BS EN ISO 21487:2018

BSI Standards Publication

Small craft - Permanently installed petrol and diesel fuel tanks

bsi.

National foreword

This British Standard is the UK implementation of EN ISO 21487:2018. It is identical to ISO 21487:2012, incorporating amendment 1:2014 and amendment 2:2015. It supersedes BS EN ISO 21487:2012+A2:2015, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment A1 is indicated by [A1] 〈A1〉.

The UK participation in its preparation was entrusted to Technical Committee GME/33, Small craft.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 21487

October 2018

ICS 47.080

Supersedes EN ISO 21487:2012

English Version

Small craft - Permanently installed petrol and diesel fuel tanks (ISO 21487:2012, including Amd 1:2014 and Amd 2:2015)

Petits navires - Réservoirs à carburant à essence et diesel installés à demeure (ISO 21487:2012, y compris Amd 1:2014 et Amd 2:2015)

Kleine Wasserfahrzeuge - Fest eingebaute Ottokraftstoff- und Dieselkraftstofftanks (ISO 21487:2012, einschließlich Amd 1:2014 und Amd 2:2015)

This European Standard was approved by CEN on 16 April 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 21487:2018 E

European foreword

The text of ISO 21487:2012, including Amd 1:2014 and Amd 2:2015 has been prepared by Technical Committee ISO/TC 188 “Small craft” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 21487:2018.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 21487:2012.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2013/53/EU.

For relationship with EU Directive 2013/53/EU, see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 21487:2012, including Amd 1:2014 and Amd 2:2015 has been approved by CEN as EN ISO 21487:2018 without any modification.

Annex ZA
(informative)

Relationship between this European Standard and the Essential Requirements of Directive 2013/53/EU aimed to be covered

This European standard has been prepared under a Commission's standardization request M/542 C(2015) 8736 final to provide one voluntary means of conforming to Essential Requirements of Directive 2013/53/EU.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Annex I and Annex II of Directive 2013/53/EU

Essential Requirements of Directive 2013/53/EU	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Annex I, Part A, 5.2.2 – Fuel tanks	4, 5, 6, 7, 8	This standard deals with the design and test of petrol and diesel fuel tanks and tank openings only. This standard does not deal with the ventilation of fuel tank spaces; protection against fire from the engine and other sources of ignition and heat or separation from living quarters.
Annex II - Components of watercraft; (4) - Fuel tanks intended for fixed installations and fuel hoses.	4, 5, 6, 7, 8	In respect of fuel tanks and their openings when placed on the Union market separately.

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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).

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INTERNATIONAL STANDARD **ISO 21487:2012+A2:2015**

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