International Standard

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Non-destructive testing — Equipment for eddy current examination —

Part 1: Instrument characteristics and verification

Essais non destructifs — Appareillage pour examen par courants de Foucault —

Partie 1: Caractéristiques de l'appareil et vérifications

Reference number
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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 4, *Eddy current 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 third edition cancels and replaces the second edition (ISO 15548-1:2013), which has been technically revised.

The main changes are as follows:

— inclusion of digital instrument;

— revision of the measurement procedures;

— introduction of acceptance criteria.

A list of all parts in the ISO 15548 series can be found on the ISO website.

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 evaluation of the characteristics of general-purpose eddy current instruments permits a well-defined description and comparability of eddy current instruments.

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

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Non-destructive testing — Equipment for eddy current examination —

Part 1: Instrument characteristics and verification

1 Scope

This document specifies the characteristics of general-purpose eddy current instruments and provides methods for their evaluation and verification.

This document can be completed by an application document specifying acceptance criteria for the characteristics of the eddy current instrument.

Where accessories are used, these are characterized using the principles of this document (e.g. additional external amplifiers).

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

ISO 12718, *Non-destructive testing — Eddy current testing — Vocabulary*

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

ISO 18173, *Non-destructive testing — General terms and definitions*

ISO/IEC Guide 99, *International vocabulary of metrology — Basic and general concepts and associated terms (VIM)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12718, ISO 18173 and ISO/IEC Guide 99 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/

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