

Steel tubes and fittings for onshore and offshore pipelines - External liquid applied epoxy and epoxy-modified coatings

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 10289:2002 sisaldab Euroopa standardi EN 10289:2002 ingliskeelset teksti. Käesolev dokument on jõustatud 13.12.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 10289:2002 consists of the English text of the European standard EN 10289:2002. This document is endorsed on 13.12.2002 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This European Standard specifies the requirements of liquid applied external coating, epoxy (EP) and epoxymodified (EP-MOD), for the corrosion protection of steel tubes and pipeline fittings. The coating in this standard can be applied to longitudinally or spirally welded and to seamless steel tubes and fittings used for the construction of pipelines for conveying liquids or gases	Scope: This European Standard specifies the requirements of liquid applied external coating, epoxy (EP) and epoxymodified (EP-MOD), for the corrosion protection of steel tubes and pipeline fittings. The coating in this standard can be applied to longitudinally or spirally welded and to seamless steel tubes and fittings used for the construction of pipelines for conveying liquids or gases
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Võtmesõnad: pipelines, pipes, plastic coatings, plastics, polyurethane, quality assurance, sheathings, specification (approval), specifications, steel pipes, steels, storage, testing, thermosetting polymers, thermosetting resins, tubes, water pipelines

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ICS 23.040.99; 25.220.60

English version

Steel tubes and fittings for onshore and offshore pipelines - External liquid applied epoxy and epoxy-modified coatings

Tubes et raccords en acier pour canalisations enterrées et immergées - Revêtements externes en résine époxyde ou époxyde modifiée appliquée à l'état liquide

Stahlrohre und Formstücke für On- und Offshoreverlegte Rohrleitungen - Umhüllung (Außenbeschichtung) mit Epoxi- und epoxi-modifizierten Materialien

This European Standard was approved by CEN on 11 April 2002.

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.

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 Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document EN 10289:2002 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 February 2002, and conflicting national standards shall be withdrawn at the latest by February 2002.

The annexes A to K are normative.

Annex L is informative.

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 specifies the requirements of liquid applied external coating, epoxy (EP) and epoxy-modified (EP-MOD), for the corrosion protection of steel tubes and pipeline fittings.

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

If the component has to be cold bent the coating shall be applied after bending unless otherwise approved by the purchaser.

The coating shall consist normally of one layer of liquid product, applied by brush or by spray airless technique. Other application methods can be recommended by the product manufacturer, in accordance with the kind of product.

This coating can be used for the protection of buried or submerged steel tubes for service at the following temperatures and with three thickness classes A (400 µm), B (800 µm) and C(1 500 µm) based on the following combination:

- type 1 : - 20 °C to 40 °C, thickness class A or B or C
- type 2 : - 20 °C to 60 °C, thickness class B or C
- type 3 : - 20 °C to 80 °C, thickness class C

Other temperatures can be agreed ; in this case, tests shall be carried out at the required temperature.

In this standard the word components is used for tubes and fittings.

Frequencies of tests on fittings shall be agreed by the parties at the ordering stage.

Components coated with these types of coatings 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 amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 10021, *General technical delivery requirements for steel and iron products*.

EN 24624, *Paints and varnishes - Pull-off test (ISO 4624:1978)*.

EN ISO 868, *Plastics and ebonite - Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868:1985)*.

EN ISO 2808, *Paints and varnishes - Determination of film thickness (ISO 2808:1997)*.

EN 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 8501-1:1998)*.

ISO 2815, *Paints and varnishes - Buchholz indentation test*.