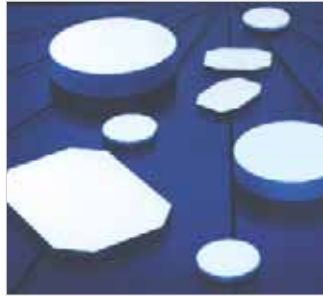


Acton Optics Protected and Enhanced Silver Coatings



Acton Optics protected and enhanced silver mirror coatings offer breakthrough levels of durability and reflectance. These proprietary coatings are offered on a variety of substrates including diamond-turned aluminum and are the ideal choice for highest reflectivity from 500nm to 2 μ . The excellent reflectance and durability can easily be extended into the 3 to 5 μ range if required.

These dependable coatings can be manufactured to provide greater than 98% average reflectance over very broad bandwidths. Coatings have been optimized for visible, NIR, as well as a combination of visible and NIR performance.

The longevity of the mirror is maximized by the precise deposition of proprietary binder layers and dielectric overcoat layers carefully selected based upon substrate choice and end user application. This newly developed coating protects diamond-turned substrates from scratches and corrosion.

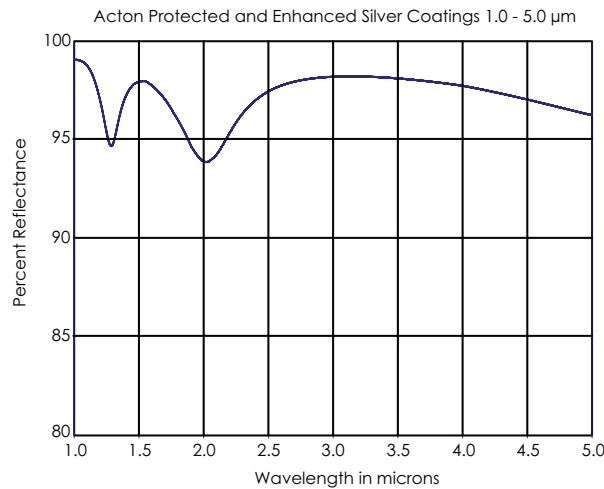
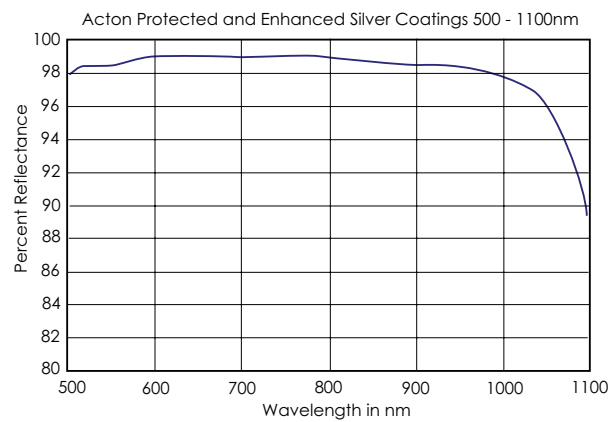
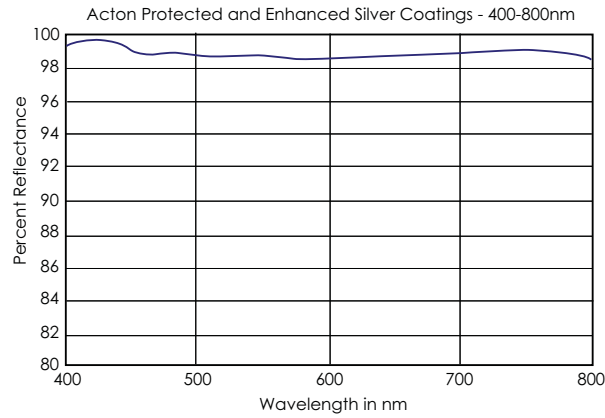
Applications: military optics, telescopes, space flight hardware, analytic instruments, ultrafast Ti:Sapphire lasers

Standard substrate materials: BK7 glass, diamond-turned aluminum, nickel plated diamond-turned aluminum

Features	Benefits
Protective dielectric overcoat	Cleanable, durable surface
High reflectivity	Greater throughput
Advanced binder layer	Superior adhesion and lifetime
Robust design	High laser damage threshold

Environmental Specifications

Environmental	Coatings exceed MIL-M-13508 requirements and salt water immersion test of Mil-F-48616. The parts continue to perform after being tested under the following conditions.
Humidity	24 hours at 120°F with 95-100% humidity
Temperature	5 hours at -80°F and 5 hours at +160°F
Adhesion	Passes quick and slow tape test
Moderate abrasion	50 strokes with cheesecloth at 1 pound
Severe abrasion	40 strokes with eraser at 1 pound
Salt spray	24 hours without degradation
Solubility and cleanability	Immersion for 10 minutes in trichloroethylene, acetone and ethyl alcohol
Salt solubility	Immersion for 24 hours in a solution of 6 oz. salt in 1 gallon of water
Water solubility	Immersion for 24 hours in distilled water



Coating can be customized to optimize specific wavelength requirements.



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