



Designation: A 899-91 (Reapproved 2002) Designation: A 899 - 91 (Reapproved 2007)

Standard Specification for Steel Wire, Epoxy-Coated¹

This standard is issued under the fixed designation A 899; 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 steel wire in the size range of 0.120 to 0.500 in. (3.05 to 12.7 mm) with three classes of protective epoxy coating, in coils, for general use. Class A coating is intended for use for moderate corrosion protection, Class B coating for more severe protection, and Class C for severe corrosion and abrasion protection.

NOTE 1—The coating applicator is identified throughout this specification as the manufacturer.

1.2 The values stated in inch-pound units are to be regarded as the standard. The SI units given in parentheses are for information only.

2. Referenced Documents

2.1 ASTM Standards:²

A 510 Specification for General Requirements for Wire Rods and Coarse Round Wire, Carbon Steel

A 775/A 775M Specification for Epoxy-Coated Reinforcing Steel Reinforcing Bars

A 853 Specification for Steel Wire, Carbon, for General Use

G 12 Test Method for Nondestructive Measurement of Film Thickness of Pipeline Coatings on Steel

3. Ordering Information

3.1 The purchaser shall specify the following:

3.1.1 Wire size (the nominal diameter of the coated wire),

3.1.2 Quantity,

3.1.3 Class of coating, and

3.1.4 Method of packaging, such as, coils, coils on steel reels, etc.

3.2 The purchaser may specify the following if desired:

3.2.1 Requirements for certification (see 14.1),

3.2.2 Requirements for patching material (see 4.3),

3.2.3 Specific requirements for test frequency (see 8.1), and

3.2.4 Requirements for outside inspection of manufacturing plant.

NOTE 2—A typical ordering description for wire is as follows: 40 000 lb of epoxy coated wire, ASTM A 853, 0.148 in. diameter, Grade 1018 with a Class A epoxy coating in 1000 lb coils on steel reels to ASTM A 899.

4. Materials and Manufacture

4.1 Steel wire to be coated shall meet the requirements of the purchaser or the requirements of an applicable general wire specification such as Specification A 510 and Specification A 853, and shall be free of surface contaminants such as oil, grease, or paint when received at the manufacturer's plant and prior to cleaning and coating.

4.2 The coating material shall meet the requirements listed in Annex A1 of Specification A 775/A 775M/A775M.

4.2.1 If specified in the order, a written certification shall be furnished to the purchaser that properly identifies the number of each batch of coating material used in the order, material, quantity represented, date of manufacture, name and address of manufacturer, and a statement that the supplied coating material meets the requirements of Annex A1 of Specification A 775/A 775M/A775M.

4.3 If specified in the order, patching material, compatible with the coating material and meeting the requirements of Annex A1

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 A01.03 on Steel Rod and Wire.

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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.