



SLOVENSKI STANDARD

oSIST prEN ISO 11300-3:2025

01-marec-2025

Cevni sistemi za obnovo podzemnih odtokov, kanalizacije in vodovodnih omrežij - 3. del: Nemehčan polivinilklorid (PVC-U) (ISO/DIS 11300-3:2025)

Piping systems for rehabilitation of underground drains, sewers and water supply networks - Part 3: Unplasticized poly (vinyl chloride) (PVC-U) material (ISO/DIS 11300-3:2025)

Rohrleitungssysteme für die Sanierung von unterirdischen Entwässerungs-, Kanalisations- und Wasserversorgungsnetzen - Teil 3: Weichmacherfreies Poly (vinylchlorid) (PVC-U) (ISO/DIS 11300-3:2025)

Systèmes de canalisations pour la réhabilitation des branchements, des collecteurs d'assainissement et des réseaux d'alimentation en eau enterrés - Partie 3: Matériau poly (chlorure de vinyle) non plastifié (PVC U) (ISO/DIS 11300-3:2025)

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Ta slovenski standard je istoveten z: prEN ISO 11300-3

ICS:

23.040.05	Cevovodi za zunanje sisteme za odpadno vodo in njihovi deli	Pipeline and its parts for external sewage systems
91.140.80	Drenažni sistemi	Drainage systems
93.025	Zunanji sistemi za prevajanje vode	External water conveyance systems
93.030	Zunanji sistemi za odpadno vodo	External sewage systems

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en,fr,de



DRAFT International Standard

ISO/DIS 11300-3

Piping systems for rehabilitation of underground drains, sewers and water supply networks —

Part 3: Unplasticized poly (vinyl chloride) (PVC-U) material

ICS: 93.025; 23.040.20; 91.140.80; 93.030; 23.040.45

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ISO/CEN PARALLEL PROCESSING

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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 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*.

For piping systems made from unplasticized poly (vinyl chloride) (PVC-U) material, this document replaces the related content, including requirements, of the system standards: ISO 11296-1, -3.

ISO 11300-1 similarly replaces for piping systems using PE material, the content of the standards:

ISO 11296-1, -3 and -7, ISO 11297-1, -2, -3, ISO 11298-1, -2, -3 and ISO 21225-1, -2.

ISO 11300-2 similarly replaces for piping systems using Thermoset composite materials, the content of the standards: ISO 11296-1, -4, ISO 11297-1, -4 and ISO 11298-1, -4.

ISO 11300-4 similarly replaces for piping systems using Thermoplastic composite materials, the content of the standards: ISO 11296-1, -7, -9 (and ISO 11298-1, -11).

A list of all parts in the ISO 11300 series, can be found on the ISO website.

Once all three parts of ISO 11300 have been published, the above mentioned replaced standards will be withdrawn.

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.

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Introduction

This document is a part of a System Standard for piping systems of various materials used for the rehabilitation of existing pipelines in a specified application area. System Standards for rehabilitation deal with the following applications:

- ISO 11300: *Piping systems for rehabilitation of underground drains, sewers, and water supply networks*; (this standard)
- ISO 11301: *Piping systems for rehabilitation of underground gas supply networks*.

The System Standards ISO 11300 and ISO 11301 are subdivided into parts covering a specific material per pipe system.

ISO 11300 is subdivided in four parts:

- *Part 1: Polyethylene (PE) material*;
- *Part 2: Thermoset composite materials*;
- *Part 3: PVC-U material* (this document);
- *Part 4: Thermoplastic composite materials*.

These System Standards cover various techniques for renovation and trenchless replacement. Furthermore, they 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 piping system components “as manufactured”.

A consistent structure of clause headings has been adopted for all parts of ISO 11300 and ISO 11301, in order to facilitate direct comparisons across renovation technique families.

[Figure 1](#) shows the clause structure and the relationship between ISO 11300 and ISO 11301.

For complementary information, see ISO 11295^[1].

For assessment of conformity to the requirements of this document, see ISO/TS 23818-3^[2].

System Standard ISO 11300 covers the relevant content of and replaces the following previous System Standards for the rehabilitation of existing drains and sewers:

- The ISO 11296 series: *Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks*;
- The ISO 11297 series: *Plastics piping systems for renovation of underground drainage and sewerage networks under pressure*;
- The ISO 11298 series: *Plastics piping systems for renovation of underground water supply networks*;
- The ISO 21225 series: *Plastics piping systems for the trenchless replacement of underground pipeline networks*.

