

TECHSPEC<sup>®</sup> 9mm Diameter x -18 FL, VIS 0° Coated, Plano-Concave Lens



Stock **#48-269** **20+ In Stock**

☐ [Other Coating Options](#)

-

1

+

C\$64<sup>.40</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-9        | C\$64.40 each                 |
| Qty 10-25      | C\$57.75 each                 |
| Qty 26-49      | C\$51.45 each                 |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

Type:  
Plano-Concave Lens

Physical & Mechanical Properties

Diameter (mm):  
9.00 +0.0/-0.025

|                                  |        |
|----------------------------------|--------|
|                                  | Bevel: |
| Protective as needed             |        |
|                                  |        |
| Center Thickness CT (mm):        | 2.25   |
| Center Thickness Tolerance (mm): | ±0.05  |
|                                  |        |
| Centering (arcmin):              | <1     |
| Clear Aperture CA (mm):          | 8.1    |
|                                  |        |
| Edge Thickness ET (mm):          | 2.89   |

Optical Properties

|                                                       |                                      |
|-------------------------------------------------------|--------------------------------------|
| Effective Focal Length EFL (mm):                      | -18.00                               |
| Substrate: <input type="checkbox"/>                   | N-SF11                               |
| f/#:                                                  | 2.00                                 |
| Numerical Aperture NA:                                | 0.25                                 |
| Coating:                                              | VIS 0° (425-675nm)                   |
| Wavelength Range (nm):                                | 425 - 675                            |
|                                                       |                                      |
| Back Focal Length BFL (mm):                           | -19.26                               |
| Coating Specification:                                | R <sub>avg</sub> ≤0.4% @ 425 - 675nm |
| Focal Length Specification Wavelength (nm):           | 587.6                                |
| Focal Length Tolerance (%):                           | ±1                                   |
|                                                       |                                      |
| Radius R <sub>1</sub> (mm):                           | -14.12                               |
| Surface Quality:                                      | 40-20                                |
|                                                       |                                      |
| Damage Threshold, By Design: <input type="checkbox"/> | 5 J/cm² @ 532nm, 10ns                |
| Power (P-V) @ 632.8nm:                                | 1.5λ                                 |
|                                                       |                                      |
| Irregularity (P-V) @ 632.8nm:                         | λ/4                                  |

Regulatory Compliance

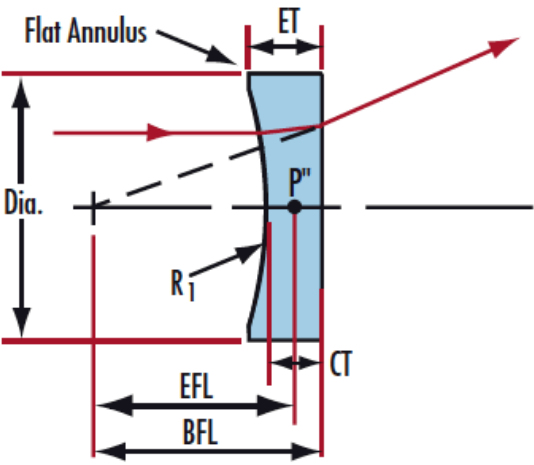
|                             |           |
|-----------------------------|-----------|
| RoHS 2015:                  | Compliant |
| Reach 219:                  | Compliant |
|                             |           |
| Certificate of Conformance: | View      |

Product Details

- AR Coated to Provide <0.4% Reflectance per Surface for 425 - 675nm
- Designed for 0° Angle of Incidence
- Various Coating Options: [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS-NIR](#), [YAG-BBAR](#), [NIR I](#), and [NIR II](#)

