



Precision Optics since 1974

Gestione SILO srl

- 1998, new plant in Scandicci (Fi), via di Castelpulci 14/d;
- 1200 m² optical shop;
- 4 departments;
- 28 employers.



Main Activities

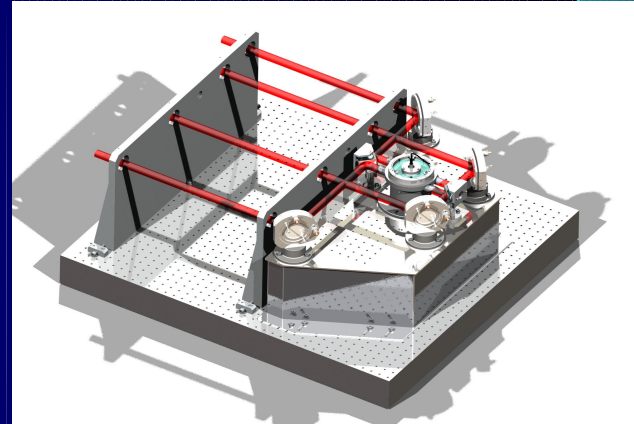
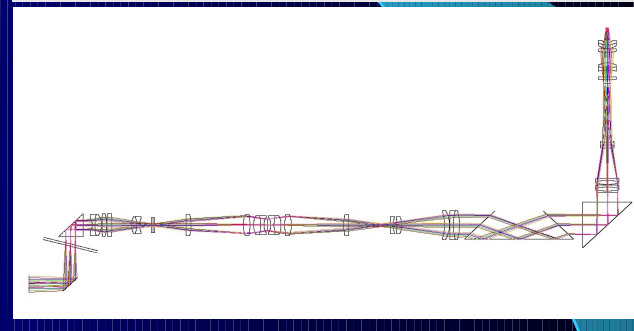
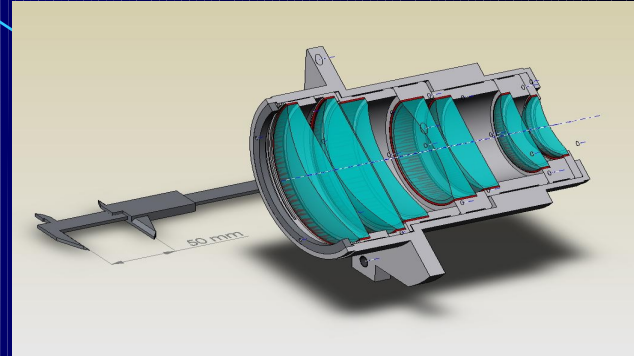
- Manufacturing of components and systems for optical applications.
- Optical and mechanical engineering dedicated to opto-mechanical integration.
- Testing of optical components and systems.
- Fields of applications: Industrial, Biomedical, Military, Aerspatial, Research, ...

Departments

- System Engineering;
- Optical and Mechanical production;
- Optical Coating;
- Assembling and Testing.

System Engineeing

- Staff: 2 physicists, 1 mechanical engineer;
- Customized opto-mechanical systems;
- Designing Software: Zemax +SolidWorks;
- More than 1000 projects developed on 20 years of activity.

