



HYPERBARIC TECHNOLOGY
HYTECH

- Military and Professional Diving Equipment
- Hyperbaric Medical Equipment ● Life Support Equipment

*We keep you
breathing.*

Introduction

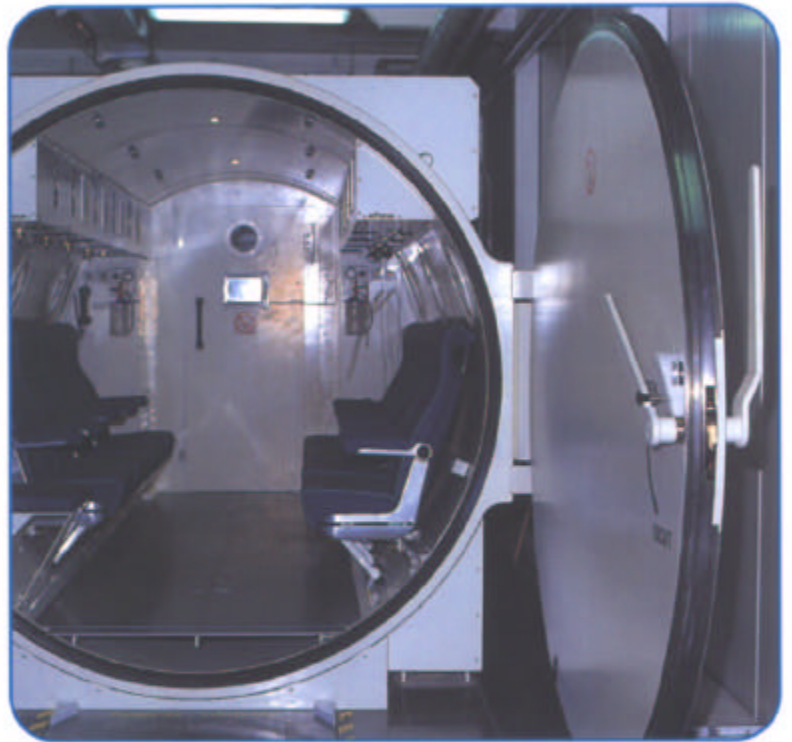
Hytech is a company involved in the design and manufacture of multiplace Hyperbaric Oxygen Treatment chambers (HBO Chambers)
Our HBO chambers are manufactured to clients specifications meaning that the dimensions for example can vary from 1700 to 3000 mm and the length of the chamber can be suited to the number of patients and or the size of the building.

Our chambers can either be equipped with rectangular entrance doors or with a full sized circular door equal to the diameter of the main chamber. The full sized door allows for the easy access of intensive care patients on full sized hospital beds.
The full sized door is provided with a safety interlock system that prevents the opening of the door whilst the chamber is pressurised.

Hytech HBO chambers fulfills the requirements of annex IV of the Council Directive 93/42/EEC concerning Medical Devices.

Hytech also can offer the following services:

1. Technical, medical and paramedical training
2. Transcutaneous pO₂ measurement (tcom) training
3. Facilities preparation for HBO multidisciplinary teamwork
4. Promotion and advertising assistance
5. Hyperbaric medical consulting



Overall view of the inside of our 8 man HBO chamber, diameter 2200 mm. The luxury patient seats are easily removed from the chamber in order to allow for the use of full sized hospital beds. The colour design in the chamber interior can be chosen by the client. Hytech aims to manufacture high quality HBO chambers giving maximum comfort to the patients and the operators.



An electrically driven lifting platform has been integrated in the hospital floor to overcome the height difference between the normal floor level and the floor of the chamber.
Hospital beds can be easily raised and lowered safely and without effort.



The HBO chamber showing a full sized hospital bed. The seats have been removed for this purpose.



Each patient is provided with the following equipment;

- Foldable or fixed mounted armrests,
- an integrated headrest
- optional footrests for maximum comfort.

Attendant alert system

Entertainment system consisting of;

- Headset with audio connection
- Video channel connections
- Volume controls
- Channel selection switch for the audio system



Hytech HBO chambers are provided with a sophisticated oxygen breathing system, allowing the patients to breath comfortably, with a low inhalation and exhalation resistance.

(3,0 mBar)

The oxygen is supplied to the patient by means of a half mask or an oxygen hood system and the flow to each patient can be adjusted separately. The connections of the oxygen system, the entertainment system and the patient monitoring system are installed in the overhead panel.



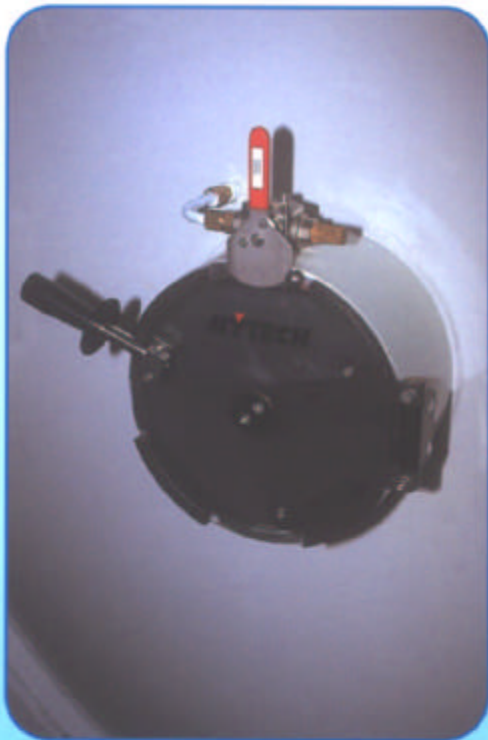


The HBO chamber is provided with a vacuum suction system with a storage container. Connection points are also present for the supply of oxygen and / or air to medical equipment such as patient ventilators. The chamber is also fitted with an emergency sound powered communication system.

Many optional accessories can be added to the chamber such as;

- Fire suppression system (sprinkler)
- Chamber climatisation unit
- Patient monitoring
- etc.

Medical lock system; provided with a safety interlock system.



Inspection camera installed in an adjustable penetrator.





Hytech HBO chambers are provided with the latest in chamber computer control technology. The control system is integrated in an ergonomically designed control stand.

Hytech also offers a manual control system without the computer interface.

The Hytech control stand accommodates all the necessary components to fully control the chamber and patient systems.

This includes;

- Patient Video-monitors connected to colour cameras installed on the HBO chamber
- Chamber communication system
- Entertainment system
- Back-up communication system
- Oxygen analyser
- Pressurisation and de-pressurisation controls for both chamber compartments.
- Chamber flushing Control valve
- PC with monitor
- Mechanical pressure gauges for both compartments

Hytech uses an industrial PLC for the computer steering systems of both chamber compartments.

A selection of Pre-programmed therapy profiles are included in the software and the operator can also make up or enter other suitable profiles.

The PLC controls the pneumatic valves that steer pressurisation and de-pressurisation of the chamber but it is always possible to override the computer and take over manual control of the system.

The computer and the monitor which are installed in the control panel operate as a feed-backsystem for the PLC and display the following parameters;

- Actual pressure against time
- Lapsed time / Pressure and time / pressure to go
- Pressure increase / decrease of both compartments
- Chamber pressures in both compartments (msw / bar)
- Temperature
- Relative humidity
- Oxygen percentage

It is always possible to change the pressure / time profile during a treatment session as well as entering relevant comments and patient data for future use.