Standard Specification for
Welded UNS N08120, UNS N08800, UNS N08810, and
UNS N08811 Alloy Tubes1

This standard is issued under the fixed designation B515; 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 welded UNS N08120, UNS
N08800, UNS N08810 and UNS N08811* alloy boiler, heat
exchanger, and condenser tubes for general corrosion resisting
and low or high-temperature service.
1.2 This specification covers tubes 1/8 to 5 in. (3.18 to 127
mm), inclusive, in outside diameter and 0.015 to 0.500 in. (0.38
to 12.70 mm), inclusive, in wall thickness. Table 2 of Specifi-
cation B751 lists the dimensional requirements of these sizes.
Tubes having other dimensions may be furnished provided
such tubing complies with all other requirements of this
specification.
1.3 The values stated in inch-pound units are to be regarded
as standard. The values given in parentheses are mathematical
conversions to SI units that are provided for information only
and are not considered standard.
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 (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
B751 Specification for General Requirements for Nickel and
Nickel Alloy Welded Tube

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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 E527 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.

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6.3 *Flattening Test*—A flattening test shall be made on each end of one tube per lot. Superficial ruptures resulting from surface imperfections shall not be cause for rejection.

6.4 *Flange Test*—A flange test shall be made on each end of one tube per lot.

6.5 *Nondestructive Test Requirements*:

6.5.1 *Class 1*—Each piece of each lot shall be subject to one of the following four tests: hydrostatic, pneumatic (air underwater), eddy current, or ultrasonic.

6.5.2 *Class 2*—Each piece in each lot shall be subjected to a leak test and an electric test as follows:

6.5.2.1 *Leak Test*—Hydrostatic or pneumatic (air underwater).

6.5.2.2 *Electric Test*—Eddy current or ultrasonic.

6.6 The manufacturer shall have the option to test Class 1 or Class 2 and select the nondestructive test methods, if not specified by the purchaser.

7. *General Requirements*

7.1 Material furnished under this specification shall conform to the applicable requirements of the current edition of Specification B751 unless otherwise provided herein.

8. *Keywords*

8.1 UNS N08120; UNS N08800; UNS N08810; UNS N08811; welded tube