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Non-destructive testing — Equipment for eddy current examination — Array probe characteristics and verification

Essais non destructifs — Appareillage pour examen par courants de Foucault — Caractéristiques des capteurs multiéléments et vérifications

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Foreword

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This document was prepared by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 4, *Eddy current testing.*

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Non-destructive testing — Equipment for eddy current examination — Array probe characteristics and verification

1 Scope

This document identifies the functional characteristics of eddy current array probes and their interconnecting elements and provides methods for their measurement and verification.

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

Where relevant, this document gives recommendations for acceptance criteria for the characteristics.

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

ISO 15548-1, *Non-destructive testing — Equipment for eddy current examination — Part 1: Instrument characteristics and verification*

ISO 15548-2:2013, *Non-destructive testing — Equipment for eddy current examination — Part 2: Probe characteristics and verification*

3 Terms and definitions

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

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

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
element
single physical component such as a coil, a GMR or a Hall probe which has a basic function of excitation or reception

3.2
pattern
single physical and electronic arrangement of simultaneously active elements

3.3
sequencing
chronology of the activation of patterns

3.4
threshold
lowest acceptable sensitivity value defined in an application document

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