



An ISO 9001  
Company

## Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT/ MATERIALS MANAGEMENT

<b>ENQUIRY</b>	Phone: +91 431 257 7653 Fax : +91 431 252 0031 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>NOTICE INVITING TENDER</b>	

<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.	<b>2631600057</b>	<b>24.08.2016</b>	<b>17.09.2016</b>

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	Quantity
10	Hydraulic Mobile Scissor Lift 2 Ton 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> )	05 Nos.

### Important points to be taken care during submission of offer

1. Compliance Form to be duly filled and enclosed along with your offer, failing which the offer will not be considered for evaluation.
2. 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 including bank guarantee formats and list of consortium banks, commercial compliance form 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 "2631600057".

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

*Sarany.e*  
C. SARANYA  
Senior Engineer  
MM / Capital Equipment  
BHEL / Tiruchirappalli - 620 014

## PART - A

### QUALIFYING CRITERIA FOR SCISSOR LIFT HYDRAULIC ELECTRO PLATFORM

#### Section-I

The BIDDER/VENDOR has to compulsorily meet the following requirement to get qualified for submitting an offer for Scissor Lift.

S.No	BHEL Specification	Vendor's Offer
1.0	<b>QUALIFYING CRITERIA</b>	
1.1	The BIDDER / VENDOR (OEM) shall have at least FIVE Years of Experience in the Design, Manufacture & Supply of "SCISSOR LIFT". Vendor to indicate the actual no. of years of experience in the field.	
1.2	Only those vendors ( <b>OEMs</b> ), who have manufactured ,supplied and commissioned <b>at least ONE SCISSOR LIFT of 2Ton or higher capacity</b> in the last FIVE years [as on date of this tender opening(first date)] should quote.	
1.3	Vendor has to submit <b>at least one Performance Certificate</b> from any of their customers, for satisfactory performance of the <b>Scissor Lift/s specified in clause 1.2</b> supplied to them and such the system is working satisfactorily for a minimum period of <b>one year</b> [as on date of this tender opening(first date)]. For obtaining the Performance certificate, a suggestive format is provided at the end of part-A.	
1.4	BHEL reserves the right to verify the information provided by the vendor. In case the information provided by the vendor is found to be false/ incorrect, the offer shall be rejected.	

#### Section-II

2.0	<b>INFORMATION TO BE PROVIDED BY VENDOR</b>	
2.1	Vendor shall provide contact details(phone no & email id) including the address of his Agents / Service Centres in India	
2.2	Year of launch of the model quoted against this enquiry	
2.3	Number of "Scissor Lifts" supplied and commissioned till date in the quoted capacity (to quote Scissor Lift supplied during the last three years only)	
2.4	The BIDDER/VENDOR to furnish Reference List of Customers (max 10 customers) including Contact details(phone no & email id).	

### SECTION III

The BIDDER to note:

S. No.	PARTICULARS	Vendor's Offer
3.1	The BIDDER shall submit the offer in <b>Two Parts</b> – 1. Technical [with PART A & PART B] & 2. Commercial and Price Bid.	
3.2	The VENDOR's RESPONSE against each clause in PART A & B of the offer should be filled by the BIDDER compulsorily with complete details.	
3.3	The Technical Offer shall be supported by Product Catalogue and Data Sheets in original and complete technical details / literature on the quoted models of Scissor Lift.	
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**.

## PERFORMANCE CERTIFICATE

- |   |   |                                 |
|---|---|---------------------------------|
| 1 | Supplier of the Scissor Lift/ system  |                                 |
| 2 | Make & Model of the Scissor Lift/ system  |                                 |
| 3 | Total Capacity of the Scissor Lift/ system in Ton (Kg)                              |                                 |
| 3 | Month & Year of Commissioning   |                                 |
| 4 | Application for which Scissor Lift/ system is used                                  |                                 |
| 5 | Performance of the Scissor Lift/ system<br>(Strike off whichever is not applicable) | Satisfactory / Not Satisfactory |
| 6 | After sales service<br>(Strike off whichever is not applicable)                     | Satisfactory / Not Satisfactory |
| 7 | Any Other remarks   |                                 |

Performance certificate issued date:

Signature & Seal of the Authority  
Issuing the Performance Certificate

Contact details of issuing authority  
Name & Designation:  
Office No/ Mobile no:  
Email ID:

