



# Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

An ISO 9001  
Company

<b>ENQUIRY NOTICE INVITING TENDER</b>	Phone: +91 431 257 79 38
	Fax : +91 431 252 00 31
	Email : <a href="mailto:tvenkat@bheltry.co.in">tvenkat@bheltry.co.in</a>
	Web : <a href="http://www.bhel.com">www.bhel.com</a>

<b>TWO PART BID</b> Tender to be submitted in two Parts	<b>Enquiry Number:</b> 2851300028	<b>Enquiry Date:</b> 15.11.2013	<b>Due date for submission of quotation:</b> 20.12.2013
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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	Qty.	Delivery Required	Delivery Terms Required
10	CI Bed Plates 3000 x 1500 x 300 mm as per the technical specification & commercial 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> )	16 Nos.	6 Months from the date of Purchase Order.	F.O.R, BHEL Stores, POWER EQUIPMENT FABRICATION PLANT, BHARAT HEAVY ELECTRICALS LIMITED, Mundipar- 441804, Sakoli Taluk, Bhandara District, Maharashtra State.

**Important points to be taken care during submission of offer:-**

1. Compliance Form No. BND/IND/06 to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
2. EMD for this Tender will be Rs. 1,50,000.00/-
3. Delivery shall not exceed 6 months from the date of Purchase Order.
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.
5. The time period required for Erection & Commissioning of the item shall be 3 weeks from the date of intimation from BHEL requesting supplier to depute Service Engineers about site readiness

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> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "2851300028".

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 <b>BHARAT HEAVY ELECTRICALS LIMITED</b>  Sr. Manager / Capital Equipment / MM
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**T. VENKATESWARAN**  
Senior Manager  
Capital Equipment / MM  
BHEL, Tiruchirappalli - 620014

**CI Bed Plate 3000 x 1500 x 300mm****PART - A****SECTION- I: Qualifying Criteria**

The BIDDER has to compulsorily meet the Qualifying Criteria indicated in **Section-I** to get qualified. Otherwise the technical offer will not be considered.

<b>S No.</b>	<b>REQUIREMENTS</b>	<b>VENDOR'S RESPONSE</b>
1.1	The BIDDER / VENDOR (OEM) shall have a minimum of TEN Years of Continuous Experience in the Design, Manufacture & Supply of " <b>Large CI Bed Plates</b> ". Vendor shall indicate the actual no. of years of experience in the field	
1.2	Only those vendors (OEMs) should quote, who have commissioned in the past (10) years (on the original date of opening of Tender) at least 50Nos of "CI Bed Plate of size 3000 xx1500 x 300mm" either (i) in at least one country other than the country of origin to establish vendor's (OEM's) global business activity or (ii) in India; and the referred item is presently giving satisfactory performance for more than one year after commissioning (on the original date of opening of Tender). The name and contact addresses of the customers to whom the item has been supplied has to be furnished with details. BHEL reserves the right to accept or reject the OEMs based on the assessment of their technical and financial capability.	
1.3	Vendor has to submit at least ONE PERFORMANCE CERTIFICATE from their customers in India or from the customers to whom the CI bed plate was supplied outside the country of origin, for satisfactory performance of the item as given under Clause 1.2 above, for a minimum period of one year (on the original date of opening of Tender). (Original Certificate or through E-mail directly from the customer). The original performance certificate may be returned after verification by BHEL, if required. For obtaining the Performance certificate, a suggestive format is provided.	
1.4	BHEL reserves the right to verify the information provided by the Vendor for the referred machine at their referred customer's works. It shall be the responsibility of the vendor to facilitate the visit of BHEL's team at their referred customer works .The Travel and Boarding expenses for BHEL Personnel shall be borne by BHEL. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.	

**SECTION - 2**

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

<b>S No.</b>	<b>REQUIREMENTS</b>	<b>VENDOR'S RESPONSE</b>
2.1	The BIDDER / VENDOR to furnish Reference List of Customers, with complete address, details of contact person, where CI Bed Plates have been supplied in the past.	
2.2	Specify details of CI Bed Plate supplied to other units of BHEL, if any (Year of commissioning, etc.)	
2.3	Details on SERVICE-AFTER-SALES Set-up in India including the Address of Agents / Service Centres in India.	
2.4	Any Additional data to supplement the manufacturing capability of the BIDDER for the subject equipment.	

**SECTION – 3:**

The BIDDER to note:

<b>S No.</b>	<b>REQUIREMENTS</b>	<b>VENDOR'S RESPONSE</b>
3.1	The BIDDER / VENDOR shall submit the offer in TWO parts. 1. Technical Offer [ <b>with PART A &amp; PART B</b> ] 2. Commercial Offer and Price bid.	
3.2	The Technical Offer shall contain complete details against all clauses of Technical Specifications given by BHEL.	
3.3	The Technical Offer shall be supported by copies of product Catalogues, Datasheets and technical details of Bought- Out- Items.	
3.4	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.	