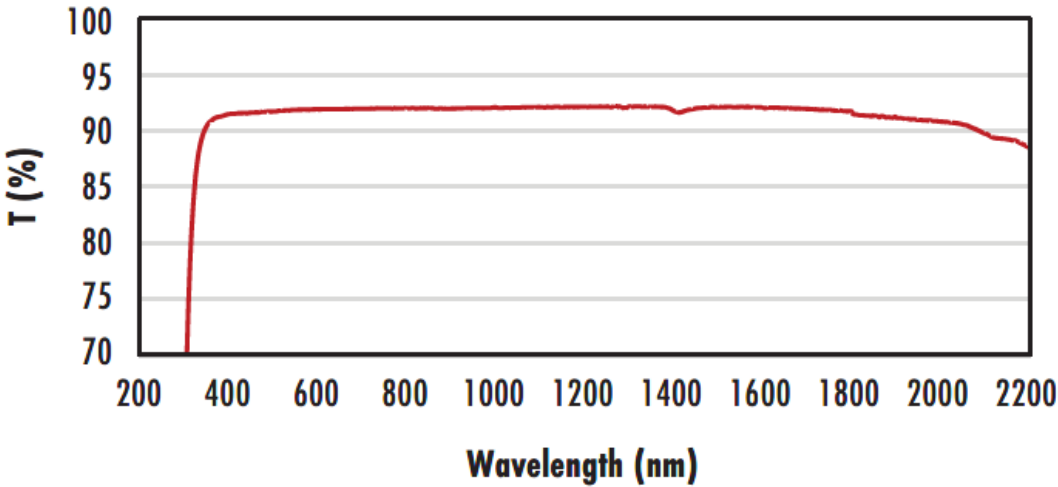
TECHSPEC® VIS 0° Coated Plano-Concave (PCV) Lenses are designed to bend parallel input rays to diverge from one another on the output side of the lens causing this lens to have a negative focal length. These lenses can be used for balancing aberrations created by other lenses within a system due to their negative spherical aberration. Plano-Concave (PCV) lenses are commonly used in a variety of applications including image reduction, beam expansion, and telescopes. TECHSPEC VIS 0° Coated Plano-Concave (PCV) Lenses are best used in 0° angle of incidence situations and provide optimized transmission in the 425nm – 675nm range. These lenses are also available [Uncoated](#), [VIS-EXT](#), [MgF<sub>2</sub>](#), [VIS-NIR](#), [YAG-BBAR](#), [NIR I](#), or with [NIR II](#) AR coating options.

Technical Information



N-BK7

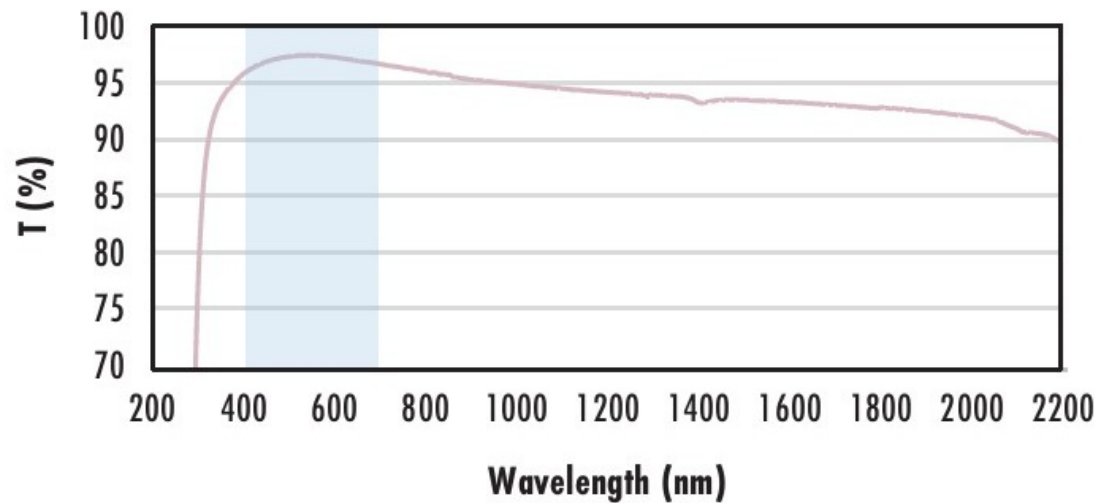
Uncoated N-BK7 Typical Transmission



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

[Click Here to Download Data](#)

N-BK7 with MgF<sub>2</sub> Coating Typical Transmission



Typical transmission of a 3mm thick N-BK7 window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.

