

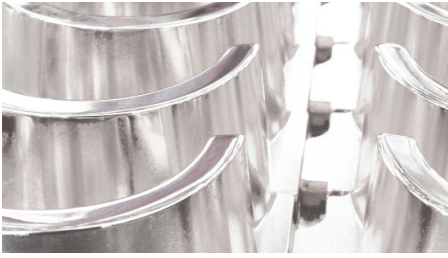
ACTERON

OptiSilver™



Higher Performance, Lower Cost

A breakthrough in reflective Silver—
Tarnish resistant electrodeposits at elevated
temperatures.



OptiSilver™

A breakthrough in Silver reflector coatings—highly reflective silver electrodeposits immune from tarnish and oxidation at elevated temperatures.

Advantages

Tarnish Resistance

OptiSilver™ protects against tarnish from chlorides, sulfides and oxides. The tarnish protection of *OptiSilver™* is unaltered at temperatures exceeding 300°C.

Uniformity

OptiSilver™ is not subject to line of sight constraints on uniformity. Excellent consistency on irregular surfaces.

Optimum Reflectivity

OptiSilver™ uses proprietary technologies to achieve 98.5% plus IR reflectivity and low emissivity. Excellent visible reflectivity.

Purity

OptiSilver™ is highly pure (99.9%) and finely grained.

Cost

OptiSilver™ outperforms more costly gold in many reflector applications. Its electrodeposition process and unique protective layer are inherently lower cost than sputtered or vacuum deposited coatings.

Applications

Infrared Reflectors

OptiSilver™ is the ideal coating for epitaxial reactors, rapid thermal processing systems and many other heat shielding or thermal directing applications.

Optic Mirrors/Lasers

Spectral or diffused *OptiSilver™* provides exceptional durability, reflectivity and precise quality control.

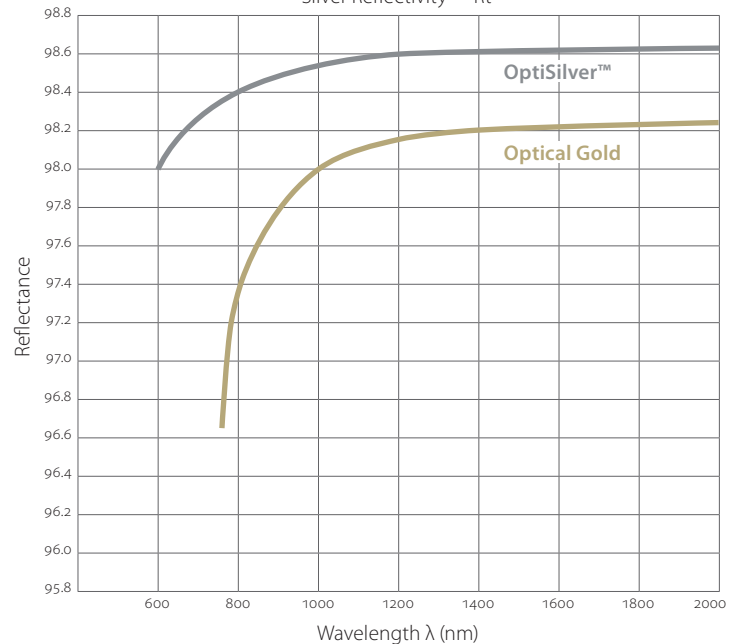
Special Substrates

Substrates

OptiSilver™ can be applied to virtually all metallic and many non-metallic substrates through the use of Acteron's proprietary *OptiBond™* processes which achieve exceptional coating adhesion without surface modifications.

Silver Reflectivity

Silver Reflectivity — Rt



Acteron Quality Assurance

Quality Control Laboratory

- atomic absorption analysis
- complete chemical laboratory
- full engineering staff for process and analytical control

Advanced Inspection

- x-ray fluorescence
- thermal testing up to 1200°F
- surface profile
- laser measurement
- IR Spectrophotometer
- Electronic Impedance Spectroscopy (EIS)