

ISO 8533:2019-08 (E)

Glass-reinforced thermosetting plastics (GRP) pipes and fittings - Test methods to prove the design of cemented or wrapped joints

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
5 Apparatus	2
5.1 End sealing devices	2
5.1.1 General	2
5.1.2 Capable of applying the end loads	3
5.1.3 Not capable of applying the end loads	3
5.2 Supports	3
5.2.1 End thrust supports	3
5.2.2 Straps or cradles	3
5.2.3 Special supports	3
5.3 Source of hydrostatic pressure	3
5.4 Means of measuring the gauge pressure	3
5.5 Vacuum pump	3
5.6 Means for applying the required bending force	3
6 Test pieces	3
6.1 Test arrangement for tests detailed in 9.2, 9.4 and 9.5	3
6.2 Test arrangement for tests detailed in 9.3	4
6.3 Number of test pieces	6
7 Conditioning	6
8 Test temperature	6
9 Procedure	6
9.1 General	6
9.2 Negative pressure	7
9.3 Resistance to bending with pressure and end thrust	8
9.3.1 Method A	8
9.3.2 Method B	8
9.4 Resistance to internal cyclic pressure	9
9.5 Resistance to maintained internal pressure	10
9.6 Resistance to bolt-tightening torque	10
10 Test report	10
Annex A (normative) Calculation of the additional force FA and limiting deflection used in 9.3, Method A	12
Annex B (normative) Calculation of the bending load FB used in 9.3, Method B	13