



Designation: **A 618/A 618M – 014**

Standard Specification for Hot-Formed Welded and Seamless High-Strength Low-Alloy Structural Tubing¹

This standard is issued under the fixed designation A 618/A 618M; 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.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope*

1.1 This specification covers grades of hot-formed welded and seamless high-strength low-alloy square, rectangular, round, or special shape structural tubing for welded, riveted, or bolted construction of bridges and buildings and for general structural purposes. When the steel is used in welded construction, the welding procedure shall be suitable for the steel and the intended service.

1.2 Grade II has atmospheric corrosion resistance equivalent to that of carbon steel with copper (0.20 minimum Cu). Grades Ia and Ib have atmospheric corrosion resistance substantially better than that of Grade II (Note 1). When properly exposed to the atmosphere, Grades Ia and Ib can be used bare (unpainted) for many applications. When enhanced corrosion resistance is desired, Grade III, copper limits may be specified.

NOTE 1—For methods of estimating the atmospheric corrosion resistance of low alloy steels see Guide G 101 or actual data.

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

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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*A Summary of Changes section appears at the end of this standard.