भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS

मानक भवन, ९ बहादुरशाह ज़फर मार्ग, नई दिल्ली ११०००२
Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

दूरभाष 011 23236311 Website: www.bis.org.in तार: मानकसंस्था
Phones 011 23236311 E-mail: ted@bis.org.in Grams: Manaksanstha

व्यापक परिचालन मे मसौदा

प्रलेख प्रेषण संज्ञापन	
संदर्भ	टी ई डी १८/ टी-89
दिनांक	13.07.2018

इनलैंड, हारबर क्राफ्ट और फिशिंग वेसल्स विषय समिति, टी ई डी १८

क) परिवहन इंजीनियरिंग विभाग परिषद (प इ वि प) के सभी सदस्यों को ।

ख) इनलैंड, हारबर क्राफ्ट और फिशिंग वेसल्स विषय समिति, टी ई डी १८ के सभी सदस्यों को ।

ग) अन्य सभी रूचि रखने वाले सभी निकाय ।

प्रिय महोदय/महोदया,

आपके अवलोकन हेतु निम्नलिखित प्रलेख संलग्न है:

प्रलेख संख्या	**विषय**
टी ई डी १८ (१२८९५)	छोटी नौका – पतवार निर्माण एवं स्कैंटलिंग - भाग 9: जलयान उपांग (ISO 12215-9:2012 का अभिन्न अभिग्रहण)

प्रासंगिक आईएसओ विशिष्टता पर आधारित उपरोक्त दस्तावेज की तकनीकी सामग्री टी ई डी से अनुरोध पर प्राप्त किये जा सकते है |

कृप्या उपरोक्त मानक मसौदे का अवलोकन कर अपनी सम्मएतियॉ यह बताते हुए भेजे कि यदि अंतत: यह भारतीय मानक के रूप में प्रकाशित हो जाए तो इस पर अमल करने में आपके व्यंवसाय अथवा कारोबार में क्या कठिनाइयाँ आ सकती हैं ।

सम्मतियॉ भेजने की अंतिम तिथि : 15.09.2018

सम्मतियॉ यदि कोई हो, तो नीचे दिए गए प्रारूप में लिख कर, उपरिलिखित पते पर अधोहस्ताक्षरी को भेजें ।

यदि कोई सम्मति प्राप्त नहीं होती है अथवा सम्मति में केवल भाषा संबन्धी त्रुटि हुई तो उपरोक्त प्रलेख को यथावत अंतिम रूप दिया जायेगा । यदि कोई सम्मति तकनीकी प्रकृति की हुई तो विषय समिति के

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अध्यक्ष के परामर्श से अथवा उनकी इच्छा पर आगे की कार्यवाही के लिए विषय समिति को भेजे जाने के बाद प्रलेख को अंतिम रूप दे दिया जायेगा ।

आपसे अनुरोध है की संबंधित हितधारकों को यह प्रसार अवशय करे जो इस ड्राफ्ट मसौदा पर जांच एवं टिप्पणी करने के लिए सक्षम है।

यह प्रलेख भारतीय मानक ब्यूरो की वैबसाइट www.bis.org.in पर भी उपलब्ध है ।

धन्यवाद,

भवदीय,

(आर आर सिंह)
वैज्ञानिक 'ई' एवं प्रमुख
(परिवहन इंजिनीयरिंग विभाग)

प्रति : उपरिलिखित

नोट : कृपया ध्यान दें कि यह मसौदा आपकी सम्मतियॉ हेतु हैं तथा इसका प्रयोग किसी अन्य उद्देश्य के लिए नहीं करे क्योंकि यह कॉपीराइट के तहत हैं ।

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DRAFT IN WIDE CIRCULATION

DOCUMENT DISPATCH ADVICE	
Our Ref:	Date
TED 18/ T- 89	13.07.2018

INLAND, HARBOUR CRAFTS AND FISHING VESSELS SECTIONAL COMMITTEE, TED 18

1. All members of Transport Engineering Division Council, TEDC.
2. All members of Inland, Harbour Crafts and Fishing Vessel Sectional Committee, TED18.
3. All others interested.

