Media release

Pfäffikon, Schwyz, Switzerland, June 16, 2025

Oerlikon at the Paris Air Show 2025: Innovations for Aerospace and Defense

As the latest aircraft models take to the skies over Paris, Oerlikon will also be on board: with solutions that make aviation safer, more efficient and more sustainable. At the 2025 Paris Air Show, Europe's premier trade fair for civil and military aerospace, Oerlikon will showcase its broad portfolio of innovative cutting-edge technologies under the theme "We make products better. For Aerospace and Defense".

Whether in commercial aircraft or fighter jets, Oerlikon's solutions enhance efficiency and reliably protect critical components such as landing gear or turbine parts from corrosion, erosion and wear. The company offers vertically integrated manufacturing of complex assemblies – from machining and sheet metal processing to honeycomb structures, brazing, coating, and final assembly – alongside comprehensive service solutions. This year's spotlight is on the latest generation of high-performance coatings, and the systems required to apply them, as well as components produced using 3D printing.

Additive manufacturing enables the realization of highly complex designs while significantly reducing component weight – a decisive factor in lowering fuel consumption. In Paris, Oerlikon will unveil innovative 3D printed cooling plates, which can be deployed in fighter jets. Oerlikon recently commissioned an additional, state-of-the-art additive manufacturing facility in Huntersville (USA) to produce these and other defense and aerospace components for U.S. manufacturers.

Technology that takes off - and protects

A standout at the Oerlikon booth is an Eldim stator vane designed to direct and optimize airflow in turbines. These critical components withstand the extreme conditions inside aircraft turbines thanks to advanced coatings such as the BALORA PVD MCrAlY and BALINIT TURBINE PRO, both featured in Paris. In turbine combustion chambers, temperatures exceed 2,000 degrees Celsius – conditions that demand specialized thermal barrier coatings developed by Oerlikon.

Oerlikon’s engineering teams are always focused on increasing turbine efficiency to deliver more power with less fuel. At the same time, coatings extend the service life of the components, improving equipment availability and operational safety.

New diamond coating for lightweight construction materials

With BALDIA VARIA, Oerlikon is introducing a new, highly developed diamond coating for cutting tools. It has been specially developed for machining lightweight and ceramic materials such as carbon fiber reinforced plastics (CFRP), composite materials, graphite and high-performance ceramics. These materials are highly abrasive and place special demands on the tools used.

For example, CFRP, enable the construction of lighter aircrafts such as the Airbus A350. They however place exceptional strain on the tools used in machining. BALDIA VARIA ensures more efficient machining, reduces manufacturing costs and increases component quality at the same time – a decisive advantage in an industry with the highest precision requirements.

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Trusted partner to leading manufacturers in the industry

Through targeted investments, strategic partnerships and an uncompromising commitment to quality, Oerlikon has established itself as a key technology partner to the aerospace and defense industry. Today, the company supplies all major component manufacturers and OEMs in commercial and military aviation, as well as the defense and space industries in Europe, the U.S. and India. Leading OEMs in the aviation and defense market rely on solutions from Oerlikon – from material development to coating, components and additive manufacturing.

Growth market aerospace

Aerospace and Defense is one of Oerlikon's strategic growth drivers: In 2024, the company generated over CHF 200 million in sales from these industries – accounting for 14% of the core business with surface technologies. In Wohlen, Switzerland, Oerlikon operates a globally unique turbine test stand and a laser competence center where, among other things, rocket components are manufactured using the Direct Energy Deposition (DED) additive process. Experts across more than 30 specialized sites worldwide develop solutions that meet the highest standards, including AS9100 and Nadcap.

Defense: Innovation for protection

The defense industry increasingly benefits from Oerlikon's expertise, particularly in additive manufacturing. Whether in drones, satellites, missiles, or armored vehicles, Oerlikon's coatings provide reliable protection against heat, wear and detection. The company is currently developing specialized coatings that make military equipment even more resilient and harder to detect – contributing to the safety of personnel and assets.

Shaping the future – together

Oerlikon actively participates in international research initiatives such as the EU-funded InShaPe and DISCO2030 projects and collaborates closely with leading manufacturers to drive the development of next-generation manufacturing technologies.

The message from Paris is clear: Oerlikon is shaping the future of civil and military aerospace.

Additional Information
The media release can be found at www.oerlikon.com/pressreleases and www.oerlikon.com/ir.

About Oerlikon
Oerlikon (SIX: OERL) is a global leader in surface technologies with a subsidiary for manmade fibers solutions, Barmag. With a unique portfolio in surface engineering, advanced materials, coating equipment and components, we make products better by improving efficiency, durability and sustainability. Oerlikon serves a wide range of industries, including Aerospace, Automotive, Defense, Energy, Medical, Luxury and Semiconductors. Headquartered in Pfaeffikon, Switzerland, the Group has a global presence with over 12 000 employees across 199 locations in 38 countries, achieving sales of CHF 2.4 billion in 2024.

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