International Standard ISO 7574/3

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

Acoustics — Statistical methods for determining and verifying stated noise emission values of machinery and equipment — Part 3 : Simple (transition) method for stated values for batches of machines

Acoustique — Méthodes statistiques pour la détermination et le contrôle des valeurs déclarées d'émission acoustique des machines et équipements — Partie 3: Méthode simplifiée (transitoire) pour valeurs déclarées de lots de machines

First edition — 1985-12-15

UDC 534.835.46 : 512.24 **Ref. No. ISO 7574/3-1985 (E)**

Descriptors : acoustics, machinery, noise (sound), statistical quality control, statistical analysis.

Price based on 2 pages

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7574/3 was prepared by Technical Committee ISO/TC 43, *Acoustics*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Printed in Switzerland

Acoustics — Statistical methods for determining and verifying stated noise emission values of machinery and equipment — Part 3 : Simple (transition) method for stated values for batches of machines

0 Introduction

A general introduction to the four-part series of ISO 7574 is given in ISO 7574/1.

For the purposes of this part of ISO 7574, the term "labelled value" stands for all kinds of stated values (e.g. information on a label, the upper noise limit set by an authority, the agreed contract value) for which the methods may be applied.

1 Scope and field of application

This part of ISO 7574 is derived from ISO 7574/4. It provides guidelines for determining the labelled value, L_c, by the labeller and specifies a simple method for verifying compliance of the noise emissions of a batch (lot) of machinery or equipment with its labelled value, L_c. This method may be used when a specific noise labelling code (in accordance with clause 6 of ISO 7574/4) specifying the reference standard deviation, sample size and sampling procedure for the family of machines does not yet exist. If a specific noise labelling code exists, it shall be used, in which case reference to this part of ISO 7574 shall not be made.

This part of ISO 7574 should preferably be used only by agreement, e.g. as reached in the standards relating to the relevant machinery industry or in a contract.

This part of ISO 7574 does not deal with the consequences that ensue if the stated value is not confirmed as verified for a batch of machines.

2 References

ISO 3741, *Acoustics — Determination of sound power levels of noise sources — Precision methods for broad-band sources in reverberation rooms.*

ISO 3742, *Acoustics — Determination of sound power levels of noise sources — Precision methods for discrete-frequency and narrow-band sources in reverberation rooms.*

ISO 3743, *Acoustics — Determination of sound power levels of noise sources — Engineering methods for special reverberation test rooms.*

ISO 3744, *Acoustics — Determination of sound power levels of noise sources — Engineering methods for free-field conditions over a reflecting plane.*

ISO 3745, *Acoustics — Determination of sound power levels of noise sources — Precision methods for anechoic and semi-anechoic rooms.*

ISO 3746, *Acoustics — Determination of sound power levels of noise sources — Survey method.*

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 7574/4, *Acoustics — Statistical methods for determining and verifying stated noise emission values of machinery and equipment — Part 4: Methods for stated values for batches of machines.*

3 Definitions

For the purposes of this part of ISO 7574, the definitions given in ISO 7574/1 apply.

4 General

When checking compliance of a batch with its labelled value, this part of ISO 7574 works on the principle that the labelled value indicates the limit below which a specified large proportion of the noise emission values of the batch shall lie. This proportion accounts for both the variability between the machines and the random measurement errors occurring under reproducibility conditions (see 3.17 in ISO 7574/1).

NOTE — In the application of this part of ISO 7574, it is assumed that all measurements will be performed by a testing laboratory which has appropriate test facilities and trained staff.