## Väikelaevad. Kerekonstruktsioon ja prussid. Osa 6: Konstruktsiooni eripärad ja detailid

Small craft - Hull construction and scantlings - Part 6: ind cooking of the state of the Structural arrangements and details



## FESTI STANDARDI FESSÕNA

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 12215-6:2008 sisaldab Euroopa standardi EN ISO 12215-6:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 20.06.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.04.2008.

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ICS 47.080

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## **EUROPEAN STANDARD**

## **EN ISO 12215-6**

# NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English Version**

# Small craft - Hull construction and scantlings - Part 6: Structural arrangements and details (ISO 12215-6:2008)

Petits navires - Construction de coques et échantillonnages - Partie 6: Dispositions et détails de construction (ISO 12215-6:2008) Kleine Wasserfahrzeuge - Rumpfbauweise und Dimensionierung - Teil 6: Bauanordnung und Details (ISO 12215-6:2008)

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

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## **Foreword**

This document (EN ISO 12215-6:2008) has been prepared by Technical Committee ISO/TC 188 "Small craft" in collaboration with Technical Committee CEN/SS T01 "Shipbuilding and maritime structures", the secretariat of which is held by CMC.

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of an identical text or by endorsement, at the latest by October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive.

For relationship with EC Directive, see informative Annex ZA, which is an integral part of this document.

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

#### **Endorsement notice**

The text of ISO 12215-6:2008 has been approved by CEN as a EN ISO 12215-6:2008 without any modification.

# Annex ZA (informative)

# Relationship between this International Standard and the Essential Requirements of EU Directive 94/25/EC

This International Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Directive 94/25/EC as amended by Directive 2003/44/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this International Standard and Directive 94/25/EC as amended by Directive 2003/44/EC

Clauses/sub-clauses of this international Standard	Corresponding annexes/paragraphs of EU Directive 94/25/EC as amended by Directive 2003/44/EC	Comments
All clauses	Annex I, Part A, Clause 3.1, Structure	The standard provides structural details for monohull and multihull craft constructed from fibre reinforced plastics, aluminium or steel alloys, wood or similar suitable materials.

WARNING — Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

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## Introduction

The underlying reason for preparing this part of ISO 12215 is that standards and recommended practices for loads on the hull and the dimensioning of small craft differ considerably, thus limiting the general worldwide acceptability of boats.

The objective of this part of ISO 12215 is to achieve an overall structural strength that ensures the watertight and weathertight integrity of the craft.

This part of ISO 12215 is considered to have been developed with the application of current practice and sound engineering principles.

Considering future development in technology and boat types, as well as small craft currently outside the scope of this part of ISO 12215, and provided that methods supported by appropriate technology exist, consideration may be given to their use so long as equivalent strength to this part of ISO 12215 is achieved.

Dimensioning in accordance with this part of ISO 12215 is regarded as reflecting current practice, provided October 19 Control of the Control of that the craft is correctly handled in the sense of good seamanship and that it is equipped and operated at a speed appropriate to the prevailing sea state.

## Small craft — Hull construction and scantlings —

## Part 6:

## Structural arrangements and details

## 1 Scope

This part of ISO 12215 concerns structural details and structural components not explicitly included in ISO 12215-5, ISO 12215-7, ISO 12215-8 and ISO 12215-9. It applies to monohull and multihull small craft constructed from fibre reinforced plastics (FRP), aluminium or steel alloys, wood or other suitable boat building material, with a hull length, in accordance with ISO 8666, of up to 24 m.

This part of ISO 12215 fulfils two functions. Firstly, it supports ISO 12215-5 by providing further explanations and calculation procedures and formulae. Secondly, it gives a number of examples of arrangements and structural details which illustrate principles of good practice. These principles provide a standard against which alternative arrangements and structural details can be benchmarked, using the equivalence criteria specified in this part of ISO 12215.

NOTE Scantlings derived from this part of ISO 12215 are primarily intended to apply to recreational craft including recreational charter vessels and might not be suitable for performance racing craft.

## 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 8666, Small craft — Principal data

ISO 12215-5:2008, Small craft — Hull construction and scantlings — Part 5: Design pressures for monohulls, design stresses, scantlings determination

ISO 12215-7, Small craft — Hull construction and scantlings — Part 7: Scantling determination of multihulls

ISO 12215-8, Small craft — Hull construction and scantlings — Part 8: Rudders

ISO 12215-9, Small craft — Hull construction and scantlings — Part 9: Appendages and rig attachment

ISO 12216, Small craft — Windows, portlights, hatches, deadlights and doors — Strength and watertightness requirements

### 3 Terms and definitions

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

### 3.1

### loaded displacement mass

 $m_{\rm LDC}$ 

mass of the craft, including all appendages, when in the fully-loaded ready-for-use condition, as defined in ISO 8666

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