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Ships and marine technology — Ship's mooring and towing fittings — Recessed bitts (casting type)

Navires et technologie maritime — Corps-morts et ferrures de remorquage de navires — Bittes d'amarrage encastrées (type moulage)

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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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 4, *Outfitting and deck machinery.*

This second edition cancels and replaces the first edition (ISO 13799:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

— the definition of SWL (3.1) has been reworded;

— the mark numbers in Figure 1 have been amended;

— technical information on FEM has been added in A.3.2.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The recessed bitt is a type of ship's towing fitting installed on the side shell of the ship.

Recessed bitts are normally provided to easily attach the towing lines where the height of the mooring deck is too high.

Ships and marine technology — Ship's mooring and towing fittings — Recessed bitts (casting type)

1 Scope

This document specifies the types, nominal sizes, dimensions and materials, as well as construction, manufacturing and marking requirements, for casting type recessed bitts to meet normal towing requirements.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IMO Circular MSC/Circ.1175, *Guidance on shipboard towing and mooring equipment*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
safe working load
SWL
safe load limit (maximum permissible load) of the fittings used for mooring and towing

4 Classification

4.1 Type

Depending on the size and strength of the material, recessed bitts shall be classified as belonging to one of the following six types:

a) Type 75: nominal size 850, casting material having a yield point of not less than 235 N/mm^2;

b) Type 110: nominal size 850, casting material having a yield point of not less than 350 N/mm^2;

c) Type 135: nominal size 850, casting material having a yield point of not less than 430 N/mm^2;

d) Type 100: nominal size 920, casting material having a yield point of not less than 235 N/mm^2;

e) Type 150: nominal size 920, casting material having a yield point of not less than 350 N/mm^2;

f) Type 180: nominal size 920, casting material having a yield point of not less than 430 N/mm^2.