



SLOVENSKI STANDARD SIST EN ISO 15548-1:2009

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Non-destructive testing - Equipment for eddy current examination - Part 1: Instrument characteristics and verification (ISO 15548-1:2008)

Zerstörungsfreie Prüfung - Wirbelstromprüfung - Kenngrößen von Prüfeinrichtungen und deren Verifizierung - Teil 1: Kenngrößen von Prüfgeräten und deren Verifizierung (ISO 15548-1:2008)

Essais non destructifs - Équipement pour examens par courants de Foucault - Partie 1: Caractéristiques et vérification des instruments (ISO 15548-1:2008)

Ta slovenski standard je istoveten z: EN ISO 15548-1:2008

ICS:

19.100 Neporušitveno preskušanje Non-destructive testing

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 15548-1

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ICS 19.100

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English Version

**Non-destructive testing - Equipment for eddy current
examination - Part 1: Instrument characteristics and verification
(ISO 15548-1:2008)**

Essais non destructifs - Appareillage pour examen par
courants de Foucault - Partie 1: Caractéristiques de
l'appareil et vérifications (ISO 15548-1:2008)

Zerstörungsfreie Prüfung - Wirbelstromprüfung -
Kenngrößen von Prüfeinrichtungen und deren Verifizierung
- Teil 1: Kenngrößen von Prüfgeräten und deren
Verifizierung (ISO 15548-1:2008)

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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Foreword

This document (EN ISO 15548-1:2008) has been prepared by Technical Committee CEN/TC 138 "Non-destructive testing", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 135 "Non-destructive testing".

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of an identical text or by endorsement, at the latest by March 2009, and conflicting national standards shall be withdrawn at the latest by March 2009.

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 13860-1:2003.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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INTERNATIONAL STANDARD

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Non-destructive testing — Equipment for eddy current examination —

Part 1: Instrument characteristics and verification

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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
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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.

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

ISO 15548-1 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 138, *Non-destructive Testing*, in collaboration with ISO Technical Committee TC 135, *Non-destructive Testing*, Subcommittee SC 4, *Eddy current methods*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 15548 consists of the following parts, under the general title *Non-destructive testing — Equipment for eddy current examination*:

- *Part 1: Instrument characteristics and verification*
- *Part 2: Probe characteristics and verification*
- *Part 3: System characteristics and verification*

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Non-destructive testing — Equipment for eddy current examination —

Part 1: Instrument characteristics and verification

1 Scope

This part of ISO 15548 identifies the functional characteristics of a general-purpose eddy current instrument and provides methods for their measurement and verification.

The evaluation of these characteristics permits a well-defined description and comparability of eddy current equipment.

By careful choice of the characteristics, a consistent and effective eddy current examination system can be designed for a specific application.

Where accessories are used, these are characterised using the principles of this part of ISO 15548.

This part of ISO 15548 gives neither the extent of verification nor acceptance criteria for the characteristics. They are given in the application documents.

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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 12718, *Non-destructive testing — Eddy current testing — Terminology*

ISO 15549, *Non-destructive testing — Eddy current testing — General principles*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12718 apply.

4 Eddy current instrument characteristics

4.1 General characteristics

4.1.1 Type of instrument

- a) An instrument has a general-purpose application when the relationship between the measured quantity and the display or output is established by the user. A range of probes can be connected to the instrument. The instrument manufacturer shall provide details of the internal electrical characteristics, in order that the user can design the examination system. The examination system shall be in accordance