

TECHSPEC® 40.0mm Dia. x 200.0mm FL, MgF₂ Coated, Plano-Convex Lens



Stock #33-377 **5 In Stock**

[Other Coating Options](#)

1 **\$82⁰⁰**

ADD TO CART

Volume Pricing	
Qty 1-9	\$82.60 each
Qty 10-24	\$74.20 each
Qty 25-49	\$66.15 each
Need More?	Request Quote

Product Downloads

SPECIFICATIONS

General

Type:

Physical & Mechanical Properties

40.00 +0.0/-0.025 **Diameter (mm):**

<1 **Centering (arcmin):**

5.00 ±0.10 **Center Thickness CT (mm):**

3.05 **Edge Thickness ET (mm):**

39 **Clear Aperture CA (mm):**

Protective as needed **Bevel:**

Optical Properties

200.00 @ 587.6nm **Effective Focal Length EFL (mm):**

196.7 **Back Focal Length BFL (mm):**

MgF₂ (400-700nm) **Coating:**

R_{avg} ≤ 1.75% @ 400 - 700nm **Coating Specification:**

N-BK7 **Substrate:**

40-20 **Surface Quality:**

1.5λ **Power (P-V) @ 632.8nm:**

λ/4 **Irregularity (P-V) @ 632.8nm:**

±1 **Focal Length Tolerance (%):**

103.36 **Radius R₁ (mm):**

5 **f#:**

0.10 **Numerical Aperture NA:**

400 - 700 **Wavelength Range (nm):**

10 J/cm² @ 532nm, 10ns **Damage Threshold, By Design:**

Regulatory Compliance

Compliant **RoHS 2015:**

View **Certificate of Conformance:**

Compliant **Reach 235:**

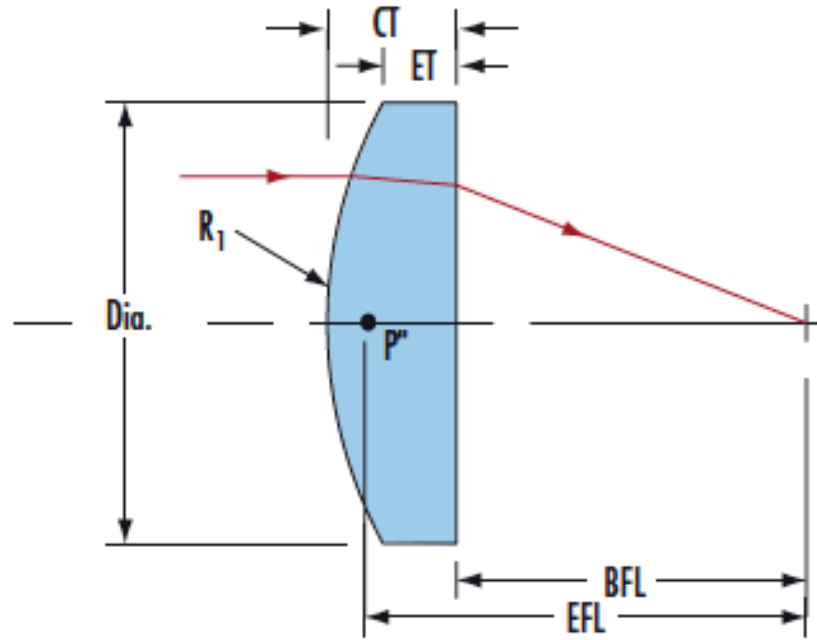
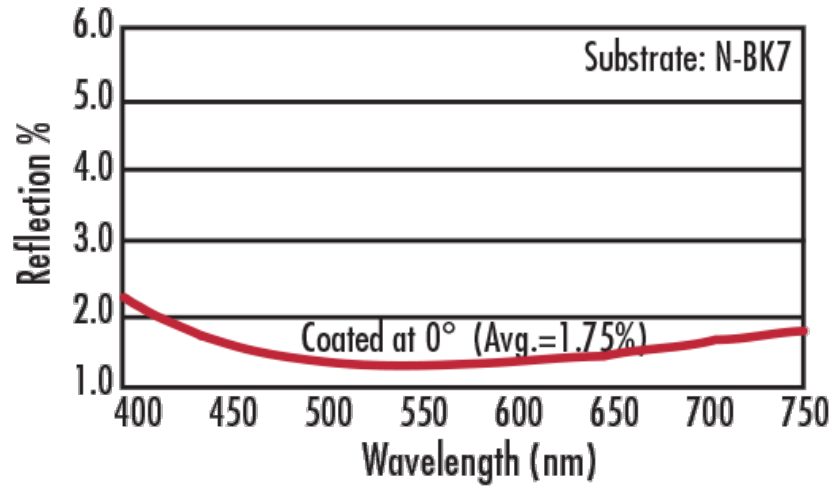
PRODUCT DETAILS

