



# Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

MATERIALS MANAGEMENT / CAPITAL EQUIPMENT

An ISO 9001  
Company

<b>ENQUIRY NOTICE INVITING TENDER</b>	Phone: +91 431 257 7653
	Fax : +91 431 252 0719
	Email : <a href="mailto:skaruna@bheltry.co.in">skaruna@bheltry.co.in</a>
	Web : <a href="http://www.bhel.com">www.bhel.com</a>

<b>TWO PART BID</b>	<b>Enquiry Number:</b>	<b>Enquiry Date:</b>	<b>Due date for submission of quotation :</b>
Tender to be submitted in Two Parts	2711200001	06.03.2012	06.04.2012

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.

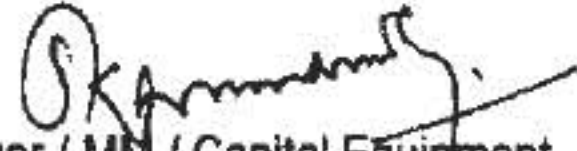
Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 Hrs on the date of tender opening

Item No.	Item Description	Quantity
10	Supply of Heat and Sound Proof Operator Control Room at SSTP BHEL, Trichy 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> )	01 Set.

### Important Points to be taken care during the submission of offer:-

1. Delivery required 3 months from the date of purchase order.
2. Check list to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.

BHEL's General guidelines /instructions including bank guarantee formats and list of consortium banks, commercial terms checklist 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) Tender Enquiry reference "2711200001"

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 / MM / Capital Equipment
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**QUALIFYING CRITERIA FOR THE SUPPLY OF  
HEAT & SOUNDPROOF OPERATOR CONTROL ROOM FOR HOT MILL**

**The bidder / vendor has to compulsorily meet the following requirements to get qualified for submitting an offer for the heat & soundproof operator control room**

S. No.	REQUIREMENTS	VENDOR's RESPONSE
1.0	The VENDOR shall have a minimum of 5 <u>Years</u> of Continuous Experience in the Design, Manufacture & Supply of 'HEAT & SOUNDPROOF OPERATOR CONTROL ROOM for similar purpose and industries'. Indicate the actual experience.	
2.0	The VENDOR shall have supplied at least 2 number of the equipment in offered model, within the last two years. Indicate the number sold in India & Other Countries.	
3.0	Reference List of Customers indicating type and purpose of system, date of commissioning and performance in the last one year along with full contact details of CONTACT PERSON.	
4.0	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.	
5.0	<p>DELIVERY - The bidder shall quote the best possible delivery. However the delivery shall not exceed 3 months with an additional grace period of 1 month. The additional grace period will attract a penalty which is explained in the commercial terms of the enquiry.</p> <p>The delivery period shall be reckoned from date of purchase order to despatch from the vendor works.</p>	
6.0	Details of Quality System followed (Kindly furnish the salient aspects of the QA system followed)	

<b>7.0</b>	Any Additional Data to supplement the manufacturing capability of the BIDDER	
<b>8.0</b>	<p>The BIDDER / VENDOR shall submit the offer in TWO PARTS –</p> <ol style="list-style-type: none"> <li>1. Technical &amp; Commercial without price</li> <li>2. Price Bid.</li> </ol> <p>The Technical Offer shall be in line with the BHEL Technical Specifications and the Guidelines or Annexure mentioned, wherever applicable.</p>	
<b>9.0</b>	<p>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.</p>	
<b>10.0</b>	<p>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</p>	
<b>11.0</b>	<p>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 of Scope of Supply.</p>	
<b>12.0</b>	<p>Price shall be quoted in the following format</p> <ol style="list-style-type: none"> <li>a. supply of control room#1</li> <li>b. supply of control room#2</li> <li>c. Supply of control room #3</li> <li>d. Erection &amp; commissioning of all the above</li> </ol>	

## TECHNICAL SPECIFICATION OF OPERATOR CONTROL ROOM

### 1.0 General

Seamless Steel Tubes are made by hot rolling in long lengths from billets of about 1.6 m heated in a rotary hearth furnace. These billets are pierced in piercing mill and elongated in Push bench and further heated in Walking beam type reheating furnace and rolled in Stretch reducing mill. Three nos. of operator control room are to be quoted as per the following specification

