

▶ Thales Alenia Space

a global references in
the space programs



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Thales Alenia Space is a joint venture between Thales (67%) and Finmeccanica (33%), and along with Telespazio, forms the Space Alliance, which offers a complete range of solutions and services. It is a key European player in space telecommunications, navigation, Earth observation, exploration and orbital infrastructures. Because of its unrivaled expertise in dual (civil/military) missions, constellations, flexible payloads, altimetry, meteorology and high-resolution optical and radar instruments, Thales Alenia Space is the natural partner to countries that want to expand their space program. The Company has 7,500 employees, with 12 industrial sites in 7 countries (France, Italy, Spain, Belgium, Germany, England and Poland).



▶ Thales Alenia Space Italia

Thales Alenia Space Italia S.p.A. is the Italian component of Thales Alenia Space. The company is based on 40 years of experience gained building over two hundred satellites for telecommunications (Intelsat, Hot Bird, Arabsat, Olympus, Italsat, Artemis, Globalstar, O3b, Iridium-NEXT, Athena-Fidus, SICRAL), navigation (Gloive B, Galileo), science and explo-

ration (Hipaorcos, Beppo Sax, Cassini-Huygens, Rosetta, Integral, Mars Express and Venus Express) and remote sensing (ERS 1 and 2, Envisat, Metop, COSMO-SkyMed, Sentinel).

Without forgetting the significant contribution to the development of orbiting infrastructures (the International Space Station and the logistics modules). The company collaborates with the leading international space industries on the programs of the most prestigious agencies, such as NASA, the European Space Agency and the Italian Space Agency.

Thales Alenia Space Italia has around 2,200 employees and has plants in Rome, Torino, L'Aquila and Milan.



▶ Turin: home to the future

the journey to the stars
begins here

Specialized since the beginning in building scientific satellites, the Thales Alenia Space Italia plant in Turin has seen its role in the field of orbiting infrastructures grow in recent years, contributing more than 50% to the building of the pressurized modules of the International Space Station and becoming a center of excellence at the global level in this field.

► Space is our home

space station modules and exploration probes

The International Space Station is the largest orbiting infrastructure project in the history of mankind. Thales Alenia Space Italia and, in particular, the plant in Turin, gave an essential contribution to its development, building several modules of the "orbiting home". The three MPLMs (Multi-Purpose Logistic Modules), the goods/persons transport modules are among the symbol projects. Other crowning achievements of Thales Alenia Space Italia's activities for the space station in Turin are the Columbus European laboratory for microgravity research; the ATV (Automated Transfer Vehicle) modules, automatic logistics systems with maximum refueling and materials loads for astronauts up to 7,300 kilograms; NODES 2 and 3, elements that connect the pressurized modules of the "orbiting home" together, and the CUPOLA, a special observatory to allow the astronauts on board the station to operate the remote robotic arm during

Today the Thales Alenia Space Italia plant in Turin is a significant industrial reality, perfectly inserted in the productive, economic and social fabric of the Piedmontese capital. Of the over 50,000 square meters of the Turin plant, more than 30,000 are occupied by laboratories, Clean Rooms and production areas. The site's high production level is attested by the participation in the major European scientific missions (Integral, Mars Express, Venus Express, Rosetta, GOCE and Exo-Mars) and in the construction work on the International Space Station modules. The labs and Clean Rooms, where the products are also tested, simulating all deep space environmental conditions, are the heart of the complex production process.

the module assembly operations. Thales Alenia Space also makes the Pressurized Cargo Modules (PCM) for the Cygnus resupply vessel, and it is prime contractor for ESA's IXV and Expert re-entry demonstrators.

The plant's other activity of excellence is that of the scientific satellites and probes intended for exploration of the Universe. Among the most important projects integrated in Turin are the Herschel (for observation of the infrared band in the universe) and Planck (to examine cosmic background radiation) satellites and the GOCE project (to map the Earth's gravity). In the field of exploration of the Universe, after Rosetta (to study the comet 67P/Churyumov-Gerasimenko), Mars Express and Venus Express (to explore the planets having the same names), the Company is now deeply involved in BepiColombo (to explore Mercury) Exo-Mars (for robotic exploration of Mars) and Euclid (for dark energy and dark matter exploration).

