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Statistical methods for determining and verifying stated noise emission values of machinery and equipment —

Part 4: Methods for determining and verifying stated values for batches of machines

[ISO title: 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]

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**BS 6805-4:
1987**

**ISO 7574-4:
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**EN 27574-4:
1988**

*Incorporating
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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Environment and Pollution Standards Committee (EPC/-) to Technical Committee EPC/1, upon which the following bodies were represented:

- Association of Consulting Engineers
- British Broadcasting Corporation
- British Occupational Hygiene Society
- British Telecommunications plc
- Department of Health and Social Security
- Department of the Environment (Building Research Establishment)
- Department of Trade and Industry (Air Division)
- Department of Trade and Industry (National Physical Laboratory)
- Engineering Equipment and Materials Users' Association
- Health and Safety Executive
- Incorporated Association of Architects and Surveyors
- Institute of Acoustics
- Institute of Occupational Hygienists
- Institute of Physics
- Institute of Sound and Vibration Research
- Institution of Civil Engineers
- Institution of Electronic and Radio Engineers
- Petroleum Industry Association
- Royal Institute of British Architects
- Society of Environmental Engineers
- Transmission and Distribution Association (BEAMA Limited)

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- Advanced Manufacturing Technology Research Institute
- Agricultural Engineers' Association
- British Compressed Air Society
- British Engine Group of the Society of Motor Manufacturers and Traders
- British Steel Corporation
- Business Equipment Trade Association
- Cement Makers' Federation
- Department of Trade and Industry (National Engineering Laboratory)
- Hevac Association
- Institution of Mechanical Engineers
- Institution of Production Engineers
- Rotating Electrical Machines Association (BEAMA Ltd.)

This British Standard, having been prepared under the direction of the Environment and Pollution Standards Committee, was published under the authority of the Board of BSI and comes into effect on 30 January 1987

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The following BSI references relate to the work on this standard:
Committee reference EPC/1
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Amendments issued since publication

Amd. No.	Date of issue	Comments
6301	April 1990	Indicated by a sideline in the margin

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National foreword

This Part of BS 6805 has been prepared under the direction of the Environment and Pollution Standards Committee and is identical with ISO 7574-4:1985 “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”. The standard was prepared by subcommittee 1, Noise, of Technical Committee 43, Acoustics, of the International Organization for Standardization (ISO) with the active participation and approval of the UK.

In 1988 the European Committee for Standardization (CEN) accepted ISO 7574-4:1985 as European Standard EN 27574-4:1988.

BS 6805 at present comprises the following Parts.

- Part 1: Glossary of terms;
- Part 2: Method for determining and verifying stated values for individual machines;
- Part 3: Method for determining and verifying stated values for batches of machines using a simple (transition) method;
- Part 4: Methods for determining and verifying stated values for batches of machines.

Further Parts of BS 6805 will be prepared, if required.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

The comma has been used throughout as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Wherever the words “ISO 7574” or “part of ISO 7574” appear, referring to this standard, they should be read as “BS 6805” or “Part of BS 6805” respectively.

Cross-references

International Standard	Corresponding British Standard
	BS 4196 <i>Sound power levels of noise sources</i>
ISO 3741:1975	Part 1:1981 <i>Precision methods for determination of sound power levels for broad-band sources in reverberation rooms</i> (Identical)
ISO 3742:1975	Part 2:1981 <i>Precision methods for determination of sound power levels for discrete-frequency and narrow-band sources in reverberation rooms</i> (Identical)
ISO 3743:1976	Part 3:1981 <i>Engineering methods for determination of sound power levels for sources in special reverberation test rooms</i> (Identical)
ISO 3744:1981	Part 4:1981 <i>Engineering methods for determination of sound power levels for sources in free-field conditions over a reflecting plane</i> (Identical)
ISO 3745:1977	Part 5:1981 <i>Precision methods for determination of sound power levels for sources in anechoic and semi-anechoic rooms</i> (Identical)

International Standard	Corresponding British Standard
ISO 3951:1981	BS 6002:1979 <i>Specification for sampling procedures and charts for inspection by variables for percent defective</i> (Technically equivalent)
ISO 5725:1981	BS 5497 <i>Precision of test methods</i> Part 1:1979 <i>Guide for the determination of repeatability and reproducibility for a standard test method</i> (Technically equivalent) BS 6805 <i>Statistical methods for determining and verifying stated noise emission values of machinery and equipment</i>
ISO 7574-1:1985	Part 1:1987 <i>Glossary of terms</i> (Identical)
ISO 7574-3:1985	Part 3:1987 <i>Method for determining and verifying stated values for batches of machines using a simple (transition) method</i> (Identical)

The Technical Committee has reviewed the provisions of ISO 4871, to which reference is made in the text for information only, and has decided that they are acceptable for use in conjunction with this standard.

NOTE Textual error. When adopting the text of the International Standard, the textual error given below was discovered. It has been marked in the text and has been reported to ISO in a proposal to amend the text of the International Standard.

In the last line of **B.2.2**, delete “ISO 7574-4” and substitute “ISO 7574-1”.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, the EN title page, pages 2 to 18, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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Key words: Acoustics, noise: sound, engine noise, statistical quality control, statistical analysis, sampling, standard deviation

English version

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

(ISO 7574-4, edition 1985)

Acoustique; Méthodes statistiques pour la détermination et le contrôle des valeurs déclarées d'émission acoustique des machines et équipements; Partie 4: Méthodes pour valeurs déclarées de lots de machines (ISO 7574-4, édition 1985)

Akustik; Statistische Verfahren zur Festlegung und Nachprüfung angegebener (oder vorgegebener) Geräuschemissionswerte von Maschinen und Geräten; Teil 4: Verfahren für Angaben (oder Vorgaben) für Maschinenlose (ISO 7574-4, Ausgabe 1985)

This European Standard was accepted by CEN on 15 November 1988. CEN members are bound to comply with the requirements of the CEN/CENELEC Rules 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 CEN Central Secretariat or to any CEN member.

This European Standard exists in the 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 CEN Central Secretariat has the same status as the official versions.

CEN members are the national standards organizations of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, 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

Brief history

The Technical Board decided with Resolution BT 84/1988, to submit the International Standard ISO 7574-4:1985, “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”.

to the Formal Vote.

Since this standard passed the Formal Vote positively without modification, it was approved by CEN as European Standard EN 27574-4.

In accordance with the Common CEN/CENELEC Rules, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Statement

The text of the International Standard ISO 7574-4, edition 1985 was approved by CEN as a European Standard without any modification.

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