Specification for Flexible Pipe Ancillary Equipment

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This standard is under the jurisdiction of the API Subcommittee on Subsea Production Systems. API Subcommittee 17 documents consists of the following

— RP 17A, *Design and Operation of Subsea Production Systems—General Requirements and Recommendations*
— RP 17B, *Recommended Practice for Flexible Pipe*
— RP 17C, *Recommended Practice on TFL (Through Flowline) Systems*
— Spec 17D, *Design and Operation of Subsea Production Systems—Subsea Wellhead and Tree Equipment*
— Spec 17E, *Specification for Subsea Umbilicals*
— Spec 17F, *Specification for Subsea Production Control Systems*
— RP 17G, *Recommended Practice for Completion/Workover Risers*
— RP 17H, *Remotely Operated Vehicle (ROV) Interfaces on Subsea Production Systems*
— Spec 17J, *Specification for Unbonded Flexible Pipe*
— Spec 17K, *Specification for Bonded Flexible Pipe*
— Spec 17L1, *Specification for Flexible Pipe Ancillary Equipment*
— RP 17L2, *Recommended Practice for Flexible Pipe Ancillary Equipment*
— RP 17M, *Recommended Practice on Remotely Operated Tool (ROT) Intervention Systems*
— RP 17N, *Recommended Practice for Subsea Production System Reliabilityand Technical Risk Management*
— RP 17O, *Recommended Practice for Subsea High Integrity Pressure Protection Systems (HIPPS)*
— RP 17P, *Subsea Structures and Manifolds* (in press)
— RP 17Q, *Subsea Equipment Qualification–Standardized Process for Documentation*

Contents

page

Introduction

This specification is the result of a Joint Industry Project to develop a worldwide industry standard for the design, material selection, manufacture, documentation, testing, marking and packaging of flexible pipe ancillary equipment. The objective of this specification is to provide an integrated approach, together with API 17B, API 17J, API 17K and API 17L2, to the design of flexible pipe systems. Therefore it is intended that this document be used in close conjunction with these documents.

Within this document, “shall” is used to state that a provision is mandatory; “should” is used to state that a provision is not mandatory, but is recommended as good practice; “may” is used to state that a provision is optional.

Systeme Internationale (SI) units are identified first when cited in the document. United States Customary (USC) units may be given in brackets after the SI units.

Specification for Flexible Pipe Ancillary Equipment

1 Scope

This specification defines the technical requirements for safe, dimensionally and functionally interchangeable flexible pipe ancillary equipment that is designed and manufactured to uniform standards and criteria.

Minimum requirements are specified for the design, material selection, manufacture, testing, documentation, marking and packaging of flexible pipe ancillary equipment, with reference to existing codes and standards where applicable. See API 17L2 for guidelines on the use of ancillary equipment.

The applicability relating to a specific item of ancillary equipment is stated at the beginning of the particular section for the ancillary equipment in question.

This specification applies to the following flexible pipe ancillary equipment:

— bend stiffeners;

— bend restrictors;

— bellmouths;

— buoyancy modules and ballast modules;

— subsea buoys;

— tethers for subsea buoys and tether clamps;

— riser and tether bases;

— clamping devices;

— piggy-back clamps;

— repair clamps;

— I/J-tube seals;

— pull-in heads/installation aids;

— connectors;

— load-transfer devices;

— mechanical protection;

— fire protection.

This specification may be used for bonded flexible pipe ancillary equipment, though any requirements specific to these applications are not addressed.