

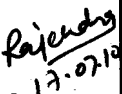
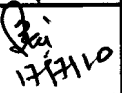


दिनांक एवं हस्ताक्षर SIGN & DATE		PRODUCT PURCHASE SPECIFICATION		CAPITAL																												
				पृष्ठ 1 का 2 Page 1 of 2																												
सामग्री सूची संख्या को SUPERSEDES INVENTORY NO	PM 2.5/PM10 AMBIENT AIR SAMPLER																															
COPYRIGHT AND CONFIDENTIAL The information 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.	<ol style="list-style-type: none"> PM 2.5 / PM10 Ambient Air Sampler equipped with capability of measuring PM 2.5 and PM 10 dust using Brushless Motor. PM 2.5 and PM10 Impactors of sampler based on standardized designs. The sampler using a brush-less pump with a low noise. Instrument should be capable of sampling PM10 and PM2.5 (one at a time). Equipment to be used for PM10 measurement or PM2.5 measurement (one parameter at a time). Lower sampling rate of 1 m³/hr. Critical Orifice for maintaining sampling rate of 1 m³/hr. Compact and portable for field operation. <p>8. Broad Specification:-</p> <ul style="list-style-type: none"> Particle size : PM 10 (less Than 10 microns) / PM 2.5 (less than 2.5 microns). Sampling rate : Sampling rate of approx. 1 m³/hr Filter Media : Filter holder - standard 47 mm dia filter media Sampling time record : 0-9999.99 hours recorded on time totaliser Sample Volume : Meter for recording the total volume sampled. Power required : 220 V, single Phase. 50 Hzs, AC main supply Voltage Stabilizer : Equipped with Voltage Stabilizer <p>9. Consumables :</p> <table border="1"> <thead> <tr> <th>S.N.</th> <th>Consumables</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>PTFE filter with identification number for each filter, Whatman Make, Pore Size 2µm, dia 46.2mm with PP ring supported. Suitable for monitoring PM 2.5 particulates in sealed packet of 50 discs</td> <td>6 pkts</td> </tr> <tr> <td>2</td> <td>37mm dia GF/A Filter paper, Whatman make, for Impactor in a sealed packet of 100 discs.</td> <td>6 pkts.</td> </tr> <tr> <td>3</td> <td>47mm dia GF/A Filter Paper, Whatman make, in a sealed packet of 100 discs for monitoring of Dust PM 10</td> <td></td> </tr> <tr> <td>4</td> <td>Filter carrier with cover</td> <td>6 pkts.</td> </tr> <tr> <td>5</td> <td>Silicone Oil for Impactor in 100ml bottle.</td> <td>6 Nos.</td> </tr> </tbody> </table>					S.N.	Consumables	Quantity	1	PTFE filter with identification number for each filter, Whatman Make, Pore Size 2µm, dia 46.2mm with PP ring supported. Suitable for monitoring PM 2.5 particulates in sealed packet of 50 discs	6 pkts	2	37mm dia GF/A Filter paper, Whatman make, for Impactor in a sealed packet of 100 discs.	6 pkts.	3	47mm dia GF/A Filter Paper, Whatman make, in a sealed packet of 100 discs for monitoring of Dust PM 10		4	Filter carrier with cover	6 pkts.	5	Silicone Oil for Impactor in 100ml bottle.	6 Nos.									
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स्वत्वाधिकार एवं गोपनीय इस दस्तावेज में दी गई सूचना भारत हेवी इलेक्ट्रिकल्स की सम्पत्ति है इसका प्रत्यक्ष एवं अप्रत्यक्ष रूप से किसी भी तरह प्रयोग, जो कि कंपनी के हित में हानिकारक हो सकता है।	<table border="1"> <tr> <td>हस्ताक्षर एवं दिनांक SIGN & DATE</td> <td>नाम NAME</td> <td>दिनांक एवं हस्ताक्षर SIGNATURE & DATE</td> </tr> <tr> <td></td> <td>अनुवादक TRANSLATED BY</td> <td></td> </tr> <tr> <td></td> <td>निर्माणकर्ता WORKED BY</td> <td>(Rajendra Yadav)</td> </tr> <tr> <td></td> <td>जांचकर्ता CHECKED BY</td> <td>(Bhoj Raj)</td> </tr> <tr> <td>सहमत विभाग AGREED DEPT.</td> <td>नाम NAME</td> <td>दिनांक एवं हस्ताक्षर DATE & SIGNATURE</td> </tr> <tr> <td></td> <td>पर्यवेक्षणकर्ता SUPERVISED BY</td> <td>(Ambrish Goel)</td> </tr> <tr> <td></td> <td>स्वीकृति APPROVED :</td> <td>(Ambrish Goel)</td> </tr> <tr> <td>REV.NO.</td> <td>निर्माण PREPARED :</td> <td>जारी ISSUED :</td> </tr> <tr> <td>DI.</td> <td></td> <td>दिनांक DATE : 17.7.10</td> </tr> </table>					हस्ताक्षर एवं दिनांक SIGN & DATE	नाम NAME	दिनांक एवं हस्ताक्षर SIGNATURE & DATE		अनुवादक TRANSLATED BY			निर्माणकर्ता WORKED BY	(Rajendra Yadav)		जांचकर्ता CHECKED BY	(Bhoj Raj)	सहमत विभाग AGREED DEPT.	नाम NAME	दिनांक एवं हस्ताक्षर DATE & SIGNATURE		पर्यवेक्षणकर्ता SUPERVISED BY	(Ambrish Goel)		स्वीकृति APPROVED :	(Ambrish Goel)	REV.NO.	निर्माण PREPARED :	जारी ISSUED :	DI.		दिनांक DATE : 17.7.10
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सुपरसेड्स INVENTORY NO. सामग्री सूची संख्या को अपडेट किया है	<p>10. Optional Accessories :</p> <p>Gaseous Sampling Attachment</p> <p>Specifications:-</p> <ol style="list-style-type: none"> 1. Flow Rate : 0.3 lpm to 3 lpm . 2. Flow Control : four inlet and on outlet with built in needle valves for flow control 3. Sampling Train: 4 no. of 35 ml borosilicate midget glass impingers with four inlets <p>11.0 General Terms & Conditions</p> <p>11.1 Document : Two hard copies of O&M manual in English language giving complete technical information for operation and maintenance of the equipment including circuit diagram shall be supplied.</p> <p>11.2 Installation and Commissioning : The supplier shall demonstrate the performance of the Equipment at PCRI, BHEL Haridwar and all its accessories to ensure compliance with complete specifications & parameters quoted by them to the satisfaction of BHEL</p> <p>11.4 The equipment shall work on 220 VAC, 50 Hz single phase supply.</p> <p>11.5 Guarantee: The equipment shall be guaranteed for satisfactory performance for a period of 12 months from the date of commissioning.</p> <p>11.6 Packing & Dispatch : The equipment / accessories shall be packed in a suitable water proof/vibration proof packing boxes capable of bearing road transit hazards.</p> <p>12.0. Cross referred Document: Nil</p>				
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हस्ताक्षर एवं दिनांक SIGN & DATE					
सामग्री सूची संख्या INVENTORY NO.	REV.NO.		निर्माणकर्ता WORKED BY जांचकर्ता CHECKED BY	Rajendra Yadav Bhoj Raj	 

