



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.

2. Referenced Documents

2.1 *ASTM Standards*:²

[A1025 Specification for Ferroalloys and Other Alloying Materials, General Requirements](#)

[E371 Test Method for The Determination of Boron in Ferroboron](#) (Withdrawn 2006)³

3. General Conditions for Delivery

3.1 Materials furnished to this specification shall conform to the requirements of Specification [A1025](#), including any supple-

mentary requirements that are indicated in the purchase order. Failure to comply with the general requirements of Specification [A1025](#) constitutes nonconformance with this specification. In case of conflict between the requirements of this specification and Specification [A1025](#), 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, ¼ 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

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.

Current edition approved Nov. 1, 2015. Published November 2015. Originally approved in 1949. Last previous edition approved in 2010 as A323 – 05 (2010). DOI: 10.1520/A0323-05R15.

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.

**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 %.

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; <http://www.copyright.com/>