



# METALLIC COATINGS

FOR SPACE, AEROSPACE, DEFENCE, INDUSTRY, ASTRONOMY,  
RESEARCH



ENHANCING OPTICAL SYSTEMS PERFORMANCES FOR MIRRORS UP TO 2 METERS

Catalogue available upon request

From small to large dimensions

Bridge cranes to handle heavy optics

From prototype to serial production

**SILVER**

**ALUMINUM**

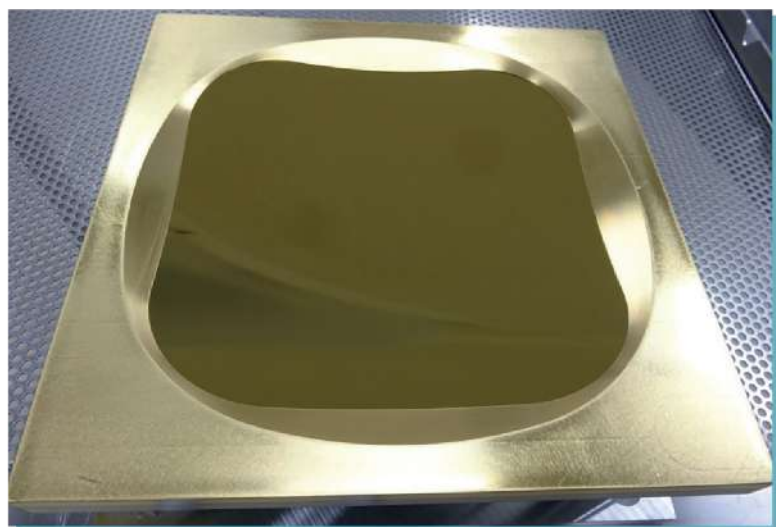
**GOLD**



## FEATURES OF METALLIC COATINGS

<b>SUBSTRATE MATERIALS</b>	Silica, Zerodur®, Aluminum + NiP, Bare aluminum, Stainless steel, SiC, etc
<b>SUBSTRATES SHAPES</b>	Flat, concave and convex mirrors, gratings Up to diameter 2000 mm, 400 mm height and 1.5 tons
<b>COATING TYPE</b>	Protected and enhanced silver Protected and enhanced aluminum Unprotected gold
<b>COATING PROCESS</b>	Magnetron sputtering (dense coating) 900 m <sup>2</sup> of clean room ISO5 to ISO8 Grounding upon request

<b>REFLECTIVITY</b>	From 250 nm to 16 μm
<b>COSMETICS</b>	5/C 1 x 0.16 per 100 mm pupil according ISO 10110-7
<b>ENVIRONMENTAL COMPATIBILITY</b>	Suitable for severe environments (ATOX, radiations, vacuum, humidity...) Space heritage available upon request Cleanable
<b>COATING AREAS</b>	Full surface coating Masked upon request



## MAIN REFERENCES

- Laser Mégajoule reflectors
- Copernicus CO2M, CHIME, LSTM
- Proba-V and TROPOMI instruments
- Space telescope mirrors
- Euclid OGSE

## CONTACT

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

CILAS - 600 Avenue de la RocheFourcade  
13400 Aubagne - France  
[www.cilas.com](http://www.cilas.com)