

Orbital systems
Ground segments
Satellites
Transversal competencies

THALES

Thales manufactures SESO® Optics & Systems for Space, Lasers, Astronomy & X-Rays in Aix-en-Provence, in France, since 1965.

1st European manufacturer of lightweight Zerodur® Mirrors for Earth observation telescopes, with 166 flight models delivered.

1st manufacturer in the world of X-ray mirrors for Synchrotrons with more than 1500 in operation.

COMPETENCIES & CAPABILITIES

- 2 meter-class optics manufacturing capabilities, including design, grinding, extreme lightweighting, polishing, coating, opto-mechanical assembly & integration, metrology and environmental tests.
- High expertise in Zerodur®, Silica & Silicon polishing
- Polishing : Traditional, Robotic, Magneto Rheology Finishing, Ion Beam Figuring
- Coating : Multidielectric, metallic, space qualified, laser, outdoor



Thales SESO® Space Telescope Primary Mirror - © Thales Alenia Space

Thales - SESO® Optics & Systems

PRODUCTS & SERVICES

Products for Space:

- Lightweight Zerodur Mirrors
- Collimators
- Focal Plane Assemblies
- Cryogenic objectives
- Laser Retro-Reflector Arrays
- Corner Cubes (Hollow or Full)
- Sunshields & cryostat polishing & coating
- Ultra-stable Fabry-Pérot (molecular adhesion)
- Prisms

MAJOR SPACE PROJECTS & REFERENCES

CNES/DGA

- Pleiades, SARAL
- CSO
- TANGO

ESA

- Sentinel 3 & 5, IASI, GAIA, ExoMars TGO, AEOLUS
- MTG Cold Optics, Telescope Optics & Hollow Corner Cubes
- Copernicus : CO2M, CHIME

Most of these projects were run through Thales Alenia Space, some through OHB and Leonardo, and some in direct with CNES/DGA or ESA.

POINT OF CONTACT

ADDRESS 530 rue Frédéric Joliot
13290 Aix-en-Provence, France

WEBSITE www.seso.com

PHONE +33 (0)4 42 16 56 68

POINT-OF-CONTACT : Gilles BORSONI, Director of Sales & Bus Dev,
gilles.borsoni@fr.thalesgroup.com, Mobile +33 (0)6 80 61 82 58

TURNOVER 15 M€

WORK FORCE 119 employees

SPACE TURNOVER 11 M€

SPACE WORK FORCE 87 employees