Australian Standard™

Work in compressed air and hyperbaric facilities

Part 2: Hyperbaric oxygen facilities

Standards Australia

This Australian Standard was prepared by Committee SF-046, Non-diving Work in Compressed Air and Hyperbaric Treatment Facilities. It was approved on behalf of the Council of Standards Australia on 29 March 2002 and published on 24 April 2002.

The following interests are represented on Committee SF-046:

Australian and New Zealand Hyperbaric Medicine Group

Australian and New Zealand College of Anaesthetists

Australian Industry Group

Australian Medical Association

Hyperbaric Engineering Industry Forum

Hyperbaric Technicians and Nurses Association

Institution of Engineers Australia

South Pacific Underwater Medicine Society

WorkCover New South Wales

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PREFACE

This Standard was prepared by Standards Australia Committee SF-046, Non-diving Work in Compressed Air and Hyperbaric Treatment Facilities, in response to a request from the Hyperbaric Technicians and Nurses Association (HTNA).

This Standard was prepared using the Hyperbaric Oxygen Therapy Facilities Industry Guidelines (HOTFIG) as a basis. HOTFIG was prepared by participants in the hyperbaric oxygen therapy industry during the period of 1995 to 1998. HOTFIG was a consensus document prepared by a committee with membership from the HTNA, Australian and New Zealand Hyperbaric Medicine Group and operators and suppliers of hyperbaric chambers.* A wider review group provided comment on HOTFIG drafts at various stages.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendices. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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* The Undersea and Hyperbaric Medicine Society (UHMS) *Guidelines for Clinical Multiplace Hyperbaric Facilities* was used as a basis for HOTFIG.

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies requirements and recommendations for the design, construction, operation and maintenance of pressure vessels used for human occupancy other than those used in conjunction with, and support of, underwater diving operations.

Minimum training requirements for hyperbaric attendants, chamber operators and technical officers are included in appendices.

NOTES:

1 Both monoplace and multiplace hyperbaric chambers are covered.

2 This Standard does not address hypobaric chambers.

3 Facilities such as sporting domes and medical or industrial clean rooms which operate at very low increased pressures are excluded from the scope of this Standard.

1.2 OBJECTIVE

The objective of this Standard is to provide designers, manufacturers, operators and maintainers of hyperbaric oxygen facilities other than those used in conjunction with, and support of, underwater diving operations, with requirements and recommendations so that safe hyperbaric exposures of all persons involved in the operation of such facilities may be conducted.

1.3 REFERENCED DOCUMENTS

A list of referenced and other related publications is provided in Appendix A.

1.4 DEFINITIONS

For the purposes of this Standard the definitions below apply.

1.4.1 Air environment

A pressurized environment having an oxygen concentration not exceeding 23.5% oxygen by volume.

1.4.2 Chamber operator

The person responsible for operating the controls of a hyperbaric chamber.

1.4.3 Competent person

A person who has acquired through training, qualifications or experience, or a combination of these, the knowledge and skills enabling that person to safely perform a specific task.