INTERNATIONAL STANDARD

ISO 13776

Second edition
2020-08

Ships and marine technology — Ship's mooring and towing fittings — Pedestal fairleads

Navires et technologie maritime — Corps-morts et ferrures de remorquage de navires — Chaumards à piédestal

Reference number
ISO 13776:2020(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

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 13776:2012), 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.

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 pedestal fairlead is a type of ship's mooring fitting installed on board to lead and change the mooring rope.

Ships and marine technology — Ship's mooring and towing fittings — Pedestal fairleads

1 Scope

This document specifies the nominal sizes, dimensions and materials, as well as construction, manufacturing and marking requirements, for pedestal fairleads installed to lead the mooring rope of a ship.

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.

ISO 13755, *Ships and marine technology — Ship's mooring and towing fittings — Steel rollers*

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 Nominal sizes

The nominal sizes, D_n, of pedestal fairleads are denoted by reference to the outside diameter of the roller, in millimetres, from a basic series of preferred numbers.

The nominal sizes are: 150, 200, 250, 300, 350, 400, 450 and 500.

5 Dimensions

Pedestal fairleads shall have dimensions and particulars in accordance with Tables 1 and 2, and Figures 1 and 2.

6 Materials

The following material shall be used for manufacturing the pedestal fairleads:

— weldable steel plates having a yield point of not less than 235 N/mm^2.

7 Manufacturing and inspection

7.1 All surfaces of the pedestal fairleads, including welded surfaces, shall be free from any visible flaws or imperfections.

7.2 All surfaces in contact with the ropes shall be free from surface roughness or irregularities likely to cause damage to the ropes by abrasion.

7.3 The pedestal fairleads shall be coated externally with an anti-corrosion protective finish.

8 Marking

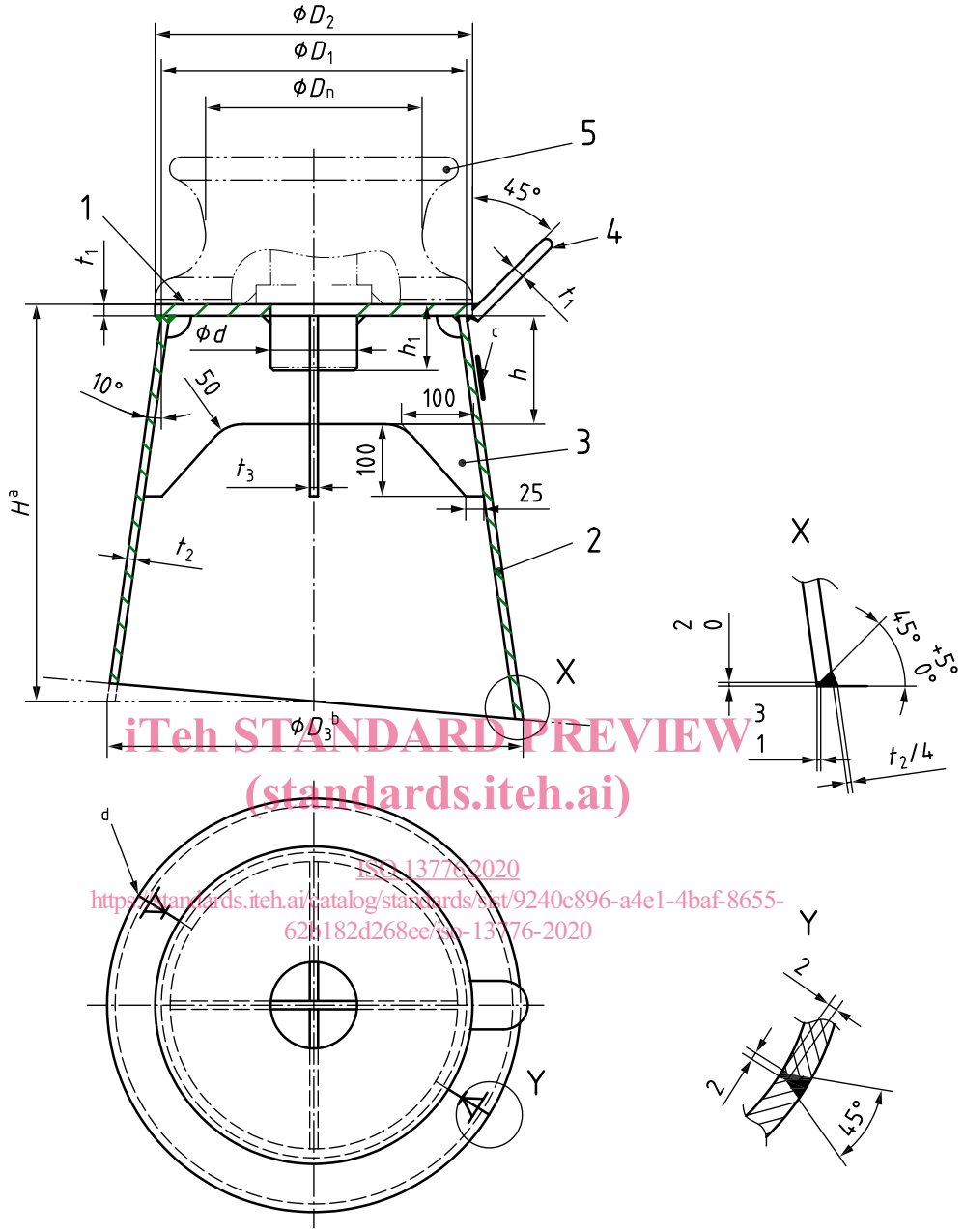
8.1 The safe working load (SWL) for the intended use of the pedestal fairleads shall be noted in the towing and mooring plan available on board for the guidance of the shipmaster as specified in IMO circular MSC/Circ.1175.

8.2 The actual SWL on board shall be determined by considering the under deck reinforcement, and shall be marked on the towing and mooring plan. The actual SWL shall not be over the SWL indicated in this document.

8.3 The pedestal fairleads shall be clearly marked with their SWL by weld bead or equivalent. The SWL shall be expressed in tonnes (symbol 't') and be placed so that it is not obscured during operation of the fitting.

EXAMPLE SWL XXX t.

Dimensions in millimetres



Key

1 top plate
2 body
3 reinforcement
4 rope guide
5 steel roller (ISO 13755 steel rollers)

[a] Height is to be determined in accordance with actual mooring rope height through the pedestal fairlead.

[b] Diameter Ø D_3 is to be calculated depending on the height of the pedestal, H [$D_3 = D_2 + 2 \times (H - t_1) \times \tan 10°$].

[c] SWL marking.

[d] Seam.

Figure 1 — Assembly of pedestal fairleads