

Hypobaric Facility

The Hypobaric Facility, also known as the altitude chamber, is one of the largest and most capable in Europe. The facility enables assessment of human performance at altitude and the testing of aircraft oxygen life support systems and equipment.

Our Hypobaric Chamber can precisely simulate the cabin altitudes of all types of military and commercial aircraft, including gradual or rapid loss of cabin pressure.

Typically the chamber is used to assess the effectiveness of aircraft life support systems using both manned and unmanned tests. It is also used for aeromedical research and aircrew training.

Features include:

- A 70 kPa pressure change can be conducted in less than 0.1 second, equating to a decompression from 8,000ft to 65,000ft
- Controlled by highly experienced pressure chamber operators and specialist medical staff
- Supply of oxygen for breathing
- Compressed air supply for the inflation of aircrew protective clothing
- Intercom system for communication between occupants and operators
- Video system enables monitoring and recording of all studies
- Instrumentation ports pass through the Chamber walls

- Three compartments, the largest holding up to eight people
- Simulates altitudes in excess of 100,000ft
- Variety of rapid decompression profiles are available
- Observation windows
- Air-conditioned

In support of the Hypobaric Chamber, the two chamber Hyperbaric Chamber is on standby should a requirement arise to carry out emergency compression of subjects suffering from acute decompression illness. It has a supply of breathing oxygen for occupants and includes an intercom to allow communication between the subject in the chamber and the operators outside.

An instrumentation port passes through the wall, allowing for atmospheric monitoring of the Chamber.

Specifications include:

- 1900mm internal diameter
- 2300mm main compartment
- 1040mm Man Lock compartment
- Capable of achieving a pressure equivalent to 50 metres of seawater
- Holds up to five people



Enabling full understanding of human performance at altitude