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**Plastics piping systems for renovation of  
underground water supply networks —**

**Part 1:  
General**

*Systèmes de canalisations en matières plastiques pour la rénovation  
des réseaux enterrés d'alimentation en eau —*

*Partie 1: Généralités*



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# Contents

Page

Foreword .....	v
Introduction .....	vi
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	1
3.1 General .....	1
3.2 Techniques .....	3
3.3 Geometrics .....	4
3.4 Materials .....	5
3.5 Product stages .....	6
3.6 Service conditions .....	6
3.7 Joints .....	6
4 Symbols and abbreviated terms .....	6
4.1 Symbols .....	6
4.2 Abbreviated terms .....	7
5 Pipes at the “M” stage .....	7
5.1 Materials .....	7
5.2 General characteristics .....	7
5.3 Material characteristics .....	7
5.4 Geometric characteristics .....	7
5.5 Mechanical characteristics .....	7
5.6 Physical characteristics .....	7
5.7 Jointing .....	7
5.8 Marking .....	8
6 Fittings at the “M” stage .....	8
6.1 Materials .....	8
6.2 General characteristics .....	8
6.3 Material characteristics .....	8
6.4 Geometric characteristics .....	8
6.5 Mechanical characteristics .....	8
6.6 Physical characteristics .....	9
6.7 Jointing .....	9
6.8 Marking .....	9
7 Ancillary components .....	9
8 Fitness for purpose of the installed lining system at the “I” stage .....	9
8.1 Materials .....	9
8.2 General characteristics .....	10
8.3 Material characteristics .....	10
8.4 Geometric characteristics .....	10
8.5 Mechanical characteristics .....	10
8.6 Physical characteristics .....	11
8.7 Additional characteristics .....	11
8.8 Sampling .....	11
9 Installation practice .....	11
9.1 Preparatory work .....	11
9.2 Storage, handling and transport of pipes and fittings .....	11
9.3 Equipment .....	11

9.4 Installation .....12

9.5 Process-related inspection and testing .....13

9.6 Lining termination.....13

9.7 Reconnection to the existing pipeline system .....13

9.8 Final inspection and testing .....13

9.9 Documentation.....13

Bibliography .....14

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 11298-1 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*.

ISO 11298 consists of the following parts, under the general title *Plastics piping systems for renovation of underground water supply networks*:

- Part 1: General
- Part 3: Lining with close-fit pipes

Lining with continuous pipes is to form the subject of a part 2; lining with cured-in-place pipes is to form the subject of a part 4; lining with adhesive-backed hoses is to form the subject of a part 6.

## Introduction

This part of ISO 11298 is a part of a System Standard for plastics piping systems of various materials used for the renovation of existing pipelines in a specified application area. System Standards for renovation deal with the following applications:

- Plastics piping systems for renovation of underground non-pressure drainage and sewerage networks;
- Plastics piping systems for renovation of underground water supply networks;
- Plastics piping systems for renovation of underground gas supply networks;
- Plastics piping systems for renovation of underground drainage and sewerage networks under pressure.

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.

This System Standard comprises a:

- Part 1: General

and all applicable renovation technique family-related parts from the following:

- Part 2: Lining with continuous pipes
- Part 3: Lining with close-fit pipes
- Part 4: Lining with cured-in-place pipes
- Part 6: Lining with adhesive-backed hoses

The requirements for any given renovation technique family are given in part 1, applied in conjunction with the relevant other part. For example, this part of ISO 11298 and ISO 11298-3 together specify the requirements relating to lining with close-fit pipes. For complementary information, see ISO 41295. Not all technique families are pertinent to every area of application and this is reflected in the part numbers included in each System Standard.

A consistent structure of clause headings has been adopted for all parts of ISO 11298, in order to facilitate direct comparisons across renovation technique families.

Figure 1 shows the common part and clause structure and the relationship between ISO 11298 and the System Standards for other application areas.

