Designation: A101 – 04

Standard Specification for Ferrochromium[1]

This standard is issued under the fixed designation A101; 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 two types of ferrochromium designated as high carbon and low carbon, the latter including nitrogen-bearing and vacuum grades.

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

E363 Test Methods for Chemical Analysis of Chromium and Ferrochromium

3. General Conditions for Delivery

3.1 Materials furnished to this specification shall conform to the requirements of Specification A1025, including any supplementary 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 grades shall conform to the requirements as to chemical composition specified in Table 1. The manufacturer shall furnish an analysis of each shipment showing the elements specified in Table 1.

5. Size

5.1 The various grades are available in sizes as listed in Table 2.

5.2 The sizes listed in Table 2 are typical, as shipped from the manufacturer's plant. These alloys exhibit varying degrees of friability; therefore, some attrition may be expected in transit, storage, and handling. A quantitative test is not available for rating relative friability of ferroalloys. A code system has been developed, therefore, for this purpose, and a number rating for each product type is shown in the last column of Table 2. Definitions applicable to these code numbers are given in Specification A1025.

6. Chemical Analysis

6.1 The chemical analysis method shall be agreed upon by the purchaser and supplier.

6.2 In cases of discrepancy, Test Methods E363 shall be used for referee purposes.

7. Keywords

7.1 ferroalloys; ferrochromium; high carbon; low carbon; nitrogen-bearing; vacuum low carbon

[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.**