

# In pursuit of pure air with CTT Systems

This is a special feature from *PAX Tech's* [April 2024 Seating & IFEC issue](#), on [page 28](#).



CTT Systems' Humidifier Onboard helps create ground-like levels of humidity, removing the negative impact of dry air

In 2022 the UN General Assembly passed a resolution declaring [access to a healthy environment a universal human right](#).

Reacting to the historic move, Soo-Young Hwang, a Legal Officer with the UN Environment Programme (UNEP) commented that "the right to breathe clean air is an integral component of the right to a healthy environment."

While the resolution targets the air outdoors, the conversation has moved indoors, and to spaces like the aircraft cabin, where, at 10,000 meters the air becomes extremely dry, an issue exacerbated by the fact air in the cabin is typically refreshed every two minutes, quickly dehydrating people.

This can cause a variety of problems such as dry eyes and respiratory obstructions.



Ola Häggfeldt, Chief Commercial Officer of CTT Systems

Speaking to *PAX Tech*, Ola Häggfeldt, Chief Commercial Officer of [CTT Systems](#), explains that cabin humidity comes mainly from the passengers' personal evaporation, which is about 70 grams per hour. It is a simple equation—the less people there are, the dryer the cabin. That is why First Class and the flight deck can feel like a desert environment, while those in Economy have the best air onboard, he says.

But help is at hand to ensure the whole aircraft benefits from good air quality.

CTT Systems' Humidifier Onboard, Pure Air, has an active carbon filter that reduces zone and Volatile Organic Compounds (VOC) —bleed air gases— and eliminates fumes such as exhaust, fuel and de-icing fumes. The result, says Häggfeldt, is that air delivered to the passenger cabin is humidified and filtered to ground-like conditions.

This creates a better working environment for pilots and crew, who can avoid fatigue and a reduced immunity. Ultimately, better health leads to less sick leave for cabin crew. Passengers will also feel better overall, hydrated and rested.

Humidifier Onboard is available as supplier-furnished equipment (SFE) for 787 and 777X aircraft as well as A350 models. It is available as a retrofit option on all aircraft. Retrofitting is easy as installation occurs below the floor of the cargo bay in the triangle area and starts working immediately.

According to Häggfeldt, there are currently more than 60 airlines using Humidifier Onboard for the flight deck and crew rest on 787 and A350 aircraft. Additionally, eight full-service carriers have selected the solution for the passenger cabin, including [Air India](#), [China Southern](#), [Lufthansa](#) and [Turkish Airlines](#), with future deployments set for [ANA](#), [Emirates](#) and [Qantas](#).