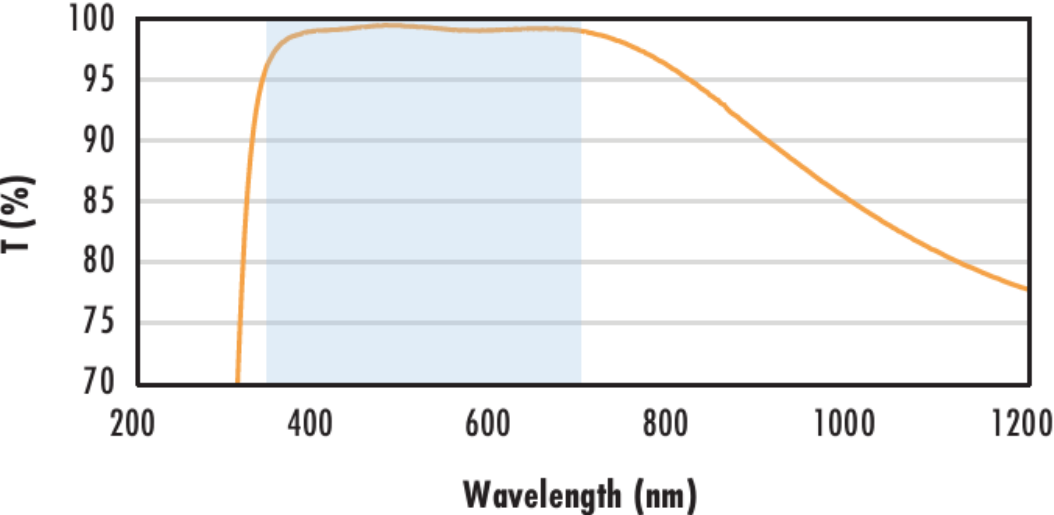
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$  (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.

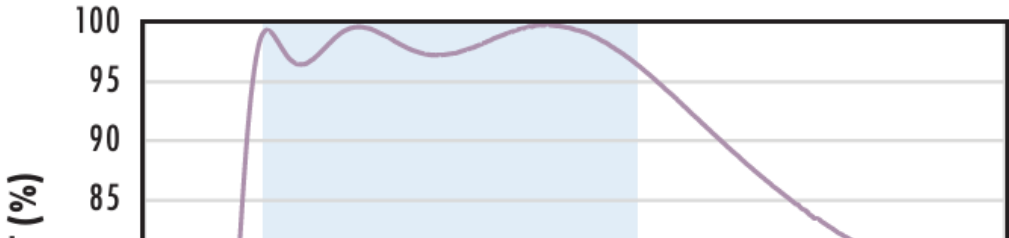
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$

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

[Click Here to Download Data](#)

