SLOVENSKI STANDARD
SIST-TS CEN ISO/TS 23818-2:2022

01-oktober-2022

Ugotavljanje skladnosti cevnih sistemov iz polimernih materialov za obnovo obstoječih cevovodov - 2. del: Kompozitni material iz smolnih vlaken (RFC) (ISO/TS 23818-2:2021)

Assessment of conformity of plastics piping systems for the rehabilitation of existing pipelines - Part 2: Resin-fibre composite (RFC) material (ISO/TS 23818-2:2021)

Évaluation de la conformité des systèmes de canalisations en plastique destinés à la réhabilitation des réseaux existants - Partie 2: Matériau composite résine-fibres (RFC) (ISO/TS 23818-2:2021)

Ta slovenski standard je istoveten z: **CEN ISO/TS 23818-2:2022**

ICS:

23.040.20	Cevi iz polimernih materialov	Plastics pipes
83.140.40	Gumene cevi	Hoses

SIST-TS CEN ISO/TS 23818-2:2022 **en,fr,de**

TECHNICAL SPECIFICATION

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CEN ISO/TS 23818-2

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English Version

Assessment of conformity of plastics piping systems for the rehabilitation of existing pipelines - Part 2: Resin-fibre composite (RFC) material (ISO/TS 23818-2:2021)

Évaluation de la conformité des systèmes de canalisations en plastique destinés à la réhabilitation des réseaux existants - Partie 2: Matériau composite résine-fibres (RFC) (ISO/TS 23818-2:2021)

This Technical Specification (CEN/TS) was approved by CEN on 24 July 2022 for provisional application.

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European foreword

The text of ISO/TS 23818-2:2021 has been prepared by Technical Committee ISO/TC 138 "Plastics pipes, fittings and valves for the transport of fluids" of the International Organization for Standardization (ISO) and has been taken over as CEN ISO/TS 23818-2:2022 by 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 23818-2:2021 has been approved by CEN as CEN ISO/TS 23818-2:2022 without any modification.

TECHNICAL SPECIFICATION

ISO/TS 23818-2

First edition
2021-08

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

Part 2: Resin-fibre composite (RFC) material

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

Partie 2: Matériau composite résine-fibres (RFC)

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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).

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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.

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*.

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.

A list of all parts in the ISO 23818 series can be found on the ISO website.

Introduction

System standards dealing with the following applications are either available or in preparation for pipeline rehabilitation:

— ISO 11296, *Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks*;

— 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*;

— ISO 21225, *Plastics piping systems for the trenchless replacement of underground pipeline 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.

For the assessment of conformity, three Technical Specifications for pipe lining systems of distinct materials are applicable:

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

— ISO/TS 23818-2 (this document), *Assessment of conformity of plastics piping systems for the rehabilitation of existing pipelines — Part 2: Resin-fibre composite (RFC) material*;

— ISO/TS 23818-3, *Assessment of conformity of plastics piping systems for the rehabilitation of existing pipelines — Part 3: Unplasticized poly(vinyl chloride) (PVC-U) material*.

These three Technical Specifications cover the system standards, as presented in Table 1.

Table 1 — Structure of Technical Specifications for assessment of conformity

Technical Specification	Material	Technique	Application			
			Non-pressure drainage and sewerage networks	Drainage and sewerage networks under pressure	Water supply networks	Gas supply networks
ISO/TS 23818-1	PE	LINING WITH CONTINUOUS PIPES, CLOSE-FIT PIPES AND SPIRALLY WOUND PIPES	ISO 11296-2 ISO 11296-3 ISO 11296-7	ISO 11297-2 ISO 11297-3	ISO 11298-2 ISO 11298-3	ISO 11299-2 ISO 11299-3
		TRENCHLESS REPLACEMENT USING PIPE BURSTING, PIPE EXTRACTION, HORIZONTAL DRILLING AND IMPACT MOLING	ISO 21225-1 ISO 21225-2	ISO 21225-1 ISO 21225-2	ISO 21225-1 ISO 21225-2	ISO 21225-1 ISO 21225-2
ISO/TS 23818-2	RFC	LINING WITH CURED-IN-PLACE PIPES (CIPP)	ISO 11296-4	ISO 11297-4	ISO 11298-4	
ISO/TS 23818-3	PVC-U	LINING WITH CLOSE-FIT PIPES AND SPIRALLY WOUND PIPES	ISO 11296-3 ISO 11296-7			

The format of the three Technical Specifications is in line with Technical Specifications for assessment of conformity to other system standards, apart from presenting the detailed requirement for Inspection and Testing in two annexes, for non-pressure applications and pressure applications (where applicable) respectively.

The format is schematically represented in Figure 1.

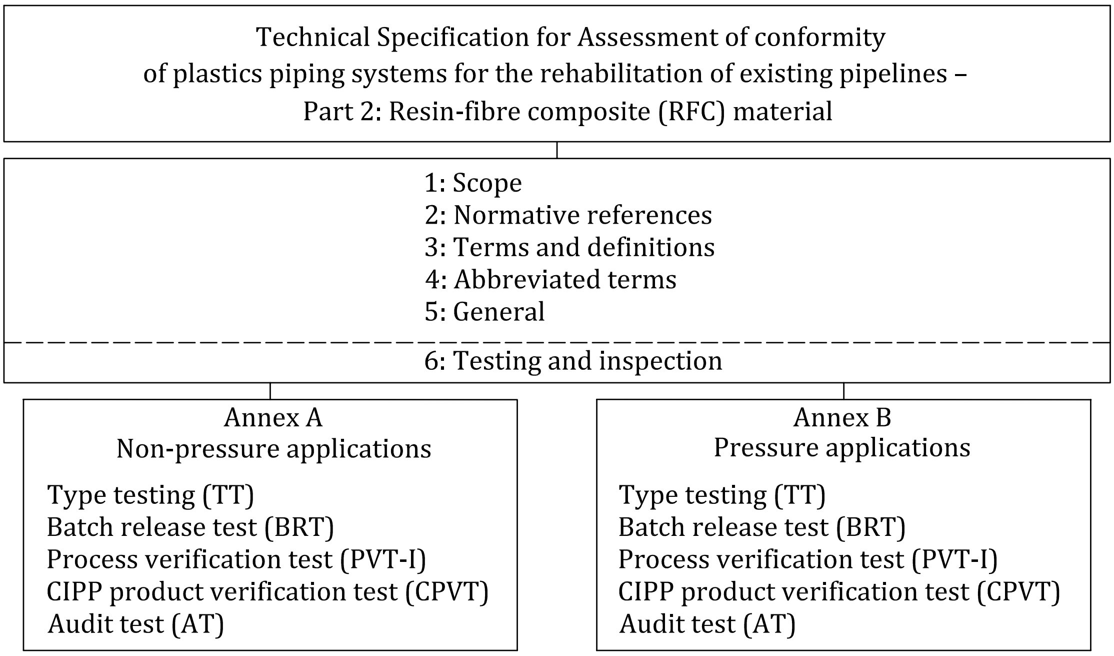

Figure 1 — Format of the Technical Specifications for the assessment of conformity

Figure 2 is 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-I), CIPP product verification test (CPVT) and audit test (AT), this document details the applicable characteristics to be assessed as well as the frequency and sampling of testing.

Figure 2 also provides a typical scheme for the assessment of conformity of RFC pipes, fittings, joints or assemblies by manufacturers and/or installers, including certification.