ICS 19.100 SLOVENSKÁ TECHNICKÁ NORMA Jún 2025

STN	**Nedeštruktívne skúšanie Skúšanie ultrazvukom Nastavenie citlivosti a časovej základne (ISO 16811: 2025)**	**STN EN ISO 16811** 01 5019

Non-destructive testing - Ultrasonic testing - Sensitivity and range setting (ISO 16811:2025)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/25

Obsahuje: EN ISO 16811:2025, ISO 16811:2025

Oznámením tejto normy sa ruší
STN EN ISO 16811 (01 5019) zo septembra 2014

140472

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2025
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 16811

March 2025

ICS 19.100

Supersedes EN ISO 16811:2014

English Version

Non-destructive testing - Ultrasonic testing - Sensitivity and range setting (ISO 16811:2025)

Essais non destructifs - Contrôle par ultrasons - Réglage de la sensibilité et de la base de temps (ISO 16811:2025)

Zerstörungsfreie Prüfung - Ultraschallprüfung - Empfindlichkeits- und Entfernungsjustierung (ISO 16811:2025)

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN ISO 16811:2025) has been prepared by Technical Committee ISO/TC 135 "Non-destructive testing" in collaboration with Technical Committee CEN/TC 138 “Non-destructive testing” the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2025, and conflicting national standards shall be withdrawn at the latest by September 2025.

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International Standard

ISO 16811

Non-destructive testing — Ultrasonic testing — Sensitivity and range setting

Essais non destructifs — Contrôle par ultrasons — Réglage de la sensibilité et de la base de temps

Second edition
2025-03

Reference number
ISO 16811:2025(en)

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Published in Switzerland

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 3, *Ultrasonic testing*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 138 *Non-destructive testing,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 16811:2012), which has been technically revised.

The main changes are as follows:

— normative references have been updated;

— Annex A and Annex B from the prior edition have been moved to the main text;

— document has been editorially revised.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The following standards on ultrasonic testing are linked:

— ISO 16810, Non-destructive testing — Ultrasonic testing — General principles;

— ISO 16811, Non-destructive testing — Ultrasonic testing — Sensitivity and range setting;

— ISO 16823, Non-destructive testing — Ultrasonic testing — Through transmission technique;

— ISO 16826, Non-destructive testing — Ultrasonic testing — Testing for discontinuities perpendicular to the surface;

— ISO 16827, Non-destructive testing — Ultrasonic testing — Characterization and sizing of discontinuities;

— ISO 16828, Non-destructive testing — Ultrasonic testing — Time-of-flight diffraction technique as a method for detection and sizing of discontinuities.

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International Standard **ISO 16811:2025(en)**

Non-destructive testing — Ultrasonic testing — Sensitivity and range setting

1 Scope

This document specifies the general rules for setting the time-base range and sensitivity (i.e. gain adjustment) of a manually operated ultrasonic instrument with A-scan display in order that reproducible determinations can be made of the location and echo height of a reflector.

This document is applicable to contact techniques employing a single probe with either a single transducer or dual transducers. This document does not apply to the immersion technique and techniques employing more than one probe.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2400, *Non-destructive testing — Ultrasonic testing — Specification for calibration block No. 1*[1)]

ISO 5577, *Non-destructive testing — Ultrasonic testing — Vocabulary*

ISO 7963, *Non-destructive testing — Ultrasonic testing — Specification for calibration block No. 2*[1)]

ISO 9712, *Non-destructive testing — Qualification and certification of NDT personnel*

ISO 22232-1, *Non-destructive testing — Characterization and verification of ultrasonic test equipment — Part 1: Instruments*

ISO 22232-2, *Non-destructive testing — Characterization and verification of ultrasonic test equipment — Part 2: Probes*

ISO 22232-3, *Non-destructive testing — Characterization and verification of ultrasonic test equipment — Part 3: Combined equipment*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

1) In the next revision of the standard, the term "calibration block" is intended to be replaced by the term "standard block".

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