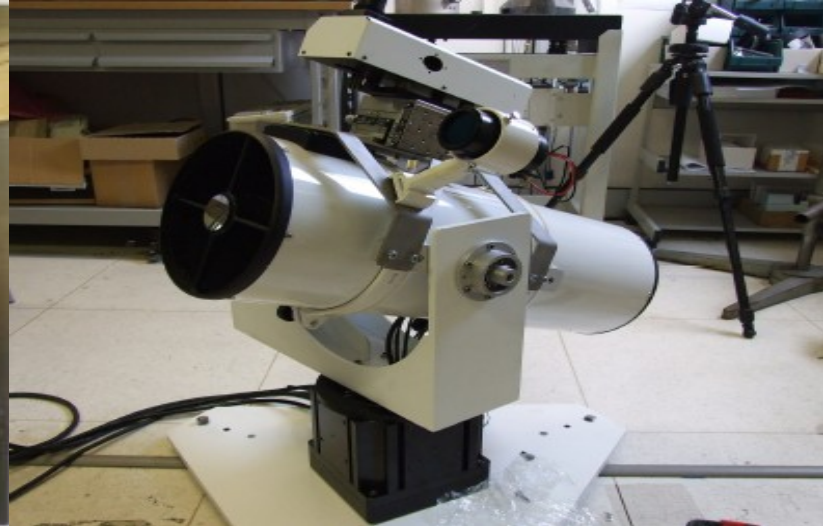
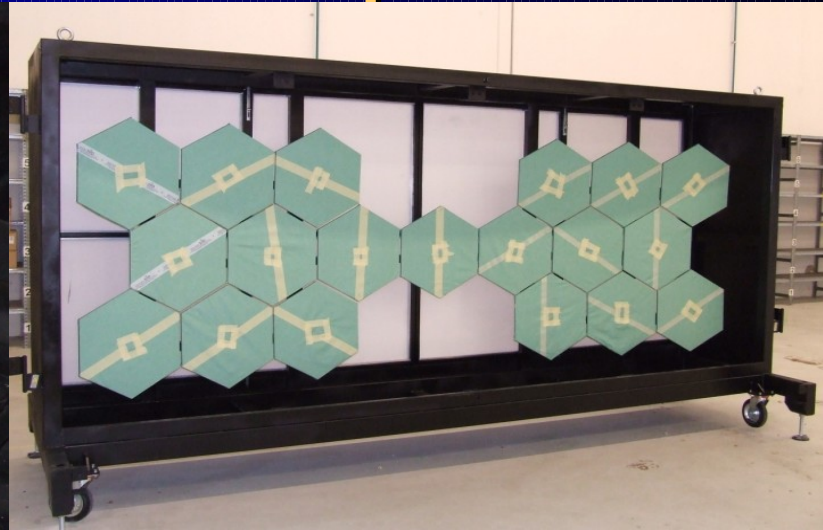
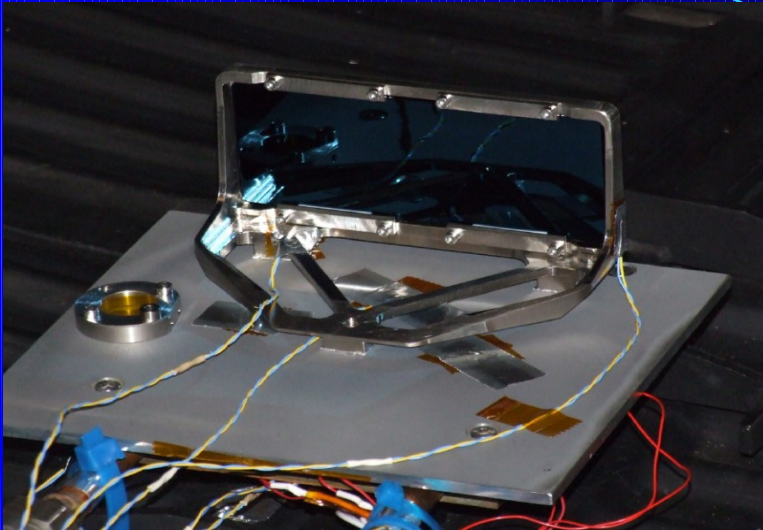


Opto-Mechanical production

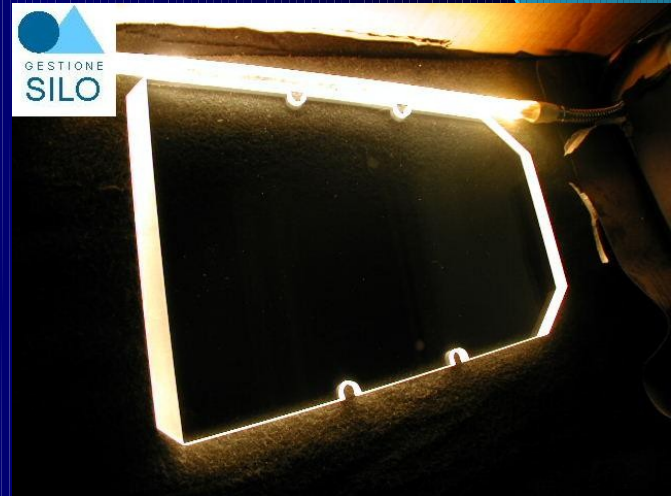
- Staff: 1 mechanical engineer, 18 skilled operators.
- Manufacturing (cut, grind, polish) of lenses, prisms, mirrors, ...
- Optical glasses, crystals for UV and IR (CaF_2 , MgF_2 , BaF_2 , etc.), IR materials (ZnSe , ZnS , Ge , Si , Amtir, SiO_2 , etc.)
- Super-polishing ($0.4\text{-}1\text{nm } R_a$) for special applications: XUV, laser.
- High precision lapping on mechanical components.



