

**Akustika. Statistilised meetodid
mehhanismide ja seadmete etteantud
müraemissiooni väärtuste määramiseks
ja kontrollimiseks. Osa 1:
Üldkaalutlused ja -määratlused**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 27574-1:1999 sisaldab Euroopa standardi EN 27574-1:1988 ingliskeelset teksti.	This Estonian standard EVS-EN 27574-1:1999 consists of the English text of the European standard EN 27574-1:1988.
Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: Standard määratleb terminid, mis on seotud mehhanismide ja seadmete etteantud (nt seadmele märgitud) müraväärtuste määramise ja kontrollimise meetoditega.	Scope:
---	---------------

ICS 17.140.20

Võtmesõnad: akustika, mehhanismid, määratlused, müra (heli), statistiline analüüs, statistiline kvaliteedikontroll

UDC 534.61 : 534.835.46 : 620.1

Descriptors: Acoustics, noise, sound, engine noise, statistical quality control, statistical analysis, definitions.

English version

Acoustics

**Statistical methods for determining and verifying stated noise
emission values of machinery and equipment
Part 1: General considerations and definitions
(ISO 7574-1 : 1985)**

Acoustique; méthodes statistiques pour
la détermination et le contrôle des
valeurs déclarées d'émission acou-
stique des machines et équipements.
Partie 1: Généralités et définitions
(ISO 7574-1 : 1985)

Akustik; statistische Verfahren zur Fest-
legung und Nachprüfung angegebener
(oder vorgegebener) Geräuschemissi-
onswerte von Maschinen und Geräten.
Teil 1: Allgemeines und Begriffe
(ISO 7574-1 : 1985)

This European Standard was approved by CEN on 1988-11-15 and is identical to the ISO Standard as referred to.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CEN

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

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

Foreword

In 1988, CEN/BT decided to submit International Standard

ISO 7574-1 : 1985 Acoustics; statistical methods for determining and verifying stated noise emission values of machinery and equipment; general considerations and definitions

to Formal Vote. The result was positive.

In accordance with the CEN/CENELEC Internal Regulations, 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 United Kingdom.

Endorsement notice

The text of the International Standard ISO 7574-1 : 1985 was approved by CEN as a European Standard without any modification.

0 Introduction to ISO 7574

In order to state the noise emission value for a machine or a batch of machines in an unambiguous manner, this four-part series of International Standards provides guidelines for determining the noise emission value to be stated (e.g. as a labelled value) and specifies verification procedures. These methods are based on the premise of clearly defined acoustical measurement methods and describe the handling of the variability of the measurement results and, if relevant, of the noise emissions of the machines in a batch.

The methods presented in this series of International Standards are compatible with the requirements specified in ISO 4871, i.e.,

- the stated (e.g. labelled) value indicates the limit below which the noise emission value of the individual machine and/or a specified large proportion of the noise emission values of the batch lies;
- the basic noise emission quantity used is the A-weighted sound power level.

Although this series of International Standards is drafted mainly in terms of A-weighted sound power level as a noise emission quantity, it is equally applicable to other quantities.

In this series of International Standard the term "label" is considered to include all means for providing information on the noise emission values to potential users of the equipment; this includes labels, brochures, advertisements, commercial literature, etc. Requirements for this may be stipulated, for example in a contract or in regulations.

The methods described may be applied not only to values stated for labelling purposes, but also to values stated for other purposes, for example :

- to the upper noise limit set by an authority or specified in a technical standard for a specific family of machines;
- to contract values as agreed by the manufacturer and purchaser of the machine(s).

This series of International Standards does not specify whether, or for which specific family of machines, the purposes

mentioned above are relevant or whether the methods for determining and verifying stated noise emission values should be applied. This is left to a labelling code specific to the machinery or equipment concerned or, if this does not exist, to an agreement between the users of the standards (e.g. in a contract).

Two cases are considered:

- the stated value is given for one individual machine;
- the stated value is given for an entire batch of machines.

For economic reasons, the stated values for batches of series-produced machines may be verified by sampling procedures.

This four-part series of International Standards does not deal with the consequences that ensue if the stated value is not verified for a single machine or for a batch (lot) of machines.

This series of International Standards which comprise ISO 7574 requires that the labelled value be determined using the same measurement test code as that specified for verification. It therefore applies to families of machines or equipment for which special measurement test codes for the determination of noise emission quantities are prepared. If no special test code for a particular family exists, the methods specified in ISO 3741, ISO 3742, ISO 3743, ISO 3744 and ISO 3745 may be appropriate.

NOTE — This does not preclude the use of other International Standards, e.g. ISO 3746, which may form the basis of special measurement test codes.

In each case the installation and operating conditions typical for normal use shall be clearly specified or agreed.

The relevant measurement conditions may provide information, in the form of standard deviations, on the dispersion of measurement results. A measure for the dispersion of the emission values due to the different emissions of the different machines is the standard deviation of production (see 3.18).

The series of International Standards which make up ISO 7574 comprises the following four parts:

Part 1: General considerations and definitions