



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

ENQUIRY

Phone: +91 431 257 7653

Fax :

Email : skaruna@bheltry.co.in

Web : www.bhel.com

NOTICE INVITING TENDER

TWO PART BID

Enquiry
Number:

Enquiry
Date:

Due date for submission
of quotation:

Tender to be submitted in two Parts

2631700003

13.03.2017

06.04.2017

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 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	Centrifugal Pump as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	1.00 No.	FOR, BHEL, Stores, High Pressure Boiler Plant, Tiruchirappalli - 620014

Important points to be taken care during submission of offer

1. Delivery required 1.50 Months from the date of purchase order.
2. Erection & Commissioning period required 2 Weeks from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
3. Compliance Form No: TRY/IND/08 to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
4. 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) 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 above Enquiry reference.

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**

[Signature]
DGM / Capital Equipment / MM

S.PARTHASARATHY
MANAGER
CAPITAL EQUIPMENT / MM
BHEL, TRICHY-620014.

PART - A

QUALIFYING CRITERIA FOR CENTRIFUGAL PUMP

Section-I

The BIDDER/VENDOR has to compulsorily meet the following requirement to get qualified for submitting an offer for Centrifugal pump

S.No	BHEL Specification	Vendor's Offer
1.0	QUALIFYING CRITERIA	
1.1	The BIDDER / VENDOR (OEM) shall have at least THREE Years of Experience in the Design, Manufacture & Supply of "Centrifugal PUMP". Vendor to indicate the actual no. of years of experience in the field.	
1.2	Only those vendors (OEMs), who have manufactured ,supplied and commissioned at least ONE CENTRIFUGAL PUMP driven by a motor power of minimum 4 HP (2.98KW approx.) in the last TEN years [as on date of this tender opening(first date)] should quote.	
1.3	Vendor has to submit Proof for supply and commissioning of the above pump to any of their customers.	
1.4	BHEL reserves the right to verify the information provided by the vendor. In case the information provided by the vendor is found to be false/ incorrect, the offer shall be rejected.	

Section-II

2.0	INFORMATION TO BE PROVIDED BY VENDOR	
2.1	Vendor shall provide contact details(phone no & email id) including the address of his Agents / Service Centres in India	
2.2	Number of "Centrifugal pumps" supplied and commissioned till date having motor of 4 HP(2.98 KW) or more (to quote pumps supplied during the last three years only)	
2.3	The BIDDER/VENDOR to furnish Reference List of Customers(max 10 customers) including Contact details(phone no & email id).	

SECTION III

The BIDDER to note:

S. No.	PARTICULARS	Vendor's Offer
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 VENDOR'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 Five 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 of pumps.	
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.	

PART B
TECHNICAL SPECIFICATION FOR CENTRIFUGAL PUMP

S.No.	PARTICULARS	SPECIFICATION DETAILS	VENDORS OFFER
1.0	APPLICATION		
1.1	Purpose	The proposed system is intended for filling in large quantities & also capable of withstanding Demineralised water heated to 80 deg.C for Hydrotesting of Steam Generators & Reactor Headers having a water volume of around 120 Cu.m at Secondary side & 20 cu.m at Primary side. The offered pump shall also be able to run continuously to fill the job having a capacity of maximum 120 Cu.m. Vendor to confirm and must specify the actual temperature of water that the pump can withstand.	
2.0	EQUIPMENT CONFIGURATION		
2.1	General scope	The centrifugal pump unit shall have the following elements in position to facilitate the pre-filling operation. - Centrifugal Pump coupled to Electric motor. - Pump inlet flange suitable to connect the specified inlet pipe - Pump outlet flange suitable to connect the specified outlet pipe - Control panel / Motor starter	
2.2	Electric Motor	The centrifugal Pump shall have independent on/off facility with suitable Motor, Star-Delta Starter with all the required accessories.	
2.3	Base for unit	The complete unit shall be mounted on a proper metallic flat base of suitable thickness with one hole at each corner with suitable nut and bolts for fixing.	
2.4	Diagram	A diagram to be submitted with the offer, showing the location of the entire unit including Base, and flanges with details, to meet the requirements mentioned in Clause No.2.0	

