



BHARAT HEAVY ELECTRICALS LTD.  
CENTRAL FOUNDRY FORGE PLANT RANIPUR, HARDWAR  
**MAINTENANCE & SERVICES – FORGE SHOP MAINTENANCE**

**NOTICE INVITING TENDER**

Date: 10.09.2016

Sealed tenders are invited in two parts i.e. (i) Techno- Commercial Offer and (ii) Price Bid, through registered post / speed post/ courier/ by hand on or before **10.10.2016 up to 01:30 PM** from **parties meeting the qualifying criteria** for the under-mentioned work. Tender documents can be downloaded from the tenders section of the website of BHEL: [www.bhelhwr.co.in](http://www.bhelhwr.co.in) & [www.bhel.com](http://www.bhel.com).

Last date of **DOWNLOAD** of tender : **10.10.2016 up to 01:00 P.M.**  
Last date of **SUBMISSION** of tender : **10.10.2016 at 01:30 P.M.**  
Date of **OPENING** tender : **10.10.2016 at 02:00 P.M.**  
Place of **SUBMISSION** of tender : **Tender Room,  
Administrative Building  
CFFP, BHEL, Haridwar.**

The party must submit documentary proof of meeting the qualifying requirements mentioned below in **Pre-Qualification Criteria (Annexure-I)** in “Techno-Commercial envelope”. **Parties are required to ensure at their end that tender documents complete in all aspects reaches in CFFP on or before tender opening date and time without any plea of delay on any account.**

For more details, please visit our website [www.bhelhwr.co.in](http://www.bhelhwr.co.in) or may contact on:  
01334-284165, +91-9917119896, e-mail: [udbhav@bhelhwr.co.in](mailto:udbhav@bhelhwr.co.in).

Tender no. & date	Name of work	Estimated cost for two years	Earnest Money	Tender Cost
FF/16/MFG/RM /ME/06 dt. 10.09.2016	Reconditioning of Hydraulic Control System for Rotation and Clamping of Jaw of 32/65 mT Manipulator in Heavy Forge Shop	Rs. 23.29 Lakhs	Rs. 60000/=	NIL

**Note:**

1. Earnest money must be submitted in separate along with Techno-Commercial offer.
2. BHEL reserves the right to accept or reject any / all application(s) without assigning any reason thereof.
3. If any document(s) submitted by vendor is/are found false at any stage, the tender (offer) will be cancelled immediately and suitable action, as deemed fit, will be taken against the vendor.
4. BHEL will not be responsible for the loss or delay of tenders in transit in any case.
5. All further corrigenda, addenda, amendments, time extensions, clarifications etc. to the tender, if any, shall be hosted only on our website.
6. This tender notice is accompanied by 4 annexures namely:  
Annexure – A: Specification of Hydraulic Control System for Jaw of Manipulator  
Annexure – B: Pre-Qualification Criteria  
Annexure – C: Special Terms and Conditions  
Annexure – D: General Terms and Conditions, and  
Price Bid (Priced/Un-priced)

Sr. Engineer (HFS Maintenance)

Signature of Vendor (With seal)



**BHARAT HEAVY ELECTRICALS LTD.**  
**CENTRAL FOUNDRY FORGE PLANT RANIPUR, HARDWAR**  
**MAINTENANCE & SERVICES – FORGE SHOP MAINTENANCE**

