



Designation: A994 – 23a

Standard Guide for Editorial Procedures and Form of Product Specifications for Steel, Stainless Steel, and Related Alloys¹

This standard is issued under the fixed designation A994; 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 This guide covers the editorial form and style for product specifications under the jurisdiction of ASTM Committee A01.

NOTE 1—For standards other than product specifications, such as test methods, practices, and guides, see the appropriate sections of *Form and Style for ASTM Standards* (Blue Book).²

1.2 Subcommittees preparing new product specifications or revising existing ones should follow the practices and procedures outlined herein, and be guided by the latest specification covering similar commodities.

1.3 This guide has been prepared as a supplement to the current edition of the Form and Style Manual, and is appropriate for use by the subcommittees to Committee A01. This guide is to be applied in conjunction with the Form and Style Manual.

1.4 If a conflict exists between this guide and the mandatory sections of the current edition of the Form and Style Manual, the Form and Style Manual requirements have precedence. If a conflict exists between this guide and the nonmandatory sections of the current edition of the Form and Style Manual, the guide has precedence.

1.5 When patents are involved, the specifications writer should refer to section F3 of the Form and Style Manual. Also, refer to part F of the Form and Style Manual for trademark information and the safety hazards caveat.

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This guide is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel and Related Alloys and is the direct responsibility of Subcommittee A01.91 on Editorial.

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² Available from ASTM International Headquarters, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959.

2. Referenced Documents

2.1 *ASTM Standards*:³

A370 Test Methods and Definitions for Mechanical Testing of Steel Products

A488/A488M Practice for Steel Castings, Welding, Qualifications of Procedures and Personnel

A700 Guide for Packaging, Marking, and Loading Methods for Steel Products for Shipment

A751 Test Methods and Practices for Chemical Analysis of Steel Products

A941 Terminology Relating to Steel, Stainless Steel, Related Alloys, and Ferroalloys

A1058 Test Methods for Mechanical Testing of Steel Products—Metric

E6 Terminology Relating to Methods of Mechanical Testing

E1282 Guide for Specifying the Chemical Compositions and Selecting Sampling Practices and Quantitative Analysis Methods for Metals, Ores, and Related Materials

2.2 *ASME Boiler and Pressure Vessel Codes*:⁴

Section IX

2.3 *Federal Standard*:

Fed. Std. No. 123 Marking for Shipments (Civil Agencies)⁵

3. Terminology

3.1 *Definitions of Terms Specific to This Standard*:

3.1.1 For definitions of terms used in this guide, refer to the Form and Style Manual, Terminology A941, and Terminology E6.

4. Significance and Use

4.1 The Form and Style Manual provides mandatory requirements and recommended practices for the preparation and

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.

⁴ Available from American Society of Mechanical Engineers (ASME), ASME International Headquarters, Two Park Ave., New York, NY 10016-5990, <http://www.asme.org>.

⁵ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Phila., PA 19111-5094, Attn: NPODS.

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

content of ASTM specifications. In order to promote consistency in the style and content of product specifications under its jurisdiction, Committee A01 recognizes the need to provide a supplementary document pertaining to the types of products and materials covered by those specifications.

4.2 This guide contains a list of sections to be considered for inclusion in a specification for steel, stainless steel, and related alloy products, and guidance or recommended wording, or both, for such sections.

4.3 Persons drafting new product specifications, or modifying existing ones, under the jurisdiction of Committee A01, should follow this guide and the requirements of the Form and Style Manual to ensure consistency.

5. Subject Headings of Text

5.1 The various sections of a Committee A01 product specification should be arranged in the following order. Not all of these sections will appear in every specification; however, those used should be listed in the order given. In some cases, a specification may require the addition of a section or sections not listed, in which case they should be inserted in the specification so as to preserve the logical sequence of sections, insofar as possible.

5.2 When only one requirement is used in a section having multiple possible subheadings, that requirement becomes the section heading (for example, Tension Test instead of Mechanical Properties).

- Title
- Designation
- Scope
- Referenced Documents
 - ASTM Standards
 - Other Documents
- Classification
- Terminology
- Ordering Information
- General Requirements
- Materials and Manufacture
 - Melting Practice
 - Mechanical Working Practice
 - Heat Treatment
 - Welding
 - Coatings
- Chemical Composition
 - Heat Analysis
 - Product Analysis
 - Methods of Analysis
- Metallurgical Requirements
 - Grain Size
 - Decarburization
 - Etch Test
 - Micro-cleanliness
 - Hardenability
 - Corrosion Resistance
- Physical Properties
 - Electrical Resistivity
 - Thermal Conductivity
- Mechanical Properties
 - Tension Test
 - Hardness Test
 - Impact Test
 - Bend Test
 - Flattening Test
 - Flange Test
 - Flare Test
 - Proof Load Test
 - Wrap Test

- Crush Test
- Coiling Test
- Pressure Test Requirements
 - Hydrostatic Test
 - Air-Under-Water Test
- Nondestructive Test Requirements
 - Magnetic Particle Test
 - Liquid Penetrant Test
 - Radiographic Test
 - Ultrasonic Test
 - Eddy Current Test
 - Flux Leakage Test
- Other Test Requirements
- Dimensions, Mass, and Permissible Variations
 - Flatness
 - Straightness
 - Out-of-roundness
 - Camber
 - Bowing
 - Mating
 - Length
 - Diameter
 - Thickness
- Workmanship, Finish, and Appearance
 - Surface Finish
 - Edges
 - End Finish
- Rework, Retreatment, and Weld Repair
- Sampling
- Number of Tests, Retests, and Resampling
- Specimen Preparation
- Test Methods and Analytical Methods
- Inspection
- Rejection and Rehearing
- Certification
- Product Identification
- Packaging, Marking, and Loading for Shipment
- Keywords
- Supplementary Requirements
- Annexes and Appendixes

6. Section Contents

6.1 Title:

6.1.1 The title should be as concise as possible, but complete enough to identify clearly the product covered by the specification. Titles are also used in lists, table of contents, and indexes, and it is most important that they be brief but self-explanatory.

6.1.2 Two methods for establishing wording are considered acceptable and are at the option of the subcommittee.

6.1.3 One is to word as in ordinary conversation with the adjectives first as is normal in the English language. For example, “Standard Specification for Hot-Worked, Hot-Cold-Worked, and Cold-Worked Alloy Steel Plate, Sheet, and Strip for High Strength at Elevated Temperatures.” A general scheme for generating titles with this format is:

6.1.3.1 Type of document: “Standard Specification for,”

6.1.3.2 Special treatment of the material, if any: “quenched and tempered,” “hot-rolled,” “seamless,” “welded,” etc.,

6.1.3.3 Material type based on chemical composition: “carbon,” “high-strength low-alloy,” “austenitic stainless,” etc.,

6.1.3.4 “Steel,”

6.1.3.5 Product form: “bars,” “pressure vessel plate,” “casting,” “sheet and strip,” etc.,

6.1.3.6 Special quality of the product, if any: “with improved toughness,” “with mechanical property requirements,” “of commercial quality,” etc., and