S.No.	PARTICULARS	SPECIFICATION DETAILS	VENDORS OFFER
3.0	CENTRIFUGAL PUMP SPECIFICATION		
3.1	Pump Type	Single stage Centrifugal Pump with mechanical sealing --Vendor to confirm	
3.2	Priming	Self-Priming type. Vendor to confirm	
3.3	Discharge Capacity	Around 38 Cu.m/hr. or better Vendor to provide the actual discharge capacity of the offered pump	
3.3.1	Pumping Medium	Hot DM Water heated at 80 Deg. C	
3.4	Existing Pipe line Size (OD in mm)	Suction side Pipe OD ~ 70mm Delivery side Pipe OD ~ 60mm Vendor to supply the inlet and outlet flanges to match the existing Pipe suction and delivery pipes. Vendor to provide Flanges drawings for approval incase of ordering.	
3.5	Total Head	15m water column or better (Outlet will be around 8m height from floor level) Vendor to specify	
3.6	Impeller & shaft material of pump	Stainless steel material	
3.7	Sealings	Mechanical seals to be used for sealing the rotating part of the shaft against the stationary part of the pump housing. Vendor to confirm	
3.8	Inlet Flange Coupling	Vendor to provide the material details along with the drawing	
3.9	Outlet Flange coupling	Vendor to provide the material details along with the drawing	
3.9.1	Noise level	Not more than 85 ± 3 dBA @1m distance. Vendor to confirm	
3.9.2	Make and model	Vendor to mention the make and model of pump offered	
4.0	ELECTRIC MOTOR SPECIFICATION		
4.1	Motor Type	Totally Enclosed Fan Cooled, Squirrel Cage Induction Motor	
4.2	Motor Rating	4 H.P or better with 4 pole motor. Vendor to indicate the actual rating of motor.	
4.3	Input Power	415V +/- 10%, 50Hz +/-3 Hz, 3 Phase AC (3 wire system without neutral). Vendor to confirm	
4.4	Energy Efficiency	Motor should be of EFF-1 as per IEC standard	
4.5	Motor Make	Siemens, Crompton greaves, kirloskar, ABB, L&T, Mitshubishi,Toshiba, Baldor or any other make acceptable to BHEL. Vendor to specify the make/s offered	
4.6	Motor Starter	STAR-DELTA starter of SIEMENS / L&T/Schneider/ABB/BCH make or any other make acceptable to BHEL. Vendor to specify the make/s offered	

S.No.	PARTICULARS	SPECIFICATION DETAILS	VENDORS OFFER
5.0	GENERAL INSTRUCTIONS		
5.1	Technical Comparative Statement	The offer shall contain clear Technical details for all the clauses of this specification. The offer will be liable for rejection, without this Technical Comparative Sheet.	
5.2	G.A. Drawing	The offer shall contain a detailed General Arrangement Drawing with part indications and the ratings/material of different parts (those listed in Clause 2.0)	
5.3	List of Spares	The vendor shall provide a list of critical spares required. However the list should include the following items compulsorily. The price of each item shall be submitted in a sealed bid along with the commercial offer. 1. Pump shaft - 1 No 2. Pump Bearing - 1 pair 3. Radial shaft seal - 3 pair 4. Mechanical seal – 3 set 5. Shaft protecting sleeve – 1 No	
5.4	Unpriced Bid	The Technical Bid shall contain the UNPRICED PRICE BID giving the list of items quoted, including the spares.	
6.0	O & M Manual	Three hard copies of Instruction, Operation & Maintenance Manual to be supplied	
7.0	Pre Dispatch Inspection	The pump shall be offered for inspection by BHEL at supplier's works before despatch to check its functioning. Also, The following documents have to be submitted at the time of pre dispatch inspection: a) Test Certificate of Centrifugal pump b) Test Certificate of electric motor	
8.0	Commissioning	The supplier shall depute their representative for commissioning and performance prove-out of the equipment at BHEL works.	
9.0	Guarantee	12 months from the date of commissioning and acceptance at BHEL works.	