**SPECIAL INSTRUCTIONS**

1. Kindly read this set of special instructions carefully before filling up the tender form.
2. Pre-qualification requirements placed at Annexure B must be fulfilled by the vendor to participate in the tender and submitted along with the Techno-Commercial bid.
3. The bidders are to submit the tender form along with all annexures, Price Bid as well as this set of special instructions, all pages duly signed.
4. The tender is to be submitted in two parts; viz.:
  - a) Techno-commercial bid, and
  - b) Price Bid
5. Both the techno-commercial bid and the price bid are to be placed separately in duly sealed envelopes, super scribed – “Techno-commercial bid for tender no. FF/16/MFG/RM/ME/06” and “Price Bid for tender no. FF/16/MFG/RM/ME/06”, respectively. The two envelopes are to be placed in a common envelope super scribed “Tender for tender no. FF/16/MFG/RM/ME/06”. The techno-commercial bid must also contain an un-priced copy of the price bid.
6. Only the techno-commercial bid will be opened on the day of tender opening. The priced bid will be opened only if techno-commercial bid(s) are found technically suitable & acceptable. The date of opening of the price bid(s) will be intimated to all bidders found technically suitable and acceptable bidders at a suitable time.
7. Once the price bids are opened and accepted by BHEL, the same cannot be withdrawn by the bidder for whatsoever reasons. In case a bidder withdraws (or attempts to) his/her/their tender, suitable action may be taken by BHEL as deemed fit.

If there is a difference found in the figures & words of the offered price, the price given in the words will be considered.

Sr. Engineer (HFS Maintenance)

Signature of Vendor (With seal)

BHARAT HEAVY ELECTRICALS LTD.  
CENTRAL FOUNDRY FORGE PLANT RANIPUR, HARDWAR  
**MAINTENANCE & SERVICES – FORGE SHOP MAINTENANCE**

**Price Bid**  
**(Priced/Un-priced)**

**Name of work:** Reconditioning of Hydraulic Control System of Jaw of 32/65 mT Manipulator in Heavy Forge Shop

**Tender No.** : FF/16/MFG/RM/ME/06  
**Estimated Cost** : Rs. 23.29 Lakhs (Excluding Taxes)  
**Earnest Money** : Rs. 60,000.00/-  
**Cost of Tender** : NIL  
**Date of Tender Opening** : 10.10.2016 at 02:00 PM

Bill of Quantity

S. No.	DESCRIPTION OF WORK	Qty.	Total cost
1.	Reconditioning of Hydraulic Control System of Jaw of 32/65 mT Manipulator in Heavy Forge Shop - <b>Design &amp; Supply</b> of items as per technical specification (Annexure – A) – scope of supply	1	₹. _____
2	Reconditioning of Hydraulic Control System of Jaw of 32/65 mT Manipulator in Heavy Forge Shop - <b>Erection, Commissioning and Trial run (Hot and cold)</b> as per technical specification (Annexure – A) – scope of work	1	₹. _____
3.	Total	1	In words ( _____ _____ _____ )
Note: Service Tax will be Extra as applicable at the time of billing.			

**Note:** Rates are to be mentioned in figure as well as in words. If overwriting/un-readable figure is found in rates, the rates offered in words will be considered final. In case of cutting/over-writing/un-readable figure in both numbers as well as words, the bid may be cancelled.

**The value of Erection, Commissioning and Trial run - Hot and cold (at # 2) above is to be at least 10% of the total quoted value (at # 3). If value quoted at # 2 is found less by 10% of total amount quoted (at #3), then the amount less will be adjusted by deduction from amount quoted against design and supply, at # 1.**

