BS ISO 20283-5:2016

BSI Standards Publication

Mechanical vibration — Measurement of vibration on ships

Part 5: Guidelines for measurement, evaluation and reporting of vibration with regard to habitability on passenger and merchant ships

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National foreword

This British Standard is the UK implementation of ISO 20283-5:2016. It supersedes BS ISO 6954:2000 which is now withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GME/21/5, Vibration of machines.

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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Mechanical vibration — Measurement of vibration on ships —

Part 5: Guidelines for measurement, evaluation and reporting of vibration with regard to habitability on passenger and merchant ships

Vibrations mécaniques — Mesurage des vibrations à bord des navires —

Partie 5: Lignes directrices pour le mesurage, l'évaluation et l'établissement de rapports des vibrations affectant l'habitabilité à bord des navires de commerce et des paquebots

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Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
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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).

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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 World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 108, *Mechanical vibration, shock and condition monitoring*, Subcommittee SC 2, *Measurement and evaluation of mechanical vibration and shock as applied to machines, vehicles and structures*.

This first edition of ISO 20283-5 cancels and replaces ISO 6954:2000, which has been technically revised with the following changes:

— crew and passenger spaces were clearly defined;

— measurement conditions also include dynamic positioning (DP) mode;

— guideline values were changed from pairs of lower and upper values representing the range of commonly accepted vibration magnitude to just one maximum value. This gives a clearer indication when this document is referred to in commercial contracts or similar. The actual guideline values are somewhat severer accounting for the technical progress made.

A list of parts in the ISO 20283 series can be found on the ISO website.

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Introduction

Shipboard vibration that interferes with duties or reduces comfort is objectionable and often results in adverse comments from crew and passengers. To quantify this vibration, this document gives guidelines for the measurement, evaluation and reporting of habitability for all persons on board, especially for the crew.

Vibration data acquired in accordance with this document are also useful for

— comparison with ship specifications,

— comparison with other ships, and

— further development and improvement of vibration regulations.

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