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First edition
2016-03-15

Underwater acoustics — Quantities and procedures for description and measurement of underwater sound from ships —

Part 1: Requirements for precision measurements in deep water used for comparison purposes

Acoustique sous-marine — Grandeurs et modes de description et de mesurage de l'acoustique sous-marine des navires —

Partie 1: Exigences pour les mesurages en eau profonde utilisées pour des besoins de comparaison



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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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 43, *Acoustics*, Subcommittee SC 3, *Underwater acoustics*.

This first edition cancels and replaces ISO/PAS 17208-1:2012, which has been technically revised.

ISO 17208 consists of the following parts, under the general title *Underwater acoustics — Quantities and procedures for description and measurement of underwater sound from ships*:

— *Part 1: Requirements for precision measurements in deep water used for comparison purposes*

The following part is under preparation:

— *Part 2: Determination of source levels*

A third part on measurement of radiated noise levels in shallow water is planned.

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Introduction

This part of ISO 17208 was developed to provide a standardized measurement method for the quantification and qualification of a ship's underwater radiated noise level. This procedure measures a sector average for a certain beam aspect. It promotes the consistency of reported sound measurements from shipping sources. This part of ISO 17208 provides users with the necessary procedure to compare a ship's radiated noise level to criteria established by others or to contract specifications.

Reduction of all types of ship emissions, most notably ballast water and engine emissions, became an issue in the decade prior to publication of ISO/PAS 17208-1:2012. ISO/PAS 17208-1:2012 was developed in response to growing international concerns about underwater noise and its impact on marine animals.

Excessive underwater noise has the potential to interfere with a marine animal's ability to perform a variety of critical life functions, including navigation, communication and finding food. Because of this, the environmental impact statements of underwater projects such as pile driving, pipe laying and oil exploration now include assessments of underwater noise impact.

This part of ISO 17208 converts the PAS to an International Standard and limits its focus to a precision grade of measurement.