

Single Point Diamond Turning & Flycutting

Infrared and Exotic Materials



DESCRIPTION:

Reynard Corporation offers single point diamond turning (SPDT) in-house capabilities to produce 6mm to 250mm diameter high quality precision optical components for aerospace, military and commercial industries.

Our Nanoforms – Ultra Precision Machining Systems by Precitech are used for the diamond turning multi-stage process to achieve sub-nanometer level surface finishes and sub-micrometer form accuracies. All optical elements are designed, manufactured, coated and tested in-house.

From flats (plano) optical elements and wedges to aspherics, we understand precision optics from fabrication to coating.

We process popular materials such as borosilicate, fused silica and colored filter glass, we are intimately experienced working with UV, visible and IR exotic materials, including crystals and ceramics.

Companies have put their trust in Reynard Corporation knowing that they will get their demanding specifications met. We offer our customers support, solutions and top-quality products.

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

GENERAL CAPABILITIES:

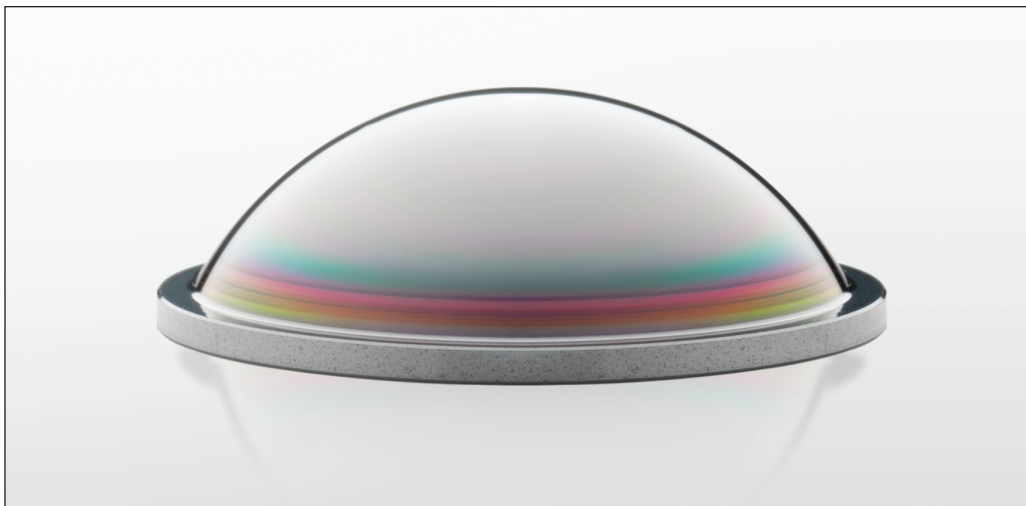
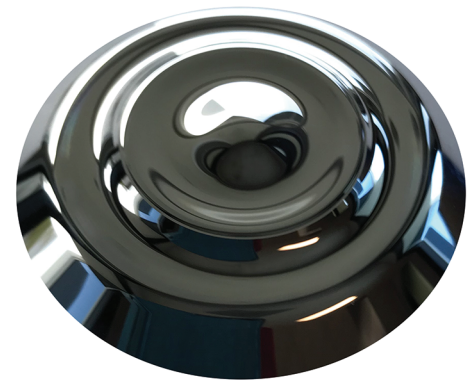
- Achromats
- Aspheric
- Axicons
- Cylindrical
- Diffractive Asphere
- Elliptical Surface
- Flat Optics
- Freeform
- Fresnel, IR, IR/UV Lenses
- Lens Arrays
- Linear Fresnel Lenses
- Off-Axis Asphere
- Parabolic Surface
- Plastic Fresnel Lenses
- Prism
- Reverse Axicon 360° Windows
- Singlets
- Spherical
- Torics
- Windows
- Prototype to Volume Production

Diamond Point Turning

MATERIALS:

- Acrylic Plastic El Nickel (Ni)
- Aluminum (Al)
- Chalcogenide
 - AMTIR series
 - GASIR series
 - Schott IRG26 (IG6)
 - 1173
- Calcium Fluoride (CaF₂)
- Cleartran Zinc Selenide (ZnSe)
- Copper (Cu)
- Germanium (Ge)
- Indium Antimonide (InSb)
- Indium Arsenide (InAs)
- Silicon (Si)
- Stainless Steel (SS)
- Titanium (Ti)
- Zinc Sulfide (ZnS)
- + Other IR, Exotic & III-V Crystals

*Designed,
Fabricated,
Coated & Tested*
IN-HOUSE



APPLICATIONS:

- Camera Systems
- Telescopes
- Video Projectors
- Lasers
- Missile Guidance Systems
- Airborne Optical Systems
- Thermal Imaging
- Detectors
- Medical Products
- Engineering Models

OPERATIONAL CAPABILITIES:

- Axis Symmetric Grinding
- Polygon Flycutting
- Rotary B-Axis Grinding
- Spiral Milling