



Designation: B 673 – 04

Standard Specification for UNS N08904, UNS N08925, UNS N08354, and UNS N08926 Welded Pipe¹

This standard is issued under the fixed designation B 673; 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 UNS N08904, UNS N08925, UNS N08354, and UNS N08926* welded pipe for general corrosion applications.

1.2 This specification covers pipe sizes in schedules shown in Table 1.

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

1.4 *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 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

B 775 Specification for General Requirements for Nickel and Nickel Alloy Welded Pipe

2.2 *ANSI Standards:*³

B2.1 Pipe Threads

B31.10 Power Piping

B36.10 Welded and Seamless Wrought Steel Pipe

B36.19 Stainless Steel Pipe³

3. Classification

3.1 *Class 1*—Welded, cold worked, solution treated, and nondestructively tested in accordance with 8.3.1.

3.2 *Class 2*—Welded, cold worked, solution treated, and nondestructively tested in accordance with 8.3.2.

3.3 *Class 3*—As welded, solution treated, and nondestructively tested in accordance with 8.3.1.

4. General Requirement

4.1 Material furnished under this specification shall conform to the applicable requirements of Specification B 775 unless otherwise provided herein.

5. Ordering Information

5.1 Orders for material under this specification should include the following information:

5.1.1 Alloy name or UNS number,

5.1.2 *Class*,

5.1.3 *Quantity* (feet or number of lengths),

5.1.4 *Size* (nominal size or outside diameter and schedule number or average wall thickness),

5.1.5 *Length*—Specify cut length or random,

5.1.6 *Certification*—State if certification or a report of test results is required,

5.1.7 *Purchaser Inspection*—State which tests or inspections are to be witnessed,

5.1.8 *Ends*—Plain ends cut and deburred will be furnished, unless otherwise specified, and

5.1.9 *Samples for Product (Check) Analysis*—State whether samples shall be furnished.

6. Materials and Manufacture

6.1 Pipe shall be made from flat-rolled alloy by an automatic welding process with no addition of filler metal. Subsequent to welding and before final solution treatment, Class 1 and Class 2 material shall be cold worked either in both weld and base metal or in weld metal only.

NOTE 1—The recommended heat treatment shall consist of heating to a temperature of 1985 to 2100°F [1085 to 1150°C] for UNS N08904, 1975 to 2150°F [1080 to 1180°C] for UNS N08354, or 2010 to 2100°F [1100 to 1150°C] for UNS N08925 and UNS N08926, followed by quenching in water or rapid cooling by other means.

6.2 Pipe shall be furnished with oxide removed. When solution treatment is performed in a protective atmosphere, descaling is not necessary.

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.

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* New designation established in accordance with ASTM E 527 and SAE J1086, Practice for Numbering Metals and Alloys (UNS).

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.

³ Available from American National Standards Institute, 25 W. 43rd St., 4th Floor, New York, NY 10036.