# Inland navigation vessels - Flat bollards

Inland navigation vessels - Flat bollards



### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN
14965:2006 sisaldab Euroopa standardi
EN 14965:2005 ingliskeelset teksti.

Käesolev dokument on jõustatud 27.02.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14965:2006 consists of the English text of the European standard EN 14965:2005.

This document is endorsed on 27.02.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard specifies dimensions, material, design and designation of flat bollards used preferably for pushing vessels and for guiding ropes of coupling devices, e.g. according to EN ISO 6218, on push-tows.

#### Scope:

This European Standard specifies dimensions, material, design and designation of flat bollards used preferably for pushing vessels and for guiding ropes of coupling devices, e.g. according to EN ISO 6218, on push-tows.

ICS 47.020.50, 47.060

Võtmesõnad:

# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 14965

December 2005

ICS 47.020.50; 47.060

#### **English Version**

## Inland navigation vessels - Flat bollards

Bateaux de navigation intérieure - Bittes plates

Fahrzeuge der Binnenschifffahrt - Flachpoller

This European Standard was approved by CEN on 14 November 2005.

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

Normative references       4         Dimensions       4         Material       5         Design       5         1 Type       5         1 Annex A (normative)       5         Annex A (normative)       Flat bollards made of cast steel       7         Annex A (material       7         Annex A (material       7	JUI1	terits		Page
Scope       4         Normative references       4         Dimensions       4         Material       5         Design       5         5.1 Type       5         5.2 Machining       5         5.3 Fastening       5         5 Designation       5         Marking       5         Manufacturer's certificate       6         Annex A (normative) Flat bollards made of cast steel       7         A.1 Material       7         A.2 Heat treatment       7         A.3 Dimensions of the cast steel       7         A.4 Fastening       7         Sibliography       8	-orox	ord C		3
2. Normative references       4         3. Dimensions       4         4. Material       5         5. Design       5         5.1 Type       5         5.2 Machining       5         5.3 Fastening       5         5 Designation       5         6 Marking       5         8 Manufacturer's certificate       6         Annex A (normative) Flat bollards made of cast steel       7         A.1 Material       7         A.2 Heat treatment       7         A.3 Dimensions of the cast steel       7         A.4 Fastening       7         Bibliography       8	-orew I			_
B. Dimensions       4         Material       5         Design       5         5.1 Type       5         5.2 Machining       5         5.3 Fastening       5         5 Designation       5         Marking       5         Manufacturer's certificate       6         Annex A (normative) Flat bollards made of cast steel       7         A.1 Material       7         A.2 Heat treatment       7         A.3 Dimensions of the cast steel       7         Bibliography       8				
Material       5         Design       5         1 Type       5         2 Machining       5         3 Fastening       5         Designation       5         Marking       5         Manufacturer's certificate       6         Annex A (normative) Flat bollards made of cast steel       7         1 Material       7         1.2 Heat treatment       7         1.3 Dimensions of the cast steel       7         1.4 Fastening       7         Sibliography       8				
5       Design       5         5.1       Type       5         5.2       Machining       5         5.3       Fastening       5         6       Designation       5         7       Marking       5         8       Manufacturer's certificate       6         Annex A (normative) Flat bollards made of cast steel       7         8.1       Material       7         9.2       Heat treatment       7         9.3       Dimensions of the cast steel       7         9.4       Fastening       7         8       Bibliography       8				
5.1       Type       5         5.2       Machining       5         5.3       Fastening       5         6       Designation       5         7       Marking       5         8       Manufacturer's certificate       6         Annex A (normative) Flat bollards made of cast steel       7         A.1       Material       7         A.2       Heat treatment       7         A.3       Dimensions of the cast steel       7         A.4       Fastening       7         Bibliography       8				
Marking       5         Manufacturer's certificate       6         Annex A (normative) Flat bollards made of cast steel       7         A.1 Material       7         A.2 Heat treatment       7         A.3 Dimensions of the cast steel       7         A.4 Fastening       7         Bibliography       8	5 5.1 5.2 5.3	Type Machining Fastening		5 5 5
Manufacturer's certificate 6  Annex A (normative) Flat bollards made of cast steel 7  A.1 Material 7  A.2 Heat treatment 7  A.3 Dimensions of the cast steel 7  A.4 Fastening 7  Bibliography 8	;			
Manufacturer's certificate 6  Annex A (normative) Flat bollards made of cast steel 7  A.1 Material 7  A.2 Heat treatment 7  A.3 Dimensions of the cast steel 7  A.4 Fastening 7  Bibliography 8	•	Marking		5
Annex A (normative) Flat bollards made of cast steel	3	Manufacturer's certificate	)	6
A.1 Material				
A.3 Dimensions of the cast steel	4.1	Material		7
A.4 Fastening	<b>4.2</b>			
Bibliography8	-			

## **Foreword**

This document (EN 14965:2005) has been prepared by Technical Committee CEN/TC 15 "Inland navigation vessels", the secretariat of which is held by DIN.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2006, and conflicting national standards shall be withdrawn at the latest by June 2006.

Flat bollards have proven successful in push-towing.

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 A BORCHICK ORNORDIA O and the United Kingdom.

#### 1 Scope

This European Standard specifies dimensions, material, design and designation of flat bollards used preferably for pushing vessels and for guiding ropes of coupling devices, e.g. according to EN ISO 6218, on push-tows.

#### 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 2768-1, General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications

ISO 8062, Castings — System of dimensional tolerances and machining allowances

#### **Dimensions** 3

For general tolerances for sheet steel, class c of ISO 2768-1 shall apply.

For general tolerances for cast steel, class CT 12 of ISO 8062 shall apply.

The design need not correspond to the design illustrated, compliance is only required with the main dimensions given in Table 1.

Dimensions in millimetres

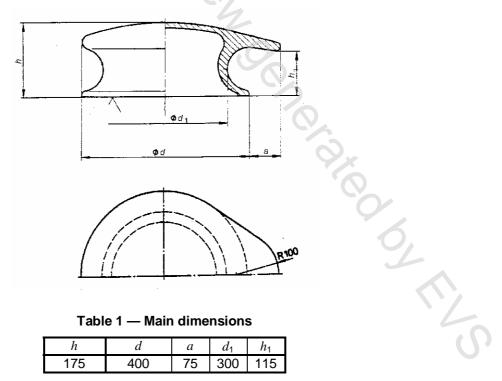


Table 1 — Main dimensions

h	d	а	$d_1$	$h_1$
175	400	75	300	115

Figure 1 — Flat bollard