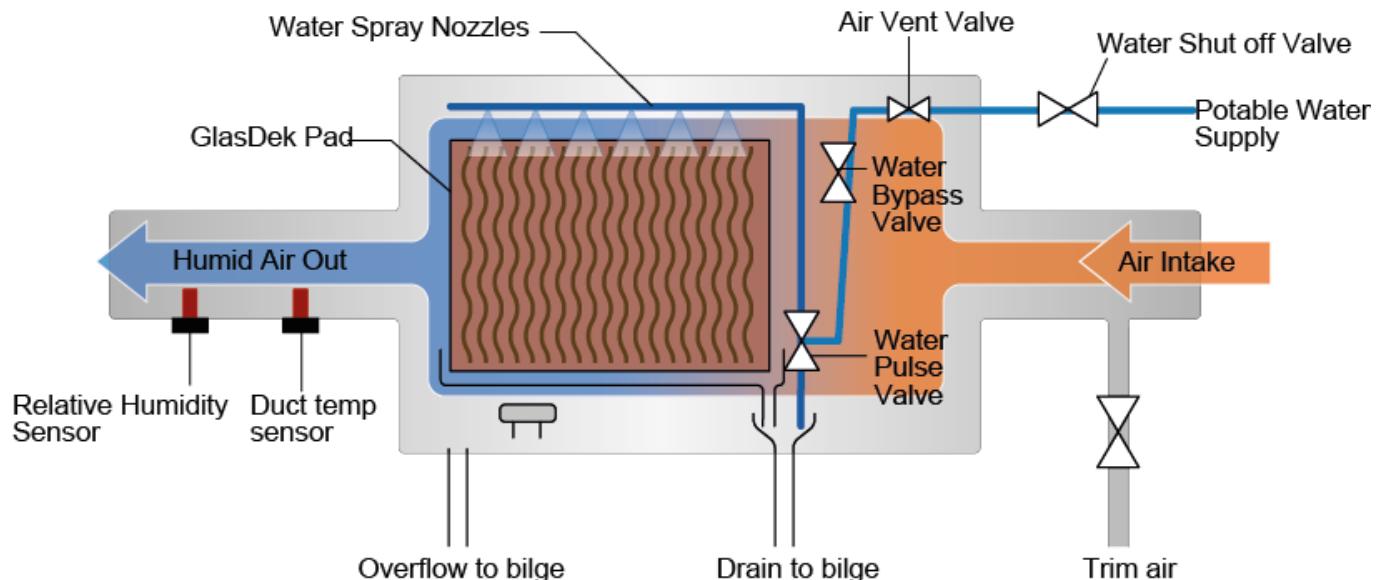


# A balanced future with CTT Systems

This is a special feature from PAX Tech's July Cabin Hygiene, Seating & IFEC 2020 edition.



Cabin Humidification System by CTT Systems

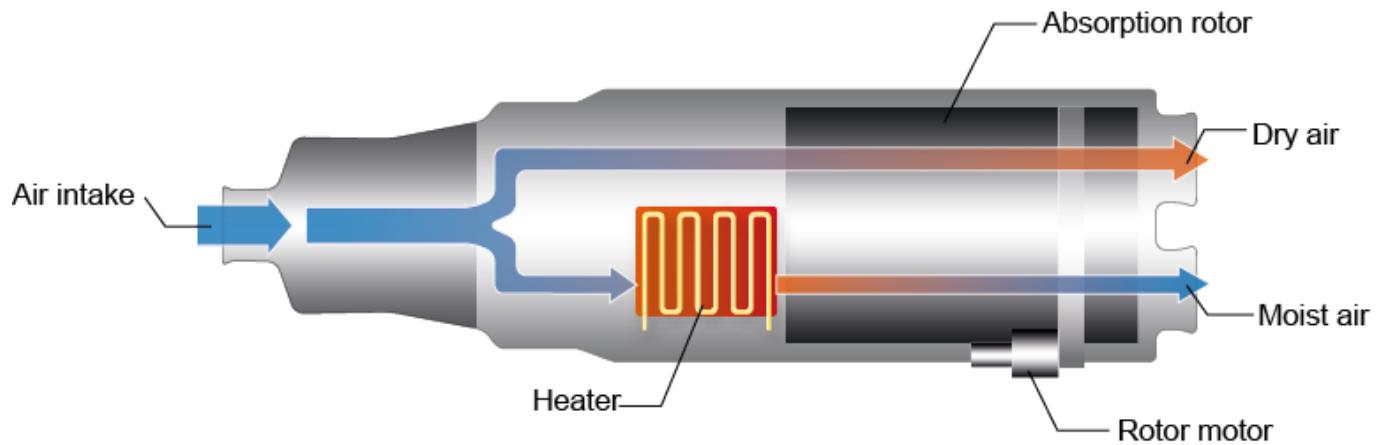
From seating to inflight entertainment and connectivity, this issue of *PAX Tech* examines the intelligent innovations that help the industry adjust to the irreversible impacts of the COVID-19 pandemic. Headquartered in Nyköping, Sweden, [CTT Systems AB](#) provides a solution to another, less visible dilemma facing the industry: cabin air too dry for passengers' to effectively fight off viruses and bacteria.

CTT Systems supplies two subsystems that work in unison to deliver optimal humidity in the cabin: The Zonal Drying system and the Cabin Humidification system, explains Peter Landquist, Vice President of Sales and Marketing.

The Zonal Drying system reduces the fuselage condensation that builds while inflight, Landquist says. When the aircraft lands, this frozen layer melts, creating excess water. Up to 300 kilograms of weight is trapped in the insulation blankets which has negative effects on reliability for parts, such as computers, antennas, sensors and connectors, Landquist says. The CTT system instead distributes dry air effectively preventing humid air from reaching the cold fuselage structures, benefiting both the aircraft and the environment, he says.

The Cabin Humidification system increases cabin humidity to a comfortable level similar to that experienced on the ground. Humidifiers can be installed in specific zones, such as premium cabins, which are prone to dryness since there are fewer passengers. Water from the aircraft's potable supply is applied to a pad within the humidifier which is integrated in the air conditioner supply duct for the cabin zone that is meant to be humidified. The system adds humidity to the aircraft ventilation system.

As a result, passengers and crew experience less dryness in the mouth and nose on long-haul flights, maintaining the natural mucus barriers that help prevent germs and viruses from entering the body, Landquist explains. It also benefits the airline and environment by using the excess potable water while inflight avoiding the unnecessary dumping of unsanitary water.



### CTT Systems' Zonal Drying system

"The airlines have recognized that improved cabin humidity is needed for improved comfort, wellbeing and also for passenger health as part of reducing the risk of catching a virus or bacterial infection," Landquist says. "I also believe that future passengers, especially Business travelers, [who may be] keen on wellbeing, health, being in shape when they meet their customers and family, will request these kinds of systems that improve the cabin environment."

Humidification selection from CTT Systems is offered on A350 and 777X for crew rest zones and First and Business class. The company has provided approximately 100 retrofitted VIP inflight Cabin Humidification systems for various 737s, 321neo and more. The retrofit humidifier design is EASA certified. Lufthansa has installed the Cabin Humidification system on all 14 A380 First Class cabins. For Zonal Drying system retrofit installation, CTT Systems has an agreement with Lufthansa Technik in Hamburg. Two other major airlines have selected the humidification system for A350 Business Class while two others have selected it for 777-9 First and Business Class.