



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirapalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

ENQUIRY

NOTICE INVITING TENDER

Phone: +91 431 257 76 53

Email : skaruna@bheltry.co.in

spsy@bheltry.co.in

Web : www.bhel.com

TWO PART BID

Tender to be submitted in two Parts

Enquiry
Number:

2631700103

Enquiry
Date:

27.11.2017

Due date for submission
of quotation:

19.12.2017

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 should reach physically on or before 14.00 Hrs(IST) on the Date of tender opening. Tenders received after 14.00Hrs (IST) will not be considered for evaluation.

Item	Description	Quantity	(Indigenous Vendors) Matl. Will be Delivered to
10	Water Purification System as per the technical specification & commercial conditions applicable (To be downloaded from web site www.bhel.com or http://tenders.gov.in)	1 No	FOR, BHEL, Stores, HPBP TRICHY

Important points to be taken care during submission of offer

- 1) Material shall be delivered to (By Indigenous vendors): As stated above.
- 2) By Foreign Vendors: CFR Chennai Seaport / Airport
- 3) Delivery required 2 months from the date of purchase order.
- 4) Erection & Commissioning period required 1 Week from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
- 5) EMD for this Tender will be (INR): NIL
- 6) Compliance Forms. TRY/IMP/04 & TRY/IND/04A to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
- 7) 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 / 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> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference .

Tenders should be submitted before 14.00Hrs (IST) on the due date
Tenders will be opened online 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

DGM / Capital Equipment / MM

S.PARTHASARATHY
MANAGER

CAPITAL EQUIPMENT / MM
BHEL, TRICHY-620014.

LABORATORY WATER PURIFICATION SYSTEM, Qty. 1 no.

PART A

Section 1 - Qualifying Criteria:

The BIDDER has to compulsorily meet the Qualifying criteria indicated in SECTION 1 to get qualified. Otherwise the technical offer will not be considered.

S. No.	REQUIREMENTS	BIDDER's RESPONSE
1.1	The bidder/OEM shall have a minimum of last 10 years of continuous experience in the field of Design, manufacture and supply of laboratory water purification system The relevant documents viz. PO, delivery challan should be submitted as proof of experience as per this clause.	
1.2	Only those vendors who have supplied, and commissioned at least 5 nos. of the model quoted against this tender or a higher model in the past five years (on the initial date of opening of tender) should quote.	
1.3	The bidder should submit at least one Performance certificate from any of the customers regarding satisfactory performance of the model quoted against this tender or a model with higher rating for a minimum period of one year from the date of commissioning (as on the initial date of opening of tender), supplied to such customers in the last 5 years. Full contact details of the customer from whom the performance certificate is obtained are to be provided. For obtaining the Performance certificate, a suggestive format is provided in Annexure A.	
1.4	Service centre to be available in India. Details on Service-After-Sales Set-Up in India (Address of Agents / Service Centres), to be furnished compulsorily.	
1.5	BHEL reserves the right to accept or reject the BIDDER /VENDOR (OEM) offer based on the assessment of their technical capability. BHEL reserves the right to verify the information provided by the Vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	

SECTION 2: The BIDDER is requested to provide the following information:

S. No.	REQUIREMENTS	BIDDER's RESPONSE
2.1	Number of "Laboratory Water purification system" supplied & commissioned till date.	
2.2	Year of Launch of the Model quoted in this tender.	
2.3	The BIDDER shall give details about supply of similar purification system to BHEL units if any with Make, Model and Year of Supply & Commissioning etc.	
2.4	A complete reference list of Customers shall be furnished to whom such offered model has been supplied in the last ten years with PO details, Qty., Year of commissioning with contact details of the customers.	
2.5	Original catalogue for the offered model has to be attached along with the technical bid. Photo copies of the catalogues are not accepted.	
2.6	The vendor has to supply the spares for the offered instrument model for at least five years from the date of commissioning.	

SECTION 3: The BIDDER to note:

S. No.	REQUIREMENTS	BIDDER's RESPONSE
3.1	The BIDDER shall submit the offer in Two Parts – 1. Technical [with PART A & PART B] & 2. Commercial and Price Bid.	
3.2	The BIDDER's RESPONSE against each clause in PART A & B of the offer should be filled by the BIDDER compulsorily with complete details.	
3.3	The BIDDER shall assure a continuous support for Spares and Service for 5 Years, from the date of commissioning of the equipment at BHEL Works.	
3.4	The Technical Offer shall be supported by Product Catalogue and Data Sheets in original and complete technical details / literature on the quoted models	
3.5	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation.	

