



Designation: B582 – 07

Standard Specification for Nickel-Chromium-Iron-Molybdenum-Copper Alloy Plate, Sheet, and Strip¹

This standard is issued under the fixed designation B582; 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 The specification² covers plate, sheet, and strip of nickel-chromium-iron-molybdenum-copper alloys (UNS N06007, N06975, N06985, and N06030)* as shown in **Table 1**, for use in general corrosive service.

1.2 The following products are covered under this specification:

1.2.1 *Sheet and Strip*—Hot or cold rolled, solution annealed, and descaled unless solution anneal is performed in an atmosphere yielding a bright finish.

1.2.2 *Plate*—Hot or cold rolled, solution annealed, and descaled.

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

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to become familiar with all hazards including those identified in the appropriate Material Safety Data Sheet (MSDS) for this product/material as provided by the manufacturer, to establish appropriate safety and health practices, and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards*:³

B906 Specification for General Requirements for Flat-Rolled Nickel and Nickel Alloys Plate, Sheet, and Strip

¹ This specification is under the jurisdiction of ASTM Committee B02 on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee B02.07 on Refined Nickel and Cobalt and Their Alloys.

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² For ASME Boiler and Pressure Vessel Code applications, see related Specification SB-582 in Section II of that Code.

* New designation established in accordance with ASTM E527 and SAE J1086, Practice for Numbering Metals and Alloys (UNS).

³ 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.

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *cold-rolled plate, n*—material $\frac{3}{16}$ to $\frac{3}{8}$ in. (4.76 to 9.52 mm), inclusive, in thickness.

3.1.2 *hot-rolled plate, n*—material $\frac{3}{16}$ in. (4.76 mm) and over in thickness.

3.1.3 *plate, n*—material $\frac{3}{16}$ in. (4.76 mm) and over in thickness.

3.1.4 *sheet and strip, n*—material under $\frac{3}{16}$ in. (4.76 mm) in thickness.

4. General Requirements

4.1 Materials furnished to this specification shall conform to the applicable requirements of Specification B906 unless otherwise provided herein.

5. Ordering Information

5.1 It is the responsibility of the purchaser to specify all requirements that are necessary for material ordered under this specification. Examples of such requirements include, but are not limited to, the following:

5.1.1 *Alloy*—**Table 1**,

5.1.2 *Dimensions*—Thickness (in decimals of an inch), width, and length (inch or fractions of an inch),

5.1.3 *Optional Requirement, Plate*—How the plate is to be cut (see 8.1 and Specification B906, Table A2.3),

5.1.4 *Certification*—State if certification or a report of test results is required (Specification B906),

5.1.5 *Purchaser Inspection*—State which tests or inspections are to be witnessed (Specification B906), and

5.1.6 *Samples for Product (Check) Analysis*—State whether samples should be furnished (Section 6).

6. Chemical Composition

6.1 *Heat Analysis*—The material shall conform to the composition limits specified in **Table 1**.

6.2 *Product (Check) Analysis*—If a product (check) analysis is made by the purchaser, the material shall conform to the requirements specified in **Table 1** subject to the permissible tolerances in Specification B906.