



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 70 49 Fax : +91 431 252 07 19 Email : csguna@bheltry.co.in Web : www.bhel.com
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	Enquiry Number: 2620800036	Enquiry Date: 02.06.2008	Due date for submission of quotation: 03.07.2008
You are requested to quote the Enquiry number date and due date in all your correspondences. This is only a request for quotation and not an order			

Item	Description	Quantity	Delivery (Item required at BHEL on)
10	FRP Cooling Tower as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	2 Nos.	30.11.2008
BHEL commercial terms & conditions with Price Bid and Bank Guarantee formats along with technical specifications 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 “2620800036”.			
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 Manager / Capital Equipment / MM	

PART A**SECTION – I : QUALIFYING CRITERIA**

The BIDDER has to compulsorily meet the following requirements to get qualified for consideration of the technical offer for the Cooling Tower

S. No.	REQUIREMENTS	VENDOR's RESPONSE
1	The BIDDER shall have a minimum of TEN Years of Continuous Experience in the field of Design, Manufacture and Supply of FRP COOLING TOWER	
2	Only those vendors, who have supplied and commissioned at least FRP Cooling tower of 75 cubic meter/hour or above in the past ten years (on the date of opening of Tender) and such machine is presently working satisfactorily for more than one year after commissioning (on the date of opening of Tender), should quote. Performance certificate from the customers regarding satisfactory performance of machine supplied to them in attached format to be enclosed along with technical offer.	
2.1	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	

SECTION – II

The BIDDER / VENDOR is requested to provide the following information:

3.0	The BIDDER/VENDOR to furnish Reference List of Customers, with full address, details of contact person, where FRP Cooling tower of 75 cubic meter/hour or above higher rating has been supplied in the past.	
4.0	Details of Quality System followed [Furnish the salient aspects of the Quality Assurance System followed] and Stages of In-House Inspection, including Third Party Inspection Schedule.	
6.0	Details on SERVICE-AFTER-SALES Set-Up in India including the Addresses of	

	Agents / Service Centers in South India	
7.0	Any Additional Data to supplement the manufacturing capability of the BIDDER for the subject equipment.	

SECTION – III

The BIDDER has to comply with the following, for accepting the Technical Offer for scrutiny by the Purchaser:

S. No.	PARTICULARS	VENDOR'S RESPONSE
8.0	The BIDDER / VENDOR shall submit the offer in TWO PARTS - Technical Offer [with PART A & PART B] & Commercial and Price Bid.	
9.0	The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the Offer Details submitted by the Bidder, against each clause. A just 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement may lead to disqualification of the Technical Offer.	
10.0	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details of 'Bought-Out-Items' with copies of Product Catalogue and Selection Criteria	
11.0	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	
12.0	BIDDER has to indicate the Country of Origin for the supply of main equipment / important bought-out items.	

PERFORMANCE CERTIFICATE

(On Customer's Letter Head)

1. Supplier of the machine :
2. Make & Model of the Equipment :
3. Month & Year of Commissioning :
4. Application :
5. Capacity :
Output Pressure :
Medium Handled :
6. Performance of the Machine : Best in the market /
(Strike off whichever is not applicable) Satisfactory /
Good /
Average /
Not Satisfactory
7. Any other remarks:

Date:

Signature & Seal of the Authority
Issuing the Performance certificate

PART-B

SPECIFICATION FOR FRP COOLING TOWER

1.TYPE OF COOLING TOWER: INDUCED DRAFT CROSS FLOW.

2.WATER FLOW RATE : 75 CUBIC METER PER HOUR.

3.HOT WATER TEMPERATURE: 40 DEGREE CELCIUS.

4.COLD WATER TEMPERATURE: 30 DEGREE CELCIUS.

5.DESIGN WET BULB TEMP : 27.2 DEGREE CELCIUS.

6.EVAPORATION LOSS : LIMITED TO 1.7%

7.DRIFT LOSS : 0.05%

8.CONSTRUCTION :The cold water basin, basin cover, fan deck, fan cylinder, and access door shall be formed of inert glass-fiber reinforced polyester (GRP).All hardware including structural columns shall be fabricated of HDG steel. This shall include the mechanical support structure, fan guards. All bolts, nuts and fasteners used in the construction of the tower should be made of stainless steel.

9.MECHANICAL EQUIPMENT :

Fan shall be propeller type, incorporating heavy-duty blades of cast aluminum alloy. Blades shall be individually adjustable. Fan shall be driven continuously through a right angle, industrial duty, oil lubricated, geared speed reducer. Speed reducers employing pulleys and belts will not be acceptable. The drive motors used in the cooling tower should be of reputed make like Alstom, Kirloskar, Hindustan Electronic motor and Crompton greeves. One set of essential spares should also be quoted with individual price.

10.OPERATION:

Normally one tower will be in continuous operation and another will be standby.

11.SCOPE OF WORK:

The cooling tower manufacturer shall be responsible for the design fabrication and delivery of materials to the project site and for the erection and commissioning of the tower over supporting grillage and prove out.

12. WARRANTY:

The manufacturer shall warrant the entire tower (including the motor) against deficiency in performance and failure due to defects in materials and workmanship for a period of at least 24 months following commissioning.