

Steel tubes and fittings for onshore and offshore pipelines - External two layer extruded polyethylene based coatings

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 10288:2002 sisaldab Euroopa standardi EN 10288:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.09.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 10288:2002 consists of the English text of the European standard EN 10288:2002.</p> <p>This document is endorsed on 18.09.2002 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:</p> <p>This European Standard defines the application of factory applied external two layer extruded polyethylene based coatings for the corrosion protection of tubes and pipeline components. External extruded polyethylene coating can be used for the protection of buried or submerged tubes service at temperatures up to + 60 °C for type 1 and + 30 °C for type 2. The coatings in this standard can be applied to longitudinally or spirally welded and to seamless steel tubes and components used for the construction of pipelines for conveying liquids or gases. Tubes coated with this type of coating may be further protected by means of cathodic protection.</p>	<p>Scope:</p> <p>This European Standard defines the application of factory applied external two layer extruded polyethylene based coatings for the corrosion protection of tubes and pipeline components. External extruded polyethylene coating can be used for the protection of buried or submerged tubes service at temperatures up to + 60 °C for type 1 and + 30 °C for type 2. The coatings in this standard can be applied to longitudinally or spirally welded and to seamless steel tubes and components used for the construction of pipelines for conveying liquids or gases. Tubes coated with this type of coating may be further protected by means of cathodic protection.</p>
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ICS 23.040.10, 23.040.40, 25.220.60

Võtmesõnad: corrosion protection, definition, definitions, extruded, fittings, pipelines, plastic laminations, plastics, polyethylene, steel pipes, steel tubes, water pipelines

Hinnagrupp T

ICS 23.040.10; 23.040.40; 25.220.60

English version

**Steel tubes and fittings for onshore and offshore
pipelines**

External two-layer extruded polyethylene based coatings

Tubes et raccords en acier pour
canalisations enterrées et immer-
gées – Revêtements externes
double couche à base de polyéthyl-
ène extrudé

Stahlrohre und -formstücke für
erd- und wasserverlegte Rohrleitun-
gen – Im Zweischichtverfahren
extrudierte Polyethylenbeschich-
tungen

This European Standard was approved by CEN on 2001-12-26.

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 Management Centre 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 Management Centre 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

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Foreword

This document EN 10288:2002 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 October 2002, and conflicting national standards shall be withdrawn at the latest by October 2002.

During the 6 months enquiry, it appeared that two tests were omitted:

- long term performance;
- stress cracking.

After discussions, the conclusions were that there was insufficient data for standardization of test conditions and required properties.

ECISS/TC 29/SC 4 agreed to leave the standards as they are and to create an Ad Hoc Group to study these problems in order to be able to introduce these tests in the 5 years revision.

The annexes A, B, C, D, E, F, G, H, J and K are normative.

The annex L is informative.

This standard includes a Bibliography.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard defines the application of factory applied external two layer extruded polyethylene based coatings for the corrosion protection of tubes and pipeline components.

External extruded polyethylene coating can be used for the protection of buried or submerged tubes service at temperatures up to + 60 °C for type 1 and + 30 °C for type 2.

The coatings in this standard can be applied to longitudinally or spirally welded and to seamless steel tubes and components used for the construction of pipelines for conveying liquids or gases.

Tubes coated with this type of coating may be further protected by means of cathodic protection.

2 Normative references

This European Standard 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 these publications apply to this European Standard only when incorporated in it by amendments or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

prEN 10224, *Steel tubes and steel fittings for the conveyance of aqueous liquids including water for human consumption - Technical delivery conditions.*

ISO 527-2:1993, *Plastics - Determination of tensile properties – Part 2 : Test conditions for moulding and extrusion plastics.*

ISO 1133, *Plastics - Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastics.*

ISO 1183, *Plastics - Methods for determining the density and relative density of non-cellular plastics.*

ISO 4287, *Geometrical Product Specification (GPS) – Surface texture : Profile method – Terms, definitions and surface texture parameters.*

ISO 4892-2:1994, *Plastics - Methods of exposure to laboratory light sources – Part 2 : Xenon-arc sources.*

ISO 8501-1, *Preparation of steel substrates before application of paints and related products – Visual assessment of surface cleanliness – Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings.*

ISO 11420, *Method for the assessment of the degree of carbon black dispersion in polyolefin pipes, fittings and compounds.*