Designation: A 323 – 05

Standard Specification for Ferroboron[1]

This standard is issued under the fixed designation A 323; 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]

A 1025 Specification for Ferroalloys, General Requirements

E 371 Test Method for the Determination of Boron in Ferroboron

3. General Conditions for Delivery

3.1 Materials furnished to this specification shall conform to the requirements of Specification A 1025, including any supplementary requirements that are indicated in the purchase order. Failure to comply with the general requirements of Specification A 1025 constitutes nonconformance with this specification. In case of conflict between the requirements of this specification and Specification A 1025, 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.

TABLE 1 Chemical Requirements

Grade	Boron[A]		Composition, %		
			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 %.

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 E 371. Where a method is not given in Test Method E 371 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.

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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.

***A Summary of Changes section appears at the end of this standard.**

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SUMMARY OF CHANGES

Committee A01 has identified the location of selected changes to this standard since the last issue, A 323 - 93(2004), that may impact the use of this standard. (Approved May 1, 2005.)

(1) Sections 1-10 were either modified or deleted.

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