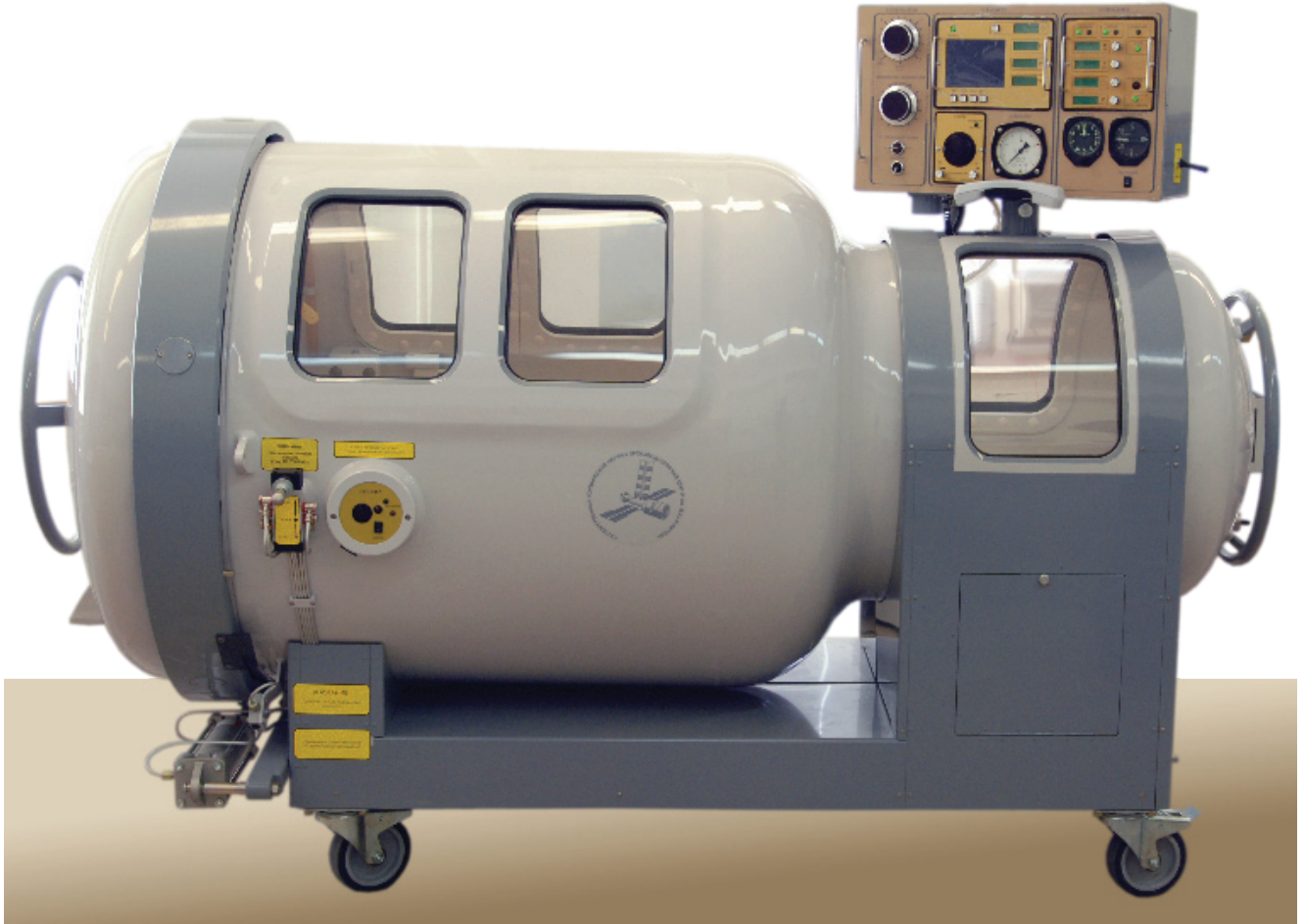


# BLKS-307-KHRUNICHEV

## MONOPLACE HYPERBARIC OXYGEN TREATMENT SYSTEM



**DUAL FUNCTION of the Unit:** The hyperbaric oxygenation (HBOT) method and the hypobaric hypoxia method – the effect of ‘mountain air’. This is achieved through the use of a combined control panel and a system of final control elements, which allows for the manufacture of another 2 modifications of the hyperbaric chamber:

