



The laboratory mainly provides a platform for verifying the airworthiness of the cabin environment for civil aviation aircraft. Through the simulation and construction of the cabin air environment, it can simulate the actual aircraft cockpit air environment. The core parameters include temperature, pressure, humidity and pollution degree.

The airworthiness test system is designed according to the whole economy class configuration of corresponding aircraft. Single-aisle cabin, standard 5 rows of 6 seats per row (3+3 layout), 18.5 inches wide, adjustable row spacing (32 inches /36 inches), providing air environment simulation based on real airplane cabin air intake model.

The laboratory consists of the following sections:

- Simulated cabin subsystem;
- Air injection subsystem;
- Temperature injection subsystem;
- Humidity injection subsystem;
- Pollutant injection subsystem;
- Monitoring and control system;