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ISO 9001:2000

**HEAVY MACHINE BUILDING PLANT
HEAVY ENGINEERING CORPORATION LIMITED**

(A Govt. of India Enterprise)

Ranchi – 834 004 (INDIA)

Tender Enquiry No. PUR/HMB/FI (653)/20-6211

Date: 28.01.2021

OPEN TENDER ENQUIRY**Sub: E-tendering with E-price bids for Supply and Supervision of commissioning work of complete hydraulic system for the Hydraulic power pack of MLP.**Tenders are invited on line through website from **domestic manufacturers only**. Tenders are to be submitted strictly as per guidelines furnished in the website of <http://etenders.gov.in> hereunder:**INSTRUCTION TO BIDDERS (ITB)****1.0 Tender Summary :**

| | | |
|---|--|-------------------|
| Tender Ref No. | PUR/HMB/FI(653)/20-6211 dated 28.01.2021 | |
| Cost of Tender documents / Tender Fee (Exempted for NSIC/SSI/MSME registered firms) (As per NIT clause No:9 of Annexure A) | Rs.750.00 in favor of "Heavy Engineering Corporation Limited "Payable at Ranchi.(To be submitted in form of DD" to the undersigned through courier/By Hand) (Tender fees is non refundable) | |
| EMD : Bids must be accompanied by a Earnest Money Deposit (Bid Security) .(Exempted for NSIC/SSI/MSME registered firms) (As per NIT clause No:16 of Annexure A) | Rs.1,50,000/- in the form of bank demand draft in favour of "Heavy Engineering Corporation Limited" and payable at par at Ranchi or in form of BG (BG format Annexure C) to be submitted with Part-I of the tender i.e. with techno-commercial bid . | |
| Mode of Tender: | E tender with e price bid | |
| Type of tender | Two Bid System | |
| Last date and time for on-line submission of tender | 18.02.2021 | UPTO 13 Hrs (IST) |
| Due date and time for on line opening of tender : | 20.02.2021 | AT 15 Hrs (IST) |
| Due date and time for online opening of Price bid of techno commercially suitable firms | Will be intimated through e tender portal | |
| (Under unforeseen circumstances and if the due date falls on holiday, the tender will be opened on the next full working day at same time | | |

*Bidders are requested to submit their most competitive offer through e- procurement mode only. Offer submitted through offline mode will not be considered. For more information please visit our website <https://etenders.gov.in/eprocure/app>.**Prospective Tenderers are advised to get registered themselves only on at NIC tender portal i.e. <https://etenders.gov.in/eprocure/app>, obtain 'User ID' & 'Password' and go through the 'Self Help files' available in the Home Page after log in to the portal <http://etenders.gov.in>. They should also obtain*



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Class III Digital Signature Certificate (DSC) in parallel which is essentially required for submission of their application. A detailed instruction for online bid submission is mentioned below. No registration fee would be charged from the bidders.

Bidders are required to upload the bid along with all supporting documents including priced part (BoQ) only on the e-tendering website (<https://etenders.gov.in/e procure/app>), on or before the due date and time for submission of bid.

NOTE:

1. HEC reserves the right to extend / change the schedule of any activity by intimating the bidders through a notification on the e-tender portal.

2. For detailed guidance for online bid submission, please refer annexure-G.

2.0 Contents of tender documents:

| | | |
|---|---|--|
| 1 | Technical specification & Commercial Terms and Conditions of NIT | Annexure "A" & Annexure 'B' respectively |
| 2 | Template for Price format/BOQ for online submission by the bidder | BOQ.xls |

Requirements for Vendors:

- A) P.C. connected with internet.
- B) Registration with Service provider portal <https://etenders.gov.in>
- C) The vendor should possess a Class-II or Class III Digital Signature certificate (Mandatory). (Bids will not be recorded without Digital Signature Certificate.)
- D) In case of any clarification please contact M/s NIC, before the schedule time of the submission of bid. Contact Person:- **Shri Kushal Kumar: 09852923855 / 7903884318**
- E) Registration / Enrollment of Bidder on e- tender Portal of HEC: In order to submit the bid, the bidders have to get themselves registered online on the e- tender portal of HEC Ltd with valid Digital Signature Certificate (DSC) issued from any agency authorized by CCA and which can be traced upto the chain of trust to the Root Certificate of CCA. The online Registration of the Bidders on the portal will be free of cost and one time activity only. The registration should be in the name of the bidder, whereas DSC holder may be either bidder himself or his duly authorized person.

