

BLACK COATINGS

ABSORBING 99% OF THE LIGHT FOR COMPONENTS UP TO 2 METERS
SOLUTION FOR STRAYLIGHT MITIGATION

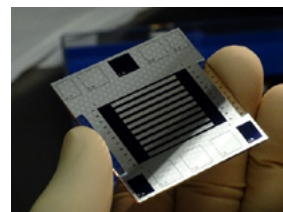
For Space, Industry, Astronomy and Research

- > Feasibility studies and design service
- > From prototype to mass production
- > From small to large dimensions

| Features of Black coatings | |
|-----------------------------------|---|
| Substrate materials | Silica, Zerodur®, Titanium, Aluminum + NiP, Bare aluminum, Stainless steel, SiC, CFRP, etc. |
| Substrates shapes and dimensions | Applicable to a wide range of components and shapes: slits, windows, prisms, stripe filters, baffles, barrels, etc. Up to diameter 2000mm, 20mm height |
| Coating type | Metal-dielectric multilayer coating |
| Coating process | Magnetron sputtering (dense coating) 900m ² of clean room ISO5 to ISO8 |
| Coating thickness | <1 μm |
| Specular reflectivity | R < 1% over [400-900nm] for AOI 0-30° Other spectral ranges upon request |
| Hemispheric reflectivity | R < 1.6% |
| Transmittance | T < 10 ⁻⁵ |
| Emissivity | ε < 0.35 on aluminum |
| Cosmetics | 5/C 1x0.16 per 100mm pupil according to ISO 10110-7 |
| Environmental compatibility | Suitable for severe environments (ATOX, radiations, vacuum, humidity...) Space heritage available upon request Cleanable |
| Contact areas or non-useful areas | Coating free areas masked mechanically or using photolithography techniques |

Main references

- > Embedded objective baffles and slits
- > Multispectral filters



CONTACT

Email: optics@cilas.com
Phone: +33 4 42 36 97 00
[in](#) @CILAS

CILAS

600 avenue de la Roche Fourcade
13400 Aubagne - France
www.cilas.com