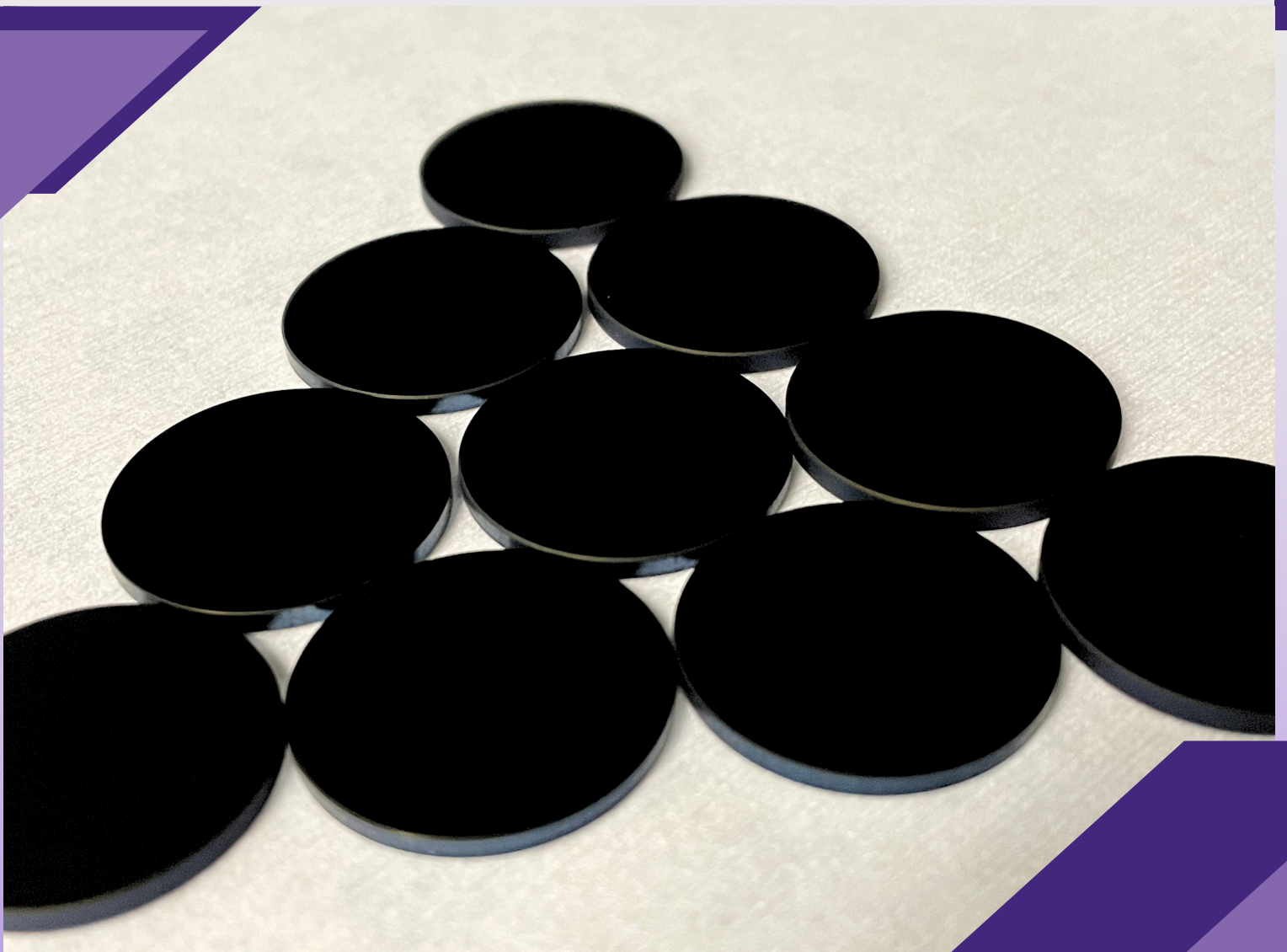




BLACK COATINGS

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



ENGINEERED TO BE DEEP DARK DURABLE

Custom coating design support

High durability in extreme environment

From prototype to serial production



VNIR

400-900 for AOI 0-30°

NIR

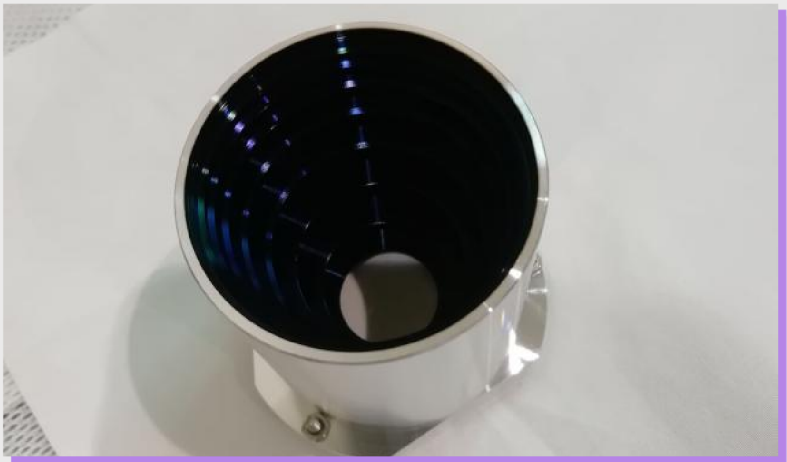
500-1700 for AOI 0-30°

SWIR 1

950-1200 for AOI 0-30°

SWIR 2

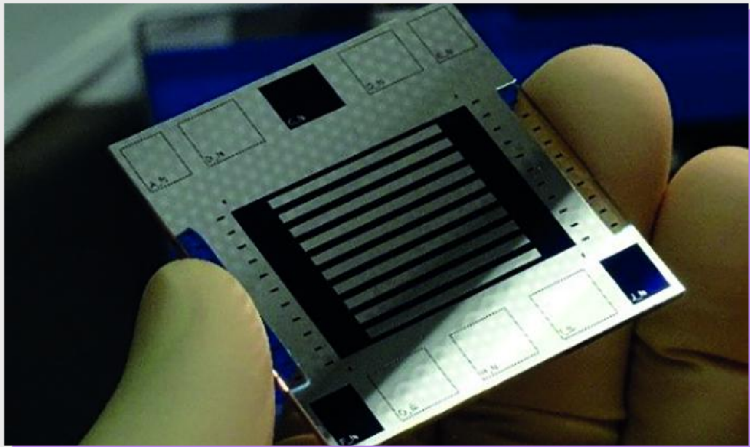
1500-2600 for AOI 0-30°



FEATURES OF BLACK COATINGS

SUBSTRATES MATERIALS	Silica, Zerodur®, Titanium, Aluminum + NiP, Bare Aluminum, Stainless steel, SiC, CFRP, etc
SUBSTRATES SHAPES AND DIMENSIONS	Applicable to a wide range of components: slits, windows, prisms, stripe filters, baffle, barrels, etc 20 mm height, flat or near flat
ROUGHNESS	Replicate substrate surface roughness
COATING PROCESS	Magnetron sputtering (dense coating) 900 m² of clean room ISO5 to ISO8
COATING THICKNESS	< 1µm
OUTGASSING	CVCM (%) 0,0002 RML (%) 0,0000 according to ECSS-Q-ST-70-02C

COSMETIC	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
COATING AREAS	Full surface coating Masking upon request
OTHERS	Typical values for VNIR Black THR <1,6% (over 400-800nm) TIS 0.6% at 600nm T < 10-5 ε 0.35 L*a*b L <10, a <5, b <5



MAIN REFERENCES

- TROPOMI / Sentinel-5
- ELT MICADO central obscuration on filters
- Eyesat
- METimage
- Slits for Copernicus CHIME

CONTACT

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