

Integrity Management of Spoolable Reinforced Line Pipe

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Integrity Management of Spoolable Reinforced Line Pipe

1 Scope

This recommended practice is for integrity management of an existing API 15S asset including threat identification, identification of potential failure modes, risk assessment, testing requirements, initial and ongoing inspection practices, end-fitting and coupling inspection, potential mitigations, repair, and associated documentation.

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.

API Specification 15S, *Spoolable Reinforced Plastic Line Pipe*

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

3 Terms and Definitions

For the purposes of this document, the following terms and definitions apply.

3.1

blistering

Damage in the form of gas-filled pockets caused by the release of absorbed gas on depressurization within a solid polymer layer (e.g. polymeric liner).

3.2

brittle failure

A component failure mode which exhibits no visible (to the naked eye) permanent material deformation (stretching, elongation, or necking down) in the area of the break.

3.3

connector

Device used to provide a leak-tight (except to intentionally vent gas) structural connection between the end-fitting and adjacent piping (e.g. bolted flanges, clamped hubs, weld necks, and proprietary connectors).

3.4

coupling

A fitting developed for joining one section of pipe to another (e.g. in-line connector).

3.5

coupon

A test piece cut from a representative specimen.

3.6

cover

Protective outer sheath of the pipe.

3.7

cyclic loading

More than 7000 pressure cycles and $\Delta P/NPR > 6\%$ where ΔP is maximum to minimum amplitude.