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SINGAPORE STANDARD

Code of practice for diving at work



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This Singapore Standard was approved on 23 November 2018 by the Quality and Safety Standards Committee under the purview of the Singapore Standards Council.

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The Quality and Safety Standards Committee, appointed by the Standards Council, consists of the following members:

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Advisor	:	Mr Chan Yew Kwong	Individual Capacity
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The organisations in which the experts of the Working Group are involved are:

Association of Singapore Marine Industries Commercial Diving Association (Singapore) Flinders EMA Pte Ltd KB Associates Pte Ltd Ministry of Manpower Nanyang Technological University Singapore Underwater Federation Workplace Safety and Health Council

Contents

		Page
Fore	word	6
1	Scope	
2	Normative references	
3	Terms and definitions	
4	Roles and responsibilities	
5	Personnel, training and records	
6	General diving procedures	19
7	Surface and environmental conditions	
8	Communications	
9	Diving equipment	
10	Dive site requirements	30
11	Decompression diving	31
12	Specific requirements for SSBA/SSDE diving operations	32
13	Specific requirements for CSCUBA diving operations	37
14	Incident reporting and investigation	39
15	Medical requirements	40
Anne	exes	
Α	Dive log sheet	42
В	Hazard identification, risk assessment and control	
С	Contents of diving operations manual	48
D	Guidelines for doctors performing diving medical assessments	51
Е	Lifeline signals	58
Table	es	
1	Minimum number of personnel required for different SSDE diving operations dive depths	33
2	Minimum number of personnel required for different CSCUBA diving operations dive	
D.1	Guidelines for diving medical assessments	
D.2	Guidelines for diving medical assessments overall components	
D.3	Guidelines for medical declaration	52
D.4	Guidelines for medical examination	
D.5	Guidelines for medical investigations	
D.6	Guidelines for cardiovascular testing (treadmill and exercise stress echo)	

Foreword

This Singapore Standard was prepared by the Working Group appointed by the Technical Committee on Workplace Safety and Health under the purview of the Quality and Safety Standards Committee.

The summary of changes from the 2010 edition is as follows:

- 1) Review of definitions such as the use of CSCUBA, "Live boating" and "Planned maintenance system".
- 2) Clarified when CSCUBA can/cannot be used.
- 3) Inclusion of a sample of a dive log sheet (Annex A) to provide readers with an easy reference on the details of a dive log sheet.
- 4) Inclusion of lifeline signals (Annex E) to provide readers with an easy reference on general signals, direction signals, working signals and emergency signals.
- 5) Revision of medical requirements.

The code deals with diving at work and, in particular, it provides a set of requirements to promote uniformity of practice in relation to the occupational safety and health in the commercial diving industry.

This latest revision is to bring the standard up-to-date with the latest relevant industry standards and to issue a standard specifically for use in Singapore waters.

In the preparation of this standard, reference was made to the following publications:

- 1) AS/NZS 2299.1 Occupational diving operations Standard operational practice
- 2) AS/NZS 2030.1 Gas cylinders General requirements
- 3) AS/NZS 4484 Gas cylinders for industrial, scientific, medical and refrigerant use Labelling and colour coding
- 4) HSE UK L104 Commercial diving projects inland / inshore
- 5) ISO 2230 Rubber products Guidelines for storage
- 6) Commercial diving competency standards for inland/inshore issued by the Workplace Safety and Health Council.
- 7) Guidance Note DMAC 07 Recommendation for flying after diving (Diving Medical Advisory Committee)
- 8) The medical examination and assessment of divers (Health and Safety Executive)
- 9) Workplace Safety and Health (Construction) Regulations
- 10) Workplace Safety and Health (Risk Management) Regulations
- 11) CDA(S) Guidance Document "Recognised Commercial Diving Certification"

Acknowledgement is made for the use of the information from the above publications and materials.

Acknowledgement is also made to the following organisations for their kind permission to reproduce Annexes A, D and E:

- KB Associates Pte Ltd (Annexes A and E);
- Flinders EMA Pte Ltd (Annex D).

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

- Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

Code of practice for diving at work

1 Scope

- **1.1** This standard provides organisational and logistical requirements for the use of compressed air supply apparatus in occupational diving operations as well as specific requirements for the use of surface-supplied diving equipment (SSDE) in occupational underwater operations in depths not exceeding 50 m and commercial self-contained underwater breathing apparatus (CSCUBA) in occupational underwater operations in depths not exceeding 30 m.
- 1.2 This standard does not apply to recreational diving and scientific diving.
- NOTE 1 For recreational diving, refer to TR 32 Technical Reference for Recreational Diving.

NOTE 2 - For scientific diving, refer to SS 623 Code of Practice for Scientific Diving.

Specialised gas mixing, filling, analysis, labelling and diving procedures are necessary for safe diving using breathing gases other than air. In particular, special equipment selection and cleaning procedures are needed for diving using oxygen-enriched gas mixture. This standard does not provide guidance on these procedures, and such diving methods/techniques are outside its scope.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN 12021	Respiratory protective devices – Compressed air for breathing apparatus
SS 473	Personal eye protectors
	Part 1: General requirements

Part 2: Selection, use and maintenance

SS 639 The filling, inspection, testing and maintenance of gas cylinders for the storage

and transport of compressed gases.

Part 1: Seamless steel and aluminium alloy cylinders (excluding dissolved acetylene) – Inspection at the time of filing, periodic maintenance and testing