- BLKS 307/01 – for conducting HBOT sessions
- BLKS 307/02 – for conducting Hypobaric Hypoxia Therapy sessions

**THE CONSTRUCTION OF THE SYSTEM ALLOWS FOR CONNECTION OF EXTERNAL EQUIPMENT** (diagnostic equipment, life support systems).

**OXYGEN ECONOMY** is achieved by using an additional flow of circulation.

**RELIABILITY** is assured through the use of durable materials of the capsule, unique space technologies and the special design of the cover locking mechanism.

**PATIENT COMFORT** is guaranteed thanks to the bed design, which allows the patient to lie in various positions, a large internal space, a big glass area and an in-built doctor-patient communication system.

**MONITORING THE PATIENT'S CONDITION.** The HBOT monitoring system provides an objective assessment. Visual monitoring is possible due to large viewport windows and a built-in communication system allows you to find out how the patient is feeling during the treatment session.

### CODES AND STANDARDS

- ASME PVHO-1, Safety Standards for Pressure Vessels for Human Occupancy
- NFPA 99 Health Care Facilities
- ASME Boiler and Pressure Vessel Codes, Section VIII, Division I, Pressure Vessels
- U. S. FDA Requirement, 21 Code of Federal Regulations, Part 820

Quality Management System (QMS) is introduced and applied at the factory in the field of designing, manufacturing, maintenance and repair of hyperbaric systems ISO 9001:2000, ISO 13485:2003

## TECHNICAL SPECIFICATIONS

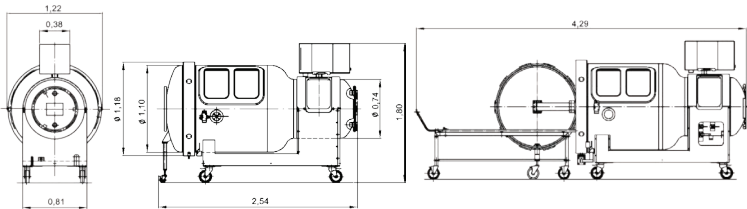
External width .....	1.21 m
External length .....	2.54 m
External height .....	1.80 m
Internal Diameter .....	1.08 m
Weight .....	500 kg
Projected lifetime .....	8 years, or 10,000 one hour sessions

### When using HBOT:

Working pressure .....	300 kPa
Rate of compression/decompression ..	5-25 kPa/min
Emergency decompression time at 300 kPa (3kgf/cm2) .....	90 sec
Maximum oxygen consumption during an hour's session .....	9m <sup>3</sup>

### When using Hypobaric Hypoxia Therapy:

Oxygen Concentration .....	21-13,6%
Rate of 'altitude' change .....	0-10 m/sec
Maximum sub-atmospheric pressure ..	493 mm Hg (at an altitude of 3,500 m above sea level)



## MONITORING AND CONTROL PANEL:

The built-in monitoring system monitors the patient's physiological condition: arterial blood pressure, ECG, photoplethysmogram, heart rate, SpO2 and the properties inside the hyperbaric chamber: pressure, rate of compression/decompression, humidity, temperature and the level of O2 and CO2 concentrations.

The appearance of the monitoring and control panel depends on the hyperbaric chamber's modifications. For example, the hyperbaric version has no hypobaric session control panel, altimeter or variometer.



There are three ball valves located in the lower part of the hyperbaric unit for switching modes (hyperbaric/hypobaric)



The pumping unit (when using the hypobaric mode) has the dimensions 0.48x0.49x0.57 m



The warning system allows the patient to draw the doctor's attention to an emergency situation



Control handle for the bayonet lock is for emergency use only when there is no pressure in power circuit



The bed design allows the patient to find a comfortable position.