

THE PROCESS

Pioneer's Optical Black™ is a proprietary anodizing process specifically designed for the optics industry. Optical Black™ absorbs light across a broad spectrum, from the infrared to ultra violet, reducing stray light and increasing measurement accuracies.

THE EFFECTS

When exposed to white light, Optical Black™ absorbs 5 times more light than conventional black anodizing. Test results are captured by this image (right), taken at a wavelength of 1064 nanometers.

PERFORMANCE BENEFITS

Chemically More Stable for Lasers Low Reflectivity
Uniformly Absorbs Laser Beams w/ Wavelengths Outside the Visible Spectrum Not Effected by UV and Will Not Discolor Over Time, Retaining its Absorptive Characteristics Over the Life of the Product Optical Black Does Not Out-Gas or Cloud Sensitive Lenses.

THE OVERVIEW

OPTICAL BLACK™

Optical Black™ was developed to resolve the optical industry's challenge to absorb stray light and minimize outgassing caused by optical lasers. Most finishes and dyed anodized coatings break down in ultraviolet light and 'outgas', which deposits on the lens causing cloudiness and reducing accuracy. Optical Black™ uses an alternative color agent specifically designed to address this problem.

[CLICK HERE TO VIEW IMAGES OF THIS PROCESS](#)

RECEPTIVE METALS

Aluminum Alloys
6000,3000 & 5000 series only
Not suitable for 7000, 2000 or castings

THICKNESS

.0001 - .001"

MAX PART SIZE

36" X 36" x 30"

SPECIFICATIONS

Proprietary Process



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