



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 7421/7833

Fax : 431 257 6826

Email : vkarna@bhel.in

: vijayak@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	2622000024	09.10.2020	30.10.2020

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	Procurement of Hydraulic Scissor Lift with Extendable Platform 2 Ton Capacity as per the technical specification, BHEL commercial terms & conditions applicable (to be downloaded from web site www.bhel.com and https://eprocure.gov.in)	6 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. Delivery required 4 Months (Including PDI) from the date purchase order.
3. Erection & Commissioning period required 3 Weeks from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
4. EMD for this Tender will be (INR): 1,50,000.00.
5. Compliance Form. ATP 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> or from Central Public Procurement Portal website <https://eprocure.gov.in> under Enquiry reference "2622000024".

Note: this is not an E-tender, hence Vendors are requested to ensure that the offer is reaching physically at our office before 14:00 Hrs. on the date of tender opening.

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

**HYDRAULIC SCISSOR LIFT (2 TON CAPACITY) WITH EXTENDABLE PLATFORM,
Qty. 6 nos.**

PART A - QUALIFYING CRITERIA

S.No	BHEL Specification	Bidder's Offer
1.0	QUALIFYING CRITERIA	
1.1	Bidder / OEM must have manufactured, supplied and commissioned at least 2 nos. of hydraulic scissor lift of 2 ton or higher capacity in the last 5 years are eligible to quote.	
1.2	Bidder has to submit at least ONE Performance Certificate from any of their customer (end user), for satisfactory performance of hydraulic scissor lift of 2 ton or higher capacity meeting the following conditions: a) The Equipment must have been supplied within the last 5 years as on the first date of tender opening. b) The Equipment must have performed satisfactorily for at least one year during this period. For obtaining the Performance certificate, a suggestive format is provided at the end of part-A.	
1.3	BHEL reserves the right to verify the information provided by the Bidder. In case the information provided is found to be false/ incorrect, the offer is liable for rejection.	
2.0	INFORMATION TO BE PROVIDED BY BIDDER	
2.1	Bidder shall provide contact details(phone no & email id) including the address of his Agents / Service Centres in India	
2.2	Details of HYDRAULIC SCISSOR LIFTS supplied to other BHEL units if any	
2.3	The BIDDER to furnish Reference List of Customers(max 10 customers) including Contact details(phone no & email id).	
3.0	The BIDDER to note:	
3.1	The BIDDER shall submit the offer in Two Parts – 1. Technical [with PART A & PART B] & 2. Commercial and Price Bid.	
3.2	The Bidder's offer 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 Ten 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 in original and complete technical details / literature on the quoted equipment.	
3.5	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the	


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	Price-Bid, for confirmation.	
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Suggestive Format of Performance Certificate:

The performance certificate to be produced **on Customer's Letter Head.**

PERFORMANCE CERTIFICATE

- 1 Make of the equipment
- 2 Month & Year of Commissioning
- 3 Application for which the equipment is used
- 4 Capacity of the equipment in Tons
- 5 Performance of the equipment Satisfactory / Not Satisfactory
(Strike off whichever is not applicable)
- 6 Service support after sales Satisfactory / Not Satisfactory
(Strike off whichever is not applicable)
- 7 Any Other remarks
- 8 This performance certificate was issued on: (DD/MM/YYYY)

Authority

Signature & Seal of the

Issuing the Performance Certificate

Contact details of issuing authority

Name & Designation:

Office No/ Mobile no:

Email ID:


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PART-B

HYDRAULIC SCISSOR LIFT (2 TON CAPACITY) WITH EXTENDABLE PLATFORM, Qty. 6 nos.

PART B - Technical Specification

S. No.	BHEL SPECIFICATION		Bidder's Offer with technical details
1.0	APPLICATION:	The Scissor Lift with extendable platform is intended for use as working platform at elevated position to reach the top of steam generator vessel around 3500 mm diameter placed on rotators.	Bidder to note
2.0	ELECTRO HYDRAULIC SCISSOR LIFT PLATFORM		
2.1	Type	Scissor lift platform with Electro-hydraulic control. Electrically Operated through push buttons and the Main Platform is to be lifted by hydraulic cylinders and an additional platform shall be provided with hinged support.	Bidder to provide details
2.2	Platform type	Chequered plate type, thickness and material of the platform and other details to be specified	Bidder to provide details
2.3	Main Platform Size (L x W)	3 x 1.5 meters or above	Bidder to confirm and provide details
2.4	Extendable Platform size (L x W)	1 x 1.5 metres or above. The extendable platform shall be provided with proper structural reinforcement	Bidder to confirm and provide details
2.5	The extendable platform shall be hinged on to the scissor lift and levelled to the main platform and shall be rotated about this hinge for operation. When not in use the extendable platform shall be kept vertical and coupled to the side supports of the main platform. For usage, the extendable platform shall be decoupled from the support and brought to horizontal position as a cantilever extension platform.		

