Designation: A368 – 95a (Reapproved 2019)

Standard Specification for Stainless Steel Wire Strand[1]

This standard is issued under the fixed designation A368; 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 stainless steel wire strand composed of a multiplicity of round wires and suitable for use as guy wires, overhead ground wires, and similar purposes.

1.2 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.

1.3 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

A555/A555M Specification for General Requirements for Stainless Steel Wire and Wire Rods

A751 Test Methods, Practices, and Terminology for Chemical Analysis of Steel Products

3. Ordering Information

3.1 It is the responsibility of the purchaser to specify all requirements that are necessary for material ordered under this specification. Such requirements may include, but are not limited to, the following:

3.1.1 Quantity (length of strand or weight of quantity ordered, or both; see 13.1 and Table 1),

3.1.2 Name of material (stainless steel),

3.1.3 Form (wire strand in coils or on reels),

3.1.4 Applicable dimensions (for nominal strand diameter, see Table 1),

3.1.5 Number of wires per strand (Table 1),

3.1.6 Minimum breaking strength (medium or high strength),

3.1.7 Type designation (see Section 7),

3.1.8 ASTM designation, and date of issue, and

3.1.9 Special requirements, if any.

NOTE 1—A typical ordering description is as follows: 1000 ft, stainless steel 7-wire strand, 7/16-in. diameter, medium strength, on reel, Type 302, ASTM A368 dated _____.

4. General Requirements for Delivery

4.1 In addition to the requirements of this specification, all requirements of the current edition of Specification A555/A555M shall apply. Failure to comply with the general requirements of Specification A555/A555M constitutes nonconformance with this specification.

5. Stranding

5.1 Three-wire strand shall have a left lay with a uniform pitch of not less than 10 nor more than 16 times the nominal diameter of the strand. Seven-wire strand and the outer layer of 19-wire strand, shall have a left lay with a uniform pitch of not less than 12 nor more than 16 times the nominal diameter of the strand. A left lay is defined as a counter-clockwise twist away from the observer. All wires shall be stranded with uniform tension. Stranding shall be sufficiently close to ensure no appreciable reduction in diameter when stressed to 10 % of the specified strength.

5.2 All wires in the strand shall lie naturally in their true positions in the completed strand, and when the strand is cut, the ends shall remain in position or be readily replaced by hand and then remain in position. This may be accomplished by any means or process, such as preforming, post forming, or form setting.

6. Joints

6.1 There shall be no strand joints or strand splices in any length of the completed strand.

6.2 In 3-wire strand, there shall be no joints in the individual wires.

6.3 In 7-wire strand, joints in individual wires shall be acceptable provided there is not more than one joint in any 150-ft (46-m) section of the completed strand and the location

[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 A01.17 on Flat-Rolled and Wrought Stainless Steel.

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[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.