

Liebherr to Supply Air Cycle Air Conditioning Systems for the 1st Series of Deutsche Bahn's ICE 3

Korneuburg (Austria), September 2014 – Liebherr-Transportation Systems has been contracted by Deutsche Bahn to convert one unit of the first series of its fleet of ICE 3 trains to state-of-the-art air cycle systems.

Deutsche Bahn (DB) has selected Liebherr-Transportation Systems to equip one unit from the first series of its fleet of ICE 3 trains with new air cycle air conditioning systems. Liebherr's cold-air systems have been tried and tested for many years in the second series of the ICE 3 fleet. The contract concluded between the two companies initially provides for the conversion of one eight-section train in the coming year followed by a one-year testing period. DB will then make a decision regarding the conversion of all 53 ICE 3 trains of the 1st series as part of a redesign scheduled to start in 2016.

Absolutely environmentally-friendly air cycle technology

The cold-air systems are based on an absolutely environmentally friendly technology. The so-called process air is taken from the surroundings and expanded with an electrically powered cooling turbine. The resulting reduction in pressure effects a simultaneous reduction in temperature. An air-air heat exchanger is used to draw energy from the inflowing air, which is then fed into the passenger compartment. In the next step, the process air in the open circuit of the cold-air system is re-compressed to ambient pressure and then released to the outside. As Liebherr's cold-air systems only consist of a few components, they are not only of low weight, but also simple and inexpensive to service. In addition, the system is characterized by very low operating costs and low energy consumption.

The new contract with DB is a milestone for Liebherr and another demonstration of confidence – both in Liebherr-Transportation Systems as a company and in the future viability of its cold-air technology.

Liebherr-Transportation Systems – Renowned Manufacturer of Railway Technology

Liebherr-Aerospace & Transportation SAS in Toulouse (France) is one of eleven divisional control companies in the Liebherr Group and coordinates all activities in the fields of transportation and aviation equipment. It employs around 4,900 people worldwide.

Liebherr's transportation systems division deals with air conditioning, hydraulic actuation systems and electronic components for rail vehicles of all kinds, and is backed by many years of experience in the development and manufacture of these technologies. In addition to its own sales and service centers, the division has access to the Group's development and service facilities around the world. This global set-up means that Liebherr-Transportation Systems is there for its customers wherever they may be.

Captions

Liebherr_Air Cycle Air Conditioning Unit.jpg

The eco-friendly air-cycle air conditioning system from Liebherr has already proved its worth in day-to-day train operations.

Contract Signature DB AG_InnoTrans2014.jpg

Andreas Busemann, Member of the Board (Production) of DB Fernverkehr AG (left), with Dirk Junghans, Managing Director Sales, Marketing and Customer Service (middle) and Andreas Buhl, Managing Director Research and Technology (right), of Liebherr-Transportation Systems GmbH & Co KG, at the contract signature ceremony during InnoTrans 2014

Contact person

Ute Braam

Corporate Communications

Phone: +49 8381 46 4403

E-mail: ute.braam@liebherr.com

Published by

Liebherr-Aerospace & Transportation SAS

Toulouse, France

www.liebherr.com