



SLOVENSKI STANDARD  
SIST EN 15272-2:2007

01-maj-2007

D`c j ]U nU W ]bg\_Y j cXY ! JcX ]c`nU j f j `!& rXY . CVfU Ubj ]`\_c`i h

Inland navigation vessels - Equipment for rope leading - Part 2: Fairlead

Fahrzeuge der Binnenschifffahrt - Ausrüstung zur Seilführung - Teil 2: Umlenkrolle

Bateaux de navigation intérieure - Equipement de guidage de câble - Partie 2: Chaumard a rouleaux

iteh STANDARD PREVIEW  
(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 15272-2:2007

[SIST EN 15272-2:2007](https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007)

<https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007>

**ICS:**

- 47.020.50 Palubna oprema ter naprave Deck equipment and installations
- 47.060 R` ^ ! • \ aš Á ^ } aš || ç a e Inland navigation vessels

**SIST EN 15272-2:2007 en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 15272-2:2007

<https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007>

ICS 47.020.50; 47.060

English Version

## Inland navigation vessels - Equipment for rope leading - Part 2: Fairlead

Bateaux de navigation intérieure - Equipement de guidage  
de câble - Partie 2: Chaumard à rouleaux

Fahrzeuge der Binnenschifffahrt - Ausrüstung zur  
Seilführung - Teil 2: Umlenkrolle

This European Standard was approved by CEN on 3 February 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

[SIST EN 15272-2:2007](https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007)

<https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007>



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

## Contents

Page

Foreword.....	4
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	5
4 Safety requirements .....	6
4.1 Dimensions.....	6
4.2 Strength .....	7
4.3 Material .....	7
4.4 Corrosion protection .....	7
4.5 Shaft bearing .....	7
4.6 Fixing holes .....	7
5 Test methods.....	7
5.1 General.....	7
5.2 Testing .....	7
6 Designation .....	8
6.1 Designation of a fairlead .....	8
6.2 Designation of a bush .....	8
7 Marking .....	8
8 Manufacturer's certificate .....	8
Annex A (informative) Component parts of a fairlead made of cast steel.....	9
A.1 Materials .....	9
A.2 Component parts .....	10
A.2.1 Roller .....	10
A.2.2 Shaft .....	12
A.2.3 Bush for shaft.....	13
A.2.4 Bush for roller .....	13
A.2.5 Washer .....	14
Annex B (informative) Example .....	15
B.1 Fairlead on deck.....	15
Bibliography .....	16

## Figures

Figure 1 — Fairlead.....	6
Figure A.1 — Roller, item 1, for nominal size 2-8 .....	10
Figure A.2 — Roller, item 1, only for nominal size 1 .....	11
Figure A.3 — Shaft, item 2 .....	12
Figure A.4 — Bush for shaft, item 3 .....	13
Figure A.5 — Bush for roller, item 4 .....	13

Figure A.6 — Washer, item 5 ..... 14

Figure B.1 — Fairlead on deck ..... 15

**Tables**

Table 1 — Main dimensions ..... 7

Table A.1 — Materials ..... 9

Table A.2 — Dimensions for roller (cast) ..... 11

Table A.3 — Shaft dimensions ..... 12

Table A.4 — Dimensions for bushes and washer ..... 14

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

SIST EN 15272-2:2007  
<https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007>

## Foreword

This document (EN 15272-2:2007) 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 September 2007, and conflicting national standards shall be withdrawn at the latest by September 2007.

prEN 15272 *Inland navigation vessels — Equipment for rope leading* consists of:

- *Part 1: General requirements*
- *Part 2: Fairlead*
- *Part 3: Roller fairleads*
- *Part 4: Rope lead*

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 15272-2:2007

<https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007>

## 1 Scope

This European Standard specifies requirements for fairleads on inland navigation vessels. It applies to fairleads for guiding ropes perpendicularly to the fairlead shaft.

## 2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies

EN 13573:2001, *Inland navigation vessels — Anchoring, coupling, towing, hauling and mooring systems*

prEN 15272-1, *Inland navigation vessels — Equipment for rope leading — Part 1: General requirements*

EN ISO 1302, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation (ISO 1302:2002)*

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indication*

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 13573:2001 and the following apply.

