



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 7653/7775

Fax : +91 431 252 0031

Email : [skaruna@bheltry.co.in](mailto:skaruna@bheltry.co.in)

Web : [www.bhel.com](http://www.bhel.com)

TWO PART BID	Enquiry Number:	Enquiry Date:	Due date for submission of quotation:
Tender to be submitted in two parts	2601700005	13.05.2017	20.06.2017

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.

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	Qty.	(Indigenous Vendors) Matl. Will be Delivered to
10	"Hand-Held Electrically Operated Tube-End Beveling Equipment" as per the technical specification, BHEL commercial terms & conditions applicable (to be downloaded from web site <a href="http://www.bhel.com">www.bhel.com</a> or <a href="http://tenders.gov.in">http://tenders.gov.in</a> )	4 Nos.	FOR, BHEL, Stores, High Pressure Boiler Plant, Trichirappalli - 620014

#### 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 4 months from the date purchase order.
4. Erection & Commissioning period required 2 Weeks 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):40,000.00.
6. Compliance Forms. TRY/IMP/03 & TRY/IND/03A 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 1001 – 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 "2601700005".

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

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



**PART - A****TENDER REQUIREMENTS FOR THE SUPPLY OF  
ELECTRICALLY OPERATED TUBE BEVELLING MACHINE****SECTION – I: Qualifying Criteria**

The BIDDER has to compulsorily meet the Qualification Criteria indicated in this Section I, to get qualified. Otherwise the technical offer will not be considered.

<b>S. No.</b>	<b>PARTICULARS</b>	<b>VENDOR's RESPONSE</b>
<b>1.1</b>	VENDORS / Original Equipment Manufacturer (OEM), might have supplied and commissioned at least TWENTY FIVE number of Electrically Operated Tube Beveling Machines, which are handheld with light-weight construction and safety measures - of the offered model in the past TEN years (on the date of opening of this Tender).	
<b>1.2</b>	Only those vendors (OEMs) should quote, who have supplied and commissioned in the last 10 years (as on the original date of this tender opening) at least FIVE number of Electrically Operated Tube Beveling Machines of the offered model EITHER (i) In at least one country other than the country of origin to establish Vendor's global business activity. OR (ii) In India ; and the referred machines shall be presently working satisfactorily for more than one year from the date of commissioning (as on the original date of this tender opening). The name and contact addresses of the customers to whom the above said machine were supplied to be furnished with details.	
<b>1.3</b>	Vendor has to submit at least TWO PERFORMANCE CERTIFICATES for satisfactory performance of Electrically Operated Tube Beveling Machines of the offered model (under Clause No.1.2), for a minimum period of one year from the date of commissioning from their customers in India or in any other country outside the country of origin.	

S. No.	PARTICULARS	VENDOR's RESPONSE
1.4	Performance certificate in Original Form can be submitted through E-mail / TELEFAX directly to BHEL Purchase, by the customer to the VENDOR 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 as ANNEXURE-A.	
1.5	BHEL reserves the right to verify the information provided by the Vendor for the referred machine at their referred customer's works In case the information provided by vendor is found to be false / incorrect, the offer shall be rejected. BHEL reserves the right to accept or reject the OEM'S based on the assessment of their technical and financial capability.	

## **SECTION – II**

The BIDDER/VENDOR are requested to provide the following information:-

S. No.	REQUIREMENTS	VENDOR's COMMENTS
2.1	The BIDDER / VENDOR to furnish Reference List of Customers, with complete address, details of contact person, where Electrically Operated Tube Beveling Machines of the offered model have been supplied in the past.	
2.2	Specify details of Electrically Operated Tube Beveling Machines of the offered model supplied to any unit of BHEL, if any (Year of commissioning with details etc.).	
2.3	Details on SERVICE –AFTER-SALES Set-up in India including the Address of Agent / Service Centers In India.	
2.4	Any Additional data to supplement the manufacturing capability of the BIDDER for the subject equipment.	



