

Plastrørssystemer til reovering af jordlagte trykløse dræn- og afløbsnet – Del 4: Strømpeforing – Tillæg 1: Opdaterede definitioner, mærkningskrav og metode til alternative udtryk for resultater af bøjningstest

Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks – Part 4: Lining with cured-in-place pipes – Amendment 1: Updated definitions, marking requirements and procedure for alternative expression of flexural test results (ISO 11296-4:2018/Amd 1:2021)

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DS/EN ISO 11296-4:2018/A1:2021

København

DS projekt: M344197

ICS: 23.040.20; 23.040.45; 91.140.80; 93.030

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ICS 23.040.20; 23.040.45; 91.140.80; 93.030

English Version

**Plastics piping systems for renovation of underground
non-pressure drainage and sewerage networks - Part 4:
Lining with cured-in-place pipes - Amendment 1: Updated
definitions, marking requirements and procedure for
alternative expression of flexural test results (ISO 11296-
4:2018/Amd 1:2021)**

Systèmes de canalisations en plastique pour la
rénovation des réseaux de branchements et de
collecteurs d'assainissement enterrés sans pression -
Partie 4: Tubage continu par tubes polymérisés sur
place - Amendement 1: Actualisation des définitions,
des exigences de marquage, et de la procédure pour
une autre expression des propriétés de flexion (ISO
11296-4:2018/Amd 1:2021)

Kunststoff-Rohrleitungssysteme für die Renovierung
von erdverlegten drucklosen Entwässerungsnetzen
(Freispiegelleitungen) - Teil 4: Vor Ort härtendes
Schlauch-Lining - Änderung 1: Aktualisierung von
Begriffen, Anforderungen an Kennzeichnungen und
Verfahren für die alternative Angabe von Ergebnissen
des Biegeversuchs (ISO 11296-4:2018/Amd 1:2021)

This amendment A1 modifies the European Standard EN ISO 11296-4:2018; it was approved by CEN on 24 December 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This amendment 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 COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 11296-4:2018/A1:2021) 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 Amendment to the European Standard EN ISO 11296-4:2018 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2021, and conflicting national standards shall be withdrawn at the latest by November 2021.

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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Endorsement notice

The text of ISO 11296-4:2018/Amd 1:2021 has been approved by CEN as EN ISO 11296-4:2018/A1:2021 without any modification.

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

Part 4:
Lining with cured-in-place pipes

**AMENDMENT 1: Updated definitions,
marking requirements and procedure
for alternative expression of flexural
test results**

*Systèmes de canalisations en plastique pour la rénovation des réseaux
de branchements et de collecteurs d'assainissement enterrés sans
pression —*

Partie 4: Tubage continu par tubes polymérisés sur place

*AMENDEMENT 1: Actualisation des définitions, des exigences
de marquage, et de la procédure pour une autre expression des
propriétés de flexion*





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Published in Switzerland

Foreword

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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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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*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 155, *Plastics piping systems and ducting systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 11296 series can be found on the ISO website.

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

Part 4: Lining with cured-in-place pipes

AMENDMENT 1: Updated definitions, marking requirements and procedure for alternative expression of flexural test results

Normative references

Replace the references to ISO 178:2010+A1:2013, ISO 7685:1998, ISO 10467:-1), ISO 10468 and ISO 14125:1998+A1:2011 with the following:

ISO 178:2019, *Plastics — Determination of flexural properties*

ISO 7685:2019, *Glass-reinforced thermosetting plastics (GRP) pipes — Determination of initial ring stiffness*

ISO 10467:2018, *Plastics piping systems for pressure and non-pressure drainage and sewerage — Glass-reinforced thermosetting plastics (GRP) systems based on unsaturated polyester (UP) resin*

ISO 10468, *Glass-reinforced thermosetting plastics (GRP) pipes — Determination of the ring creep properties under wet or dry conditions*

ISO 14125:1998, *Fibre-reinforced plastic composites — Determination of flexural properties*

Delete ISO 7684 from the list.

Delete footnote 1).