

API SC15 WG02 Spoolable Plastic Line Pipe

GTI Composite Pipe Workshop

17 July 2012



EXTREME PERFORMANCE VALUE DURABILITY

Presentation Outline

Working Group Goals

API 'SPEC' 15S Scope

API SC15 WG02 Structure and Membership

History of API RP 15S

Approaches by Other Parties (ISO, End Users, etc.)

Current Status

Timeline of Activities

Working Group Goals

SC15 WG02 is tasked with re-writing API RP 15S as a single performance based standard for all spoolable composite pipelines:

- Metal reinforced
- Fiber reinforced with or without matrix material
- Fabric reinforced
- Other materials

15S Scope

This Standard Specification provides requirements for the design, manufacture, qualification and application of spoolable reinforced plastic line pipe in oilfield and energy applications

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These products consist of continuous plastic line pipe with helically wrapped metallic and/or non-metallic reinforcing elements

...

They are continuous pipeline systems capable of being reeled for storage, transport and installation

...

This document contains performance requirements for materials, pipe and fittings

...

API Committee Structure

API

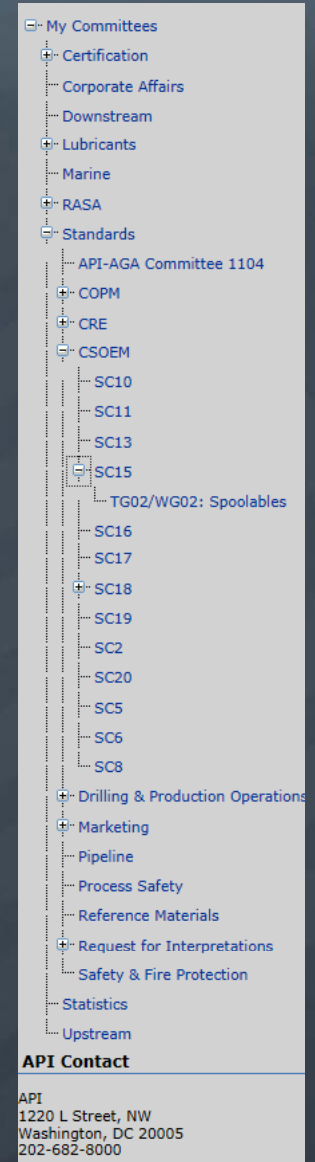
Standards

Committee on Standardization of Oilfield Equipment and Materials (CSOEM)

SC15 – Subcommittee of Fiberglass and Plastic Tubulars

- Spec 15HR, Specification for High Pressure Fiberglass Line Pipe
- Spec 15LR, Specification for Low Pressure Fiberglass Line Pipe
- RP 15TL4, Recommended Practice for the Care and Use of Fiberglass Tubulars
- RP 15CLT, Recommended Practice for Composite Lined Steel Tubular Goods
- Spec 15LE, Specification for Polyethylene (PE) Line Pipe
- RP 15S, Recommended Practice for Qualification of Spoolable Reinforced Plastic Line Pipe

TG02/WG02: Spoolable Plastic Line Pipe



TG02/WG02: Spoolable Plastic Line Pipe Members

Approximately 30 Members:

- Manufacturers:



- End Users:



- Suppliers/Labs:



- Trade Associations:



- Regulatory:



- Independent Consultants



History of API 15S Document

1999-2002:

Joint Industry Project (JIP) on “Implementation of Reinforced Thermoplastic Pipes in the Oil and Gas Industries”

**Professor Geoff Gibson, Centre for Composite Materials Engineering,
University of Newcastle upon Tyne**

2002- 2004:

**ISO Working Group, ISO/TC138/SC4/WG8 produced ISO TS 18226 (2004),
Reinforced Thermoplastic Piping Systems for Gaseous Fuels**

2006:

API RP 15S 1st Edition, Qualification of Spoolable Reinforced Plastic Line Pipe

2011:

Working Group initiated to rewrite 15S as an API Specification

Other Related Standards

- API: 15HR, 15LE, 17B, 17J, 17K
- ASTM: D2992, F2686, F2805
- CSA: Z662, Clause 13
- DNV: F201, F202
- ISO: 9080, 13628-2, 13628-11, 18226
- End user specifications (e.g. Shell DEP)



Current Status and Remaining Work

Document Outline

1. Scope
2. References
3. Definitions
4. Product Description / Material Requirements
5. Qualification Program
6. Process and Quality Assurance Requirements
7. Dimensions, Tolerances and Marking
8. Documentation
9. Handling, Storage and Transportation
- Appendices

Status

- Complete
- Complete during final editing
- Complete during final editing
- Complete
- ~70% Complete
- ~50% Complete
- ~25% Complete
- ~50% Complete
- 0% Complete
- ~10% Complete

Timeline for Remaining Activities

- Next meeting scheduled for September 10-12 to continue drafting document
- Tentatively plan to meet in late October or early November to finalize draft
- Goal is to complete the document by the end of 2012 for balloting by the SC15 membership
- SC15 Ballot in the First Quarter of 2013
- Anticipated Publication in the Second Quarter of 2013