

**Non-destructive testing of steel tubes -
Part 9: Automatic ultrasonic testing of
the weld seam of submerged arc
welded steel tubes for the detection of
longitudinal and/or transverse
imperfections**

Non-destructive testing of steel tubes - Part 9:
Automatic ultrasonic testing of the weld seam of
submerged arc welded steel tubes for the detection
of longitudinal and/or transverse imperfections

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 10246-9:2000 sisaldab Euroopa standardi EN 10246-9:2000 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 10246-9:2000 consists of the English text of the European standard EN 10246-9:2000.</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>Käsitlusala: This part of EN 10246 specifies the requirements for the automatic ultrasonic testing of the weld seam of submerged arc-welded (longitudinally or spirally) tubes for the detection of imperfections oriented predominantly parallel to and/or at right angles to the weld seam, according to three different acceptance levels.</p>	<p>Scope: This part of EN 10246 specifies the requirements for the automatic ultrasonic testing of the weld seam of submerged arc-welded (longitudinally or spirally) tubes for the detection of imperfections oriented predominantly parallel to and/or at right angles to the weld seam, according to three different acceptance levels.</p>
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ICS 23.040.10, 77.040.20

Võtmesõnad:

Hinnagrupp F

ICS 23.040.10; 25.160.40; 77.040.20

English version

Non-destructive testing of steel tubes

Part 9: Automatic ultrasonic testing of the weld seam of submerged arc welded steel tubes for the detection of longitudinal and/or transverse imperfections

Essais non destructifs des tubes en acier – Partie 9: Contrôle automatique par ultrasons du cordon de soudure pour la détection des imperfections longitudinales et/ou transversales des tubes soudés à l'arc immergé sous flux en poudre

Zerstörungsfreie Prüfung von Stahlrohren – Teil 9: Automatische Ultraschallprüfung der Schweißnaht unterpulvergeschweißter Stahlrohre zum Nachweis von Längs- und/oder Querfehlern

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
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FOREWORD

This European Standard has been prepared by Technical Committee EC/ISS/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 the automatic ultrasonic testing of the weld seam of submerged arc-welded (longitudinally or helically) tubes for the detection of imperfections oriented predominantly parallel to and/or at right angles to the weld seam. The standard specifies acceptance levels and calibration procedures.

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.

prEN 10246-10:1999	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
EN 20286-2	ISO system of limits and fits - Part 2 : Tables of standard tolerance grades and limit deviations for holes and shafts (ISO 286-2:1988)
ISO 235	Parallel shank jobber and stub series drills and Morse taper shank drills

3 GENERAL REQUIREMENTS

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

For cold-expanded tubes, the ultrasonic testing shall be carried out after expansion.

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

4 METHOD OF TEST

4.1 The weld of the longitudinally or helically tubes shall be tested using an ultrasonic technique for the detection of imperfections oriented predominantly parallel and/or at right angles to the weld seam.

In both cases, testing shall be carried out in two opposite directions of beam travel, unless otherwise agreed between purchaser and manufacturer.

4.2 During testing, the transducer assembly shall be maintained in proper alignment with the weld so that the whole of the weld seam is scanned.