SLOVENSKI STANDARD
SIST EN ISO 11689:1999

01-november-1999

Akustika - Postopek za primerjavo podatkov o emisiji hrupa naprav in opreme (ISO 11689:1996)

Acoustics - Procedure for the comparison of noise-emission data for machinery and equipment (ISO 11689:1996)

Akustik - Vorgehensweise für den Vergleich von Geräuschemissionswerten für Maschinen und Geräte (ISO 11689:1996)

Acoustique - Procédure de comparaison des données d'émission sonore des machines et équipements (ISO 11689:1996)

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EUROPÄISCHE NORM

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English version

Acoustics - Procedure for the comparison of noise-emission data for machinery and equipment (ISO 11689:1996)

Acoustique - Procédure de comparaison des données d'émission sonore des machines et équipements (ISO 11689:1996)

Akustik - Vorgehensweise für den Vergleich von Geräuschemissionswerten für Maschinen und Geräte (ISO 11689:1996)

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CEN

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

Central Secretariat: rue de Stassart,36 B-1050 Brussels

Foreword

The text of the International Standard ISO 11689:1996 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of an identical text or by endorsement, at the latest by June 1997, and conflicting national standards shall be withdrawn at the latest by June 1997.

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

Endorsement notice

The text of the International Standard ISO 11689:1996 was approved by CEN as a European Standard without any modification.

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

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.

Publication	Year	Title	EN	Year
ISO 12001	1996	Acoustics - Noise emitted by machinery and equipment - Rules for the drafting and presentation of a noise test code	EN ISO 12001	1996

INTERNATIONAL STANDARD

ISO 11689

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Acoustics — Procedure for the comparison of noise-emission data for machinery and equipment

Acoustique — Procédure de comparaison des données d'émission sonore des machines et équipements

Reference number
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Contents

		Page
1	Scope	1
2	Normative reference	1
3	Definitions	1
4	Machine classification	2
5	Noise-emission data	2
6	Presentation of noise-emission values	3
7	Evaluation of noise-emission data	4
8	Steps to be followed when determining noise-control performance	6
9	Information to be recorded	6
10	Information to be reported	6

Annexes

A	Calculation of a linear regression	7
B	Examples of evaluation of noise-emission data	10
C	Example of the presentation of noise-emission data in accordance with this International Standard (form sheet to be copied)	13
D	Bibliography	14

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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.

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.

International Standard ISO 11689 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*, on request by CEN/TC 211, *Acoustics*.

Annexes A to D of this International Standard are for information only.

Introduction

National and international regulations increasingly require the production and use of low-noise machinery and equipment. This implies that manufacturers, users of machinery and equipment and authorities are aware of the noise emission of a particular product in relation to the noise emission of the relevant machine family. This will only be possible if reliable information on the actual noise emission is available or can be determined.

Based on this information, any index of noise-control performance can be determined for a well-defined family, type or group of machinery or equipment available on the market at a stated time.

The comparison and evaluation of noise-emission data are of use to

a) a designer requiring information about noise levels for a particular family, for example when specifying the desired properties of a new concept;

b) a user and/or buyer of machinery or equipment belonging to a specific family, who wishes to compare similar machinery or equipment available on the market with regard to noise emission;

c) working groups preparing machinery safety standards, noise test codes and/or noise guidelines relating to a particular family;

d) authorities in charge of legislation, labour supervision and inspection, health and safety at work;

e) manufacturers and potential users of noise-emission data bases;

f) consultants in acoustics using appropriate techniques for performing a first evaluation of the noise level on a site.

In addition to knowledge about noise control at source by design, the evaluation procedure requires particular knowledge of the machine group in question.

Collecting noise-emission data and editing clusters of noise-emission data are the responsibility of a committee of the parties involved (e.g. manufacturers, authorities or consumer organisations).

Acoustics — Procedure for the comparison of noise-emission data for machinery and equipment

1 Scope

This International Standard specifies a method for establishing the noise-control performance for a family, type, group or sub-group of machinery or equipment on the basis of noise-emission data. It is, in principle, applicable to any kind of machinery or equipment for which a noise test code exists or comparable noise-emission data are available.

NOTE 1 The general procedure described in this International Standard is, in principle, applicable to other physical agents (e.g. vibration).

This International Standard specifies methods and requirements for comparison of noise-emission data so that they can be used for the determination of noise-control performance.

The methods presented allow evaluation of the noise emission of individual machines or of a single type of machine within a machine group, i.e. allow a comparison of the acoustical aspects of machines with comparable non-acoustical data and fields of application.

Annex B gives examples of how the evaluation of collected noise-emission data for a machine group can be carried out.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 12001:1996, *Acoustics — Noise emitted by machinery and equipment — Rules for the drafting and presentation of a noise test code.*

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 12001 and the following definitions apply.

3.1 family of machinery or equipment: Machinery or equipment of similar design or type, intended to perform the same functions.

3.2 measured noise-emission value: Value of the time-averaged A-weighted sound power level L_{WA}, or the A-weighted emission sound pressure level L_{pA}, or the C-weighted peak emission sound pressure level $L_{pC,peak}$ determined from measurements.

3.3 declared noise-emission value: Value of the declared A-weighted sound power level L_{WAd}, the declared A-weighted emission sound pressure level L_{pAd}, or the declared C-weighted peak emission sound pressure level, $L_{pC,peak,d}$.

3.4 characteristic machine parameter: Non-acoustic quantity which characterizes a particular group of machines.