- AR Coated to Provide <1.75% Reflectance per Surface for 400 - 700nm
- Designed for 0° Angle of Incidence
- Various PCX Coating Options: [Uncoated](#), [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#)
- Also Available [Pre-Mounted in Engraved C-Mount Housings](#)

TECHSPEC® MgF₂ Coated Plano-Convex (PCX) Lenses have a positive focal length, making them ideal for collecting and focusing light in imaging applications. They are also useful in a variety of applications involving emitters, detectors, lasers, and fiber optics. TECHSPEC® MgF₂ Coated Plano-Convex (PCX) Lenses are available in a wide variety of diameters and focal lengths. Identical designs of these PCX lenses are also offered [uncoated](#) or with broadband anti-reflective (BBAR) coatings, which include [VIS 0°](#), [VIS-NIR](#), [NIR I](#), [NIR II](#), [VIS-EXT](#), and [YAG-BBAR](#).

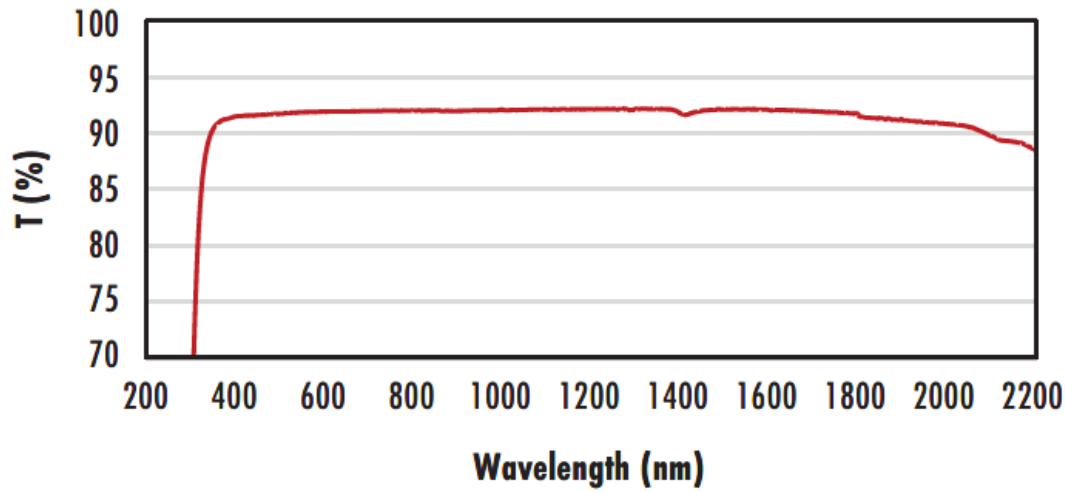
TECHNICAL INFORMATION

MgF₂ Coating
 $R_{avg} \leq 1.75\% @ 400 - 700nm$
 Typ. Energy Density Limit: 10 J/cm² @ 532nm, 10ns



