



SLOVENSKI STANDARD

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Plovila za celinske vode - Delovni, pomožni in reševalni čolni

Inland navigation vessels - Work boats, ship's boats and lifeboats

Fahrzeuge der Binnenschifffahrt - Arbeits-, Bei- und Rettungsboote

Bateaux de navigation intérieure - Bateaux-ateliers, canots de service et de sauvetage

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ICS:

47.060	Jezerska in rečna plovila	Inland navigation vessels
47.080	Čolni	Small craft

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EUROPEAN STANDARD
NORME EUROPÉENNE
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October 2016

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Supersedes EN 1914:2009

English Version

**Inland navigation vessels - Work boats, ship's boats and
lifeboats**

Bateaux de navigation intérieure - Canots de travail,
baleinières et canots de sauvetage

Fahrzeuge der Binnenschifffahrt - Arbeits-, Bei- und
Rettungsboote

This European Standard was approved by CEN on 8 July 2016.

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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-CENELEC Management Centre has the same status as the official versions.

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

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EN 1914:2016 (E)**European Foreword**

This document (EN 1914:2016) 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of an identical text or by endorsement, at the latest by April 2017, and any conflicting national standards shall be withdrawn at the latest by April 2017.

It should be noted that some elements of this document may be subject to patent rights. CEN [and/or CENELEC] shall not be responsible for identifying any or all such patent rights.

This document supersedes EN 1914:2009.

This standard was written up for ship's boats, for inland navigation vessels and maritime construction company work boats.

This standard specifies requirements for ship's boats covered in § 10.05 of the Rhine Vessel Inspection Order and in Article 10.05 of Annex II of Directive 2006/87/EC.

The following amendments have been made to EN 1914:2009:

- a) firefighting and water rescue boats were removed from the scope;
- b) specifications were added for handgrips/lifelines as a function of the freeboard height;
- c) test provisions regarding motors were revised;
- d) stability testing was changed.

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

1 Scope

This European Standard applies to:

- ship's boats that shall be carried on inland navigation vessels according to Annex II of Directive 2006/87/EC;
- lifeboats if no special life-saving equipment (e.g. ADN) is specified for the area of use;
- work boats for the transport of a limited number of persons or smaller working loads in the construction site area and over comparatively short distances.

This standard does not apply to:

- recreational craft according to Directive 2013/53/EU;
- firefighting and water rescue boats.

2 Normative references

The following documents, which are cited in this document either in part or as a whole, are indispensable for the application 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 2768-1:1989)

EN ISO 6185 (all parts), *Inflatable Boats* (ISO 6185, all parts)

ISO 20712-1, *Water safety signs and beach safety flags – Part 1: Specifications for water safety signs used in workplaces and public areas*

IMO Resolution MSC.61 (67), International code for application of fire test procedures¹⁾

3 Terms and definitions

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

3.1.

boat

work boat, ship's boat or lifeboat used for transportation, rescue, recovery and work

3.2.

work boat

boat for the transportation of persons and working loads and for operational working tasks in construction site areas

1) Available for purchase from: IMO Maritime Knowledge Centre, 202 Lambeth Road, London SE1 7JW, United Kingdom, sales@imo.org.

EN 1914:2016 (E)**3.3.****ship's boat**

boat carried on an inland navigation vessel

3.4.**lifeboat**

boat for the rescue and recovery of crew and passengers and rescue and recovery of third parties

3.5.**boat volume**

V

water displacement to the lowest point at which water can enter the vessel

3.6.**permissible number of persons carried**

maximum number of persons allowed in the boat

3.7.**reserve buoyancy**

A_R

buoyancy of the unmanned flooded boat

3.8.**deadweight**

TF

permissible mass that can be carried by the boat comprising persons, equipment, motor and working load

3.9.**freeboard**

F_b

distance between the water surface and the lowest opening or top edge of the shell when loaded to the deadweight

3.10**residual freeboard**

F_R

distance between the water surface and the lowest opening or upper edge of the shell when loaded during the stability test

3.11**rowlock**

movable holding device for the oars

3.12**gunwale**

upper edge of the side to which the rowlock is attached

4 Symbols

For the purposes of this European norm, the symbols and associated units shown in Table 1 shall apply.

