

Press release

Liebherr presents innovative solutions at NBAA-BACE 2023

- Liebherr-Aerospace welcomes visitors at its booth in the North Hall, booth no. N4414
- Exhibits include electrification of aircraft systems as well as innovative solutions for increasing aircraft efficiency and enhanced passenger and crew comfort
- Liebherr is already presenting solutions today for tomorrow's aircraft platforms and on its way to a model-based enterprise

As a major supplier to the international business aviation industry, Liebherr-Aerospace will participate in NBAA-BACE from October 17 to 19, 2023 in Las Vegas, NV (USA). The company will be represented in the North Hall at stand N4414. On display will be the latest innovations such as modular electro-mechanical actuators, solutions for local, decentralized hydraulic supply as well as environmentally friendly air humidification systems for comfort on board.

Toulouse (France), October 2023 – The transformation of the aviation industry is in full swing. It is not only the post-pandemic recovery and the drive to reduce emissions that are setting the direction. The requirements for digital solutions across the entire value chain and for the next generations of business aircraft with new technologies also require rethinking.

Liebherr-Aerospace's presence at NBAA-BACE demonstrates that the company has accepted the challenges and is ready for these industry transformations. With investments in research and technology far above the industry average, Liebherr is making a significant contribution to the development of efficient and environmentally friendly air transport.

Many years of experience in the design and integration of air management, flight control and actuation systems, landing gears and in the field of signal and power electronics make Liebherr an indispensable partner to aircraft manufacturers.

Based on its core competencies, however, Liebherr is continuously looking beyond the limits of what is feasible today. Electrification, 3D printing or hydrogen technologies can make a huge contribution here.

Leader in the development of electromechanical actuators

Liebherr-Aerospace has always been a leader in the research and development of electromechanical actuators (EMA) for medium to large commercial aircraft. Now the company is also adding smaller actuators to its portfolio.

The new concept specifically addresses business jets, commercial planes, helicopters, as well as the emerging AAM (Advanced Air Mobility) sector. Liebherr's EMA family concept benefits from the experience gained from millions of flight hours in numerous aircraft programs with actuators and associated electronics over the past decades.

The development approach offers scalability for small installation spaces, a favorable power-to-weight ratio and high reliability.

Positioned for the future with electrification and decarbonization

Liebherr has also been driving forward the electrification of today's aircraft for many years and also offers successful applications for the future in this area. In aircraft that will be more electric in the future, the engine will be decoupled from onboard power consumers for increased efficiency. Electric power will replace bleed air or hydraulic systems and enable the introduction of electric air management and actuation systems. Liebherr's exhibits show that the company can already master these requirements today: Electromechanical actuators (EMA) and an electric motor pump (EMP) as core element for decentralized hydraulic power supply solutions are on display.

Air humidification systems for enhanced travel comfort

In order to avoid a low relative humidity level on board (less than 5%), Liebherr offers an air humidification system that constantly monitors and keeps the level between 20% and 25% at room temperature of around 20 °C to 24 °C. Human organs sensitive to air dryness are not stressed during flight. The system has multi-zone humidity control capability and is easy to maintain.

On the way to model-based engineering

In addition, digital means are revolutionizing the way Liebherr designs, builds and maintains aircraft systems. On its way to becoming a model-based company, Liebherr is exchanging models with customers as early as possible to contribute to more efficient aircraft design and development.

About Liebherr-Aerospace & Transportation

Liebherr-Aerospace & Transportation SAS, Toulouse (France), is one of eleven product segment control companies within the Liebherr Group and coordinates all activities in the aerospace and transportation systems sectors.

Liebherr-Aerospace is a leading supplier of systems for the aviation industry and has more than six decades of experience in this field. The range of aviation equipment produced by Liebherr for the civil and defense sectors includes flight control and actuation systems, gears and gearboxes, landing gear and air management systems as well as electronics. These systems are deployed in wide-bodied aircraft, single aisle and regional aircraft, business jets, defense aircraft, defense transporters, defense training aircraft and civil and defense helicopters.

Liebherr's aerospace and transportation systems division employs around 6,000 people. It has three aviation equipment production plants at Lindenberg (Germany), Toulouse (France) and Guaratinguetá (Brazil). These production sites offer a worldwide service with additional customer service centers in Saline (Michigan/USA), Seattle (Washington/USA), Montreal (Canada), Hamburg (Germany), Dubai (UAE), Bangalore (India), Singapore and Shanghai (People's Republic of China).

About the Liebherr Group

The Liebherr Group is a family-run technology company with a highly diversified product portfolio. The company is one of the largest construction equipment manufacturers in the world. It also provides high-quality and user-oriented products and services in a wide range of other areas. The Liebherr Group includes over 140 companies across all continents. In 2022, it employed more than 51,000 staff and achieved combined revenues of over 12.5 billion euros. Liebherr was founded in Kirchdorf an der Iller in Southern Germany in 1949. Since then, the employees have been pursuing the goal of achieving continuous technological innovation, and bringing industry-leading solutions to its customers.

Images



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Electromechanical actuator – © Liebherr

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