Some examples

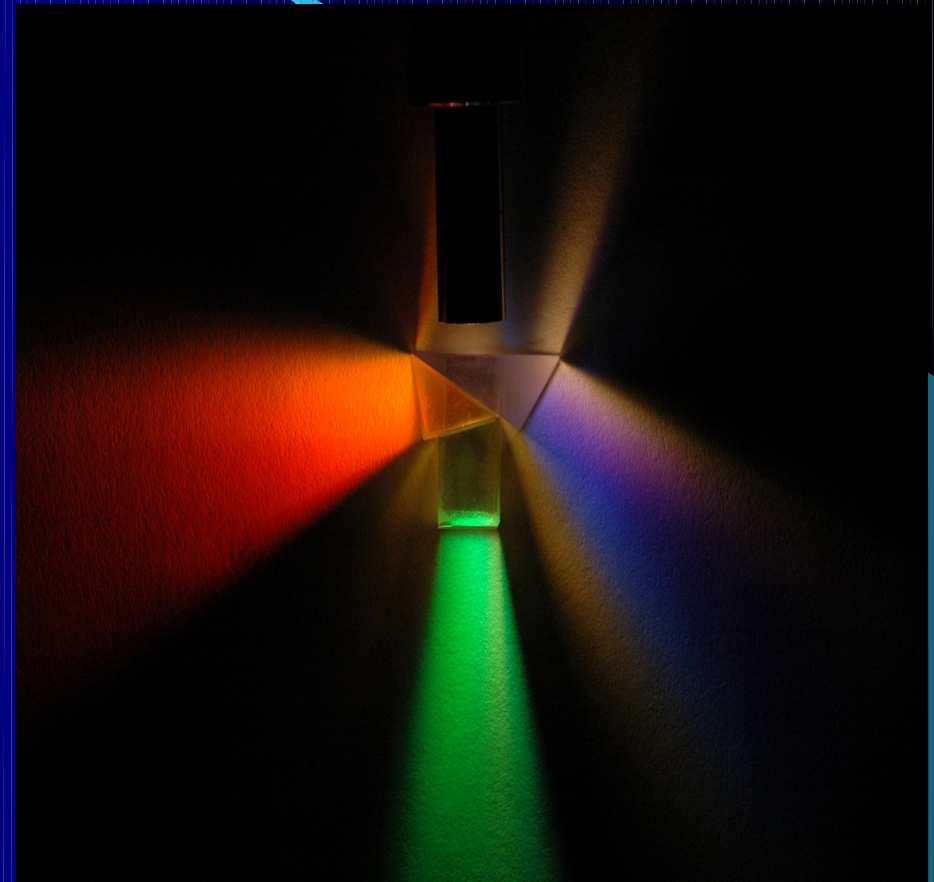


Some examples



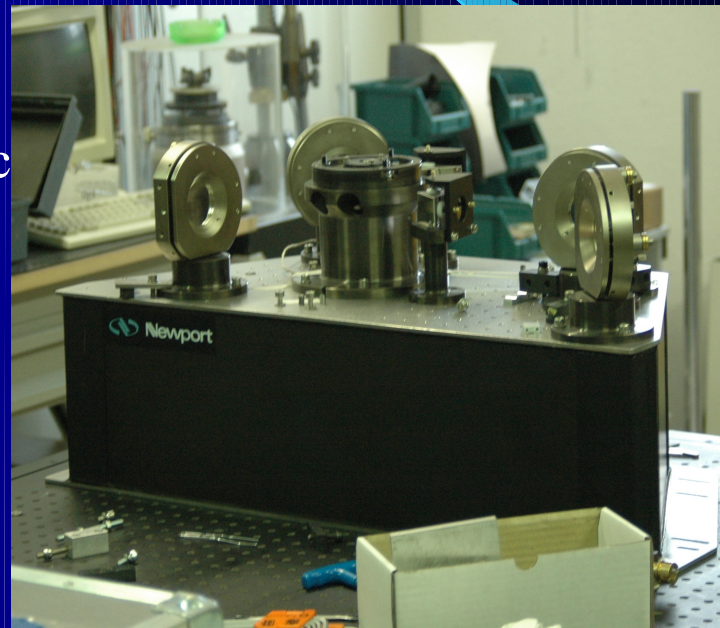
Optical coatings

- Started in 2001.
- Staff: 2 skilled operators.
- Equipments: 2 vacuum chambers-
1m³- electronic beam gun source, 1
ion-assisted machine.
- AR coating for UV,VIS, IR (up to
14 μm) applications.
- Beamsplitter : 2, 3, 4 channels-
neutral , band-pass and polarizing.
- Metallic and dielectric mirror
coating.
- Research and development of
customized optical coatings.