PRE-QUALIFYING REQUIREMENT (PQR) :

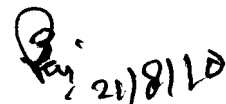
Only those vendors(OEMs) should quote who have supplied and commissioned at least one equipment of same size in the past ten years(on the date of opening of tender) and referred equipment is presently working satisfactorily for more than one year after commissioning(on the date of opening of tender).

The following information is to be submitted by the vendor about the companies where similar equipments have been supplied. This is required for all vendors for qualification of their offer.


- a. Name of the customer/company where referred system is installed
- b. Complete postal address of the customer.
- c. P.O.No., date, scope of supply and Month & year of commissioning.
- d. Name and designation of contact person of the customer
- e. Phone, Fax no. and e-mail address of the contact person of the customer
- f. Performance certificate from the customers regarding satisfactory performance of system supplied to them (Original Certificate or Through E-mail directly from customer).

The original performance certificate may be returned after verification by BHEL, if required.

1. Prices should be quoted for individual items separately. However all the items shall be procured from same party only in view of consideration of technical compatibility of these items. etc. which have been quoted
2. Party should indicate any other operating/ environmental requirement for safe and trouble-free operation of system and also any specific requirements of the system for continuous operation over prolonged periods as may be required in process monitoring/control applications.
3. Party shall quote all items even which are not mentioned in specification.



(Bhoj Raj)
Sr. Manager (PCRI)

DGM (PCRI)  21/8/10