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Small craft — Owner's manual

Petits navires — Manuel du propriétaire

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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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).

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).

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

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.

This document was prepared by Technical Committee ISO/TC 188, *Small craft*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 464, *Small Craft*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 10240:2019), of which it constitutes a minor revision.

The main changes are as follows:

- editorial changes throughout the document;
- the Normative references have been updated;
- [Figures 1](#) and [2](#) have been updated;
- References in [Annex B](#) have been updated.

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.

Small craft — Owner's manual

1 Scope

This document specifies requirements and information for inclusion in the owner's manual of small craft to enable the owner/operator to use the craft safely.

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 6185-1:2001, *Inflatable boats — Part 1: Boats with a maximum motor power rating of 4,5 kW*

ISO 6185-2:2001, *Inflatable boats — Part 2: Boats with a maximum motor power rating of 4,5 kW to 15 kW inclusive*

ISO 6185-3:2014, *Inflatable boats — Part 3: Boats with a hull length less than 8 m with a motor rating of 15 kW and greater*

ISO 6185-4:2011, *Inflatable boats — Part 4: Boats with a hull length of between 8 m and 24 m with a motor power rating of 15 kW and greater*

ISO 8099-1:2018, *Small craft — Waste systems — Part 1: Waste water retention*

ISO 8666:2020, *Small craft — Principal data*

ISO 8999:2001, *Reciprocating internal combustion engines — Graphical symbols*

ISO 9094, *Small craft — Fire protection*

ISO 10239:2014, *Small craft — Liquefied petroleum gas (LPG) systems*

ISO 11105:2020, *Small craft — Ventilation of petrol engine and/or petrol tank compartments*

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

ISO 11547:1994, *Small craft — Start-in-gear protection*

ISO 11592-1:2016, *Small craft — Determination of maximum propulsion power rating using manoeuvring speed — Part 1: Craft with a length of hull less than 8 m*

ISO 11592-2:2021, *Small craft — Determination of maximum propulsion power rating using manoeuvring speed — Part 2: Craft with a length of hull between 8 m and 24 m*

ISO 12217-1, *Small craft — Stability and buoyancy assessment and categorization — Part 1: Non-sailing boats of hull length greater than or equal to 6 m*

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*

ISO 12217-3, *Small craft — Stability and buoyancy assessment and categorization — Part 3: Boats of hull length less than 6 m*

ISO 13297:2020, *Small craft — Electrical systems — Alternating and direct current installations*

ISO 14946:2021, *Small craft — Maximum load capacity*

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ISO 15083:2020, *Small craft — Bilge-pumping systems*

ISO 15084:2003, *Small craft — Anchoring, mooring and towing — Strong points*

ISO 15085:2003, *Small craft — Man-overboard prevention and recovery*

ISO 15085:2003/Amd 2:2017, *Small craft — Man-overboard prevention and recovery — Amendment 2*

ISO 16315:2016, *Small craft — Electric propulsion system*

ISO 80000-1:2009, *Quantities and units — Part 1: General*

3 Terms and definitions

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

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

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

3.1

craft

small craft

recreational craft, and other watercraft using similar equipment, of up to 24 m length of hull (L_H)

Note 1 to entry: The length of hull (L_H) is defined in ISO 8666:2020.

[SOURCE: ISO 8666:2020, 3.15, modified — Note 1 to entry has been added.]

4 General requirements

4.1 Information required

The owner's manual shall provide information necessary for safe use of the craft and its equipment and systems. It shall draw particular attention to set up, maintenance, regular operation, prevention of risks and risk management with due consideration for the environment.

The owner's manual may contain a check-list of actions to be undertaken before craft use.

4.2 Format

The owner's manual shall be produced in a language acceptable to or required in the country of intended use. It can be multilingual. If only provided in an electronic means, the manufacturers shall have a procedure in place that allows printing of the owner's manual by the owner.

