

Corrosion-resistant Bolting for Use in the Petroleum and Natural Gas Industries

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Corrosion-resistant Bolting for Use in the Petroleum and Natural Gas Industries

1 Scope

1.1 Purpose

This standard specifies requirements for the qualification, production, and documentation of corrosion-resistant bolting used in the petroleum and natural gas industries.

1.2 Applicability

This standard applies when referenced by an applicable API equipment standard or otherwise specified as a requirement for compliance.

1.3 Bolting Specification Levels (BSL)

This standard establishes requirements for two bolting specification levels (BSL). These two BSL designations define different levels of technical, quality, and qualification requirements: BSL-2 and BSL-3. The BSLs are numbered in increasing levels of requirements in order to reflect increasing technical, quality, and qualification criteria. BSL-2 and BSL-3 are intended to be comparable to BSL-2 and BSL-3, as found in API 20E. BSL-1 is omitted from this standard.

1.4 Bolting Types for Qualification

This standard covers the following product forms, processes, and sizes:

- a) machined studs;
- b) machined bolts, screws, and nuts;
- c) cold-formed bolts, screws, and nuts with cut or cold-formed threads;
- d) hot-formed bolts and screws <1.5 in. (38.1 mm) nominal diameter;
- e) hot-formed bolts and screws ≥1.5 in. (38.1 mm) nominal diameter;
- f) roll threaded studs, bolts, and screws <1.5 in. (38.1 mm) diameter;
- g) roll threaded studs, bolts, and screws ≥1.5 in. (38.1 mm) diameter;
- h) hot-formed nuts <1.5 in. (38.1 mm) nominal diameter;
- i) hot-formed nuts ≥1.5 in. (38.1 mm) nominal diameter.

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 applies (including any addenda/errata).

API Specification Q1, *Specification for Quality Management System Requirements for Manufacturing Organizations for the Petroleum and Natural Gas Industry*