Key elements and figures

250 employees in 2016

43 M€ turnover in 2016

Exports
Domestic sales

50%
50%

Defence
Civilian

52%
48%

Confidentiel CILAS
A bunch of products in optronics

Optical Coatings

Adaptive Optics

Industrial Instrumentation

Optronics & Lasers

Helicopter Visual Landing Aid System

Laser Range Finding

Laser Target Designation

Sniper and Sight Detection

Confidentiel CILAS
Optical coatings production

- Located in AUBAGNE
- 700m² of clean room ISO5 to ISO8
- Physical vapour deposition
- Automated coating machines
- Automated cleaning machines (ultrasonic)
- Spectral metrology
- Climatic chambers

Deposition under vacuum
Coating achievements for Astronomy

Complex coatings

For ESO VLT SPHERE Instrument
IRDIS Filters wheel Band-pass filters
(Cryogenic environment)

Large size coatings

Al coating for the OAJ observatory mirror
 diameter 1,25m
 weight 320kg
A pioneer in adaptive optics and deformable mirrors

CILAS is the world expert in the development of piezoelectric deformable mirrors

Monomorph Mirrors
MONO

Stack Array Mirrors
SAM
Monomorph technology: from Earth to Space

✓ A simple architecture
✓ Size active pupil From 25 to 250 mm
✓ Large strokes up 100 µm
✓ High optical quality
✓ High reliability
✓ Light weight technology

✓ Astronomy
  • First generation of bimorph deformable mirror in VLT, Subaru Telescope
  • Example of adaptive optics with the 1-meter Swedish Solar Telescope (SST)

✓ High power laser chains
✓ Space born instrumentation
  • CILAS is developing a space-qualified monomorph deformable mirror for CNES and AIRBUS to allow in-flight correction of the telescope distortions

Confidentiel CILAS
Large stack Array Mirrors for astronomy

- Technology with a high level of performances:
  - Stroke, optical quality, bandwidth
  - From 50 to 500 mm
  - From 50 to 5000 actuators
  - Low dependence to temperature

- Mirror with 1377 actuators for VLT SPHERE

- CILAS is developing the large deformable mirrors for the Thirty Meter Telescope
  - 2 deformable mirrors with 3125 actionneurs (Ø 325mm) and 4548 actionneurs (Ø 386mm)

- New generation of actuators with high reliability

- The design of the mirrors has been done and a prototype is under manufacturing.

- This technology is appropriate for the future deformable mirrors of the E-ELT:
  MAORY, Extreme Adaptive Optics,…