

Recommended Practice for Flexible Pipe

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Introduction

Users of this recommended practice should be aware that further or differing requirements might be needed for individual applications. This recommended practice is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This may be particularly applicable where there is innovative or developing technology. Where an alternative is offered, the vendor should identify any variations from this recommended practice and provide details.

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Recommended Practice for Flexible Pipe

1 Scope

API 17B provides guidelines for the design, analysis, manufacture, testing, installation, and operation of flexible pipes and flexible pipe systems for onshore, subsea, and marine applications. API 17B supplements API 17J and API 17K, which specify minimum requirements for the design, material selection, manufacture, testing, marking, and packaging of unbonded and bonded flexible pipes, respectively.

API 17B applies to flexible pipe assemblies, consisting of segments of flexible pipe body with end fittings attached to both ends. Both bonded and unbonded pipe types are covered. In addition, API 17B applies to flexible pipe systems, including ancillary components.

The applications covered by API 17B are sweet and sour service production, including export and injection applications. API 17B applies to both static and dynamic flexible pipe systems, used as flowlines, risers, jumpers, downlines, and other temporary applications of flexible pipe. API 17B does not cover in general terms, the use of flexible pipes for offshore loading systems. Refer also to API 17K and Bibliographic Item [54] for offshore loading systems.

API 17B does not cover flexible pipes for use in choke and kill line or umbilical and control lines.

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 Recommended Practice 17C, *Recommended Practice for FL (Through Flowline) Systems*

API Specification 17J, *Specification for Unbonded Flexible Pipe*, 2014

API Specification 17K, *Specification for Bonded Flexible Pipe*

DNV OS-C501¹, *Composite Components*, October 2010

NACE MR0175², *Petroleum and natural gas industries—Materials for use in H₂S-containing environments in oil and gas production—Part 1: General principles for selection of cracking-resistant materials*.

3 Terms, Definitions, Acronyms, Abbreviations, and Symbols

3.1 Terms and Definitions

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

3.1.1

ancillary components

Components that are attached to the flexible pipe in order to perform one or more of the following functions:

- Control the flexible pipe behavior;

¹ DNV GL, Veritasveien 1, 1322 Hovik, Oslo, Norway, www.dnvgl.com.

² NACE International (formerly the National Association of Corrosion Engineers), 1440 South Creek Drive, Houston, Texas 77084-4906, www.nace.org.