

Petroleum and natural gas industries - Glass-reinforced plastics (GRP) piping - Part 3: System design

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN ISO 14692-3:2003 sisaldab Euroopa standardi EN ISO 14692-3:2002 + AC:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 15.04.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN ISO 14692-3:2003 consists of the English text of the European standard EN ISO 14692-3:2002 + AC:2006.</p> <p>This document is endorsed on 15.04.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p> |
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| <p>Käsitlusala:</p> <p>This part of ISO 14692 gives guidelines for the design of GRP piping systems. The requirements and recommendations apply to layout dimensions, hydraulic design, structural design, detailing, fire endurance, spread of fire and emissions and control of electrostatic discharge</p> | <p>Scope:</p> <p>This part of ISO 14692 gives guidelines for the design of GRP piping systems. The requirements and recommendations apply to layout dimensions, hydraulic design, structural design, detailing, fire endurance, spread of fire and emissions and control of electrostatic discharge</p> |
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Võtmesõnad: design, glass-fibre reinforced plastics, industries, installation, natural gas, natural gas industries, offshore construction works, oil industries, petroleum, pipe laying, pipelayers, pipelines, system architecture, testing

ICS 75.200; 83.140.30

English version

**Petroleum and natural gas industries - Glass-reinforced plastics
(GRP) piping - Part 3: System design (ISO 14692-3:2002)**

Industries du pétrole et du gaz naturel - Canalisations en
plastique renforcé de verre (PRV) - Partie 3: Conception
des systèmes (ISO 14692-3:2002)

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Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

This document (EN ISO 14692-3:2002) has been prepared by Technical Committee ISO/TC 67 "Materials, equipment and offshore structures for petroleum and natural gas industries" in collaboration with Technical Committee CEN/TC 12 "Materials, equipment and offshore structures for petroleum and natural gas industries", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2003, and conflicting national standards shall be withdrawn at the latest by June 2003.

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NOTE FROM CMC The foreword is susceptible to be amended on reception of the German language version. The confirmed or amended foreword, and when appropriate, the normative annex ZA for the references to international publications with their relevant European publications will be circulated with the German version.

Endorsement notice

The text of ISO 14692-3:2002 has been approved by CEN as EN ISO 14692-3:2002 without any modifications.

**Petroleum and natural gas industries —
Glass-reinforced plastics (GRP) piping —**

**Part 3:
System design**

*Industries du pétrole et du gaz naturel — Canalisations en plastique
renforcé de verre (PRV) —*

Partie 3: Conception des systèmes



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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
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Contents

Page

| | |
|---|----|
| Introduction | vi |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Symbols and abbreviated terms | 1 |
| 5 Layout requirements | 2 |
| 5.1 General | 2 |
| 5.2 Space requirements | 2 |
| 5.3 System supports | 3 |
| 5.4 Isolation and access for cleaning | 5 |
| 5.5 Vulnerability | 5 |
| 5.6 Joint selection | 6 |
| 5.7 Fire and blast | 7 |
| 5.8 Control of electrostatic discharge | 8 |
| 5.9 Galvanic corrosion | 9 |
| 6 Hydraulic design | 9 |
| 6.1 General | 9 |
| 6.2 Flow characteristics | 9 |
| 6.3 General velocity limitations | 9 |
| 6.4 Erosion | 10 |
| 6.5 Water hammer | 10 |
| 6.6 Cyclic conditions | 11 |
| 7 Structural design | 11 |
| 7.1 General | 11 |
| 7.2 Manufacturer's pressure rating | 11 |
| 7.3 Qualified pressure | 11 |
| 7.4 Factored qualified pressure | 12 |
| 7.5 System design pressure | 13 |
| 7.6 Loading requirements | 14 |
| 7.7 Allowable displacements | 16 |
| 7.8 Qualified stress | 16 |
| 7.9 Factored stress | 16 |
| 7.10 Limits of calculated stresses due to loading | 17 |
| 7.11 Determination of failure envelope | 18 |
| 8 Stress analysis | 25 |
| 8.1 Analysis methods | 25 |
| 8.2 Analysis requirements | 25 |
| 8.3 External pressure/vacuum | 26 |
| 8.4 Thermal loading | 27 |
| 8.5 Stresses due to internal pressure | 27 |
| 8.6 Stresses due to pipe support | 28 |
| 8.7 Axial compressive load (buckling) | 29 |
| 9 Fire performance | 30 |
| 9.1 General | 30 |
| 9.2 Fire endurance | 31 |
| 9.3 Fire reaction | 32 |
| 9.4 Fire-protective coatings | 32 |

