INTERNATIONAL STANDARD

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Ships and marine technology — Marine environment protection — Oil booms —

Part 2: Strength and performance requirements

Navires et technologie maritime — Protection de l'environnement marin — Barrages de rétention de pétrole —

Partie 2: Exigences de résistance et de performance

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 2, *Marine environment protection*.

ISO 17325 consists of the following parts, under the general title *Ships and marine technology — Marine environment protection — Oil booms*:

— *Part 1: Design requirements*

— *Part 2: Strength and performance requirements*

The following parts are under preparation:

— *Part 3: End connectors*

Auxiliary equipment will form the subject of future Part 4.

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Introduction

Oil booms can be classified in two major types:

— Fence booms typically provide a stiffened barrier designed to float vertically in the water.

— Curtain booms are provided with flexible material for the underwater portion of the membrane (called the skirt).

There are other types of booms, such as special purpose booms and sorbent booms, which are not the subject of this part of ISO 17325.

This International Standard gives some general guidelines for manufacturers as well as users with regard to subjects associated with producing, purchasing, and using such types of equipment. It does not define any specific type and size of boom for a particular application, as many variables have to be taken into consideration. This part of ISO 17325 specifies the strength and performance requirements of booms and relevant test methods.

This International Standard has been developed after considering the below standards and national legislative requirements.

The American Society for Testing and Materials (ASTM) Committee F-20 has prepared two standards relating to boom connectors. ASTM F1093-99 specifies static laboratory tests of the strength of an oil spill response boom under tensile loading. ASTM F1523-94 provides a guide on the selection of a containment boom that can be used to control spills of oil and other substances that float on the water.

The Japanese Industrial Standard JIS F 9900-1 and JIS F 9900-2 provide the necessary conditions and specifications for the design, manufacture, etc. of oil booms.

This part of ISO 17325 incorporates and acknowledges use and refers to many elements provided in ASTM F1093-99, ASTM F1523-94, JIS F 9900-1, and JIS F 9900-2. However, it also contains changes and additional details on strength and performance requirements for oil booms.

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Ships and marine technology — Marine environment protection — Oil booms —

Part 2: Strength and performance requirements

1 Scope

In addition to ISO 17325-1, this part of ISO 17325 specifies the particular strength and performance requirements of oil booms and associated test methods. It does not purport to address the safety concerns, if any, associated with their use. It is the responsibility of the user of this International Standard to establish the appropriate safety and health practices and determine applicability of regulatory limitations prior to use.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 34-1, *Rubber, vulcanized or thermoplastic — Determination of tear strength — Part 1: Trouser, angle and crescent test pieces*

ISO 175, *Plastics — Methods of test for the determination of the effects of immersion in liquid chemicals*

ISO 505, *Conveyor belts — Method for the determination of the tear propagation resistance of textile conveyor belts*

ISO 3011, *Rubber- or plastics-coated fabrics — Determination of resistance to ozone cracking under static conditions*

ISO 16165, *Ships and marine technology — Marine environment protection — Terminology relating to oil spill response*

ISO 17325-1:2014, *Ships and marine technology — Marine environment protection — Oil booms — Part 1: Design requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16165 and the following apply.

3.1
fresh water
water with less than 0,5 ppt salinity

3.2
salt water
marine water with greater than 32 ppt salinity

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