



**Designation: A 36/A 36M – 03**

## **Standard Specification for Carbon Structural Steel<sup>1</sup>**

This standard is issued under the fixed designation A 36/A 36M; 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 reappraisal. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reappraisal.

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

### **1. Scope\***

1.1 This specification<sup>2</sup> covers carbon steel shapes, plates, and bars of structural quality for use in riveted, bolted, or welded construction of bridges and buildings, and for general structural purposes.

1.2 Supplementary requirements are provided for use where additional testing or additional restrictions are required by the purchaser. Such requirements apply only when specified in the purchase order.

1.3 When the steel is to be welded, a welding procedure suitable for the grade of steel and intended use or service is to be utilized. See Appendix X3 of Specification A 6/A 6M for information on weldability.

1.4 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 is to be used independently of the other, without combining values in any way.

1.5 The text of this specification contains notes or footnotes, or both, that provide explanatory material. Such notes and footnotes, excluding those in tables and figures, do not contain any mandatory requirements.

1.6 For structural products produced from coil and furnished without heat treatment or with stress relieving only, the additional requirements, including additional testing requirements and the reporting of additional test results, of A 6/A 6M apply.

### **2. Referenced Documents**

#### *2.1 ASTM Standards:*

A 6/A 6M Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling<sup>3</sup>

A 27/A 27M Specification for Steel Castings, Carbon, for

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel, and Related Alloys, and is the direct responsibility of Subcommittee A01.02 on Structural Steel for Bridges, Buildings, Rolling Stock, and Ships.

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<sup>2</sup> For ASME Boiler and Pressure Vessel Code Applications, see related Specifications SA-36 in Section II of that Code.

<sup>3</sup> *Annual Book of ASTM Standards*, Vol 01.04.

#### General Application<sup>4</sup>

A 307 Specification for Carbon Steel Bolts and Studs, 60 000 psi Tensile Strength<sup>5</sup>

A 325 Specification for High-Strength Bolts for Structural Steel Joints<sup>5</sup>

A 325M Specification for High-Strength Bolts for Structural Steel Joints [Metric]<sup>5</sup>

A 500 Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes<sup>6</sup>

A 501 Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing<sup>6</sup>

A 502 Specification for Steel Structural Rivets<sup>5</sup>

A 563 Specification for Carbon and Alloy Steel Nuts<sup>5</sup>

A 563M Specification for Carbon and Alloy Steel Nuts [Metric]<sup>5</sup>

A 1011/A 1011M Specification for Steel, Sheet and Strip, Carbon, Hot-Rolled, High Strength Low Alloy, and High Strength Low Alloy with Improved Formability<sup>7</sup>

A 668/A 668M Specification for Steel Forgings, Carbon and Alloy, for General Industrial Use<sup>8</sup>

F 568M Specification for Carbon and Alloy Steel Externally Threaded Metric Fasteners<sup>5</sup>

### **3. Appurtenant Materials**

3.1 When components of a steel structure are identified with this ASTM designation but the product form is not listed in the scope of this specification, the material shall conform to one of the standards listed in Table 1 unless otherwise specified by the purchaser.

### **4. General Requirements for Delivery**

4.1 Structural products furnished under this specification shall conform to the requirements of the current edition of Specification A 6/A 6M, for the specific structural product ordered, unless a conflict exists in which case this specification shall prevail.

4.2 Coils are excluded from qualification to this specification until they are processed into a finished structural product.

<sup>4</sup> *Annual Book of ASTM Standards*, Vol 01.02.

<sup>5</sup> *Annual Book of ASTM Standards*, Vol 15.08.

<sup>6</sup> *Annual Book of ASTM Standards*, Vol 01.01.

<sup>7</sup> *Annual Book of ASTM Standards*, Vol 01.03.

<sup>8</sup> *Annual Book of ASTM Standards*, Vol 01.05.

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