3.0 For **registration**, Submission procedure and method of correspondence etc. Please visit our website: <https://www.hecltd.com> / <https://etenders.gov.in> and click on the relevant link for help.

4.0 Help for participating in e-tender:

The detailed method for participating in the e-procurement are available in the website <https://www.hecltd.com> or <https://etenders.gov.in> The bidders have to Log on to official website and then click on the specified links to start participating in the e-procurement process.

Bidders are also free to communicate with the contact person of the service provider to get all clarifications regarding the mode of the e-procurement process.

NB:

- (I) Please note that there is no provision to take out the list of parties downloading the tender document from the above referred web site. As such, tenderers are requested to see the website once again before due date of tender opening to ensure that they have not missed any corrigendum uploaded against the said tender after downloading the tender document. The responsibility of downloading the related corrigenda, if any, will be that of the downloading parties.
- (II) No separate intimation in respect of corrigendum to this NIT(if any) will be sent to tenderers



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who have down loaded the documents from website. Please see website i.e., <http://www.hecltd.com> or <http://www.etenders.gov.in>

- 5.0 The offer should be submitted (uploaded) strictly as per the terms and conditions and Procedures laid down in the website <https://etenders.nic.in> tender document failing which the offer is liable for rejection.
Bidders should download the complete NIT including the Annexure and read carefully before filling the details and uploading the documents.
- 6.0 Incomplete offers shall not be considered.
- 7.0 The bidder must upload all the documents required as per the terms of NIT. (Any other document uploaded which is not required as per the terms of the NIT shall not be considered.)
- 8.0 It may please be noted that E-tendering or e-procurement fall under the purview of the Information Technology Act 2000 and Information Technology (Amendment) Act 2008 and other relevant acts and subsequent amendments if any).
- 9.0 There will be no physical sale of the tender documents.

10.0 PREPARATION OF TENDER DOCUMENTS :

Tender is to be submitted in two bid system i.e, Two Parts (Part-1 & Part-2) in the following manner and shall be submitted through electronic mode only as detailed below:

- a. **Techno-commercial bid (Part-1) details** – The offer is to be scanned and uploaded in HEC and CPP portal consisting technical details as per annexure-A. The check list for commercial terms and conditions (as per annexure A & B). The format as per Annexure-B (Commercial checklist sheet) shall be downloaded and the same file duly filled by the bidder is to be uploaded while submitting the offer. **No price part is to be uploaded in this part.**
- b. **Price-format/BOQ (Part-2) details:** This part of the offer should contain price portion .The format of Price Bid/BOQ which in excel format shall be downloaded by the bidder and rate offered by the bidder shall be filled in the excel file and uploaded the same excel file of e tendering system while submitting the offer. The price-format/BOQ which is incomplete and not submitted as per the instructions given will be liable for rejection.

Note :

Bidders are requested to upload all the attachments /documents in one single PDF File in Other Important Documents (OID) or as indicated in the online instructions. For Example if more than one document is to be uploaded in support of Eligibility criteria or proven-ness criteria or any other requirement then bidder must prepare one single PDF file of all the related documents and then upload in the system in OID

Bid Opening Process is as below:-

Cover-I: Technical bid opening date will be as per given dates. If any clarification is needed from the bidder about the deficiency in his uploaded documents in Cover-I, he will be asked to provide it through Short fall documents folder in e-tendering portal. The bidder shall upload the requisite clarification / documents within time specified by HEC, failing which tender will be liable for rejection.

Cover-II: The financial bids of the contractors / firms found to be meeting the qualifying requirements and technical criteria shall be intimated through portal. (Depending on Cover-I evaluation any changes in the date shall be intimated through e-tendering portal).

11.0 Please read carefully before you quote: -

Last date of Receipt of Tender Document: by 1:00 PM (IST) on 18/02/2021

Due date of tender opening: at 3:00 PM (IST) on 20/02/2021

- 1. Items to be supplied as per the provided specifications.
- 2. It should be quoted on **FOR HMBP Store.**
- 3. **Validity** – Minimum 90 days from the date of opening of tender.



