



Designation: A323 – 05 (Reapproved 2020)

Standard Specification for Ferroboron¹

This standard is issued under the fixed designation A323; 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 several grades of ferroboron.

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

1.3 *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.*

2. Referenced Documents

2.1 *ASTM Standards:*²

A1025/A1025M Specification for Ferroalloys and Other Alloying Materials, General Requirements

E371 Test Method for The Determination of Boron in Ferroboron (Withdrawn 2006)³

¹ This specification is under the jurisdiction of ASTM Committee A01 on Steel, Stainless Steel and Related Alloys and is the direct responsibility of Subcommittee A01.18 on Castings.

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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 The last approved version of this historical standard is referenced on www.astm.org.

3. General Conditions for Delivery

3.1 Materials furnished to this specification shall conform to the requirements of Specification **A1025/A1025M**, including any supplementary requirements that are indicated in the purchase order. Failure to comply with the general requirements of Specification **A1025/A1025M** constitutes nonconformance with this specification. In case of conflict between the requirements of this specification and Specification **A1025/A1025M**, this specification shall prevail.

4. Chemical Composition

4.1 The various grades shall conform to the requirements as to chemical composition specified in **Table 1**. The manufacturer shall furnish an analysis of each lot showing the percentage of each element specified.

5. Sizing

5.1 Ferroboron is available in various sizes such as: 2 in. (50.8 mm) by down, 1 in. (25.4 mm) by down, 1/4 in. (6.35 mm) by down, and 20 mesh (0.841 mm) by down. The size shall be as specified in the order.

6. Chemical Analysis

6.1 The chemical analysis of the material shall be made in accordance with Test Method **E371**. Where a method is not given in Test Method **E371** for the analysis for a particular element, the analysis shall be made in accordance with a procedure agreed upon by the manufacturer and purchaser.

7. Keywords

7.1 ferroboron

**TABLE 1 Chemical Requirements**

Grade	Composition, %				
	Boron ^A		Carbon	Silicon	Aluminum
	min	max	max	max	max
A1	12.0	14.0	1.5	2.0	0.5
A2	12.0	14.0	1.5	2.0	4.0
B1	17.5	19.0	1.5	2.0	0.5
B2	17.5	19.0	1.5	2.0	4.0
C1	19.0	24.0	1.5	2.0	0.5
C2	19.0	24.0	1.5	2.0	4.0

^A Boron shall be reported to the nearest 0.1 %.

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