SLOVENSKI STANDARD
oSIST prEN 17361:2019

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Plovila za celinske vode - Zunanje lestve

Inland navigation vessels - Outboard ladders

Fahrzeuge der Binnenschifffahrt - Außenbordleitern

Bateaux de navigation intérieure - Échelles de bord extérieures

Ta slovenski standard je istoveten z: **prEN 17361**

ICS:

47.020.10	Ladijski trupi in njihovi konstrukcijski elementi	Hulls and their structure elements
47.060	Jezerska in rečna plovila	Inland navigation vessels

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Inland navigation vessels - Outboard ladders

Bateaux de navigation intérieure - Échelles de bord extérieures

Fahrzeuge der Binnenschifffahrt - Außenbordleitern

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents

Page

European foreword

This document (prEN 17361:2019) has been prepared by Technical Committee CEN/TC 15 “Inland navigation vessels”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

1 Scope

This document applies to outboard ladders for inland navigation vessels. Outboard ladders are used on inland navigation vessels having great side heights to facilitate safe climbing into ship's boats, safe disembarking or safe crossing over onto vessels in the case of significantly different boarding heights.

This document specifies safety requirements on design, dimensions and strength and test conditions for outboard ladders.

Outboard ladders are intended for that range where removable boarding stairs according to EN 1502 are not sufficient in length. This range starts at a boarding height of approximately at 2,80 m above the light water-line.

Boarding ladders are not intended for use by passengers.

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.

EN 22768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications (ISO 2768-1)*

EN ISO 3506-1, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 1: Bolts, screws and studs (ISO 3506-1)*

EN ISO 3506-2, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 2: Nuts (ISO 3506-2)*

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:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
outboard ladder
removable and displacable device with rungs to be attached to the shipside for boarding and disembarking

3.2
handhold
upper part of stringer of outboard ladder

3.3
platform
enlarged top rung of outboard ladder

3.4
stringer
lateral limitation of outboard ladder supporting the rungs

3.5
rung
treads of outboard ladder

3.6
spacer
construction to ensure a distance between vessel's side and outboard ladder

3.7
web
part for strengthening the platform and as connection for the adjustable hook

3.8
adjustable hook
construction for hooking the outboard ladder to the vessel's side

3.9
holder
part of the outboard ladder at which it is hooked to the vessel's side

Note 1 to entry: Lower part of the handhold or adjustable hook.

4 Safety requirements

4.1 Dimensions

General tolerances: EN 22768-1

The dimensions are shown in Figures 1 to 4 and in Table 1.

Edges shall be rounded to min. R 1,5 mm.

Data which have not been specified shall be selected as appropriate.

4.2 Parts

4.2.1 General

Ouboard ladders are not expected to conform to the designs illustrated here; however the dimensions and specifications given shall be followed. The dimensions and masses for Type A and Type B are given in Table 1.

4.2.2 Stringer and handhold

Stringers extending above the platform are used as handhold. On that side which faces the ship's wall, the handholds shall be designed according to Figure 5.

Stringers and handholds shall be made from pipe section, Ø 40 mm.

4.2.3 Steps

4.2.3.1 General

Steps are the rungs and the platform.

4.2.3.2 Rung

Rungs shall be made of rectangular hollow profile, e.g. 40 mm × 30 mm.

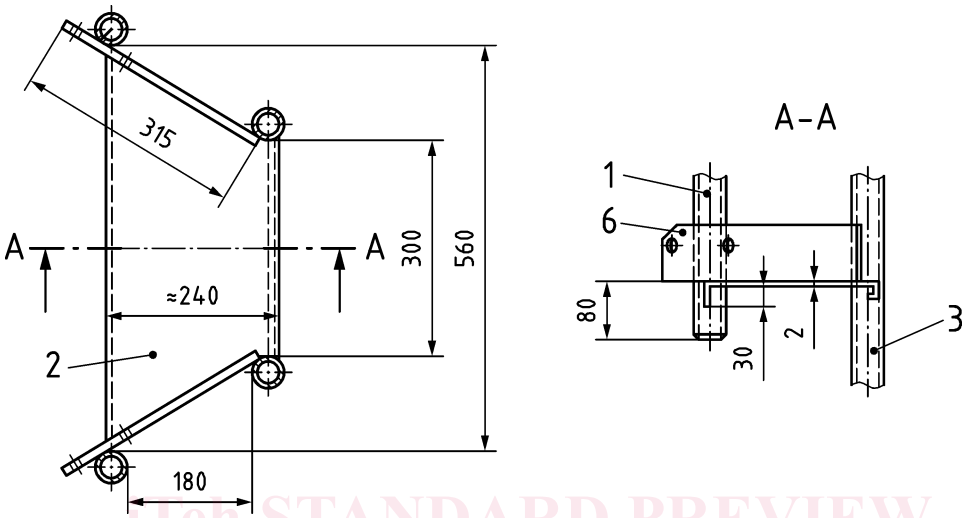
4.2.3.3 Platform

The Platform shall be made of quintet riffle (chequer) plate or similar.

