiral Milling
- Al, Chalcogenide, CaF2, Cu, Ge, Ni, InAs, ZnS, ZnSe + more!

## **OPTICAL FABRICATION**



- Precision Flats, Plano/Plano, Elliptical and Wedge
- · CNC Shaping, Edging, Grinding and Wafer Dicing
- · Dedicated III-V Material Processing Area
- Ge, Si, AMTIR, InP, InAs, ZnS, ZnSe, + more!
- · FS, N-BK7 and Chalcogenides
- Binary & Ternary Semi-Conductor Non-Linear Materials

#### **METALLIZATION**



- Electrical Connection
- EMI Shielding
- Soldering
- Sealing
- · Optical Edge and Surface
- Durable: 30 min. boiling water, Tape Test, & Adhesion: Pull Strength >800psi

#### **PATTERNED OPTICS**



- Pattern Geometries Down to 5µm
- Multiple Pattern Stacking
- Gapless Patterns no physical space between adjacent coatings
- · Custom Patterns
- Extremely Accurate Alignment

