

Australian Standard[®]

**Training and certification of
occupational divers**

Part 3: Air diving to 50 m

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 3 June 1992 and published on 20 July 1992.

The following interests are represented on Committee SF/17:

Association of Offshore Diving Contractors of Australia
Australian Council of Trade Unions
Australian Institute for Maritime Archaeology
Australian Marine Sciences Association
Australian Medical Association
Australian Pipeline Industries Association
Confederation of Australian Industry
Department of Defence
Department of Employment, Vocational Education, Training and Industrial Relations, Qld
Department of Labour, S.A.
Department of Manufacturing and Industry Development, Vic.
Department of Occupational Health, Safety and Welfare, W.A.
Division of Fisheries, CSIRO
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Metal Trades Industry Association of Australia
National Association of SCUBA Diving Schools Australasia
Police Department, N.S.W.
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Part 3: Air diving to 50 m

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PREFACE

This Standard was prepared by the Standards Australia Committee on Work in Compressed Air to supersede AS 2815.3—1985, *Training and certification of divers Part 3: Commercial air diving with surface compression facilities*.

The Standard is one part (Part 3) of a series of Standards relevant to the training and certification of underwater divers, where the requirements of regulatory authorities and industry demand a prescribed degree of training and competence to ensure an adequate degree of safety, performance and economy.

This Standard is particularly related to the training of personnel who will be engaged in underwater operations as described in AS 2299, *Occupational diving*, using surface-supplied compressed air or self-contained breathing apparatus and having access to a surface compression chamber. Such qualification is the minimum required by the regulatory authorities responsible for the control of off-shore diving operations, e.g. oil and gas exploration.

Other Standards in the series relate to SCUBA diving to 30 m (Part 1), air diving to 30 m (Part 2) and bell diving (Part 4). Other parts for the AS 2815 series may also be prepared for training of other persons/operators involved in diving operations, e.g. diving supervisors.

Persons who successfully complete the training course specified in this Standard are eligible for certification from a State certification scheme such as that administered by the Work Cover Authority, N.S.W. or under the Australian Diver Accreditation Scheme (ADAS) administered by the Victorian Department of Manufacturing and Industry Development subject to ADAS approval of the diver training establishment. Restricted certificates may be issued to divers who complete all training with the exception of specialist task modules. Persons successfully completing the modified training syllabus may only carry out diving operations using limited plant, tools and equipment. Upgrading of the diver's qualification and underwater task capacity may be achieved by completion of the relevant specialist task modules and endorsement for the type of work the module covered. The relationship between the various parts of the AS 2815 series and the certification schemes available to successful candidates is shown in the diagram.

