



# Technical Specification

**ISO/TS 23818-3**

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

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

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

*Partie 3: Matériau poly(chlorure de vinyle) non-plastifié (PVC-U)*

**Second edition  
2026-02**

# Sample Document

get full document from [standards.iteh.ai](https://standards.iteh.ai)



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2026

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

	Page
<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
3.1 Assessment of conformity.....	1
3.2 Rehabilitation, general.....	5
<b>4 Abbreviated terms</b> .....	<b>5</b>
<b>5 General</b> .....	<b>6</b>
<b>6 Testing and inspection</b> .....	<b>6</b>
6.1 Grouping.....	6
6.1.1 General.....	6
6.1.2 Size groups.....	6
6.1.3 Fitting groups.....	7
6.2 Type testing.....	7
6.3 Batch release tests.....	7
6.4 Process verification tests.....	7
6.5 Audit tests.....	8
6.6 Indirect tests.....	8
6.7 Test records.....	8
<b>Annex A (normative) Test procedures for plastics piping systems for the rehabilitation of networks for underground non-pressure drains and sewers</b> .....	<b>9</b>
<b>Annex B (normative) Specification of new system (N), change in design (D), change in material (M) and extension of the product range (E)</b> .....	<b>14</b>
<b>Annex C (informative) Summary tables of scheme requirements</b> .....	<b>16</b>
<b>Bibliography</b> .....	<b>17</b>

## 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](http://www.iso.org/directives)).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at [www.iso.org/patents](http://www.iso.org/patents). ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

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 23818-3:2021), 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;
- lining with spirally-wound pipes has been excluded and 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](http://www.iso.org/members.html).

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

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

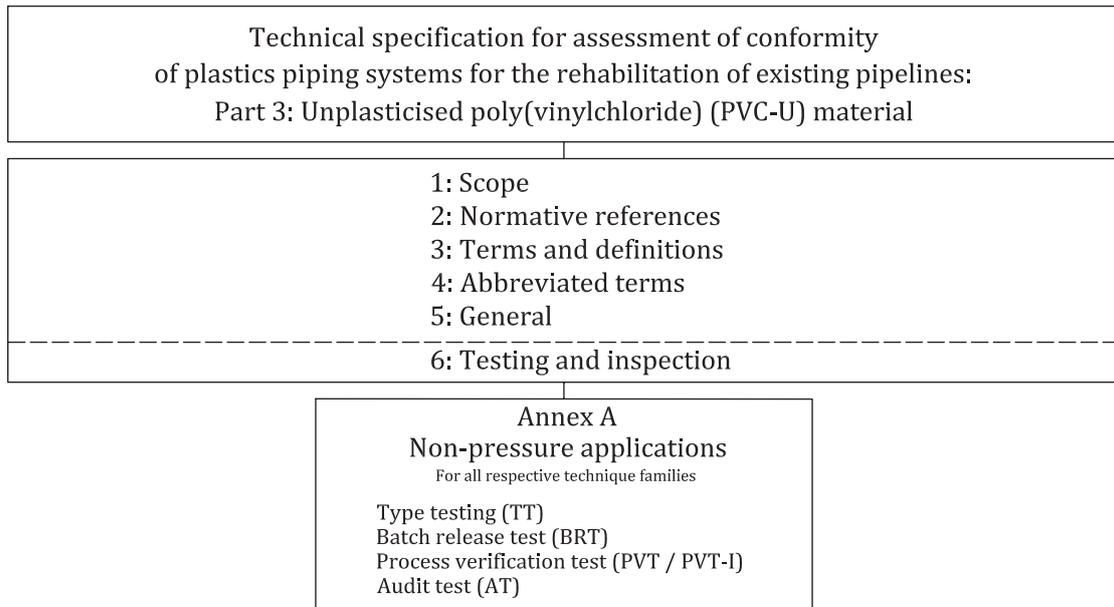
**Table 1 — Structure of technical specifications for assessment of conformity**

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 <sup>a</sup>	Thermoplastic composite	Lining with spirally wound pipes and rigidly anchored plastic liners (RAPL)	ISO 11300-4	n/a
— <sup>b</sup>	PA-U	— <sup>b</sup>	n/a	— <sup>b</sup>
<sup>a</sup> In preparation				
<sup>b</sup> Under development (as ISO/TS 23818-5)				

The format of the four 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.

