

# SLOVENSKI STANDARD

## SIST EN ISO 11296-7:2019

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Nadomešča:

SIST EN ISO 11296-7:2013

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**Cevni sistemi iz polimernih materialov za obnovo podzemnih omrežij za odvodnjavanje in kanalizacijo za obratovanje brez tlaka (vodi s prosto gladino) - 7. del: Oblaganje s spiralnimi cevmi (ISO 11296-7:2019)**

Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks - Part 7: Lining with spirally-wound pipes (ISO 11296-7:2019)

**iTeh STANDARD PREVIEW**

Kunststoff-Rohrleitungssysteme für die Renovierung von erdverlegten drucklosen Entwässerungsnetzen (Freispiegelleitungen) - Teil 7: Wickelrohr-Lining (ISO 11296-7:2019)

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Systèmes de canalisations en plastique pour la rénovation des réseaux de branchements et de collecteurs d'assainissement enterrés sans pression - Partie 7: Tubage par enroulement hélicoïdal (ISO 11296-7:2019)

**Ta slovenski standard je istoveten z: EN ISO 11296-7:2019**

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**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
93.030	Zunanji sistemi za odpadno vodo	External sewage systems

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**en**

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## Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks - Part 7: Lining with spirally-wound pipes (ISO 11296-7:2019)

Systèmes de canalisations en plastique pour la rénovation des réseaux de branchements et de collecteurs d'assainissement enterrés sans pression - Partie 7: Tubage par enroulement hélicoïdal (ISO 11296-7:2019)

Kunststoff-Rohrleitungssysteme für die Renovierung von erdverlegten drucklosen Entwässerungsnetzen (Freispiegelleitungen) - Teil 7: Wickelrohr-Lining (ISO 11296-7:2019)

This European Standard was approved by CEN on 27 December 2018.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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## European foreword

This document (EN ISO 11296-7:2019) 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 August 2019, and conflicting national standards shall be withdrawn at the latest by August 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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STANDARD

ISO  
11296-7

Second edition  
2019-01

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

**Part 7:  
Lining with spirally-wound pipes**

**iTeh STANDARD PREVIEW**  
*Systemes de canalisations en plastique pour la rénovation des réseaux  
de branchements et de collecteurs d'assainissement enterrés sans  
pression —*  
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*Partie 7: Tubage par enroulement hélicoïdal*  
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## ISO 11296-7:2019(E)

## 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](http://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](http://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](http://www.iso.org/iso/foreword.html). (standards.iteh.ai)

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 11296-7:2011), which has been technically revised. The following clause(s) have been revised:

- In [5.1](#), thermoplastics has been added as a separate seam sealant material category;
- In [5.3](#), the thickness range has been removed;
- In [Table 2](#) the requirement for Modulus of Elasticity has been lowered to reflect current state of the art;
- In [Clause 6](#), ISO 10467 replaces EN 14364 as normative reference for GRP saddles;
- In [8.5, Table 6](#), ISO 13262 replaces EN 1979 for tensile testing of a locked seam.

A list of all parts in the ISO 11296 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](http://www.iso.org/members.html).

## 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* (this application);
- 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*.

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 non-pressure drainage and sewerage networks include or potentially include the following:

- *Part 2: Lining with continuous pipes*;
- *Part 3: Lining with close-fit pipes*; [SIST EN ISO 11296-7:2019](https://standards.iteh.ai/catalog/standards/sist/f2cf56f2-7de0-45d4-b22a-11296-7-2019)
- *Part 4: Lining with cured-in-place pipes*; <https://standards.iteh.ai/catalog/standards/sist/f2cf56f2-7de0-45d4-b22a-11296-7-2019>
- *Part 5: Lining with discrete pipes*;
- *Part 7: Lining with spirally-wound pipes* (this document);
- *Part 8: Lining with pipe segments*;
- *Part 9: Lining with a rigidly anchored plastics inner layer*;
- *Part 10: Lining with sprayed polymeric materials*.

The requirements for any given renovation technique family are specified in Part 1, applied in conjunction with the relevant other part. For example, both ISO 11296-1 and this document together specify the requirements relating to lining with spirally-wound 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 11296, in order to facilitate direct comparisons across renovation technique families.

[Figure 1](#) shows the common part and clause structure and the relationship between ISO 11296 and the System Standards for other application areas.