Table 1 — Symbols

Symbol	Meaning	Unit of Measurement	Section
A_R	Reserve Buoyancy	kN	5.4
B	Overall Breadth	m	5.1
F_b	Freeboard	m	5.2
F_R	Residual Freeboard	m	5.5
H	Height measured at 0,5 L from lower edge of hull to upper edge of boat's side	m	5.1
L	Overall Length	m	5.1
TF	Deadweight	kg	5.1
V	Boat Volume	m ³	5.3

5 Safety requirements

5.1 Dimensions

General tolerances: ISO 2768 – c as described in EN 22768-1.

Boats are not expected to conform to the design illustrated in Figure 1, but the dimensions shall comply with Figure 1.

The main dimensions and the deadweight TF shall conform to the following ratios:

- a) $3,5 \text{ m} \leq L \leq 8 \text{ m}$
- b) $\frac{L}{B} = \left(2,3 + 0,6 \frac{L-3,5}{2} \right) \pm 0,2$
- c) $\frac{B}{H} = 2,5 \pm 0,4$
- d) $TF \geq 200(L-2) \text{ kg}$

The test shall be carried out as described in 8.2.1 and 8.2.2.

Examples of construction for boats with rigid hulls corresponding to these ratios are given in Table A.1 and Table A.2 in Annex A.

