
Ugotavljanje skladnosti cevnih sistemov iz polimernih materialov za obnovo obstoječih cevovodov - 1. del: Polietilen (PE) (ISO/TS 23818-1:2026)

Assessment of conformity of plastics piping systems for the rehabilitation of existing pipelines - Part 1: Polyethylene (PE) material (ISO/TS 23818-1:2026)

Konformitätsbewertung von Kunststoff-Rohrleitungssystemen für die Sanierung von bestehenden Rohrleitungen - Teil 1: Werkstoff Polyethylen (PE) (ISO/TS 23818-1:2026)

Évaluation de la conformité des systèmes de canalisations en plastique destinés à la réhabilitation des réseaux existants - Partie 1: Matériau Polyéthylène (PE) (ISO/TS 23818-1:2026)

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ICS:

23.040.20	Cevi iz polimernih materialov	Plastics pipes
83.140.40	Gumene cevi	Hoses

SIST-TS CEN ISO/TS 23818-1:2026 **en,fr,de**

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ICS 23.040.20

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English Version

**Assessment of conformity of plastics piping systems for
the rehabilitation of existing pipelines - Part 1:
Polyethylene (PE) material (ISO/TS 23818-1:2026)**

Évaluation de la conformité des systèmes de
canalisations en plastique destinés à la réhabilitation
des réseaux existants - Partie 1: Matériau Polyéthylène
(PE) (ISO/TS 23818-1:2026)

Konformitätsbewertung von Kunststoff-
Rohrleitungssystemen für die Sanierung von
bestehenden Rohrleitungen - Teil 1: Werkstoff
Polyethylen (PE) (ISO/TS 23818-1:2026)

This Technical Specification (CEN/TS) was approved by CEN on 1 March 2026 for provisional application.

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Ref. No. CEN ISO/TS 23818-1:2026 E

Contents	Page
European foreword.....	3

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European foreword

This document (CEN ISO/TS 23818-1:2026) 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.

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Endorsement notice

The text of ISO/TS 23818-1:2026 has been approved by CEN as CEN ISO/TS 23818-1:2026 without any modification.

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Technical Specification

ISO/TS 23818-1

Assessment of conformity of plastics piping systems for the rehabilitation of existing pipelines —

Part 1: Polyethylene (PE) material

*Évaluation de la conformité des systèmes de canalisations en
plastique destinés à la réhabilitation des réseaux existants —*

Partie 1: Matériau Polyéthylène (PE)

**Second edition
2026-02**

ISO/TS 23818-1:2026(en)

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Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
3.1 Assessment of conformity.....	2
3.2 Rehabilitation general.....	5
4 Abbreviated terms	5
5 General	6
6 Testing and inspection	6
6.1 Grouping.....	6
6.1.1 General.....	6
6.1.2 Size groups.....	6
6.1.3 Fitting groups.....	6
6.2 Type testing.....	7
6.3 Batch release tests.....	7
6.4 Process verification tests.....	8
6.5 Audit tests.....	8
6.6 Indirect tests.....	8
6.7 Test records.....	8
Annex A (normative) Test procedures for plastics piping systems for the rehabilitation of underground non-pressure drains and sewers	9
Annex B (normative) Test procedures for plastics piping systems for the rehabilitation of drains and sewers under pressure, and for water and gas supply networks	14
Annex C (normative) Specification of new system (N), change in design (D), change in material (M) and extension of the product range (E)	28
Annex D (normative) Testing and inspection of fabricated fittings	29
Annex E (normative) Summary tables of scheme requirements	32
Bibliography	35

ISO/TS 23818-1:2026(en)

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 document 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 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).

This second edition cancels and replaces the first edition (ISO/TS 23818-1:2020), which has been technically revised.

The main changes are as follows:

- the document has been amended following the merging and renumbering of International Standards concerning piping systems, referred to in this document.
- in [Clause 3](#), seven definitions have been removed by reference to ISO 11295;
- the technique family "lining with spirally-wound pipes" has been excluded and the respective content has been incorporated in ISO/TS 23818-4.

A list of all parts in the ISO/TS 23818 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/TS 23818-1:2026(en)

Introduction

International Standards dealing with the following applications are either available or in preparation for pipeline rehabilitation:

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

These International 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.

For the assessment of conformity, five technical specifications for pipe systems of distinctive materials are applicable:

- ISO/TS 23818-1 (this document);
- ISO/TS 23818-2;
- ISO/TS 23818-3;
- ISO/TS 23818-4.

These technical specifications cover the International Standards concerning piping systems, as presented in [Table 1](#).

Table 1 — Structure of technical specifications for assessment of conformity

Technical Specification	Material	Technique	Application	
			Drains, sewers and water supply networks	Gas supply networks
ISO/TS 23818-1	PE	Lining with continuous pipes and close fit pipes trenchless replacement using pipe bursting, pipe extraction, horizontal drilling and impact moling	ISO 11300-1	ISO 11301-1
ISO/TS 23818-2	Thermoset composite	Lining with cured-in-place pipes (CIPP)	ISO 11300-2	n/a
ISO/TS 23818-3	PVC-U	Lining with close-fit pipes	ISO 11300-3	n/a
ISO/TS 23818-4 ^a	Thermoplastic composite	Lining with spirally wound pipes and rigidly anchored plastic liners (RAPL)	ISO 11300-4	n/a
— ^b	PA-U	— ^b	n/a	— ^b
^a In preparation				
^b Under development (as Part 5)				

The format of technical specifications is in line with technical specifications for assessment of conformity to other system standards, apart from presenting the detailed requirements for inspection and testing in two annexes, for non-pressure applications and pressure applications (where applicable), respectively.

