

STN	Nedeštruktívne skúšanie. Skúška ultrazvukom. Zisťovanie necelistvostí kolmých na povrch (ISO 16826: 2012).	STN EN ISO 16826 01 5019
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Non-destructive testing - Ultrasonic testing - Examination for discontinuities perpendicular to the surface (ISO 16826:2012)

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. 08/14

Obsahuje: EN ISO 16826:2014, ISO 16826:2012

Oznámením tejto normy sa ruší
STN EN 583-4 (01 5019) z mája 2003

119401

Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, odbor SÚTN, 2014
Podľa zákona č. 264/1999 Z. z. v znení neskorších predpisov sa môžu slovenské technické normy
rozmnožovať a rozširovať iba so súhlasom Úradu pre normalizáciu, metrológiu a skúšobníctvo SR.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 16826

March 2014

ICS 19.100

Supersedes EN 583-4:2002

English Version

**Non-destructive testing - Ultrasonic testing - Examination for
discontinuities perpendicular to the surface (ISO 16826:2012)**

Essais non destructifs - Contrôle par ultrasons - Contrôle
des discontinuités perpendiculaires à la surface (ISO
16826:2012)

Zerstörungsfreie Prüfung - Ultraschallprüfung - Prüfung auf
Inhomogenitäten senkrecht zur Oberfläche (ISO
16826:2012)

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Contents	Page
Foreword.....	3

Foreword

The text of ISO 16826:2012 has been prepared by Technical Committee ISO/TC 135 “Non-destructive testing” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 16826:2014 by 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of an identical text or by endorsement, at the latest by September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

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Endorsement notice

The text of ISO 16826:2012 has been approved by CEN as EN ISO 16826:2014 without any modification.

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

*Essais non destructifs — Contrôle par ultrasons — Contrôle des
discontinuités perpendiculaires à la surface*





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Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Tandem examination	1
4.1 General	1
4.2 Time base adjustment	2
4.3 Setting of sensitivity	3
4.4 Determination of examination zones	3
4.5 DGS-diagram for tandem examination	4
4.6 Corrections of sensitivity	5
4.7 Object with concentric surfaces	5
5 LLT-examination	7
5.1 General	7
5.2 Time base adjustment and determination of discontinuity depth	8
5.3 Setting of sensitivity	9
5.4 Determination of examination depth	9
5.5 DGS-diagrams for LLT-examination	11
5.6 Correction of sensitivity	11
Annex A (informative) Nomograms for determination of tandem distances for convex (Figure A.1) and concave (Figure A.2) scanning surface	12

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 16826 was prepared by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 3, *Ultrasonic testing*.

Introduction

This International Standard is based on EN 583-4:2002+A1:2003, *Non-destructive testing — Ultrasonic examination — Part 4: Examination for discontinuities perpendicular to the surface*.

The following International Standards 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 — Transmission technique*

ISO 16826, *Non-destructive testing — Ultrasonic testing — Examination 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 — Examination for discontinuities perpendicular to the surface

1 Scope

This International Standard defines the principles for tandem- and longitudinal-longitudinal-transverse (LLT) wave examination for the detection of discontinuities perpendicular to the surface.

The general principles required for the ultrasonic examination of industrial products are described in ISO 16810. A list of symbols and equations is given in ISO 16811.

The tandem- or LLT-examination should be used for the detection of planar discontinuities with distance to the surface greater than 15 mm. This International Standard has been prepared for the examination of metallic materials with a thickness between 40 mm and 500 mm with parallel or concentric surfaces. It can, however, be used for other materials and smaller thickness provided special measures are taken.

2 Normative references

The following referenced documents are indispensable for the application 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 inspection — Vocabulary*

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

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

EN 1330-4, *Non-destructive testing — Terminology — Terms used in ultrasonic testing*

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