



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 41666.3-2022

**Plastics piping systems for renovation of underground
non-pressure drainage and sewerage networks - Part 3: Lining
with close-fit pipes**

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents" drafted.

This document is part 3 of GB/T 41666 "Plastic piping system for trenchless repair of underground pressureless drainage network". GB/T 41666

The following sections have been published.

--- Part 3. Closely fit lining method.

This document is modified and adopted ISO 11296-3:2018 "Plastic piping system for trenchless repair of underground pressureless drainage pipe network - Part 3. Tight Close fit lining method.

Compared with ISO 11296-3:2018, this document has more structural adjustments. Appendix A lists this document and ISO 11296-3.

2018 chapter number comparison list.

There are technical differences between this document and ISO 11296-3:2018, and the clauses involved in these differences have been

The vertical single line (1) of the position is marked, and a list of the corresponding technical differences and their reasons is given in Appendix B.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

GB/T 37862 specifies the technical classification, terms and definitions of plastic piping

systems for trenchless repair. This document specifies that underground

Requirements for plastic piping systems for trenchless repair of pressurized drainage networks. According to the application field of the repaired pipeline system, the trenchless repair technology is also

Divided into the following technical series, corresponding to different series of standards.

---Plastic pipe system for trenchless repair of underground pressureless drainage pipe network (this series of standards);

---Plastic pipe system for trenchless repair of underground pressurized drainage pipe network (not yet prepared);

--- Plastic pipe system for trenchless repair of underground water supply network (not yet prepared);

--- Plastic piping system for trenchless repair of underground gas pipe network (not yet prepared).

GB/T 41666 "Plastic Pipeline System for Trenchless Repair of Underground Unpressurized Drainage Pipe Network" is proposed to consist of the following parts.

--- Part 1.General;

--- Part 2.Coiled tube lining method;

--- Part 3.Closely fit lining method;

--- Part 4.In-situ curing lining method;

--- Part 5.Short tube insertion method;

--- Part 7.Spiral winding lining method;

--- Part 8.Segment lining method;

--- Part 9.Padding method;

--- Part 10.Spray polymer lining method.

Part 1 (General) of each technology series specifies the general requirements for trenchless repair technology in this field, and the other parts are specific engineering.

Engineering method (construction method). Each part (Construction Method) and Part 1 (General) shall be used in combination. This document specifies the phases of the close fit lining method

off requirements. See GB/T 37862 for further information. Since not all technical (construction method) standards are applicable to all application fields,

The components contained in this different technical series of standards will vary.

The standard system table in Figure 1 shows the general parts of the trenchless repair technology system, the interrelationship of each technology series and its basic constitute.

Figure 1 Framework of Repair System Standards

Plastics for trenchless repair of underground pressureless drainage pipe network

Piping systems part 3.close fit lining method

1 Scope

This document specifies the terminology for plastic piping systems used in the trenchless repair of underground pressureless drainage networks with close fit lining

and Definitions, Symbols and Abbreviations, Production Stage ("M" Stage) Lined Pipe Requirements, Production Stage ("M" Stage) Fitting Requirements, Accessories, Construction Stages

Section ("I" Phase) Requirements, Construction and Acceptance.

This document is applicable to the use of the close-fitting lining method in the plastic pipe system for the trenchless repair of the underground pressureless drainage pipe network.

Pipes made of polyethylene (PE) or unplasticized polyvinyl chloride (PVC-U), as well as installed lining systems, joints and construction.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 1033.1-2008 Determination of the density of non-foamed plastics - Part 1.Impregnation method, pycnometer method and titration method

(GB/T 1033.1-2008, ISO 1183-1.2004, IDT)

GB/T 1040.2 Determination of Tensile Properties of Plastics Part 2.Test Conditions for Molded and Extruded Plastics (GB/T 1040.2-

2006, ISO 527-2.1993, IDT)

GB/T 3682.1-2018 Plastics Thermoplastics Melt Mass Flow Rate (MFR) and Melt Volume Flow Rate (MVR)

Determination of Part 1. Standard Methods (GB/T 3682.1-2018, ISO 1133.1.2011, MOD)

GB/T 6111 Determination of internal pressure resistance of thermoplastic piping systems for fluid transportation (GB/T 6111-2018,

ISO 1167-1.2006, ISO 1167-2.2006, ISO 1167-3.2007, ISO 1167-4.2007, NEQ)

GB/T 6671-2001 Determination of longitudinal shrinkage of thermoplastic pipes (eqv ISO 2505.1994)

GB/T 8802 Determination of Vicat softening temperature of thermoplastic pipes and fittings (GB/T 8802-2001, eqv ISO 2507.1995)

GB/T 8804.1 Determination of Tensile Properties of Thermoplastic Pipes Part 1. General Principles of Test Methods (GB/T 8804.1-2003,

ISO 6259-1.1997, IDT)

GB/T 8804.2 Determination of Tensile Properties of Thermoplastic Pipes Part 2. Rigid Polyvinyl Chloride (PVC-U), Chlorinated Polyvinyl Chloride

(PVC-C) and high impact polyvinyl chloride (PVC-HI) pipes (GB/T 8804.2-2003, ISO 6259.2.1997, IDT)

GB/T 8804.3 Determination of Tensile Properties of Thermoplastic Pipes Part 3. Polyolefin Pipes (GB/T 8804.3-2003,

ISO 6259-3.1997, IDT)

GB/T 8806 Determination of the dimensions of plastic parts of plastic piping systems (GB/T 8806-2008, ISO 3126.2005, IDT)

GB/T 9345.1-2008 Determination of ash content of plastics - Part 1. General method (ISO 3451-1.1997, IDT)

GB/T 9647 Determination of Ring Rigidity of Thermoplastic Pipes (GB/T 9647-2015, ISO 9969.2007, IDT)

GB/T 13526-2007 Rigid Polyvinyl Chloride (PVC-U) Pipe Dichloromethane Impregnation Test Method

GB/T 14152 Thermoplastic Pipes Test Method for External Impact Resistance Clock Rotation Method (GB/T 14152-2001, eqv

ISO 3127.1994)

GB/T 18042-2000 Test method for creep ratio of thermoplastic pipes (eqv ISO 9967.1994)

GB/T 19278 General terms and definitions for thermoplastic pipes, fittings and valves