Coiled Tubing, Snubbing, and Wireline Well Intervention Equipment

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Introduction

The U.S. customary unit (USC) system is used in this specification. Nominal sizes are shown as fractions in the inch system. The fractions and their decimal equivalents are equal and interchangeable. Metric conversions and inch dimensions in this specification are based on the original fractional inch designs. Functional dimensions have been converted into the metric system to ensure interchangeability of products manufactured in metric or inch systems; see also Annex C.

A "—" symbol when used in tables means that the applicable size, value, or dimension does not apply.

It is necessary that users of this specification be aware that further or differing requirements might be needed for individual applications. This specification is not intended to inhibit a vendor from offering, or the purchaser from accepting, alternative equipment or engineering solutions for the individual application. This can be particularly applicable where there is innovative or developing technology. Where an alternative is offered, it is the vendor's responsibility to identify any variations from this specification and provide details.

Coiled Tubing, Snubbing, and Wireline Well Intervention Equipment

1 Scope

This specification defines the requirements for performance, design, materials, testing and inspection, welding, marking, handling, storing, and shipping of surface-installed well intervention pressure control equipment used in coiled tubing and snubbing well intervention, well servicing and drilling operations, and wireline well intervention and well servicing operations in the oil and gas industry. It also defines service conditions in terms of pressure, temperature, and wellbore fluids for which the equipment will be designed.

This specification is applicable to and establishes requirements for the following:

a) ram-type coiled tubing pressure control equipment;

b) ram-type snubbing pressure control equipment;

c) ram-type wireline pressure control equipment;

d) ram blocks, packers, top seals, and rear seals.

This specification does not apply to field use or field testing of the coiled tubing, snubbing, or wireline well intervention pressure control equipment. This specification also does not apply to repair of equipment except for weld repair in conjunction with manufacturing.

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 Specification 5ST, *Specification for Coiled Tubing*

API Specification 6A, *Specification for Wellhead and Christmas Tree Equipment*

API Specification 9A, *Specification for Wire Rope*

API Specification 16A, *Specification for Drill-through Equipment*

API Specification 20E, *Alloy and Carbon Steel Bolting for Use in the Petroleum and Natural Gas Industries*

API Specification 20F, *Corrosion-Resistant Bolting for Use in the Petroleum and Natural Gas Industries*

API Specification 20H, *Heat Treatment Services—Batch Type for Equipment Used in the Petroleum and Natural Gas Industry*

API Specification 20N, *Heat Treatment Services—Continuous Line for Equipment Used in the Petroleum and Natural Gas Industry*

API Standard 6X, *Design Calculations for Pressure-containing Equipment*

ASME *Boiler and Pressure Vessel Code*, Section V, Article 4, 2021

ASME *Boiler and Pressure Vessel Code*, Section VIII, Division 1

ASME *Boiler and Pressure Vessel Code,* Section IX, Articles I, II, III, and IV