N-BK7

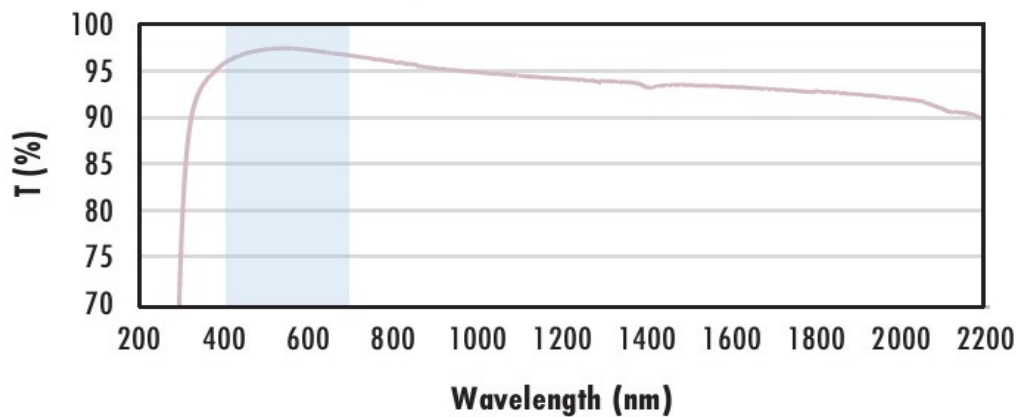
Uncoated N-BK7 Typical Transmission



Typical transmission of a 3mm thick, uncoated N-BK7 window across the UV - NIR spectra.

[Click Here to Download Data](#)

N-BK7 with MgF₂ Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF₂ (400-700nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 1.75\% @ 400 - 700nm$ (N-BK7)

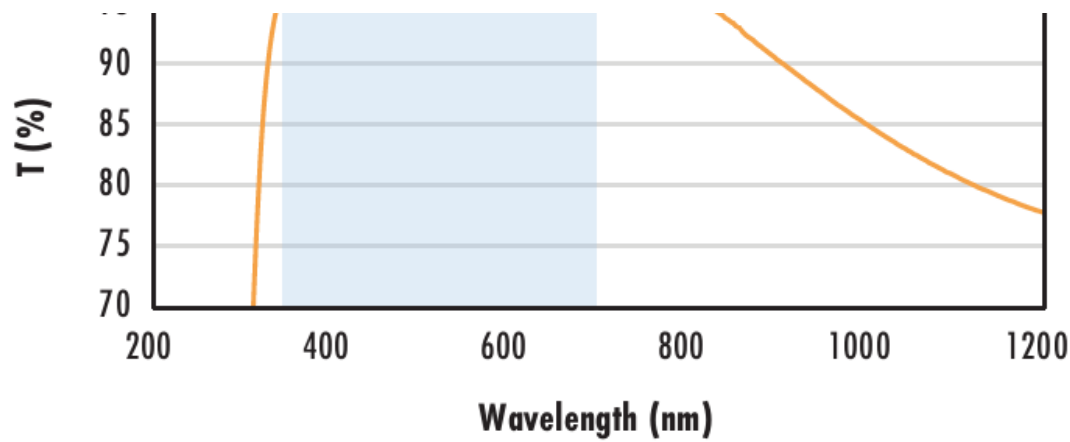
Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

