

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

ILNAS-EN 14628-1:2020

Ductile iron pipes, fittings and accessories - Requirements and test methods - Part 1: PE coatings

Rohre, Formstücke und Zubehörteile aus duktilem Gusseisen - Anforderungen und Prüfverfahren - Teil 1: Polyethylenumhüllung von Rohren

Tuyaux, raccords et accessoires en fonte ductile - Prescriptions et méthodes d'essai - Partie 1 : Revêtements en PE

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National Foreword

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English Version

Ductile iron pipes, fittings and accessories - Requirements and test methods - Part 1: PE coatings

Tuyaux, raccords et accessoires en fonte ductile -Prescriptions et méthodes d'essai - Partie 1 : Revêtements en PE Rohre, Formstücke und Zubehörteile aus duktilem Gusseisen - Anforderungen und Prüfverfahren - Teil 1: Polyethylenumhüllung von Rohren

This European Standard was approved by CEN on 9 April 2020.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents		Page
Euro	opean foreword	4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	
4	Ordering information	
4.1	General	
4.2	Mandatory	
4.3	Options to be indicated by the purchaser	8
5	Technical requirements	
5.1	Surface condition	
5.2	Material properties	
5.3	Finished polyethylene coating	
5.4	Repairs	
5.5 5.6	Marking Peeling strength	
5.0 5.7	Non-porosity	
6 6.1	Performance requirementsImpact strength	
6.2	Indentation resistance	
6.3	Elongation at break	
6.4	Specific coating resistance	
6.5	Heat ageing	13
6.6	Light ageing	13
7	Test methods	
7.1	Peel resistance of the adhesive	
7.2	Coating thickness	
7.3	Non-porosity	
7.4 7.5	Impact strengthIndentation resistance	
7.5 7.6	Elongation at break	
7.7	Specific coating resistance	
7.8	Heat ageing	
7.9	Light ageing	
Ann	ex A (informative) Quality assurance	18
A.1	General	18
A.2	Performance test	
A.3	Quality assessment system	20
Ann	ex B (informative) Application process	21
B.1	General	21
B.2	Tubular extrusion method	21

B.3	Flat die wrapping extrusion method	22
Annex	x C (informative) Coating material	23
C.1	General	23
C.2	Polyethylene	23
C.3	Adhesive	23
Bibliography		24

European foreword

This document (EN 14628-1:2020) has been prepared by Technical Committee CEN/TC 203 "Cast iron pipes, fittings and their joints", the secretariat of which is held by AFNOR.

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 January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14628:2005.

In comparison with the previous edition, the following technical modifications have been made:

a) EN 14628 has been split into two parts. This part covers factory applied extruded polyethylene coatings for the external corrosion protection of ductile iron pipes.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document is in conformity with the general requirements already established by CEN/TC 164 in the field of water supply (e.g. potable water) and CEN/TC 165 in the field of waste water.

In respect of potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this document:

- a) this document provides no information as to whether the product can be used without restriction in any of the member states of the EU or EFTA;
- b) it is also noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

1 Scope

This document specifies the requirements and test methods applicable to factory applied extruded polyethylene coatings for the external corrosion protection of ductile iron pipes according to EN 545, EN 598 and EN 969 for use at operating temperatures up to $50\,^{\circ}$ C.

This document is not applicable to ductile iron pipes protected with thin PE sleeve. Special works at site like drilling, tapping, etc. can influence the corrosion protection properties. Those job steps are intended to be included in the instructions of pipe saddle and accessory manufacturers and all other essential installation instructions. These instructions are not part of this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 545, Ductile iron pipes, fittings, accessories and their joints for water pipelines - Requirements and test methods

EN 598, Ductile iron pipes, fittings, accessories and their joints for sewerage application - Requirements and test methods

EN 969, Ductile iron pipes, fittings, accessories and their joints for gas pipelines – Requirements and test methods

EN 1238, Adhesives - Determination of the softening point of thermoplastic adhesives (ring and ball)

EN ISO 527-1, Plastics - Determination of tensile properties - Part 1: General principles (ISO 527-1)

EN ISO 527-2, Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2)

EN ISO 1133-1, Plastics - Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics - Part 1: Standard method (ISO 1133-1)

EN ISO 3681, Binders for paints and varnishes - Determination of saponification value - Titrimetric method (ISO 3681)

EN ISO 4892-2, Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps (ISO 4892-2)

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp/ui

3.1

ductile iron

cast iron used for pipes, fittings and accessories in which graphite is present substantially in spheroidal form