Signature of Issuing Officer

Signature of Bidder/Tenderer



**BHARAT HEAVY ELECTRICAL LIMITED**  
**CENTRAL FOUNDRY FORGE PLANT**  
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<b><u>Annexure A: Specification of Hydraulic Control System for Jaw of Manipulator</u></b>			
<b>Clause No</b>	<b>Description</b>		<b>Vendor's Acceptance</b>
1.0	<b>GENERAL DESCRIPTION:</b> This specification covers the design, supply, erection, commissioning and trial run (Hot and cold) of Hydraulic Control system for Jaw of Manipulator in CFFP, BHEL Haridwar		
2.0	<b>TECHNICAL PARAMETERS:</b>		
2.1	Type	Hydraulic operated, electrically controlled	
2.2	Application	32/65 mT Manipulator of 9000 T Press	
2.3	<b>The scope of supply of hydraulic control system:</b>		
2.3.1	Functions	a. Rotation of jaw – clockwise and anti-clockwise (without speed regulation, i.e., jaw will rotate at constant speed in either directions) b. Clamping/de-clamping operations of jaw The system should be capable to operate either of the two operations at a time i.e., clockwise/anti-clockwise rotation or clamping/de-clamping.	
2.3.2	Pump	Variable flow axial piston pump – one no., parameters: Max. flow: 360 LPM                      Max. pressure: 350 bar RPM: 1500 Acceptable makes: Eaton, Wepuko, Parker, Rexroth only Motor shall be provided by BHEL and vendor is to make suitable arrangements for integration of the pump with the system. The rating of the motor shall be provided by the vendor.	
2.3.3	Valves	System is to contain: a. Directional control valve (solenoid operated – 24 V DC) – 2 nos. for choice of rotation or clamping/de-clamping and rotation direction. b. Relief valve – At least 1 no. c. Check valve – of suitable size and nos.  Acceptable makes: Eaton, Wepuko, Parker, Rexroth only All the valves shall be of size 30-32 NB and able to withstand maximum flow of 360 LPM at pressure 250 bar.	

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2.3.4	Other items	<p>Other items are to include:</p> <ul style="list-style-type: none"><li>a. Suction strainer for filtration of oil – 250 micron, at least one no.</li><li>b. Manifold block – of suitable size and nos. (to include pressure measuring points for all functions and drain)</li><li>c. Hydraulic pipe line and other accessories including fittings of piping, nuts, bolts and washers</li><li>d. Other miscellaneous items required for successful commissioning and proving of the system at full capacity or otherwise, as required by BHEL</li></ul>	
2.3.5	Drawings	<p>Hydraulic circuit drawings, electrical control/logic diagrams, design calculations and layout drawings are to be submitted to BHEL within 15 working days of the date of work order. Changes required, if any, shall be suitably made by the vendor in consultation/ after a joint discussion with BHEL.</p> <p>Vendor is to submit the final updated drawings and component manuals in soft copy (1 set) as well as hard copy (5 sets) before starting the commissioning process.</p>	
2.3.6	Miscellaneous	<p>Any other item required for successful operation of the system mentioned in this scope or otherwise, shall be deemed to be included in the scope of the vendor. Vendor's scope shall include but not be limited to the items mentioned herewith.</p>	
3.0		<p><b>SCOPE OF WORK:</b> The items supplied by the vendor have to be integrated on the Hydraulic control circuit of the manipulator so as to perform the operations of clamping/ de-clamping and rotation in both the directions through one high pressure pump as supplied. All the valves have to be integrated on the block as supplied. Therefore, the vendors are <b>strongly advised to visit CFFP/BHEL Haridwar</b> to study the site before submitting the offer. The erection commissioning, testing and trial run of the system shall be in the scope of vendor. The performance of the system shall meet the <b>acceptance criteria</b> as described below. The mechanical and electrical terminal points of the system to be replaced shall be clearly indicated in the drawing provided by BHEL.</p>	
4.0		<p><b>Acceptance Criteria:</b> System will be tested after erection, commissioning and integration of the erected assembly with the manipulator at CFFP, BHEL and trial run at test pressure of 250 bars. The system should run satisfactorily performing both the functions of rotation (bi-directional) and clamping/de-clamping. (Pressure measuring points to be provided in block for both functions, ref. tech spec.)</p>	
5.0		<p><b>PERFORMANCE GUARANTEE / WARRANTY:</b> The guarantee period of the system shall be 18 months from the date of supply or 12 months from the date of successful commissioning and acceptance of the system at CFFP, BHEL Haridwar whichever is later.</p>	

Signature of Issuing Officer

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**CENTRAL FOUNDRY FORGE PLANT**  
**RANIPUR, HARDWAR**  
**FORGE SHOP MAINTENANCE**

