
**Small craft — Permanently installed
petrol and diesel fuel tanks**

*Petits navires — Réservoirs à carburant à essence et diesel installés à
demeure*



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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.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 21487 was prepared by Technical Committee ISO/TC 188, *Small craft*.

This second edition cancels and replaces the first edition (ISO 21487:2006), which has been technically revised. It also incorporates the Technical Corrigendum ISO 21487:2006/Cor.1:2008. The main changes from the first edition are the following:

- diesel tanks shall be equipped with inspection hatch(es) for cleaning and inspection (4.3.10);
- metallic tanks may be static pressure tested as an alternative to the pressure-impulse test (5.2.2);
- non-metallic, non-integral tanks, if installed in an engine compartment, shall be fire tested (6.2.3);
- non-metallic tanks shall be marked with the maximum temperature to which the tank may be exposed (Clause 8).

Small craft — Permanently installed petrol and diesel fuel tanks

1 Scope

This International Standard establishes requirements for design and test of petrol and diesel fuel tanks for internal combustion engines that are intended to be permanently installed in small craft of up to 24 m length of hull.

For installation requirements, ISO 10088 applies.

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 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

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

ISO 11192, *Small craft — Graphical symbols*

ISO 12215-5, *Small craft — Hull construction and scantlings — Part 5: Design pressures for monohulls, design stresses, scantlings determination*

ISO 12215-6, *Small craft — Hull construction and scantlings — Part 6: Structural arrangements and details*

ISO 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections*

3 Terms and definitions

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

3.1

petrol

hydrocarbon fuel or blend of hydrocarbon fuel and denatured ethanol which is liquid at atmospheric pressure and is used in spark ignition engines

3.2

diesel

hydrocarbon fuel, biofuel or blend of these which is liquid at atmospheric pressure and is used in compression ignition engines

3.3

spark ignition engine

engine in which an electrical spark is produced to ignite the fuel/air mixture

3.4

compression ignition engine

engine in which ignition is obtained by means of compressing the fuel/air mixture

3.5

permanently installed

securely fastened so that tools need to be used for removal