Dear Sir/Madam,

Please find enclosed the following document:

Doc No.	Title
TED 18 (12895)W	Small craft -- Hull construction and scantlings -- Part 9: Sailing craft appendages (Identical adoption of ISO 12215-9:2012)

The technical contents of the above document corresponding to relevant ISO specification can be obtained from TED on request.

Kindly examine this draft standard and forward your views stating any difficulties which you are likely to experience in your business or profession, if this is finally adopted as Indian Standard.

Last date for comments: 15.09.2018

Comments, if any may please be made in the format attached and mailed to the undersigned.

In case no comments are received or comments received are of editorial nature, you will kindly permit us to presume your approval for the above document as finalized. However, in case of comments of technical in nature are received then it may be finalized either in consultation with the Chairman, Sectional Committee or referred to the sectional committee for further necessary action if so desired by the Chairman, Sectional Committee.

It is also requested to further disseminate this to other stakeholders concerned to enable them to examine this draft and send comments thereon, if any.

The above document is also hosted on BIS website **www.bis.org.in**.

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Thanking you,

yours faithfully,

(R R Singh)
Scientist 'E' & Head
Transport Engineering Department

Encl: As above.

Note: Please note that the document attached is for your comments only and shall not be used for any other purpose as it is under copy right

FORMAT FOR SENDING COMMENTS ON BIS DOCUMENTS

(Please use A4 size sheet of paper only and type within fields indicated. Comments on each clauses/sub-clauses/table/fig. etc be started on a fresh box. Information in Column 4 should include reasons for the comments and suggestions for modified wording of the clauses when the existing text is found not acceptable. Adherence to this format in Microsoft Word File facilitates Secretariat's work)

Doc. No.: TED 18 (12895) W

TITLE: SMALL CRAFT -- HULL CONSTRUCTION AND SCANTLINGS -- PART 9: SAILING CRAFT APPENDAGES

LAST DATE OF COMMENTS: 15.09.2018

NAME OF THE COMMENTATOR/ORGANISATION: _____

Sl. No.	Clause/ Sub-clause/ Para/Table/ Fig. no. commented	Type of Comments (General/ Editorial/ Technical)	Justification	Proposed change

IS 16183 (Part 9) : **
/ISO 12215-9 : 2012
Doc No. TED 18 (12895) W

For Comments Only

भारतीय मानक मसौदा

छोटी नौका — पतवार निर्माण एवं स्कैंटलिंग — भाग ९: जलयान उपांग

(आई एस ओ १२२१५-९:२०१२ का अधिग्रहण)

Draft Indian Standard

SMALL CRAFT — HULL CONSTRUCTION AND SCANTLINGS —
PART 9: SAILING CRAFT APPENDAGES

(Adoption of ISO 12215-9:2012)

ICS 47.080

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Inland Harbour Crafts and Fishing Vessels Sectional Committee, TED 18

NATIONAL FOREWORD

This draft Indian Standard which is identical with ISO 12215-9: 2012 'Small craft — Hull construction and scantlings — Part 9: Sailing craft appendages' issued by the International Organization for Standardization (ISO), shall be considered for adoption by the Bureau of Indian Standards, on the recommendation of the Inland, Harbour Crafts and Fishing Vessels Sectional Committee and after approval of the Transport Engineering Divisional Council.

This standard, IS 16183 has various parts under general title 'Small craft — Hull construction and scantlings'. Other parts published in this series are:

Part 2 Materials: Core materials for sandwich construction, embedded materials
Part 3: Materials: Steel, aluminium alloys, wood, other materials

Further, the Committee has decided to formulate following new parts of IS 16183 which are under preparation:

Part 1 Materials: Thermosetting resins, glass-fibre reinforcement, reference laminate
Part 4: Workshop and Manufacturing
Part 6: Structural arrangements and details
Part 8: Rudders

Annex A forms normative part of this standard. Annex B to Annex F of this standard are for information only.