**Ref.:** FF:16:MFG:RM:ME:06

**Date:** 19/08/2016

**Work:** Reconditioning of Hydraulic Control System for Rotation and Clamping of Jaw of 32/65 mT Manipulator in Heavy Forge Shop

**Annexure - B: Pre - Qualification Criteria**

<b>S. No.</b>	<b>Criteria</b>	<b>Requirement</b>	<b>Vendor's Response</b>
1	Vendor must have successfully completed similar job work/ purchase order of reconditioning of hydraulic control system		
1.1	Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: Three similar completed works each costing equal to or more than Rs. 9.32 Lakhs Or Two similar completed works each costing equal to or more than Rs. 11.65 Lakhs Or One similar completed work each costing equal to or more than Rs. 18.64 Lakhs	Vendor to submit the copies of purchase orders/completion certificate of work duly signed by customers	
1.2	Name & postal address of the customers for whom the above mentioned WOs/POs along with name, contact phone number(s), email id, designation of the contact person to be submitted	Details as required to be enclosed	
3	Average annual financial turnover during the last 3 years ending 31st March of the previous financial year, should be at least 6.98 Lakhs.	Balance sheet of last 3 years clearly indicating the turnover to be submitted	

Signature of Issuing Officer

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**Note:**

1. Similar work means “supply, erection and commissioning of hydraulic control system including at least one no. pump of working pressure at least 200 bar and one no. directional control valve along with block, of size at least 30 NB.”
2. BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false/ incorrect, the offer shall be rejected.

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**FORGE SHOP MAINTENANCE**

**Ref.:** FF:16:MFG:RM:ME:06

**Date:** 19/08/2016

**Work:** Reconditioning of Hydraulic Control System for Rotation and Clamping of Jaw of 32/65 mT Manipulator in Heavy Forge Shop

**Annexure – C: Special Terms & Conditions**

1. The work of reconditioning is to be done on the 32/65 mT Manipulator of Heavy Forge Shop in CFFP/BHEL, Ranipur, Haridwar.
2. CFFP/BHEL reserves the right to pre-inspect the material as per scope of supply for reconditioning at vendor's works/warehouse/premises before final dispatch and during intermediary processes.
3. The final inspection of the material shall be carried out jointly by BHEL and vendor at CFFP, BHEL Haridwar after the receipt of material.
4. The cost of transportation of material will be borne by the vendor and is to be included in the bid.
5. The cost of transit insurance during transportation will be borne by the vendor and is to be included in the bid.
6. The work period for complete design, supply, erection, commissioning and trial run shall be as follows:

Supply	:	6 months from the date of Work Order
Erection, commissioning and trial run	:	15 days from the date of material acceptance at CFFP, BHEL Haridwar or otherwise as per the Work schedule of BHEL.
7. The final bid will be evaluated on total landed cost including material cost, transit, transportation cost, insurance cost, and Erection and Commissioning works
8. . However, Service Tax will be paid extra on actual basis.
9. Contractor shall submit hydraulic circuit drawings and electrical control/logic diagrams to BHEL for approval as specified in the technical specification of work. Before commencement of the E&C, vendor shall submit a work schedule.
10. All original drawings and standards are propriety of BHEL; they must not be used in any way detrimental to the interest of the company.
11. Terms and conditions of payment:
  - a. 80% of material cost (i.e. design and supply) along with 100% taxes & duties (Excise duty, CST/VAT as applicable) after receipt of material at CFFP, BHEL, and its joint inspection and acceptance at CFFP. Balance 20% of material cost and the cost of E&C, trial run hot and cold will be paid after completion of commissioning work & acceptance of system by BHEL after submission of Performance Bank (PBG) Guarantee of 10% of contract value (Material + E&C Charges). The guarantee period of the system shall be 12 months from the date of commissioning or 18 months from the date of supply, whichever is later.

**Acceptance of system** : System will be tested after integration of the erected assembly with the manipulator at CFFP, BHEL and run at test pressure of 250 bars. The system should run satisfactorily performing both the functions of rotation (bi- directional) and clamping/ dec-lamping. (Pressure measuring points to be provided in block for both functions, ref. tech spec.)

