



OXYTECH

FOR HEALTH
FOR THERAPY
FOR SAFETY

The
Next
Big
Step



**FOR HEALTH
FOR THERAPY
FOR SAFETY**

Oxytech is a certified medical device manufacturing company that offers manufacturing service to Hyperbaric Chambers Companies.

We have been producing hyperbaric chambers for both domestic and international customers since 2008.

We are able to produce chambers with many optional features, working up to 10 bar working pressure, multi person - single person, single compartment - double compartment, lying and sitting, manually controlled and automatically controlled, round - rectangular - omega cross-sections.

Oxytech produces:

- Multiplace and Monoplace Medical Hyperbaric Oxygen Therapy Chambers
- Divers Decompression Chambers and Transportable Divers Chambers
- Wellness Chambers
- Equine and Animal Chambers
- Oxygen Concentrator
- Air Compressor
- Hyperbaric Software
- Other Hyperbaric related equipments

All chambers are manufactured per applicable international standards and specifications, such as

- ASME PVHO-1 (Safety Standard for Pressure Vessels for Human Occupancy)
- EN 14931 (Pressure vessels for human occupancy)
- 2014/68/EU - former 97/23/EC (PED - Pressured Equipment Directive)
- ASME SEC VII D.1. (ASME Boiler and Pressure Vessel Code)
- MDD Medical Device Directive
- NFPA 99 (Health Care Facilities Code)

We carry out our manufacturing in two different factories in Izmit-Kocaeli province. Our production system is ISO 9001 and ISO 13485 Medical Device Production certified. Additionally, our products have CE certificates.

Our aim is to work as a contract manufacturer for hyperbaric chamber manufacturers around the world.

We produce your own designed chambers at the most competitive prices, with high quality and on-time delivery philosophy.

We have our own model Hyperbaric chamber designs.

We design and manufacture oxygen concentrator and air compressor as additional products suitable for the hyperbaric sector.

We also have Hyperbaric Control and Management Software created by our team for hyperbaric chambers.

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DESIGN & MANUFACTURING

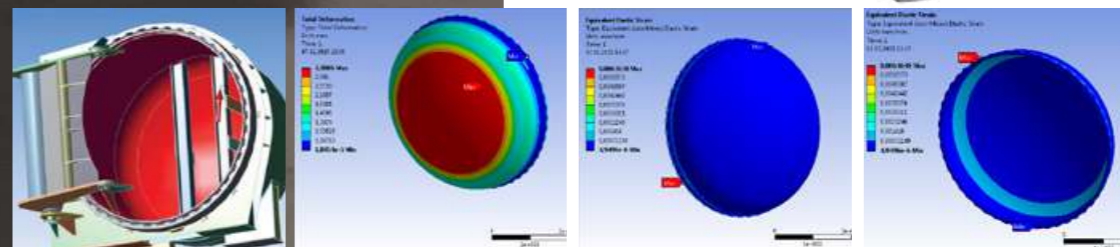
SUBMERGED ARC WELDING (Linear and circular parts using column boom and Welding stations) (SAW)
METAL ARC WELDING (MIG & MAG) (GMAW)
TIG WELDING (Tungstan Inert Gas Welding)(TIG/GTAW)
ELECTRODE WELDING (MMA /SMAW)

SPECIAL WELDING TESTS

RADIOGRAPHIC TEST
ULTRASONIC TEST
DYE PENETRANT TEST
MAGNETIC PARTICLE TEST
VISUAL TEST

DESIGN TOOLS

Autocad Inventor
Intergraph PV Elite
ANSYS CFD Flow/Mnf 15.0
ANSYS Design Modeler 15.0





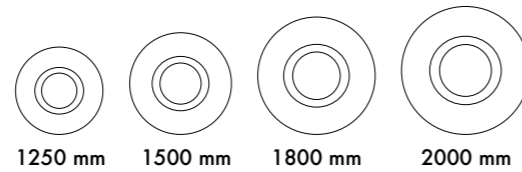
DIVERS DECOMPRESSION CHAMBERS

Decompression chambers serve as a tool for divers to adjust their bodies to normal surface pressure without the risk of long underwater decompression. Recompression chambers are used to treat divers for diving disorders, or when they develop decompression sickness.

