

Superseded by AS 2299-1992

Amendment 1 - January 1991

Australian Standard®

Occupational diving

[Title allocated by Defence Cataloguing Authority:
UNDERWATER AIR BREATHING OPERATIONS NSC 4220]

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This Australian Standard was prepared by Committee SF/17, Work in Compressed Air. It was approved on behalf of the Council of Standards Australia on 8 February 1990 and published on 14 May 1990.

The following interests are represented on Committee SF/17:

Association of Offshore Diving Contractors of Australia
Australian Institute for Maritime Archaeology
Australian Marine Sciences Association
Australian Medical Association
Australian Pipeline Industry Association
Board of Works, Melbourne
Confederation of Australian Industry
CSIRO, Division of Fisheries
Department of Community Services and Health
Department of Defence
Department of Health, Qld
Department of Industrial Affairs, Qld
Department of Industry, Technology and Resources, Vic
Department of Labour, S.A.
Department of Labour, Vic.
Department of Occupational Health, Safety and Welfare, W.A.
Department of Primary Industries and Energy
Federation of Australian Underwater Industries
Manufacturing interests
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Metal Trades Industry Association of Australia
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This Standard was issued in draft form for comment as DR 86227.

STANDARDS AUSTRALIA

**Amendment No 1
to
AS 2299—1990
Occupational design**

CORRECTION

The 1990 edition of AS 2299 is amended as follows: the amendment(s) should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Paragraphs A3.6 and A3.10 of Appendix A.

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Australian Standard®

Occupational diving

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UNDERWATER AIR BREATHING OPERATIONS NSC 4220]

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and redesignated as AS 2299—1979.
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PREFACE

This Standard was prepared by the Standards Australia Committee on Work in Compressed Air to supersede AS 2299—1979, *Underwater air breathing operations*.

The Standard applies to those situations where a person works in water to conduct his particular work or project. It is not necessary that the person should physically enter the water as there are many situations where an individual is subject to pressure equivalent to the sea pressure experienced at a particular depth of working. Under these conditions the individual need not necessarily enter the water to be subjected to ambient water pressure.

The Standard is restricted to underwater operations conducted at a depth not exceeding 50 m (165 ft) and using air as the breathing medium. It applies to diving from a barge, lighter, other vessels, beach or shore, or platform fixed or not to the ocean floor, or from any other medium used for the purpose of diving underwater. Specifically, the Standard covers diving using self-contained breathing apparatus (i.e. the SCUBA type), helmet diving, work chamber diving, and diving using surface supply breathing apparatus.

Significant differences from the 1979 edition of the Standard include:

- (a) Qualifications required for divers and supervisors have been expanded.
- (b) The separation of requirements specific to different types of breathing apparatus from those requirements which apply to all diving operations.
- (c) The training and certification of divers has been referenced to AS 2815.
- (d) Requirements for the availability of a compression chamber have been clarified and expanded.
- (e) Comprehensive revisions of Appendix A—Medical Standards, and Appendix C—Therapeutic Recompression Treatments.
- (f) Replacement of Royal Australian Navy Decompression Tables by Canadian Forces Decompression Tables in Appendix B.

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STANDARDS AUSTRALIA

Australian Standard
Occupational diving

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE. This Standard applies to underwater operations using compressed air as the breathing medium. In particular, the Standard is intended to provide the basis for uniformity of practice throughout the Commonwealth of Australia in relation to the safety and health of personnel engaged in occupational underwater operations.

NOTE: This Standard does not apply to—

- (a) recreational diving; or
- (b) diving beyond 50 m.

This Standard applies to underwater operations using either surface supplied breathing apparatus (SSBA) or self-contained underwater breathing apparatus (SCUBA).

Specific requirements for SSBA diving operations are given in Section 5 and those for SCUBA diving operations are given in Section 6.

The Standard includes, in either mandatory or advisory form, requirements for personnel procedures to be followed in diving, the equipment and the compressed air supply utilized, together with appendices dealing with the following subjects:

- (i) Medical Standards and examination reports.
- (ii) Example of approved decompression tables.
- (iii) Therapeutic recompression treatment.
- (iv) Minimum qualifications for divers.
- (v) Personal records of dives and medical examination.
- (vi) Example of lifeline signals.
- (vii) Example of employer's record(s) of dives.
- (viii) Typical compression chamber medical kit.
- (ix) Contents of a diving operation manual.
- (x) Guidance on selecting the type of breathing apparatus to be used.
- (xi) Locations of medical practitioners with training in diving medicine.

1.2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS	
1210	SAA Unfired Pressure Vessels Code
1269	Acoustics—Hearing conservation
1337	Eye protectors for industrial applications
1885	Code of practice for recording and measuring work injury experience
1944	Medical gas cylinder identification
2030	SAA Gas Cylinders Code
2030.1	Part 1: Cylinders for compressed gases other than acetylene
2299	Occupational diving
2299(Suppl)	Supplement 1: Nato flange—drawings*
2705	Portable cylinders for self-contained underwater breathing apparatus (SCUBA)—Safety guide
2815	Training and certification of divers
2815.1	Part 1: Occupational SCUBA diving*
2815.2	Part 2: Restricted commercial air diving
2815.3	Part 3: Commercial air diving
2815.4	Part 4: Bell diving
3000	SAA Wiring Rules
XXXX	Training and certification of recreational divers
XXXX.1	Part 1: Minimum entry level SCUBA diving*
CK15	Code of recommended practice for the storage of vulcanized elastomers

* In course of preparation