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- b. All the payments shall be made through e-payment after submission of following documents along with first bill.
  - I. E-payment form duly filled (Form will be provided by BHEL)
  - II. Income tax exemption letter( if applicable)
  - III. Excise duty & CST/VAT will be paid on material cost and service tax will be paid on commissioning charges at actual. Related original documents to be submitted for availing MODVAT credit by BHEL.
  - IV. Timely submission of CENVATABLE invoices along with necessary documents to enable availment of CENVAT (Excise duty, Service Tax & VAT) credit by BHEL.  
Note: Wherever CENVAT credit cannot be availed within given time limit due to delay in submission of invoices or for any other reasons attributed to vendor, loss of such CENVAT credit will be recovered from such vendor.
- c. Invoices will be raised separately for material & commissioning.
- d. Form "C" will be issued against CST after acceptance of Material at BHEL.
- e. No advance payment will be made by BHEL.
- f. Proof for Service Tax deposit is must to submit for the payment of commissioning charges.

12. Penalty Clause:

- a. A delay in supplying the material for reconditioning of the system to BHEL, by the contractor, beyond scheduled date as specified in the Work Order or otherwise shall attract a penalty of 0.5% per week or part of that, subject to a maximum of 10% of contract value (including both supply and E &C works).
- b. A delay in handing over of the system to BHEL, by the contractor, beyond scheduled date as specified in the Work Order or otherwise shall attract a penalty of 0.5% per week or part of that, subject to a maximum of 10% of contract value (including both supply and works).
- c. In case of application of both penalties, the maximum value of penalty (including that on supply and that on E&C works) shall be limited to 15% of the contract value (including both supply and E&C works). The total period of execution (Supply and E&C) will be calculated from the date of issue of work order to handing over the system to BHEL less any time taken by BHEL (like time taken by BHEL in handing over the machine to contractor for installation and delay due to PDI (if applicable).

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**FORGE SHOP MAINTENANCE**

**Ref.:** FF:16:MFG:RM:ME:06

**Date:** 19/08/2016

**Work:** Reconditioning of Hydraulic Control System for Rotation and Clamping of Jaw of 32/65 mT Manipulator in Heavy Forge Shop

**Annexure – D: General Terms & Conditions**

Please read the instructions below carefully before filling the tender form. Tender form having any cuttings/overwriting/not having clarity/having ambiguity will be cancelled. Do not remove any page from this form and sign both sides of the pages:

1. No tender documents will be accepted without submission of earnest money.
2. The contractor must sign each page of tender documents. In relation to the company or firm, the tender must be signed by the person who has the power of attorney, and a copy of the same must be enclosed with the tender form.
3. All the tenders must necessarily be accompanied with the earnest money as detailed in the tender notice/tender form. Any tender submitted without the earnest money will be liable to be rejected.
4. Once tenders are opened and accepted by BHEL, the same cannot be withdrawn by the bidder for whatsoever reasons. In case a bidder withdraws his/her/their tender, the earnest money deposited will be forfeited.
5. Service tax will be reimbursed on providing service tax deposit receipt.
6. EMD is to be submitted in the form of cash (as permissible under the income tax act), pay order or demand draft.

EMD of the tenderer will be forfeited as per tender documents, if:

- a. After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.
  - b. The tenderer does not commence the work within the period as per contract. (Ref. clause 21)
7. All documents of tender form and earnest money along with the receipt, received after depositing the DD/Pay order (CFFP) to the cash section (if applicable), should be sent to

**Tender Room,  
Administrative Building  
CFFP, BHEL Ranipur  
Haridwar**

by hand/by registered post/by courier in a sealed envelope before opening of tender.

8. Contract shall be governed by the works policy, fraud prevention policy and the same shall be made available to the vendor in case of requirement expressed by the vendor. The Bidder along with its associate/collaborators/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.

