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Irish Standard
I.S. EN ISO 11298-2:2018

Plastics piping systems for renovation of underground water supply networks - Part 2: Lining with continuous pipes (ISO 11298-2:2018)

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National Foreword

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NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 11298-2

February 2018

ICS 23.040.20; 23.040.45; 93.025

English Version

Plastics piping systems for renovation of underground water supply networks - Part 2: Lining with continuous pipes (ISO 11298-2:2018)

Systémes de canalisation en plastiques pour la rénovation des réseaux enterrés d'alimentation en eau - Partie 2: Tubage par tuyau continu avec espace annulaire (ISO 11298-2:2018)

Kunststoff-Rohrleitungssysteme für die Renovierung von erdverlegten Wasserversorgungsnetzen - Teil 2: Rohrstrang-Lining (ISO 11298-2:2018)

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Ref. No. EN ISO 11298-2:2018 E

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European foreword **3**

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European foreword

This document (EN ISO 11298-2:2018) has been prepared by Technical Committee ISO/TC 138 "Rehabilitation of pipeline systems" in collaboration with Technical Committee CEN/TC 155 "Plastics piping systems and ducting systems" the secretariat of which is held by NEN.

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INTERNATIONAL STANDARD

ISO 11298-2

First edition
2018-02

Plastics piping systems for renovation of underground water supply networks —

Part 2: Lining with continuous pipes

Systémes de canalisation en plastiques pour la rénovation des réseaux enterrés d'alimentation en eau —

Partie 2: Tubage par tuyau continu avec espace annulaire

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Foreword

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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 11298 series can be found on the ISO website.

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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 deal with the following applications:

— ISO 11296, *Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks*;

— ISO 11927, *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* (this application);

— ISO 11299, *Plastics piping systems for renovation of underground gas supply networks*.

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 system components "as manufactured".

Each of the system standards comprises a:

— *Part 1: General*,

and all applicable renovation technique family-related parts, which for water supply networks under pressure 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 5: Lining with discrete pipes*;

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

— *Part 10: Lining with sprayed polymeric materials*;

— *Part 11: 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, this document and ISO 11298-1 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 ISO 11298 (all parts), in order to facilitate direct comparisons across renovation technique families.

Figure 1 shows the common part and clause structure and the relationship between ISO 11298 (all parts) and the system standards for other application areas.

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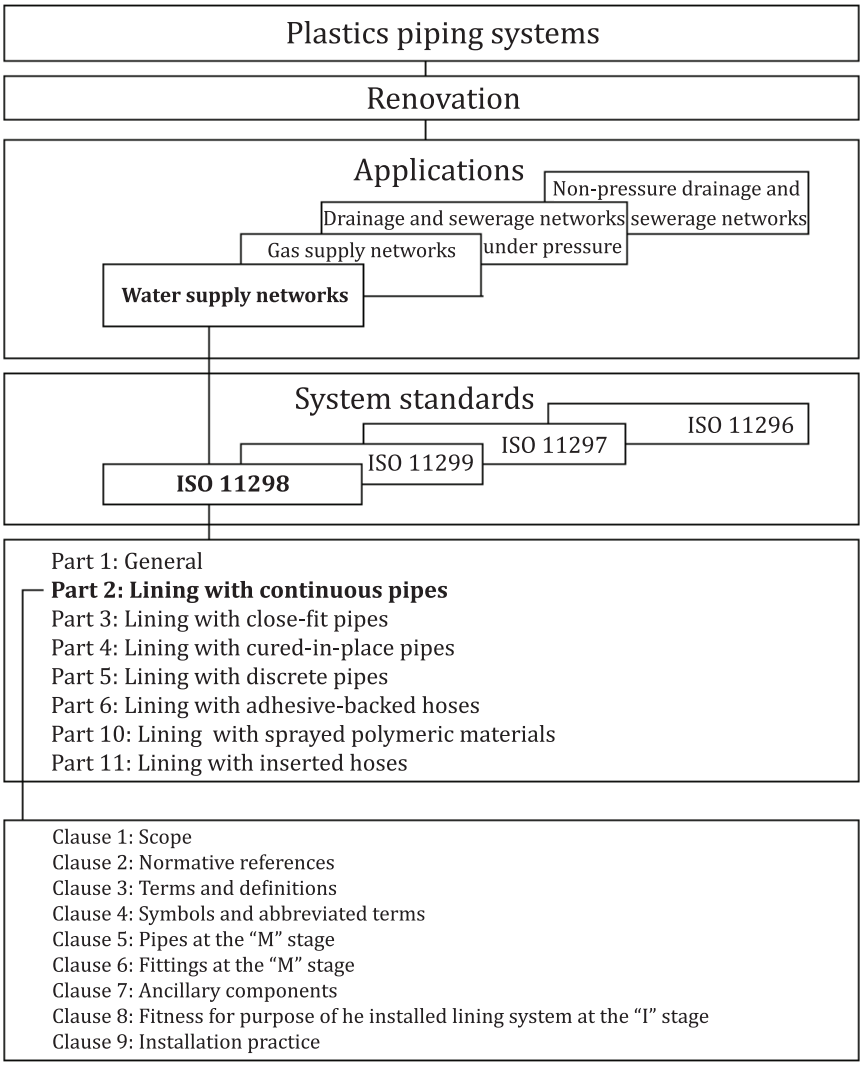

Figure 1 — Format of the renovation system standards

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Plastics piping systems for renovation of underground water supply networks —

Part 2: Lining with continuous pipes

1 Scope

This document, read in conjunction with ISO 11298-1, 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 water supply networks. It is applicable to 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;

— PE coated pipes (outside diameter, d_n) having a peelable, contiguous, thermoplastics additional layer on the outside of the pipe ("coated pipe"); see Annex A.

In addition, it covers

— jointing of pipe lengths by means of butt fusion, and

— 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 °C as the reference temperature.

NOTE For applications operating at constant temperatures greater than 20 °C and up to 40 °C, see ISO 4427-1:2007, Annex A.

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 4427-1:2007, *Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 1: General*

ISO 4427-2, *Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 2: Pipes*

ISO 4427-3, *Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 3: Fittings*

ISO 4427-5, *Plastics piping systems — Polyethylene (PE) pipes and fittings for water supply — Part 5: Fitness for purpose of the system*

ISO 11298-1:2018, *Plastics piping systems for renovation of underground water supply networks — Part 1: General*

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

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