



MAGNESIUM FERRO - SILICON ALLOY

1. Scope

The material required under this Standard is a magnesium ferro silicon alloy.

2. Application

This material is a nodularising alloy and is used as a ladle addition to obtain the desired graphite form and physical properties in nodular iron manufacture.

3. Requirements

3.1 Chemical Composition of Consignment

Silicon	43,0-50,0%
Magnesium	4,5% - 5,5%
Cerium	0,15% - 0,5%
Aluminium	1,0% max
Calcium	0,5 - 1,0%
Lead	0,02% max
Boron	0,10% max
Sulphur	0,015% max
Phosphorus	0,030% max
Iron	Balance

The magnesium content of 18 kilogram (40 lb) samples taken from any part of a consignment must lie within 4,5% - 6,0%.

3.2 Size

This material shall be furnished to the following size:-

No dimension larger than 38 mm (1½")

No dimension less than 13 mm (½")

Unless otherwise stated on the Purchase Order.

3.3 Foreign Substances

This material shall contain no substances of a different nature, to those specified on this Standard.

4.0 Supply Instructions

4.1 Identification

Consignments must be clearly, visibly and permanently identified by the type-description, Manufacturing Standards number and the name or trade mark of the manufacturer. The net weight must also be shown on the consignment. Materials which contain substances subject to EC Directive, 67/548 "Packaging and Labelling of Dangerous Substances" shall be labelled in accordance with resultant national regulations.

4.2 Supplier's responsibility

A supplier's screen analysis on a laboratory test report must be submitted with every consignment. All material supplied to this standard must be equivalent in all characteristics to the material upon which approval was originally granted and shall be suitable for the intended application.

Any proposed change in formulation of a material which has previously received approval will result in the material being regarded as a new material, for which renewed approval, including medical approval, must be obtained.

4.3 Approval of new suppliers

Materials submitted by new suppliers to this standard must have laboratory and shop trial approval. Recommendations for additions to the Manufacturing Standards Bulletin must be made to the appropriate Group Staff Materials Engineering activity in accordance with Manufacturing Procedure EU-II-d-1.

5.0 Health & Safety

5.1 Storage and Odour

The material must not be stored in a location where it may be exposed to contact with molten metal.

The material shall be free from objectionable odour, and shall remain so during normal periods of storage and use.

5.2 Dust Formation

This material must not form dust potentially harmful to health by inhalation.