Designation: B722 – 06

Standard Specification for Nickel-Chromium-Molybdenum-Cobalt-Tungsten-Iron-Silicon Alloy (UNS N06333) Seamless Pipe and Tube[1]

This standard is issued under the fixed designation B722; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope*

1.1 This specification covers alloy N06333 in the form of hot-finished and cold-finished seamless pipe and tube intended for heat-resisting applications and general corrosive service. The general requirements for pipe and tube are covered in Specification B829.

1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to become familiar with all hazards including those identified in the appropriate Material Safety Data Sheet (MSDS) for this product/material as provided by the manufacturer, to establish appropriate safety and health practices, and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

B829 Specification for General Requirements for Nickel and Nickel Alloys Seamless Pipe and Tube

3. General Requirement

3.1 Material furnished under this specification shall conform to the applicable requirements of Specification B829 unless otherwise provided herein.

4. Ordering Information

4.1 It is the responsibility of the purchaser to specify all requirements that are necessary for material ordered under this specification. Examples of such requirements include but are not limited to the following:

TABLE 1 Mechanical Properties

Tensile Strength, min psi (MPa)	Yield Strength, 0.2 % offset, min psi (MPa)	Elongation in 2 in. or 50 mm, or 4D, min. %	Hardness[A]
80 000 (551)	35 000 (241)	30	75 to 95 HRB

[A] Hardness values are informative only and not to be construed as the basis for acceptance.

4.1.1 Alloy name or UNS number.
4.1.2 ASTM designation and year of issue.
4.1.3 Quantity (feet or number of pieces).
4.1.4 *Dimensions*:
4.1.4.1 Pipe size.
4.1.4.2 Tube dimensions (outside or inside diameter and nominal wall thickness).
4.1.4.3 Length (specific or random).
4.1.5 *Hydrostatic Test or Nondestructive Electric Test*—Specify type of test (see 5.2).
4.1.6 *Certification*—State if certification is required.
4.1.7 *Samples for Product (Check) Analysis*—State whether samples for product (check) analysis should be furnished.
4.1.8 *Purchaser Inspection*—If purchaser wishes to witness tests or inspection of material at place of manufacture, the purchase order must so state indicating which tests or inspections are to be witnessed.

5. Mechanical and Other Requirements

5.1 *Tension Test*—The mechanical properties of the material at room temperature shall conform to those shown in Table 1. The sampling and specimen preparation are covered in Specification B829.

5.2 *Hydrostatic or Nondestructive Electric Test*—Each pipe or tube shall be subjected to either the hydrostatic test or to the nondestructive electric test. The type of test to be used shall be at the option of the manufacturer, unless otherwise specified in the purchase order.

6. Dimensions and Permissible Variations

6.1 The requirements of Specification B829 will apply except for hot-finished pipe and tube dimensional requirements shown in Table 2.

[1] This specification is under the jurisdiction of ASTM Committee B02 on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee B02.07 on Refined Nickel and Cobalt and Their Alloys.

Current edition approved Dec. 1, 2006. Published January 2007. Originally approved in 1983. Last previous edition approved in 2002 as B722 - 02. DOI: 10.1520/B0722-06.

[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

***A Summary of Changes section appears at the end of this standard.**