**SECTION – III**

The BIDDER to note:

<b>S.No.</b>	<b>REQUIREMENTS</b>	<b>VENDOR'S COMPLIANCE</b>
<b>3.1</b>	The BIDDER shall submit the offer in TWO PARTS - Technical [with <b>PART A &amp; PART B</b> ] & Commercial and Price Bid.	
<b>3.2</b>	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. In case of any deviations in any of the technical specifications, such deviations should be clearly specified in the comparative statement.	
<b>3.3</b>	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.	
<b>3.4</b>	The Technical Offer shall be supported by Product Catalogue and Data Sheets in ORIGINAL and complete technical details / literature on the QUOTED MODELS of Electrically Operated Tube Beveling Machines of the offered model.	
<b>3.5</b>	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 for the scope of supply.	
<b>3.6</b>	Earlier performance & field experience (service support) with BHEL (if any) will be a reckoning factor for the technical qualification of the OFFER. Vendor can quote of supply to BHEL units of systems of similar capability.	

**ANNEXURE -A**

## Suggestive Format of Performance Certificate

The Performance should be certified by the customer on Customer's Letter Head and submitted along with the offer.

**PERFORMANCE CERTIFICATE**

1.0	Type of the Machine :	
2.0	Supplier's Name & Address	
3.0	Make & Model Number of the Electrically Operated Tube Beveling Machines and other Major Accessories	
4.0	Month & Year of Commissioning	
5.0	Application for which the Tube Beveling Machine is generally used	
6.0	MACHINE DETAILS :	
6.1	Size of the jobs performed in the machine	
	a) Tube thickness ( minimum and maximum ) in mm b) Tube diameter ( minimum and maximum ) in mm c) Tube materials	
7.0	Performance of the Machine (Please tick the appropriate option)	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Non Satisfactory
8.0	Service after Sales Support given (Please tick the appropriate option)	<input type="checkbox"/> Satisfactory <input type="checkbox"/> Non Satisfactory
9.0	Other remarks (if any)	
Date :		          Signature & Seal of the Authority Issuing the Performance Certificate



## PORTABLE, HAND-HELD ELECTRICALLY OPERATED TUBE - END BEVELING EQUIPMENT

TECHNICAL SPECIFICATION

S.No.	FEATURE	BHEL SPECIFICATIONS	VENDOR'S OFFER (with complete Technical Details)
1.0	PURPOSE/FUNCTION	The equipment is to be used for the edge preparation of Nickel Alloy / Stainless Steel TUBE Ends for butt-joint fit-up and welding. The tubes are used in High Pressure boiler applications.	
1.1	O.D.Chamfering	Outside Beveling to 37.5° or 45.0° angle and 'J' style edge preparation. All styles with a land of 1.0 mm to 2.0 mm.	
1.2	Facing	End Facing of Pipes	
1.3	I.D.Boring	Internal Taper Turning to 10° to 12°	
1.4	Machining Mode	The above three operations are to be done in single setting with suitable tool holders.	
2.0	MACHINE OPERATION	Electrically Operated	
2.1	Power Supply	230 +/- 10% V, 50 +/-3 Hz, Single Phase AC Supply, through a 3-Wire System. [3rd wire for protective earthing]	
2.2	Input Power Cable	The input power cable shall be of 10 metres in length and provided with a suitable end connector for 3-Pin Socket.	
2.3	Noise Level	Not more than 75dB, at a distance of one metre from the workspot.	