(On Customer's letter head)

PERFORMANCE CERTIFICATE

1. Supplier of the machine :
2. Make & Model of the m/c :
3. Month & Year of Commissioning :
4. Quantity :
5. Machine Details :
6. Performance of the Machine : Satisfactory / Not Satisfactory
(Strike off whichever is not applicable)
7. After sales service : Satisfactory / Not Satisfactory
(Strike off whichever is not applicable)
8. Any Other remarks :

Date:

Signature & Seal of the Authority
Issuing the Performance Certificate

LABORATORY WATER PURIFICATION SYSTEM, Qty. 1 no.

PART B – Technical Specification

S. No.	BHEL SPECIFICATION	BIDDER's OFFER
1	Purpose: The intended Laboratory water purification system should be a bench top equipment for producing high pure water and ultra-pure water fit for carrying out inorganic analyses mainly Ion Chromatography analysis, for measuring low level chlorides and trace elements analysis in ICP-MS.	
2	Features of the Water Purification system:	
2.1	The Laboratory water purification system should consists of an electro de-ionization (EDI) system coupled with a reverse osmosis (RO) system, multi stage mixed bed ion exchange system as its primary components. Bidder to confirm and give details.	
2.2	The regeneration of EDI system should be carried out automatically without requiring any external chemicals, replaceable consumables. Bidder to confirm and give details.	
2.3	The RO system should have polymeric membrane system which is stable in handling water with input water chloride content. Bidder to confirm and give details.	
2.4	The multi stage mixed bed system shall be used for polishing the purified water quality to produce ultra-pure water. Bidder to confirm and give details.	
3	Bidder to specify the rejection efficiency of the RO system. The same shall be demonstrated during commissioning of the equipment by comparing the input, output water quality by system inbuilt measuring facilities for both input, output water streams seperately.	
4	The water quality measuring facilities in the offered water purification system. Vendor to give details	
5	Vendor to specify the display or warning Indicators available for ex. Low Pressure Indicator, resin exhaustion indicators etc. in the offered system	
6	Input Feed water at BHEL: specific conductivity more than 2000 $\mu\text{S}/\text{cm}$ at 25 °C with chloride about 200 ppm.	

S. No.	BHEL SPECIFICATION	BIDDER's OFFER
7	High Pure water - The Laboratory water purification system should produce high pure water with specific conductivity less than or equal to 0.1 $\mu\text{S}/\text{cm}$ at 25 °C and accordingly the resistivity shall be less than or equal to 10 $\text{M}\Omega\cdot\text{cm}$ at 25 °C. The product high pure water quality should conform to ASTM reagent water quality standard Type II as per D 1193-06 (2011).	
8	Ultra-pure water - The Laboratory water purification system should also include provisions for polishing the product water (high pure) for producing ultra-pure water having resistivity of 18 $\text{M}\Omega\cdot\text{cm}$ at 25 °C. The product ultra-pure water quality should conform to ASTM reagent water quality standard Type I as per D 1193-06 (2011).	
9	The total organic carbon content shall be filtered and restricted to less than 30 ppb in the high pure product water.	
10	The total chloride content shall be restricted to 30 ppb in the high pure product water. This is an essential requirement since this high pure product water is to be used as a solvent/diluting agent for measuring low level chlorides in aqueous analytical samples.	
11	The total silica content shall be restricted to 10 ppb in the high pure product water.	
12	Pretreatment system: The laboratory water purification system shall contain a pretreatment system such as a dual filter system etc. for pretreatment of feed water in order to reduce the ionic load in the feed water by a suitable technology such as micron filters etc. so as to reduce the load on the EDI, RO system for improved activity and longevity. Vendor to confirm and give details.	
13	Necessary accessories such as pumps, gauges, controllers required for functioning of the pretreatment system shall be supplied along with the laboratory water purification system. Vendor to give details.	
14	The high pure water flow rate from the water purification system should be minimum 5 litres per day. Vendor to confirm and give details.	
15	Storage vessel: The water purification system shall have a quality storage vessel for storing the purified product water. The capacity shall be at least 30 litres. Vendor to give details.	

S. No.	BHEL SPECIFICATION	BIDDER's OFFER
16	Input power supply: 230 V, Single phase AC, 50 Hz	
17	All essential accessories and consumables required for successful installation and commissioning of the equipment shall be supplied	
18	Bidder to quote for essential spares required for 2 years of trouble free operation of the equipment	
19	Commissioning & Installation: The installation and Commissioning of the water purification system at BHEL works is to be carried out by supplier's representative.	
20	The equipment shall be guaranteed for a period of 12 months from the date of commissioning at BHEL works or 18 months from despatch whichever is earlier.	