

Akustika. Mehhanismide ja seadmete poolt tekitatud müra. Inseneritehniline meetod mürataseme koormuse määramiseks töökohtadel ja teistes spetsiifilistes kohtades

Acoustics - Noise emitted by machinery and equipment - Engineering method for the determination of emission sound pressure levels in situ at the work station and at other specified positions using sound intensity

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 11205:2004 sisaldab Euroopa standardi EN ISO 11205:2003 + AC:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.04.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 11205:2004 consists of the English text of the European standard EN ISO 11205:2003 + AC:2006.</p> <p>This document is endorsed on 27.04.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This International Standard specifies an engineering method to determine the emission sound pressure level of machines in situ, at work station or at other specified positions, using sound intensity.</p>	<p>Scope: This International Standard specifies an engineering method to determine the emission sound pressure level of machines in situ, at work station or at other specified positions, using sound intensity.</p>
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ICS 17.140.01

Võtmesõnad:

ICS 17.140.01

English version

Acoustics – Noise emitted by machinery and equipment
**Engineering method for the determination of emission
sound pressure levels in situ at the work station and
at other specified positions using sound intensity**
(ISO 11205 : 2003)

Acoustique – Bruit émis par les machines et les équipements – Méthode d'expertise pour la détermination par intensimétrie des niveaux de pression acoustique d'émission in situ au poste de travail et en d'autres positions spécifiées (ISO 11205 : 2003)

Akustik – Geräuschabstrahlung von Maschinen und Geräten – Verfahren der Genauigkeitsklasse 2 zur Bestimmung von Emissions-Schalldruckpegeln am Arbeitsplatz und an anderen festgelegten Orten unter Einsatzbedingungen aus Schallintensitätsmessungen (ISO 11205 : 2003)

This European Standard was approved by CEN on 2003-11-21.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 11205 : 2003 Acoustics – Noise emitted by machinery and equipment – Engineering method for the determination of emission sound pressure levels in situ at the work station and at other specified positions using sound intensity,

which was prepared by ISO/TC 43 'Acoustics' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 211 'Acoustics' Secretariat Denmark, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 2004 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 11205 : 2003 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to International publications are listed in Annex ZA (normative).

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1 Scope

This International Standard specifies an engineering method (grade 2 accuracy) to determine the emission sound pressure level of machines *in situ*, at the work station or at other specified positions, using sound intensity. It is an alternative to ISO 11201, ISO 11202 and ISO 11204 for *in situ* measurements. It is applicable to all kinds of test environments provided that the requirements on background noise and field indicators are fulfilled.

This International Standard is applicable to equipment emitting stationary broadband noise. The noise can differ between operational cycles and can be with or without discrete frequency or narrow band components.

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 7574-1, *Acoustics — Statistical methods for determining and verifying stated noise emission values of machinery and equipment — Part 1: General considerations and definitions*

ISO 12001, *Acoustics — Noise emitted by machinery and equipment — Rules for the drafting and presentation of a noise test code*

IEC 60942:2003, *Electroacoustics — Sound calibrators*

IEC 61043:2003, *Electroacoustics — Instruments for the measurement of sound intensity — Measurements with pairs of pressure sensing microphones*

3 Terms and definitions

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

3.1

sound intensity

\bar{I}

time-averaged instantaneous flow of sound energy per unit of area and per unit time in the direction of the local instantaneous acoustic particle velocity in a temporally stationary sound field

$$\bar{I} = \lim_{T \rightarrow \infty} \frac{1}{T} \int_0^T p(t) \vec{u}(t) dt$$