

Australian Standard[®]

**Training and certification of
occupational divers**

**Part 1: Occupational SCUBA diver—
Standard**

STANDARDS
Australia



This Australian Standard® was prepared by Committee SF-017, Occupational Diving. It was approved on behalf of the Council of Standards Australia on 16 May 2008. This Standard was published on 25 June 2008.

The following are represented on Committee SF-017:

- Association of Diving Contractors, New Zealand
- Australian Council of Trade Unions
- Australian Diver Accreditation Scheme
- Australian Diving Contractors Association
- Australian Marine Sciences Association
- Australian Medical Association
- CSIRO—Marine & Atmospheric Research
- Department of Defence, Australia
- Department of Labour, New Zealand
- Department of the Premier and Cabinet, SA
- Dive Queensland
- Diving Training Council, New Zealand
- Hyperbaric Engineering Industry Forum, Australia
- Maritime Union of Australia
- National Aquaculture Council
- National Association of Occupational Diver Training Establishments, Australia
- National Institute of Water and Atmospheric Research, New Zealand
- NSW Police Service
- New Zealand Commercial Diver Training Council
- New Zealand Underwater Association
- Professional Divers Association of Australia
- Royal New Zealand Navy
- Seafood Services Australia
- South Pacific Underwater Medicine Society
- Underwater Visual Producers Association, Australia
- Victoria Police
- WorkCover New South Wales

This Standard was issued in draft form for comment as DR 07421.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard[®]

**Training and certification of
occupational divers**

**Part 1: Occupational SCUBA diver—
Standard**

Originally published in Australia as AS 2815.1—1992.
Second edition AS 2815.1—2008.

COPYRIGHT

© Standards Australia

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.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 8754 1

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-017, Occupational Diving, to supersede AS 2815.1—1992, *Training and certification of occupational divers, Part 1: SCUBA diving to 30 m*.

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee SF-017. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The Standard is one part 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 objective of this Standard is to provide regulatory authorities, training providers and trainees with a summary of the minimum competencies for an occupational SCUBA diver, the minimum content of a training course for imparting these competencies to trainee occupational SCUBA divers and assessment procedures.

This Standard is particularly related 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 major change for this edition of the Standard is that the qualification is set out in a competency-based format.

The task training set out in the units of this Standard 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 special training to be undertaken.

Persons who successfully complete the training course specified in this Standard are eligible for certification under the Australian Diver Accreditation Scheme (ADAS) subject to ADAS approval of the diver training establishment.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 APPLICATION	4
1.3 REFERENCED DOCUMENTS	5
1.4 DEFINITIONS	5
1.5 PURPOSE	6
1.6 SELECTION CRITERIA	7
SECTION 2 TRAINING COURSE CONTENT	8
SECTION 3 UNITS OF COMPETENCY	
3.1 DIVING INDUSTRY AND DIVER QUALIFICATIONS	9
3.2 ANATOMY, PHYSIOLOGY AND DIVING PHYSICS	9
3.3 HEALTH AND SAFETY IN DIVING OPERATIONS	12
3.4 DIVING FIRST AID	13
3.5 COMPRESSION CHAMBER THEORY	14
3.6 EFFECTIVE WORKING RELATIONSHIPS	15
3.7 EMERGENCY PROCEDURES	16
3.8 SCUBA EQUIPMENT	17
3.9 PRE-DIVE PREPARATIONS	19
3.10 UNDERWATER DEPLOYMENT	21
3.11 POST-DIVE PROCEDURES	24
3.12 DIVING WORK TASKS	25
SECTION 4 TRAINING PLANS, ASSESSMENT AND PLANNED EXPERIENCE	
4.1 DEVELOPING THE TRAINING PLAN	28
4.2 METHODS OF TRAINEE ASSESSMENT	29
4.3 STAFFING, EQUIPMENT AND FACILITIES	31
4.4 PLANNED EXPERIENCE	36

STANDARDS AUSTRALIA

Australian Standard
Training and certification of occupational divers**Part 1: Occupational SCUBA diver—Standard**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard 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 using self-contained underwater breathing apparatus (SCUBA) (see Notes). Requirements and guidance for providers of occupational SCUBA diver training are provided in Section 4.

This Standard is not intended to encompass the recreational diving industry and training within this industry.

NOTES:

- 1 Many occupational diving operations will require additional underwater work skills to those listed in this Standard.
- 2 Training and certification of recreational SCUBA divers is dealt with in the AS 4005 series.
- 3 Attention is drawn to the requirements of AS/NZS 2299.1, AS/NZS 2299.2 and of regulatory authorities which limit the depths and times of diving with no compression chamber facilities. In particular, the requirements of regulatory authorities and AS/NZS 2299.1 generally restrict the use of SCUBA to lower risk dives, including limiting SCUBA to no decompression dives to depths no greater than 30 m.

1.2 APPLICATION**1.2.1 General**

This Standard may be used to—

- (a) design and deliver occupational diver training;
- (b) approve establishments to run courses to this Standard;
- (c) monitor courses to ensure standards are being maintained; and
- (d) issue or accept certificates of competence to or from persons who have completed the specified training tasks and are adjudged competent to achieve the competencies prescribed in this Standard.

1.2.2 Occupational certification

Persons requiring occupational certification need to meet all elements of competency and performance criteria specified in this Standard for the particular level of certification being sought.

NOTE: See also AS/NZS 2299.1 for requirements for certification bodies.