| | | |
|---------------------|--|-----------|
| 10 | Static electricity | 33 |
| 10.1 | General | 33 |
| 10.2 | Classification code for control of electrostatic charge accumulation..... | 33 |
| 10.3 | Mitigation options..... | 33 |
| 10.4 | Design and documentation requirements | 34 |
| 10.5 | Pipes that contain a fluid with an electrical conductivity more than 10 000 pS/m..... | 36 |
| 10.6 | Pipes that contain a fluid with an electrical conductivity less than 10 000 pS/m..... | 36 |
| 10.7 | Pipes exposed to weak/moderate external electrostatic-generation mechanisms | 37 |
| 10.8 | Pipes exposed to strong external electrostatic generation mechanisms | 37 |
| 10.9 | Continuity of electrical path within piping system | 38 |
| 10.10 | Lightning strike..... | 38 |
| 11 | Installer and operator documentation..... | 38 |
| Annex A | (informative) Guidance for design of GRP piping system layout..... | 40 |
| Annex B | (informative) Description and guidance on selection of jointing designs | 42 |
| Annex C | (informative) Guidance on material properties and stress/strain analysis | 47 |
| Annex D | (normative) Guidance on flexibility analysis..... | 49 |
| Annex E | (normative) Calculation of support stresses for large-diameter liquid-filled pipe | 59 |
| Annex F | (informative) Guidance on quantifying fire performance properties..... | 63 |
| Annex G | (informative) Static electricity | 68 |
| Annex H | (informative) Inspection strategy..... | 76 |
| Bibliography | | 79 |

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 14692-3 was prepared by Technical Committee ISO/TC 67, *Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries*, Subcommittee SC 6, *Processing equipment and systems*.

ISO 14692 consists of the following parts, under the general title *Petroleum and natural gas industries — Glass-reinforced plastics (GRP) piping*:

- *Part 1: Vocabulary, symbols, applications and materials*
- *Part 2: Qualification and manufacture*
- *Part 3: System design*
- *Part 4: Fabrication, installation and operation*

Introduction

The objective of this part of ISO 14692 is to ensure that piping systems, when designed using the components qualified in ISO 14692-2, will meet the specified performance requirements. These piping systems are designed for use in oil and natural gas industry processing and utility service applications. The main users of the document will be the principal, design contractors, suppliers contracted to do the design, certifying authorities and government agencies.

An explanation of the pressure terminology used in this part of ISO 14692 is given in ISO 14692-1.

Petroleum and natural gas industries — Glass-reinforced plastics (GRP) piping —

Part 3: System design

1 Scope

This part of ISO 14692 gives guidelines for the design of GRP piping systems. The requirements and recommendations apply to layout dimensions, hydraulic design, structural design, detailing, fire endurance, spread of fire and emissions and control of electrostatic discharge.

This part of ISO 14692 is intended to be read in conjunction with ISO 14692-1.

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.

ISO 14692-1:2002, *Petroleum and natural gas industries — Glass-reinforced plastics (GRP) piping — Part 1: Vocabulary, symbols, applications and materials*

ISO 14692-2:2002, *Petroleum and natural gas industries — Glass-reinforced plastics (GRP) piping — Part 2: Qualification and manufacture*

ISO 14692-4:2002, *Petroleum and natural gas industries — Glass-reinforced plastics (GRP) piping — Part 4: Fabrication, installation and operation*

BS 7159:1989 *Code of practice for design and construction of glass-reinforced plastics (GRP) piping systems for individual plants or sites*

ASTM E1118, *Standard practice for acoustic emission examination of reinforced thermosetting resin pipe (RTRP)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14692-1 apply.

4 Symbols and abbreviated terms

For the purposes of this part of ISO 14692, the symbols and abbreviated terms given in ISO 14692-1 apply.