N-BK7 with VIS-EXT Coating Typical Transmission

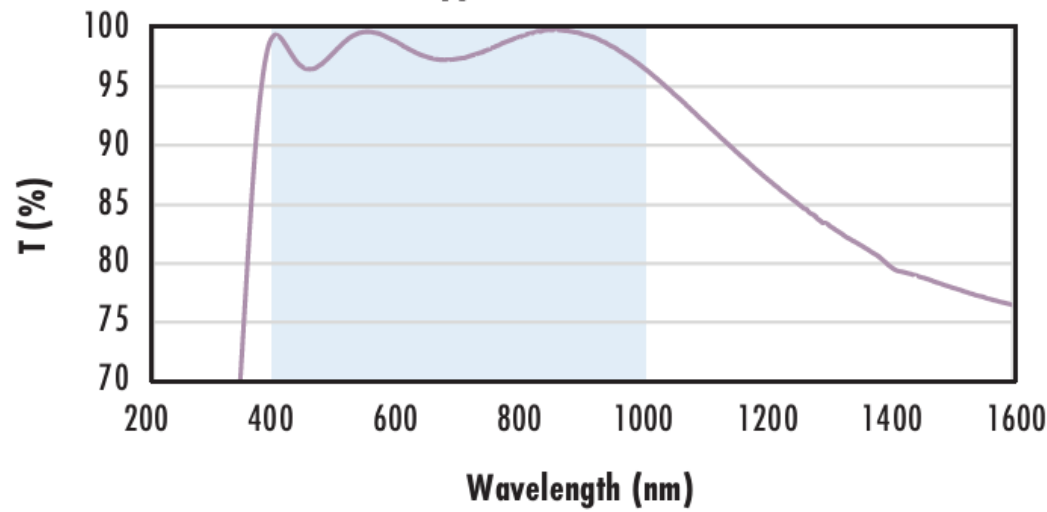


Typical transmission of a 3mm thick N-BK7 window with VIS-EXT



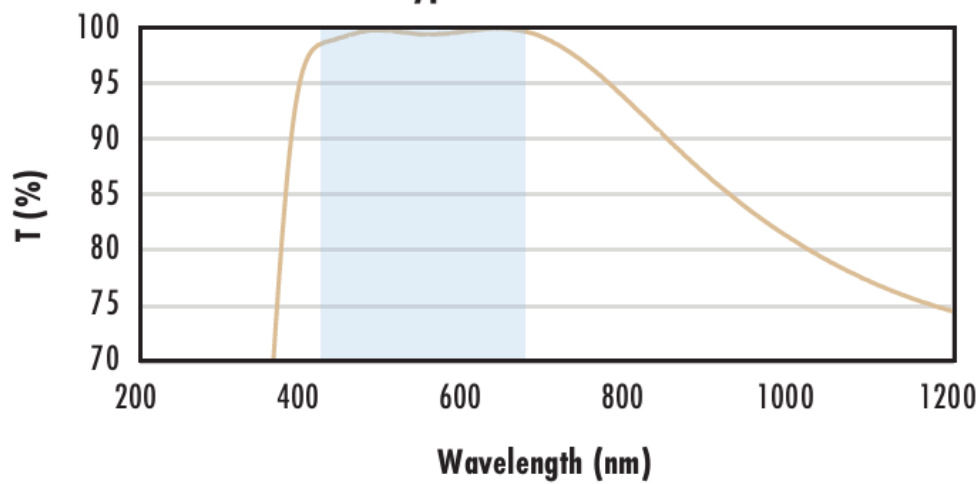
(350-700nm) coating at 0° AOI.
 The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{avg} \leq 0.5\%$ @ 350 - 700nm
 Data outside this range is not guaranteed and is for reference only.
[Click Here to Download Data](#)

