



AMF Optics, Inc. is a manufacturer of standard and custom optical components built to military or commercial specifications. Offering products in a variety of materials our goal is to provide high precision optics delivered on time and at a competitive price.

MATERIALS AVAILABLE

VISIBLE MATERIALS METAL MATERIALS INFRARED MATERIALS

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> • BK-7 • Pyrex • Filter Glass • Fused Quartz • Fused Silica • Soda Lime • B270 • CaF2 | <ul style="list-style-type: none"> • Copper • Stainless Steel • Nickel • Aluminum • Molybdenum • Titanium | <ul style="list-style-type: none"> • Germanium • Silicon • Zinc Selenide • Zinc Sulfide • Zinc Sulfide Multispectral |
|--|---|---|

PRODUCTS AVAILABLE

ASSEMBLIES

- Mechanical
- Optical

PRODUCTS

- Spherical Lenses
- Beam Splitters
- Prisms
- Wafers
- Witness Samples / Wedges
- Flats

PRODUCTS

- Laser Optics
- Mirrors
- Stress Samples
- Windows
- Cylindrical Optics
- Raw Material Blanks

MANUFACTURING SPECIFICATIONS

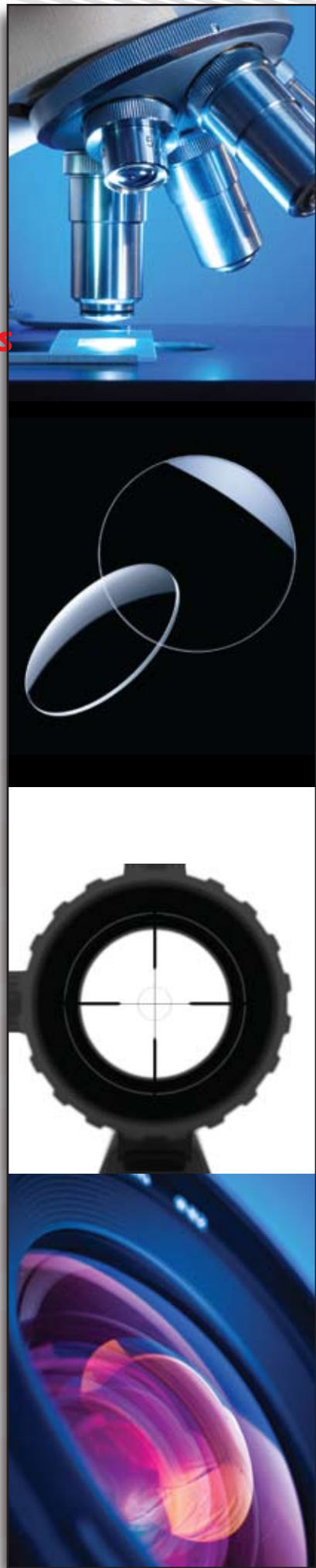
- Size: 0.5mm - 500mm
- Shape Tolerance: to ± 0.010 mm
- Minimum Thickness: ≥ 0.125 mm
- Thickness Tolerance: to ± 0.005 mm
- Surface accuracy: to $\leq \lambda/20$
- Surface Quality: to 10-5 per MIL-O-13830A
- Surface Roughness: $\geq 4a$
- Parallelism: < 1 arc second

A.M.F. Optics, Inc

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Ph: 781-933-6125 • Fax: 781-933-6420

All Products Manufactured in the United States

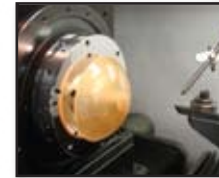
www.amfoptics.com



Precision Optical Components Since 1975

PRECISION OPTICAL COMPONENTS

UV • VISIBLE • INFRARED • METAL MATERIALS



DIAMOND TURNING

CD/DVD MOLD POLISH



PRISMS

LENSES



MIRRORS

WINDOWS



INJECTION MOLD POLISHING

TESTING CAPABILITIES



At AMF Optics we know that our immediate and long term success is dependent on supplying our customers with precision optical parts and products that fully meet their needs, on time, every time, and at a fair price. Our goal is to work with our customers to receive all necessary information in order to understand their requirements and work with our suppliers to make sure those requirements are met each and every time. At AMF Optics, it is our policy to meet or exceed our customers quality needs and expectations today, and concurrently anticipate the requirements of tomorrow. Quality control and quality assurance are vital links in the production and assembly process. Quality is planned and built into every optical component made at AMF Optics Inc.. Our vision is to build a relationship with our customers and suppliers to ensure quality is never compromised.



LENSES

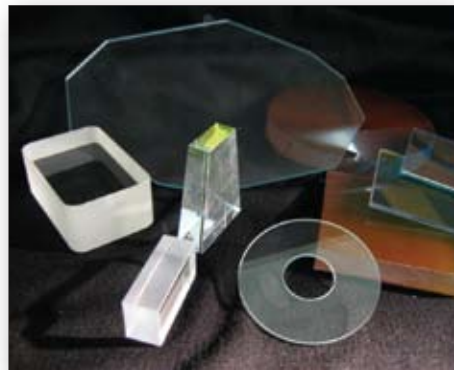
Spherical

We fabricate spherical lenses from 0.250"Ø to 8"Ø using materials such as BK-7 to Excimer Grade Fused Silica. Surface finishes are usually 1/10λ spherical and/or 1/10λ flat with 20/10 or better scratch & dig.

