

**WEX – SERVICE PLANTS
BHEL, HEEP HARIDWAR**

Annexure-I

TECHNICAL SPECIFICATION OF CALCIUM CARBIDE & QUALIFYING CONDITIONS

(Ref. Indent No. 20173922; Dt. 11-11-2017)

Description	Vendor's Comment/Remark
A) <u>QUALIFYING CRITERIA</u>	
1) The offer of only those manufacturer/traders/stockists shall be considered who have supplied at least 36 MT of calcium carbide of quality as per BHEL requirement during last three years from the tender opening date. Relevant PO copies shall be submitted with offer.	
B) <u>TECHNICAL SPECIFICATION</u>	
1) <u>GENERAL</u> : This specification is for requirement of Calcium Carbide, Technical, Quality B in grade size of 25 to 50 mm.	
2) <u>APPLICATION</u> : For production of acetylene gas.	
3) <u>COMPLIANCE WITH INDIAN STANDARD</u> : The material shall comply with the requirements of the IS : 1040 – 2003, Quality B Calcium Carbide.	
4) <u>TEST SAMPLES</u> : Samples for testing shall be drawn as per Appendix D of IS: 1040.	
5) <u>PROPERTIES</u> : When tested as per relevant test methods / clauses of IS:1040 shown against each, the material shall show the following properties : 5.1 Grade Size of Pieces (Cl 4): 25 – 50 mm. 5.2 Gas Yield (Cl 5.2): The material shall yield 288 lit/kg, minimum of gas (measured dry or corrected to dry gas basis) calculated at NTP.	
6) <u>TEST CERTIFICATES</u> : The test & gas yield certificate shall be supplied along with each consignment, giving the following information: • BHEL Order No. • Batch / Lot No. • Supplier's/ Manufacturer's Name and Trade mark, if any	



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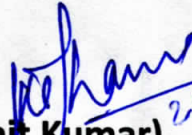
7) <u>PACKING & MARKING</u> : The material shall be supplied in suitable non-returnable moisture proof steel containers of capacity 100 kg. Each container shall be legibly marked with the following information: • Calcium carbide, Quality B, Size: 25-50 mm • Batch / Lot No. • Manufacturing Date of Calcium Carbide • Supplier's/ Manufacturer's Name and Trade mark, if any • The container shall also be clearly marked with the symbol indicating danger of ignition with the wording "CALCIUM CARBIDE-DANGEROUS IF NOT KEPT DRY".	
8) <u>INSPECTION OF MATERIAL</u> : Pre-Despatch inspection & testing of material may be carried out at the manufacturer or vendor works by BHEL representative. However BHEL reserves the right for testing and inspection of material at our works' for every consignment to ascertain the quality and results must be acceptable to supplier.	
9) <u>TRANSPORTATION</u> : The Calcium carbide shall be transported as per safety regulations laid by Chief Controller of Explosives, Govt. of India and other regulatory authorities.	
10) <u>MANUFACTURER/TRADERS/STOCKISTS</u> : The following shall apply to manufacturer/traders/stockists :- 10.1 The material of only one manufacturer will be acceptable in one lot and the details of manufacturer must be provided to us. 10.2 The material supplied shall not be older than 60 days from date of manufacture. If material is imported then its date of manufacture must be traceable to import documents.	
11) <u>PENALTY ON LOWER GAS YIELD</u> : 11.1 After testing if the gas yield is found to be less than 288 lit/kg (upto 274 lit/kg) then material will be accepted but basic price of calcium carbide shall be reduced as follows: – % Reduction in basic price : $3 \times \frac{(288 - GY)}{288} \times 100$; where GY = Gas yield obtained in lab 11.1.1 The gas yield below 274 lit/kg shall not be acceptable and material will be rejected. 11.1.2 Further supplies from the vendor will be stopped and balance quantity will be awarded to other supplier.	

Signature

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11.1.3 In case of any dispute w.r.t. to quality (size, gas yield, etc.), report of inspection & testing at our works' shall be final.	
12) TC & GC is required alongwith each lot of Calcium Carbide. Guarantee is required for 12 Months from the date of receipt of material at BHEL, Haridwar.	

Note:- Vendor shall confirm/comment against each point, if required additional sheet can also be attached for more details/comments.


(Mohit Kumar) 25/04/18
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A.G.M (WEX – SP, ERN & ERS)

(वेक्स-ए.सी. सर्विस प्लांट एवं डी.जी.सेट)
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