Shape and dimensions of the platform (tread with two webs) as specified in Figure 2.

Web dimensions shall correspond to Figure 3.

Dimensions in millimetre



Key

See Figure 5.

Figure 1 — Platform

4.2.4 Spacers

Spacers shall be made of: pipe section Ø 30 mm

Spacers shall be attached to each stringer:

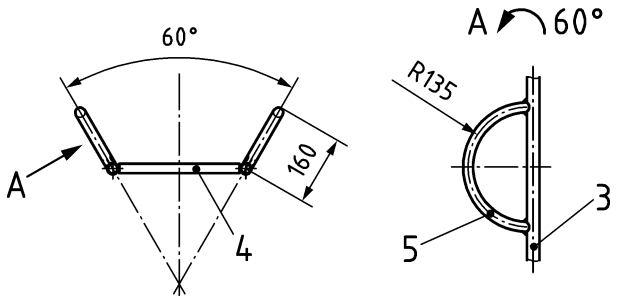
— between the first and second rung;

— at midlength of the outboard ladder;

— between the second last and last rung.

Shape and spreading angle of the spacers shall correspond to Figure 2.

Dimensions in millimetre



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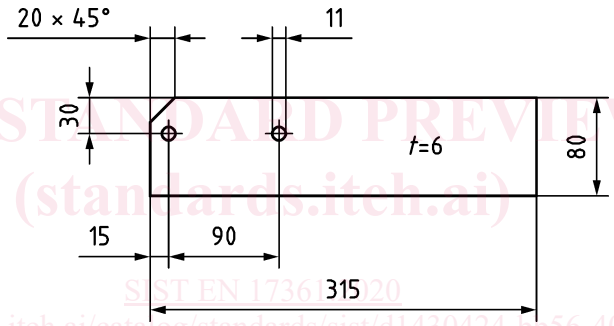
See Figure 5.

Figure 2 — Spacers

4.2.5 Web

Dimensions in millimetre



Key

t thickness

Figure 3 — Web

4.3 Holder of the outboard ladder

4.3.1 General

The holder to hook the outboard ladder onto the shell of the vessel is rigid for the Type A and adjustable for the Type B.

NOTE Outboard ladders of Type A can be converted to outboard ladders of Type B by attaching two adjustable hooks (H) as specified in 4.4. This is the reason why the webs are provided with two screw holes.

4.3.2 Type A

The hook-shaped holder is formed by the two ship-side ends of the handrail which extend down beyond the webs, see Figure 5 a) and Figure 5 b).

4.3.3 Type B

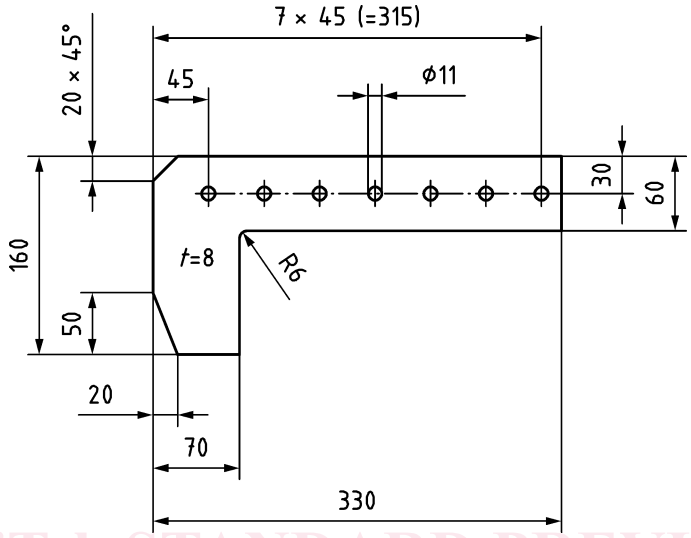
Holder as for Type A but additionally equipped with an adjustable screw-on hook by means of which the hook engagement length can be adjusted to the construction of the vessel, see Figure 1 c).

For details of the adjustable hook (H) see 4.3.

4.4 Adjustable hook (H)

4.4.1 Dimensions

Dimensions in millimetre



Key

t thickness

Figure 4 — Adjustable hook (H)

4.4.2 Fasteners

Per adjustable hook:

— two hexagon head bolts M10 × 25 according to EN ISO 3506-1;

— two hexagon nuts according to EN ISO 3506-2 with spring washer and plain washer.