SLOVENSKI STANDARD
SIST EN 17361:2023

01-april-2023

Plovila za celinske vode - Zunanje lestve

Inland navigation vessels - Outboard ladders

Fahrzeuge der Binnenschifffahrt - Außenbordleitern

Bateaux de navigation intérieure - Échelles de bordé

Ta slovenski standard je istoveten z: **EN 17361:2023**

ICS:

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

SIST EN 17361:2023 **en,fr,de**

EUROPEAN STANDARD

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ICS 47.020.10; 47.060

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English Version

Inland navigation vessels - Outboard ladders

Bateaux de navigation intérieure - Échelles de bordé

Fahrzeuge der Binnenschifffahrt - Außenbordleitern

This European Standard was approved by CEN on 2 January 2023.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 17361:2023) has been prepared by Technical Committee CEN/TC 15 “Inland navigation vessels”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2023, and conflicting national standards shall be withdrawn at the latest by August 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 17361:2020.

The main changes compared to EN 17361:2020 are listed below:

a) 5.1 has been replaced by the Clause “Watertightness”;

b) 5.4 has been deleted.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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1 Scope

This document is applicable 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 boarding stairs according to EN 1502 are not sufficient in length. This range starts at a boarding height of approximately at 2,8 m above the light water-line.

Outboard 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, *Fasteners - Mechanical properties of corrosion-resistant stainless steel fasteners - Part 1: Bolts, screws and studs with specified grades and property classes (ISO 3506-1)*

EN ISO 3506-2, *Fasteners - Mechanical properties of corrosion-resistant stainless steel fasteners - Part 2: Nuts with specified grades and property classes (ISO 3506-2)*

3 Terms and definitions

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

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

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

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

3.1
outboard ladder
removable and displacable device with rungs to be attached to the vessel's side for boarding and disembarking

3.2
handhold
<inland navigation> upper part of stringer of outboard ladder

3.3
platform
<inland navigation> enlarged top rung of outboard ladder

3.4
stringer
<inland navigation> lateral limitation of outboard ladder supporting the rungs

3.5
rung
<inland navigation> treads of outboard ladder

3.6
spacer
construction to ensure a distance between the vessel's side and the 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 by 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: ISO 2768 – c (see EN 22768-1).

The dimensions are shown in Figures 1 to 5 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. Maximum permissible masses are shown in Table 1.

4.2.2 Stringer and handhold

4.2.2.1 The stringers extending on both sides above the platform are used as handholds. On that side which faces the vessel's wall, the handholds shall be designed according to Figure 5.

4.2.2.2 Stringers and handholds should be made from tubular section tube with Ø 35 mm ± 5 mm. If alternative profiles are chosen, it shall be ensured, that they are easy to grasp.

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 profile, e.g. hollow profile 40 mm × 30 mm.

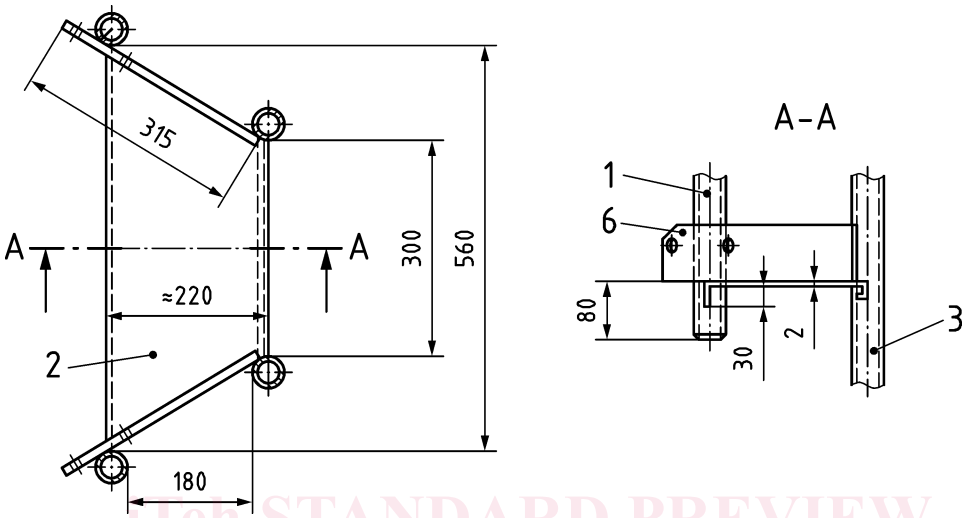
4.2.3.3 Platform

The platform shall be made of water displacing sheet.

