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AMENDMENT 1
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Small craft — Measurement of airborne sound emitted by powered recreational craft

AMENDMENT 1

iTeh STANDARD PREVIEW
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*Petits navires — Mesurage du bruit aérien émis par les navires de
plaisance motorisés*
AMENDEMENT 1

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Foreword

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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.

Amendment 1 to ISO 14509:2000 was prepared by Technical Committee ISO/TC 188, *Small craft*.

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Introduction

Based on a request from ICOMIA (International Council of Marine Industry Associations), it was decided to prepare an amendment to include type testing of stern drives with integral exhaust systems in conjunction with standard craft.

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Page iii, Contents

Add the following new lines after: “**13 Standard craft specifications for outboard motor ...**”

- 14 Standard craft specifications for type tests for stern drives with integral exhaust systems according to clause 10**

Page 1, clause 1

Replace the existing text with the following (new text is shaded)

1 Scope

This International Standard 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 type tests for stern drives with integral exhaust systems and for outboard motors, based on standard craft.

Annex A 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 International Standard is engineering grade (grade 2) as defined in ISO 12001. See also clause 6.

Page 1, clause 2

Replace ISO 8665 with the following:

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

Delete footnote 1) after IEC 61672-1.

Page 2, definition 3.1

Replace the existing text with the following (new text is shaded):

3.1

type test for recreational craft

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.

Page 2, definition 3.2

Replace the existing text with the following (new text is shaded):

3.2

monitoring test for recreational craft

measurement performed in order to check that the sound of the craft in motion, or of the outboard motor when using any craft, or of the stern drive with integral exhaust system when using any craft, is still within prescribed limits and that no noticeable changes have occurred since the acceptance on initial delivery or after modification, as applicable

NOTE 1 Subsequent type testing may also be required in the case of a significant change.

NOTE 2 See also definition of "monitoring test" in ISO 2922.

Page 3, clause 3

Add the following new 3.7 and 3.8 after 3.6.

3.7

stern drive

any propulsion unit with the engine inboard and the transmission/drive located external to the hull

3.8

stern drive with integral exhaust systems

any stern drive placed on the market as a complete unit where the exhaust gases are expelled through the transmission/drive

Page 7, clause 10

Add a new sentence to the 4th paragraph of clause 10 (new text is shaded).

For type tests, outboard motors shall be tested on standard craft as specified in clause 13. For type tests, stern drives with integral exhaust systems shall be tested on standard craft as specified in clause 14.

Page 9, clause 12 i)

Amend the first line of 12 i) as follows (new text is shaded):

- i) data for the craft or the standard craft according to clause 13 or clause 14:

Renumber footnote 2) after "HIN" as 1).

Page 10

Add the following new clause 14 after clause 13:

14 Standard craft specifications for type tests for stern drives with integral exhaust systems according to clause 10

Any series production craft with a V-hull shape meeting the dimensional, mass and operating characteristics given in Table 4 may be used as a standard craft:

Table 4 — Standard craft specifications

Declared propeller shaft power (according to ISO 8665) of the stern drive with integral exhaust system under test kW	Length of hull (according to ISO 8666) m	Maximum beam (according to ISO 8666) m	Mass with engine kg
$P < 78$	5,0	2,0	700
$78 \leq P < 115$	5,8	2,3	1600
$115 \leq P < 159$	7,0	2,5	1900
$159 \leq P < 226$	7,7	2,7	2200
$P \geq 226$	8,7	2,9	2600

A variation of $\pm 10\%$ is allowed in the dimensional characteristics (length of hull and maximum beam as given in Table 4) and a variation of $\pm 20\%$ is allowed in the mass of the craft (as given in Table 4). In addition, the craft shall have no unusual covers or extensions behind the transom which could affect the sound level.

Stern drives with integral exhaust systems shall be fitted in the boat according to the manufacturer's specifications. No modifications on series production craft, such as applying additional absorbing components or trim tabs, are permitted.

NOTE For further information regarding this standard craft concept for stern drives with integral exhaust systems, refer to IMEC 17 F/05; see bibliography.

Page 15, Annex B, 1st line

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In the headline "Data of the craft / Data of...", delete the words "outboard motor" as follows:

Data of the craft / Data of the standard craft for type tests
<https://standards.iteh.ai/catalog/standards/sist/5117ea0-a03d-418d-bfd7-c66c06cd26ef/iso-14509-2000-amd-1-2004>

Page 16, Bibliography

Replace [1] with the following:

- [1] ISO 2922, *Acoustics — Measurement of airborne sound emitted by vessels on inland waterways and harbours*.

Renumber footnote 3) as 2) in [5] and [6].

Add the following new [7] after [6]:

- [7] IMEC 17 F/05:2000²⁾, *Standard boat concept sound level test report — Stern drives with integral exhaust systems*.

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