

HYPERBARIC CHAMBER

The NASTAR Center Hyperbaric Chamber is a single-person occupancy (monoplace) pressure chamber used to deliver high levels of oxygen to occupants to increase oxygen in the blood using Hyperbaric Oxygen Therapy (HBOT). Hyperbaric Chambers work by increasing pressure, thereby reducing the size of any air/gas bubbles in bloodstead and improving the transport of blood to tissues, organs, and extremities. Hyperbaric Chambers are commonly used in the training and treatment of decompression sickness, air embolism, medical treatment of deep wounds, skin grafts, burns, carbon monoxide poisoning, and gas gangrene, and any damages to other tissues and organs. Research is ongoing to determine if HBOT can be used to treat traumatic brain injuries and autism.

The NASTAR Center BARA-MED XD (manufactured by parent company ETC) is computerized and incorporates SMOOTH RIDE technology, a patient friendly pressurization alternative software, that minimizes complications due to middle ear and sinus barotraumas without increasing compression time.



HYPERBARIC CHAMBER

APPLICATIONS

- Underwater Physics and Physiology
- Decompression Sickness & Injury
- Underwater Hazards
- Damaged tissues and organs
- Barotrauma
- Gas Embolism
- Deep Wounds & Burns

SPECIFICATIONS

- 700 pound capacity
- Max operating pressure: 3 ATA (29.4 psi)
- Pressurization/Depressurization rate: 0.5 to 5 psi/min
- Internal length x diameter: 89in. x 33.5in
- Transcutaneous Oxygen
- Medical monitoring capability
- IV infusion
- General-purpose electrical penetrations for critical care
- Respiratory support
- General-purpose pneumatic penetrations
- Passive pressure relief mattress
- Adjustable height gurney
- SMOOTH-RIDE pressure-change technology
- Suitable for pressurization with air or oxygen

VALUES

- Computer-based operation is helpful for efficient treatment and electronic record of treatment
- Patient call button, two-way communication, and see-through chamber reduce claustrophobia related symptoms
- Valuable tool in training and treatment of various pressure-related scenarios
- Full fidelity simulation
- Data linking capability to Cockpit Modules of other simulators via HLA