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4. Order will be under L.D. clause.
5. Price format:-Filled in Price format to be uploaded as per BOQ of NIT.
6. Commercial Terms and condition checklist in Annexure-B to be submitted/uploaded along with offer i.e, Part-1 of the bid.
7. The EMD (BG or DD) needs to be sent to office of purchaser before in advance so that it reach before scheduled date of opening of tender and the envelope containing EMD shall be super scribe the “ EMD for the Tender Reference Number and the date .
TO
MATERIAL MANAGEMENT DIVISION
HEAVY MACHINE BUILDING PLANT
HEAVY ENGINEERING CORPORATION LTD.
RANCHI-834004, JHARKHAND
INDIA
8. **Disclaimer clause**:-The Company (Heavy Engineering Corporation Ltd.) nor the service provider (www.etenders.gov.in) is responsible for any failure of submission of bids due to failure of internet or other connectivity problems or reasons thereof.



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Annexure A**1.0 SCOPE OF SUPPLY with Supervision of commissioning work: -**

| Sl. | Description | Material | Qty. |
|---|--|--------------|--------------|
| A | Hydraulic power pack for MLP consist of followings (Material Code: 4430175100 and Drawing No:4301.75.100) | Assly | 1 Set |
| A.1 | Hydraulic Power pack (MEQ11M41CGUX). Axial piston pump split flow type with 4 equal independent out lets, Model No: 37701111. Max. oil flow: 4X0.22 LPM @250bar , Max W.P: 250 Bar or above For each outlet: VMM41 Manual Valve, Pressure Gauges, VRU38 Valve, K73FC couplers, Stainless Steel 10 litre tank, with all accessories like suction strainer, return line filter, pressure gauge, oil level indicator, gauge isolating valve, air breather, etc. And Stainless steel cage for each outlet. The Pump direct coupled with Electric motor, 3 phase, 4 poles, 415V±10%, 50Hz ±3%, Flame Proof, group IIB, IP (enclosure) : 55 or better. Make: F.I.M.M | Sub assly | 1 |
| A.2 | Hydraulic Cylinders. Type : Double Acting, with pilot check valve arrangement. Capacity : 20.6 ton (Pull mode) & 23.8 ton (Push mode) Stroke : 150 mm, Max. Working Pressure: 250 Bar. Model No.: COT20N150X Mounting Style : Front Flange Mounting with threaded Rod end Accessories: Rod clevis, pivot pin, eye bracket, Hydraulic Cylinder to be supplied along with mounting brackets having maximum width of 250 mm | Sub assly | 6 |
| A.3 | Hydraulic Hoses. MAX WORKING PRESS 700 BARS , BURST PRESS 2800 BARS, 3/8" NPT END FIT + 2 MALE COUPLINGS. QC/DC END CONNECTIONS ALONG WITH METAL DUST CAPS AT BOTH ENDS LENGTH OF EACH HOSE : 20 M, MODEL NO : SN200MM | Sub assly | 16 |
| A.4 | Axial Piston Pump. Axial piston pump split flow type with 4 equal independent out lets, Max. oil flow: 4X0.22 LPM @250bar Max W.P: 250 Bar or above WITH FLANGE, DIA. 24 CAM AND BEARINGS Model No: 37701111 | Sub assly | 1 |
| A.5 | Control Panel for Hydraulic Power pack. The local control panel shall include the following control switches & displays: •Power on / off switches. • Start/stop switch for motor/pump of power pack. • Direction control valves for forward/reverse movement of SSR. • Control valve for controlling the speed of movement of the actuators. • All control shall be provided with LED lamps. | Sub assly | 1 |
| A.6 | SEAL KIT FOR COT20N150X | Sub assly | 6 |
| A.7 | SEAL KIT FOR Power Pack MEQ11M41CGUX | Sub assly | 1 |
| A.8 | Supervision of commissioning work for complete hydraulic system at our customer site ISRO, SHAR, Sriharikota, India. (Shall be done, if required) | -- | 1 |
| Technical Instructions :- | | | |
| <ol style="list-style-type: none"> 1. Firm should furnish Schematic Diagram, G.A.Drawing with BOM & Make & Catalogue of the items along with the offer in the part-1 (i.e, techno commercial) bid. 2. Firm to confirm that they shall supply the power pack as per Technical Instruction, TI - 4301.75.100. (Technical Instruction Attached in Annexure : H) 3. Any commissioning spares, other than at Sl. No. A.6 & A.7 shall be included with offer and the same shall be supplied along with the equipment. 4. List of recommended operational spares for two years from date of commissioning shall be furnished along with the part-1 (i.e, Techno commercial) bid with the quantities for each year separately. 5. After placement of order the firm should to get the final drawings approved before manufacturing. 6. Firm shall attend the problems at our customer's site during warranty period without any additional cost. 7. After completion of assembly, the firm shall carry out testing of Hydraulic system and shall submit the following inspection reports and documents at the time of dispatch. <ol style="list-style-type: none"> a) Copies of internal inspection reports. b) Inspection reports for "Bought out items". c) Pressure test reports of individual components. d) Dimension inspection reports. e) Load test and performance reports for the total system. f) Documents to be submitted:- <ol style="list-style-type: none"> i. Maintenance manuals. ii. Operational manuals. iii. 3 sets of detailed drawings. | | | |



