Recommended Practice for Wet and Dry Thermal Insulation of Subsea Flowlines and Equipment

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Suggested revisions are invited and should be submitted to the Standards Department, API, 200 Massachusetts Avenue, NW, Suite 1100, Washington, DC 20001, standards@api.org.

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1 General

1.1 Scope

This recommended practice (RP) provides guidance for the performance, qualification, application, quality control, handling, and storage requirements of wet and dry thermal insulation for subsea applications in the petroleum and gas industries. This guideline also covers the inspection of the insulation, and the repair of insulation defects.

Annex A specifies the minimum recommendations for the performance qualification testing and inspection testing requirements for wet insulation systems (insulations in direct contact with seawater).

Annex B specifies the minimum recommendations for the performance qualification testing and inspection testing requirements for dry insulation systems (insulations not in direct contact with seawater).

This document is not intended to address either installation procedures or proprietary fabrication of any particular insulation type.

This RP is not a prescriptive document. If agreed between company and supplier, prescriptive requirements for wet insulation systems presented in ISO 12736 could be used.

1.2 Applicability

This RP is applicable to the following and components such as:

— flowlines and risers;

— Christmas tree, valve block, and piping;

— manifold valves and pipework on subsea structures;

— jumpers (i.e. piping and bends);

— connectors and fittings;

— valves and chokes;

— Subsea Separators.

2 Normative References

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda) applies.

API Recommended Practice 5L1, *Recommended Practice for Railroad Transportation of Line Pipe*

API Recommended Practice 5LW, *Recommended Practice for Transportation of Line Pipe on Barges and Marine Vessels*

ASTM C165, *Standard Test Method for Measuring Compressive Properties of Thermal Insulations*

ASTM C167, *Standard Test Methods for Thickness and Density of Blanket or Batt Thermal Insulations*