



Engineered Sustained
IAQ Solutions for Airports

Sustainable Airport IAQ Design

In non-industrial areas such as large cities it is common to find products of incomplete combustion emitted from engine exhaust being transferred throughout your facility by the air condition system. It is also very common to see outdoor air intakes in the vicinity of jet engine exhausts in airports and helicopter, diesel trucks, and generators exhaust.



The emissions from aircraft as well as vehicles used by passengers and airport services contribute significantly to the abundance of odorous pollutants found in terminals and control towers. A great portion of these pollutants originates from the outdoor air and enters the indoor environment via ventilation systems, physical openings and cracks. Furthermore, smoking, bad cleaning habits and poor maintenance of the ventilations system filters largely contribute to further increase of their concentration.

Genesis Air Photo-Catalytic Oxidation

- Three Stage Process
- Merv Rated Filtration - UVGI - PhotoOxidation
- The most powerful advanced oxidation systems are based on the generation of hydroxyl radicals.
- Hydroxyls convert and breakdown biological contaminants at a molecular level.
- Hydroxyls oxidize and convert these contaminants into benign CO₂ and H₂O.
- In odor reduction applications, hydroxyl radicals accelerate the breakdown of most volatile organic compounds (VOCs) by destroying the molecular bonds.
- UL, CARB and EPA listed
- 15 year catalyst life cycle

Contact your local Trane Account Manager for more information

Sources of Contamination

- Aircraft landing Takeoff Operations (LTO)
- Ground Support equipment (GSE)
- Ground Access Vehicles (GAV)
- Power Generation
- Boilers
- Fire Training Events
- Shuttles, Taxi and Bus Operations
- Fuel Transfer Operations
- Maintenance Activities
- Biologic Contamination

Installations

- San Francisco Airport T2 Terminal
- SFO Airport Authority Building 575
- San Diego Airport T2 Terminal
- JFK International-Delta Delta Terminal
- Detroit Metro Airport-Delta Terminal
- Oakland Int. Airport FAA Control Tower



San Francisco T2 Terminal Retro-Fit

“As designed and tested the Genesis Air system was able to remove or neutralize better than 98% of the airborne material as it processed the test chamber.”

Dugway Proving Grounds Western Desert Test Center (2006). *WDTC-TR-06-078,3.8,33.*