



Hypoxic Sleeping Room

Welltech's Altitude control system is to integrated with any room(s) for altitude control up to 3500m (13% O₂) or 5000m(11% O₂) as option. Single room or multi-room of altitude control is available on request. The altitude control system is suitable for training, sleeping and research purpose.

Welltech's altitude control system

- Safe in design
- Easy in operation
- Good in quality
- Reliable & flexible

Welltech's altitude control system is combined by two main parts.

- a) Control system (user friendly LCD touch screen controller), sensor*
- b) Hypoxic air generation system*

We also offer CO₂ scrubber as option to remove the CO₂ breath out from the people to keep the CO₂ level low.

Advantage of hypoxic sleeping room

- Hypoxic training
- Enhance athletic performance, improves recovery, prepare people fro trips to high altitude and supports general health
- Rehabilitation
- Body refreshment – enhance blood carrying oxygen ability





Hypoxic air generation system consists of

- Hypoxic modules (Fiber membrane column)
- Air compressor
- Dryer
- Air filtering system



Altitude control system consists of

- LCD touch screen controller
 - programming control & scheduling setting
- Sensing system
 - O₂, CO₂, Temperature and Humidity display
- Data storage system
- Gas flow control system
- Safety override system
- Alarm system



Design Consultation

Welltech works with the users to design the altitude control system to fit with their existing room(s) or new building facility. Design of sealing, ventilation, tube mapping and power requirement is necessary.



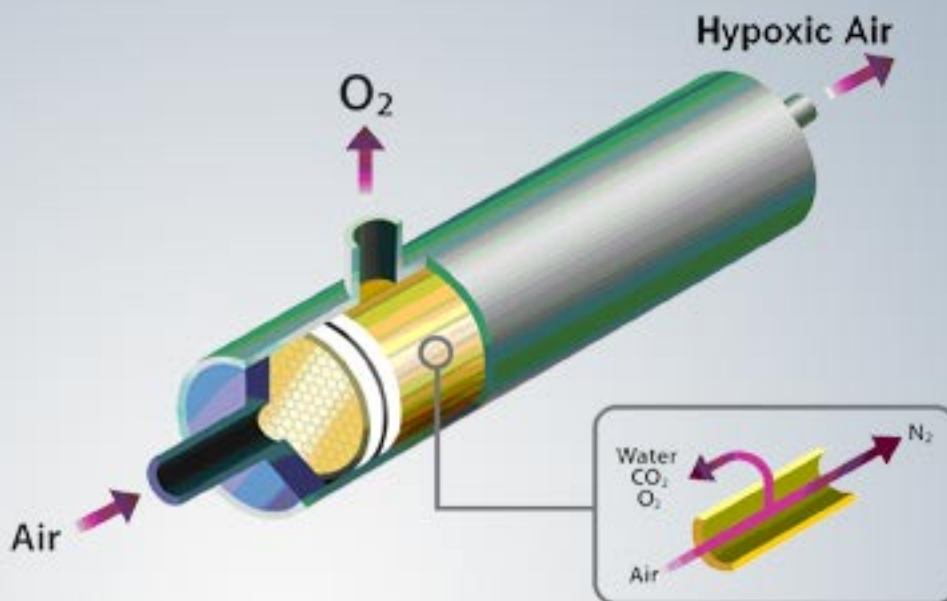
Single room or multi-rooms control is different in design and need to be discussed in detail.



Theory – how to generate the hypoxic air

Hypoxic Modules

The hypoxic modules is the spirit to generate the hypoxic air to the room(s). Inside the hypoxic modules , the high pressure air passing through the hollow fiber membrane so that the smaller oxygen molecules are separated and leaving a higher concentration of nitrogen (hypoxic air) out. The hypoxic air is purged into the room(s) which is controlled by the non-drifted oxygen sensor.



There are different capacity and length of hypoxic modules. The hypoxic modules can also be connected in parallel in order to get a faster rate of generation.

The capacity of hypoxic modules depends on

- 1) size of each room(s)
- 2) the time to arrives the preset altitude