- Diver Decompression Chambers
- Containerized Diving Chambers
- Transportable Diving Chambers
- Adaptor
- Diving Panel

Oxytech standard decompression chambers come with two compartments, the main lock and entry lock.

Oxytech manufactures the following fully equipped Diving Chambers.



1250 mm 1500 mm 1800 mm 2000 mm



4-12 Divers



FEATURES

- Medical Grade Compression Gas System
- Communication System
- Video Monitoring System
- Video Recording
- Viewports
- Medical Lock
- O₂ & CO₂ Gas Analyzers
- O₂ & CO₂ Monitoring
- Air Conditioner
- Oxygen Mask & Hood
- Hyperbaric Lights
- CO₂ Scrubber
- Temperature & Humidity Sensors
- Hyperbaric Fire Extinguishers
- Oxygen Storage Cylinders
- High Pressure Air Storage Cylinders
- High Pressure Air Compressor
- Spare Penetrators
- Pressure Gauges
- Caisson Gauges
- Benching/Seating/Stecker

SPECIFICATIONS

- Working Pressure:** 2.0 – 10.0 bar
- Main Chamber Human Capacity:** 4 - 20 patients
- Paint:** Non-Toxic Water Resistant
- Material:** Pressure Vessel Steel, Stainless Steel, Aluminium
- Standards:** EN 14931, ASME PVHO-1, 2014/68/EU, 97/23/EC, ASME SEC VII Division.1, EN 93/42 EEC, IMCA D Series



TRANSPORTABLE DECOMPRESSION CHAMBERS

Diver attendant transportable decompression chambers are suitable for transferring divers under pressure to a hyperbaric medical facility. The system is capable of being transported to remote locations where diving operations or emergency rescue activities are to be carried out. It is capable of an operating depth equivalent to 70 meters.

The chamber is fitted with a nato flange. This flange makes possible to connect the transportable chamber to hyperbaric facilities. Transportable Decompression Chambers also allow decompression and therapeutic treatment.



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- Hyperbaric Lights
- CO₂ Scrubber
- Temperature & Humidity Sensors
- Hyperbaric Fire Extinguishers
- Oxygen Storage Cylinders
- High Pressure Air Storage Cylinders
- High Pressure Air Compressor
- Spare Penetrators
- Pressure Gauge
- Caisson Gauge
- Benching/Seating/Stretchers

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MEDICAL CHAMBERS

Description of Hyperbaric Oxygen Therapy:

Hyperbaric Oxygen Therapy (HBOT) is the administration of pure oxygen at pressures greater than normal atmospheric pressure to a patient inside a hyperbaric chamber for therapeutic reasons.

This treatment is performed in pressure chambers of various sizes, ranging from monoplace chambers for one patient only, to multiplace or multi-compartment treatment chambers in which several patients can sit and where hospital beds or even an entire intensive care setting can be installed and where health workers can attend to the patients.

This therapy has been available for several decades and is used for many indications. It is typically administered at 1 to 3 atm. for 90 to 120 minutes. HBOT appears to be quite safe and the occasional adverse effects are mainly mild and reversible although they could, potentially, be severe and life threatening. State of the art installation and maintenance and adequate staffing is therefore of paramount importance.

Clinical Effectiveness:

HBOT has been used for many medical conditions. HBOT has become accepted standard therapy in a few life threatening conditions i.e. decompression illness and gas embolism; mainly based on historical empirical evidence.

We manufacture various type of HBOT Chambers.

The Omega is a classic shaped chamber and we also have a Rectangular type, both provide more space and less claustrophobic feeling for the patients during the therapy.

