

AS 2815.2:2021



STANDARDS  
Australia



# Training and certification of occupational divers

Part 2: Surface supplied diver to 30 m

currently in review, click buy full version

AS 2815.2:2021

This Australian Standard® was prepared by SF-017, Occupational Diving. It was approved on behalf of the Council of Standards Australia on 06 December 2021.

This Standard was published on 17 December 2021.

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

This Standard was issued in draft form for comment as DR AS 2815.2:2020.

#### **Keeping Standards up-to-date**

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:

[www.standards.org.au](http://www.standards.org.au)

ISBN 978 1 76113 627 6

# Training and certification of occupational divers

## Part 2: Surface supplied diver to 30 m

Originates as AS 2815.2—1985.  
Second edition 1992.  
Jointly revised and redesignated as AS/NZS 2815.2:2013.  
Revised and redesignated as AS 2815.2:2021.

© Standards Australia Limited 2021

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

## Preface

This Standard was prepared by the Australian members of Joint Standards Australia/Standards New Zealand Committee SF-017, Occupational Diving, to supersede AS/NZS 2815.2:2013, *Training and certification of occupational divers, Part 2: Surface supplied diving to 30 m*.

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 2815.2:2021, was approved by the Standards Development and Accreditation Committee on 6 August 2020, as a one-off exemption to the directives of Standardization Guide SG-006, Section 35.

The objective of this document is to provide regulatory authorities, training providers and trainees with the content of a training course for imparting minimum levels of competency to trainee occupational surface supplied breathing apparatus (SSBA) 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.

The document is Part 2 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 document is particularly relevant to the training of personnel who will be engaged in underwater SSBA operations as described in the AS/NZS 2299 series of occupational diving operations.

The major changes for this edition are to allow the order of training to be more flexible, so that surface supplied diver training may be undertaken prior to or in conjunction with occupational SCUBA diver training (refer to AS 2815.1). This means that this document no longer requires occupational SCUBA diver training as one of the necessary trainee application criteria. It includes non-SCUBA-specific competencies from within AS 2815.1 *Training and certification of occupational divers, Part 1: Occupational SCUBA diver*, to allow critical theory, safety and basic work task units to be undertaken during the initial SSBA diver training, with additional dives and in-water dive time which may be undertaken on either SCUBA or SSBA.

This document also provides guidance allowing for certified divers to undertake a top up to full SSBA diver from restricted SSBA diver certification. It allows EAN or dry suit training as standalone units in addition to previously undertaken SSBA diver training.

## Contents

Preface .....	ii
<b>Section 1 Scope and general .....</b>	<b>1</b>
1.1 Scope .....	1
1.2 Application .....	1
1.2.1 General .....	1
1.2.2 Certification .....	2
1.2.3 Qualification .....	3
1.3 Normative references .....	3
1.4 Terms and definitions .....	3
1.5 Purpose .....	5
1.6 Trainee application criteria .....	6
<b>Section 2 Training course content .....</b>	<b>8</b>
<b>Section 3 Units of competency .....</b>	<b>10</b>
3.1 Unit 1 — SSBA equipment .....	10
3.1.1 General .....	10
3.1.2 Unit of competency, elements and performance criteria .....	10
3.2 Unit 2 — Emergency procedures — SSBA .....	11
3.2.1 General .....	11
3.2.2 Unit of competency, elements and performance criteria .....	11
3.3 Unit 3 — Pre-dive preparations — SSBA .....	12
3.3.1 General .....	12
3.3.2 Unit of competency, elements and performance criteria .....	12
3.4 Unit 4 — Underwater deployment — SSBA to 10 m .....	13
3.4.1 General .....	13
3.4.2 Unit of competency, elements and performance criteria .....	13
3.4.3 Dive requirements .....	13
3.4.4 Training dives .....	14
3.5 Unit 5 — Post-dive procedures — SSBA .....	16
3.5.1 General .....	16
3.5.2 Unit of competency, elements and performance criteria .....	16
3.6 Unit 6 — Compression chamber dive .....	17
3.6.1 General .....	17
3.6.2 Unit of competency, elements and performance criteria .....	17
3.7 Unit 7 — Underwater work — Basic .....	17
3.7.1 General .....	17
3.7.2 Unit of competency, elements and performance criteria .....	17
3.8 Unit 8 — Underwater work — Powered tools .....	18
3.8.1 General .....	18
3.8.2 Unit of competency, elements and performance criteria .....	18
3.9 Unit 9 — Underwater work — Cutting and welding .....	19
3.9.1 General .....	19
3.9.2 Unit of competency, elements and performance criteria .....	19
3.10 Unit 10 — Underwater work — Construction .....	20
3.10.1 General .....	20
3.10.2 Unit of competency, elements and performance criteria .....	20
3.11 Unit 11 — Underwater work — Explosives .....	21
3.11.1 General .....	21
3.11.2 Unit of competency, elements and performance criteria .....	21
3.12 Unit 12 — Using enriched air nitrox (EAN) .....	21
3.12.1 General .....	21
3.12.2 Unit of competency, elements and performance criteria .....	22
3.12.3 Dive requirements .....	22
3.13 Unit 13 — Using dry suits .....	23
3.13.1 General .....	23

