STN	Potrubné systémy z plastov na renováciu podzemných sietí na zásobovanie zemným plynom Časť 3: Výstelkovanie s kontinuálnymi rúrami (ISO 11299-2: 2018)	STN EN ISO 11299-2
		38 6414

Plastics piping systems for renovation of underground gas supply networks - Part 2: Lining with continuous pipes (ISO 11299-2:2018)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/19

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EN ISO 11299-2

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Plastics piping systems for renovation of underground gas supply networks - Part 2: Lining with continuous pipes (ISO 11299-2:2018)

Systèmes de canalisations en plastique pour la rénovation des réseaux enterrés de distribution de gaz - Partie 2: Tubage par tuyau continu avec espace annulaire (ISO 11299-2:2018)

Kunststoff-Rohrleitungssysteme für die Renovierung von erdverlegten Gasversorgungsnetzwerken - Teil 2: Rohrstrang-Lining (ISO 11299-2:2018)

This European Standard was approved by CEN on 18 October 2018.

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EN ISO 11299-2:2018 (E)

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European foreword

This document (EN ISO 11299-2:2018) has been prepared by Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids" in collaboration with 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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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Endorsement notice

The text of ISO 11299-2:2018 has been approved by CEN as EN ISO 11299-2:2018 without any modification.

INTERNATIONAL STANDARD

ISO 11299-2

First edition 2018-10

Plastics piping systems for renovation of underground gas supply networks —

Part 2: **Lining with continuous pipes**

Systèmes de canalisations en plastique pour la rénovation des réseaux enterrés de distribution de gaz —

Partie 2: Tubage par tuyau continu avec espace annulaire



STN EN ISO 11299-2: 2019

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 8, *Rehabilitation of pipeline systems*.

A list of all parts in the ISO 11299 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document is a part of a system standard for plastics piping systems of various materials used for renovation of existing pipelines in a specified application area. System standards for renovation dealing with the following applications are either available or under preparation:

- ISO 11296, Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks;
- ISO 11297, Plastics piping systems for renovation of underground drainage and sewerage networks under pressure;
- ISO 11298, Plastics piping systems for renovation of underground water supply networks;
- ISO 11299, *Plastics piping systems for renovation of underground gas supply networks* (this series of standards).

These system standards are distinguished from system standards for conventionally installed plastics piping systems by the requirement to verify certain characteristics in the "as installed" condition, after site processing. This is in addition to verification of characteristics of plastics piping systems "as manufactured".

Each of the system standards comprises a:

— Part 1: General

and all applicable renovation technique family-related parts, which, for gas supply networks, include or potentially include the following:

- *Part 2: Lining with continuous pipes* (this document);
- Part 3: Lining with close-fit pipes;
- Part 4: Lining with cured-in-place pipes;
- Part 6: Lining with adhesive-backed hoses;
- Part 11: Lining with inserted hoses.

The requirements for any given renovation technique family are specified in Part 1, applied in conjunction with the other relevant part. For example, this document and ISO 11299-1 together specify the requirements relating to lining with continuous 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 to facilitate direct comparisons across renovation technique families.

Figure 1 shows the common part and clause structure and the relationship between ISO 11299 and system standards for other applications.

Annex A of this document is normative.

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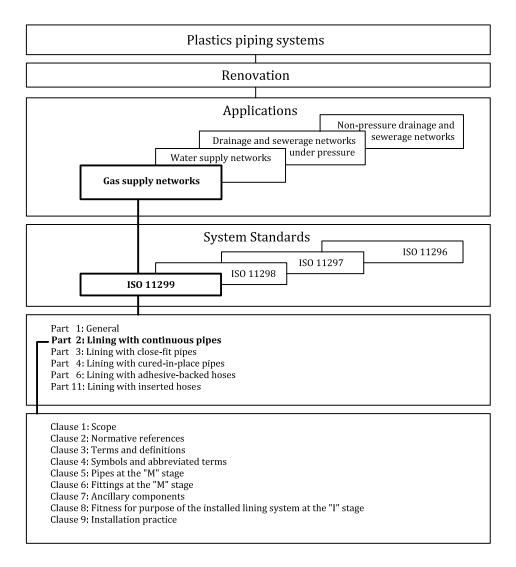


Figure 1 — Format of the renovation System Standards

Plastics piping systems for renovation of underground gas supply networks —

Part 2:

Lining with continuous pipes

1 Scope

This document, read in conjunction with ISO 11299-1, specifies requirements and test methods for pipes and fittings which are part of plastics piping systems installed as continuous pipes in the renovation of underground gas supply networks. It is applicable to polyethylene (PE) pipes of three different types:

- PE solid wall single layered pipes (nominal outside diameter, d_n), including any identification stripes;
- PE pipes with co-extruded layers on either or both the outside and inside of the pipe (total outside diameter, d_n), as specified in Annex A, where all layers have the same MRS rating;
- Coated PE pipes (outside diameter, d_n) having a peelable, contiguous, thermoplastics additional layer on the outside of the pipe ("coated pipe"), as described in Annex A.

In addition it covers:

- jointing of pipe lengths by means of butt fusion;
- fabricated and injection-moulded fittings made of PE;

It is applicable to PE pipes, fittings and assemblies intended to be used at an operating temperature of $20\,^{\circ}\text{C}$ as the reference temperature.

NOTE For other operating temperatures, guidance is given in ISO 4437-5:2014.

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.

ISO 4437-1, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 1: General

ISO 4437-2, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 2: Pipes

ISO 4437-3, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 3: Fittings

ISO 4437-5:2014, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 5: Fitness for purpose of the system

ISO 11299-1:2018, 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

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EN 1555-1, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 1: General EN 1555-2, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 2: Pipes EN 1555-3, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 3: Fittings EN 1555-5, Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 5: Fitness for purpose of the system

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