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NSAI Standards

Irish Standard
I.S. EN ISO 11299-3:2013

Plastics piping systems for renovation of underground gas supply networks - Part 3: Lining with close-fit pipes (ISO 11299 -3:2011)

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie

W **NSAI.ie**

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 11299-3

February 2013

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English Version

Plastics piping systems for renovation of underground gas supply networks - Part 3: Lining with close-fit pipes (ISO 11299-3:2011)

Systèmes de canalisations en plastique pour la rénovation des réseaux de gaz enterrés - Partie 3: Tubage par tuyau continu sans espace annulaire (ISO 11299-3:2011)

Kunststoff-Rohrleitungssysteme für die Renovierung von erdverlegten Gasversorgungsnetzwerken - Teil 3: Close-Fit-Lining (ISO 11299-3:2011)

This European Standard was approved by CEN on 5 February 2013.

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Foreword

The text of ISO 11299-3:2011 has been prepared by Technical Committee ISO/TC 138 “Plastics pipes, fittings and valves for the transport of fluids” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 11299-3:2013 by Technical Committee CEN/TC 155 “Plastics piping systems and ducting systems” the secretariat of which is held by NEN.

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of an identical text or by endorsement, at the latest by August 2013, and conflicting national standards shall be withdrawn at the latest by August 2013.

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INTERNATIONAL STANDARD

ISO 11299-3

First edition
2011-09-15

Plastics piping systems for renovation of underground gas supply networks

Part 3: Lining with close-fit pipes

Systèmes de canalisations en plastique pour la rénovation des réseaux de gaz enterrés — Partie 3: Tubage par tuyau continu sans espace annulaire

Reference number
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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 11299-3 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*.

ISO 11299 consists of the following parts, under the general title *Plastics piping systems for renovation of underground gas supply networks*:

— *Part 1: General*

— *Part 3: Lining with close-fit pipes*

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Introduction

This part of ISO 11299 is part of a system standard for plastics piping systems of various materials used for the renovation of existing pipelines in a specified application area. System standards for renovation deal with the following applications:

— plastics piping systems for renovation of underground non-pressure drainage and sewerage networks;

— plastics piping systems for renovation of underground drainage and sewerage networks under pressure;

— plastics piping systems for renovation of underground water supply networks;

— plastics piping systems for renovation of underground gas supply networks (this application).

These system standards are distinguished from those for conventionally installed plastics piping systems because they set requirements for certain characteristics in the as-installed condition, after site processing. This is in addition to verification of characteristics of plastics piping systems as manufactured.

This system standard comprises a *Part 1: General* and all applicable parts relating to the renovation technique family, from the following:

— *Part 2: Lining with continuous pipes*

— *Part 3: Lining with close-fit pipes (this document)*

— *Part 4: Lining with cured-in-place pipes*

— *Part 6: Lining with adhesive-backed hoses*

The requirements for any given renovation technique family are specified in this part of ISO 11299 and are applied in conjunction with the relevant other part. For example, both ISO 11299-1 and this part of ISO 11299 specify the requirements relating to lining with close-fit pipes. For complementary information, see ISO 11295. Not all technique families are pertinent to every area of application and this is reflected in the part numbers included in each system standard.

A consistent structure of clause headings has been adopted for all parts of ISO 11299, in order to facilitate direct comparisons across renovation technique families.

Figure 1 illustrates the common part and clause structure and the relationship between ISO 11299 and the system standards for other application areas.

