

Spoolable Reinforced Plastic Line Pipe

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Contents

	Page
1 Scope.....	1
2 Normative References.....	1
3 Terms, Definitions, and Abbreviations.....	3
3.1 Terms and Definitions.....	3
3.2 Abbreviations.....	8
4 Materials.....	9
4.1 Materials Selection.....	9
4.2 Material Requirements.....	9
5 Qualification Program.....	16
5.1 Introduction.....	16
5.2 Qualification Requirements for Pipe and Field-Fittings.....	16
5.3 Pipe Qualification Test Procedures.....	20
5.4 Requalification.....	28
5.5 Retest Procedure.....	29
6 Process and Quality Assurance Requirements.....	29
6.1 Quality Management System.....	29
6.2 Extruded Polymer Layers.....	29
6.3 Reinforcement.....	30
6.4 Quality Assurance Tests.....	30
7 Dimensions, Tolerances, and Marking.....	32
7.1 Dimensions.....	32
7.2 Marking.....	33
7.3 Packaging.....	33
8 Documentation.....	34
8.1 Certification of Conformance.....	34
8.2 Quality Assurance Test Reports.....	34
8.3 Record Retention.....	34
8.4 Qualification Test Report.....	34
8.5 Project Information Checklist.....	34
8.6 Pipe Product Information.....	34
8.7 Transportation, Storage, Installation, and Maintenance Guidance.....	34
Annex A (informative) Project Application Information.....	35
Annex B (normative) Pipe Blowdown Test Procedure.....	37
Annex C (informative) Service Factors.....	38
Annex D (normative) Requirements for Cyclic Pressure Fluctuations.....	39
Annex E (informative) Regression Curve Terminology.....	41
Annex F (normative) Information to be Provided by the Pipe Manufacturer.....	43

Contents

	Page
Annex G (normative) Lower Prediction Bound Calculation	45
Bibliography.....	47

Figures

E.1	Regression Curve, LCL Curve, LPL Curve, and Use of the LCL_{RCRT} to Define MPR and MOP.....	42
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Tables

1	Polymer Material Cell Classification Standards	11
2	Property Requirements for Materials of Construction	11
3	Qualification Testing Requirements Pipe Using Steel Reinforcement	18
4	Qualification Testing Requirements for Pipe Using Non-Metallic Reinforcement	19
5	Summary of Changes Requiring Technical Justification and Partial Requalification	29
6	Steel Reinforcement Property Requirements	30
7	Sizing in Accordance with Nominal Diameter	32
A.1	Purchaser Information	35
G.1	Tabulation of $\left[t_{(1-\alpha, n-1)} \sqrt{1 + 1/n} \right]$ for Various Values of n with $\alpha = 0.025$	46

Spoolable Reinforced Plastic Line Pipe

1 Scope

This specification provides requirements for the manufacture and qualification of spoolable reinforced plastic line pipe in oilfield and energy applications, including transport of multiphase fluids, hydrocarbon gases, hydrocarbon liquids, oilfield production chemicals, and nonpotable water. Also included are performance requirements for materials, pipe, and fittings.

These products consist of a liner, a reinforcement layer consisting of helically wrapped steel or nonmetallic reinforcing elements, and an outer cover. The spoolable reinforced line pipe under this specification is capable of being spooled for storage, transport, and installation. For offshore use, additional requirements may apply and are not within the scope of this document.

This specification is limited to pipe and end fittings and couplings and does not relate to other system components and appurtenances. Where other system components (e.g., elbows, tees, valves) are of conventional construction, they will be governed by other applicable codes and practices.

Products manufactured and qualified to this specification are eligible for participation in the API Monogram Program.

2 Normative References

The following referenced documents are indispensable for the application of this document. All of these documents do not necessarily apply to all products conforming to this specification. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document applies (including any addenda/errata).

API Specification Q1, *Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry*

API Recommended Practice 15SIH, *Installation and Handling of Spoolable Reinforced Line Pipe*

API Recommended Practice 17B, *Recommended Practice for Flexible Pipe*

API 1104, *Standard for Welding Pipelines and Related Facilities*

ASME¹ B31.3, *Process Piping*

ASME BPVC, Section IX, *Welding and Brazing Qualifications*

ASTM² A370, *Standard Test Method and Definitions for Mechanical Testing of Steel Products*

ASTM A751, *Standard Test Methods, Practices, and Terminology for Chemical Analysis of Steel Products*

ASTM E746, *Standard Test Method for Brittleness Temperature of Plastics and Elastomers by Impact*

ASTM D385, *Standard Test Methods for Tire Cords, Tire Cord Fabrics, and Industrial Filament Yarns Made from Manufactured Organic Base Fibers*

ASTM D1598, *Test Method for Time-To-Failure of Plastic Pipe under Constant Internal Pressure*

¹ American Society of Mechanical Engineers, Two Park Avenue, New York, NY 10016-5990, www.asme.org

² ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, www.astm.org.