Triple Lock	Rectangular Shape
Double Lock	Omega Shape
Single Lock	Round Shape

Indications accepted by either the European or the North American Hyperbaric Medical Societies; the European Committee for Hyperbaric Medicine (ECHM, www.echm.org) and the Undersea and Hyperbaric Society' (UHMS, www.uhms.org):

- Air or Gas Embolism
- Carbon Monoxide Poisoning
- Clostridial Myositis and Myonecrosis (Gas Gangrene)
- Crush Injury, Compartment Syndrome and Other Acute Traumatic Ischemias
- Decompression Sickness
- Arterial Insufficiencies
- Severe Anemia
- Intracranial Abscess
- Necrotizing Soft Tissue Infections
- Osteomyelitis (Refractory)
- Delayed Radiation Injury (Soft Tissue and Bony Necrosis)
- Compromised Grafts and Flaps
- Acute Thermal Burn Injury
- Idiopathic Sudden Sensorineural Hearing Loss
- Enhancement of Healing in Selected Problem Wounds
- Post-anoxic encephalopathy
- Ophthalmological Disorders
- Neuroblastoma Stage IV
- Diabetes
- Brain Stroke
- Autism
- Pneumatosis Cystoides Intestinalis

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- Oxygen Storage Cylinders
- High Pressure Air Storage Cylinders
- High Pressure Air Compressor
- Spare Penetrators
- Pressure Gauge
- Caisson Gauge
- Benching/Seating/Stretcher
- Used also For Monoplace Chamber

SPECIFICATIONS (MULTIPLACE)

- Working Pressure:** 3 ATA - 6.5 ATA (2 bar - 5.5 bar)
- Main Chamber Human Capacity:** 4 - 16 patients
- Entry Chamber Patient Cap.:** 2-4 patients
- Dimensions (Sigma):** 7500 x 2300mm
- Dimensions (Rectangular):** 6700 x 2300mm
- Material:** PressureVessel Steel
- Number of Doors:** 3
- Rectangular Doors:** 800x1800mm
- Viewports:** Ø300mm
- Standards:** EN 14931, ASME PVHO-1, 2014/68/EU, 97/23/EC, ASME SEC VII Division.1, EN 93/42 EEC

SPECIFICATIONS (MONOPLACE)

- Working Pressure:** 2.0 ATA - 4 ATA (1 bar - 3 bar)
- Semi Acrylic, Full Acrylic
- Chamber Capacity:** 1 patient
- Dimensions:** Ø900 - 1000 x (L) 2400mm
- Material:** Steel and Acrylic
- Standards:** EN 14931, ASME PVHO-1, 2014/68/EU, 97/23/EC, ASME SEC VII Division.1, EN 93/42 EEC





Oxygen treatment under pressure reduces swelling, stimulates healing, reduces inflammation and increases the body's ability to deliver antibiotics to areas of relatively poor blood supply.

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- Hyperbaric Fire Extinguishers
- Oxygen Storage Cylinders
- High Pressure Air Storage Cylinders
- High Pressure Air Compressor

SPECIFICATIONS

- Working Pressure:** 3.0 ATA (2.0 bar)
- Chamber Capacity:** 1 or 2 Animals
- Paint:** Non-Toxic Water Resistant
- Material:** Pressure Vessel Steel
- Standards:** EN 14931, ASME PVHO-1, 2014/68/EU, 97/23/EC, ASME SEC VII Division.1,



EQUINE&ANIMAL CHAMBERS

Our chambers are used in Veterinary clinics, Veterinary colleges, Equine rehabilitation clinics, Private horse farms.

During hyperbaric therapy your horse breathes 100% oxygen at 2-3 times atmospheric pressure for approximately one hour. Breathing oxygen under pressure increases the amount of oxygen in the lungs and carried to the tissues of the body. Oxygen treatment under pressure reduces swelling, stimulates healing, reduces inflammation and increases the body's ability to deliver antibiotics to areas of relatively poor blood supply.

HBOT has proven useful, in wound treatment, cellulitis, skin, muscle tendon and ligament injuries, aerobic and anaerobic infections, osteomyelitis, head and spinal injuries, chronic infections, dummy foal syndrome, lung or abdominal abscesses, colic, sinus infections, lyme's disease, intestinal ischemia and reperfusion injury, laminitis and exercise-induced pulmonary hemorrhage.

Our Hyperbaric Chamber is a spacious, open room design that allows the horse to relax and move comfortably during the treatment. Throughout the treatment period your horse is carefully monitored by trained staff using video monitoring and direct observation through acrylic portals in the side of the chamber.