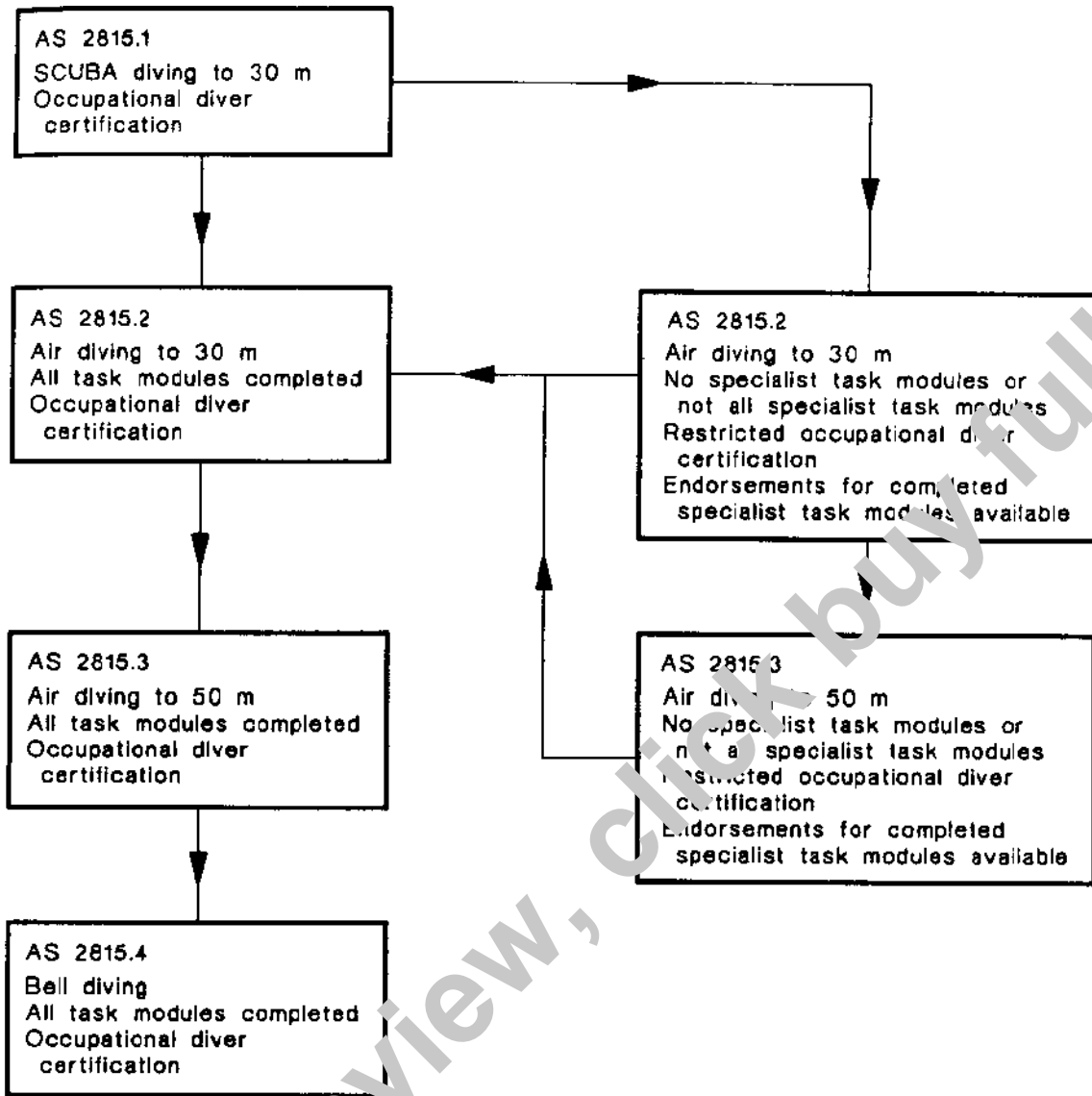
This Standard is largely based on requirements originally developed by the (U.K.) Manpower Services Commission (MSC) and the European Diving Technology Committee of the EEC, which were developed to comply with the (U.K.) Health and Safety Executive Diving operations at work regulations. Such regulations require all divers entering construction or off-shore oil and gas industries in the United Kingdom to have achieved the appropriate requirements of the appropriate underwater working training Standard and to be certified as such by the relevant regulatory authority.

Australian industry and the Committee have strongly supported the objectives of developing training Standards compatible with the U.K. standards and to provide for reciprocal acceptance of diver qualification/certification within Australia and with the U.K. and European authorities. Such reciprocity is most desirable to provide uniform control and regulations for the itinerant workforce of professional divers. To this end, close contact has been maintained with the U.K. authorities and arrangements for reciprocal approval of diver training schools (curriculum and facilities) were being negotiated by the Victorian Department of Manufacturing and Industry Development. It should be noted that these reciprocity negotiations were based on the Australian Diver Accreditation Scheme, not on the restricted occupational certification scheme.

