SLOVENSKI STANDARD
SIST EN ISO 10846-1:2008

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Nadomešča:
SIST EN ISO 10846-1:1999

Akustika in vibracije - Laboratorijsko merjenje vibro-akustičnih prenosnih lastnosti elastičnih elementov - 1. del: Načela in smernice (ISO 10846-1:2008)

Acoustics and vibration - Laboratory measurement of vibro-acoustic transfer properties of resilient elements - Part 1: Principles and guidelines (ISO 10846-1:2008)

Akustik und Schwingungstechnik - Laborverfahren zur Messung der vibro-akustischen Transfereigenschaften elastischer Elemente - Teil 1: Grundlagen und Übersicht (ISO 10846-1:2008)

Acoustique et vibrations - Mesurage en laboratoire des propriétés de transfert vibro-acoustique des éléments élastiques - Partie 1: Principes et lignes directrices (ISO 10846-1:2008)

Ta slovenski standard je istoveten z: **EN ISO 10846-1:2008**

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17.140.01	Akustična merjenja in blaženje hrupa na splošno	Acoustic measurements and noise abatement in general
17.160	Vibracije, meritve udarcev in vibracij	Vibrations, shock and vibration measurements

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English Version

Acoustics and vibration - Laboratory measurement of vibro-acoustic transfer properties of resilient elements - Part 1: Principles and guidelines (ISO 10846-1:2008)

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COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Page

Foreword

This document (EN ISO 10846-1:2008) has been prepared by Technical Committee ISO/TC 43 "Acoustics" in collaboration with Technical Committee CEN/TC 211 “Acoustics” the secretariat of which is held by DS.

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of an identical text or by endorsement, at the latest by February 2009, and conflicting national standards shall be withdrawn at the latest by February 2009.

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

This document supersedes EN ISO 10846-1:1998.

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Endorsement notice

The text of ISO 10846-1:2008 has been approved by CEN as a EN ISO 10846-1:2008 without any modification.

INTERNATIONAL STANDARD

ISO 10846-1

Second edition
2008-08-15

Acoustics and vibration — Laboratory measurement of vibro-acoustic transfer properties of resilient elements —

Part 1: Principles and guidelines

Acoustique et vibrations — Mesurage en laboratoire des propriétés de transfert vibro-acoustique des éléments élastiques —
Partie 1: Principes et lignes directrices

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Contents

Page

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.

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ISO 10846-1 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*, and ISO/TC 108, *Mechanical vibration, shock and condition monitoring*.

This second edition cancels and replaces the first edition (ISO 10846-1:1997), which has been technically revised.

ISO 10846 consists of the following parts, under the general title *Acoustics and vibration — Laboratory measurement of vibro-acoustic transfer properties of resilient elements*:

— *Part 1: Principles and guidelines*

— *Part 2: Direct method for determination of the dynamic stiffness of resilient supports for translatory motion*

— *Part 3: Indirect method for determination of the dynamic stiffness of resilient supports for translatory motion*

— *Part 4: Dynamic stiffness of elements other than resilient supports for translatory motion*

— *Part 5: Driving point method for determination of the low-frequency transfer stiffness of resilient supports for translatory motion*

Introduction

Passive vibration isolators of various kinds are used to reduce the transmission of vibrations. Examples include automobile engine mounts, resilient supports for buildings, resilient mounts and flexible shaft couplings for shipboard machinery and small isolators in household appliances.

This part of ISO 10846 serves as an introduction and a guide to ISO 10846-2, ISO 10846-3, ISO 10846-4 and ISO 10846-5, which describe laboratory measurement methods for the determination of the most important quantities which govern the transmission of vibrations through linear resilient elements, i.e. frequency-dependent dynamic transfer stiffnesses. This part of ISO 10846 provides the theoretical background, the principles of the methods, the limitations of the methods, and guidance for the selection of the most appropriate standard of the series.

The laboratory conditions described in all parts of ISO 10846 include the application of static preload, where appropriate.

The results of the methods are useful for resilient elements, which are used to prevent low-frequency vibration problems and to attenuate structure-borne sound. However, for complete characterization of resilient elements that are used to attenuate low-frequency vibration or shock excursions, additional information is needed, which is not provided by these methods.