Suggestive Format of Performance Certificate:

The Performance certificate should be produced on **Customer's Letter Head** and submitted along with the offer.

### PERFORMANCE CERTIFICATE

1.0	Supplier – Name and Address		
2.0	Make & Model of CI Bed Plate		
3.0	Month & Year of Commissioning		
4.0	Usage of CI Bed Plates		
5.0	<b>Bed Plate Details</b>		
5.1	Size of plates x thickness		
5.2	Flatness of the plates		
5.3	Quantity of the plates		
6.0	Performance of the CI Bed Plate (Please tick the appropriate option)	Not Satisfactory	
		Average	
		Good	
		Satisfactory	
7.0	Service after sales (Please tick the appropriate option)	Not Satisfactory	
		Average	
		Good	
		Satisfactory	
8.0	Other remarks (if any)		
Date:		Signature & Seal of the Authority Issuing the Performance Certificate	

**PART - B: Technical Specification**

**Revision No. 00 -- 01-09-2013**

Note:-

1. The Column "Vendor's offer with Technical details" in this specification shall be filled in by the Vendor and submitted along with the offer. Inadequate / incomplete, ambiguous or unsustainable information against any of the clauses of the specifications / requirements shall be treated as non-compliance.
2. The offer and all documents enclosed with offer should be in English language only.

3. Name & Address of the Supplier:

Name & Address of the Indian agent (if any)

Telephone no.:

Fax no.:

e-mail:

<b>SCOPE: SUPPLY, ERECTION &amp; COMMISSIONING OF CAST IRON BED PLATES</b>					
<b>SNO</b>	<b>DESCRIPTION FOR BHEL REQUIREMENT</b>	<b>SPECIFIED / CONFIRMED BY</b>	<b>OFFERED</b>	<b>DEVIATIONS</b>	<b>REMARKS</b>
<b>1</b>	<b>PURPOSE:</b> (Operations/Jobs involved): Cast iron bed plates with T-slots shall be used for mounting, assembling and clamping of power generation equipments components etc. during weld and assembly.	Vendor to Confirm			
<b>2</b>	<b>SPECIFICATION:</b>				
2.1	Cast iron bed plates shall conform to IS:10602-1983/2005 (Edition 1.1). It shall be made from plain grey iron castings conforming to grade FG:200 of IS:210-1993. Min. hardness 200HB. Material test certificates as required by the Indian Standard shall be submitted along with the supply. Min load bearing capacity 5Tons/sq. M	Vendor to Confirm			
2.2	Individual Bed plate size (approx) 1500 x 3000 x 300 mm - 28H12 -II IS:10602. Levelling arrangement and joining of floor plates as per Type B of Appendix A of same IS.	Vendor to Confirm			
2.3	Total No. of 1.5M x 3.0M bed plates: 16	Vendor to Confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
2.4	Pitch distance of T-slots shall be 250±0.5 as per IS 2013 (part 1): 1996. End T slots shall be at 125mm from the edges.	Vendor to Confirm			
2.5	General Tolerance shall be as per as per IS:2102 (part 1):1993 "Medium"	Vendor to Confirm			
2.6	Unspecified as cast dimensional tolerances shall be as per IS:5519, class II	Vendor to Confirm			
2.7	Casting shall be sound and free from any defects, blow holes, cracks etc.. NDT to be used to ensure surface and sub surface defect.	Vendor to Confirm			
2.8	No welding on any casting defect will be allowed at any stage of manufacturing.	Vendor to Confirm			
2.9	Cast surfaces shall be feteled, shot blasted and dressed.	Vendor to Confirm			
2.10	The bed plates shall be marked at an appropriate place with designation and the manufacturer's name and trade-mark.	Vendor to Confirm			
2.11	To facilitate proper evaluation of the offer, Sketches / Drawings / Catalogues etc. showing all details (of the offered bed plate) shall be submitted by the vendor.	Vendor to Specify			
2.12	No defects shall reveal after finish machining of the bed plate.	Vendor to note			
3	<b>Flatness Accuracy</b>				
3.1	The flatness accuracy of each bed plate shall be within value as per grade-II, IS:10602. Accuracy shall be checked using precision calibrated straight edge and feeler gauges linearly anywhere on the working surface. Inspection certificates with traceability shall be furnished by the vendor along with the bed plates.	Vendor to Confirm			
3.2	Vendor shall mention and explain in details, the method to be adopted for checking and recording the flatness accuracy during manufacture and during pre-dispatch inspection by BHEL at their works.	Vendor to Confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
3.3	A border zone of 20 mm width from the edges of plate, T-slots, holes or cored opening on the top working surface shall be excluded from the requirement of surface flatness accuracy provided no points within any of the border zone shall project higher than the remainder of the working surface of the floor plate.	Vendor to Confirm			
<b>4</b>	<b>CONSTRUCTION:</b>				
4.1	Details of wall thickness, ribbing pattern, levelling pockets and method to join the plates shall be informed by the vendor. Drawing of finished floor plate shall be prepared and submitted by vendor for BHEL approval.	Vendor to Specify			
4.2	24 nos. top accessed holes for anchoring and levelling shall be provided. The access holes for levelling shall be closed using heavy covers with rubber O rings to avoid entry of coolants, dust, chips etc. into the pockets.	Vendor to Confirm			
4.3	The bed plates shall be finish machined on their top working surface as well as four sides at their periphery. Top surface may be hand scrapped to achieve the specified flatness accuracy. The cast iron bed plates shall be free from cracks, burrs, pits and other defects.	Vendor to Confirm			
4.4	Stress relieving of the floor bed casting shall be done after proof machining. The stress relieving graphs shall be submitted to BHEL for approval. Sample SR graphs to be submitted with the offer.	Vendor to specify and confirm			
4.5	The approximate weight of the finished bed plate shall remain 3850 kgs each 1.5M x 3.0Mx 300mm. Decrease in weight allowed is 25 kgs.	Vendor to Confirm			
4.6	All non machined surfaces shall be enamel painted of BHEL specified colour. All machined surfaces shall be covered with good quality solvent dissolvable anti rust compound.	Vendor to specify and confirm			
<b>5</b>	<b>LEVELLING &amp; ANCHORING SYSTEM</b>				

