

Non-destructive testing - Ultrasonic testing - Transmission technique (ISO 16823:2012)

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

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Non-destructive testing - Ultrasonic testing - Transmission technique (ISO 16823:2012)

Essais non destructifs - Contrôle par ultrasons - Technique par transmission (ISO 16823:2012)

Zerstörungsfreie Prüfung - Ultraschallprüfung - Durchschallungstechnik (ISO 16823:2012)

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EN ISO 16823:2014 (E)

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Foreword

The text of ISO 16823:2012 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 16823:2014 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of an identical text or by endorsement, at the latest by September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

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

This document supersedes EN 583-3:1997.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 16823:2012 has been approved by CEN as EN ISO 16823:2014 without any modification.

INTERNATIONAL STANDARD

ISO 16823

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Non-destructive testing — Ultrasonic testing — Transmission technique

Essais non destructifs — Contrôle par ultrasons — Technique par transmission



ISO 16823:2012(E)



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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 16823 was prepared by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 3, *Ultrasonic testing*.

Introduction

This International Standard is based on EN 583-3:1997, *Non-destructive testing — Ultrasonic examination — Part 3: Transmission technique*.

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 — Transmission technique

1 Scope

This International Standard specifies the principles of transmission techniques.

Transmission techniques can be used for:

- detection of imperfections;
- determination of attenuation.

The general principles required for the use of ultrasonic examination of industrial products are described in ISO 16810.

The transmission technique is used for examination of flat products, e.g. plates and sheets.

Further, it is used for examinations e.g.:

- where the shape, dimensions or orientation of possible imperfections are unfavourable for direct reflection;
- in materials with high attenuation;
- in thin products.

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

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

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