

AS 2815.1:2021



# Training and certification of occupational divers

Part 1: Occupational SCUBA diver



AS 2815.1:2021

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The following are represented on Committee SF-017:

- Australasian Institute for Maritime Archaeology
- Australian Council of Trade Unions (ACTU)
- Australian Diver Accreditation Scheme
- Australian Marine Sciences Association
- Australian Medical Association
- Better Regulation Division (Fair Trading, SafeWork NSW, TestSafe)
- Department of Defence (Australian Government)
- Flinders University
- Maritime Union of Australia
- National Association of Occupational Diver Training Establishments
- NSW Police Force
- Victoria Police
- Zoo and Aquarium Association

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# **Training and certification of occupational divers**

## **Part 1: Occupational SCUBA diver**

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## Preface

This Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee SF-017, Occupational Diving, to supersede AS 2815.1—2008, *Training and certification of occupational divers, Part 1: Occupational SCUBA diver—Standard*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this document as an Australian Standard rather than an Australian/New Zealand Standard.

The inclusion of roles and responsibilities in AS 2815.1:2021, was approved by the Standards Development and Accreditation Committee on 6 August 2020, as a one-off exemption to the directives of Standardization Guide 006, Section 35.

The objective of this document is to provide regulatory authorities, training providers and trainees with a summary of the minimum competencies for an occupational self-contained underwater breathing apparatus (SCUBA) diver; the minimum content of a training course for imparting these competencies to trainee occupational SCUBA divers; and assessment procedures.

The task training set out in the units of this document will provide the trainee with a general appreciation of the techniques and problems involved in carrying out the specified underwater work. For the diver to be considered a competent underwater worker, it will generally be necessary for further specialist training to be undertaken.

This document is particularly relevant to the training of personnel who will be engaged in underwater operations as described in the AS/NZS 2299 series on occupational diving operations.

The document is Part 1 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.

The major changes for this edition are to —

- (a) set out the units in a competency-based format; and
- (b) include optional competencies for training in the use of enriched air nitrox (EAN) techniques and use of a dry suit.

Controlled Waters occupational SCUBA diver certification has been included within this document and is intended for divers undertaking occupational diving operations in controlled environments only, such as aquariums, animal enclosures or swimming pools.

This document separates equipment competencies into general SCUBA equipment and a new unit specifically addressing the use and maintenance of compressors. The use and maintenance of compressors unit is not mandatory for Controlled Waters occupational SCUBA diver certification.

This document also provides guidance allowing for certified divers to undertake EAN or dry suit training as standalone units in addition to previously undertaken SCUBA training.

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# Australian Standard®

## Training and certification of occupational divers

### Part 1: Occupational SCUBA diver

#### Section 1 Scope and general

##### 1.1 Scope

This document specifies the training activities and competencies required for the training and certification of divers to work safely and competently as members of an occupational diving team —

- (a) using self-contained underwater breathing apparatus (SCUBA);
- (b) breathing air as the breathing gas;
- (c) undertaking no decompression dives to 30 m (see Notes);
- (d) undertaking basic underwater tasks;
- (e) using a dry suit; and
- (f) breathing enriched air nitrox (EAN) as the breathing gas.

Training and certification to this document is generally the minimum required by a diver to undertake diving in onshore locations to a depth no greater than 30 m, where no surface compression chambers are required by AS/NZS 2299 to be present on site. It is not intended to equip occupational divers who may be engaged in more demanding tasks and environments, such as within the construction industry.

This document includes provisions for trainees to undertake a more limited training program leading to Controlled Waters occupational diver certification.

Requirements and guidance for providers of occupational SCUBA diving training are given in [Section 4](#).

Training and certification of scientific divers is addressed in AS/NZS 2815.6.

This document is not intended to encompass the recreational diving industry and training within that industry.

For the purposes of this document, only open-circuit SCUBA is considered using either air or EAN. This document is not intended to train divers in the use of closed circuit or rebreather diving systems.

This document is not intended to train divers for surface supply diving, construction diving or diving in other higher hazard conditions. Refer to AS 2815.2 or AS 2815.3 for additional training and certification requirements for these occupations.

**NOTE** Controlled Waters occupational diver certification is for persons whose diving duties only involve diving within a controlled environment such as an aquarium, animal enclosure or swimming pool or who do not require training in all of the specialized underwater tasks (see [Section 2](#)). Divers with Controlled Waters certificates may only undertake diving operations within controlled environments up to the depth of training of 18 m. Persons holding Controlled Waters occupational diver certificates to this document may upgrade their diving qualifications by completion of all remaining modules or dive requirements in this document for full certification (except for the EAN or dry suit modules, which remain optional).