### 3.1

#### fairlead

pedestal unit fairlead

fairlead washer

pulley with concave guide for reversing ropes

iTeh STANDARD PREVIEW  
(standards.iteh.ai)

SIST EN 15272-2:2007

<https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007>

## 4 Safety requirements

### 4.1 Dimensions

Dimensions in millimetres

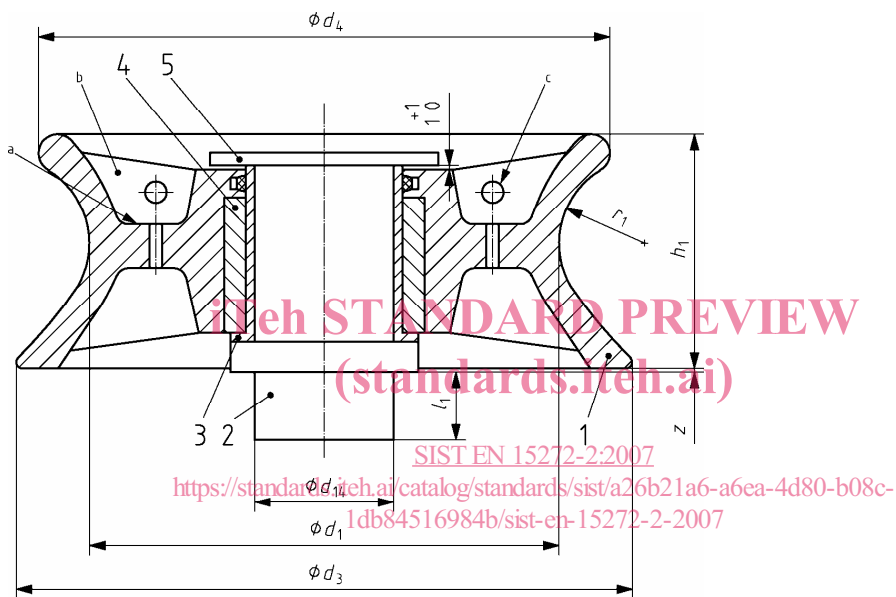
For general tolerances ISO 2768- – accuracy grade m shall apply.

Surface data shall be according to EN ISO 1302.

Fairleads shall have no sharp edges or burr.

Edges shall be rounded and have a radius  $R$  of at least 2 mm.

Details not given need not comply with the illustration given here; compliance is only required for the dimensions and specifications given in clauses 4 to 7.



#### Key

- 1 Roller
- 2 Shaft
- 3 Bush for shaft
- 4 Bush for roller
- 5 Washer
- <sup>a</sup> Marking
- <sup>b</sup> Rib
- <sup>c</sup> Fixing holes

Figure 1 — Fairlead



Table 1 — Main dimensions

Nominal size	$d_1$ mm	$d_3$ mm	$d_4$ mm	$d_{14}$ H7 mm	$h_1$ mm	$r_1$ mm	$s$ mm
1	160	210	195	60	80	25	1,5
2	200	265	245	70	102	32	2,5
3	250	330	300	85	126	42	2,5
5	320	420	390	106	160	55	2,5
8	400	530	490	125	208	73	2,5

#### 4.2 Strength

The fairlead, its component parts and the fairlead fastening to the vessel shall withstand the basic test load as specified in prEN 15272-1 without any permanent deformation.

#### 4.3 Material

All materials are permitted that meet the strength requirements specified in 4.2 except grey cast iron.

Plastics shall be UV-resistant.

#### 4.4 Corrosion protection

Components susceptible to corrosion shall be permanently protected.

#### 4.5 Shaft bearing

The materials of the bearing shells shall be compatible with each other.

The shaft bearings shall either be maintenance-free or capable of being lubricated.

#### 4.6 Fixing holes

In the case of rollers of nominal size 3 to 8, fixing holes shall be provided at the top of two ribs located opposite each other for connecting shackles.

<https://standards.iteh.ai/catalog/standards/sist/a26b21a6-a6ea-4d80-b08c-1db84516984b/sist-en-15272-2-2007>

### 5 Test methods

#### 5.1 General

The strength of the components can be proven by calculation or by testing.

#### 5.2 Testing

For the test, a rope is laid in a U-shape around the fairlead with the rope ends horizontal, i.e. perpendicular to the shaft.

The tensile load of 1,25 times the minimum breaking load according to prEN 15272-1 shall be applied to both ends of the basic rope for 60 s. The load is applied 50 times.

None of the fairlead components shall have undergone any permanent deformation and all of them shall be fully functional.