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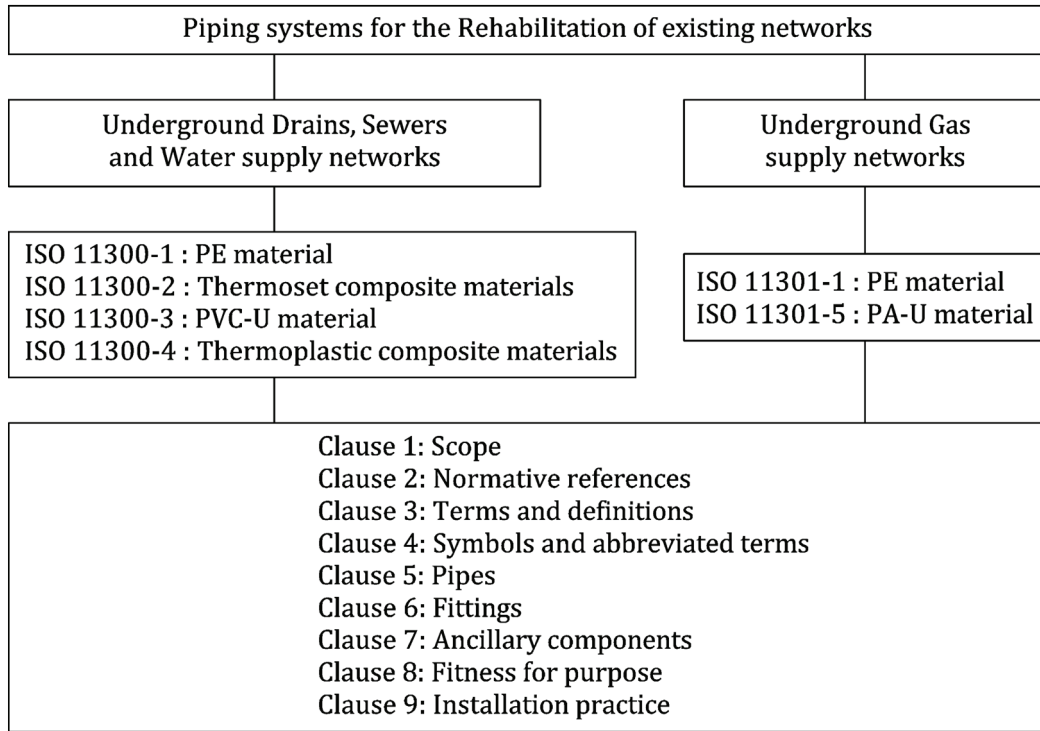


Figure 1 — Format of the rehabilitation system standards

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Piping systems for rehabilitation of underground drains, sewers and water supply networks —

Part 3: Unplasticized poly (vinyl chloride) (PVC-U) material

1 Scope

This document specifies requirements and test methods for pipes and fittings which are part of piping systems for the rehabilitation of underground drains, sewers and water supply networks.

It is applicable to unplasticized poly (vinyl chloride) (PVC-U) pipes, fittings and assemblies, as manufactured and as installed. It is not applicable to the existing pipeline.

It is applicable to technique families for renovation:

- lining with close-fit pipes.

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 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 2505, *Thermoplastics pipes — Longitudinal reversion — Test method and parameters*

ISO 2507-1, *Thermoplastics pipes and fittings — Vicat softening temperature — Part 1: General test method*

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

ISO 3127, *Thermoplastics pipes — Determination of resistance to external blows — Round-the-clock method*

ISO 4435, *Plastics piping systems for non-pressure underground drainage and sewerage — Unplasticized poly(vinyl chloride) (PVC-U)*

ISO 6259-1, *Thermoplastics pipes — Determination of tensile properties — Part 1: General test method*

ISO 9852, *Unplasticized poly(vinyl chloride) (PVC-U) pipes — Dichloromethane resistance at specified temperature (DCMT) — Test method*

ISO 9967, *Thermoplastics pipes — Determination of creep ratio*

ISO 9969, *Thermoplastics pipes — Determination of ring stiffness*

ISO 18373-1:2007, *Rigid PVC pipes — Differential scanning calorimetry (DSC) method — Part 1: Measurement of the processing temperature*

EN 1401-1, *Plastics piping systems for non-pressure underground drainage and sewerage – Unplasticized poly(vinyl chloride) (PVC-U) – Part 1: Specifications for pipes, fittings and the system*