The format is schematically represented for this document in [Figure 1](#).

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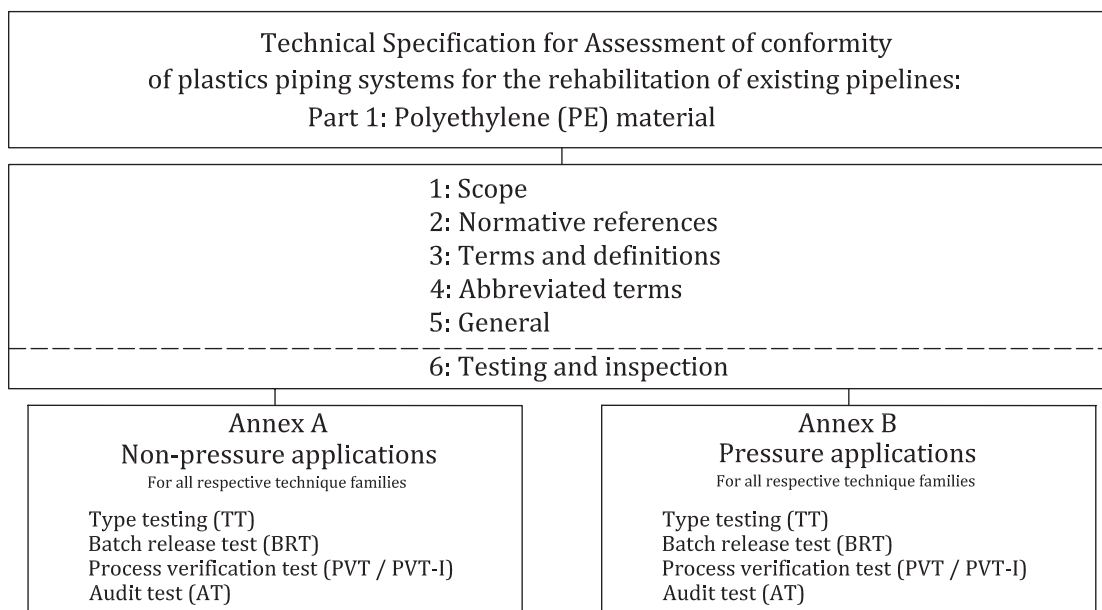


Figure 1 — Format of the technical specifications for conformity assessment

Figures 2 and 3 are intended to provide general information on the concept of testing and organisation of those tests used for the purpose of the assessment of conformity. For each type of test, i.e. type testing (TT), batch release test (BRT), process verification test (PVT), and audit test (AT), this document details the applicable characteristics to be assessed as well as the frequency and sampling of testing.

A typical scheme for the assessment of conformity of PE pipes, fittings, joints or assemblies by manufacturers is given in Figure 2.

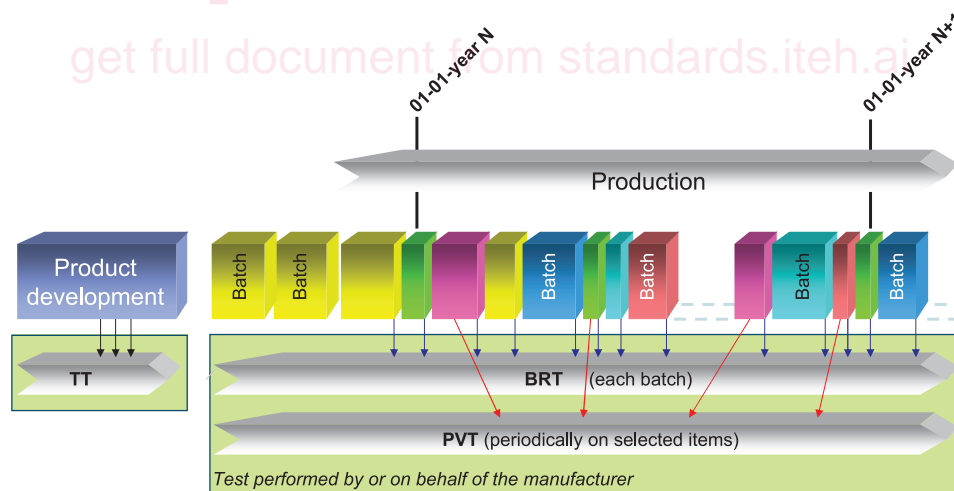


Figure 2 — Typical scheme for the assessment of conformity by a manufacturer

A typical scheme for the assessment of conformity of PE pipes, fittings, joints or assemblies by manufacturers, including certification, is given in Figure 3.