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Non-destructive testing - Ultrasonic testing - Testing for discontinuities perpendicular to the surface (ISO 16826:2025)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN ISO 16826:2025 sisaldab Euroopa standardi EN ISO 16826:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 12.03.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN ISO 16826:2025 consists of the English text of the European standard EN ISO 16826:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 12.03.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 19.100

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EUROPEAN STANDARD

EN ISO 16826

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN ISO 16826:2014

English Version

Non-destructive testing - Ultrasonic testing - Testing for
discontinuities perpendicular to the surface (ISO
16826:2025)

Essais non destructifs - Contrôle par ultrasons -
Contrôle des discontinuités perpendiculaires à la
surface (ISO 16826:2025)

Zerstörungsfreie Prüfung - Ultraschallprüfung -
Prüfung auf Inhomogenitäten senkrecht zur Oberfläche
(ISO 16826:2025)

This European Standard was approved by CEN on 1 March 2025.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN ISO 16826:2025) 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of an identical text or by endorsement, at the latest by September 2025, and conflicting national standards shall be withdrawn at the latest by September 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 16826:2014.

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Endorsement notice

The text of ISO 16826:2025 has been approved by CEN as EN ISO 16826:2025 without any modification.

Contents

Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Test equipment and test personnel.....	1
5 Tandem technique.....	2
6 Longitudinal-longitudinal-transverse wave technique.....	8
Annex A (informative) Nomograms for tandem distances for convex and concave surfaces.....	12
Bibliography.....	15

Introduction

The following documents 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*

Non-destructive testing — Ultrasonic testing — Testing for discontinuities perpendicular to the surface

1 Scope

This document specifies principles for the tandem technique and the longitudinal-longitudinal-transverse wave (LLT) technique for detection of discontinuities perpendicular to the surface or almost perpendicular to the surface.

The general principles for ultrasonic testing of industrial products are described in ISO 16810.

The tandem or LLT techniques can be used for the detection of embedded planar discontinuities.

This document gives guidelines for the testing of metallic materials with a thickness between 40 mm and 500 mm with parallel or concentric surfaces.

The procedures provided in this document can be used for testing of other materials or smaller thickness if special measures are taken according to a written testing procedure.

Phased array techniques can also be applied for the tandem technique and the LLT technique, but additional steps or verifications can be needed.

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

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5577 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Test equipment and test personnel

The requirements of ISO 16810 on test equipment and test personnel shall be applied unless stated otherwise.