



Designation: A 821/A 821M – 939

Standard Specification for Steel Wire, Hard Drawn for Prestressing Concrete Tanks¹

This standard is issued under the fixed designation A 821/A 821M; 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 uncoated, high-strength, hard-drawn steel wire for use in the manufacture of prestressed concrete tanks and similar structures. In application, the wire is continuously wrapped on the structure maintaining tension by a device employing a wire drawing die, or mechanical tensioning system without redrawing.

1.2 This specification is applicable only to the condition of the wire as delivered to the user. It is not applicable to the properties or condition of the wire after application.

1.2.1 Type A wire is to be tensioned by drawing through a wire drawing die or by a mechanical system without redrawing.

1.2.2 Type B wire is drawn to finished size by the manufacturer for tensioning by a mechanical system without redrawing.

NOTE 1—Type A wire, when tensioned by drawing through a die, may not function properly if the user does not ensure that during application the surface of the wire is free of rust and foreign materials that can be detrimental to good wire drawing practice. Further, the user should ensure that proper wire drawing techniques are followed, including adequate lubrication, cooling, and proper die mechanics.

1.3 The values stated in either inch-pound or SI units are to be regarded as the standard. Within the text, the inch-pound units are shown in parentheses. The values given stated in parentheses each system are not exact equivalents; therefore, each system must be used independently of the other. Combining values from the two systems may result in nonconformance with the specification.

2. Referenced Documents

2.1 *ASTM Standards:*

¹ This specification is under the jurisdiction of ASTM Committee A-1 on Steel, Stainless Steel, and Related Alloys and is the direct responsibility of Subcommittee A01.05 on Steel Reinforcement.

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