OPTICAL SYSTEMS
FOR ASTRONOMY

> 1-M TO 8-M ASPHERIC ACTIVE MIRROR ASSEMBLY
> 1-M TO 2-M SEGMENTED MIRRORS
> LARGE FIELD CORRECTORS, FILTERS AND INSTRUMENT ASSEMBLY
> LARGE THIN SHELL FOR ADAPTIVE MIRRORS
> 1-M TO 3-M ROBOTIC TELESCOPES
A longstanding partner of the French, European and international astronomical community, Reosc, a subsidiary of Sagem designs and manufactures a complete range of high-performance optics and equipment. Drawing on its engineering and technical expertise, Reosc continues to push back the boundaries of possibility to meet the many technological challenges raised by some of the most ambitious projects.

Founded in 1937 by Henri Chrétien and Charles Fabry, Reosc gained significant experience in large and aspheric optics with precision polishing and testing as well as in design, fabrication, assembly and test of robotic telescopes and instruments.

As a participant in major international scientific programs, Reosc produced the giant 8.2-m Very Large Telescope (VLT) and Gemini active primary mirrors polished well below diffraction limit (down to 8.5 nm RMS figure for VLT n° 4), the 42 1.8 m off-axis segments for the Gran Telescopio Canarias telescope and the 7 prototype segments for the primary mirror of the European Extremely Large Telescope (E-ELT).

References

European Extremely Large Telescope
- 7 prototype 1.4-m hexagonal off-axis segments
- 6-m convex secondary mirror assembly
- Adaptive M4 and Tilt-tilt M5 prototypes

Gran Telescopio Canarias 11-m telescope
- 36 +6 spare 1.8-m hexagonal off-axis segments
- 1.2-m beryllium secondary mirror

ESO VLT 8.2-m telescopes optics
- Four 8.2-m M1, Four 1.1-m beryllium M2
- 4 Coudé Train, 4 Cat’s Eye telescopes
- M1 active support system (150 actuators)
- 1.1-m thin shell for M2 adaptive mirror

AURA GEMINI 8.2-m telescope optics
- Two 2.2-m M1, 1.1-m lightweight M2

Other references
- ESO 3.6-m telescope optics assembly
- SOFIA airborne telescope optics
- 2.5-m Robotic observatory
- Pic du Midi telescope optics
- Nishi Harima telescope optics
- Keck Outrigger telescope optics
- US NAVY 1.8-m lightweight mirror assemblies
- 1.8-m aluminium mirrors
- Korean Astronomical Institute 1.8-m optics
- IOE-Chengdu 1.8-m optics
- Various 1.5-m class telescopes
- LAMOST Demonstration segments
- Large Field Corrector
- Large thin plates for AO mirrors

Large aspheric mirrors
Large segmented mirrors
Filters and dichroic plates
Thin shell for AO mirrors
Telescope instruments
Robotic telescopes and domes

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