3.13.2	Unit of competency, elements and performance criteria.....	23
3.13.3	Dive requirements.....	23
<b>Section 4</b>	<b>Training plans, assessment and planned experience .....</b>	<b>25</b>
4.1	Developing the training plan.....	25
4.1.1	General.....	25
4.1.2	Consultation with authorities.....	25
4.1.3	Conformance with workplace health and safety requirements and other Standards.....	25
4.1.4	Syllabus.....	25
4.1.5	Training records.....	26
4.1.6	Course outline.....	26
4.2	Methods of trainee assessment.....	26
4.2.1	General conditions.....	26
4.2.2	Assessment methods.....	26
4.2.3	Conditions of assessment.....	27
4.2.4	Practical work.....	28
4.2.5	Theory assessments.....	28
4.2.6	Assessment of personnel with previous diving experience.....	28
4.3	Staffing, equipment and facilities.....	28
4.3.1	Staffing.....	28
4.3.2	Equipment and facilities.....	29
4.4	Planned experience.....	33
<b>Bibliography</b> .....		<b>34</b>

# Australian Standard®

## Training and certification of occupational divers

### Part 2: Surface supplied diver to 30 m

#### 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 surface supplied breathing apparatus (SSBA) to depths of 30 m;
- (b) breathing air as the breathing gas;
- (c) undertaking no decompression dives to 30 m (see Notes);
- (d) using a dry suit; and
- (e) 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 and construction activities, e.g. repair of jetties, dams on sites where no surface compression chambers are required by AS/NZS 2299 to be present on site.

Requirements and guidance for providers of surface supplied diver training are given in [Section 4](#).

NOTE 1 Many occupational diving operations will require additional underwater work skills to those listed in this document. It should be noted that there may be specific regulatory requirements relating to occupational divers intending to work in the construction industry.

NOTE 2 Restricted occupational diver certification is for persons whose diving duties do not require training in all of the specialized underwater tasks (see [Section 2](#)). Divers with restricted certificates may only undertake diving operations that involve limited use of plant, tools and equipment. Persons holding restricted occupational diver certificates to this document may upgrade their diving qualifications by completion of all remaining modules in this document for full certification, except for the EAN or dry suit modules which remain optional.

NOTE 3 Training and certification of occupational SCUBA divers is dealt with in AS 2815.1. Attention is drawn to the requirements of AS/NZS 2299.1 and of regulatory authorities, which may limit the depths and times of diving with no compression chamber facilities on site.

NOTE 4 Persons who wish to be trained sufficiently to dive using recompression facilities and to depths greater than 30 m need to be trained to AS 2815.3. Graduates from training courses to this document, i.e. AS 2815.2, who wish to upgrade their diving qualifications, may be eligible to do so by completing approved selected modules at an approved diving training establishment.

##### 1.2 Application

###### 1.2.1 General

This document comprises requirements and guidance for use by the trainee diver, supervisor, person conducting a business or undertaking (PCBU), training establishment or certification agency. Specifically, it is intended to —

- (a) prescribe to a trainee the level of competency that a qualified diver is expected to achieve;
- (b) provide minimum requirements for a school or training establishment in the development of a course of training;