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S. No.	BHEL SPECIFICATION		Bidder's Offer with technical details
	The free end of the extendable platform shall be provided with lifting hooks for supporting the extendable platform. Link rods of suitable Diameter/chains or ropes of suitable load bearing capacity shall be provided to support the lifting hooks to the side support of the main platform. A tentative sketch is shown in the Annexure for understanding purpose only.		
2.6	Lifting Capacity on the main platform	Minimum 2 TONS	Bidder to confirm and provide details
2.6.1	Lifting capacity at the extreme end of the extendable platform	Minimum 750 kgs. Bidder to provide details of the counterweight or suitable design to avoid overturning of the scissor lift when load of max. 750 kg weight is loaded on the extendable platform	Bidder to confirm and provide details
2.7	Platform Height from ground (Minimum/collapsed position)	Around 1 Metre	Bidder to provide details
2.8	Platform Height from ground (Maximum elevated position)	6 Metres	Bidder to provide details
2.9	The scissor lift platform shall be Stoppable/usable at any intermittent height		Bidder to confirm
2.10	No. of Scissor in the Lift Table		Bidder to specify
2.11	Scissor material and dimensions		Bidder to provide details
2.12	Base structure	Mild Steel	Bidder to specify the details of the base structure

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PART-B

S. No.	BHEL SPECIFICATION		Bidder's Offer with technical details
2.13	Hand bar to pull the ladder	To provide suitable hand bar	Bidder to specify
2.14	Mechanical Clamping Pads / jacks	Mechanical clamping pads to fix the lift table to the shop floor ground to be provided.	Bidder to confirm and provide details
2.15	Carriage for Movement	- The entire equipment shall be easily transportable from place to place by means of a wheeled transport carriage. 4 number of caster wheels of suitable diameter with Wheel lock arrangement	Bidder to confirm and provide details
2.16	Lifting hooks	Suitable lifting hooks shall be provided for lifting the scissor lift by EOT crane	Bidder to confirm
2.17	Safety Railing on Platform	Suitable safety measures such as guardrails up to minimum 750mm height on all 4 sides to be provided on the Platform, removable type on all sides.	Bidder to confirm
3.0	OPERATION, CONTROLS AND FEATURES		
3.1	UP, DOWN and EMERGENCY STOP also to be controlled through Pushbuttons provided outside the Platform.		Bidder to confirm
3.2	The platform shall be operable by the operator while standing on the main platform through operator pendant.		Bidder to confirm
3.3	Lifting and lowering action shall be uniform and without jerks.		Bidder to confirm
3.4	The lift shall stop automatically when the platform reaching the desired level by actuation of pre-adjusted levelling limit switches.		Bidder to confirm
3.5	Audio-visual Motion alarm for up and down movement of the lift.		Bidder to confirm
3.6	Platform work lights and Horn.		Bidder to confirm

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S. No.	BHEL SPECIFICATION	Bidder's Offer with technical details
4.0	SAFETY FEATURES	
4.1	Lateral movement stability for safe working must be ensured at all levels. (Additional structures can be provided to ensure the stability of the platform at an elevated condition.)	Bidder to confirm
4.2	Safety valves, burst valve etc. in case of hydraulic failure & overload.	Bidder to confirm and provide details
4.3	Ratchet safety mechanism engages each time the lift stops through the lifting height.	Bidder to confirm and provide details
4.4	Suitable earthing arrangement to be ensured.	Bidder to confirm
4.5	Control voltage not exceeding 24V in the operator pendant in view of safety.	Bidder to confirm
4.6	Manual solenoid release/suitable provision at the bottom for manual release in case of power failure.	Bidder to confirm and provide details
4.7	Any other safety features provided in the equipment.	Bidder to provide details
5.0	HYDRAULIC UNIT & COMPONENTS	
5.1	Hydraulic unit with one power pack unit shall consist of distributor and the required numbers of inclined hydraulic cylinders/ telescopic cylinders to meet the Lifting Capacity of 2 Ton.	Bidder to confirm and provide details
5.2	Hydraulic cylinders shall consist of internal honed pipe having hard chrome Plated piston and hard chrome Plated piston rod	Bidder to confirm
5.3	The details of hydraulic unit system along with necessary drawings indicating circuit details to be provided by Bidder.	Bidder to submit
5.4	The continuous running power pack unit shall have motor of Suitable capacity.	Bidder to confirm and specify the KW rating of the motor.
5.5	The electric motor should be of following Makes: ABB / KIRLOSKAR / SIEMENS / CROMPTON / NGEF / ALSTOM/ BHARAT BUJLEE only acceptable.	Bidder to confirm

