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**Small craft — Hull construction and scantlings — Part 5: Design pressures for monohulls, design stresses, scantlings determination**

*Petits navires — Construction de la coque et échantillonnage — Partie 5: Pressions de conception pour les monocoques, contraintes de conception, détermination de l'échantillonnage*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 188, *Small craft*.

This second edition cancels and replaces the first edition (ISO 12215-5:2008, including its amendment ISO 12215-5:2008/Amd 1:2014), which has been ~~technically~~ revised.

One of the main reasons to achieve this revision, after a decade implementing the first edition, was to allow other scantlings calculation methods than those given in the 2008 edition, noting the huge development of finite element analysis methods and software, and the trend already applied in ISO 12215-9 (keels and appendages) and ISO 12215-7 (multihulls).

Therefore, in this new edition, like in many other scantlings standards, the design pressure loads, and the design stresses are given in the main body of the standard and, where needed, the scantlings calculation methods are detailed in Annexes.

The main changes compared to the previous edition are as follows:

- clarification of the scope and of many definitions, dimensions, and assessment;
- definition of a theoretical hull/deck limit height  $Z_{SDT}$  in Table 3;
- renaming of  $n_{GC}$  into  $k_{DYN}$  in Table 7;
- lowering of the values of  $k_L$  in the aft part of the craft in Table 8;
- deletion of  $k_{AR}$  min, to better consider large panels, mainly sandwiches, in Table 9;

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