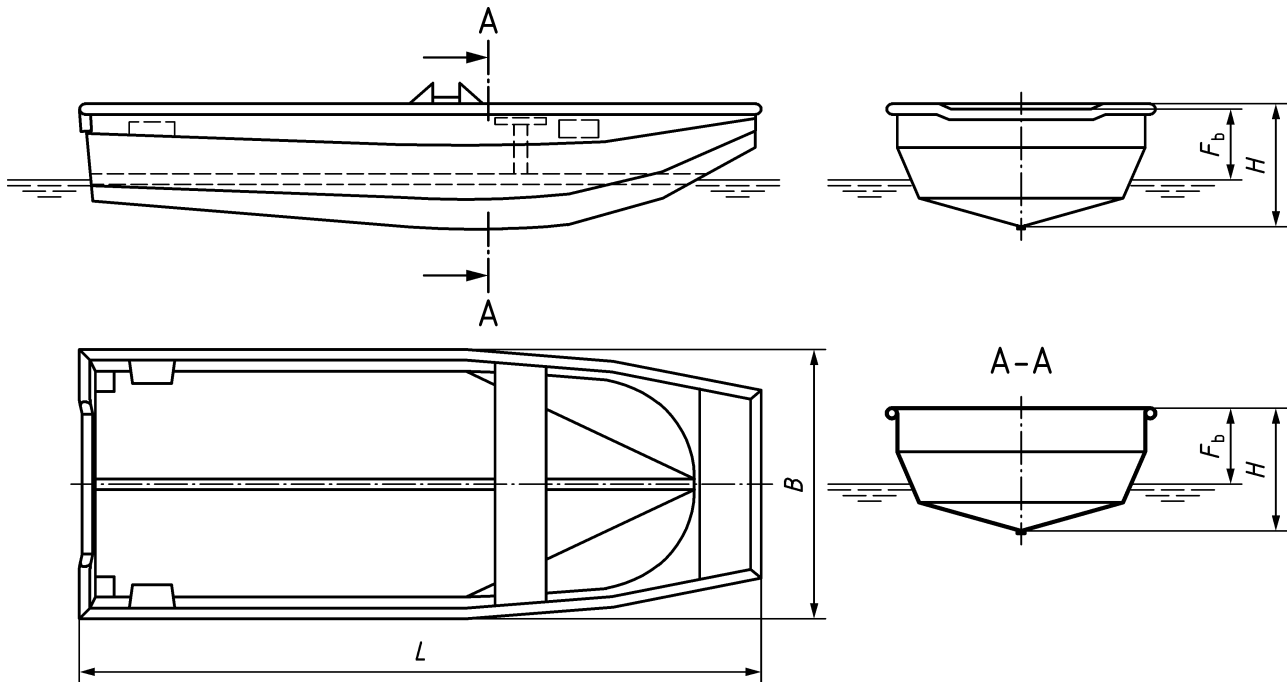


Figure 1 — Main dimensions

5.2 Freeboard

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The freeboard F_b of the fully equipped boat (loaded to its deadweight) shall be at least 0,25 m.

The test shall be carried out as described in 8.2.1. [SIST EN 1914:2016](https://standards.iteh.ai/catalog/standards/sist/c7c9d21b-0aa0-4a82-a926-784be6e953f0/sist-en-1914-2016)

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5.3 Boat volume

The boat volume V shall be determined by Simpson's rule or by another equivalent method and shall be at least $1,5 \text{ m}^3$ or the product of $L \times B \times H$ shall be not less than $2,7 \text{ m}^3$.

The test shall be carried out as described in 8.2.1.

5.4 Reserve buoyancy A_R

The buoyancy of the boat shall be ensured by buoyancy units. The reserve buoyancy A_R of the unmanned flooded boat shall be at least:

$$A_R \geq 0.3 \text{ kN/m}^3 \times L \times B \times H$$

The reserve buoyancy shall be distributed evenly throughout the boat.

The test shall be carried out as described in 8.2.1 and 8.3.

5.5 Stability

The stability is regarded as adequate if a residual freeboard of at least 0,1 m remains on a fully equipped boat under both test conditions according to 8.4.

5.6 Permissible number of persons

The permissible number of persons depends on the deadweight, boat volume and number of seats. Boats shall be provided with seats for at least three persons.

At least 0,4 m³ of boat volume, 0,45 m seat width and 100 kg deadweight shall be provided for each person.

The lowest value is the decisive one.

The test shall be carried out as described in 8.2.3.

The depth of the seating area on benches, seats or buoyancy units shall be at least 0.45 m and on thwarts at least 0,25 m.

The permissible number of persons shall be selected so that safe operation of the boat is ensured and all manoeuvres can be carried out safely and in a proper manner.

The test shall be carried out as described in 8.2.1 and 8.6.

5.7 Drainage device

Boats shall be fitted with a drainage device made of corrosion-resistant material that can be quickly and securely closed at any time. The plug shall be permanently attached to the boat.

The drainage device shall be constructed in such a way that any unintentional operation is prevented.

The test shall be carried out as described in 8.2.1.

5.8 Buoyancy units

5.8.1 Hermetically-sealed buoyancy units

Buoyancy units shall be designed as parts of the boat construction enclosed on all sides. It shall not be possible to use as them as storage compartments. Longitudinal buoyancy units shall have transverse bulkheads or cells every $L/3$ at least.

Buoyancy units shall have a watertight inspection aperture that cannot be opened manually.

Inflatable boats shall have as many buoyancy units as it is necessary to meet the requirements as described in 5.4 and 5.5, even if any one of the buoyancy units fails.

The test shall be carried out as described in 8.2.1.

5.8.2 Buoyancy units filled with expanded materials

The expanded materials shall be of the closed-cell type and attached to the hull or accommodated in chambers, false bottoms or other spaces in the boat.

Expanded material shall not come into contact with fuel or UV light or shall be protected.

The test shall be carried out as described in 8.2.1 and 8.2.4.

5.9 Non-slip surfaces

The floor and deck surfaces, footholds and treads and shall be of non-slip design. The bottom of the boat or the covering on it shall enable persons to stand and walk on it safely and securely without slipping.