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Small craft - Hull construction and scantlings - Part 8:
Rudders (ISO 12215-8:2009, including Cor 1:2010)

EESTI STANDARDI EESSÕNA

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EUROPEAN STANDARD

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Small craft - Hull construction and scantlings - Part 8: Rudders (ISO 12215-8:2009, including Cor 1:2010)

Petits navires - Construction de coques et
échantillonnage - Partie 8: Gouvernails (ISO 12215-
8:2009; y compris Cor 1:2010)

Kleine Wasserfahrzeuge - Rumpfbauweise und
Dimensionierung - Teil 8: Ruder (ISO 12215-8:2009,
einschließlich Cor 1:2010)

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European foreword

The text of ISO 12215-8:2009, including Cor 1:2010 has been prepared by Technical Committee ISO/TC 188 "Small craft" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 12215-8:2018.

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of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.

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For relationship with EU Directive 2013/53/EU, see informative Annex ZA, which is an integral part of this document.

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Endorsement notice

The text of ISO 12215-8:2009, including Cor 1:2010 has been approved by CEN as EN ISO 12215-8:2018 without any modification.

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Introduction

The reason underlying the preparation of 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 craft. This part of ISO 12215 has been set towards the lower boundary range of common practice.

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.

The working group considers this part of ISO 12215 to have been developed applying present practice and sound engineering principles. The design loads and criteria of this part of ISO 12215 may be used with the scantling determination equations of this part of ISO 12215 or using equivalent engineering methods such as continuous beam theory, matrix-displacement method and classical lamination theory, as indicated within.

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

The dimensioning according to this part of ISO 12215 is regarded as reflecting current practice, provided the craft is correctly handled in the sense of good seamanship and equipped and operated at a speed appropriate to the prevailing sea state.

Small craft — Hull construction and scantlings —

Part 8: Rudders

1 Scope

This part of ISO 12215 gives requirements on the scantlings of rudders fitted to small craft with a length of hull, L_H , of up to 24 m, measured according to ISO 8666. It applies only to monohulls.

This part of ISO 12215 does not give requirements on rudder characteristics required for proper steering capabilities.

This part of ISO 12215 only considers pressure loads on the rudder due to craft manoeuvring. Loads on the rudder or its skeg, where fitted, induced by grounding or docking, where relevant, are out of scope and need to be considered separately.

NOTE Scantlings derived from this part of ISO 12215 are primarily intended to apply to recreational craft including charter 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*

3 Terms and definitions

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

3.1

design categories

sea and wind conditions for which a craft is assessed by this part of ISO 12215 to be suitable, provided the craft is correctly handled in the sense of good seamanship and operated at a speed appropriate to the prevailing sea state

3.1.1

design category A (“ocean”)

category of craft considered suitable to operate in seas with significant wave heights above 4 m and wind speeds in excess of Beaufort Force 8, but excluding abnormal conditions such as hurricanes