LOW CARBON FERRO CHROME

1. SCOPE

This specification governs the quality of Low carbon Ferro Chrome Lumps.

2. APPLICATION

The material shall be used as alloying addition for manufacturing of alloy steel.

3. CONDITION OF DELIVERY

The size should be in the range of 10-50 mm. However oversized material should not exceed 10% by weight and undersized material should not exceed 15% by weight.

4. COMPLIANCE WITH NATIONAL STANDARDS

The specification in general is based on Indian standards specification IS 1170-1992.

5. FREEDOM FROM CONTAMINATION

The material shall be free from extraneous contamination such as slag.

6. CHEMICAL COMPOSTION

The material shall conform to the following chemical composition when it is analyzed in accordance with IS: 1559. Composite sample shall be prepared by drawing samples from each consignment of 1000Kg or part thereof.

ELEMENT	% MIN	%MAX
Carbon	-	0.10
Chromium	65	75
Silicon	-	2
Sulphur	-	0.05
Phosphorus	-	0.05

Trace elements are for information purpose only.
The test results are to be rounded off as per IS 2-1960 (reaffirmed 2000).

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			APPROVED : PLANT STANDARDS COMMITTEE		
			PREPARED : SMS TECH	ISSUED : Steel Melting Shop	DATE : 24.12.10

7. INSPECTION AT SUPPLIER'S WORKS:

- CFFP reserves the right to witness the testing of the material at supplier works and therefore the supplier shall notify the readiness of the material in advance.
- CFFP may, at its discretion, test the material after receipt and acceptance of the material will be based on the CFFP'S test results.
- Supplier shall ensure that the material is free from extraneous material. The material shall be rejected if it is not free from extraneous material.
- For result of analysis and properties of material the decision of CFFP shall be final and binding on the supplier.

8. TEST CERTIFICATES

One Original and three copies of Test Certificate from the **Manufacturer** containing the following information **along with test result of clause 3 and the chemical composition as per clause 6** should be provided.

Manufacturer's Name
Name of the material
Quantity.

Note:

a) A manufacturer supplying directly to BHEL should include BHEL's P.O. No. and Challan No. also in the TC.

b) Any other supplier should provide a covering letter along with original Manufacturer's TC as above mentioning BHEL's P.O. No. and Challan No. Supplier shall give packing details of the material in the guarantee certificate.

9. PACKING AND MARKING

The material shall be packed such as to prevent loss / deterioration in quality during handling, transport and storage. It should be in the manufacturer's packing. Each package should be marked with the following details.

Name of the material
Manufacturer's Name / Trade mark
Net weight.

10. REFFERED STANDARDS

IS: 1170 -1992, IS: 1559

WORKED BY	RANJAN	Ranjan	24/12/10

REVISION RECORD SHEET

SN	Revision No.	Revision date	Nature of Changes
01.	05	07.09.2009	- Clauses 8 and 9 revised incorporating requirement of manufacturer's packing and Test certificate.
02	06	24.12.2010	- Clause 3: Size range redefined. - Clause 6: Minimum Cr content changed to 65% from 67 % and Si content (max) changed to 2% from 1.5%. Sampling of material will be done as per this specification for chemical analysis. - Clause 8: Result of clause 3 should be part of TC. - Clause 8 & 9: Batch no & lot no removed.

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