**N-BK7 with VIS-NIR Coating
 Typical Transmission**



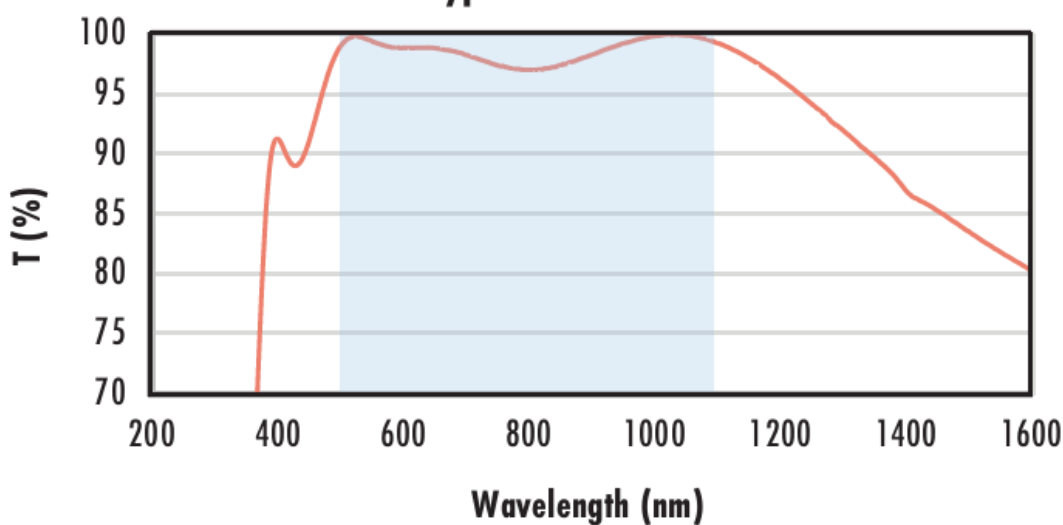
Typical transmission of a 3mm thick N-BK7 window with VIS-NIR (400-1000nm) coating at 0° AOI.
 The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{abs} \leq 0.25\%$ @ 880nm
 $R_{avg} \leq 1.25\%$ @ 400 - 870nm
 $R_{avg} \leq 1.25\%$ @ 890 - 1000nm
 Data outside this range is not guaranteed and is for reference only.
[Click Here to Download Data](#)

**N-BK7 with VIS 0° Coating
 Typical Transmission**



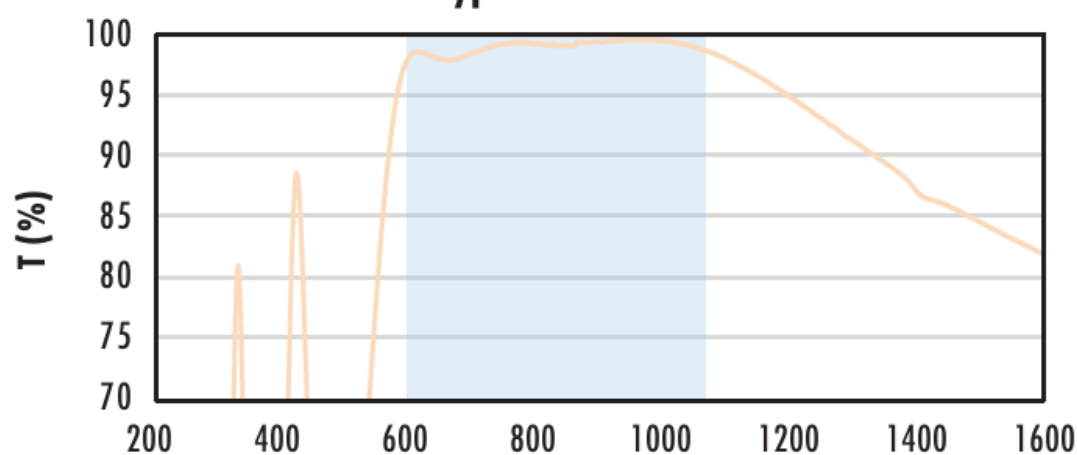
Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.
 The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{avg} \leq 0.4\%$ @ 425 - 675nm
 Data outside this range is not guaranteed and is for reference only.
[Click Here to Download Data](#)

