Casing and Tubing

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In the interests of worldwide application of this standard, the API Subcommittee on Tubular Goods (SC5) has decided, after detailed technical analysis, that certain documents listed in Section 2 and prepared by API SC5 or other technical committees are interchangeable in the context of the relevant requirement with the relevant document prepared by the International Organization for Standardization or the ASTM International. These latter documents are cited in the running text following the API reference and preceded by “or,” for example, “API XXXX or ISO YYYY” or “ISO YYYY or ASTM ZZZZ.” Application of an alternative document cited in this manner may lead to technical results different from the use of the preceding API reference. However, both results are acceptable, and these documents are thus considered interchangeable in practice.

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Casing and Tubing

1 Scope

1.1 Coverage

This standard specifies the technical delivery conditions for steel pipes (casing, tubing, and pup joints), couplings, coupling stock, coupling material, and accessory material.

For products covered by this standard, the sizes, masses, and wall thicknesses, as well as grades and applicable end-finishes, are provided. API 5L pipe may be ordered as casing in accordance with API 5C6.

By agreement between the purchaser and the manufacturer, this standard can also be applied to other plain-end pipe sizes and wall thicknesses.

1.2 Applicability—Connections

This standard is applicable to the following connections in accordance with API 5B:

— short round thread casing (SC);

— long round thread casing (LC);

— buttress thread casing (BC);

— non-upset tubing (NU);

— external upset tubing (EU);

— integral tubing (IJ).

For such connections, this standard specifies the technical delivery conditions for couplings and thread protection.

This standard also can be applied to products with connections not covered by API standards.

This standard is not applicable to threading requirements.

NOTE Dimensional requirements on threads and thread gauges, stipulations on gauging practice, gauge specifications, and instruments and methods for inspection of threads are given in API 5B.

1.3 Applicability—Grades

The products to which this standard is applicable include the following grades: H40, J55, K55, N80 (all types), L80 (all types), C90, R95, T95, P110, C110, C125, and Q125. In this standard, when the symbol L80 is used alone, it is applicable to Grades L80 Type 1, L80 3Cr, L80 9Cr, and L80 13Cr; when the symbol N80 is used alone, it is applicable to Grades N80 Type 1 and N80Q.

Caution—Any sulfide stress cracking (SSC) test performed as part of this standard is for quality control purposes only and does not qualify the material for any specific sour service application. NACE MR0175/ISO 15156 provides guidelines for material selection in H_2S (sour) service environment for resistance to cracking; however, grades are not necessarily immune to cracking under all service conditions. It is the product user's responsibility to ensure that the product is suitable for the intended application with consideration of all environmental degradation threats during both normal operation and system upsets.