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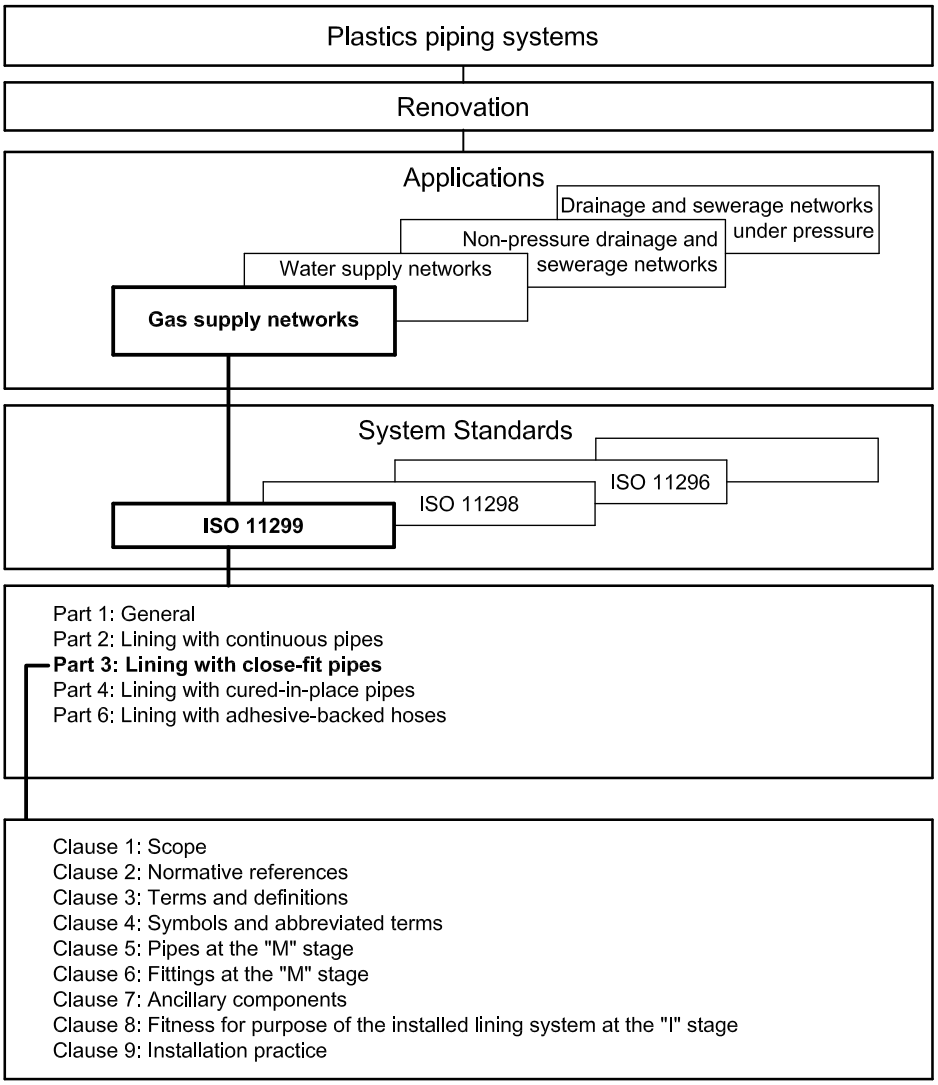

Figure 1 — Format of the renovation system standards

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Plastics piping systems for renovation of underground gas supply networks

Part 3: Lining with close-fit pipes

1 Scope

This part of ISO 11299, in conjunction with ISO 11299-1, specifies requirements and test methods for close-fit lining systems intended to be used for the renovation of gas supply networks.

It is applicable to polyethylene (PE) pipes for both independent and interactive pressure pipe liners as well as associated fittings and joints for the construction of the lining system.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 3126, *Plastics piping systems — Plastics components — Determination of dimensions*

ISO 4437:2007, *Buried polyethylene (PE) pipes for the supply of gaseous fuels — Metric series — Specifications*

ISO 8085-3, *Polyethylene fittings for use with polyethylene pipes for the supply of gaseous fuels — Metric series — Specifications — Part 3: Electrofusion fittings*

ISO 11299-1:2011, *Plastics piping systems for renovation of underground gas supply networks — Part 1: General*

ISO 12176-1, *Plastics pipes and fittings — Equipment for fusion jointing polyethylene systems — Part 1: Butt fusion*

ISO 12176-2, *Plastics pipes and fittings — Equipment for fusion jointing polyethylene systems — Part 2: Electrofusion*

3 Terms and definitions

For the purposes of this document, the terms, definitions, symbols and abbreviations given in ISO 11299-1 and the following apply.

3.1 General

3.1.1
close fit
situation of the outside of the installed liner relative to the inside of the existing pipeline, which may either be an interference fit or include a small annular gap resulting from shrinkage and tolerances only

3.1.2
close-fit pipe
continuous lining pipe of thermoplastic material reshaped or otherwise expanded after insertion to achieve a close fit to the existing pipeline

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