



Designation: B 723 – 00

Standard Specification for Nickel-Chromium-Molybdenum-Cobalt-Tungsten-Iron-Silicon Alloy (UNS N06333) Welded Pipe¹

This standard is issued under the fixed designation B 723; 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 reappraisal. A superscript epsilon (ε) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This specification covers wrought alloy UNS N06333 in the form of welded pipe intended for heat-resisting applications and general corrosive service.

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 establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

B 775 Specification for General Requirements for Nickel and Nickel Alloy Seamless and Welded Pipe²

B 718 Specification for Nickel-Chromium-Molybdenum-Cobalt-Tungsten-Iron-Silicon Alloy (UNS N06333) Plate, Sheet, and Strip²

3. General Requirement

3.1 Material furnished in accordance with this specification shall conform to the applicable requirements of the current edition of Specification **B 775** unless otherwise provided herein.

4. Ordering Information

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

4.1.1 Alloy name or UNS number.

4.1.2 ASTM designation and year of issue.

4.1.3 Condition (temper) (**Table 1**).

4.1.4 *Dimensions:*

4.1.4.1 Nominal pipe size or outside diameter and schedule number or nominal wall thickness.

4.1.4.2 Length (specific or random).

4.1.5 Quantity (feet or metres, or number of pieces).

4.1.6 *Certification*— State if certification or a report of test results 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. Material and Manufacture

5.1 The pipe shall be made from flat-rolled alloy conforming to Specification **B 718**, by an automatic welding process with no addition of filler metal.

5.2 Pipe shall be furnished annealed after welding, with oxide removed. When final heat treatment is performed in a protective atmosphere, descaling is not necessary.

6. Chemical Requirements

6.1 The material shall conform to the requirements as to chemical composition specified in **Table 1**.

6.2 If a product (check) analysis is performed by the purchaser, the material shall conform to the product (check) analysis variations in **Table 1** of Specification **B 775**.

7. Mechanical and Other Requirements

7.1 The mechanical properties of the material at room temperature shall conform to those shown in **Table 2**.

7.2 *Flattening Test*— One flattening test shall be made on one end of one pipe from each lot.

7.3 *Nondestructive Test Requirements:*

7.3.1 Pipe shall be subjected to a pressure test or nondestructive electric test at the manufacturer's option.

8. Dimensions and Permissible Variations

8.1 *Lengths*—Pipe lengths shall be in accordance with the following regular practice.

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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² *Annual Book of ASTM Standards*, Vol 02.04.