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BHEL SPECIFICATION		Bidder's Offer with technical details
S. No.		
5.6	The induction motor offered shall be of energy efficient class IE2 conforming to IS standards.	Bidder to confirm
5.7	Hydraulic oil tank capacity in litres to be specified	Bidder to specify
5.8	First filling of all hydraulic Oil should be supplied by bidder. Oil grade: ISO VG 68 / equivalent Indigenous (Indian) source or Indian equivalent and specifications of oils also to be provided by the bidder.	Bidder to specify
5.9	First fill of hydraulic oil to be supplied along with the equipment	Bidder to confirm
5.10	Makes of hydraulic components (Valves, pumps) components should be of REXROTH / VICKERS / PARKER/ OIL GEAR/KAWASAKI or any other make acceptable to BHEL.	
5.11	Hydraulic hoses make should be of GATES/ AEROQUIP/ POLYHOSE / DUNLOP or any other make acceptable to BHEL.	Bidder to confirm
5.12	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	Bidder to confirm
6.0	ELECTRICAL COMPONENTS	
6.1	The cylinder unit shall be provided with limit switch and Push Button control with Panel Board.	Bidder to confirm
6.2	The electric panel shall have Starter contactors, MCB's, push buttons, Limit switches and Terminal strip.	Bidder to confirm
6.3	Makes of control and switch gears shall be SIEMENS/ L&T/ TELEMCHANIQUE or any other reputed make acceptable to BHEL.	Bidder to confirm
6.4	Makes of Limit switches used in the machine shall be BCH/SIEMENS/JAI BALAJI/ L&T/ TELEMCHANIQUE or any other make acceptable to BHEL.	Bidder to confirm
6.5	The main control panel/cabinet is to be mounted within the power pack at the ground level.	Bidder to confirm

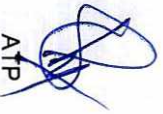
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PART-B

S. No.	BHEL SPECIFICATION	Bidder's Offer with technical details
6.6	All the cables to the field elements and operator panel should be protected by flexible metal conduits with PVC sheathed (Anagonda hoses) and both the ends shall be provided with suitable metal glands/connectors.	Bidder to confirm
6.7	Suitable size of cable ducts/trays should be provided for routing the hoses wherever required.	Bidder to confirm
6.8	A 20 m long sheathed power input cable with suitable heavy duty covering & suitable plug arrangement (for shifting equipment) is to be provided along with the equipment.	Bidder to confirm
6.9	The details along with of electrical circuit diagram to be provided by Bidder.	Bidder to provide
7.0	INPUT POWER SUPPLY BHEL will provide input power supply of 415 V $\pm 10\%$, 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.	Bidder to confirm
8.0	ACCESSORIES: 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.	Bidder to provide details
9.0	SPARES:	


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PART-B

S. No.	BHEL SPECIFICATION	Bidder's Offer with technical details
	Complete List of Spares including the following to be offered along with the Equipment— both Mechanical & Electrical: - Hydraulic cylinder seal kit - Push buttons, selector switches, indication lamps (2 in each type) - Contactors, relays, MCBs, limit switches (1 in each type) - Flexible Hose Pipe - Hydraulic return line filter cartridge	
9.1	Bidder 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.	Bidder to provide details
10.0	Schematic Diagram	Bidder to provide details
	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 with offer to understand the integration & operation of the entire system.	
11.0	O & M MANUALS to be Supplied with Equipment:	
11.1	Separate Operational Instructions & Maintenance Manual for Scissor Lift & its associated Accessories in English to be provided Hard Copies in Original: 2 Sets/ Machine Soft Copy on Pen drive/CD: 1 No	Bidder to confirm

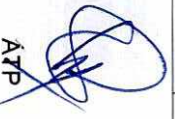

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PART-B

S. No.	BHEL SPECIFICATION	Bidder's Offer with technical details
	The O & M Manual shall contain details like: a) Operation Instructions & Maintenance manual for the total system b) Description & Constructional Details c) Mechanical Assembly Drawings d) Part Drawings e) Electrical Schematic Drawings f) Bill of Materials g) Printed Circuit Board Schematics (if any) h) Technical Leaflets of Bought-Out Items i) List of Spare Parts (Both Electrical Mechanical & Hydraulic) with Make, Specifications/Rating j) Trouble Shooting Details k) Safety Instructions – For Erection, Testing, Operation and Maintenance. m) Hydraulic circuit with bill of materials The bidder shall furnish test certificates/ reports/ characteristic charts confirming IE2 energy efficiency class for the motor.	
12.0	GENERAL POINTS:	
12.1	Drawing approval	Bidder to confirm
12.2	Pre-Despatch Inspection	Bidder to confirm


