Designation: A 524 – 96 (Reapproved 2001)

Standard Specification for Seamless Carbon Steel Pipe for Atmospheric and Lower Temperatures[1]

This standard is issued under the fixed designation A 524; 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[2] covers seamless carbon steel pipe intended primarily for service at atmospheric and lower temperatures, NPS ⅛ to 26 inclusive, with nominal (average) wall thickness as given in ANSI B 36.10. Pipe having other dimensions may be furnished, provided such pipe complies with all other requirements of this specification. Pipe ordered to this specification shall be suitable both for welding, and for bending, flanging, and similar forming operations.

1.2 The values stated in inch-pound units are to be regarded as the standard.

NOTE 1—The dimensionless designator NPS (nominal pipe size) has been substituted in this standard for such traditional terms as "nominal diameter," "size," and "nominal size".

1.3 The following hazard caveat applies to the test methods portion, Section 16, only. *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:*

A 530/A 530M Specification for General Requirements for Specialized Carbon and Alloy Steel Pipe[3]

E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications[4]

2.2 *American National Standards Institute Standard:*

B36.10 Welded and Seamless Wrought Steel Pipe[5]

3. Ordering Information

3.1 Orders for material under this specification should include the following, as required, to describe the desired material adequately:

3.1.1 Quantity (feet or number of lengths),

3.1.2 Name of material (seamless carbon steel pipe),

3.1.3 Grade (Table 1 and Table 2),

3.1.4 Manufacture (hot finished or cold drawn),

3.1.5 Size (either nominal wall thickness and weight class or schedule number, or both, or outside diameter and nominal wall thickness, ANSI B36.10),

3.1.6 Length (17),

3.1.7 Optional requirements (Section 8 and Section 11 of Specification A 530/A 530M),

3.1.8 Test report required (Certification Section of Specification A 530/A 530M),

3.1.9 Specification designation,

3.1.10 End use of material, and

3.1.11 Special requirements.

4. General Requirements

4.1 Material furnished to this specification shall conform to the applicable requirements of the current edition of Specification A 530/A 530M unless otherwise provided herein.

5. Materials and Manufacture

5.1 *Process*:

5.1.1 The steel shall be killed steel made by one or more of the following processes: open-hearth, electric-furnace, or basic-oxygen.

5.1.2 The steel shall be made to fine grain practice.

5.1.3 Steel may be cast in ingots or may be strand cast. When steel of different grades are sequentially strand cast, identification of the resultant transition material is required. The producer shall remove the transition material by any established procedure that positively separates the grades.

5.1.4 Pipe NPS 1½ and under may be either hot finished or cold drawn.

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[1] This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel, and Related Alloys, and is the direct responsibility of Subcommittee A01.09 on Carbon Steel Tubular Products.

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[2] For ASME Boiler and Pressure Vessel Code Applications see related Specification SA-524 in Section II of that Code.

[3] *Annual Book of ASTM Standards*, Vol 01.01.

[4] *Annual Book of ASTM Standards*, Vol 14.02.

[5] Available from American National Standards Institute, 11 West 42nd St., 13th Floor, New York, NY 10036.

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