

ISO 14692-1:2017-08 (E)

Petroleum and natural gas industries - Glass-reinforced plastics (GRP) piping - Part 1: Vocabulary, symbols, applications and materials

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	2
3 Terms, definitions, symbols and abbreviated terms	2
4 Pressure rating	22
4.1 MPR _{xx}	22
4.2 Part factors and partial factors	25
4.2.1 Part factor f_2 for loading	25
4.2.2 Part factor $f_{3,est}$ for the limited axial load capability of GRP piping	25
4.2.3 Partial factor A ₀ for design life	25
4.2.4 Partial factor A ₂ for chemical resistance	25
4.2.5 Partial factor A ₃ for cyclic loading	25
5 Classification	25
5.1 Joints	25
5.1.1 Unrestrained joints	25
5.1.2 Classification of joints	26
5.2 Resin matrix	26
6 Materials	27
7 Dimensions	28
Annex A (informative) Principle	30
Annex B (informative) Guidance on scope limitations	36
Annex C (normative) Enquiry sheet	37
Annex D (normative) Wall thickness definitions	40
Annex E (informative) Selection of part factor $f_{3,est}$ in the bid process	42
Annex F (informative) Worked example	48
Bibliography	67