



PLANT PURCHASE SPECIFICATION

(CFFP - HARDWAR)

FF 05067 Rev01

Page 1 of 4

WET RAMMING MASS (BASIC)

1. SCOPE

This specification governs the requirement of Magnesite Ramming mass used for building hearth, banks, and slag door of electric arc furnaces.

2. APPLICATION

Wet magnesite ramming mass used for building hearth, banks, and slag door of Electric arc furnaces in cold condition.

3. CONDITION OF DELIVERY

The size should be in the range of 0-5 mm. However oversized material should not exceed 5% by weight.

4. COMPLIANCE WITH NATIONAL STANDARDS

IS-15508:2004

5. CHEMICAL COMPOSTION

The material shall conform to the following chemical composition when it is analyzed in accordance with IS: 15508:2004.

ELEMENT	% MIN	%MAX
MgO	86	-
CaO	-	2.0
Fe ₂ O ₃	-	1.5
SiO ₂	-	9.0
Al ₂ O ₃	-	2.0
Na ₂ O+K ₂ O	-	0.1
Loss on Ignition	-	1.5

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



PLANT PURCHASE SPECIFICATION

(CFFP - HARDWAR)

FF 05067 Rev01

Page 2 of 4

6. PHYSICAL PROPERTIES:

Basic ramming mass shall conform to the requirements given below.

Property	Requirement	Reference for Testing
Grain size ,mm	0-5	IS-1528 (Part 14)
Percentage, retained above maximum size ,Maximum	5	IS 1528 (Part 14)
Bulk density, gm/cc, at 110°C/24 hrs, Min	2.55	IS -10047
Maximum service temperature (°C)	1700	
Sintering temperature (°C)	1550	
Water required (%) for gunning	6-9	
Refractoriness,(Orton/°C ,Min	38/1835	IS-1528 (Part 2)

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.

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.

WORKED
BY

M.K.SAHU

07-09-09

CHECKED
BY

RANJAN

07-09-09



PLANT PURCHASE SPECIFICATION

FF 05067 Rev01

(CFFP - HARDWAR)

Page 3 of 4

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.

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.

WORKED
BY

M.K.SAHU

07.09.09

CHECKED
BY

RANJAN

07.09.09

BHEL	PLANT PURCHASE SPECIFICATION	FF 05067 Rev 01
	C.F.F.P. HARDWAR	PAGE: 4 OF 4

REVISION RECORD SHEET

.SN	Revision No.	Revision date	Nature of Changes
01.	01	07.09.2009	-Clauses 8 and 9 revised incorporating requirement of manufacturer's packing and Test certificate. - Loss on ignition under physical properties changed to 1.5 %.

ISSUED BY:	SMS	WORKED	M.K.SAHU <i>MKS</i>
REVISION	01	DATE: 07.09.09	CHECKED RANJAN <i>Ranjan</i>
AGREED	PLANT PUR. SPEC.COMMTTEE	APPROVED	P.P.S.C.