## PART-B

### TECHNICAL SPECIFICATION FOR SCISSOR LIFT HYDRAULIC ELECTRO PLATFORM

#### DETAILED SPECIFICATION:

S.No.	FEATURES	BHEL SPECIFICATION	Vendors Reply
<b>1.0</b>	<b>APPLICATION:</b>		
1.1	Purpose	The proposed Scissor Lift is intended for use as working platform at different elevated position during tubing, cone rolling & tube expansion of Steam Generator.	
<b>2.0</b>	<b>SCISSOR LIFT HYDRAULIC ELECTRO PLATFORM DESCRIPTION</b>		
2.1	Type	Mobile Electro Hydraulic. Electro-hydraulic control - Electrically Operated through push buttons and Platform is to be lifted by hydraulic cylinders.	
2.2	Lifting Capacity	2 TON	
2.3	Platform Height from ground (Minimum)	0.755 Metres	
2.4	Platform Height from ground (Maximum)	3.5 Metres	
2.5	Platform Size	3200x1300mm (LxW)	
2.6	No. of Scissor in the Lift Table	Vendor to specify	
2.7	Material of scissors	Vendor to specify the scissor material and dimension to be used.	
2.8	Base structure	Mild Steel Structures-Vendor to specify the base structure	
2.9	Wheels	4 number of caster wheels of suitable diameter Vendor to specify.	
2.9.1	Hand bar to pull the ladder	To provide suitable hand bar Vendor to specify.	
2.9.2	Safety Railing on Platform	Suitable safety measures such as guardrails up to min.750mm height on all 4 sides to be provided on the Platform, removable type on all sides.  Vendor to confirm.	
2.9.3	Lift Operation	<ul style="list-style-type: none"> <li>➤ The platform shall be operable by the operator while standing on the platform through operator pendant.</li> <li>➤ Lifting &amp; lowering shall be uniform without jerks</li> </ul>	

## PART-B

S.No.	FEATURES	BHEL SPECIFICATION	Vendors Reply
		Vendor to provide details.	
2.9.4	Mechanical Clamping Pads	Mechanical clamping pads to fix the lift table to the ground to be provided.  Vendor to confirm.	
2.9.5	Controls	UP, DOWN and EMERGENCY STOP also to be controlled through Pushbuttons provided outside the Platform. The lift shall stop automatically when the platform reaching desired Floor level by actuation of pre-adjusted levelling limit switches.  Vendor to confirm	
3.0	Hydraulic Unit	Hydraulic unit shall consist of required numbers of inclined hydraulic cylinders/ telescopic cylinders to ensure 2 Ton Lifting Capacity with internal honed pipe having hard chrome Plated piston and hard chrome Plated piston rod with one number of power pack Unit & the details of hydraulic unit system along with necessary drawings to be provided by Vendor.  Vendor to comply.	
4.0	Hydraulic Sealings	Makes of hydraulic components (Valves, pumps) components should be of Rexroth / Vickers / Parker/ oil gear/Kawasaki make only. Hydraulic hoses make should be of Gates/ Aeroquip/ Polyhose/Dunlop only. Hydraulic seals/O-rings used shall be of PARKER/ MERKEL/ SIMRIT FREUDENBERG/ BUSHAK & SHAMBAN / HUNGER/ HALLITE/ JAMES WALKER/ TELLEBROG/ SKF or any other make acceptable to BHEL in case of non-standard seals/o-rings	
5.0	Electrical Circuits	The continuous running power pack unit shall have motor of Suitable capacity, starter with 12 metres long cables. The cylinder unit shall be provided with limit switch and Push Button control with Panel Board. The electric panel shall have Starter contactors, MCB's, push buttons, Limit switches and Terminal strip. The control panel/cabinet is to be mounted within the power pack at the ground level. All the cables to the field elements and operator panel	

## PART-B

S.No.	FEATURES	BHEL SPECIFICATION	Vendors Reply
		<p>should be protected by flexible metal conduits with PVC sheathed (Anagonda hoses) and both the ends shall be provided with suitable metal glands/connectors. Suitable size of cable ducts/trays should be provided for routing the hoses wherever required.</p> <p>Vendor to confirm.</p>	
<b>6.0</b>	<b>Electric Motor</b>	<p>The electric motor should be of following Makes : ABB / Kirloskar / Siemens / Crompton / NGEF / Alstom/Bharat Bijilee only acceptable. The induction motor offered shall be of energy efficient class IE2 conforming to IS standards. The vendor shall furnish test certificates/reports/characteristic charts confirming IE2 energy efficiency class.</p> <p>The makes of control and switch gears shall be Siemens/ L&amp;T/ Telemecanique or any other reputed make acceptable to BHEL.</p> <p>The makes of Limit switches used in the machine shall be BCH/Siemens/ /Jai Balaji/ L&amp;T/ Telemecanique only.</p> <p>Vendor to confirm.</p>	
<b>6.1</b>	<b>The KW rating of the motor</b>	Vendor to specify	
<b>7.0</b>	<b>Features</b>	<p>Vendor to confirm for providing the following features,</p> <ol style="list-style-type: none"> <li>1. Motion alarm</li> <li>2. Platform work lights</li> <li>3. Horn</li> <li>4. Wheel lock arrangement.</li> </ol>	
<b>8.0</b>	<b>Safety Features</b>	<ol style="list-style-type: none"> <li>1. Safety valves in case of hydraulic failure &amp; overload</li> <li>2. Ratchet safety mechanism engages each time the lift stops through the lifting height</li> <li>3. Suitable earthing arrangement to be ensured</li> </ol> <p>Vendor to provide any other safety features provided in the equipment.</p>	
<b>9.0</b>	<b>Schematic Diagram</b>	The supplier should provide the complete hydraulic circuit of power pack with bill of materials giving specification and make of the components used and GA Drawing along	

