

**Ships and marine technology - Potable  
water supply on ships and marine  
structures - Part 1: Planning and design**

Ships and marine technology - Potable water supply  
on ships and marine structures - Part 1: Planning  
and design

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 15748-1:2002 sisaldab Euroopa standardi EN ISO 15748-1:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.10.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 15748-1:2002 consists of the English text of the European standard EN ISO 15748-1:2002.</p> <p>This document is endorsed on 18.10.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> This part of ISO 15748 applies to the planning, design and configuration of potable water supply systems on ships, stationary or floating marine structures and inland navigation vessels</p>	<p><b>Scope:</b> This part of ISO 15748 applies to the planning, design and configuration of potable water supply systems on ships, stationary or floating marine structures and inland navigation vessels</p>
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**Võtmesõnad:** management, offshore platforms, pipelayers, pipes, pressure vessels, pumps, quality, quality assurance, securing fixture, shipbuilding, ships, specification (approval), specifications, tubes, valves, water pipelines, water quality, water supply

ICS 47.020.30

English version

**Ships and marine technology - Potable water supply on ships  
and marine structures - Part 1: Planning and design (ISO 15748-  
1:2002)**

Navires et technologie maritime - Approvisionnement en  
eau potable sur navires et structures maritimes - Partie 1:  
Planification et conception (ISO 15748-1:2002)

Schiffe und Meerestechnik - Trinkwasser-  
Versorgungsanlagen auf Schiffen und Seebauwerken - Teil  
1: Planung und Konstruktion (ISO 15748-1:2002)

This European Standard was approved by CEN on 1 May 2002.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 15748-1:2002) has been prepared by Technical Committee ISO/TC 8 "Ships and marine technology" in collaboration with Technical Committee CEN/TC 300 "Sea-going vessels and marine technology", 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 November 2002, and conflicting national standards shall be withdrawn at the latest by November 2002.

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

## Endorsement notice

The text of the International Standard ISO 15748-1:2002 has been approved by CEN as a European Standard without any modifications.

NOTE Normative references to International Standards are listed in annex ZA (normative).

## Annex ZA (normative)

### Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 5620-1	1992	Shipbuilding and marine structures - Filling connection for drinking water tanks - Part 1: General requirements	EN ISO 5620-1	1996
ISO 1127	1992	Stainless steel tubes - Dimensions, tolerances and conventional masses per unit length	EN ISO 1127	1996
ISO 14726-1	1999	Ships and marine technology - Identification colours for the content of piping systems - Part 1: Main colours and media	EN ISO 14726-1	2001
ISO 15748-2	2002	Ships and marine technology - Potable water supply on ships and marine structures - Part 2: Method of calculation	EN ISO 15748-2	2002

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**Ships and marine technology — Potable  
water supply on ships and marine  
structures —**

**Part 1:  
Planning and design**

*Navires et technologie maritime — Approvisionnement en eau potable sur  
navires et structures maritimes —*

*Partie 1: Planification et conception*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 15748 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 15748-1 was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 3, *Piping and machinery*.

ISO 15748 consists of the following parts, under the general title *Ships and marine technology — Potable water supply on ships and marine structures*:

- *Part 1: Planning and design*
- *Part 2: Method of calculation*

Annexes A, B and C of this part of ISO 15748 are for information only.

# Ships and marine technology — Potable water supply on ships and marine structures —

## Part 1: Planning and design

### 1 Scope

This part of ISO 15748 applies to the planning, design and configuration of potable water supply systems on ships, stationary or floating marine structures and inland navigation vessels.

This part of ISO 15748 specifies the minimum requirements for potable water supply systems to be met in order to protect the potable water and to maintain its quality.

It also provides hints on components to be used and on laying of the pipelines.

**NOTE** The transfer of potable water and the regulations to be observed are not covered by this part of ISO 15748. The transfer of potable water is subject to special regulations.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 15748. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 15748 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 7-1, *Pipe threads where pressure-tight joints are made on the thread — Part 1: Dimensions, tolerances and designation*

ISO 65, *Carbon steel tubes suitable for screwing in accordance with ISO 7-1*

ISO 161-1, *Thermoplastics pipes for the conveyance of fluids — Nominal outside diameters and nominal pressures — Part 1: Metric series*

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 274, *Copper tubes of circular section — Dimensions*

ISO 426-2, *Wrought copper-zinc alloys — Chemical composition and forms of wrought products — Part 2: Lead-copper-zinc alloys*

ISO 1127, *Stainless steel tubes — Dimensions, tolerances and conventional masses per unit length*

ISO 1635, *Wrought copper and copper alloys — Round tubes for general purposes — Mechanical properties*

ISO 4200, *Plain end steel tubes, welded and seamless — General tables of dimensions and masses per unit length*

ISO 5620-1, *Shipbuilding and marine structures — Filling connection for drinking water tanks — Part 1: General requirements*

ISO 14726-1, *Ships and marine technology — Identification colours for the contents of piping systems — Part 1: Main colours and media*

ISO 14726-2<sup>1)</sup>, *Ships and marine technology — Identification colours for the contents of piping systems — Part 2: Additional colours for different media and/or functions*

ISO 15748-2, *Ships and marine technology — Potable water supply on ships and marine structures — Part 2: Method of calculation*

SOLAS 1974, *International Convention for the Safety of Life at Sea, 1974*

### 3 Terms and definitions

For the purposes of this part of ISO 15748, the following terms and definitions apply.

**3.1**  
**potable water supply system**  
system for the generation, treatment, transfer, conveyance, storage, transport and distribution of potable water

**3.2**  
**water treatment plant**  
equipment for treating potable water whilst maintaining potable water properties, e.g. using filters, dosage plants, ion exchangers, disinfecting plants

**3.3**  
**potable water heaters**  
appliances used to heat potable water without affecting its properties for consumption apart from a change in temperature, e.g. continuous-flow water heaters, storage heaters

**3.4**  
**apparatus**  
collective term for technical installations making use of and/or transforming potable water

#### EXAMPLE

- distillation and sterilization apparatus;
- large-scale cooking equipment, dosage plant;
- pressurized water reservoirs, water heaters;
- dishwashers, coffee machines, as well as devices of all kinds forming part of the potable water system or connected temporarily or permanently to it, except for supply and circulating pumps.

**3.5**  
**water**  
collective term for all types of water used for water supply

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1) To be published