Designation: A 701 – 05

Standard Specification for Ferromanganese-Silicon[1]

This standard is issued under the fixed designation A 701; 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 a manganese-silicon alloy.

2. Referenced Documents

2.1 *ASTM Standards:* [2]

A 1025 Specification for Ferroalloys, General Requirements

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 requrements of this specification and Specification A 1025, this specification shall prevail.

4. Chemical Requirements

4.1 The alloy shall conform to the chemical requirements as specified in Table 1 and Table 2.

4.2 The manufacturer shall furnish an analysis of each shipment showing the percentage of each element specified.

5. Size

5.1 The alloy is available in the sizes shown in Table 3.

5.2 The sizes listed in Table 3 are typical of the product as shipped from the seller's plant. Some deterioration of size can be expected in transit.

6. Chemical Analysis

6.1 Chemical methods are subject to agreement between the purchaser and supplier.

6.2 *Special Analysis Requirements*—Analysis for additional elements other than those listed in Tables 1 and 2 shall be agreed upon between the purchaser and the manufacturer. Such elements in trace quantities shall be reported as less than "<" the limit of analytical equipment. This shall be agreed upon between the purchaser and the manufacturer.

7. Keywords

7.1 Ferromanganese-silicon

[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 September 1, 2005. Published October 2005. Originally approved in 1974. Last previous edition approved in 2004 as A 701 – 96 (2004).

[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.**

Copyright © ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States.

Copyright ASTM International
Reproduced by IHS under license with ASTM
No reproduction or networking permitted without license from IHS
Not for Resale
Reproduction authorized per License Agreement with Kathe Hooper (ASTMIHS Account); Mon Oct 17 14:58:59 EDT 2005

TABLE 1 Chemical Requirements

Element	Composition, %
Manganese	63 to 66
Carbon, max	0.08
Silicon	28 to 32
Phosphorus, max	0.05

TABLE 2 Specified Residual Elements

Element	Composition, max, %
Arsenic	0.15
Tin	0.010
Lead	0.050
Chromium	0.50

TABLE 3 Sizes

Sizes	Tolerance
75 lb by 2 in. [34.0 kg by 50.8 mm]	
50 lb by 1 in. [22.7 kg by 25.4 mm]	
6 by ½ in. [152.4 mm by 12.70 mm]	
3 in. by down (76.2 mm by down)	10 % passing ¼ in. [6.3 mm] screen, max
2 in. by down [50.8 mm by down]	10 % passing ¼ in. [6.3 mm] screen, max

SUMMARY OF CHANGES

Committee A01 has identified the location of selected changes to this standard since the last issue, A 701 - 96(04), that may impact the use of this standard. (September 1, 2005)

(*1*) Revised 1.1, Section 2, 4.2, 5.2, 6.1 (Chemical Analysis), and Keywords.
(*2*) Added new Section 3 (General Conditions for Delivery).
(*3*) Deleted Section 3 (Ordering Information); 4.3, Section 6 (Sampling); 7.3; Section 8 (Inspection); Section 9 (Rejection); Section 10 (Packaging and Package Marking); and Appendix X1.

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).

Copyright ASTM International
Reproduced by IHS under license with ASTM
No reproduction or networking permitted without license from IHS
Copyright by ASTM Int'l (all rights reserved);
Reproduction authorized per License Agreement with Kathe Hooper (ASTMIHS Account); Mon Oct 17 14:58:59 EDT 2005
Not for Resale