



Designation: B952/B952M – 19 (Reapproved 2024)

Standard Specification for Zinc Alloys in Ingot Form for Spin Casting¹

This standard is issued under the fixed designation B952/B952M; 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 zinc alloys in ingot form for remelting for the manufacture of Spin Castings as specified and designated, as shown in **Table 1**. Seven alloy compositions are specified, designated as follows:

Common	Traditional	UNS
Spin Casting Alloy SC-A	...	Z35550
Spin Casting Alloy SC-B	...	Z35551
Spin Casting Alloy SC-C	...	Z35534
Spin Casting Alloy SC-D	HJ10	Z35547
Spin Casting Alloy SC-E	HJ20	Z35548
Spin Casting Alloy SC-F	HJ40	Z35552
ZA-73	...	Z36500

1.2 Zinc alloys #2, #3, #5, and ZA-8 specified in Specification **B240** are also used in the spin casting process.

1.3 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

1.4 *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 Safety Data Sheet (SDS) for this product/material as provided by the manufacturer, to establish appropriate safety, health, and environmental practices, and determine the applicability of regulatory limitations prior to use.*

1.5 *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 specification is under the jurisdiction of ASTM Committee **B02** on Nonferrous Metals and Alloys and is the direct responsibility of Subcommittee **B02.04** on Zinc and Cadmium.

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2. Referenced Documents

2.1 The following documents of the issue in effect on date of order acceptance form a part of this specification to the extent referenced herein:

2.2 ASTM Standards:²

B240 Specification for Zinc and Zinc-Aluminum (ZA) Alloys in Ingot Form for Foundry and Die Castings

B899 Terminology Relating to Non-ferrous Metals and Alloys

B908 Practice for the Use of Color Codes for Zinc Casting Alloy Ingot

B949 Specification for General Requirements for Zinc and Zinc Alloy Products

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

E536 Test Methods for Chemical Analysis of Zinc and Zinc Alloys

2.3 ISO Standards:³

ISO 3815-1 Zinc and zinc alloys—Part 1: Analysis of solid samples by optical emission spectrometry

ISO 3815-2 Zinc and zinc alloys—Part 2: Analysis by inductively coupled plasma optical emission

3. Terminology

3.1 Terms shall be defined in accordance with Terminology **B899**.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *spin casting, n*—a casting process in which molten metal is poured into a rubber, polymer, graphite, or metal mold and spun centrifugally until solidified, also a product produced by such a process.

4. Ordering Information

4.1 Orders for zinc alloy ingot under this specification shall include information as specified in Specification **B949**.

² 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.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.