
**Small craft — Airborne sound emitted
by powered recreational craft —**

**Part 1:
Pass-by measurement procedures**

*Petits navires — Bruit aérien émis par les bateaux de plaisance
motorisés —*

Partie 1: Méthodes de mesure pour l'essai de passage



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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 14509-1 was prepared by Technical Committee ISO/TC 188, *Small craft*.

This first edition of ISO 14509-1 cancels and replaces ISO 14509:2000, which has been technically revised. It also incorporates the Amendment ISO 14509:2000/Amd.1:2004.

ISO 14509 consists of the following parts, under the general title *Small craft — Airborne sound emitted by powered recreational craft*:

- *Part 1: Pass-by measurement procedures*
- *Part 2: Sound assessment using reference craft*
- *Part 3: Sound assessment using calculation and measurement procedures*

Small craft — Airborne sound emitted by powered recreational craft —

Part 1: Pass-by measurement procedures

1 Scope

This part of ISO 14509 specifies the conditions for obtaining reproducible and comparable measurement results of the maximum sound pressure level of airborne sound generated during the passage of powered recreational craft of up to 24 m length of hull, including inboards, stern drives, personal watercraft (PWC) and outboard motors. It also specifies standard craft based type tests for stern drives with integral exhaust systems and for outboard motors. It also specifies the procedure to be followed if, in addition to the maximum sound pressure level, the determination of the sound exposure level is desired.

NOTE For craft other than those specified above, ISO 2922 is applicable for sound emission measurements.

The accuracy grade of the acoustical test procedures specified in this part of ISO 14509 is engineering grade (grade 2).

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 8665, *Small craft — Marine propulsion reciprocating internal combustion engines — Power measurements and declarations*

ISO 8666:2002, *Small craft — Principal data*

ISO 10087, *Small craft — Craft identification — Coding system*

IEC 60942, *Electroacoustics — Sound calibrators*

IEC 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications*

3 Terms and definitions

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

3.1

type test for recreational craft

type test

measurement performed to prove that the sound of the craft in motion, or of the outboard motor when using a standard craft, or of the stern drive with integral exhaust system when using a standard craft, complies with sound specifications or prescribed limits

NOTE See also definition of “acceptance test” in ISO 2922.