

**BS EN ISO 12707:2016**



**BSI Standards Publication**

**Non-destructive testing —  
Magnetic particle testing —  
Vocabulary (ISO 12707:2016)**

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**National foreword**

This British Standard is the UK implementation of EN ISO 12707:2016. It supersedes BS EN 1330-7:2005 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/46, Non-destructive testing.

A list of organizations represented on this committee can be obtained on request to its secretary.

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**EN ISO 12707**

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English Version

## Non-destructive testing - Magnetic particle testing - Vocabulary (ISO 12707:2016)

Essais non destructifs - Magnétoscopie - Vocabulaire  
(ISO 12707:2016)

Zerstörungsfreie Prüfung - Magnetpulverprüfung -  
Vokabular (ISO 12707:2016)

This European Standard was approved by CEN on 8 February 2016.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## European foreword

This document (EN ISO 12707:2016) has been prepared by Technical Committee ISO/TC 135 "Non-destructive testing" in collaboration with 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of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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 1330-7:2005.

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 12707:2016 has been approved by CEN as EN ISO 12707:2016 without any modification.

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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.

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](http://www.iso.org/directives)).

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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