## PART-B

S.No.	FEATURES	BHEL SPECIFICATION	Vendors Reply
		with offer to understand the integration & operation of the entire system. Hydraulic cylinder drawings, hydraulic circuit with bill of materials, GA drawing etc. to be submitted for approval before starting manufacturing with 15 days from date of receipt of Purchase order in case of ordering.	
<b>10.0</b>	<b>Carriage for Movement</b>	The entire equipment shall be easily transportable from place to place by means of a wheeled transport carriage. Suitable hooks for lifting the equipment by cranes also to be provided.	
<b>11.0</b>	<b>Power Input</b>	BHEL will provide power supply of 415 V with a fluctuation of $\pm 10\%$ , 50Hz, 3Ph (3 wire system – without neutral). Additionally earth wire must be provided. Suitable transformer if required is to be provided in the control panel by the supplier.  Vendor to confirm.	
11.1	Input Power Cable	A 10 m long sheathed power input cable with safety wrapper is to be provided along with the equipment.  Vendor to confirm	
<b>12.0</b>	<b>ACCESSORIES:</b>		
	All the accessories required to integrate the various sub-systems shall be offered. The accessories offered shall be listed and their application shall be described.		
<b>13.0</b>	<b>SPARES:</b>		
13.1	<p>Complete List of Spares including the following to be offered along with the Equipment– both Mechanical &amp; Electrical:</p> <ol style="list-style-type: none"> <li>a. One set of hydraulic cylinder seal kit</li> <li>b. 2 sets of push buttons, selector switches, indication lamps(2 in each type)</li> <li>c. One set of contactors, relays, MCBs, limit switches (1 in each type)</li> </ol> <p>Vendor to furnish a list of critical spares recommended for 2 years of trouble free operation in the technical offer with description, part number, quantity and specification etc. without price details. The same list shall be quoted in the commercial offer with price break up in a sealed cover.</p>		

## PART-B

<b>14.0</b>	<b>O &amp; M MANUALS:</b>						
14.1	Manuals to be Supplied with Equipment	Separate Operational Instructions & Maintenance Manual for Scissor Lift & its associated Accessories in English to be provided					
14.2	Contents of the Manual	<p>The O &amp; M Manual shall contain details like:</p> <ul style="list-style-type: none"> <li>a) Operation Instructions &amp; Maintenance manual for the total system</li> <li>b) Description &amp; Constructional Details</li> <li>c) Mechanical Assembly Drawings</li> <li>d) Part Drawings</li> <li>e) Electrical Schematic Drawings</li> <li>f) Bill of Materials</li> <li>g) Printed Circuit Board Schematics(if any)</li> <li>h) Technical Leaflets of Bought-Out Items</li> <li>i) List of Spare Parts (Both Electrical Mechanical &amp; Hydraulic) with Make, Specifications/Rating</li> <li>j) Trouble Shooting Details</li> <li>k) Safety Instructions – For Erection, Testing, Operation and Maintenance.</li> <li>l) Hydraulic circuit with bill of materials</li> </ul> <p>Vendor to confirm</p>					
14.3	No of Copies	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Hard Copies in Original</td> <td style="width: 50%;">3 Sets</td> </tr> <tr> <td>Soft Copy on CD</td> <td>1 No</td> </tr> </table> <p>Vendor to confirm.</p>	Hard Copies in Original	3 Sets	Soft Copy on CD	1 No	
Hard Copies in Original	3 Sets						
Soft Copy on CD	1 No						
<b>15.0</b>	<b>GENERAL POINTS:</b>						
15.1	Pre-Despatch Inspection	<p>The equipment shall be offered for inspection &amp; functional prove out test. This shall be witnessed by BHEL at supplier's works for performance evaluation prior to despatch.</p> <p>Final acceptance will be given by BHEL after successful Prove-OUT Test at BHEL works.</p> <p>Vendor to confirm.</p>					

## PART-B

15.2	Installation & Commissioning & Performance Prove-Out test at BHEL	Vendor should take full responsibility of Installation and commissioning at BHEL works. After the installation, the supplier has to run the equipment and demonstrate its lifting/lowering performance at BHEL works.	
15.3	Training	Training on Operation and Maintenance for BHEL Staff during Installation & Commissioning of the equipment to be provided by the vendor	
15.4	Guarantee	Performance Guarantee for the entire equipment for a period of 12 months from the date of commissioning or 18 months from the date of despatch whichever is earlier shall be provided.  Vendor to confirm.	
<b>16.0</b>	<b>IMPORTANT NOTES:</b>		
16.1	The supplier shall give point-by-point confirmation by elaborating the technical feature of the offered system, with reference to the above specification. Additional literature on principle of operation shall be given. Just mentioning 'YES' or "CONFIRMED" is not acceptable.		
16.2	Deviation statement (if any) shall be given along with the offer.		
16.3	The un-priced price bid indicating clearly the offered items shall be enclosed along with the technical offer.		
16.4	Offers incomplete with respect to the above are liable for rejection.		