Non-destructive testing of steel tubes - Part 16: Automatic ultrasonic testing of the area adjacent to the weld seam of welded steel tubes for the detection of laminar imperfections

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EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 10246-16:2000 sisaldab Euroopa standardi EN 10246-16:2000 ingliskeelset teksti. Käesolev dokument on jõustatud 08.08.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 10246-16:2000 consists of the English text of the European standard EN 10246-16:2000. This document is endorsed on 08.08.2000 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This part of EN 10246 concerns ultrasonic testing of the area adjacent to the weld of welded steel tubes for the detection of laminar imperfections according to three different acceptance leves.	**Scope:** This part of EN 10246 concerns ultrasonic testing of the area adjacent to the weld of welded steel tubes for the detection of laminar imperfections according to three different acceptance leves.

ICS 23.040.10, 77.040.20

Võtmesõnad:

Hinnagrupp G

EUROPEAN STANDARD
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English version

Non-destructive testing of steel tubes

Part 16: Automatic ultrasonic testing of the area adjacent to the weld seam of welded steel tubes for the detection of laminar imperfections

Essais non destructifs des tubes en acier – Partie 16: Contrôle automatique par ultrasons pour la détection des dédoublures dans la zone soudée des tubes en acier soudés

Zerstörungsfreie Prüfung von Stahlrohren – Teil 16: Automatische Ultraschallprüfung des an die Schweißnaht angrenzenden Bereiches geschweißter 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.

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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 requirements for the ultrasonic testing of the area adjacent to the weld of welded steel tubes for the detection of laminar imperfections. The standard specifies acceptance levels and calibration procedures

NOTE: This inspection may alternatively, in accordance with EN 10246-15, be carried out on longitudinal edges of strip/plate (used in the manufacture of welded tubes) in the flat form prior to seam welding. Electric welded tubes may alternatively be inspected in accordance with EN 10246-14 assuming that the scanning coverage used is sufficient to detect the minimum imperfection length given in table 1.

This Part of EN 10246 is applicable to the inspection of welded tubes with an outside diameter greater than 30 mm. No lower limit of wall thickness is specified but see note in 4.1.

European Standard 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.

EN 10246-10 Non-destructive testing of steel tubes - Part 10: Radiographic testing of the weld seam of automatic fusion arc welded steel tubes for the detection of imperfections

3 GENERAL REQUIREMENTS

3.1 The ultrasonic inspection covered by this Part of EN 10246 may be performed at any stage in the production process after seam welding.

3.2 The tubes to be tested shall be sufficiently straight and free from foreign matter and surface irregularities as to ensure the validity of the test.

4 METHOD OF TEST

4.1 The area adjacent to the weld seam of the welded tube shall be tested using the ultrasonic pulse echo technique for the detection of laminar imperfections. The ultrasound shall be transmitted in the direction normal to the tube surface.

NOTE: For wall thicknesses less than 5 mm, where difficulties may occur in detecting and sizing laminar imperfections using this method of test, an alternative method of test may be agreed between manufacturer and purchaser.