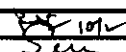
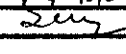
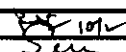
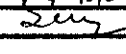
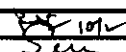
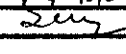


संकेत एवं दिनांक SIGN & DATE		संस्थान क्रय विनिर्देश (सी.एफ.एफ.पी. - हरिद्वार)		FF 05031 Rev 01																															
		MASTER COPY PLANT PURCHASE SPECIFICATION (CFFP - HARDWAR)		पृष्ठ का Page 1 of 4																															
सुपरसेड इन्वेंटरी नं. SUPERSEDES INVENTORY NO.	GRAPHITE ELECTRODES																																		
सामग्री सूची संख्या को जर्जिलिंग करना है	1. SCOPE This specification governs the quality requirements of Graphite Electrodes and Nipples used in electric Arc-Furnaces.																																		
COPYRIGHT AND CONFIDENTIAL The information on this documents 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	2. APPLICATION Graphite electrodes are essential consumable for electric Arc.- furnaces. These are used for melting steel scrap and for increasing and maintaining temperature of liquid scrap during manufacturing of steel.																																		
	3. COMPLIANCE WITH NATIONAL STANDARD The material shall conform to Indian standard specification IS : 9050-1979 for 'Nominal' dimensions of cylindrical machined graphite electrodes with threaded sockets and connecting pins/Nipples for use in electric Arc furnaces. All tolerances on diameters and lengths shall be conforming to above specification.																																		
	4. INSPECTION AT SUPPLIER'S WORKS - CFFP/BHEL reserves the right to inspect the material after / before despatch. Therefore the supplier should intimate in advance enclosing a copy of test certificate of the material offered for inspection. - Final inspection will be done at CFFP. - For any deviation from this specification prior approval of CFFP shall be taken. - For results of analysis and properties of material the decision of CFFP shall be final and binding on the supplier. - If the material is not found suitable according to the requirements, it shall be replaced free of cost by the supplier.																																		
रसदालिकार एवं गोपनीय इस प्रवेक में दी गई सूचना भारत भारी इलेक्ट्रिकल की संपत्ति है इसका प्रयुक्त एवं प्रसारण कर से किसी भी तरह प्रयोग, जो कि कंपनी के हित में इतिकरक हो न किया जाए	5. PROPERTIES Graphite electrodes shall have following properties:																																		
दिनांक एवं SIGN & DATE	<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td>नाम NAME</td> <td>चिह्नक एवं हस्ताक्षर SIGNATURE & DATE</td> </tr> <tr> <td>QM</td> <td>N.K.SAHU</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MPIC</td> <td>K.B.SOOD</td> <td></td> <td>निर्माणकर्ता WORKED BY</td> <td>RAJIV KUMAR</td> <td></td> </tr> <tr> <td>QM(HEAD)</td> <td>K.K.GUPTA</td> <td></td> <td>जांचकर्ता CHECKED BY</td> <td>L.K.KHANDELWAL</td> <td></td> </tr> <tr> <td>सहमत विभाग AGREED DEPTT</td> <td>नाम NAME</td> <td>हस्ताक्षर एवं चिह्नक SIGNATURE & DATE</td> <td colspan="3"></td> </tr> </table>									नाम NAME	चिह्नक एवं हस्ताक्षर SIGNATURE & DATE	QM	N.K.SAHU					MPIC	K.B.SOOD		निर्माणकर्ता WORKED BY	RAJIV KUMAR		QM(HEAD)	K.K.GUPTA		जांचकर्ता CHECKED BY	L.K.KHANDELWAL		सहमत विभाग AGREED DEPTT	नाम NAME	हस्ताक्षर एवं चिह्नक SIGNATURE & DATE			
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5.13	NOMINAL DIA (mm)	GRAPHITE ELECTRODE (CLASS)	CORRESPONDING NIPPLE (CLASS) 4 TPI
	175-300	HC 175-300	HPC 175-300
	350	HC-350	HPC-350
	400	HC-400	HPC-400
	500	HPC-PC-400	HPC-PC-400

Characteristics of nipple shall conform to IS-9050-1979.

6. CLEARANCE FOR DELIVERY

Objections shall be raised in case the material does not confirm to the condition specified in specification whereby the deviations interfere to significant extent with use of the material.

The clearance does not release the supplier from the responsibility for non-conformance determined later on.

7. TEST CERTIFICATE

The supplier shall furnish 4 copies of test certificates unless otherwise specified in purchase order. The test certificate must contain the following and must reach BHEL before or along with the material.

7.1 BHEL Reference

7.1.1 Material Specification.

7.1.2 Purchase Order No.

7.2 Supplier Reference

7.2.1 Supplier's name or emblem.

7.2.2 Material Batch No. and Serial No.

7.2.3 Test Results of analysis as per clause 5.

8. PACKING AND MARKING

8.1. The graphite electrodes shall be suitably packed in wooden crates/pallets, the end of graphite electrodes shall be covered with corrugated boards to protect the threads and to avoid damage during transit. Nipples should be packed in thick corrugated boxes.

8.2. The following shall be marked on the container.

8.2.1. Manufacturer's name.

8.2.2. Batch/Lot No.

8.2.3. Trade mark, if any.

Date: 11.02.06

निर्वाहकर्ता
WORKED BY

RAJIV KUMAR

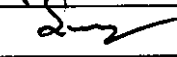
जाँचकर्ता
CHECKED BY

L.K.KHANDELWAL

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	C.F.F.P. HARDWAR	PAGE: 4 OF 4

REVISION RECORD SHEET

S. No.	Revision No.	Revision date	Nature of Changes
01.	01	11.02.06	“CLASS HC 300” and “HPC 300” in Clause 5 changed to “CLASS HC 175-300” and “CLASS HPC 175-300”. Clause 5.12 and 5.13 modified. CLAUSE 4, 6 and 7 modified.

ISSUED:	SMS TECHNOLOGY	WORKED	
REVISION	01	DATE: 11.02.06	CHECKED 
AGREED	PLANT PUR. SPEC.COMMTTEE	APPROVED	P.P.S.C