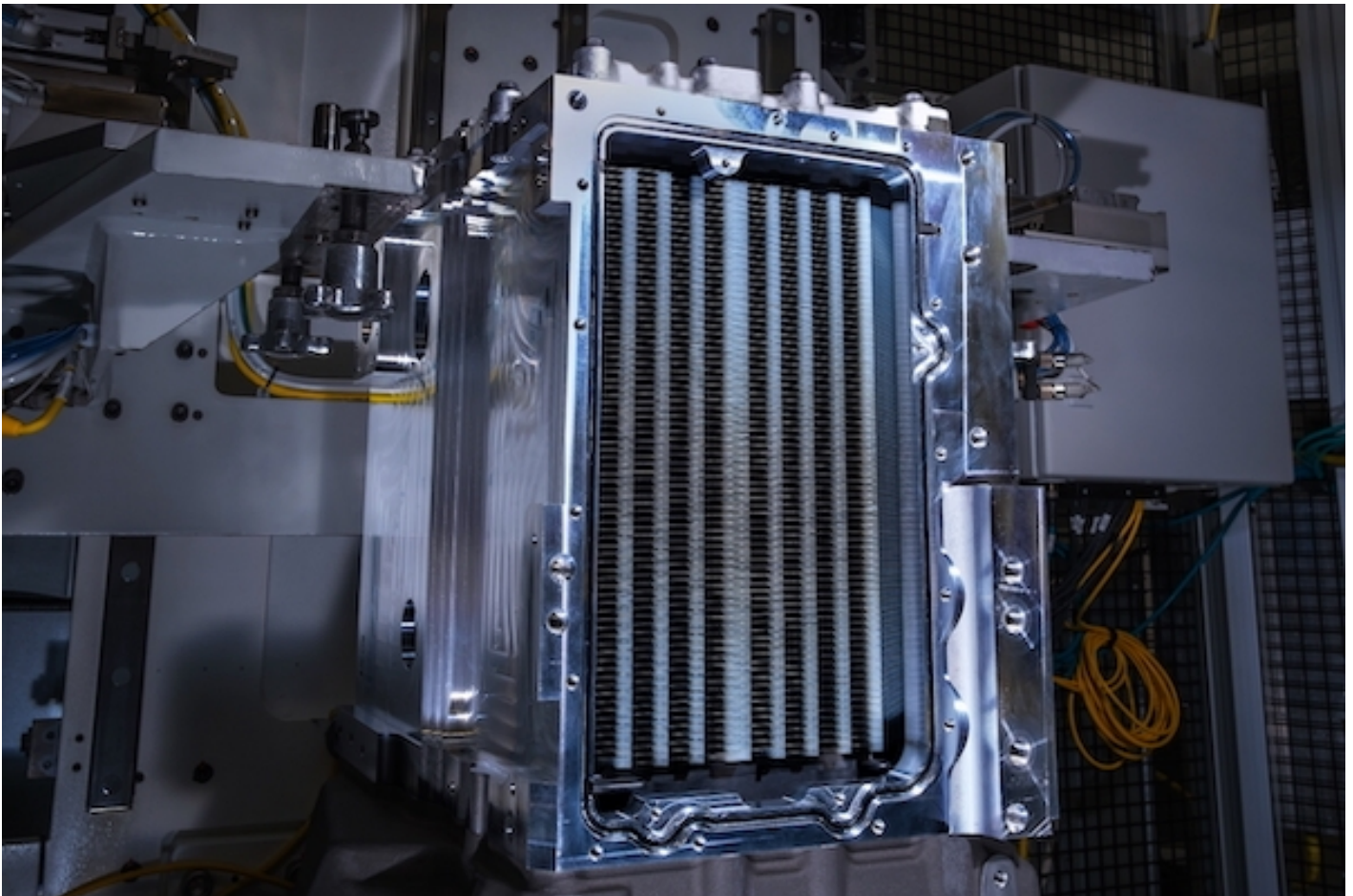




LIEBHERR AND GM TO DEVELOP HYDROTEC FUEL CELL-BASED ELECTRICAL POWER GENERATION SYSTEM FOR AEROSPACE APPLICATION

News / Manufacturer



Liebherr-Aerospace and GM have recently signed a joint development agreement covering the development of an electrical power generation system to demonstrate how hydrogen fuel cell-based power systems could be used in aircraft application. This demonstrator will be based on GM's HYDROTEC hydrogen fuel cell technology. The construction and testing of this demonstrator will take place in a specialized laboratory multi-system integration testing at Liebherr-Aerospace in Toulouse (France). The demonstrator will incorporate GM's precisely crafted fuel cells, HYDROTEC power cube and fuel cell system, along with the GM's controls and models.

GM, a leader in fuel cell technology, and Liebherr, with extensive expertise in technology integration in aircraft, are pooling their skills for this project. Lower emissions and lower noise than conventional aircraft operation: with these fuel cell advantages, among other things, both companies see a great opportunity for use in aviation. GM, through its relationship with Honda, is one of the world's most advanced fuel cell developers in many industrial fields, now entering into

aeronautics.

GM's fuel cell business benefits from decades of investment in engineering and manufacturing expertise with high volume processes that can bring economies of scale to fuel cell production.

"Aircraft are a great litmus test for the strength and versatility of our HYDROTEC fuel cells," said GM Executive Director – Global HYDROTEC Charlie Freese. "Our technology can address customer needs in a wide range of uses - on land, sea, air or rail, and this collaboration with Liebherr could open up new possibilities for aircraft, transitioning to alternative energy power sources."

Liebherr is one of the world's leading suppliers of integrated on-board aircraft systems. Liebherr's integrated aircraft system concept benefits from decades of investment in on-board thermal management and on-board power management.

"The change from the conventional to a hydrogen technology-based electrical power generation system means major systems modifications on board the aircraft that could result in better, more efficient performance of the plane. This we want to prove and test thoroughly. The advantage of GM's HYDROTEC fuel cell technology is that it has shown promise in extensive automotive and military programs, where it has shown to be reliable from the engineering and manufacturing perspectives. We are developing low emissions aerospace solutions," explains Francis Carla, Managing Director and Chief Technology Officer, Liebherr-Aerospace & Transportation SAS.

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