



Standard Specification for Nickel Plate, Sheet, and Strip¹

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

1. Scope

1.1 This specification² covers rolled nickel (UNS N02200) and low-carbon nickel (UNS N02201)³ plate, sheet, and strip.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *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:*⁴

B160 Specification for Nickel Rod and Bar

B880 Specification for General Requirements for Chemical Check Analysis Limits for Nickel, Nickel Alloys and Cobalt Alloys

E8 Test Methods for Tension Testing of Metallic Materials

E10 Test Method for Brinell Hardness of Metallic Materials

E18 Test Methods for Rockwell Hardness of Metallic Materials

E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

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-162 in Section II of that Code.

³ New designation established in accordance with Practice E527 and SAE J1086, Practice for Numbering Metals and Alloys (UNS).

⁴ 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.

E39 Methods for Chemical Analysis of Nickel (Withdrawn 1995)⁵

E112 Test Methods for Determining Average Grain Size

E140 Hardness Conversion Tables for Metals Relationship Among Brinell Hardness, Vickers Hardness, Rockwell Hardness, Superficial Hardness, Knoop Hardness, Scleroscope Hardness, and Leeb Hardness

F155 Method of Test for Temper of Strip and Sheet Metals for Electronic Devices (Spring-Back Method) (Withdrawn 1982)⁵

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 The terms given in **Table 1** shall apply.

4. Ordering Information

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

4.1.1 *Alloy*—Name and UNS number. (See **Table 2**.)

4.1.2 *ASTM designation*, including year of issue.

4.1.3 *Condition* (See **6.1**, **6.2**, and **Appendix X1**.)

4.1.4 *Finish* (See **Appendix X1**.)

4.1.5 *Dimensions*—Thickness, width, and length.

4.1.6 *Quantity*.

4.1.7 *Optional Requirements:*

4.1.7.1 *Sheet and Strip*—Whether to be furnished in coil, in cut straight lengths, or in random straight lengths.

4.1.7.2 *Strip*—Whether to be furnished with commercial slit edge, square edge, or round edge.

4.1.7.3 *Plate*—Whether to be furnished specially flattened (see **7.2.2**); also how plate is to be cut (see **7.2.1** and **7.3.2**).

4.1.8 *Fabrication Details*—Not mandatory but helpful to the manufacturer.

4.1.8.1 *Welding or Brazing*—Process to be employed.

4.1.8.2 *Plate*—Whether material is to be hot-formed.

4.1.9 *Certification*—State if certification or a report of test results is required (see **Section 15**).

⁵ The last approved version of this historical standard is referenced on www.astm.org.