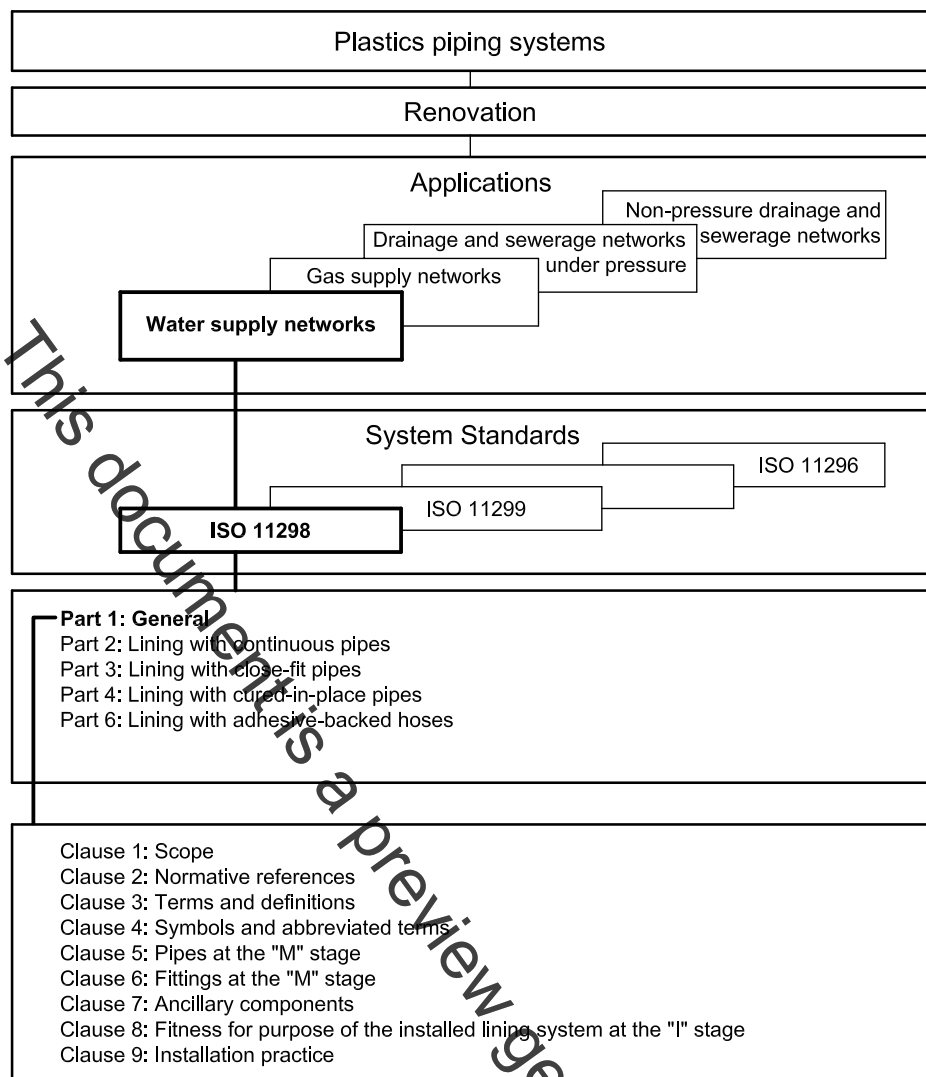


Figure 1 — Format of the renovation System Standards

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# Plastics piping systems for renovation of underground water supply networks —

## Part 1: General

### 1 Scope

This part of ISO 11298 specifies the requirements and test methods for plastics piping systems intended to be used for the renovation of underground water supply networks, which transport water intended for human consumption, including raw water intake pipelines. It is applicable to pipes and fittings, as manufactured, as well as to the installed lining system. It is not applicable to cover sprayed coatings, the existing pipeline or any annular filler.

This part of ISO 11298 gives the general requirements common to all relevant renovation techniques.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 681-1, *Elastomeric seals — Material requirements for pipe joint seals used in water and drainage applications — Part 1: Vulcanized rubber*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1 General

##### 3.1.1

##### **pipeline system**

interconnecting pipe network for the conveyance of fluids

##### 3.1.2

##### **rehabilitation**

all measures for restoring or upgrading the performance of an existing pipeline system

##### 3.1.3

##### **renovation**

work incorporating all or part of the original fabric of the pipeline, by means of which its current performance is improved