

Designation: A167 - 99(Reapproved 2009)

# Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip<sup>1</sup>

This standard is issued under the fixed designation A167; 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 ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

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

### 1. Scope

- 1.1 This specification covers stainless and heat-resisting chromium-nickel steel plate, sheet, and strip.
- 1.2 The values stated in inch-pound units are to be regarded as the standard.

Note 1—Grades that were previously covered in both Specifications A167 and A240/A240M have been removed from this specification and may now be supplied and purchased in compliance with Specification A240/A240M. The chemical and mechanical property requirements of these grades were identical in Specifications A167 and A240/A240M at the time of removal from Specification A167.

#### 2. Referenced Documents

2.1 ASTM Standards:<sup>2</sup>

A240/A240M Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications

A370 Test Methods and Definitions for Mechanical Testing of Steel Products

A480/A480M Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip

E527 Practice for Numbering Metals and Alloys in the Unified Numbering System (UNS)

2.2 SAE Standard:<sup>3</sup>
J 1086 Numbering Metals and Alloys (UNS)

# 3. Chemical Composition

3.1 The steel shall conform to the requirements as to chemical composition specified in Table 1, and shall conform to applicable requirements specified in Specification A480/A480M.

## 4. Mechanical Properties

4.1 The material shall conform to the mechanical properties specified in Table 2.

# 5. General Requirements

- 5.1 The following requirements for orders for material furnished under this specification shall conform to the applicable requirements of the current edition of Specification A480/A480M.
  - 5.1.1 Definitions,
  - 5.1.2 General requirements for delivery,
  - 5.1.3 Ordering information, 50/astm-a167-992009
  - 5.1.4 Process,
  - 5.1.5 Heat treatment,
  - 5.1.6 Special tests,
  - 5.1.7 Dimensions and permissible variations,
  - 5.1.8 Workmanship, finish, and appearance,
  - 5.1.9 Number of tests,
  - 5.1.10 Specimen preparation,
  - 5.1.11 Retreatment,
  - 5.1.12 Inspection,
  - 5.1.13 Rejection and rehearing,

<sup>&</sup>lt;sup>1</sup> This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel and Related Alloysand is the direct responsibility of Subcommittee A01.17 on Flat-Rolled and Wrought Stainless Steel.

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<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> Available from Society of Automotive Engineers (SAE), 400 Commonwealth Dr., Warrendale, PA 15096-0001, http://www.sae.org.