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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 21267-2024

Replacing GB/T 21267-2017

**Petroleum and natural gas industries - Procedures for testing
casing and tubing connections**

石油天然气工业 套管及油管螺纹连接试验程序

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 21267-2017 "Test Procedure for Threaded Connections of Casing and Tubing in the Petroleum and Natural Gas Industry" and Compared with GB/T 21267-2017, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2017 edition);
- b) Changed terms and definitions (see Chapter 3, Chapter 3 of the 2017 edition);
- c) All test matrices, test load paths and load point VMEs have been changed (see 4.1, 5.2 and 7.3 of the 2017 edition);
- d) The pressure drop method for leak detection and measurement has been changed, and an example of a device for high temperature TS-A (external pressure) has been added (see 4.1, 2017 edition).
- e) The data collection and test methods were changed, and the allowable load fluctuation range during the load holding period and the curvature-based bending moment control were increased.
- System, etc. (see 4.1, 5.9 of the 2017 edition);
- f) The test results have been changed to meet the requirements for the applicable level of the joint (see 4.1, 5.3.2 of the 2017 edition);
- g) Changed the relevant requirements for the test load envelope test (see 4.1, 7.3 of the 2017 edition);
- h) Change the joint data table to the joint specification table and sample data table (see 4.1, 4.2 and Appendix A of the 2017 edition);

- i) The test report has been changed (see 4.1, 4.5, Chapter 9 of the 2017 edition);
- j) Added the nominal joint performance envelope (see 4.2);
- k) Added anisotropy reference envelope (see 4.3);
- l) Added near-yield load effect (see 4.4);
- m) Two secondary tests (CALI-E and CALIII Room Temperature A) were deleted (see 5.1 of the 2017 edition).

This document is modified to adopt ISO 13679:2019 "Test procedures for threaded connections of casing and tubing for the petroleum and natural gas industry".

This document has the following structural adjustments compared to ISO 13679:2019.

--- Adjust the supplementary requirements for API RPI5C5.2017 in the scope of Chapter 1 to 4.1;

--- 4.2~4.5 correspond to 4.4~4.7 in ISO 13679:2019, and 4.1~4.3 in ISO 13679:2019 are deleted.

The technical differences between this document and ISO 13679:2019 and their reasons are as follows.

--- Deleted 4.1 and 4.2 in ISO 13679:2019 because the contents of 4.1 and 4.2 are explained in Chapter 1.

Avoid duplication;

--- Deleted 4.3 in ISO 13679:2019 because the content of 4.3 is included in Chapter 2.

The following editorial changes were made to this document.

--- The content in the scope of Chapter 1 regarding the distinction between tubing and casing based on use rather than outside diameter appears in the form of a note;

---Removed references.

1 Scope

This document specifies test procedures for evaluating the galling tendency, sealing performance, and structural integrity of threaded joints in tubing and casing.

This document applies to joint evaluation tests for tubing and casing.

Note: Tubing and casing are differentiated by their use rather than their outside diameter.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

tions)

3 Terms and definitions

For this document, the terms and definitions defined in API RP5C5.2017 and listed below apply.

near-yield loading effects Under stresses lower than the yield strength of the material, the plastic strain range of the cyclically softened material undergoes a cyclic growth effect.

The manufacturer specifies the range of joint performance based on pipe geometry and material properties.

4.1 General

This document supplements API RP5C5.2017 and specifies other requirements beyond those of API RP5C5.2017.

4.2 Nominal joint performance envelope

Replace the first paragraph of 4.3 in API RP5C5.2017 with.

Before starting the test, the manufacturer shall provide a test plan. The plan shall include a joint specification sheet stating the expected test evaluation level.

The manufacturer shall provide a representative drawing and documentation of the cross-sectional area of the joint.

The manufacturer shall provide the joint component parameters and maintenance procedures.

In addition, the manufacturer should identify any specific pipe body properties required to evaluate the joint, such as minimum 90% nominal wall thickness, high collapse resistance or controlled yield strength.

Degrees, etc.

Replace A.1.5 in API RP5C5.2017 with.