A generic owner's manual, i.e. one that may be used for more than one model or type of craft, may be used, provided it is modified, if necessary, to meet the requirements of this document for each craft type. This may be done with supplements.

The manual shall contain an index or table of contents referenced with page numbers, if it is more than four pages long.

Information may be presented as words, graphical symbols or pictograms.

Illustrations shall be in accordance with 4.4.

Where graphical symbols are used, ISO 8999:2001 and ISO 11192:2005 shall be used. If graphical symbols are used, they may be explained by words.

Where practicable, related texts and illustrations should be arranged so that they may be studied together.

4.3 Units and definitions

SI units shall be used in the owner's manual in accordance with ISO 80000-1:2009; other units may be added between brackets.

4.4 Illustrations

Drawings, schematics, photographs and diagrams may be used. Drawings need not be to scale.

5 Content of owner's manual

5.1 General

[Subclauses 5.2](#) to [5.12](#) specify information that shall be included in the owner's manual as appropriate for the type of craft. If any information is already provided in an acceptable or required language by way of a specific manual(s) for an appliance(s), engine(s), equipment or system provided with the craft, it is only necessary to refer to this (these) manual(s) in the owner's manual.

5.2 Introduction to the manual

Each manual shall have an introductory paragraph informing the owner of his/her responsibility concerning the intended use of the craft.

If safety labels are used, the hazard heading meaning shall be explained in the owner's manual, according to the following:

Danger — indicates an imminently hazardous situation that if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.

Warning — indicates a potentially hazardous situation that, if not avoided, can result in death or serious injury.

Caution — indicates a potentially hazardous situation that, if not avoided, can result in minor or moderate injury.

Notice — indicates information considered important, but not hazard related, e.g. relating to property damage.

[Annex A](#) provides the general introduction to the owner's manual. It may be modified accordingly to suit the particular craft.

[Annex B](#) provides a list of international standards requiring information and safety labels to be inserted in the owner's manual.

5.3 General information and craft data

The following information shall be in the owner's manual. List only the relevant items:

- a) name of craft manufacturer, company or person responsible for placing the craft on the market;
- b) name of the model or type;

c) craft design category/categories, as marked on the builder's plate, and statements explaining the design category(ies) as follows:

1) a craft given design category A is considered to be designed to operate in winds of less than Beaufort force 10 and the associated significant wave heights;

NOTE 1 Typically such conditions can be encountered on extended voyages, e.g. across oceans, but can also occur inshore when unsheltered from the wind and waves for several hundred nautical miles. Depending on atmospheric conditions, winds can gust to about 32 m/s.

2) a craft given design category B is considered to be designed to operate in winds of Beaufort force 8 or less and the associated significant waves heights of up to 4 m;

NOTE 2 Typically such conditions can be encountered on offshore voyages of sufficient length but can also occur on coasts where shelter is not always immediately available. These conditions can also be experienced on inland seas of sufficient size for the wave height to be generated. Depending on atmospheric conditions, winds can gust to about 27 m/s.

3) a craft given design category C is considered to be designed to operate in typical steady winds of Beaufort force 6 or less and the associated significant waves heights of up to 2 m;

NOTE 3 Typically such conditions can be encountered on exposed inland waters, in estuaries, and in coastal waters in moderate weather conditions. Depending on atmospheric conditions, winds can gust to about 18 m/s.

