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# Competency Standard for diving, hyperbaric chamber, and remotely operated vehicle operations

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# Preface

This is the third edition of CSA Z275.4, *Competency Standard for diving, hyperbaric chamber, and remotely operated vehicle operations.* It supersedes the previous editions published in 2002 and 1997 under the title *Competency Standard for Diving Operations*. The Standard contains requirements and performance specifications for determining and measuring competency levels for divers and their associated team members.

This new edition of the Standard adds competency requirements for a new category of support personnel, the inshore diving safety specialist (see Clause 27) and includes specific competency elements for clinical hyperbaric chamber operators. In addition, this Standard now references requirements for training in each category as established in 2005 with the publication of CSA Z275.5 (which has been revised in parallel with this new edition of CSA Z275.4). The competency requirements for offshore air-diving supervisors have also been completely revised (see Clause 15.2). In addition, this Standard adds an expectation for retraining and recertification (requalification) in all nine diving categories and 18 dive support categories specified in this Standard. And finally, this edition adds provisions for training and assessing the competency of pilots of and technicians for remotely operated vehicles.

It must be understood by the user of this Standard that the requirements contained herein are minimum levels. This Standard does not have the force of law unless mandated by legislation or referenced in the regulations of the authority having jurisdiction. The user is advised to contact the local authority having jurisdiction in his or her area in order to determine to what extent this Standard is referenced.

The requirements result from consensus among the Technical Committee members, who represent a broad spectrum of interests. The members were encouraged and aided by the public comments received as a result of the wide distribution of a draft at the public comment stage.

This Standard was prepared by the Subcommittee on Diving Competency, under the jurisdiction of the Technical Committee on Occupational Diving and Hyperbaric Environments and the Strategic Steering Committee on Occupational Health and Safety, and has been formally approved by the Technical Committee.

*February 2012*

**Notes:**

**(1)** *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*

**(2)** *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*

**(3)** *This publication was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.*

**(4)** *To submit a request for interpretation of CSA Standards, please send the following information to* ***inquiries@csa.ca*** *and include "Request for interpretation" in the subject line:*
*(a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
*(b) provide an explanation of circumstances surrounding the actual field condition; and*
*(c) where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*
*Committee interpretations are processed in accordance with the* CSA Directives and guidelines governing standardization *and are published in CSA's Current Standard Activities, which is available on the CSA website at* ***http://standardsactivities.csa.ca****.*

**(5)** *CSA Standards are subject to periodic review, and suggestions for their improvement will be referred to the appropriate committee. To submit a proposal for change to CSA Standards, please send the following information to* ***inquiries@csa.ca*** *and include "Proposal for change" in the subject line:*
*(a) Standard designation (number);*
*(b) relevant clause, table, and/or figure number;*
*(c) wording of the proposed change; and*
*(d) rationale for the change.*

# Z275.4-12
# Competency Standard for diving, hyperbaric chamber, and remotely operated vehicle operations

## 1 Scope

### 1.1
This Standard applies to occupational diving, hyperbaric facility, and remotely operated vehicle (ROV) operations conducted in connection with all types of work and employment and describes the requirements for minimum competency levels for all personnel directly associated with the identified techniques of diving or ROV operations.

Canadian safety and health legislation requires that all workers be competent to perform the work assigned to them. It requires competency in both the theory and use of the type of diving apparatus or ROV employed.

This Standard has been established to provide diver and ROV training facilities and the diving and ROV industry with a uniform minimum level of competency necessary for the various levels of diver and ROV techniques. This level of competency will allow the diver or ROV pilot/technician to safely and competently complete the specific tasks required of occupational divers or ROV personnel.

**Note:** *It is recognized that certain underwater tasks can require specialized codes of practice. It is possible that competency levels that differ from the requirements of this Standard will be acceptable to the authority having jurisdiction.*

### 1.2
This Standard addresses competency requirements for the following types of diving:

(a) occupational (open-circuit) SCUBA diving;
(b) surface-supplied diving:
    (i) air:
        (1) restricted surface-supplied; and
        (2) unrestricted surface supplied; and
    (ii) mixed gas; and
(c) deep diving:
    (i) bell techniques (bell);
    (ii) saturation techniques (SAT); and
    (iii) atmospheric diving system techniques (ADS).

### 1.3
This Standard addresses the competency requirements for the following types of personnel associated with the diving techniques specified in Clause 1.2:

(a) divers/pilots;
(b) tenders;
(c) diving supervisors;
(d) hyperbaric chamber operators (HCOs);
(e) life-support technicians (LSTs);
(f) diving medical technicians (DMTs);
(g) diving safety specialists (DSSs);
(h) diving physicians and hyperbaric physicians; and
(i) ROV pilots/technicians.