



## Standard Specification for Common Requirements for Iron Castings for General Industrial Use<sup>1</sup>

This standard is issued under the fixed designation A 834; 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 specification covers a group of requirements that are mandatory requirements when used in conjunction with the following iron casting specifications issued by ASTM:

ASTM Specification<sup>2</sup>  
A 47  
A 48  
A 197  
A 220  
A 278  
A 319  
A 395  
A 436  
A 439  
A 518  
A 532  
A 536  
A 571  
A 823  
A 842  
A 874  
A 897

1.2 This specification also covers a group of supplementary requirements which may be applied to the above specifications as indicated herein. These are provided for use when additional testing or inspection is desired and apply only when specified individually by the purchaser in the order.

1.3 The requirements of the individual material specification, and this general specification shall prevail in the sequence named.

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

### 2. Referenced Documents

#### 2.1 ASTM Standards:

- A 47 Specification for Ferritic Malleable Iron Castings<sup>2</sup>
- A 48 Specification for Gray Iron Castings<sup>2</sup>
- A 197 Specification for Cupola Malleable Iron<sup>2</sup>
- A 220 Specification for Pearlitic Malleable Iron<sup>2</sup>

- A 247 Test Method for Evaluating the Microstructure of Graphite in Iron Castings<sup>2</sup>
- A 278 Specification for Gray Iron Castings for Pressure-Containing Parts for Temperatures Up to 650°F<sup>2</sup>
- A 319 Specification for Gray Iron Castings for Elevated Temperatures for Non-Pressure Containing Parts<sup>2</sup>
- A 395 Specification for Ferritic Ductile Iron Pressure-Retaining Castings for Use at Elevated Temperatures<sup>2</sup>
- A 436 Specification for Austenitic Gray Iron Castings<sup>2</sup>
- A 439 Specification for Austenitic Ductile Iron Castings<sup>2</sup>
- A 518 Specification for Corrosion-Resistant High-Silicon Iron Castings<sup>2</sup>
- A 532 Specification for Abrasion-Resistant Cast Irons<sup>2</sup>
- A 536 Specification for Ductile Iron Castings<sup>2</sup>
- A 571 Specification for Austenitic Ductile Iron Castings for Pressure-Containing Parts Suitable for Low-Temperature Service<sup>2</sup>
- A 644 Terminology Relating to Iron Castings<sup>2</sup>
- A 802/A802M Practice for Steel Castings, Surface Acceptance Standards, Visual Examination<sup>2</sup>
- A 823 Specification for Statically Cast Permanent Mold Gray Iron Castings<sup>2</sup>
- A 842 Specification for Compacted Graphite Iron Castings<sup>2</sup>
- A 874 Specification for Ferritic Ductile Iron Castings Suitable for Low-Temperature Service<sup>2</sup>
- A 897 Specification for Austempered Ductile Iron Castings<sup>2</sup>
- A 919 Terminology Relating to Heat Treatment of Metals<sup>3</sup>
- E 8 Test Methods for Tension Testing of Metallic Materials<sup>4</sup>
- E 10 Test Method for Brinell Hardness of Metallic Materials<sup>4</sup>
- E 29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications<sup>5</sup>
- E 30 Test Methods for Chemical Analysis of Steel, Cast Iron, Open-Hearth Iron, and Wrought Iron<sup>6</sup>
- E 59 Practice for Sampling Steel and Iron for Determination of Chemical Composition<sup>7</sup>
- E 94 Guide for Radiographic Testing<sup>8</sup>

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee A04 on Iron Castings and is the direct responsibility of Subcommittee A04.01 on Gray and White Iron Castings.

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<sup>2</sup> *Annual Book of ASTM Standards*, Vol 01.02.

<sup>3</sup> Discontinued; see 1999 *Annual Book of ASTM Standards*, Vol 01.01.

<sup>4</sup> *Annual Book of ASTM Standards*, Vol 03.01.

<sup>5</sup> *Annual Book of ASTM Standards*, Vol 14.02.

<sup>6</sup> Discontinued; see 1994 *Annual Book of ASTM Standards*, Vol 03.05.

<sup>7</sup> Discontinued; see 1995 *Annual Book of ASTM Standards*, Vol 03.05.

<sup>8</sup> *Annual Book of ASTM Standards*, Vol 03.03.