

## Non-destructive testing of welds - Magnetic particle testing

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 17638:2010 sisaldab Euroopa standardi EN ISO 17638:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 11.11.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 17638:2010 consists of the English text of the European standard EN ISO 17638:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 11.11.2009.

The standard is available from Estonian standardisation organisation.

ICS 25.160.40

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English Version

**Non-destructive testing of welds - Magnetic particle testing (ISO 17638:2003)**

Contrôle non destructif des assemblages soudés - Contrôle par magnétoscopie (ISO 17638:2003)

Zerstörungsfreie Prüfung von Schweißverbindungen - Magnetpulverprüfung (ISO 17638:2003)

This European Standard was approved by CEN on 24 October 2009.

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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

The text of ISO 17638:2003 has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 17638:2009 by Technical Committee CEN/TC 121 "Welding" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by May 2010, and conflicting national standards shall be withdrawn at the latest by May 2010.

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 1290:1998.

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.

### Endorsement notice

The text of ISO 17638:2003 has been approved by CEN as a EN ISO 17638:2009 without any modification.

# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Safety precautions</b> .....	<b>1</b>
<b>5 General</b> .....	<b>2</b>
5.1 Information required prior to testing .....	2
5.2 Additional pre-test information .....	2
5.3 Personnel qualification.....	2
5.4 Surface conditions and preparation .....	2
5.5 Magnetizing .....	3
5.6 Application techniques.....	4
5.7 Detection media .....	9
5.8 Viewing conditions .....	10
5.9 Application of detection media.....	10
5.10 Overall performance test.....	10
5.11 False indications .....	10
5.12 Recording of indications .....	11
5.13 Demagnetization .....	11
5.14 Test report.....	11
<b>Annex A (informative) Variables affecting the sensitivity of magnetic particle testing</b> .....	<b>13</b>
<b>Bibliography</b> .....	<b>15</b>

# Non-destructive testing of welds — Magnetic particle testing

## 1 Scope

This International Standard specifies techniques for detection of surface imperfections in welds in ferromagnetic materials, including the heat affected zones, by means of magnetic particle testing. The techniques are suitable for most welding processes and joint configurations. Variations in the basic techniques that will provide a higher or lower test sensitivity, are described in Annex A.

This International Standard does not specify acceptance levels of the indications. Further information on acceptance levels for indications may be found in EN 1291 or in product or application standards.

## 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 3059, *Non-destructive testing — Penetrant testing and magnetic particle testing — Viewing conditions*

ISO 9934-2, *Non-destructive testing — Magnetic particle testing — Part 2: Detection media*

ISO 9934-3, *Non-destructive testing — Magnetic particle testing — Part 3: Equipment*

ISO 17635, *Non-destructive testing of welds — General rules for fusion welds in metallic materials*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 17635 apply.

## 4 Safety precautions

International, national and local safety and environmental protection regulations shall be observed at all times.

Special consideration shall be given to toxic, inflammable and/or volatile materials, electrical safety and unfiltered UV radiation.