



INTERNATIONAL STANDARD ISO 10843:1997
TECHNICAL CORRIGENDUM 1

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

Acoustics — Methods for the description and physical measurement of single impulses or series of impulses

TECHNICAL CORRIGENDUM 1

Acoustique — Métrique et techniques pour le mesurage physique de bruits impulsionnels isolés ou en courtes rafales

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to ISO 10843:1997 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*.

Page ii, Contents

Under “Annexes”, delete Annexes D and E.

Add “Bibliography”.

Page iii, Foreword, last line

Delete “Annexes A to E”, insert “Annexes A to C”.

Page 1, Clause 2

Delete all references, and insert:

“IEC 60050-801:1994, *International Electrotechnical Vocabulary — Chapter 801: Acoustics and electroacoustics*

IEC 60942:2003, *Electroacoustics — Sound calibrators*

ICS 17.140.20

Ref. No. ISO 10843:1997/Cor.1:2009(E)

ISO 10843:1997/Cor.1:2009(E)

IEC 61094-4:1995, *Measurement microphones — Part 4: Specifications for working standard microphones*

IEC 61260:1995, *Electroacoustics — Octave-band and fractional-octave-band filters*

IEC 61672-1:2002, *Electroacoustics — Sound level meters — Part 1: Specifications*

Page 2, 3.1.1, Note 1

Delete “and annex E”.

Delete “reference [25]”, insert “reference [27]”.

Page 2, 3.1.2, Note

Delete “and annex E”.

Delete “reference [25]”, insert “reference [27]”.

Page 2, 3.1.3, Note

Delete “and annex E”.

Delete “reference [34]”, insert “reference [27]”.

Page 2, 3.1.4, line 2

Delete “instantaneous”.

Page 4, 3.1.14, Note 1

Delete “20 $\mu\text{Pa}^2\cdot\text{s}$ ”, insert “(20 μPa)² s = 4 × 10⁻¹⁰ Pa² s”.

Page 5, 4.1, paragraph 2, lines 2 and 3

Delete “IEC 1094-4”, insert “IEC 61094-4”.

Page 6, 4.3.2.1, line 1

Delete “instantaneous”.

Page 7, 4.3.4

Delete “IEC 651 and IEC 804”, insert “IEC 61672-1”.

Page 7, 4.3.6

Delete “IEC 651 for type 1”, insert “IEC 61672-1 for class 1”.

Delete “; they should preferably meet the requirements for type 0 instruments”.

Page 7, 4.3.7

Delete “IEC 1260”, insert “IEC 61260”.

Page 7, 4.3.7, Note, last line

Delete “European Community Machinery Directive 89/392/EEC”, insert “European Community Machinery Directive 2006/42/EC”.

Page 7, 4.5.1.1, lines 1 and 2

Delete “type 1 requirements of IEC 651 and IEC 804 and should comply with the additional requirements of annex D.”, insert “class 1 requirements of IEC 61672-1.”

Page 7, 4.5.1.1, Notes

Delete “NOTES”.

Delete the first note entirely.

Delete “2”, insert “NOTE”.

Page 8, 4.5.1.1, Note 2, last paragraph, line 3

Delete “SEL”, insert “single event sound exposure level”.

Page 8, 4.5.1.1, Note 2, last line

Delete “IEC 651 and in annex D.”, insert “IEC 61672-1.”

Page 8, 4.5.2, lines 3 and 4 (twice)

Delete “IEC 1094-4”, insert “IEC 61094-4”.

Page 9, 5.3.1, line 2

Delete “IEC 942”, insert “IEC 60942”.

Page 10, 5.5, line 6

Delete “BIPM/IEC/IFCC/ISO/IUPAC/IUPAP/OIML guide [25]”, insert “ISO/IEC Guide 98-3 [26]”.

Page 11, 6.1.2, paragraph 2, line 1

Delete “IEC 1260”, insert “IEC 61260”.

Page 13, Clause A.1, paragraph 1, penultimate line

Delete “annex E,”.

Page 19, Clause C.1, paragraph 1, line 2

Delete “(see annex E, reference [4])”.

Page 19, Clause C.2, line 3

Delete “(see annex E, reference [5])”.

Page 19, Clause C.3

Delete “IEC 651:1979, clause 9 and IEC 804:1985, clause 9”, insert “IEC 61672-2:2003, clause 9”.

