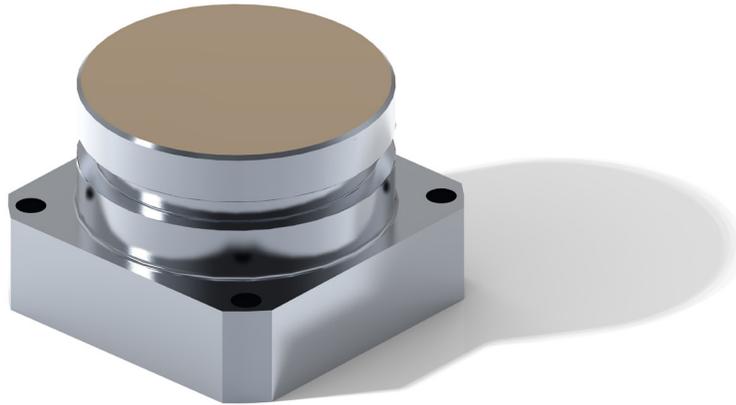


ALUMINUM MIRRORS

With Water-Cooling for High-Power Lasers

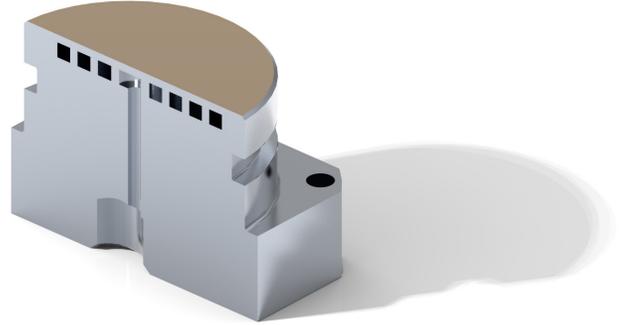
The ability to water-cool aluminum mirrors allows for lighter-weight processing heads, enabling faster cutting and welding. Aluminum offers a significant reduction in weight and corrosion compared to equivalent copper parts. For $1\mu\text{m}$ applications, aluminum mirrors can be post-polished to achieve sub-nanometer roughness in fold mirror configurations and deposited with a highly-reflective, dielectric coating for $>20\text{ kW}$ power usage.



FEATURES

- Water-cooling available
- Compatible with all standard diamond-turning operations
- Sub-nanometer roughness (plano configurations only)
- Up to 300mm diameter
- Additional light-weighting options available
- Corrosion resistant

ALUMINUM MIRRORS



Properties	Aluminum	Copper
Density	2.7 g/cc	8.94 g/cc
Thermal Diffusivity	82 mm ² /s	113 mm ² /s
Thermal Conductivity	200 W/m•K	391 W/m•K
Yield Strength	200-460 MPa	195 MPa
CTE	0.000024 (μm/m)°C	0.000017 (μm/m)°C
Knoop Hardness	96	83