INTERNATIONAL STANDARD

ISO 12707

First edition
2016-03-01

Non-destructive testing — Magnetic particle testing — Vocabulary

Essais non destructifs — Magnétoscopie — Vocabulaire

Reference number
ISO 12707:2016(E)

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

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.

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 documents 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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

ISO 12707 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 2, *Surface methods*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 12707 is based on, and constitutes a technical revision of, European Standard EN 1330-7:2005.

Non-destructive testing — Magnetic particle testing — Vocabulary

1 Scope

This International Standard defines general terms specifically associated with magnetic particle testing.

2 Terms and definitions

2.1
adjacent conductor technique
magnetization using a bar or cable close to, but isolated from the test surface

2.2
ampere turns
product of the number of turns of a coil and the current in amperes flowing through the coil

2.3
arcing strike
poor electrical contact causing burn damage

2.4
carrier liquid
liquid in which the *magnetic particles* (2.30) are suspended for the wet technique

2.5
central conductor
threaded conductor positioned in the centre of an aperture of the component

2.6
circular magnetization
continuous lines of force within a test piece produced by current flow or a conductor surrounded by the test piece

2.7
coil technique
magnetization using a flexible cable or a rigid coil to test all or a part of a component

2.8
coloured detection medium
detection medium for testing with visible light

2.9
concentrate
detection medium supplied in a form requiring dilution before use

2.10
conditioning agent
additive in water-based media used to improve their properties which may include wetting, antifoaming and corrosion inhibitors

2.11
constant current control
device to maintain the pre-set current