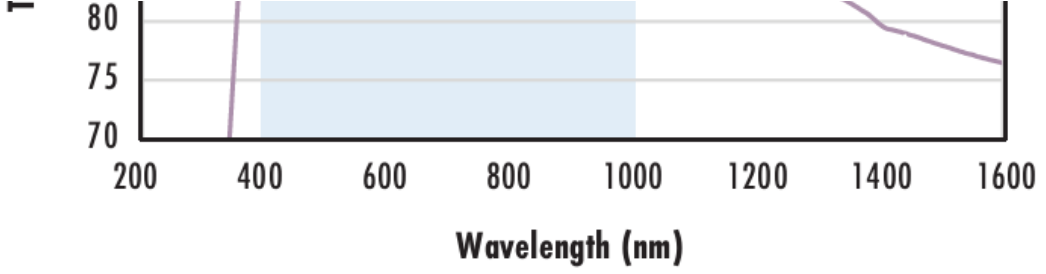
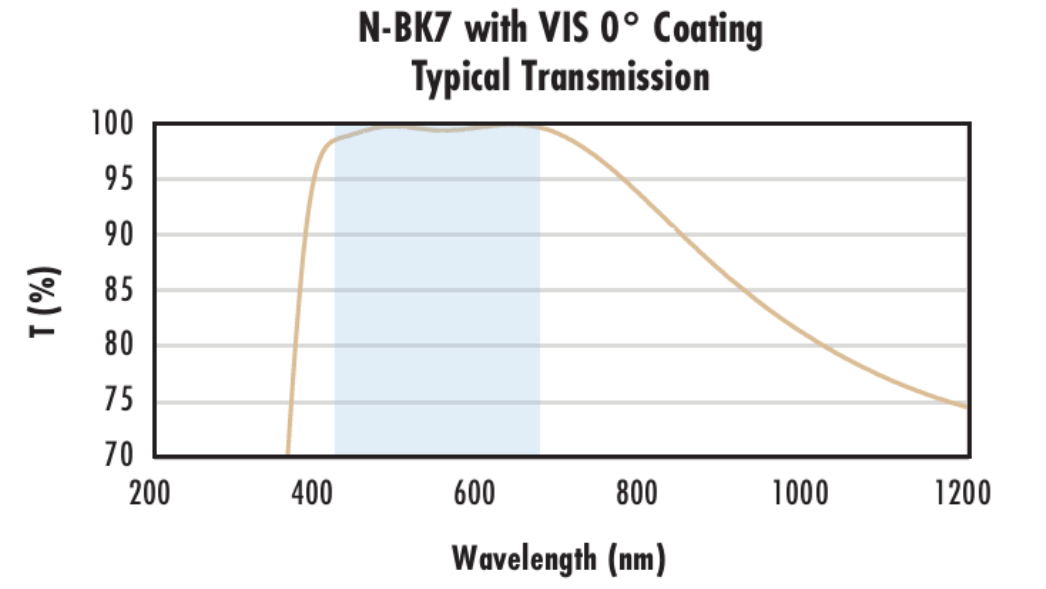
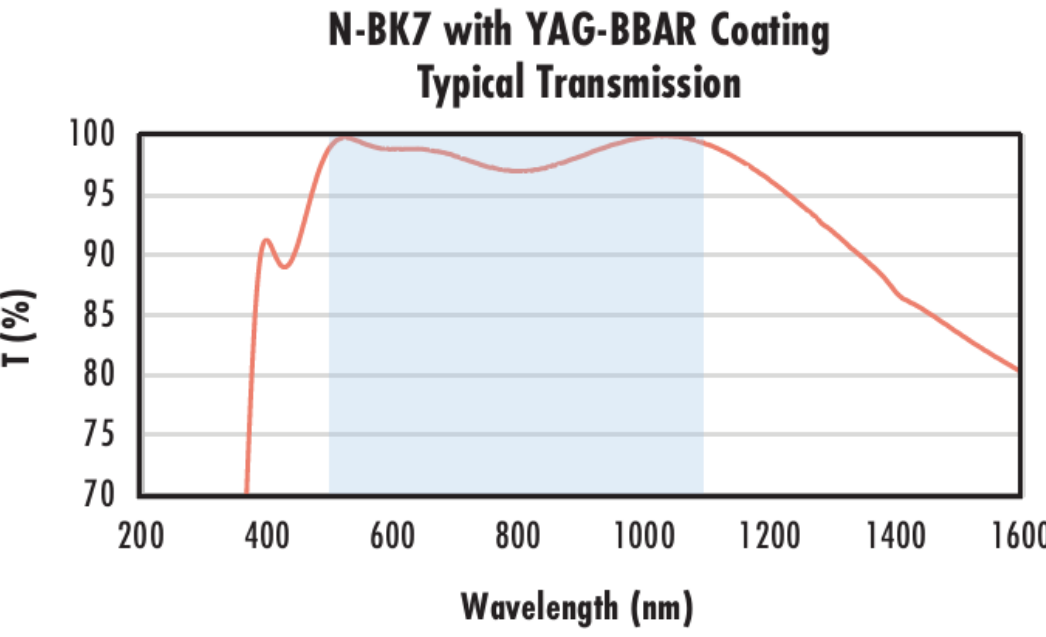
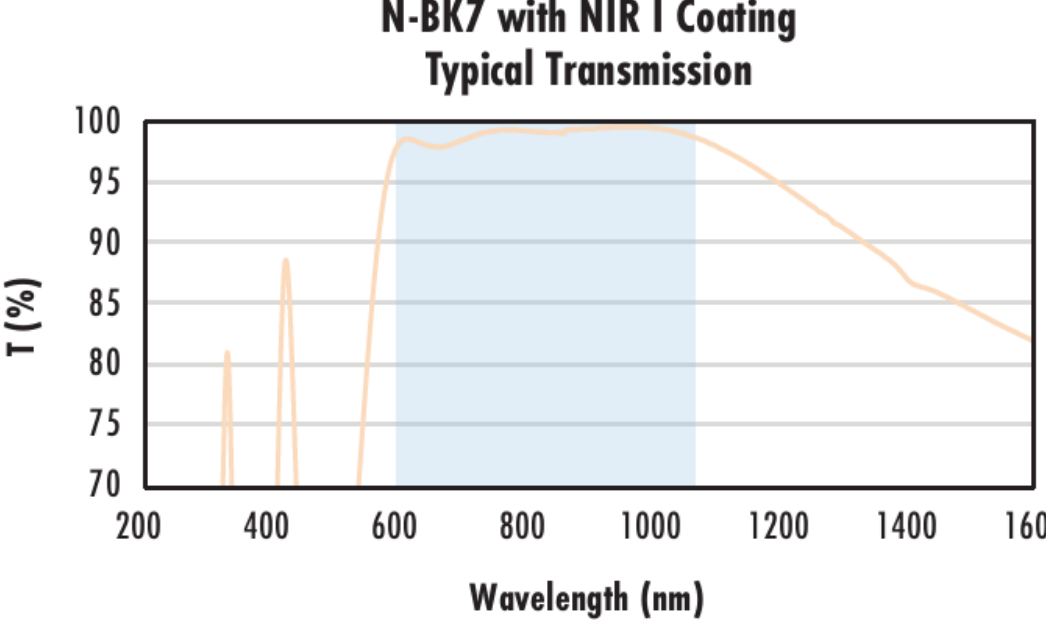
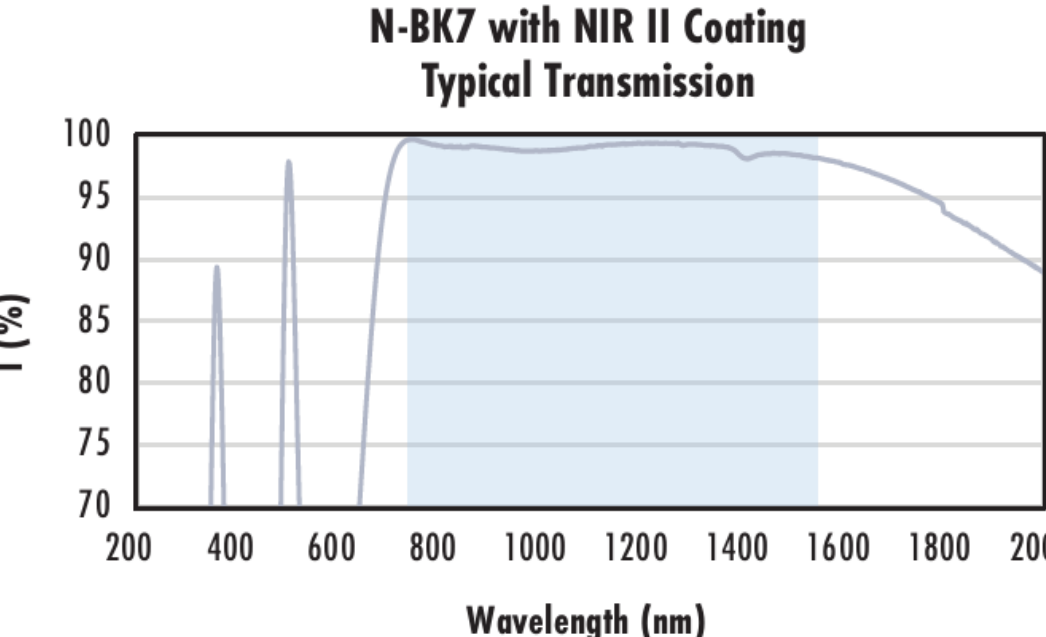
N-BK7 with VIS-NIR Coating Typical Transmission



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:

$R_{abs} \leq 0.25\% @ 880\text{nm}$   
 $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$   
 $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$

|                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><b>N-BK7 with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>    | <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                                                                                                                                                                                                                                                                                                      |
|  <p><b>N-BK7 with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p> | <p>Typical transmission of a 3mm thick N-BK7 window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.4\% @ 425 - 675\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                        |
|  <p><b>N-BK7 with NIR I Coating</b><br/><b>Typical Transmission</b></p>   | <p>Typical transmission of a 3mm thick N-BK7 window with YAG-BBAR (500-1100nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\% @ 532\text{nm}</math><br/><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math><br/><math>R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>           |
|  <p><b>N-BK7 with NIR II Coating</b><br/><b>Typical Transmission</b></p> | <p>Typical transmission of a 3mm thick N-BK7 window with NIR I (600 - 1050nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                                     |
|  <p><b>N-BK7 with NIR II Coating</b><br/><b>Typical Transmission</b></p> | <p>Typical transmission of a 3mm thick N-BK7 window with NIR II (750 - 1550nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.5\% @ 750 - 800\text{nm}</math><br/><math>R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}</math><br/><math>R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}</math></p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p> |

# 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