PORTABLE ELECTRICALLY OPERATED TUBE - END BEVELING EQUIPMENT

S.No.	FEATURE	BHEL SPECIFICATIONS	VENDOR'S OFFER (with complete Technical Details)
<b>3.0</b>	<b>JOB DETAILS</b>		
3.1	Diameter Range of Tubes	31.8 mm to 76.1mm (Outside Diameter)	
3.2	Wall Thickness	Minimum - 3 mm ; Maximum - 15 mm	
3.3	Material	INCONEL Nickel Alloy, T-91 Alloy Steel, SS - 304 H, 347 etc.	
<b>4.0</b>	<b>MACHINE CONFIGURATION</b>	Compact Design, Portable, Hand-Held & Electrically Insulated for complete safety... (standard to be given by the vendor)	
4.1	Job Clamping	Tube Outer Surface Clamping with a Locking Lever, to cover the diameter range 31.8 mm to 76.1 mm (suitable bases for varying job diameter to be provided)	
4.2	Electric Motor Output Power	Bidder to Specify [should not be less than 1000 W]	
4.3	Electric Motor Output Torque	Bidder to Specify	
4.4	Cutter Speed	100 to 150 rpm	
4.5	Tool Feed	Minimum 20 mm	
4.6	Construction	The equipment shall be made of impact resistant and corrosion resistant metal alloys with suitable coatings.	
4.7	Hook for suspension	Machine shall be provided with a hook to suspend. Vendor to confirm.	
4.8	Weight	Bidder to Specify (since used for in-situ operation at elevations, weight will be a criterion for technical qualification)	
4.9	Electrical Motor Orientation	Bidder to quote for models, where the axis of the electrical motor is (to suit various job configurations at site) a) in line with the tube longitudinal axis and b) in perpendicular to the tube longitudinal axis	



PORTABLE ELECTRICALLY OPERATED TUBE - END BEVELING EQUIPMENT

S.No.	FEATURE	BHEL SPECIFICATION	VENDOR'S OFFER (with complete Technical Details)
<b>5.0</b>	<b>TOOLINGS</b>		
5.1	O D Clamping Bases (to clamp on to the outer diameter of tubes)	The machine should be capable of clamping tubes with OD 31.8mm/ 38.1mm / 44.5mm / 51.0mm / 57.0mm / 60.3mm / 63.5mm / 76.1mm.(Total : 8 sizes)	
5.2	Cutting Tool	HSS / Carbide Tool Bits (HSS with COBALT inclusion)	
5.3	Cutters and Tool Bits	1) 37.5° and 45.0° for O.D.Beveling 2) Facing 3) 10 ° and 12° for I.D.Taper Boring 4) 'J' style for 'U' seam weld EP	
<b>6.0</b>	<b>SPARES</b>		
6.1	Main Equipment	Complete List of Spares including Motor - Armature, Bearings, Contactors, Bushes, etc. to be <b>LISTED ITEMWISE</b> with quantity.	
6.2	Cutting Tools	Cutting Heads to hold tool bits, Tool Bits for Cutting Operations mentioned under <b>5.3</b> to be <b>LISTED ITEMWISE</b> with quantity.	
<b>7.0</b>	<b>MANUALS</b>		
7.1	No of Copies	2 (Two) for Each Machine	
7.2	Language	English	
7.3	O & M Manual Details :	Manual shall contain BLOW-UP details on assembly / dismantling, part numbers with part description for Maintenance, Safety Instructions while using, Operating Sequence for using the equipment for Beveling, Trouble Shooting Chart.	



S.No.	FEATURE	BHEL SPECIFICATION	VENDOR'S OFFER (with complete Technical Details)
8.0	<b>GENERAL TERMS</b>		
8.1	Cost Details	Price break-up shall be given separately for main equipment, accessories, cutting tools, spares, etc.	
8.2	Inspection/Testing	The equipment shall be inspected and tested for performance evaluation prior to despatch. Test Certificate shall be given.	
8.3	Commissioning	Detailed Instruction Sheet shall be given for easy commissioning of the equipment at BHEL works.	
8.4	Guarantee	The equipment shall be guaranteed for a minimum of twelve months from the date of commissioning or eighteen months from the date of despatch.	
8.5	Catalogue	The offer shall be accompanied with ORIGINAL Catalogues of the offered equipment.	