SAFRAN IN GERMANY



SAFRAN IS AN **INTERNATIONAL HIGH-TECHNOLOGY GROUP. OPERATING IN THE AVIATION** (PROPULSION, EQUIPMENT AND INTERIORS), DEFENSE AND SPACE MARKETS. ITS CORE PURPOSE IS TO CONTRIBUTE TO A SAFER, MORE SUSTAINABLE WORLD. WHERE AIR TRANSPORT IS MORE ENVIRONMENTALLY FRIENDLY, COMFORTABLE AND ACCESSIBLE, SAFRAN HAS A GLOBAL PRESENCE, WITH 79,000 EMPLOYEES AND SALES OF 16.5 BILLION **EUROS IN 2020.**



Operating in Germany in our core sectors of aerospace and defense, we are a leading partner to German industrial firms. We have more than 1,800 employees working in 14 locations, and 7 R&D teams in the country, supporting our ongoing technological leadership and innovation capabilities.

AEROSPACE

In Germany, Safran mainly supplies aircraft equipment and interiors to customers worldwide, including Airbus, which is our largest customer in the country. Our engineers in Germany are involved in all of Safran's development programs, with innovative projects such as 3D printing and next-generation connectivity solutions.

Based in Hamburg since 2014, Safran Nacelles assembles and delivers nacelles for the Airbus A320neo, powered by twin LEAP-1A® engines from CFM International (the 50/50 joint company between Safran Aircraft Engines and GE). Also located in Hamburg, as well as in Berlin, Wolfsburg (Lower Saxony) and Donauwörth (Bavaria), Safran Engineering Services provides services for the aerospace and land transport industry.

Since 1991, Safran Helicopter Engines in Hamburg has been providing a range of support services (support by the hour services, logistic hub, technical support, training, etc.) and repair maintenance services for some 2,200 helicopter engines operated by 300 customers, located in 29 countries (Scandinavia, Central and Eastern Europe, Russia and Central Asia). In Germany, 60% of turbine helicopters are powered by Safran Helicopter Engines, which represent a fleet of 850 engines (60% operated by civil and police operators and 40% for military applications).

In the aircraft cabin field, the Safran Passenger Innovations plant in Wessling (near Munich) works on aircraft on-board and towards the ground connectivity. Safran Cabin sites located at Herborn and Burg (Hessen) specialized in cabin interior completion, design and make galleys, galley equipment and lavatories for airlines and aircraft manufacturers all over the world.



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14 locations



4,000 fiberoptic gyros produced per year Moreover, to improve passengers' flight experience and facilitate the work of flight attendants, ground and maintenance crews, Safran Cabin Hamburg site produces aircraft cabin control systems, integrated electronic components, sensors and instrument panels.

In the space sector, the Group is also present in Germany through ArianeGroup, a 50/50 joint venture between Airbus and Safran, which manufactures and integrates upper stage propellant in Bremen, produces combustion chambers in Ottobrunn (Bavaria) and has engineering offices and test facilities in Lampoldhausen (Baden-Württemberg).

DEFENSE

Safran is a long-standing trusted partner to the German aerospace and defense industries. Based in Murr, in the Stuttgart region, Safran Electronics & Defense designs, develops and produces inertial sensors and equipment for flight control and navigation systems, as well as for industrial equipment. The site also offers maintenance and repair services in the Defense field. Safran Electronics & Defense produces over 4,000 fiberoptic gyros (FOG) a year in Germany, as well as other systems equipment for defense and space applications.

Located in Bergisch Gladbach (near Cologne), Safran Data Systems provides flight test instrumentation and telemetry solutions for the most challenging environments. The plant specializes in the development and production of on-board and ground modular data recorders with state-of-the-art telemetry capabilities.

Safran is also a partner in 3 Germany-based joint-ventures:

Europrop International GmbH, a joint venture between Safran Aircraft Engines, ITP, MTU and Rolls-Royce that makes the TP400 turboprop engine for the Airbus A400M military transport.

- MTR GmbH, a joint venture between Safran Helicopter Engines, MTU and Rolls-Royce that makes the MTR 390 turboshaft engine powering the Tiger military helicopter.
- AES Aerospace Embedded Solutions GmbH, a joint venture between Safran Electronics & Defense and MTU that is developing electronic equipment for civil and military applications.

Safran is also partnering with Germany on European defense projects, such as the Future Combat Air System (FCAS), as well as the European Main Battle Tank (EMBT), the Main Ground Combat System (MGCS) and the Maritime Airborne Warfare System (MAWS), for which the Group is working with local partners.

SUPPORTING EDUCATIONAL INITIATIVES AND R&T

Germany is a key Safran partner for European R&T projects. Airbus, GE Research Center and DLR (German Centre for Aeronautical and Space Research) cooperate with the Group under the LuFo and Clean Sky 2 projects.

Safran is highly involved in educational support initiatives in Germany. For instance, our subsidiary AES Aerospace Embedded Solutions GmbH is one of the founders of the Embedded Systems Software Engineering Institute (SEI), created under the impetus of the software engineering committee of the German aerospace industries association, BDLI. SEI is funded by the Bavarian economy, media, energy and technology ministry, and is part of fortiss, a research institute associated with the Technical University of Munich (TUM).

In addition, the Group has developed partnerships with Hamburg Technical University, ZAL which is the research center for advanced cabin technology, also located in Hamburg, and Munich Aerospace which is an international research and technology center.