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
5.1	Levelling arrangement and joining of floor plates as per Type B of Appendix A of same IS:10602 1983/2005. All jacks, supports, fasteners, clamping elements etc. required for grouting, levelling and joining of each plate on all the four sides, shall be specified and included in the offer but quoted separately. Offer for 500 nos. T bolts of gr. 8.8 shall be quoted as optional.	Vendor to Confirm			
<b>6 ERECTION &amp; COMMISSIONING</b>					
6.1	Vendor shall submit the preliminary layout drawing for getting BHEL's approval within one month from the date of Letter of Intent (LOI) / P.O. whichever is earlier. Soil condition data will be furnished by BHEL along with the approval. Complete Foundation Design including details of reinforcement and Final Layout drawings shall be submitted by the supplier within one month after getting BHEL's approval. BHEL shall construct complete foundation under supervision of supplier and at supplier's responsibility. Vendor should arrange equipments required for the testing of foundation, if required by the vendor. The vendor shall also indicate detailed specifications of grouting compound and Grouting procedure etc.	Vendor to confirm			
6.2	Supplier to take full responsibility for carrying out the erection. Service requirement like power, air, shall be provided by BHEL at only one point to be indicated by supplier in advance. Other requirements like crane and helping personnel shall also be provided by BHEL subject to availability, otherwise shall be arranged by the vendor. Details of these requirements should be informed by vendor in advance.	Vendor to Confirm			
6.3	The complete levelling and clamping of all bed plates shall be done by vendor. Flatness accuracy after assy. shall be 0.10mm/M.	Vendor to Confirm			

SNO	DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / CONFIRMED BY	OFFERED	DEVIATIONS	REMARKS
6.4	Tools, instruments and other necessary equipment required to carry out all above activities should be brought by the supplier.	Vendor to Confirm			
6.5	Charges, duration, terms & conditions for E&C should be furnished in detail separately by vendor along with offer.	Vendor to Specify			
7	<b>INSPECTION</b>				
7.1	<b>Pre-Dispatch Inspection:</b> BHEL reserves the right to inspect at any time during the manufacturing process of bed plates. Acceptance of the Bed plates shall be made by BHEL at vendor's work prior to dispatch. Test certificates, specification compliance and flatness accuracies of the individual bed plates shall be checked and verified. Vendor to arrange for calibrated equipments for complete inspection.	Vendor to confirm			
7.2	<b>Proving:</b> Proving to be done on at least one job at BHEL works.	Vendor to confirm			
8	<b>PACKING:</b> Bed plate (s) shall be supplied in suitable packing (s) to avoid damage during handling, transportation and storage.	Vendor to confirm			
9	<b>GUARANTEE:</b> Vendor shall provide full and complete Guarantee for trouble free performance for 24 months from date of successful commissioning.	Vendor to confirm			
10	<b>GENERAL :</b> The vendor should submit the following information:				
10.1	Weight of the bed plate.	Vendor to specify			
10.2	Vendor to submit, along with offer, the reference list of customers where similar bed plate have been supplied mentioning the customer name, full specifications of the supplied bed plate with anchoring system, Year of Supply etc.	Vendor to specify			