### 2.0 Control room #1 (Push Bench)

**Qty: 1no.**

- 2.1. **SIZE:** - Outer Size – 5000 mm x 3000 mm x 2500 (LWH)  
Inner Working Space required – 4700 x 2700 x 2200 mm
- 2.2. **CONSTRUCTION:** - Dismountable type, that can be dismantled & re-assembled at any other location
- 2.3. **BASE:** - Insulated base made out by ISMC 200 mm x 75 mm, covered with 02 mm thick MS sheet from top & bottom. Over all thickness of Base is 204 mm, final inside top surface covered with 02 mm thick shockproof PVC mat
- 2.4. **OUTER WALL & ROOF:** - The Cabin shall be fabricated out of 02 mm thick of cold rolled cold annealed (CRCA) sheet & Inner side finish is 01 mm thick plain sheet, Total wall & roof thickness shall be 150mm, filled with insulation material to control noise & heat transfer.
- 2.5. **CEILING:** - shall be made out of acoustic tiles blow ceiling, tile size – 2' x 2', made out of wet formed mineral fiber, fire class-0 / class-1, Light reflection – 85% & thickness is 15 mm to prevent echo generation inside the cabin
- 2.6. **SOUND & HEAT PROOF GLASS:** - one sound proof glass inside & one heat proof glass towards mill side of size 1500 x 1200mm (LXH). Sound proof glass made out of 10mm thick two no. glass having 15 mm gap with Argon gas & Heat resistant glass is 06 mm thickness temperature resistant glass to cover sound proof glass from out side
- 2.7. **DOOR:** - Hinge type doors of required size, provided on outside wall, door having gasket to block noise leakage.
- 2.8. **MS STAIR:** - Two nos. Stair, suitable for 3000 mm height, stair steps top having checker plate & supports made out of ISMC 125 x 65 & 100 x 50 mm
- 2.9. **BOTTOM SUPPORT:** - The base is supported by structural steel 'H' profile of size – 200 x 125 mm at all four side and at middle of base, the top and bottom connected to each other with 12 mm thick MS plate total height of vertical support is 3000 mm from floor.

- 2.10. LIGHT:** - Providing wiring, switch board and lights of 400 LUX
- 2.11. AIR-CONDITIONING UNIT:** - Providing 03 no, 02 ton Split AC. Make - LG / Carrier/Voltas/reputed make or 7.5 ton water cooled package AC to maintain inside temperature
- 2.12. CUT OUT:** - Provision of cutouts (from bottom) for electrical / data cable & for other machinery

**3.0 Control room # 2 (Piercing Mill ) Qty: 1no.**

- 3.1.** Same as above except
- 3.2. SOUND & HEAT PROOF GLASS:** - one sound proof glass inside & one heat proof glass towards mill side of size 1500 x 1200mm (LXH). Sound proof glass made out of 10mm thick two no. glass having 15 mm gap with Argon gas & Heat resistant glass is 06 mm thickness temperature resistant glass to cover sound proof glass from outside. (heat proof glass is required only on front side. All other three sides do not require heat proof glass)

**4.0 Control room #3 (Furnace charging/discharging) Qty: 1no.**

- 4.1. SIZE:** - Outer Size – **2600 mm x 2600 mm x 2300 (LWH)**  
Inner Working Space required - **2300 x 2300 x 2000 mm**
- 4.2. BOTTOM SUPPORT:** - The base is supported by structural steel ‘H’ profile of size – 200 x 125 mm at all four side and at middle of base, the top and bottom connected to each other with 12 mm thick MS plate total height of vertical support is **750mm** from floor.
- 4.3. AIR-CONDITIONING UNIT:** - **02 no**, 1.5 ton AC Make - LG / Carrier /**Voltas** to maintain in side temperature
- 4.4.** Other feature same as 2.0

**5.0 INSULATION MATERIAL:-**

- 5.1.** ROCK WOOL confirming to IS-8183 of 96 kg/m<sup>3</sup> density.
- 5.2.** SOUND DAMPENING LAYER:-

CLOSED CELL FOAM: A 20 mm thick layer of closed cell rubber. Thermal Conductivity 0.037 @ 20 C as per EN ISO 8497 (DIN 52613), having vary good sound damping property & fire remittent properties

**5.3. POLYMERIC MEMBRANE: -**

02 no, 05 mm thick Sound damping material, tested from LGAI Technological Center S.A. Applus + CTC, as per UNE-EN ISO 140-3:1995, Sound damping material having high density (2000 kg /m<sup>3</sup>), asphalt-free, visco-elastic, its special characteristics to reduces insulation leaks very considerably, owing to the resonance frequency and coincidence frequency typical of traditional building systems .This permits increasing the soundproofing throughout the whole frequency spectrum.

**6.0 PERFORMANCE:** - The control cabin shall be designed to achieve 60 - 65 dB (A) noise inside the cabin and 24 degree centigrade temperature.