**N-BK7 with YAG-BBAR Coating
 Typical Transmission**

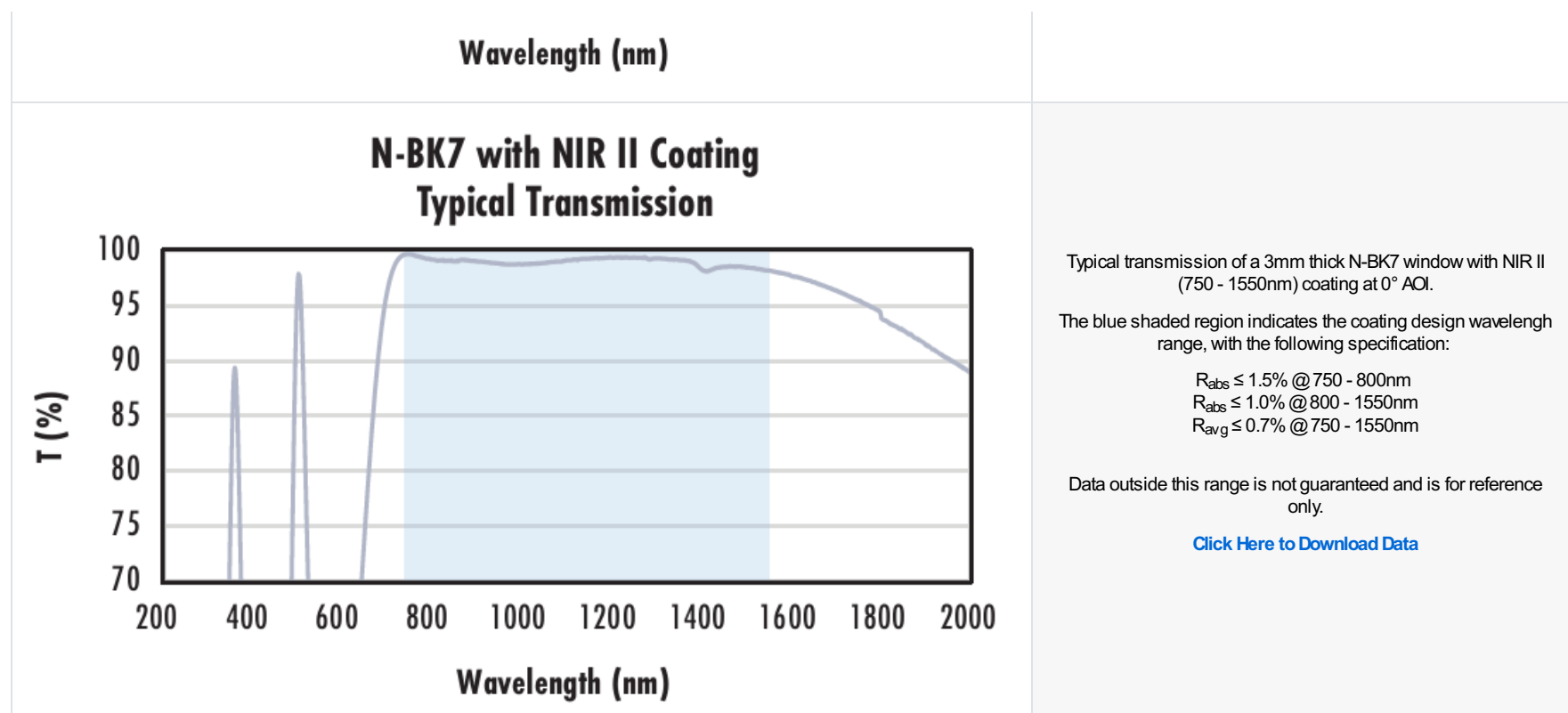


Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.
 The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{abs} \leq 0.25\%$ @ 532nm
 $R_{abs} \leq 0.25\%$ @ 1064nm
 $R_{avg} \leq 1.0\%$ @ 500 - 1100nm
 Data outside this range is not guaranteed and is for reference only.
[Click Here to Download Data](#)

**N-BK7 with NIR I Coating
 Typical Transmission**



Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.
 The blue shaded region indicates the coating design wavelength range, with the following specification:
 $R_{avg} \leq 0.5\%$ @ 600 - 1050nm
 Data outside this range is not guaranteed and is for reference only.
[Click Here to Download Data](#)



COATING CURVES

CUSTOM

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

COMPATIBLE MOUNTS