In the U.K., the relevant authority (Health and Safety Executive) has also established a Certification Board for diving training to advise on contingencies not covered by Standards, as follows:

- (a) Criteria by which diver training may be assessed for certification purposes.
- (b) Criteria by which experience may be assessed for certification purposes of a standard not less than the standard of training in Item (a).
- (c) Establishments providing training satisfying the criteria in Item (a).
- (d) Equivalence to Items (a) and (b) in respect of training and experience in foreign countries.
- (e) Arrangements for—
 - (i) issuing of certificates in respect of diver training;
 - (ii) declaring such certificates to be no longer valid; and
 - (iii) approval of persons taking part in diving operations as part of training.

Advice on how the above matters are to be handled in Australia should be sought from the relevant State regulatory authority or the ADAS administrator.



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STANDARDS AUSTRALIA

Australian Standard

Training and certification of occupational divers

Part 3: Air diving to 50 m

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies the training activities and competencies required for the training and accreditation of divers who are required to work safely and competently—

- (a) using self-contained underwater breathing apparatus (SCUBA) to depths of 30 m (see Notes), and
- (b) using surface-supplied underwater breathing apparatus (SSBA) to depths of 50 m (see Notes), and
- (c) on sites with surface compression chambers present or within convenient distance.

Requirements for full occupational diver certification and for restricted occupational diver certification are included.

NOTES:

- 1 Training and certification to this Standard is generally the minimum required to undertake diving at off-shore locations such as oil and gas exploration, development and production.
- 2 Restricted occupational diver certification is for persons whose diving duties do not require training in all of the specialized underwater tasks in Table 2.5 (see Clause 2.8). Divers with restricted certification may only undertake diving operations which involve limited use of plant, tools and equipment.
- 3 Attention is drawn to the requirements of AS 2299 and of regulatory authorities which limit the depths and times of diving under these conditions and specify the need for compression chamber facilities. In particular, the requirements of regulatory authorities and AS 2299 generally prohibit the use of SCUBA for diving to depths greater than 30 m (see also Clause 1.3.1).

1.2 APPLICATION

1.2.1 General The Standard recognizes that training may take place in a diving school or within an organization.

Regulatory authorities may utilize the Standard to—

- (a) approve establishments to run courses to this Standard;
- (b) monitor courses to ensure standards are being maintained; and
- (c) issue or accept certificates of competence, restricted or otherwise, to or from persons who have completed the specified training task and are adjudged competent to achieve the competencies described in this Standard.

NOTES:

- 1 At the time of publication investigations were under way to determine if reciprocal recognition of diver qualification and certification could be arranged between Australian and the European authorities (U.K. and EEC).
- 2 The Victorian Department of Manufacturing and Industry Development is currently working with other equivalent State regulatory bodies in Australia under the auspices of the Australian Minerals and Energy Council (AMEC) Standing Committee on Off-shore Petroleum Legislation, to institute and implement a uniform national system for occupational diver accreditation. This Standard is seen as the vehicle by which uniform training criteria can be set in Australia for diving activities requiring such certification.

1.2.2 Occupational certification Persons requiring occupational certification are required to meet all elements of competency and performance criteria in this Standard.

1.2.3 Restricted occupational certification Persons who do not require training in all the specialized tasks covered by the Powered tools, Cutting and welding, Underwater explosives and Underwater construction modules outlined in Clause 2.8 may seek restricted occupational certification from the relevant State regulatory authority once all other elements of competency, performance criteria, and minimum in-water training times in this Standard have been successfully met. Endorsement of the restricted certificate for a particular module may be sought after the relevant module has been completed. Once all modules have been completed, an occupational certificate may be sought.

1.3 PURPOSE AND UNITS OF COMPETENCY

1.3.1 Purpose The purpose of this Standard is to describe the organizational and syllabus requirements for the following:

- (a) To train underwater workers to operate safely and competently to depths of 30 m using self-contained and to 50 m using surface-supplied breathing apparatus, in accordance with AS 2299.

NOTE: AS 2299 and some regulatory authorities prohibit SCUBA diving beyond 30 m.