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Note:

1. L-1 techno-commercial suitable firm will be decided on package basis (In totality SI A1 to A8) i.e, from single source techno-commercial L-1 firm on FOR Ranchi basis.
2. Offers of only Indian Manufacturers (i.e, Domestic manufacturers) will only be considered against this tender.

Commercial terms and conditions:

1. Offers to be submitted on FOR Ranchi, HMBP Stores basis. The rate quoted shall be inclusive of all packing & forwarding, freight and transit insurance charges.
2. The Price quoted by the tenderer/bidder should be exclusive of GST. The rate and nature of GST applicable should be shown separately GST will be paid to the seller at the rate at which it is liable to be assessed or has actually been assessed on the date of supply provided the transaction of sale is legally liable to GST and within the delivery period.
3. The rates quoted must be firm and the offers made must remain open for acceptance for minimum 90 days from the date of opening of tender.
4. **Payment terms shall be as under:**
For supply: 90% payment along with 100% GST shall be made through RTGS within 60 days of the receipt and acceptance of supplies at the destination. Documents required for making payment Original Tax invoice ,Packing list ,Guarantee certificate, Test certificate, inspection certificate ,CRV (To be issued by HEC) & PBG for 10% of total supply order value .
Balance 10% payment will be released on successfully commissioning of the system on submission of invoice and commissioning certificate from Customer / HEC site in charge or his representative.

For Supervision of Erection and Commissioning work -100 % payment with 100% GST will be paid within 60 days on completion of work under the scope and successful commissioning of the system duly certified by HEC Site in charge or his representative / customer.

Note:

- a) For payment all the processing charges by the bank shall be on account of the firm.
 - b) If you offer any other payment terms other than NIT payment terms then your offer can be loaded with bank interest rate (Presently 1% per month i.e 12% per annum (Maximum) as per the rules of the company for L1 consideration only.
5. Subject to the provisions of this Government of India (GOI) Office Order No: P-45021/2/2017-PP (BE-II) dtd:04/06/2020 and 16/09/2020 this procurement of goods /services under the reference tender is covered under Public Procurement (Preference to Make in India) , Order 2017- Revision dtd:04.06.2020 & 16.09.2020 and here in after any further revision. In line with the above (GOI) order Purchase preference will be given for the order placement. For purchase preference The Margin of purchase preference shall be 20%.
Bidders at the time of tender or bidding shall be required to indicate percentage of local content and provide self certifications that the items offered meets the local content requirements for Class-I local supplier/Class-II local supplier , as the case may be. They shall also give details of location(s) at which the local value addition is made.

For the same Annexure -F is to be submitted with the techno commercial bid (i.e, Part-1).

Here 'Local Content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured(excluding net domestic indirect taxes) minus the value of imported content in the item(including all custom duties) as a proportion of the total value, in percent.



