



SLOVENSKI STANDARD  
SIST EN ISO 14257:2002

01-december-2002

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XY`cj b]` `dfcglc`f]` `nUj fYXbchYb`Y`b`^] cj ]` `U\_i gh] b]` ``Uglbcgh]`f]GC`% (&) +. &\$\$%&

Acoustics - Measurement and parametric description of spatial sound distribution curves in workrooms for evaluation of their acoustical performance (ISO 14257:2001)

Akustik - Messung und Parametrisierung von Schallausbreitungskurven in Arbeiträumen zum Zweck der Beurteilung der akustischen Qualität der Räume (ISO 14257:2001)

Acoustique - Mesurage et description paramétrique des courbes de décroissance sonore spatiale dans les locaux de travail en vue de l'évaluation de leur performance acoustique (ISO 14257:2001)

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Ta slovenski standard je istoveten z: EN ISO 14257:2001

**ICS:**

17.140.01      Acoustic measurements and noise abatement in general

SIST EN ISO 14257:2002      en

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 14257**

October 2001

ICS 13.140

English version

**Acoustics - Measurement and parametric description of spatial  
sound distribution curves in workrooms for evaluation of their  
acoustical performance (ISO 14257:2001)**

Acoustique - Mesurage et description paramétrique des  
courbes de décroissance sonore spatiale dans les locaux  
de travail en vue de l'évaluation de leur performance  
acoustique (ISO 14257:2001)

Akustik - Messung und Parametrisierung von  
Schallausbreitungskurven in Arbeitsräumen zum Zweck der  
Beurteilung der akustischen Qualität der Räume (ISO  
14257:2001)

This European Standard was approved by CEN on 5 October 2001.

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.

This European Standard exists 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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

prEN ISO 14257:2001 (E)

CORRECTED 2001-12-12

## Foreword

The text of the International Standard ISO 14257:2001 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 April 2002, and conflicting national standards shall be withdrawn at the latest by April 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## iTeh STANDARD PREVIEW Endorsement notice (standards.iteh.ai)

The text of the International Standard ISO 14257:2001 was approved by CEN as a European Standard without any modification.

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NOTE: Normative references to International Standards are listed in annex ZA (normative).

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**Annex ZA (normative)****Normative references to international publications  
with their relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN</u>	<u>Year</u>
ISO 3741	1999	Acoustics - Determination of sound power levels of noise sources using sound pressure - Precision methods for reverberation rooms	EN ISO 3741	1999
ISO 3744	1994	Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane	EN ISO 3744	1995
ISO 6926	2000	Acoustics - Requirements for the performance and calibration of reference sound sources used for the determination of sound power levels	EN ISO 6926	2001

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# INTERNATIONAL STANDARD

# ISO 14257

First edition  
2001-10-15

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## Acoustics — Measurement and parametric description of spatial sound distribution curves in workrooms for evaluation of their acoustical performance

*Acoustique — Mesurage et description paramétrique des courbes de  
décroissance sonore spatiale dans les locaux de travail en vue de  
l'évaluation de leur performance acoustique*

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Reference number  
ISO 14257:2001(E)

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Printed in Switzerland



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**ISO 14257:2001(E)****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 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14257 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*.

Annexes A and B form a normative part of this International Standard. Annex C is for information only.

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## Introduction

According to ISO 11690-1, the spatial sound distribution in a workroom is described by a curve characterizing the sound pressure level from a point source with a known sound power level, and with steady emission and omnidirectional sound radiation as a function of the distance from the source. This International Standard specifies a method for the determination of that spatial sound distribution curve, and for the derivation of two characteristics (rate of spatial decay of sound pressure levels per distance doubling and excess of sound pressure level) for the room in question.

Data obtained using this International Standard are of use for the following:

- acoustical qualification of a room with respect to noise control;
- determination of appropriate positions of a machine and of work stations in a room;
- assessment of the necessity to increase the sound absorption in the room;
- qualitative estimation of the potential performance of screens installed in the room;
- calculation of the noise-immission levels to be expected when machines with known emission are operated at specified positions in the room.

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