Cylindrical

Plano/Concave & Plano/Convex cylinder lenses with dimensions of 2" Ø, 2" x 2" square, and 3" x 3" square are fabricated on a daily basis. The material used is primarily Suprasil® 2. Standard tolerances are 1/4λ with 40/20 scratch and dig, but tighter tolerances can be met.

We stock a number of different cylindrical and spherical lenses, and we would be happy to quote on any custom lens requirement.



WINDOWS

AMF Optics manufactures and polishes a wide range of Windows.

Materials

AMF offers windows made from a wide variety of materials, including BK-7, Fused Silica, Suprasil® 2, and Excimer-Grade.

Sizes

AMF works with mirror sizes from .125" square and up, and can accommodate mirrors of almost any size.

Surfaces

Surfaces from 1/4λ to 1/20λ are standard and parts can be tested with AMF's Zygo™ GPI Interferometer.



MIRRORS

Size, Surfaces & Quantities

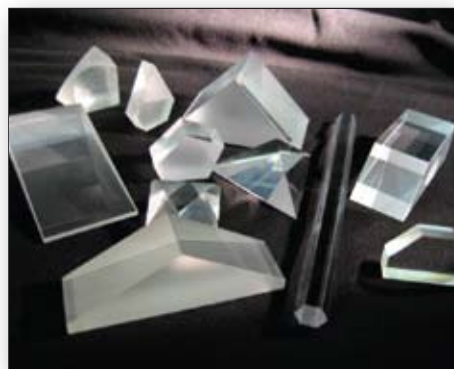
AMF produces concave and flat mirrors in sizes ranging from 0.500" Ø to 18"Ø in quantities of 1 to over 1000.

Simple or Multifaceted

AMF can produce simple or multifaceted Mirrors to meet the needs of every customer

Testing

Both Flat and Spherical Mirrors can be tested with AMF's Zygo™ GPI Interferometer.



PRISMS

Varieties

AMF Optics manufactures such well known Prisms as Penta, Right Angle, Beam Expander, Beam Splitter, Corner Cubes, Pechan, and Dove.

Quantities

AMF can provide customers with prism quantities ranging from a single prototype to full production level.

Surface

Prism tolerances from 1/4λ to 1/10λ per surface to 1/10λ in transmission.

DIAMOND TURNING

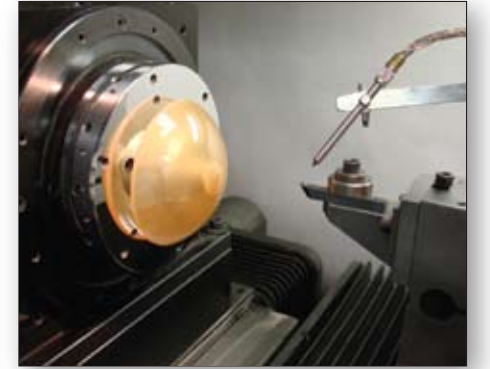
A.M.F. Optics, Inc. provides precision diamond turned optics from prototypes to production level to your specifications at our manufacturing plant. Using our single point diamond turning technology coupled with Ultra-comp, a form measurement and correction package, the technician is able to verify shape through on-board metrology. With our additional testing capabilities we can satisfy all your needs.

Products include:

- Aspheres, Spheres, Planes, Mirrors, Parabolic Mirrors

Materials include:

- Crystals- Ge, Si, ZnSe, ZnS, CaF2
- Metals- Al, Tin, Copper, Nickel
- Polymers- Acrylics, Polycarbonate, Plastics



CD/DVD POLISH

AMF offers a broad range of Mold Polishing Services for CD Replicators. The following are a just a sample of what can be polished.

- Fixed Side Mirrors
- Moving Side Mirrors
- Stamper Locators, Hubs, Bushings
- Jewel Box Molds
- Titanium Nitride Coating (TiN)
- DLC Coatings
- Laser Engraving SID Codes (IFPI #'s)
- Height Adjustments

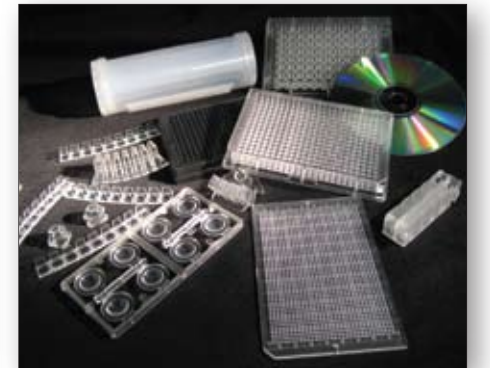


INJECTION MOLD POLISHING

Super Polish For High Quality Metal Mirrors

One of AMF Optics' specialties is polishing high quality metal mirrors for the medical, R&D, and entertainment industries. Years of experience polishing 1/10 to 1/20 wave surfaces have earned us the distinction of a precision optical company.

We have taken that experience and combined it with state-of-the-art metal polishing techniques to provide superior mirror finishes. Currently, we polish a wide variety of metals used for injection molding, including Stavax®, 420 S.S., and many other stainless steels



INTERFEROMETRIC TESTING

AMF Optics is licensed to use ZYGO's Metropro™ software.

- Standard GPI Flatness, transmitted wave front
- Two sphere application
- Static fringe analysis
- Zernike evaluation
- Corner cube testing••
- Angular measurements
- Disk flatness
- 3 flat measurement
- Spherical testing (limited) Testing capability on our 6" aperture GPI is accurate to better than 1/100 of a wave (3 flat testing to remove any system error), 1/1000 of a wave RMS