Signature of Issuing Officer

Signature of Bidder/Tenderer

9. BHEL will have the right to cancel any or all tenders and to accept any tender whether it is minimum or maximum. Incomplete forms will be cancelled.
10. Presence of tenderers at the time of tender opening is required but not necessary.
11. After getting the contract, security money (SD) has to be deposited by the vendor before commencement of work. The value of SD shall be as follows:

Up to Rs. 10 lakhs	:	10% of the contract value
Above Rs. 10 lakhs upto Rs. 50 lakhs	:	Rs. 1 lakh + 7.5% of the amount exceeding Rs. 10 lakhs

SD may be furnished in any of the following forms:

- a. Cash (as permissible under the income tax act)
- b. Pay order, demand draft in favour of BHEL
- c. Local cheques of scheduled banks, subject to realization
- d. Securities available from Post Offices such as NSC, KVP etc. (Certificates should be held in the name of the contractor furnishing the security and duly pledged in favour of BHEL and discharged on back).
- e. Bank guarantee from Scheduled Banks/Public Financial Institutions as defined in the companies act. The bank guarantee format should have the approval of BHEL.
- f. FDRs from Scheduled Banks/Public Financial Institutions as defined in the companies act. The FDR should be in the name of the contractor, A/c BHEL, duly discharged on the back.

EMD of the successful tenderer can be converted and adjusted against the security deposit. The security deposit shall not carry any interest.

Security deposit shall not be refunded to the contractor except in accordance with the terms of the contract.

12. During the execution of contract, if the contractor gets any other contract from other department, then he must inform the prior department in writing. If not informed, the contractor may prohibit from future partnership.
13. The vendor must have work experience as detailed by the PQC.
14. No overdue interest clause to be added. If added, BHEL is not liable to entertain the same.
15. All the payments to contractor will be made through e-payment.
16. This contract shall be a fixed price contract and BHEL shall not entertain any request from the contractor for enhancement of the contract price on any grounds whatsoever.
17. Tenderers have to quote the rates in the column(s) of tender forms in numbers and words only. All the rates have to be given in Rupees and no rate will be accepted in kilo, ton or bags terms. Overwritten and incomplete forms will be cancelled.
18. If the rate value given in numbers and words are different then the value given in words will be considered.
19. Tenderer has to sign on the agreement before taking the Work order.
20. It is notified to all tenderers that they shall not be submitting any fake documents along with the tender form. All the collected documents can be examined at any point of time and if documents are found fake /forged, then appropriate action will be taken to the extent of cancellation of registration and tender.
21. In case the contractor defaults in commencing the work within the time specified by BHEL in spite of a reasonable notice in writing or in case the contractor fails, to comply with any of the terms and conditions of the contract, in spite of 10 days' notice in writing or in case he/she neglects or refuses to execute the contract or any part thereof at any stage, the contract shall, without prejudice to any other rights or remedies available to BHEL be liable to cancelled/termination in part or as a whole. In the event of cancellation/termination. The contractor shall be liable to compensate BHEL for all loss

Signature of Issuing Officer

Signature of Bidder/Tenderer

incurred by BHEL including the loss suffered on account of having the work executed through any other contractor or department as may be convenient to BHEL in accordance with the exigencies of the work.

22.

In case only a part of the contract is cancelled, the remaining portion of contract may be allowed to be executed by the contractor. All disputes arising in connection with the contract shall be settled by mutual consultation if no agreement is reached the dispute shall be settled in accordance with the provisions of the Arbitration and conciliation Act, 1996 and the rules made there under. The dispute shall be referred for arbitration to any arbitrator to be appointed by the Head of the BHEL CFFP Unit. The award of the arbitrator shall be final and binding on both the Parties. The venue of the Arbitration shall be Haridwar (U.K.) in India. The questions, disputes, differences arising under, out of or in connection with this contract shall be to the exclusive jurisdiction of Haridwar Courts.

Signature of Issuing Officer

Signature of Bidder/Tenderer