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PART-B

S. No.	BHEL SPECIFICATION		Bidder's Offer with technical details
12.3	Installation & Commissioning & Performance Prove-Out test at BHEL	Bidder should take full responsibility of Installation and commissioning at BHEL works. After the installation, the supplier has to run the equipment and proveout its lifting/lowering capability with the rated load for successfully commissioning of the equipment at BHEL works.	Bidder to confirm
12.4	Training	Training on Operation and Maintenance for BHEL Staff during Installation & Commissioning of the equipment at BHEL works to be provided by the bidder	Bidder to confirm
12.5	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.	Bidder to confirm

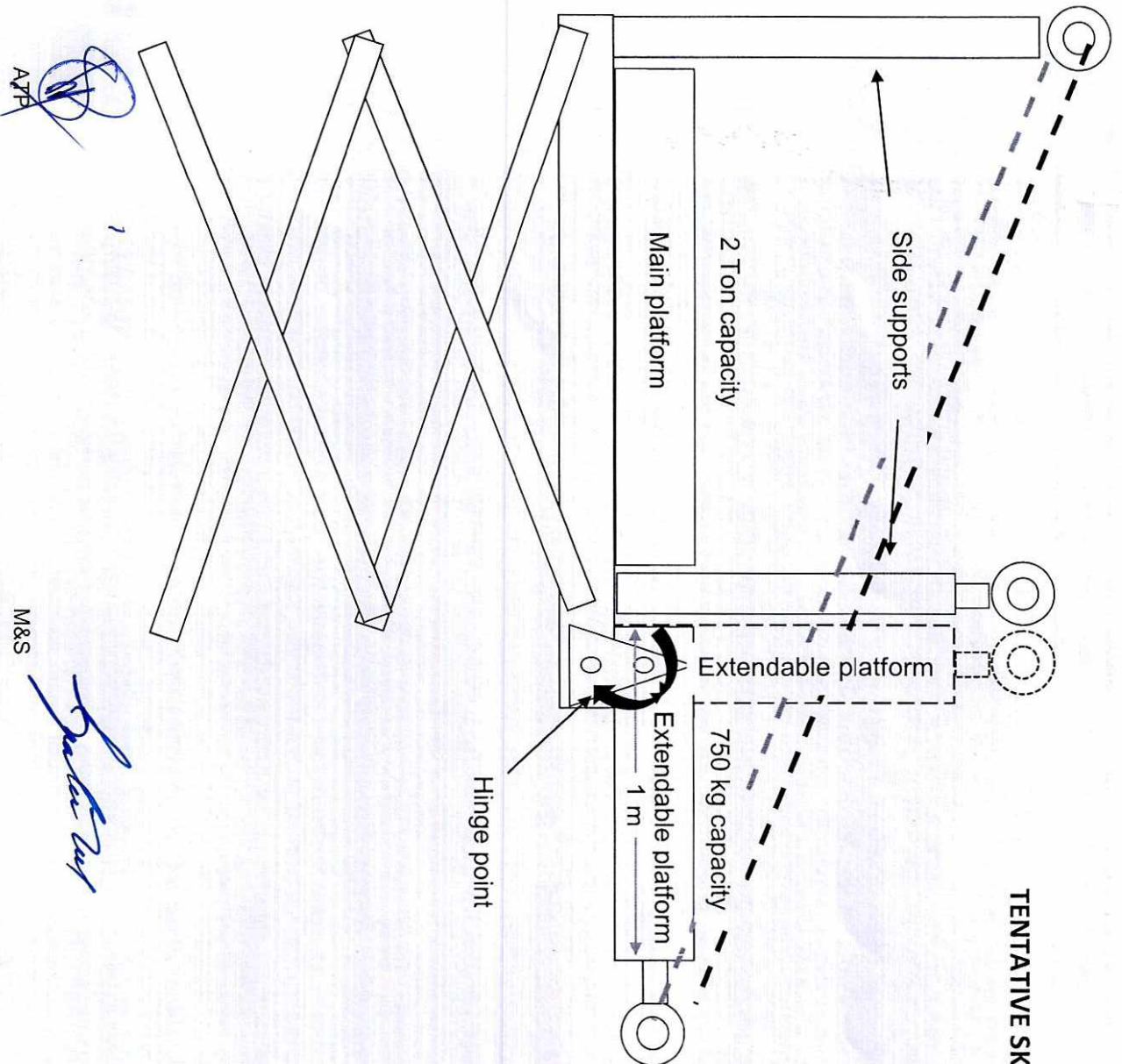

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ANNEXURE

TENTATIVE SKETCH OF THE SCISSOR LIFT PLATFORM



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