Page 19, Clause C.4

Delete “IEC 804:1985”, insert “IEC 61672-2:2003”.

Page 20

Delete Annex D.

Page 21 to 23

Delete Annex E, insert the following Bibliography.

Bibliography

- [1] ISO 1996-1, *Acoustics — Description, measurement and assessment of environmental noise — Part 1: Basic quantities and assessment procedures*
- [2] ISO 1996-2, *Acoustics — Description, measurement and assessment of environmental noise — Part 2: Determination of environmental noise levels*
- [3] ISO 3740, *Acoustics — Determination of sound power levels of noise sources — Guidelines for the use of basic standards*
- [4] ISO 3741, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Precision methods for reverberation rooms*
- [5] ISO 3743-1, *Acoustics — Determination of sound power levels of noise sources — Engineering methods for small, movable sources in reverberant fields — Part 1: Comparison method for hard-walled test rooms*
- [6] ISO 3743-2, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering methods for small, movable sources in reverberant fields — Part 2: Methods for special reverberation test rooms*
- [7] ISO 3744, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane*
- [8] ISO 3745, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Precision methods for free-field test rooms and hemi-free-field test rooms¹⁾*
- [9] ISO 3746, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane*
- [10] ISO 3747, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering/survey methods for use in situ in a reverberant environment*
- [11] ISO 4871, *Acoustics — Declaration and verification of noise emission values of machinery and equipment*
- [12] ISO 7574-1, *Acoustics — Statistical methods for determining and verifying stated noise emission values of machinery and equipment — Part 1: General considerations and definitions*
- [13] ISO 7574-2, *Acoustics — Statistical methods for determining and verifying stated noise emission values of machinery and equipment — Part 2: Methods for stated values for individual machines*
- [14] ISO 7574-3, *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*

1) To be published. (Revision of ISO 3745:2003)

- [15] 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*
- [16] ISO 9614-1, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 1: Measurement at discrete points*
- [17] ISO 9614-2, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 2: Measurement by scanning*
- [18] ISO 9614-3, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 3: Precision method for measurement by scanning*
- [19] ISO 11200, *Acoustics — Noise emitted by machinery and equipment — Guidelines for the use of basic standards for the determination of emission sound pressure levels at a work station and at other specified positions*
- [20] ISO 11201, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections*
- [21] ISO 11202, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections*
- [22] ISO 11203, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions from the sound power level*
- [23] ISO 11204, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections*
- [24] ISO 11205, *Acoustics — Noise emitted by machinery and equipment — Engineering method for the determination of emission sound pressure levels in situ at the work station and at other specified positions using sound intensity*
- [25] IEC 61672-2:2003, *Electroacoustics — Sound level meters — Part 2: Pattern evaluation tests*
- [26] ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*
- [27] WARD, W.D. *et al. Proposed damage — Risk criterion for impulse noise (gunfire)*. Report of working group 57 of the National Research Council Committee on Hearing, Bioacoustics, and Biomechanics (CHABA), 1968
- [28] *Guidelines for preparing environmental impact statements on noise*. Report of Working Group 69 of the National Research Council Committee on Hearing, Bioacoustics, and Biomechanics (CHABA), 1977
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- [32] *Technical Committee Report on recommended practices for burst measurements in the frequency domain*. IEEE No. 257 (Institute of Electrical and Electronics Engineers), New York, 1966

- [33] *Technical Committee Report on recommended practices for burst measurements in the time domain.* IEEE No. 265 (Institute of Electrical and Electronics Engineers), New York, 1969
- [34] JOHNSON, D.R., ROBINSON, D.W. Procedure for calculating the loudness of sonic booms. *Acustica* 1969, **21**, pp. 307-318
- [35] *Final report on effects of impulse noise.* NATO Document AD/243 (Panel 8/FSG.6) D/9, 1987
- [36] PFANDER, F. *et al.* Danger of auditory impairment from impulse noise: A comparative study of the CHABA damage-risk criteria and those of the Federal Republic of Germany. *J. Acoust. Soc. Am.* 1980, **67**, pp. 628-933
- [37] VANDERKOOI, M. *Predicting OP amp slew rate limited response.* National Semiconductor LB-19, 1972
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- [39] YOUNG, R.W. On the energy transported with sound pulse. *J. Acoust. Soc. Am.* 1970, **47**, pp. 441-442
- [40] *Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC*