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**Small craft — Ventilation of  
petrol engine and/or petrol tank  
compartments**

*Petits navires — Ventilation des compartiments contenant des  
moteurs à essence et/ou des réservoirs à essence*



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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)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 188, *Small craft*.

This third edition cancels and replaces the second edition (ISO 11105:1997), which has been technically revised.

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

- definitions have been added under [Clause 3](#);
- several clauses of the standard have been re-organized for clarity;
- [subclauses 4.4, 4.6, 4.9, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 6.2, 6.4, 6.6, 6.7, 6.8](#) and [6.9](#) have been added;
- [subclauses 4.1, 4.2, 4.5, 4.7, 5.1, 5.2, 6.3, 6.10](#) have been amended;
- [Table 2](#) has been added;
- [Annex A](#) has been added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Small craft — Ventilation of petrol engine and/or petrol tank compartments

**IMPORTANT** — The colours represented in the electronic file of this document can be neither viewed on screen nor printed as true representations. For the purposes of colour matching, see ISO 3864-4 which provides colorimetric and photometric properties together with, as a guideline, references from colour order systems.

## 1 Scope

This document specifies requirements for the ventilation of petrol engine and petrol tank compartments in small craft having petrol engines for propulsion, electrical generation or mechanical power, to prevent the accumulation of explosive gases in these compartments. Personal watercraft are not covered in this document.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 8846:1990, *Small craft — Electrical devices — Protection against ignition of surrounding flammable gases*

ISO 11192:2005, *Small craft — Graphical symbols*

ISO 10088:2013, *Small craft — Permanently installed fuel systems*

## 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### **habitable space**

space surrounded by permanent structure in which there is provision for any of the following activities: sleeping, cooking, eating, washing/toilet, navigation, steering

Note 1 to entry: Spaces intended exclusively for storage, open cockpits with or without canvas enclosures and engine rooms are not included.

### 3.2

#### **net compartment volume**

volume that results from subtracting the volume of the *permanently installed* (3.4) items of equipment and accessories from the total, or gross, compartment volume

### 3.3

#### **open to the atmosphere**

<compartment or space> having at least 0,34 m<sup>2</sup> of permanent open area directly exposed to the atmosphere for each cubic meter of *net compartment volume* (3.2)