



Industry Report

PVHO World Organization

*Advancing Knowledge, Safety, and Professional Communication for
Pressure Vessels for Human Occupancy*

OUR MISSION

WHAT ARE WE ?

PVHO World serves as an independent educational resource dedicated to support the advancement of safety, compliance, and technical knowledge within the Pressure Vessels for Human Occupancy industry. Our mission is to bridge the information gap between evolving market adoption and the critical standards, codes, and regulatory requirements necessary to protect occupants, operators, and the public.

WHY?

The rapid global expansion of hyperbaric and human-occupancy pressure systems is outpacing public understanding, regulatory awareness, and technical oversight. Correct understanding and interpretation of PVHO requirements is central for the safe, effective and growing deployment of this advanced technology.

WHO ARE WE?

PVHO World is an independent educational organization dedicated to providing informational resources related to Pressure Vessels for Human Occupancy (PVHOs). PVHO World is not affiliated with, endorsed by, or acting on behalf of any standards development organization, including ASME, nor does it issue, interpret, or enforce official standards, codes, or regulatory requirements.

Editorial

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Next ASME PVHO Committee Meeting

Summer 2026 ASME PVHO Committee Session

- June 22-25, 2026
- Hanover MD
- Hosted by Oceaneering International Inc.

ASME Members meet 3 times per year to advancing safety standards in Pressure Vessels for Human Occupancy (PVHO). Participants engage in discussions on the latest updates to the national standard in dedication to maintaining the highest safety standards.

Meetings are open to the public
For visitor information and details please contact:
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Disclaimer: Some contributors to PVHO World currently serve or have served on industry standards committees related to Pressure Vessels for Human Occupancy (PVHO). Participation in PVHO World is independent of those roles, and all content presented reflects the individual views and educational efforts of the contributors, not the official positions of ASME or any other standards development organization

<https://PVHWorld.org>

PVHO World Organization

Mission Statement

The **PVHO World Organization** was established to provide an international communication and information platform for the professional community involved with *Pressure Vessels for Human Occupancy* (PVHOs).

PVHOs are used throughout the medical, aerospace, research, commercial diving, military, submarine, and submersible industries. These systems involve unique engineering, operational, regulatory, and safety considerations that require specialized technical knowledge and responsible oversight.

The rapid emergence of new commercial sectors - particularly the “wellness” hyperbaric market - has created increasing confusion regarding the legal, engineering, and operational requirements associated with PVHO systems. Many mild-hyperbaric systems operate at pressures below 15 psig and are often incorrectly perceived as being outside the scope of established pressure vessel safety practices. In reality, the engineering and safety requirements for PVHOs are far more complex than commonly understood.

The organization seeks to improve awareness and communication regarding:

- ASME PVHO requirements and interpretations
- International regulatory compatibility and misunderstandings
- FDA requirements for hyperbaric systems in the United States
- Operational safety and risk awareness
- Acrylic window design, maintenance, and replacement
- Qualification of non-standard PVHO components
- Ownership, documentation, inspection, and resale considerations
- Emerging risks associated with improperly designed or uncertified chambers

The PVHO World Organization is intended to serve as a neutral professional resource center for manufacturers, engineers, operators, owners, regulators, investors, researchers, and public agencies seeking reliable information regarding PVHO systems and standards.

The organization also supports industry communication regarding:

- ASME Boiler & Pressure Vessel Code activities
- ASME PVHO Committee meetings
- Code revisions and Code Cases
- International equivalency issues
- Industry events and technical discussions

Through the “PVHO World Industry Report” and website, the organization aims to encourage informed discussion, technical transparency, and responsible industry growth across all sectors utilizing pressure vessels for human occupancy.

Innovation Requires Understanding:

Why New PVHO Manufacturers Must First Learn the Rules

*Bret Faircloth, P.E.
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The rapid growth of the hyperbaric and human-occupancy pressure vessel industry has attracted many new manufacturers seeking to develop innovative chamber designs for medical, wellness, research, and commercial applications. While innovation is important, new manufacturers – both in the United States and overseas – must recognize that Pressure Vessels for Human Occupancy (PVHOs) are among the most highly specialized and safety-critical pressure systems in existence.

A common mistake made by new entrants is assuming that conventional industrial pressure vessel practices, consumer product approaches, or generalized engineering experience are sufficient for PVHO construction. They are not. ASME PVHO requirements involve a unique combination of structural engineering, human safety considerations, material qualification, acrylic window design, operational controls, inspection practices, testing requirements, and documentation standards developed through decades of industry experience and accident prevention.

Manufacturers that attempt to “reinvent” chamber design without fully understanding the intent and requirements of the ASME PVHO Code often discover that seemingly simple design changes can introduce serious safety, certification, operational, and legal problems. Designs that ignore established practices may ultimately become impossible to certify, insure, legally operate, or import into regulated markets such as the United States.

In addition to ASME PVHO requirements, manufacturers must understand that hyperbaric chambers intended for medical or wellness applications may also fall under FDA regulations, state requirements, fire safety standards, occupational safety rules, and international conformity requirements. Failure to recognize these obligations early in development can result in costly redesigns, delayed approvals, liability exposure, or unsafe products entering service.

The PVHO industry welcomes innovation, but successful innovation requires a thorough understanding of the existing engineering principles, regulatory framework, and safety history that govern pressure vessels intended for human occupancy.

Buyer Beware: LOOK for a NAMEPLATE

Understanding Safety Standards for Mild Hyperbaric Chambers

*William Kohnen
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The rapid growth of the mild hyperbaric chamber market has created new opportunities for wellness centers, small businesses, and private individuals interested in hyperbaric technology. However, many consumers are unaware that hyperbaric chambers are not simple consumer wellness products. They are pressure vessels designed for human occupancy and must safely contain significant stored energy while protecting the life of the occupant inside.

Most consumers cannot reasonably be expected to evaluate the engineering integrity or safety of a hyperbaric chamber on their own – just as they cannot independently assess the safety of an MRI machine, an X-ray system, or an aircraft. These systems rely upon recognized engineering standards, independent certification, and clear regulatory oversight to ensure public safety.

For *Pressure Vessels for Human Occupancy* (PVHOs), one of the most important indicators of legitimate construction is the chamber nameplate. A properly certified chamber should include a permanent engraved metal nameplate affixed directly to the pressure vessel. This nameplate identifies critical information including the manufacturer, country of origin, year of construction, maximum pressure rating, serial number, and certification status.

Most importantly, legitimate PVHO chambers constructed to recognized U.S. safety standards should clearly display the ASME certification marking and indicate compliance with ASME PVHO requirements. This provides the owner and operator with evidence that the chamber was built in accordance with recognized pressure vessel engineering and inspection practices.

Consumers should be cautious of chambers that:

- Do not have a permanent nameplate
- Lack clear manufacturer identification
- Do not display ASME certification markings
- Provide vague or incomplete documentation
- Make broad safety claims without independent certification evidence

A hyperbaric chamber is not equivalent to a fitness machine or consumer appliance. Improperly designed or uncertified pressure vessels can present serious fire, structural, and operational hazards.

Before making a significant investment into any hyperbaric chamber system, consumers and business owners should take the time to understand the applicable safety standards and verify that the chamber has been constructed and certified by qualified manufacturers operating within recognized PVHO engineering practices.