



The oxygen supply in passenger aircraft has now been optimized.

Breathing at any height with OXYFLY

As the altitude increases, the air gets thinner. To be precise, the amount of oxygen that is pumped into the air sacs (lungs) is reduced. From an altitude of 5,000 meters and above, we breathe in only half as much of this vital gas. That is why pressurized cabins create a pressure level equivalent to that on an alpine peak of 2,400 meters. But even this pressure level often leads to headaches, tiredness and discomfort. Dürr Technik has therefore developed the OXYFLY oxygen generator, which constantly supplies passengers with oxygen produced on board. Now, Lufthansa Technik AG also install a modified version of OXYFLY in its VIP aircrafts.

Being able to breathe at cruising altitudes as if you were on the ground is truly a luxury – a luxury that Lufthansa Technik AG offers its passengers on VIP aircraft. This is made possible by the “On Board Oxygen Generation System” (OBOGS), which the specialists in the VIP & Executive Jet Solutions Division of Lufthansa Technik AG have developed in cooperation with the German manufacturer Dürr Technik. Using this oxygen generator made by Dürr Technik, Lufthansa Technik AG now provides passengers with a continuous supply of therapeutic oxygen produced on board.

Lufthansa Technik AG has now certified this system. The experts have successfully carried out a large number of tests according to RTCA / DO-160G and FAR Part 25 – e.g., Temperature Compatibility, Electromagnetic Compatibility, Vibration Protection and Flammability & Fire Resistance. A supplemental type certificate (STC) issued by the European Aviation Safety Agency has also been obtained to confirm the safety of the installation.

OBOGS is a modification of the OXYFLY oxygen generator made by Dürr Technik. OXYFLY is primarily used by pilots and passengers of unpressurized aircraft. An oil-free compressor presses air into an oxygen module that increases the oxygen concentration to as much as 96%. Via hose-sets with nasal cannulas the aircraft occupant breathes in pleasantly preheated pure oxygen. This enables planes without pressurized cabins and their occupants to fly up to an altitude of 5,500 meters (18,000 ft). Flying above the cloud ceiling, they reach their destination quicker and efficiently with lower fuel consumption.

The use of OXYFLY offers many other advantages. The plane flies mostly “above the weather” and thus avoids an important risk factor. Unlike systems that use oxygen bottles, the unlimited oxygen supply works completely without a storage tank. Because the oxygen is constantly being produced freshly on board, no oxygen bottles have to be bought, filled, stored and transported. Thanks to OXYFLY, stopovers for refilling oxygen bottles are a thing of the past. Thus pilots can plan their route and altitude more flexibly and comfortably thereby reducing tiredness on night flights or on flights involving frequent climbs. The fact that all persons on board are optimally supplied with oxygen is good for their health and avoids headaches and dizziness. The hazards associated with oxygen bottles being transported on board can be excluded with OXYFLY.

Currently Dürr Technik is cooperating with partners in the aviation industry with the intention of applying for STCs for further aircraft types. As OXYFLY is also a part of the standard equipment of Vulcanair's A-Viator model, Dürr Technik is looking to equip further planes with the oxygen generator as a standard feature. Moreover, Dürr Technik is planning the use of the oxygen generator in military aircraft.

Caption:



With the new “On Board Oxygen Generation System” (OBOGS) passengers are never out of breath, as the innovation of Lufthansa Technik AG and Dürr Technik supplies passengers with freshly produced oxygen. The system is based on the OXYFLY made by Dürr Technik.

Photos: Sonja Brüggemann

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About Dürr Technik:

Dürr Technik belongs to the Dürr group with worldwide branch offices and partners. The group of companies has in total 1,100 employees. The head-quarters of Dürr Technik are located in Bietigheim-Bissingen. Besides Germany, Dürr Technik is also represented with its own subsidiaries in Great Britain, USA and China. For more than 35 years the company has been dealing in oil-free compressor and pump technology and offers a wide range of small compressors and vacuum pumps as well as customized solutions.