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DIN EN ISO 11204

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Supersedes
DIN EN ISO 11204:2010-10

Acoustics – Noise emitted by machinery and equipment – Determination of emission sound pressure levels at a work station and at other specified positions applying accurate environmental corrections (ISO 11204:2010); English version EN ISO 11204:2010, English translation of DIN EN ISO 11204:2019-10

Akustik –
Geräuschabstrahlung von Maschinen und Geräten –
Bestimmung von Emissions-Schalldruckpegeln am Arbeitsplatz und an anderen festgelegten Orten unter Anwendung exakter Umgebungskorrekturen (ISO 11204:2010);
Englische Fassung EN ISO 11204:2010,
Englische Übersetzung von DIN EN ISO 11204:2019-10

Acoustique –
Bruit émis par les machines et équipements –
Détermination des niveaux de pression acoustique d'émission au poste de travail et en d'autres positions spécifiées en appliquant des corrections d'environnement exactes (ISO 11204:2010);
Version anglaise EN ISO 11204:2010,
Traduction anglaise de DIN EN ISO 11204:2019-10

Document comprises 49 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

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A comma is used as the decimal marker.

National foreword

This document (EN ISO 11204:2010) has been prepared by Technical Committee ISO/TC 43 "Acoustics", Subcommittee SC 1 "Noise", Working Group 28 "Basic machinery noise emission standards in collaboration with Technical Committee CEN/TC 211 "Acoustics" (Secretariat: DS, Denmark).

The responsible German body involved in its preparation was *DIN VDI-Normenausschuss Akustik, Lärmminderung und Schwingungstechnik* (DIN/VDI Standards Committee Acoustics, Noise Control and Vibration Engineering), Working Committee NA 001-01-04 AA "Noise emission of machinery and equipment; measurement, reduction, data collection".

The DIN Standards corresponding to the International Standards and publications referred to in this document are as follows:

ISO 3534-2	DIN ISO 3534-2
ISO 3740	DIN EN ISO 3740
ISO 3741	DIN EN ISO 3741
ISO 3743-1	DIN EN ISO 3743-1
ISO 3743-2	DIN EN ISO 3743-2
ISO 3744	DIN EN ISO 3744
ISO 3745	DIN EN ISO 3745
ISO 3746	DIN EN ISO 3746
ISO 3747	DIN EN ISO 3747
ISO 4871	DIN EN ISO 4871
standards series ISO 5725	standards series DIN ISO 5725
ISO 6929	DIN EN ISO 6926
ISO 7574-1	DIN EN 27574-1
ISO 9614-1	DIN EN ISO 9614-1
ISO 9614-2	DIN EN ISO 9614-2
ISO 9614-3	DIN EN ISO 9614-3
ISO 11200	DIN EN ISO 11200
ISO 11201	DIN EN ISO 11201
ISO 11202	DIN EN ISO 11202
ISO 11203	DIN EN ISO 11203
ISO 11205	DIN EN ISO 11205
ISO/TR 11690-3	DIN EN ISO 11690-3
ISO 12001	DIN EN ISO 12001
IEC 60942	DIN EN 60942
IEC 61260	DIN EN 61260
IEC 61672-1	DIN EN 61672-1
ISO/IEC Guide 98-3	DIN V ENV 13005

Amendments

This standard differs from DIN EN ISO 11204:2009-12 as follows:

a) a procedure for determining the local environmental correction to determine the apparent work station directivity index has been added;

b) the limit for the permissible local environmental correction for measurements according to accuracy grade 2 has been increased from 2 dB to 4 dB;

c) further criteria for background noise and an absolute criterion have been added;

d) from a specific altitude of the measurement position above sea level, which depends on the accuracy grade, the emission sound pressure level is now to be normalized to the reference meteorological conditions;

e) the measurement uncertainty clause has been completely revised and an annex with guidance on the development of information on measurement uncertainty has been included (Annex C);

f) Annex D "Principles of the methodology" has been added;

g) the former Annex C "Guidelines for the detection of impulsive noise" has been deleted;

h) the standard has been editorially revised.

Compared with DIN EN ISO 11204:2010-10, the following corrections have been made to the German version:

a) in 5.4.1, last sentence, in 5.4.2, first sentence, and in 8.5, second sentence, the translation has been supplemented and/or corrected;

b) in 8.3.1, third paragraph, the second sentence is now normative;

c) in 11.3.1, the last sentence has been formulated as a permission;

d) in 11.3.2, sixth paragraph, the first sentence is now informative;

e) subclause A.1.1 b) is now normative;

f) in Clause A.3, in the key to Figure A.2, symbol "*S*" has been changed to "S_M";

g) some editorial corrections have been made.

Previous editions

DIN 45635: 1970-03
DIN 45635-1: 1972-01, 1984-04
DIN EN ISO 11204: 1996-07, 2009-12, 2010-10

National Annex NA
(informative)

Bibliography

DIN V ENV 13005, *Guide to the expression of uncertainty in measurement*

DIN EN 27574-1, *Acoustics — Statistical methods for determining and verifying stated noise emission values of machinery and equipment — Part 1: General considerations and definitions*

DIN EN 60942, *Electroacoustics — Sound calibrators*

DIN EN 61260, *Electroacoustics — Octave-band and fractional-octave-band filters (IEC 61260:1995 + A1:2001)*

DIN EN 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications*

DIN EN ISO 3740, *Acoustics — Determination of sound power levels of noise sources — Guidelines for the use of basic standards*

DIN EN ISO 3741, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Precision methods for reverberation test rooms*

DIN EN ISO 3743-1, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for small, movable sources in reverberant fields — Part 1: Comparison method for a hard-walled test room*

DIN EN 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*

DIN EN ISO 3744, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane*

DIN EN ISO 3745, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Precision methods for anechoic rooms and hemi-anechoic rooms*

DIN EN ISO 3746, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Survey method using an enveloping measurement surface over a reflecting plane*

DIN EN 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*

DIN EN ISO 4871, *Acoustics — Declaration and verification of noise emission values of machinery and equipment*

DIN EN ISO 6926, *Acoustics — Requirements for the performance and calibration of reference sound sources used for the determination of sound power levels*

DIN EN ISO 9614-1, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 1: Measurement at discrete points*

DIN EN ISO 9614-2, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 2: Measurement by scanning*

DIN EN ISO 9614-3, *Acoustics — Determination of sound power levels of noise sources using sound intensity — Part 3: Precision method for measurement by scanning*

DIN EN 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*

DIN EN ISO 11201, *Acoustics — Noise emitted by machinery and equipment — Determination 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*

DIN EN ISO 11202, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions applying approximate environmental corrections*

DIN EN 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*

DIN EN 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*

DIN EN ISO 11690-3, *Acoustics — Recommended practice for the design of low-noise workplaces containing machinery — Part 3: Sound propagation and noise prediction in workrooms*

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

DIN ISO 3534-2, *Statistics — Vocabulary and symbols — Part 2: Applied statistics*

DIN ISO 5725 (all parts), *Accuracy (trueness and precision) of measurement methods and results*

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