

# Infrared Optics



Utilizing REO's diverse toolkit of polishing, diamond turning, and thin film coating technologies, REO provides the complete solution for infrared optics.

## CO<sub>2</sub> Laser Cavity Optics

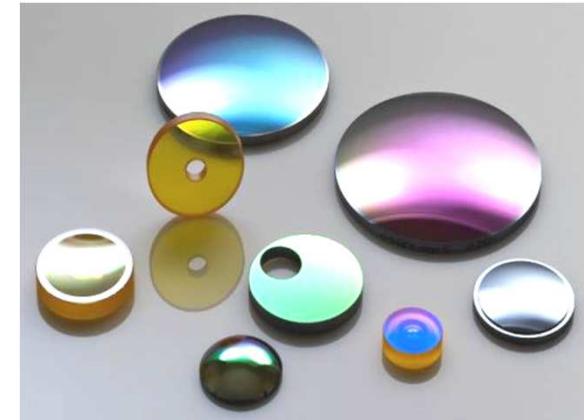
- Plasma-durable
- Mirrors (typ. abs. < 0.2%)
- Output Couplers (typ. abs. < 0.1%)
- Knife-edge Output Couplers

## Aspheric Lenses

- Surface Figure Accuracy:  $\lambda/4$
- Surface Roughness: 4 – 5 nm
- AR Coated R < 0.5%
- Achromatizing Diffractives available

## Optical Windows

- Surface Quality to 20-10
- Formats up to 300mm
- ZnS, ZnSe, Si, Ge, Spinel, CaF<sub>2</sub>,
- AR Coated R < 0.5%



# Single Point Diamond Turning



- Sizes : 0.25" to 10"
- RMS Roughness:
  - CaF<sub>2</sub>: 50A
  - Silicon: 50A
  - Germanium: 20A
  - ZnSe, ZnS: 40A
  - Al: 60A
  - Cu: 50A
- Figure Accuracy: 1/4
- Surface Quality: 20-10

