



International Maritime Organization

Diving Systems

Code of Safety for Diving Systems
1995



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Foreword

The Code of Safety for Diving Systems was originally adopted by the IMO Assembly at its thirteenth session (November 1983). Recognizing the need to update the Code and take into account amendments adopted by the Maritime Safety Committee since its adoption, the Assembly adopted a revised version, the Code of Safety for Diving Systems, 1995, at its nineteenth session (November 1995) by resolution A.831(19).

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Code of Safety for Diving Systems, 1995

PREAMBLE

1 This Code* has been developed to provide a minimum international standard for the design, construction and survey of diving systems on ships and floating structures engaged in diving operations, in order to enhance safety of divers/personnel. The Code accepts that interchangeability of equipment or the addition or deletion of components is reasonable and common practice and that this Code should not inhibit this.

2 The intent of the Code is also to facilitate the international movement and operation of diving systems.

3 Throughout the development of the Code, it was recognized that it must be based upon sound design and engineering principles and experience gained from operating such systems; furthermore, that design technology of diving systems is complex and that the Code should be re-evaluated and revised as necessary. To this end the Organization will periodically review the Code, taking into account both experience and the latest technical developments.

4 Any existing diving system which complies with the provisions of the Code should be considered eligible for issuance of a certificate in accordance with this Code.

5 The Code is not intended to prohibit the use of an existing system simply because its design, construction and equipment does not conform to the requirements of this Code. Many existing diving systems have operated successfully and safely for extended periods of time and their operating history should be considered in evaluating their suitability.

6 The Code does not include requirements for diving operations or the procedures for control of diving operations.

7 The Code has been developed for fixed diving systems. However, any temporary diving systems which comply with the provisions of the Code may be certificated in accordance with the Code.

* The Code of Safety for Diving Systems, 1995, comprises the annex to resolution A.831(19), the text of which is reproduced at the end of this publication.

Chapter 1

General

1.1 Purpose

The purpose of this Code is to recommend design criteria and construction, equipment and survey standards for diving systems so as to minimize the risk to divers, personnel, ships and floating structures having such systems on board and to facilitate the international movement of such ships and floating structures in the context of diving operations.

1.2 Application

The Code applies to new fixed diving systems which are certificated more than 12 months after the date on which the Assembly of the Organization adopts this Code. However, any existing system which complies with the provisions of the Code should be considered eligible for issuance of a certificate in accordance with this Code.

1.3 Definitions

For the purpose of this Code the terms used have the meanings defined in the following paragraphs unless expressly provided otherwise.

1.3.1 *Administration* means the Government of the State whose flag a ship or floating structure which carries a diving system is entitled to fly or in which the ship or floating structure is registered.

1.3.2 *Bottle* means a pressure container for the storage and transport of gases under pressure.

1.3.3 *Breathing gas/breathing mixture* means all gases/mixtures of gases which are used for breathing during diving operations.

1.3.4 *Certificate* means Diving System Safety Certificate.

1.3.5 *Surface compression chamber* means a pressure vessel for human occupancy with means of controlling the pressure inside the chamber.

1.3.6 *Depth* means the water depth or equivalent pressure to which the diver is exposed at any time during a dive or inside a surface compression chamber or a diving bell.

1.3.7 *Diving bell* means a submersible compression chamber, including its fitted equipment, for transfer of diving personnel under pressure between the work location and the surface compression chamber.

1.3.8 *Diving system* means the whole plant and equipment necessary for the conduct of diving operations.

1.3.8.1 *Fixed system* means a diving system installed permanently on ships or floating structures.

1.3.8.2 *Temporary system* means a diving system installed on ships or floating structures for a period not exceeding one year.

1.3.9 *Evacuation system* means a system whereby divers under pressure can be safely evacuated from a ship or floating structure to a position where decompression can be carried out.

1.3.10 *Handling system* means the plant and equipment necessary for raising, lowering and transporting the diving bell between the work location and the surface compression chamber.

1.3.11 *Hazardous areas* are those locations in which an explosive gas-air mixture is continuously present, or present for long periods (zone 0); in which an explosive gas-air mixture is likely to occur in normal operation (zone 1); in which an explosive gas-air mixture is not likely to occur, and if it does it will only exist for a short time (zone 2).

1.3.12 *Life support system* means the gas supply, breathing gas system, decompression equipment, environmental control system and equipment required to provide a safe environment for the diving crew in the diving bell and the surface compression chamber under all ranges of pressure and conditions they may be exposed to during diving operations.

1.3.13 *Living compartment* means the part of the surface compression chamber which is intended to be used as the main habitation for the divers during diving operations and which is equipped for such purpose.

1.3.14 *Main components* of a diving system include the surface compression chamber, diving bell, handling system and fixed gas storage facilities.

1.3.15 *Mating device* means the equipment necessary for the connection and disconnection of a diving bell to a surface compression chamber.

1.3.16 *Maximum operating depth* of the diving system is the depth, in metres or feet, of seawater equivalent to the maximum pressure for which the diving system is designed to operate.

1.3.17 *Organization* means the International Maritime Organization (IMO).

1.3.18 *Pressure vessel* means a container capable of withstanding an internal maximum working pressure greater than or equal to 1 bar.

1.3.19 *Umbilical* means the link between the diving support unit and the diving bell and may contain surveillance, communication and power supply cables, breathing gas and hot water hoses. The hoisting and lowering strength member may be part of the umbilical.

1.3.20 *Category A machinery spaces* are those spaces and trunks to such spaces as defined in the International Convention for the Safety of Life at Sea, 1974, as amended.

1.4 Exemptions

An Administration may exempt any system which embodies features of a novel kind from any of the provisions of the Code, so that the research and development into such novel features is not restricted by the Code. Any such system should, however, comply with safety requirements which, in the opinion of that Administration, are adequate for the operation intended and are such as to ensure the overall safety of the system. The Administration allowing any such exemptions should list the exemptions on the Certificate.

1.5 Equivalents

Where the Code requires that a particular fitting, material, appliance, apparatus, item or type of equipment should be fitted or carried in a system, or that any particular provision should be made, or any procedure or arrangement complied with, the Administration may allow alternative arrangements in that system, provided that the Administration is satisfied that such alternatives are at least as effective as the requirements of the Code.

1.6 Surveys and certification

1.6.1 Each diving system should be subject to the surveys specified below:

- .1** An initial survey before any fixed system is put into service or before the Certificate required under this section of the Code is issued for the first time, which should include a complete and thorough examination of the diving system, equipment, fittings, arrangements and material and which should be such as to ensure their full compliance with the applicable provisions of the Code.
- .2** A renewal survey at intervals specified by the Administration, but not exceeding five years, which should be a complete and thorough examination to ensure that the diving system, equipment, fittings, arrangements and material fully comply with the applicable provisions of the Code.