ISO 11298-4:2021 (E)

Plastics piping systems for renovation of underground water supply networks — Part 4: Lining with cured-in-place pipes

Contents

	For	eword	
	Intr	oduction	
1	Sco	рре	
2	Nor	mative references	
3	Teri	ms and definitions	
	3.1 3.2 3.3 3.4 3.5 3.6	General terms Techniques Characteristics Materials Product stages Service conditions	
4	Syn	nbols and abbreviated terms	
	4.1 4.2	Symbols Abbreviated terms	
5	Pipes at the "M" stage		
	5.1 5.2 5.3 5.4 5.5 5.6 5.7	Materials General characteristics Material characteristics Geometric characteristics Mechanical characteristics Physical characteristics Jointing Marking	
6	Fitt	ings at the "M" stage	
7	And	Ancillary components	
8	Fitness for purpose of the installed lining system at the "I" stage		
	8.1 8.2 8.3 8.4 8.4.1 8.4.2 8.4.3 8.5 8.5.1 8.5.2 8.6 8.7 8.7.1 8.8	Materials General characteristics Material characteristics Geometric characteristics General CIPP wall structure Wall thickness Mechanical characteristics Reference conditions for testing Test requirements Physical characteristics Additional characteristics Leak tightness of liner terminations Sampling	
9	Installation practice		
	9.1 9.2	Preparatory work Storage handling and transport of nine components	

9.3		Equipment
9.4		Installation
9.4	.1	Environmental precautions
9.4	.2	Installation procedures
9.4	.3	Simulated installations
9.5		Process-related inspection and testing
9.6		Lining termination
9.7		Reconnections to existing pipeline system
9.8		Final inspection and testing
9.9		Documentation
Annex A	(inform	mative) CIPP components and their functions
Annex B	-	ative) Cured-in-place pipes — Determination of short-term flexural properties
B.1		General
B.2	2	Apparatus
B.3		Test piece shape and dimensions
B.3		General
B.3		Shape
B.3	3.3	Thickness
B.3	3.4	Width
B.3	3.5	Length
B.4	ļ	Procedure
B.4	l.1	General
B.4	.2	Measurement of composite thickness and width
B.4	1.3	Setting of span
B.4	.4	Measurement of span
B.4	.5	Alignment of test piece
B.5		Calculation and expression of results
B.5		General
B.5		Span and thickness for calculation
B.5		Determination of strain datum
B.5		Derivation of flexural properties for flat samples
B.5		Derivation of flexural properties for curved samples
B.5		Alternative expression of flexural properties
B.6		Test report
Annex C (normative) Cured-in-place pipes — Determination of long-term flexural modulus under wet conditions		
C.1		General
C.1		
	-	Principle
C.3		Apparatus
C.4		Sample preparation
C.5		Preparation of test pieces
C.6		Procedure
C.6		Conditioning and test atmosphere for dry testing
C.6		Conditioning and test temperature for wet testing
C.6		Measurement of test piece dimensions and distance between supports
C.6		Mounting the test pieces
C.6		Loading procedure
C.6		Deflection measurement
C.6		Other measurements and controls
C.7		Expression of results
C.7		Method of calculation
C.7		Presentation of results
C.8	3	Test report
Annex D		ative) Cured-in-place pipes — Determination of long-term flexural strength under dry or onditions
D.1		Principle
D.2	2	Apparatus
D.3		Test pieces
D.3		Number of test pieces
U	3.2	Test piece preparation
		Test piece preparation Conditioning
D.3 D.3	.3	Test piece preparation Conditioning Procedure