

BLACK COATINGS

FOR SPACE, INDUSTRY, ASTRONOMY AND RESEARCH

SOLUTION FOR STRAYLIGHT MITIGATION FOR COMPONENTS UP TO 2 METERS

OPTICAL COATINGS



BLACK COATINGS

From prototype to mass production

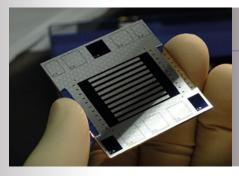
From small to large dimensions

Feasibility studies and design service

Absorb 99% of the light



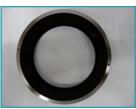
FEATURES OF BLACK COATINGS	
SUBSTRATE MATERIALS	Silica, Zerodur®, Titanium, Aluminum + NiP, Bare aluminum, Stainless steel, SiC, CFRP, etc.
SUBSTRATES SHAPES AND DIMENSIONS	Applicable to a wide range of components and shapes: slits, windows, prims, stripe filters, baffles, barrels, etc. Up to diameter 2000 mm, 20 mm height
COATING TYPE	Metal-dielectric multilayer coating
COATING PROCESS	Magnetron sputtering (dense coating) 900 m² of clean room ISO5 to ISO8
COATING THICKNESS	<1µm
SPECULAR REFLECTIVITY	R < 1% over [400–900 nm] for AOI 0–30° Other spectral ranges upon request
HEMISPHERIC REFLECTIVITY	R < 1.6%
TRANSMITTANCE	T < 10-5
THERMAL VACUUM	Qualified over [–165°C, 130°C]
COSMETICS	5/C 1 x 0.16 per 100 mm 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

- TROPOMI
- Eyesat
- METimage
- Sentinel-5





CONTACT Email: optics@cilas.com Phone: +33 4 42 36 97 00 LinkedIn : @CILAS CILAS 600 avenue de la Roche Fourcade 13400 Aubagne – France

www.cilas.com