



Standard Specification for Plates, Carbon Steel, Structural Quality, Furnished to Chemical Composition Requirements¹

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1. Scope

1.1 This specification covers structural quality carbon steel plates furnished to chemical composition requirements.

1.2 The plates are available in several standard steel grades and non-standard grades.

1.3 The plates are usually furnished in the as-rolled (hot-rolled) condition.

1.4 Supplementary requirements are provided for additional requirements that may be specified on the order.

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

2. Referenced Documents

2.1 ASTM Standards:

A 6/A 6M Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling²

3. Ordering Information

3.1 In addition to the information required by Specification A 6/A 6M, the order shall include the following, if applicable:

3.1.1 Silicon requirements (see 5.3 and Supplementary Requirement S96), and

3.1.2 Limitation on rimmed or capped steel (see 4.3 and Supplementary Requirement S97).

4. Materials and Manufacture

4.1 Steel specified to a maximum carbon content of 0.39 % or lower on heat analysis may be made to any deoxidation practice unless otherwise specified on the order.

4.2 Steel specified to a maximum carbon content of 0.40 % or higher on heat analysis shall be killed unless otherwise specified on the order.

4.3 If rimmed or capped steel is not acceptable, Supplementary Requirement S97 shall be specified on the order.

5. Chemical Composition

5.1 The heat analysis shall conform to the requirements for the applicable grade listed in Table 1, unless otherwise specified as permitted in 5.2.

5.2 The chemical requirements for heat analysis may be specified in accordance with the ranges and limits listed in Table 2. In such instances, the heat analysis shall conform to the requirements specified on the order.

5.3 When silicon is required, the range on heat analysis shall be from 0.15 to 0.40 % unless otherwise specified on the order (see Supplementary Requirement S96).

6. General Requirements

6.1 Material furnished under this specification shall conform to the requirements of the current edition of Specification A 6/A 6M, for the ordered material, unless a conflict exists in which case this specification shall prevail.

7. Keywords

7.1 carbon; chemical composition; non-standard grades; plates; standard grades; steel; structural steel

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² *Annual Book of ASTM Standards*, Vol 01.04.