Shape and dimensions of the platform (tread with two webs) as specified in Figure 1.

Web dimensions shall correspond to Figure 3.

Dimensions in millimetres



Key

1	handhold
2	platform
3	stringer
6	web

Figure 1 — Platform

4.2.4 Spacers

Material recommendation for spacers: pipe section Ø 30 mm.

Spacers shall be firmly attached to each stringer:

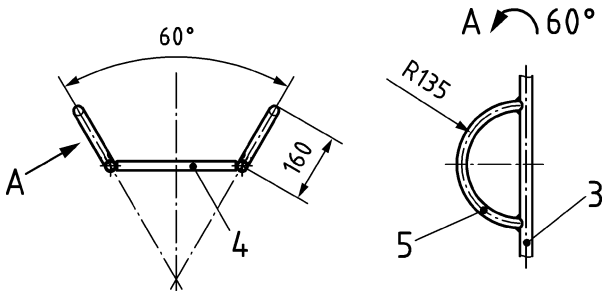
— between the first and second rung;

— 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 millimetres



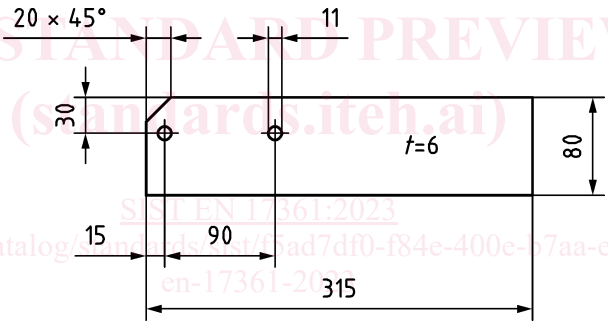
Key

3	stringer
4	rung
5	spacer

Figure 2 — Spacers

4.2.5 Web

Dimensions in millimetres



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

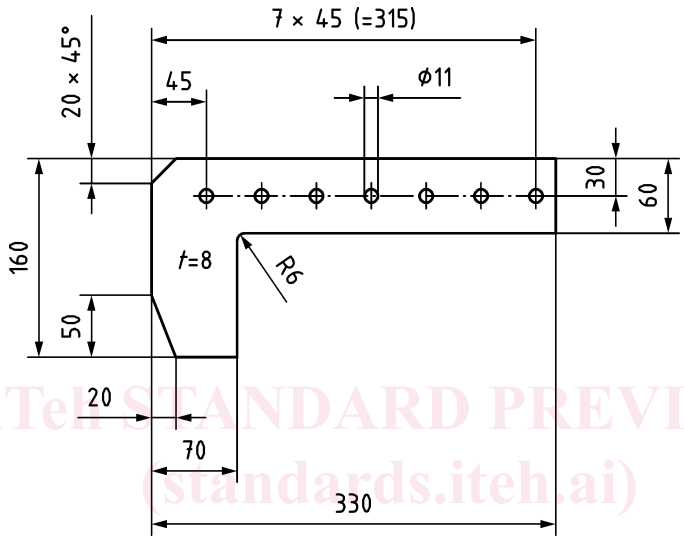
Holder as for Type A but additionally equipped with an adjustable screw-on hook by means of which the hook engagement length can be adjusted to the construction of the vessel, see Figure 5 c).

For details of the adjustable hook (H) see 4.4.

4.4 Adjustable hook (H)

4.4.1 Dimensions

Dimensions in millimetres



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.