



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

Email : vkaruna@bhel.in

Web : www.bhel.com

TWO PART BID

Enquiry
Number:

Enquiry
Date:

Due date for submission
of quotation:

Tender to be submitted in two Parts

2631900031

07.09.2019

04.10.2019

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	OPTICAL TILTING LEVEL WITH HEAVY DUTY STAND 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)	2.00 Nos.	FOR, BHEL Stores, High Pressure Boiler Plant, Tiruchirappalli - 620014

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 4 Months including PDI from the date of purchase order.
3. Erection & Commissioning period required 2 Week 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 1,00,000/-
5. Compliance Form Nos.: TRY/IMP/02 & TRY/IND/02A 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 7/9/19
DGM / Capital Equipment / MM

V. KARUNAKARAN
Dy. General Manager
Capital Equipment / MM
BHEL / Tiruchirappalli - 620 014

OPTICAL TILTING LEVEL WITH HEAVY DUTY STAND, Quantity – 2 nos.**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.	BHEL REQUIREMENTS	BIDDER's RESPONSE
1.1	Only those BIDDER / OEM, who have manufactured, supplied and commissioned at least 1 No. of Optical Tilting level.	
1.2	Bidder has to submit at least 1 Performance Certificate from any of their customers, for satisfactory performance of Optical Tilting level for a period of atleast 1 year from the date of commissioning.	
1.3	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.	PARTICULARS	VENDOR'S RESPONSE
2.1	Details on Standards followed in Design and Testing of Optical Tilting level.	
2.2	Number of Optical Tilting level supplied & commissioned during last 5 years.	
2.3	The BIDDER shall give details about supply of similar equipment to other BHEL units if any with Make, Model and Year of Supply & Commissioning etc.	
2.4	Servicing facility to be available in India. Details on Service-After-Sales Set-Up in India (Address of Agents / Service Centres), to be furnished compulsorily.	
2.5	Any Additional Data to supplement the manufacturing capability of the BIDDER.	

SECTION 3: The Bidder to comply with the following:

S. No.	PARTICULARS	VENDOR'S RESPONSE
3.1	The Bidder shall submit the offer in Two Parts – Technical [with PART A & PART B] & Commercial and Price Bid.	
3.2	The VENDOR'S RESPONSE column 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 10 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 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.	

OPTICAL TILTING LEVEL WITH HEAVY DUTY STAND, Quantity – 2 nos.

Part B – Technical Specification

S No	BHEL's SPECIFICATION	BIDDER's OFFER (with technical details)
1.0	Purpose: The optical tilting level is intended to establish a line of sight and a horizontal plane during its one rotation/revolution about azimuth axis and to measurement in vertical direction with respect to established plane. Locking or fixing at desired stage is required. Tilting level should have combined precision with rugged reliability to execute the most demanding leveling jobs. The telescope should have adjustments to maintain the line of sight straight throughout a focusing range.	
1.1	Application: • Optical alignment of components – in the line of sight – in horizontal plane. • Axes marking & transferring on Steam Generator vessels with the accuracy of 0.05mm • Establishment of optically horizontal planes • Fit up inspection. • Distortion measurement after cir seam welding. • Axis matching checking during grid alignment.	
2	Focus: 50 mm to infinity.	
3	Micrometer: The equipment shall have micrometer in order to measure level variation with respect to established line of sight / horizontal plane.	
3.1	Micrometer shall be of Metric version	
3.2	Least count of measurement: 0.02 mm or better	
3.3	Measuring range shall be ± 1 mm or better	
4	Spirit level and coincidence level shall be available for precise, accurate and quick setting and levelling. Bidder to specify	
4.1	The coincidence level shall have a 360-degree rotating turret to view the magnified bubble image from any position. Bidder to specify	
5	Measurement accuracy – preferably 3 arc seconds or better – Bidder to specify the accuracy with reference to the distance achievable.	
6	The main telescope tube may have a removable section to facilitate for conversion for auto collimation, auto projection, or installation of a right angle eyepiece. Bidder to specify	

S No	BHEL's SPECIFICATION	BIDDER's OFFER (with technical details)
7	Telescopic Barrel shall be as per the relevant international standard. Bidder to specify	
8	Telescope Length: Bidder to specify	
9	Magnification: minimum 20X at 50mm and around 30X at infinity.	
10	Field of View: Bidder to specify	
11	Image: Erect / straight.	
12	Optics: Low reflective type.	
13	Effective aperture: 1.25" minimum. Bidder to confirm and specify	
14	Accessories: The bidder to quote for the accessories / attachments as listed below. Bidder to provide an item wise breakup of all the accessories offered	
14.1	Optical Micrometer as per S No 3 – 3.3 – 1 set to be offered as accessory	
14.2	Heavy duty stand (1 no.) with height adjustment ranging from approx. 180 - 290 cm and with heavy-duty tribrach base. The stand should be provided with collapsible caster wheels under the tribrach base which are engaged and released by a suitable mechanism for mobility around the shop floor. Suitable protection mechanism to prevent sudden drops of the instrument column in case the operator simultaneously releases the collar lock and main handle while disengaging the ratchet pawl.	
14.3	Precision Lift compatible to the instrument for height adjustment of optical equipment's with modern features. Precise control of vertical motion of around 13mm	
14.4	Precision lift adapter with suitable thread & dovetail plug	
14.5	Lateral slide adapter with suitable thread & dovetail recess	
14.6	Light duty tripod stand with telescopic legs and height adjustment ranging from approx. 80 to 130 cms. The weight shall be preferably less than 15 kgs. The telescopic legs to be attached securely and quickly using attachment screws which seat in a slot in the triangular shoulder unit. A positive hand clamp to be provided to prevent accidental height changes. The swivel head at the top to rotate 360° and locked in any position.	
14.7	Precision Lateral Slide. Precision horizontal travel range approx. 5cm and dovetail mounting.	
15	The equipment shall be supplied with CALIBRATION certificate traceable to National / International standards.	
16	Operation and maintenance manuals (IN ENGLISH) for the tilting level and accessories shall be given in both hard	

S No	BHEL's SPECIFICATION	BIDDER's OFFER (with technical details)
	copies (3 sets) and soft copy (CD – 1 no.) along with the offer.	
17	The equipment shall be offered for inspection by BHEL at vendor's works prior to despatch	
18	The assembly and commissioning of the equipment at BHEL works shall be the responsibility of the vendor's representative	
19	Training and operation and maintenance of the equipment shall be imparted to BHEL staff by the vendor's representative	
20	The performance of the equipment shall be guaranteed for a period of 12 months from the date of commissioning or 18 months from the date of dispatch whichever is earlier	