# Ships and marine technology - Drainage systems on ships and marine structures - Part 4: Sanitary drainage, sewage disposal pipes

Ships and marine technology - Drainage systems on ships and marine structures - Part 4: Sanitary drainage, sewage disposal pipes



### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO
15749-4:2004 sisaldab Euroopa standardi
EN ISO 15749-4:2004 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 15749-4:2004 consists of the English text of the European standard EN ISO 15749-4:2004.

Käesolev dokument on jõustatud 23.09.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

This document is endorsed on 23.09.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

## This part of ISO 15749 applies to the design of sewage disposal pipes within the framework of sanitary drainage on ships and marine structures. For planning and basic requirements, see ISO 15749-1.

### Scope:

This part of ISO 15749 applies to the design of sewage disposal pipes within the framework of sanitary drainage on ships and marine structures. For planning and basic requirements, see ISO 15749-1.

**ICS** 47.020.30

Võtmesõnad:

### **EUROPEAN STANDARD**

### **EN ISO 15749-4**

### NORME EUROPÉENNE EUROPÄISCHE NORM

June 2004

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### English version

Ships and marine technology - Drainage systems on ships and marine structures - Part 4: Sanitary drainage, sewage disposal pipes (ISO 15749-4:2004)

Navires et technologie maritime - Installations de drainage sur navires et structures maritimes - Partie 4: Drainage sanitaire, tuyaux d'évacuation des eaux usées (ISO 15749-4:2004)

This European Standard was approved by CEN on 7 June 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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



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

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

### **Foreword**

This document (EN ISO 15749-4:2004) has been prepared by Technical Committee ISO/TC 8 "Ships and marine technology" in collaboration with Technical Committee CEN/TC 300 "Seagoing 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 December 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.

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

#### **Endorsement notice**

1 appi The text of ISO 15749-4:2004 has been approved by CEN as EN ISO 15749-4:2004 without any modifications.

### INTERNATIONAL STANDARD

ISO 15749-4

First edition 2004-06-15

### Ships and marine technology — Drainage systems on ships and marine structures —

Part 4:

Sanitary drainage, sewage disposal pipes

Navires et technologie maritime — Installations de drainage sur navires et structures maritimes —

et structures manumes Partie 4: Drainage sanitaire, tuyaux d'évacuation des eaux usées



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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 2.

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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 15749-4 was prepared by Technical Committee ISO/TC 8, Ships and marine techology, Subcommittee SC 3, Piping and machinery.

ISO 15749 consists of the following parts, under the general title *Ships and marine technology* — *Drainage systems on ships and marine structures*:

- Part 1: Sanitary drainage-system design
- Part 2: Sanitary drainage, drain piping for gravity systems
- Part 3: Sanitary drainage, drain piping for vacuum systems
- Part 4: Sanitary drainage, sewage disposal pipes
- Part 5: Drainage of decks, cargo spaces and swimming pools

### Ships and marine technology — Drainage systems on ships and marine structures —

### Part 4:

### Sanitary drainage, sewage disposal pipes

### 1 Scope

This part of ISO 15749 applies to the design of sewage disposal pipes within the framework of sanitary drainage on ships and marine structures.

For planning and basic requirements, see ISO 15749-1.

#### 2 Normative references

The following referenced documents 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.

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

ISO 9329-1, Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 1: Unalloyed steels with specified room temperature properties

ISO 9330-1, Welded steel tubes for pressure purposes — Technical delivery conditions — Part 1: Unalloyed steel tubes with specified room temperature properties

ISO 15749-1, Ships and marine technology — Drainage systems on ships and marine structures — Part 1: Sanitary drainage-system design

ISO 15749-5, Ships and marine technology — Drainage systems on ships and marine structures — Part 5: Drainage of decks, cargo spaces and swimming pools

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 15749-1 apply.

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