

**Non-destructive testing of steel tubes -  
Part 18: Magnetic particle inspection of  
tube ends of seamless and welded  
ferromagnetic steel tubes for the  
detection of laminar imperfections**

Non-destructive testing of steel tubes - Part 18:  
Magnetic particle inspection of tube ends of  
seamless and welded ferromagnetic steel tubes for  
the detection of laminar imperfections

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 10246-18:2000 sisaldab Euroopa standardi EN 10246-18:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 08.08.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 10246-18:2000 consists of the English text of the European standard EN 10246-18:2000.</p> <p>This document is endorsed on 08.08.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This part of EN 10246 specifies the requirements for magnetic particle inspection of the end/bevel face at the ends of seamless and welded ferromagnetic tubes for the detection of laminar imperfections.</p>	<p><b>Scope:</b></p> <p>This part of EN 10246 specifies the requirements for magnetic particle inspection of the end/bevel face at the ends of seamless and welded ferromagnetic tubes for the detection of laminar imperfections.</p>
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**Võtmesõnad:**

**Hinnagrupp** D

**English version**

**Non-destructive testing of steel tubes**

**Part 18: Magnetic particle inspection of tube ends of seamless and welded ferromagnetic steel tubes for the detection of laminar imperfections**

Essais non destructifs des tubes en acier – Partie 18: Contrôle par magnétoscopie des extrémités des tubes pour la détection de dédoubleures des tubes en acier ferromagnétiques sans soudure et soudés

Zerstörungsfreie Prüfung von Stahlrohren – Teil 18: Magnetpulverprüfung der Rohrenden nahtloser und geschweißter ferromagnetischer Stahlrohre zum Nachweis von Dopplungen

This European Standard was approved by CEN on 1999-12-25.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

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## FOREWORD

This European Standard has been prepared by Technical Committee ECISS/TC 29 "Steel tubes and fittings for steel tubes", the secretariat of which is held by UNI.

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 August 2000, and conflicting national standards shall be withdrawn at the latest by August 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 SCOPE

This Part of EN 10246 specifies the requirements for magnetic particle inspection of the end/bevel face at the ends of seamless and welded ferromagnetic steel tubes for the detection of laminar imperfections.

This Part of EN 10246 is to be used for the detection of laminar imperfections on the end/bevel face at the ends of plain end and bevelled end tubes which may interfere with subsequent fabrication and inspection operations (e.g. welding, ultrasonic inspection of the welds).

This Part of EN 10246 may be used as an alternative to or in addition to EN 10246-17.

This Part of EN 10246 may also be used for the detection of imperfections other than laminar imperfections on the end/bevel face. In this case, magnetization shall be applied in the direction essentially perpendicular to the orientation of the particular imperfections to be detected.

EN 10246 "Non-destructive testing of steel tubes" comprises the parts shown in Annex A.

## 2 NORMATIVE REFERENCES

This Part of EN 10246 incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of those publications apply to this Part of EN 10246 only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

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|------------------------------------|--|
| prEN ISO 9934-1:2000 <sup>1)</sup> | Non-destructive testing - Magnetic particle testing – Part 1: General principle (ISO/FDIS 9934-1:2000) |
| prEN ISO 9934-2:1999 <sup>1)</sup> | Non-destructive testing - Magnetic particle testing – Part 2: Detection media (ISO/DIS 9934-2:1999)    |
| prEN ISO 9934-3:1998 <sup>1)</sup> | Non-destructive testing - Magnetic particle testing – Part 3: Equipment (ISO/DIS 9934-3:1998)          |

## 3 GENERAL REQUIREMENTS

**3.1** The magnetic particle inspection covered by this Part of EN 10246 is usually carried out on tubes after completion of all the primary production process operations.

**3.2** The surface of the tube ends to be tested shall be sufficiently clean and free from oil, grease, sand or scale or any other foreign matter that would interfere with the correct interpretation of the indications obtained from magnetic particle inspection.

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1) In preparation; until this document is published as a European Standard, the corresponding national standard(s) should be agreed at the time of enquiry and order.