4) a craft given design category D is considered to be designed to operate in typical steady winds of Beaufort force 4 or less and the associated significant waves heights of up to 0,3 m and occasional waves of 0,5 m height;

NOTE 4 Typically such conditions can be encountered on sheltered inland waters, and in coastal waters in fine weather. Depending on atmospheric conditions, winds can gust to about 12 m/s.

d) the mass in the light craft condition (m_{LC}) (unladen mass of the craft) (kg) according to ISO 8666:2020. For craft with outboard engines, it should be stated that this mass includes the mass of the heaviest recommended outboard engine, but in some cases (e.g. a small rowing or outboard tender) the craft may be used with or without the outboard. In these cases, it would be useful to also know the mass without the outboard motor (e.g. to determine if it is light enough to carry on a car roof);

e) maximum load for the builder's plate (m_{MBP}), according to ISO 14946:2021. Include a note to draw attention to the loading provisions (see 5.5);

f) mass of the craft in the fully loaded condition (m_{LDC}) (kg); which is the sum of the craft's mass, in the light craft condition, plus the maximum load for the builder's plate, a breakdown of the fully loaded mass as calculated is recommended;

g) main dimensions of the craft: L_H , B_H , L_{max} , B_{max} , and the definition of the dimensions given; these dimensions shall be in accordance with ISO 8666:2020;

h) drafts:

1) maximum height (air draft), in the light craft condition;

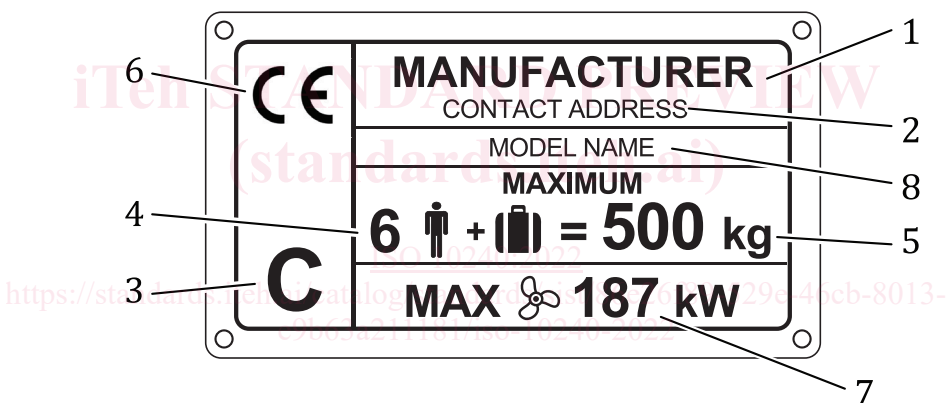
2) maximum draft(s) in the fully loaded condition;

i) type of main propulsion [power, sail, other (give details)];

j) if the craft is a sailboat, basic information on sail and rigging;

NOTE 5 Information such as main dimensions of sails, reefing system, storm sail dimensions, etc. can be given.

- k) tank capacities:
- 1) nominal fixed fuel tank(s) capacity (litres), with a statement mentioning that all of its capacity may not be usable according to trim and loading and that a 20 % reserve should be kept, type of fuel and position of filling point(s) and draining point (if fitted);
 - 2) fixed fresh water tank(s) capacity (litres), with a statement mentioning that all of its capacity may not be usable according to trim and loading, and position of filling point(s) and draining point (if fitted);
 - 3) fixed holding tank(s) capacity (litres), and position of through hull or deck fitting(s) and draining point (if fitted);
 - 4) fixed oil tank(s) capacity (litres), clean oil and used oil, and position of filling and emptying point(s);
 - 5) ballast tanks, supplied or intended by the builder (permanently installed and/or portable);
- l) builder's plate – the owner's manual shall include a mention such as: "Part of the information is given on the builder's plate affixed on the craft. A full explanation of this information is also given in the relevant sections of this manual". [Figures 1](#) and [2](#) illustrate examples of builder's plates.



Key

- 1 manufacturer's name, registered trade name or registered trademark
- 2 contact address of the manufacturer
- 3 craft design category
- 4 maximum recommended persons' capacity
- 5 maximum load for the builder's plate, expressed in kg
- 6 CE mark (if applicable)
- notified body's identification number (if applicable)
- 7 maximum power rating, expressed in kW
- 8 model name

Figure 1 — Builder's plate with minimum information for craft powered by inboard or sterndrive engines — Example