

Liebherr Supplies Additional Air Cycle Air Conditioning Systems for Deutsche Bahn's ICE 3.1

September 2016 – Liebherr-Transportation Systems has supplied eight more of its environmentally friendly air cycle air conditioning units to Deutsche Bahn for the second vehicle set of the ICE 3.1.

After the company delivered the first air conditioning system for the ICE 3.1 (first series) Redesign Program just six months after signing the contract with Deutsche Bahn in 2015, Liebherr has now provided another eight air cycle air conditioning systems on time. Deutsche Bahn installed the units in ICE 3.1 cars at their facility in Nuremberg, where they were put into operation shortly afterwards.

The air cycle air conditioning systems represent the only alternative and reliable refrigerant-free air conditioning technology currently available on the market. Air conditioning systems with the same design by Liebherr have already been deployed successfully for more than ten years in 13 ICE 3.2 (second series) multiple unit trains.

This new order from Deutsche Bahn is an important milestone for Liebherr and a further sign of confidence – both in Liebherr-Transportation Systems as a company, and in the future viability of air cycle technology.

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.

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 5,200 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.

Caption

liebherr_air cycle air conditioning unit.jpg

The environmentally friendly air cycle air conditioning system from Liebherr works

reliably in day-to-day train operations.

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2/2