

Designation: B37 – 08 (Reapproved 2013)

# Standard Specification for Aluminum for Use in Iron and Steel Manufacture<sup>1</sup>

This standard is issued under the fixed designation B37; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This specification covers aluminum and aluminum alloys in the form of ingots, bars, rods, cones, nuggets or shot, designated as shown in Table 1, for use in the manufacture of iron and steel.

1.2 Units—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 establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

## 2. Referenced Documents

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

- B275 Practice for Codification of Certain Nonferrous Metals and Alloys, Cast and Wrought
- B660 Practices for Packaging/Packing of Aluminum and Magnesium Products

B881 Terminology Relating to Aluminum- and Magnesium-Alloy Products

- D3951 Practice for Commercial Packaging
- E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
- E34 Test Methods for Chemical Analysis of Aluminum and Aluminum-Base Alloys
- E607 Test Method for Atomic Emission Spectrometric Analysis Aluminum Alloys by the Point to Plane Technique Nitrogen Atmosphere (Withdrawn 2011)<sup>3</sup>

- E716 Practices for Sampling and Sample Preparation of Aluminum and Aluminum Alloys for Determination of Chemical Composition by Spectrochemical Analysis
- E1251 Test Method for Analysis of Aluminum and Aluminum Alloys by Spark Atomic Emission Spectrometry
- 2.2 Other Standards:<sup>4</sup>
- CEN EN 14242 Aluminum and Aluminum Alloys Chemical Analysis – Inductively Coupled Plasma Optical Emission Spectral Analysis

### 3. Terminology

3.1 *Definitions*—Refer to Terminology **B881** for definitions of product terms used in this specification.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *bar*—a form of aluminum deoxidizing product with a rectangular cross section, similar to the appearance of a brick.

3.2.2 *cone*—a form of aluminum deoxidizing product with a round flat base and a pointed end.

3.2.3 *deox*—a common or commercial term used in place of aluminum deoxidizing product.

3.2.4 *nugget*—a form of aluminum deoxidizing product with a non-uniform (lump) shape.

3.2.5 *shot*—a form of aluminum deoxidizing product with a spheroid appearance of a pellet.

#### 4. Ordering Information

4.1 Orders for material under this specification shall include the following:

4.1.1 This specification designation (which includes the number, the year, and the revision letter, if applicable),

4.1.2 Grade of material (see Table 1),

4.1.3 Form of material (ingot, bar, rod, cone, nugget or shot),

4.1.4 Any required dimensional or weight limitations for the material, and

4.1.5 The quantity in either pieces or pounds (kilograms).

4.2 Additionally, orders for material to this specification shall include the following information when required by the purchaser:

<sup>&</sup>lt;sup>1</sup> This specification is under the jurisdiction of ASTM Committee B07 on Light Metals and Alloys and is the direct responsibility of Subcommittee B07.01 on Aluminum Alloy Ingots and Castings.

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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.

 $<sup>^{3}\,\</sup>text{The}$  last approved version of this historical standard is referenced on www.astm.org.

<sup>&</sup>lt;sup>4</sup> Available from European Committee for Standardization, Central Secretariat (CEN), rue de Stassart 36, B1050 Brussels, Belgium., www.CEN.eu/esearch.