

ISO 11299-3:2018 (E)

Plastics piping systems for renovation of underground gas supply networks — Part 3: Lining with close-fit pipes

Contents

| | |
|-------|---|
| | Foreword |
| | Introduction |
| 1 | Scope |
| 2 | Normative references |
| 3 | Terms and definitions |
| 3.1 | General |
| 3.2 | Techniques |
| 3.3 | Characteristics |
| 3.4 | Materials |
| 3.5 | Product stages |
| 3.6 | Service conditions |
| 3.7 | Joints |
| 4 | Symbols and abbreviated terms |
| 4.1 | Symbols |
| 4.2 | Abbreviated terms |
| 5 | Pipes at the “M” stage |
| 5.1 | Materials |
| 5.2 | General characteristics |
| 5.2.1 | Appearance |
| 5.2.2 | Colour |
| 5.3 | Material characteristics |
| 5.4 | Geometric characteristics |
| 5.5 | Mechanical characteristics |
| 5.6 | Physical characteristics |
| 5.7 | Jointing |
| 5.8 | Marking |
| 5.9 | Regional requirements for pipes |
| 6 | Fittings at the “M” stage |
| 6.1 | Requirements |
| 6.2 | Marking |
| 6.3 | Regional requirements for fittings |
| 7 | Ancillary components |
| 7.1 | Requirements |
| 7.2 | Regional requirements for ancillary components |
| 8 | Fitness for purpose of the installed lining system at the “I” stage |
| 8.1 | Materials |
| 8.2 | General characteristics |
| 8.3 | Material characteristics |
| 8.4 | Geometric characteristics |
| 8.5 | Mechanical characteristics |
| 8.6 | Physical characteristics |
| 8.7 | Additional characteristics |
| 8.8 | Sampling |
| 8.9 | Regional requirements for the installed lining system |

- 9 Installation practice**
 - 9.1 Preparatory work**
 - 9.2 Storage, handling and transport of pipes and fittings**
 - 9.3 Equipment**
 - 9.3.1 Butt fusion and debanding equipment**
 - 9.3.2 Reduction equipment**
 - 9.3.3 Pipe skids/rollers**
 - 9.3.4 Winching and rod-pulling equipment**
 - 9.3.5 Pipe entry guides**
 - 9.3.6 Reforming equipment**
 - 9.3.7 Electrofusion equipment**
 - 9.3.8 Inspection equipment**
 - 9.3.9 Lifting equipment**
 - 9.4 Installation**
 - 9.5 Process-related inspection and testing**
 - 9.6 Lining termination**
 - 9.7 Reconnection to existing laterals**
 - 9.8 Final inspection and testing**
 - 9.9 Documentation**

Annex A (normative) Factory-folded heat-reverted polyethylene (PE) pipe —Determination of memory ability

- A.1 General**
- A.2 Principle**
- A.3 Testing**
 - A.3.1 Sampling**
 - A.3.2 Procedure**
 - A.3.3 Requirements**
- A.4 Test report**

Page count: 16