





SÒPHIA HIGH TECH

Company profile

SÒPHIA HIGH TECH is focused on design, development and manufacturing of mechanical components and equipments for applications in aerospace, defense and automotive field. SÒPHIA, certified according to EN 9100:2018, AS9100D, JISQ 9100:2016 Aerospace Quality Management, uses both robust CAD design methods (time and cost saving) and advanced numerical simulation techniques (linear and non-linear FEM Finite Element Method) in order to optimize the product development phase.

Pursuing technological innovation objectives, based on high professional and ethic content, SÒPHIA HIGH TECH incresed its value in manufacturing sector. Production Department is equipped with high precision CNC machines and Additive Manufacturing processes. Today the Companu is able to complete the production cycle in a verticalized process (turnkey project), from the concept to the realization and quality control of mechanical assemblies in the aerospace sector. SÒPHIA's products are subject to accurate dimensional and geometrical checks, during the metrology phase, and process controls to guarantee the maintenance of a high quality standard.

Company management is entrusted by PhDs with high experiences in the aerospace and defense field. it implies not only an effective and mativational coordination of the TEAM but of suppliers that work around the Company. The supply chain that has built SÒPHIA HIGH TECH, from its experience, enjoys a strong trust through the various challenges faced in an optimal way.

This extremely forward-looking and innovative way of working allowed the Company to be qualified as supplier to the major Costructors in the defense, aerospace and automotive sector.

Products | Services | Applications | Technologies

SÒPHIA HIGH TECH core business is focused on product development and manufacturing. The Company has 3 main Business Units:

• BU1 | Prototyping & LRIP

Low Rate Industrial Production with high precision CNC machines and Additive Manufacturing processes. SOPHIA has a strong know-how related to product development, which has allowed the Company to become increasingly involved in the control of the production process. Using this "turnkey" approach, the Customer has the advantage of interfacing with a single company that assumes the complete responsibility for the project.

• BU2 | Design & Simulation

Structural optimization, using CAD-CAD approach, allows SÒPHIA to design lightweight and performative parts using a simulation-driven design approach. Advances in manufacturing technology also allow these sometimes complex designs to be built using both traditional processes like CNC machining, but also through Additive Manufacturing (AM) or 3D printing. Structural optimization has great potential for the aerospace construction industry. The construction industry is responsible for a large share of the worldwide consumption of natural resources, and structural optimization can help to reduce this, so improving the sustainability of the sector.

• BU 3 | Testing Equipments

In R&D are frequently required materials and structures testing fixtures for the execution of tests.

Sòphia High Tech design and manufactures a wide range of test equipments for the testing of materials, made in accordance with UNI, EN, ISO, ASTM, DIN, BS, AF, standards and following custom specifications provided by Customers.

SÒPHIA HIGH TECH is qualified as primary supplier, for design, development and manufacturing field, to the major Constructors in the defense, aerospace and automotive

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sector:

- AVIO SPA (Italy, SPACE field, on VEGA C/E Program)
- LEONARDO SPA (Italy, AERONAUTIC field, LM C130 Program, C27J Program, C-Series)
- Italian Air Force (Italy, LM C130 Program, Air Launch Program)
- CIRA S.C.p.A Centro Italiano Ricerche Aerospaziali (Italy, SPACE field, VEGA C/E Program, SPACE RIDER Program)
- LAMBORGHINI SPA (Italy/Germany, AUTOMOTIVE field, SIAN Program)
- FCA Fiat Chrysler Automobilies (Italy, AUTOMOTIVE field)
- USACE United States Army Corps of Engineers (US, Romanian Defense Dept, Custom AntiBlast doors)
- STRABAG (Austria, DEFENSE Field, Custom AntiBurglar doors)
- SAIPEM (Italy, DEFENSE field, Special Antiburglar door)
- METASENSING (Holland , SPACE field, Guardian, Wether Radars & ECR)
- MYNARIC (Germany, SPACE field)







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