Inland navigation vessels - Floating landing stages and floating equipment on inland waters - Requirements, tests



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# ICS 93.140

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# EUROPEAN STANDARD

# NORME EUROPÉENNE

# **EUROPÄISCHE NORM**

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EN 14504

ICS 93.140

Supersedes EN 14504:2009

# **English Version**

# Inland navigation vessels - Floating landing stages and floating equipment on inland waters - Requirements, tests

Bateaux de navigation intérieure - Embarcadères flottants et passerelles flottantes sur des eaux intérieures - Exigences, essais Fahrzeuge der Binnenschifffahrt - Schwimmende Anlegestellen und schwimmende Anlagen auf Binnengewässern - Anforderungen, Prüfungen

This European Standard was approved by CEN on 25 March 2016.

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

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# **European Foreword**

This document (EN 14504:2016) 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of an identical text or by endorsement, at the latest by January 2017, and conflicting national standards shall be withdrawn at the latest by January 2017.

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

This document supersedes EN 14504:2009.

The following changes have been made to EN 14504:2009:

- a) Title changed;
- b) Floating civil engineering works subdivided into floating landing stages according to function;
- c) Adaptation of technical requirements to take into consideration the materials used to make floating civil engineering works;
- d) Adaptation of the design situations to take into consideration the function of floating civil engineering works;
- e) Incorporation of metacentre commonly used in shipbuilding as a criteria for assessing floating stability;
- f) Text and drawings have been revised.

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 specifies safety requirements for floating landing stages and floating systems for passenger transport and their equipment.

Requirements relating to supplies to disposals of berthing vessels are not governed by this Standard.

It is not applicable to:

- floating landing stages for motor vehicle traffic;
- floating landing stages for recreational craft and for vehicles of inland navigation vessels which are not berthing vessels, e.g. floating equipment;
- more severe requirements for floating landing stages used for the transhipment of dangerous goods;
- any landing stages required between vessel and floating landing stage;
- specialised floating structures which are not used for passenger traffic or the berthing of vessels.

## 2 Normative references

The following documents, which are cited either partially or wholly in this document, are required 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 711, Inland navigation vessels — Railings for decks and side decks — Requirements, designs and types

EN 790, Inland navigation vessels — Stairs with inclination angles of 45° to 60° — Requirements, types

EN 1492-4, Textile slings — Safety — Part 4: Lifting slings for general service made from natural and man-made fibre ropes

EN 13056, Inland navigation vessels — Stairs with inclination angles of  $30^\circ$  to  $<45^\circ$  — Requirements, types

EN 13281, Inland navigation vessels — Safety requirements for walkways and working places

EN 13411-2, Terminations for steel wire ropes — Safety — Part 2: Splicing of eyes for wire rope slings

EN 13574, Inland navigation vessels — Permanently installed climbing devices with a length not exceeding 5 m

EN 14144, Lifebuoys — Requirements, tests

EN 14145, Holders for lifebuoys

EN 60529, Degrees of protection provided by enclosures (IP code) (IEC 60529)

EN ISO 1140, Fibre ropes — Polyamide — 3-, 4-, 8- and 12-strand ropes (ISO 1140)

EN ISO 1346, Fibre ropes — Polypropylene split film, monofilament and multifilament (PP2) and polypropylene high tenacity multifilament (PP3) — 3-, 4-, 8- and 12-strand ropes (ISO 1346)

ISO 8793, Steel wire ropes — Ferrule-secured eye terminations

ISO 18421, Ships and marine technology — Inland navigation vessels — Lifebuoy housings

ISO 18422, Ships and marine technology — Inland navigation vessels — Plate with instructions for rescue, resuscitation and first aid for drowning persons

# 3 Terms and definitions

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

#### 3.1

# floating construction

a floating structure for passenger traffic on inland waters

#### 3.1.1

## floating landing stage

a floating structure used exclusively for berthing and mooring of vessels and as a connection between vessel and shore

#### 3.1.2

# floating equipment

a floating structure with or without a berth

#### 3.1.2.1

# floating landing stage

floating equipment with a berth, for combined use for passenger traffic, berthing and mooring ships and as a transportation link between the ship and land

#### 3.1.2.2

#### floating landing bridge

floating equipment with no berth, used solely for passenger traffic and not for berthing or mooring ships

#### 3.2

# floating body

one or more fixed buoyancy bodies with a traffic area and/or a connecting bridge support

## 3.3

#### buoyancy body

body capable of floating that either:

- consists of waterproof air chambers or
- is completely filled with a closed-pore material

## 3.4

# connecting bridge

movable walkway between floating body and shore

#### 3.5

## Anchorage for the floating structure

Device by which the floating structure is secured to its berth