For this document, covering only non-pressure applications, the format is schematically represented in [Figure 1](#).

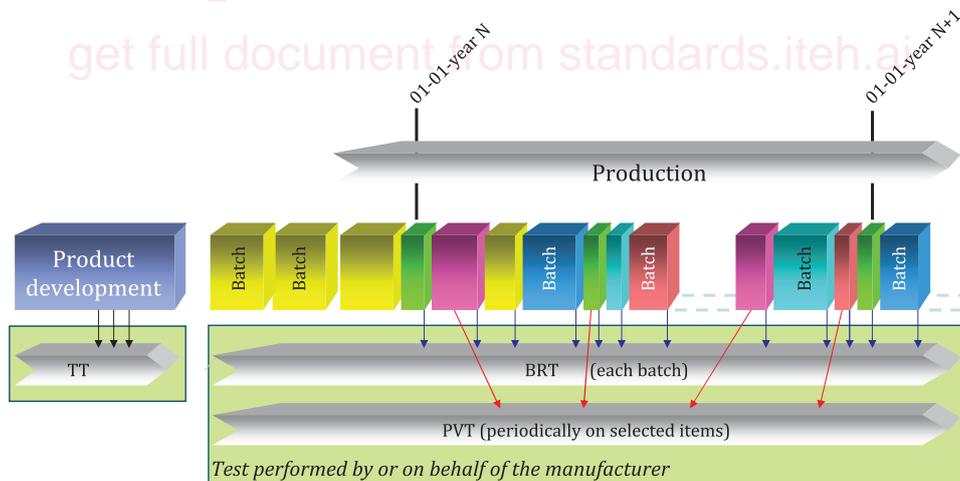
## ISO/TS 23818-3:2026(en)



**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 organization 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 PVC-U 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 PVC-U pipes, fittings, joints or assemblies by manufacturers, including certification, is given in Figure 3.

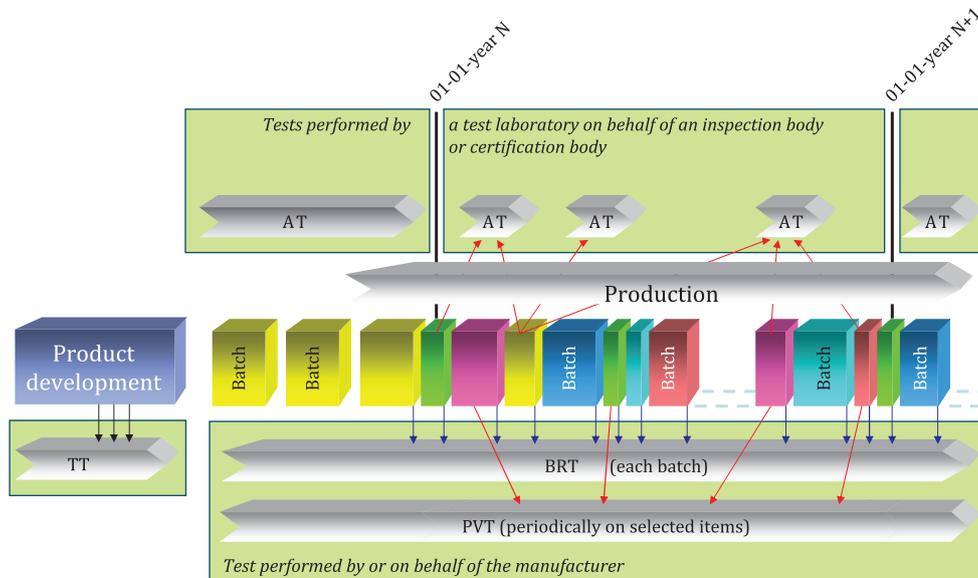


Figure 3 — Typical scheme for the assessment of conformity by a manufacturer, including certification

# Sample Document

get full document from [standards.iteh.ai](https://standards.iteh.ai)