The text of ISO Standard has been proposed to be approved as suitable for publication as an Indian Standard without deviations. Certain conventions and terminologies are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to the following International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the edition indicated:

International Standard	***Corresponding Indian Standard***	***Degree of Equivalence***
ISO 898-1 Mechanical properties of fasteners made of carbon steel and alloy steel — Part 1: Bolts, screws and studs with specified property classes — Coarse thread and fine pitch thread	IS 1367(Part 3):2017 Technical supply conditions for threaded steel fasteners Part 3: Mechanical properties of fasteners made of Carbon steel and bolts, screws and studs	*Identical*
ISO 3506-1 Mechanical properties of corrosion-resistant stainless steel fasteners — Part 1: Bolts, screws and studs	IS 1367(Part 14/Sec1):2018 Technical supply conditions for threaded steel fasteners Part 14: Mechanical properties of corrosion-resistant Stainless steel fasteners Section 1: Bolts, screws and studs	*Identical*
ISO 8666 Small craft — Principal data	TED 18 (12890) Small craft — Principal data (*under preparation*)	*Identical*
ISO 12215-3 Small craft — Hull construction and scantlings — Part 3: Materials: Steel, Aluminium alloys, Wood, Other materials	IS 16183(Part 3) : 2014 Small craft — Hull construction and scantlings Part 3 Materials: Steel, Aluminium alloys, Wood, Other materials	*Identical*
ISO 12215-6:2008 Small craft — Hull construction and scantlings — Part 6:	TED 18 (12893) Small craft — Hull construction and scantlings	*Identical*

Structural arrangements and details	— Part 6: Structural arrangements and details (*under preparation*)	

The technical committee responsible for the preparation of this standard has reviewed the provisions of following International Standards referred in this adopted standard and has decided that they are acceptable for use in conjunction with this standard:

International Standard	***Title***
ISO 12215-5:2008	Small craft — Hull construction and scantlings — Part 5: Design pressures for monohulls, design stress, scantlings determination
ISO 12217-2	Small craft — Stability and buoyancy assessment and categorization — Part 2: Sailing boats of hull length greater than or equal to 6 m

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. The Bureau of Indian Standards shall not be held responsible for identifying any or all such patent rights.

Introduction

The reason underlying the preparation of this part of International Standard 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.

The loss of a keel leading to craft capsize is one of the major casualty hazards on sailing craft and therefore the structural efficiency of all elements of the keel and its connection to the craft is paramount.

This part of ISO 12215 specifies the design loads and their associated stress factors. The user then has a choice between one or the other of the following available options for assessing the structural arrangement.

a) Use of advanced engineering methods which allow the structure to be modelled as three-dimensional: suitable methods include finite element analysis and subsets thereof such as matrix displacement or framework methods. General guidance is provided on modelling assumptions within this part of ISO 12215.

b) Use of simplified, generally two-dimensional, “strength of materials”-based stress equations: These are presented in Annexes B to F and, if this option is chosen, use of the equations will be necessary to fulfil the requirements of this part of ISO 12215.

This part of ISO 12215 has 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 as indicated in a), above.

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.

During the latter stages of the development of the ISO 12215 series, and after publication of key parts, a number of authorities adopted this International Standard for the assessment of high-performance racing yachts. While, in theory, a category A blue-water cruising yacht could experience the same loads as a competitive racing yacht, the latter has not been the principal focus of ISO 12215. Consequently, designers are strongly cautioned against attempting to design high-performance racing craft such that nearly all structural components only just comply.

Scope

This part of ISO 12215 defines the loads and specifies the scantlings of sailing craft appendages on monohull sailing craft with a length of hull, L_H, of up to 24 m, measured according to ISO 8666. It gives

— design stresses,

— the structural components to be assessed,

— load cases and design loads for keel, centreboard and their attachments,

— computational methods and modelling guidance, and

— the means for compliance with its provisions.

Note: The technical content of the document has not been enclosed as this is identical with the corresponding ISO standard.

'FOR COMPLETE TEXT OF THE DOCUMENT KINDLY REFER ISO 12215-9:2012 or CONTACT:

Scientist 'E' and Head
Transport Engineering Department
Bureau of Indian Standards
9 Bahadur Shah Zafar Marg
New Delhi 110002

Email: ted@bis.org.in, hted@bis.org.in
Telefax: (011) 23236311