



Designation: B 676 – 02

## Standard Specification for UNS N08367 Welded Tube<sup>1</sup>

This standard is issued under the fixed designation B 676; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 This specification covers UNS N08367\* welded tube for general corrosion applications.

1.2 This specification covers outside diameter and nominal wall tube.

1.2.1 The tube sizes covered by this specification are  $\frac{1}{8}$  to 5 in. (3.2 to 127 mm) in outside diameter and 0.015 to 0.320 in. (0.38 to 8.13 mm), inclusive, in wall thickness.

1.3 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses 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:*

B 751 Specification for General Requirements for Nickel and Nickel Alloy Welded Tube<sup>2</sup>

B 899 Terminology Relating to Non-ferrous Metals and Alloys<sup>2</sup>

### 3. Terminology

3.1 Terms defined in Terminology B 899 shall apply unless otherwise defined in this standard.

### 4. General Requirement

4.1 Material furnished in accordance with this specification shall conform to the applicable requirements of Specification B 751 unless otherwise provided herein.

### 5. Classification

5.1 *Class 1*—Welded, cold worked, solution treated, and each piece of each lot subjected to one of the following four tests: hydrostatic, pneumatic (air underwater), eddy current, or ultrasonic.

5.2 *Class 2*—Welded, cold worked, solution treated, and each piece of each lot leak tested (hydrostatic or pneumatic) plus electric tested (eddy current or ultrasonic).

TABLE 1 Chemical Requirements

Element	Composition Limits, %
	N08367
Carbon	0.030 max
Manganese	2.00 max
Silicon	1.00 max
Phosphorus	0.040 max
Sulfur	0.030 max
Chromium	20.00 to 22.00
Nickel	23.50 to 25.50
Molybdenum	6.00 to 7.00
Nitrogen	0.18 to 0.25
Iron <sup>A</sup>	remainder
Copper	0.75 max

<sup>A</sup> Iron shall be determined arithmetically by difference.

### 6. Ordering Information

6.1 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:

6.1.1 Alloy name or UNS number,

6.1.2 ASTM designation and year of issue,

6.1.3 Dimensions:

6.1.3.1 Outside diameter and nominal wall thicknesses,

NOTE 1—Tube produced to outside diameter and minimum wall thickness may be furnished upon agreement between the manufacturer and the purchaser.

6.1.3.2 Length (specific or random),

6.1.4 Class (Section 5),

6.1.5 Quantity (feet or number of pieces),

6.1.6 *Certification*—State if certification is required,

6.1.7 *Samples for Product (Check) Analysis*—State whether samples for product (check) analysis should be furnished, and

6.1.8 *Purchaser Inspection*—If the purchaser wishes to

<sup>1</sup> 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 Oct. 10, 2002. Published December 2002. Originally published as B 676 – 80. Last previous edition B 676 – 97.

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

<sup>2</sup> *Annual Book of ASTM Standards*, Vol 02.04.