WELNESS CHAMBERS



Hyperbaric oxygen therapy (HBOT) has garnered attention and interest due to its potential therapeutic benefits across a range of medical conditions. The “secret” of HBOT lies in its ability to utilize increased atmospheric pressure and pure oxygen to enhance the body’s natural healing processes. Here’s a deeper look into the secrets and mechanisms of HBOT

Oxygen Under Pressure

HBOT involves breathing pure oxygen in a pressurized chamber, which allows for a significantly higher concentration of oxygen to dissolve in the blood plasma. This increased oxygen availability can enhance cellular metabolism, promote tissue repair, and support immune function

Anti-inflammatory Effects

HBOT has been shown to reduce inflammation by modulating inflammatory pathways and reducing the release of pro-inflammatory molecules. This can be beneficial for conditions characterized by excessive inflammation, such as certain types of wounds, infections, and autoimmune diseases

Angiogenesis and Tissue Repair

The increased oxygen levels delivered during HBOT can stimulate the formation of new blood vessels (angiogenesis) and promote tissue regeneration. This can accelerate wound healing, improve tissue oxygenation in ischemic conditions, and support the recovery of damaged tissues

Antimicrobial Activity

High levels of oxygen can exhibit direct antimicrobial effects by inhibiting the growth and survival of certain bacteria, fungi, and viruses. HBOT can be used as an adjunctive treatment for infections that are resistant to conventional therapies or to enhance the effectiveness of antibiotics and other antimicrobial agents.

Neuroprotective and Neuromodulatory Effects

HBOT has shown promise in supporting neurological function and recovery. It can enhance oxygen delivery to the brain, promote neuroplasticity, and modulate neurotransmitter activity, which may be beneficial for conditions like traumatic brain injuries, stroke, and certain neurodegenerative disorders.

Oxygenation and Revitalization:

HBOT can increase oxygen delivery to hypoxic (low-oxygen) tissues, improving cellular respiration and energy production. This can boost overall vitality, energy levels, and cognitive function, leading to a sense of rejuvenation and well-being.



HYPERBARIC DEVICES



HYPERBARIC AIR COMPRESSOR
 Model : OXYair
 9.0 ATA
 200 - 1200 LPM
 OIL FREE & SILENT

Partmakers compressors are designed for highest performance and especially for Hyperbaric Oxygen Therapy Chambers, highly efficient, Latest technology innovative, and distinctive features like uninterrupted working system, low noise production ability, high performance level, easy transportation.

SPECIFICATION		CERTIFICATES	CE
Capacity	200 LPM	2006/42/EC	
Pressure	9.0 ATA	2014/35/EU	
Reservoir Tank	35 Liter	2014/30/EU	
Power	2 HP	2014/68/EU	
Electricity Consumption	1.5 Watt/Hour	ISO 13485	
Power Supply	220 Volt, 50 Hz	ISO 9001	
Size LxWxH (cm)	45x87x88		
Weight	40 kg		
Noise Level	< 60 db		

HYPERBARIC DEVICES



HYPERBARIC OXYGEN GENERATOR
 Model : Oxy Two
 6.2 ATA
 20 LPM
 93% Oxygen PURITY

Partmakers Concentrators are highly efficient, Latest technology innovative oxygen concentrator, designed for highest performance and distinctive features like uninterrupted working system, low noise production ability, high performance level, easy transportation

SPECIFICATION		CERTIFICATES	CE
Capacity	20 LPM	2006/42/EC	
Pressure	6.2 ATA	2014/35/EU	
Reservoir Tank	18 Liter	2014/30/EU	
Power	3 HP	2014/68/EU	
Electricity Consumption	1.5 Watt/Hour	93/42/EEC	
Power Supply	220 Volt, 50 Hz	ISO 13485	
Size LxWxH (cm)	100x130x120	ISO 9001	
Weight	70 kg		
Noise Level	< 60db		

CERTIFICATIONS





www.oxytech.com.tr

Mayer Metal Limited Őti.

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Address: Karadenizliler Mh. Akkol Sk No:

24/1 BaŐiskele / Kocaeli / Turkey

Tel: +90 532 367 65 41

E-mail: info@oxytech.com.tr