



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

ENQUIRY

NOTICE INVITING TENDER

Phone: +91 431 257 7421
+91 431 257 7360
Email : vkaruna@bhel.in
Web : www.bhel.com

TWO PART BID

Tender to be submitted in two Parts

Enquiry
Number:

2741900021

Enquiry
Date:

26.11.2019

Due date for submission
of quotation:

23.12.2019

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of tender opening.

Item	Description	Quantity	(Indigenous Vendors) Matl. will be Delivered to
10	Gas analyser and Dust monitor as per the technical specification & commercial conditions applicable (to be downloaded from web site (http://www.bhel.com) http://www.bhel.com/tender/tender_home.php or https://eprocure.gov.in/epublish/app)	1.00 No.	FOR, BHEL Stores, PPPU, THIRUMAYAM 622 507.

Important points to be taken care during submission of offer

1. Material shall be delivered to: Indigenous Vendors: As stated above.
Foreign Vendors: CFR Chennai Seaport / CPT Chennai Airport
2. Delivery required 3 Month including PDI from the date of purchase order.
3. Erection & Commissioning period required NA from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
4. EMD for this Tender will be (not less than): INR 40,000/-
5. Compliance Form Nos.: TRY/IND/07 to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
6. All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media.

BHEL's General guidelines / instructions (refer MM / CE / GENL / 001 - EMD) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site (<http://www.bhel.com>) http://www.bhel.com/tender/tender_home.php or from the Government tender website <https://eprocure.gov.in/epublish/app> under above Enquiry reference.

(This is not an E-tender, please submit your offer in hard copies)

Tenders should reach us before 14:00 hours on the due date
Tenders will be opened at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present

Yours faithfully,
For BHARAT HEAVY ELECTRICALS
LIMITED

V. Karunakaran 26/11/19
DGM / Capital Equipment / MM

Part A:- Pre-Qualification Criteria for Supply of Gas analyser and Dust monitor

SI No	BHEL's Requirement	Vendor's Response
1	Only those vendors , who have supplied and commissioned at least ONE number of "Flue gas analyzer system" similar to the equipment specified under Part B, in the past SEVEN years (as on original date of opening of Tender) and is presently working satisfactorily for more than one year after commissioning (as on original date of opening of Tender) should quote. Vendor to attach the proof of Purchase order/Work order along with the offer.	
2	Vendor has to submit at least ONE PERFORMANCE CERTIFICATE for satisfactory performance of "Flue gas analyzer system" as referred under clause 1 above, for a minimum period of one year from the date of commissioning (as on the original date of tender opening) from their customers. Performance certificate as Original Certificate or E-mail directly from the customer may be submitted. The original certificate may be returned after verification by BHEL, if required. For obtaining the Performance certificate, a suggestive format is provided.	
3	The BIDDER / VENDOR to furnish Reference List of Customers, with complete address, details of contact person, where such systems have been supplied in the past three years.	
4	Bidder to provide continuous service support to BHEL in case of service requests for supplied system in future. Details on Service-After-Sales facilities in India to be furnished.	

Part B:- Technical Specification for Supply of Gas analyser and Dust monitor for 40T Furnace chimney at BHEL, PPPU - Thirumayam			
SI No	BHEL's Desired Parameter/ Specification		Bidder's Offer with technical details
1	Gas Analyzer - 1 Set		
1.1	Make and model	Make - FUJI, Model - ZRE to meet the following parameters mentioned from SI Nos 1.2 to 1.15.	
1.2	Gases to be analyzed	Simultaneous and continuous measurement of NOx, SOx, CO and O ₂ components of flue gases.	
1.3	Measurement principle	Non Dispersive Infra-Red Spectroscopy for NOx, SOx and CO; zirconia based Oxygen sensor (external - type ZFK7) or built-in paramagnetic sensor.	
1.4	Measurement range for NOx SOx CO O ₂	NOx:0-2000 ppm SOx: 0-2000 ppm CO: 0-2000 ppm O ₂ : 0-25%, volume	
1.5	Resolution	0.1% on % or 1 PPM on PPM	
1.6	Accuracy	2% of reading or better	
1.7	Response time	Maximum 60 seconds.	
1.8	Display	Digital indication in 4 digits.	
1.9	Dimensions(HxWxD)	19" rack mounting type. 133 x 483 x 418 mm.	
1.10	Linearity	+/-1% of full scale	
1.11	Output signal	Minimum 6 linear, isolated, 4-20 mA output. Suitable signal isolators should be provided.	
1.12	Power supply	180 - 260 V AC, 50Hz.	
1.13	Communication interface	RS485/RS232/USB/Ethernet; compatible software/modem for PC communication and data download from the internal memory of the instrument.	
1.14	Auto calibration facility	Built in calibration facility should be incorporated in the instrument. Auto calibration unit should be supplied with calibration gas cylinders with regulators and all required accessories.	
1.15	Calibration certificate	Calibration certificate/ test certificate from authorized agency should be provided.	
2	Dust Monitor for Suspended Particulate Matter - 1 Set		
2.1	Make and model	Dust and opacity meter: TGI-DA100 Controller unit: TGI-DA101 Sender: TGI-DA102 Receiver: TGI-DA103 Auto cleaner: TGI-DA104 to meet the following parameters mentioned from SI Nos 2.2 to 2.14.	
2.2	Device Type	Cross Duct Single Pass Optical Transmissometry type	

Part B:- Technical Specification for Supply of Gas analyser and Dust monitor for 40T Furnace chimney at BHEL, PPPU - Thirumayam			
SI No	BHEL's Desired Parameter/ Specification		Bidder's Offer with technical details
2.3	Measurement principle	Combination of transmittance and scattered light measurement.	
2.4	Display	LCD 70x38mm	
2.5	Measuring transmission	100 - 0%	
2.6	Measuring opacity	0 - 100%	
2.7	Measuring dust concentration	0 - 1000 mg/Nm ³	
2.8	Accuracy	± 1% of full scale	
2.9	Gas temperature range	Up to 300 deg C	
2.10	Power input	85-260VAC; 50 Hz	
2.11	Test function	Manual and auto calibration facility should be provided.	
2.12	Fail safe shutter	Automatic fail safe shutter should be provided.	
2.13	Purge air blower	Purge air blower with necessary filter should be supplied.	
2.14	Interface	Remote control unit, RS- 232, RS-485 interface etc.	
3.0	Documentation		
3.0.A	Documents to be sent along with the offer		
3.0.A.1	Technical datasheets of all the equipments.		
3.0.B	Documents to be supplied with materials		
3.0.B.1	Three sets of following documents (hard copies) in English should be supplied. One copy in CD should also be supplied.		
3.0.B.2	O&M manuals and technical datasheets of gas analyser and dust monitor.		
3.0.B.3	The supplier should produce valid calibration and test certificates for the instruments and the supplier should provide details of the sources from where we can get the certificates in future.		
4.0	Guarantee: The vendor should offer guarantee for the mentioned equipments for minimum 12 months from the date of acceptance by BHEL.		