Designation: A 132 – 04

Standard Specification for Ferromolybdenum[1]

This standard is issued under the fixed designation A 132; 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 grades of ferromolybdenum.

1.2 The values stated in inch-pound units are to be regarded as the standard.

2. Referenced Documents

2.1 *ASTM Standards:* [2]

A 1025 Specification for Ferroalloys, General Requirements

E 11 Specification for Wire-Cloth Sieves for Testing Purposes

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 Requirements

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

5. Size

5.1 The 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.

6. Keywords

6.1 ferromolybdenum; molybdenum

[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 May 1, 2004. Published May 2004. Originally approved in 1963. Last previous edition approved in 1989 as A 132 – 89 (2000).

[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

TABLE 1 Chemical Requirements (maximum unless otherwise indicated)

Grade	A1	A2
Molybdenum, min	60.0	60.0
Carbon	0.10	0.10
Phosphorous	0.050	0.050
Sulfur	0.15	0.15
Silicon	1.0	1.0
Copper	1.0	0.20

TABLE 2 Ferromolybdenum Size Requirements

Product	Size Requirements	Tolerance[A]
Ferromolyb-denum	2 in. and under	10 % max retained on 2-in. (50-mm) sieve 10 % max passing ¼-in. (6.3-mm) sieve
	1½ in. and under	10 % max retained on 1½-in. (37.5-mm) sieve 10 % max passing ¼-in. (6.3-mm) sieve
	¾ in. and under	10 % max retained on ¾-in. (19.0-mm) sieve 10 % max passing No. 20 (850-µm) sieve
	4 mesh and under	10 % max retained on No. 4 (4.75-mm) sieve 10 % max passing No. 80 (180-µm) sieve
	20 mesh and under	10 % max retained on No. 20 (850-µm) sieve
	80 mesh and under	10 % max retained on No. 80 (180-µm) sieve

[A] Specification of sieves sizes used to define tolerances herein are as listed in Specification E 11.

SUPPLEMENTARY REQUIREMENTS

The composition shall be further limited to the requirements of Table S1.1 in addition to those in Table 1. The manufacturer shall furnish an analysis of each shipment showing the percentage of each element specified.

TABLE S1.1 Supplementary Chemical Requirements

Element	Composition, max, %
	Ferromolybdenum
Lead	0.010
Tin	0.010

Copyright ASTM International
Reproduced by IHS under license with ASTM
No reproduction or networking permitted without license from IHS
Not for Resale

SUMMARY OF CHANGES

Committee A01 has identified the location of selected changes to this standard since the last version (A 132 – 89 (2000)) that may impact the use of this standard.

(1) Specification A1025 added to 2.
(2) Practice E29, Test Methods E31, and Practices E32 were removed from 2.
(3) The section on Ordering Information was changed to General Conditions for Delivery.
(4) Section 4 was revised and moved.
(5) Section 5 was revised.
(6) Sections on Sampling, Chemical Analysis, Rejection, Product Marking, and Packing were removed.
(7) Supplementary Requirements section was added.
(8) A new Table 1 was added.
(9) The previous Table 1 was renumbered as Table 2.
(10) The previous Table 2 was removed.
(11) The previous Table 3 was renumbered as Table S1.1.

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).

Copyright ASTM International
Reproduced by IHS under license with ASTM
No reproduction or networking permitted without license from IHS
Not for Resale