

საქართველოს სტანდარტი

ფოლადის მილები და ფიტინგები საზღვაო სახმელეთო
მილსადენებისათვის-ორშრიანი ექსტრუდირებული პოლიეთილენის გარე
იზოლაცია

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

საინფორმაციო მონაცემები

1 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს 2014 წლის 23 აპრილის № 37 განკარგულებით

2 მიღებულია თავფურცლის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 10288:2002 „ ფოლადის მილები და ფიტინგები საზღვაო სახმელეთო მილსადენებისათვის-ორშრიანი ექსტრუდირებული პოლიეთილენის გარე იზოლაცია”

3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2014 წლის 23 აპრილი №268-1.3-5763

აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

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
immergées - Revêtements externes double couche à base
de polyéthylène extrudé

Stahlrohre- und Formstücke für erd- und wasserverlegte
Rohrleitungen - Im Zweischicht-Verfahren extrudierte
Polyethylenbeschichtungen

This European Standard was approved by CEN on 26 December 2001.

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
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

	page
Foreword	4
1 Scope	5
2 Normative references	5
3 Terms, definitions and symbols	6
3.1 Terms and definitions	6
3.2 Symbols	6
4 Classification of coatings	6
5 Information to be supplied by the purchaser	6
5.1 Mandatory	6
5.2 Options to be indicated by the purchaser	7
6 Documents	7
7 Application of the coating	7
7.1 Surface preparation	7
7.2 Composition of the coating	8
8 Requirements of the applied coating	8
8.1 General	8
8.2 Appearance and continuity	9
8.3 Thickness of the coating system	9
8.4 Cut back at the ends	11
8.5 Holiday detection	11
8.6 Impact resistance	11
8.7 Peel force	12
8.8 Indentation resistance	12
8.9 Electrical insulation resistance	13
8.10 Elongation at break	13
8.11 Resistance to ultraviolet irradiation	13
8.12 Thermal stability	13
8.13 Cathodic disbondment	15
8.14 Flexibility	15
9 Inspection	15
9.1 Document	15
9.2 Sampling	16
9.3 Nature and frequency of testing and control	16
9.4 Retests	18
10 Repairs	18
11 Marking	18
12 Handling, transportation and storage	19
12.1 Handling	19
12.2 Transportation to the storage area	19
12.3 Storage	19
12.4 Loading of tubes and components for delivery	19
Annex A (normative) Inspection of thickness	20
A.1 General	20
A.2 Apparatus	20
A.3 Procedure	20
A.4 Results	20

Annex B (normative) Holiday detection test.....	21
B.1 General.....	21
B.2 Apparatus	21
B.3 Procedure	21
B.4 Results	21
Annex C (normative) Impact test	22
C.1 General.....	22
C.2 Apparatus	22
C.3 Procedure	22
C.4 Results	23
Annex D (normative) Peel force test	24
D.1 Measurement of the peeling force on a coated sample (type1)	24
D.2 Measurement of the peel strength on large diameter tube (type 2)	25
Annex E (normative) Indentation test	30
E.1 General.....	30
E.2 Apparatus	30
E.3 Procedure	30
E.4 Results	30
Annex F (normative) Specific electrical insulation resistance test	31
F.1 General.....	31
F.2 Apparatus	31
F.3 Procedure	31
F.4 Results	31
Annex G (normative) Elongation at break test.....	35
G.1 General.....	35
G.2 Apparatus	35
G.3 Sampling	35
G.4 Procedure	35
G.5 Results	36
Annex H (normative) Ultraviolet irradiation and thermal stability tests	37
H.1 Resistance to ultraviolet irradiation.....	37
H.2 Thermal stability	38
Annex J (normative) Cathodic disbondment test	40
J.1 General.....	40
J.2 Apparatus	40
J.3 Sampling.....	41
J.4. Procedure	42
J.5 Results	42
Annex K (normative) Types of inspection documents.....	46
Annex L (informative) A-Deviation.....	47
Bibliography	48

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.

საინფორმაციო ნაწილი. სრული ტექსტის სახსრად შეიძლება სტანდარტი.