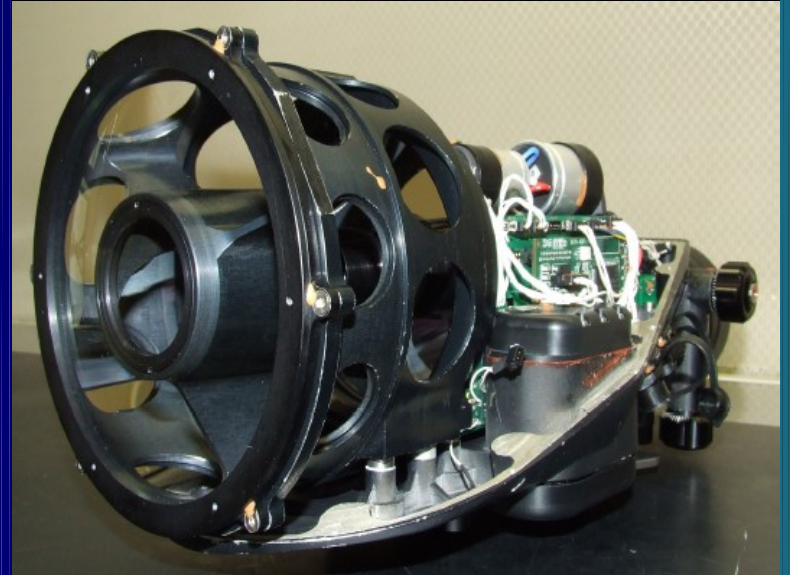
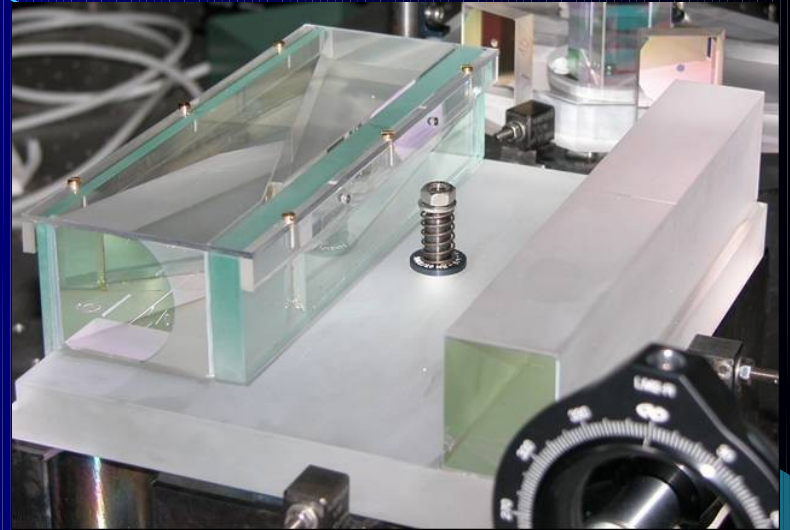


Assembling and testing

- Staff: 2 skilled operators working in clean areas.
- Equipment: no. 2 digital Ø100mm interferometers, autocollimators, interferometric optical bench for radii measurement, stabilized tables, spectro-goniometer (3arc sec resolution), 2 laser centering machines, 1 spectrofotometer 180-3500nm.
- Over 150 m² dedicated room.



Assembling and testing



Business areas

- 60% optical components for industry;
- 20% Military and Aerospace application;
- 10% Professional Astronomy equipment;
- 10% Research.

Targets

- Increasing the production of systems (OEM and SILO brand)
- Increasing the commercial area (import-export)
- Becoming a reference for italian market of optics.
- Increasing European sales, especially to France, Finland, Belgium,

THANK YOU ALL
FOR YOUR ATTENTION!

