



# PLANT PURCHASE SPECIFICATION

(CFFP - HARDWAR)

FF 05005 Rev 4

Page 1 of 3

## HIGH CARBON FERRO MANGANESE

### 1. SCOPE

This specification governs the quality of High carbon Ferro Manganese with the following requirements.

### 2. APPLICATION

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

### 3. CONDITION OF DELIVERY

- A) The size should be in the range of 50-150 mm. However oversized or undersized material should not exceed 10% each by weight.
- B) For multi hopper system  
The size should be in the range of 20-40 mm. However oversized or undersized material should not exceed 10% each by weight.

### 4. COMPLIANCE WITH NATIONAL STANDARDS

The specification in general is based on Indian standards specification IS 1171-1996;  
Grade: FeMn76.

### 5. FREEDOM FROM CONTAMINATION

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

### 6. CHEMICAL COMPOSITION

The material shall conform to the following chemical composition when it is analyzed in accordance with IS: 1171-1996.

ELEMENT	% MIN	%MAX
Carbon	6.00	8.00
Manganese	74	78
Silicon	-	1.5
Sulphur	-	0.05
Phosphorus	-	0.35

RMI	S.N.GHOSH	WORKED BY	M.K.SAHU
MPIC	SHYAM BABU	CHECKED BY	RANJAN
CHAIRMAN	K.B.SUBRAMANYAM	SUPERVISED BY	SVS NARAYANA
GPSC		APPROVED :	PLANT STANDARDS COMMITTEE
		PREPARED :	SMS TECH
		ISSUED :	Steel Melting Shop
		DATE :	07/09/09





## PLANT PURCHASE SPECIFICATION

(CFFP - HARDWARE)

FF 05005 Rev4

Page 2 of 3

COPYRIGHT AND CONFIDENTIAL  
The information on this document is the property of Bharat Heavy Electrical Limited. It must not be used directly or indirectly in any way detrimental to the interest of the company.

## 7. INSPECTION

- 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.
- For any deviation from this specification prior approval shall be taken by the supplier.
- For result of analysis and properties of material the decision of CFFP shall be final and binding on the supplier.
- If the material is not conforming to this specification, it is liable to be rejected and the supplier shall replace the same.

## 8. TEST CERTIFICATES

One Original and three copies of Test Certificate from the original manufacturer containing the following information should be provided.

Manufacturer's Name  
Name of the material  
Batch/Lot No.  
Quantity.

Note:

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

## 9. PACKING AND MARKING

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

Name of the material  
Manufacturer's Name / Trade mark  
Batch/Lot No.  
Net weight.

WORKED  
BY

M.K.SAHU

*[Signature]*

07/09/09

CHECKED  
BY

RANJAN

*[Signature]*

07/09/09

CONTROLLED COPY

BHEL	PLANT PURCHASE SPECIFICATION	FF 05005 Rev4
	C.F.F.P. HARDWAR	PAGE: 3 OF 3

### REVISION RECORD SHEET

SN	Revision No.	Revision date	Nature of Changes
01.	04	07.09.2009	-Clauses 8 and 9 revised incorporating requirement of manufacturer's packing and Test certificate.

ISSUED BY:	SMS	WORKED	M.K.SAHU <i>MKS</i>
REVISION	04	DATE: 07/09/09	CHECKED RANJAN <i>Ranjan</i>
AGREED	PLANT PUR. SPEC.COMMTTEE	APPROVED	P.P.S.C.