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| STN | Potrubné systémy z plastov na renováciu podzemných sietí na zásobovanie zemným plynom Časť 3: Výstelkovanie tesne dosadajúcimi rúrami (ISO 11299-3: 2018) | STN EN ISO 11299-3 38 6414 |
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Plastics piping systems for renovation of underground gas supply networks - Part 3: Lining with close-fit pipes (ISO 11299-3:2018)

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. 05/19

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Plastics piping systems for renovation of underground gas supply networks - Part 3: Lining with close-fit pipes (ISO 11299-3:2018)

Systèmes de canalisations en plastique pour la rénovation des réseaux enterrés de distribution de gaz
- Partie 3: Tubage par tuyau continu sans espace annulaire (ISO 11299-3:2018)

Kunststoff-Rohrleitungssysteme für die Renovierung von erdverlegten Gasversorgungsnetzwerken - Teil 3: Close-Fit-Lining (ISO 11299-3:2018)

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

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EN ISO 11299-3:2018 (E)

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European foreword

This document (EN ISO 11299-3:2018) 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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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.

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

Endorsement notice

The text of ISO 11299-3:2018 has been approved by CEN as EN ISO 11299-3:2018 without any modification.

INTERNATIONAL STANDARD

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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
enterrés de distribution de gaz —*

Partie 3: Tubage par tuyau continu sans espace annulaire



Reference number
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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation of 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 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*

This second edition cancels and replaces the first edition (ISO 11299-3:2011), which has been technically revised.

The main changes compared to the previous edition are as follows:

[Figure 1](#) and [Clauses 1, 2, 3.3, 3.4, 3.6, 5.7, 5.8, 6, 8.4, 8.5](#), and [9.2](#) to [9.8](#) have been technically revised.

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.

ISO 11299-3:2018(E)

Introduction

This document is a 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 dealing with the following applications are either available or in 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 those 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 specifying requirements for plastics piping systems components “as manufactured”.

This System Standard 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*;
- *Part 3: Lining with close-fit pipes* (this document);
- *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 given in Part 1, applied in conjunction with the relevant other part. For example, ISO 11299-1 and this document together 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](#) shows the common part and clause structure and the relationship between ISO 11299 and the System Standards for other application areas.

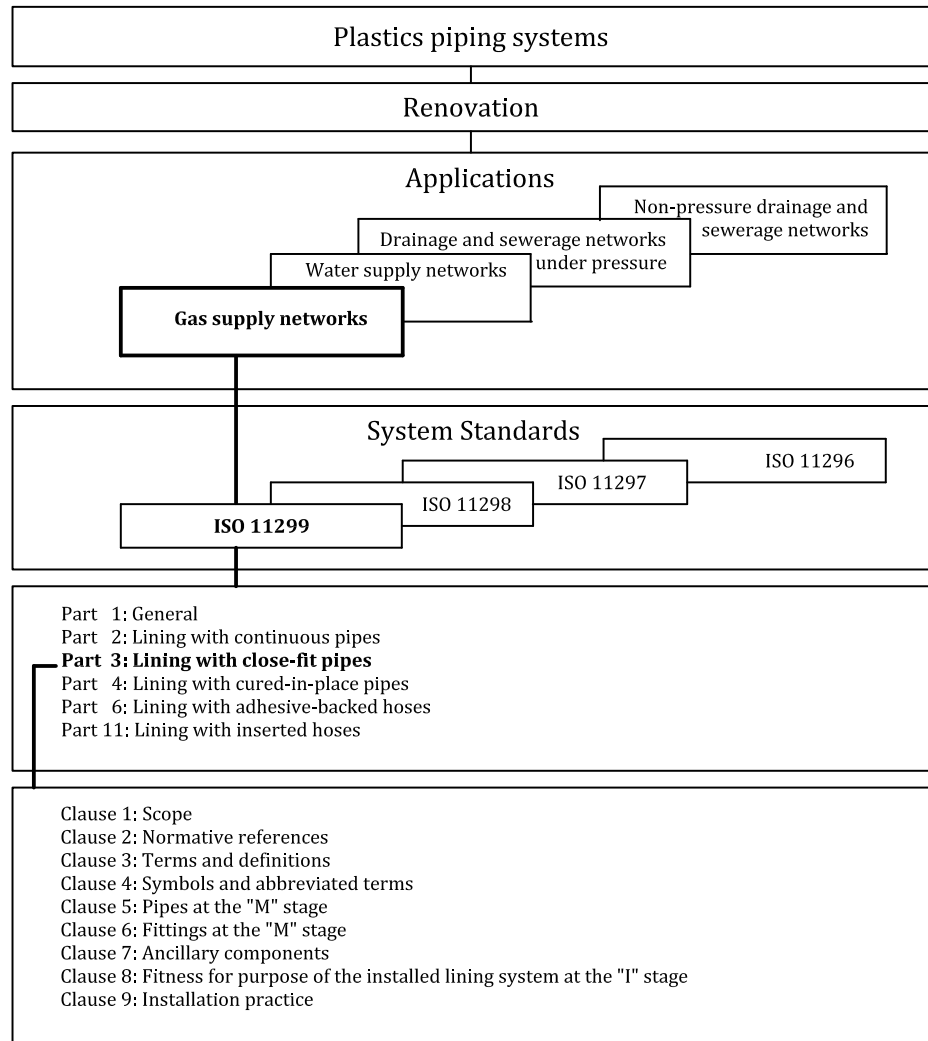


Figure 1 — Format of the renovation system standards

Plastics piping systems for renovation of underground gas supply networks —

Part 3: Lining with close-fit pipes

1 Scope

This document, 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 applies to pipes and fittings, as manufactured, as well as to the installed lining system. It is applicable to polyethylene (PE) pipe of either solid wall single layer or co-extruded layer construction, which is reduced in the factory or on site to provide a close-fitting independent or interactive pressure pipe liner, as well as associated fittings and joints for the construction of the lining system. This document is not applicable for coated PE pipes having a peelable, contiguous, thermoplastics additional layer on the outside of the pipes.

It is applicable to PE pipes, fittings and assemblies intended to be used at an operating temperature of 20 °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 3126, *Plastics piping systems — Plastics components — Determination of dimensions*

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 4437-4, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 4: Valves*

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*

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*

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EN 1555-3, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 3: Fittings*

EN 1555-4, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 4: Valves*

EN 1555-5:2010, *Plastics piping systems for the supply of gaseous fuels — Polyethylene (PE) — Part 5: Fitness for purpose of the system*

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