## Environmentally Friendly Air Humidification System

Enhanced Passenger Comfort



# LIEBHERR

#### Advantages

Usually on a flight, fatigue dry noses and throats, sore eyes and infections for example are caused by the low relative humidity level on board (less than 5%). This can be avoided with the Liebherr air humidification system: The relative humidity level is constantly monitored and controlled to improve the comfort and health of passengers and crews.

- Healthier cabin environment
- Increase of aircraft value
- Cost reduction through reduced maintenance work
- First class worldwide customer service network
- Liebherr-Aerospace's vast experience in air management technology for many fixed wing and rotor aircraft



#### Features

Our air humidification systems create an unmatched level of comfort for the passengers.

- Cabin relative humidity level between 20% and 25%
- Relative humidity level generation at room temperature of around 20°C - 24°C. Human organs sensitive to air dryness are not stressed during the flight
- 100% elimination possible of the following aqua germs: Pseudomonas Aeruginosa, Burkholderia Cepacia, Serratia Marcescens, Legionella Pneumophilia
- Optimized water consumption
- Low power air consumption
- Easy maintenance
- Steam generation using free available energy from the Environmental Control System



## Function

- Engine Bleed AirPowered Humidifier
- Steam is produced from water provided by the aircraft's potable water tank
- The water is heated and evaporated inside a boiler (equipped internally with a water/air heat exchanger)
- The hot air supplied to the boiler does not generate any additional fuel consumption since it is coming from trim air through the aircraft's engines that participate to the cabin temperature regulation by flow mixing: it uses free available energy
- The boiler generates sterile steam without any mineral deposit in the air distribution ducts
- The cabin humidity level is controlled by a closed control loop
- The system has multi-zone humidity control capability



## Product description

#### Global 5000/6000/6500 and Falcon 7X/8X

System total weight (kg):	12.5
Boiler weight (kg):	11
Cabin sensor:	1
Exchanger technology:	plates
Environmental qualification:	DO160 C
Area:	pressurized



#### Product description

#### Falcon 6X Humidifier

System total weight (kg):	12
Boiler weight (kg):	8.5
Cabin sensor:	2
Exchanger technology:	tubes
Environmental qualification:	DO160 G
Area:	pressurized or unpressurized



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