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Acoustics - Determination of uncertainties associated with sound emission measures - Part 1: Sound power levels determined from sound pressure measurements (ISO 5114-1:2024)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Acoustics - Determination of uncertainties associated with sound emission measures - Part 1: Sound power levels determined from sound pressure measurements (ISO 5114-1:2024)

Acoustique - Détermination des incertitudes associées aux mesurages de l'émission sonore - Partie 1: Niveaux de puissance acoustique déterminés à partir des mesurages de pression acoustique (ISO 5114-1:2024)

Akustik - Bestimmung der Unsicherheiten von Schallemissionsmessgrößen - Teil 1: Bestimmung von Schalleistungspegeln aus Schalldruckmessungen (ISO 5114-1:2024)

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EN ISO 5114-1:2024 (E)

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European foreword

This document (EN ISO 5114-1:2024) has been prepared by Technical Committee ISO/TC 43 "Acoustics" in collaboration with Technical Committee CEN/TC 211 "Acoustics" the secretariat of which is held by DIN.

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The text of ISO 5114-1:2024 has been approved by CEN as EN ISO 5114-1:2024 without any modification.



International Standard

ISO 5114-1

Acoustics — Determination of uncertainties associated with sound emission measures —

Part 1: Sound power levels determined from sound pressure measurements

*Acoustique — Détermination des incertitudes associées aux
mesurages de l'émission sonore —*

*Partie 1: Niveaux de puissance acoustique déterminés à partir des
mesurages de pression acoustique*

**First edition
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Foreword

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ISO 5114-1:2024(en)**Introduction**

An assessment of uncertainties that is comprehensible and close to reality is indispensable for reporting and using measured sound power levels. Uncertainties are determined following the principles of ISO/IEC Guide 98-3. This Guide specifies a detailed procedure for uncertainty evaluation that is based upon a mathematical model of the measurement. The detailedness of the model can vary from the mere analysis of the statistical spread of measured sound power levels up to an exhaustive characterisation of all relevant physical phenomena. Different such models are described by this document.

Acoustics — Determination of uncertainties associated with sound emission measures —

Part 1:

Sound power levels determined from sound pressure measurements

1 Scope

This document gives guidance on the determination of measurement uncertainties of sound power levels determined according to ISO 3741, ISO 3743-1, ISO 3743-2, ISO 3744, ISO 3745, ISO 3746, ISO 3747 or according to a noise test code based on one of these measurement standards.

2 Normative references

There are no normative references in this document.

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