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The said GOI Order can be downloaded from the following website: <https://dipp.gov.in/public-procurements>

6. Quotations erased or over written are likely to be rejected unless all corrections are authenticated with the tenderer's signature.
7. Delivery –**Within 2 months from the date of placement of PO.**
8. Full particulars i.e. specification, literature and / or drawing wherever applicable has to be submitted along with the quotation. The '**Brand**' and '**Make**' name must be indicated.
9. **Tender Cost of Rs.750.00:** Bids must be accompanied by a Tender cost amounting to Rs.750/- in the form of demand draft in favour of "Heavy Engineering Corporation Limited" and payable at par at Ranchi along with techno-commercial bid. (Scan copy of DD to be uploaded along with techno-commercial bid & original DD to be sent through courier / submitted by hand to the office of undersigned). **Exempted for MSME/NSIC/SSI registered firms.** Tender Cost is non refundable.
10. The Corporation does not pledge itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of tender or portion of the quantity offered and you shall supply the same at the rate quoted.
11. Supplies will be subject to Inspection by our Inspection wing / or inspection Agencies prescribed by us.
12. Order placed as a result of this tender will be subject to the Corporation's General Terms and Conditions of contract which can be down loaded from our website (www.hecltd.com).
13. Corporation reserves the right to call for and examine at any time the books of accounts and other documents and papers of the firm for the purpose of ascertaining whether any excess payments has been made or the firm likely to be received / received undue benefit out of execution of the particular contract.
14. Bidders shall submit the documents in support of previous past supplies for the same /similar specification of items mentioned in this tender.
15. Delivery: The time for and the date of delivery of the Stores stipulated in the acceptance of tender shall be deemed to be the essence of the contract and delivery must be completed not later than the dates specified therein. Otherwise:
 - a) **LD Clause** - The purchaser to recover from the contractor a sum of 0.5 % per week (completed week) of the price of the stores(upto maximum 10 %) as liquidated damages, which the contractor has failed to deliver as aforesaid or,
 - b) The purchaser may procure the undelivered stores / similar items from elsewhere, without notice to the contractor at the risk of the contractor without canceling the contract in respect of the consignment not yet due for delivery or,
 - c) To cancel the contract or a portion thereof.
16. **EMD:-** Bids must be accompanied by a Earnest Money Deposit (Bid Security) amounting to Rs.150000/- in the form of bank draft or BG in favour of "Heavy Engineering Corporation Limited" and payable at par at Ranchi (BG format Annexure C) along with Part-I of the tender i.e. with techno-commercial bid. (Scan copy of DD/BG to be uploaded along with techno-commercial bid & original DD/BG to be sent through courier / submitted by hand to the office of undersigned) . Format of EMD BG is placed at Annexure C.
Exemption: Tenderers registered with National Small Industries Corporation/ Small Scale Industries/ Micro, Small scale Industry (MSE) for the tendered item will be exempted from submission of EMD. The tenderer should enclose an authenticated copy / notarized copy of their valid registration certificate with NSIC for grant of exemption.
In case Bidder is covered under MSME criteria, it is mandatory to quote UAM no in Bid Documents. HEC is registered on TReDS governed by RBI Guidelines and our registration no is HE0000320. All MSME firms are advised to be get registered on RXIL (Receivable exchange of India-Mumbai)



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17. **Guarantee** – The materials supplied shall be guaranteed for a period of 12 months from commissioning or 18 months from date of receipt and acceptance of material, whichever is earlier.
18. **Security Deposit:** 5% of the P.O. value to be deposited by the successful bidder within 21 days after placement of order by HEC which shall remain with HEC till the completion of order by the firm. This clause is mandatory and has to be accepted by all bidders . If Security deposit clause is not accepted then the offer of the bidder shall not be considered. Format of SD, BG is placed at Annexure D.
19. **Performance Bank Guarantee (BG format annexure E):** The successful bidder has to submit the performance bank guarantee of 10% of order value valid till guarantee period after supply of the material (in case order placed on the firm).
20. Based on HEC's requirement and in order to ensure security of supply from more than one sources, the total tendered quantity of any item may be split amongst more than one successful bidder at L1 Landed price. Hence Purchase Order may be placed on more than one firms and the repeat order for 100% quantity may be placed on successful bidder.
21. **Risk Purchase Clause:** – If the material is not supplied within the stipulated period then material can be procured at the risk & cost of the firm without giving any notice to the firm.
22. There is no obligation on our part to accept delayed / late tenders. Tenders received after the due date of opening are liable to be summarily rejected.
23. HEC reserves the right to accept or reject any offer without assigning any reasons whatsoever. Also, HEC reserves the right to cancel this tender in case the proposals/offers received is not satisfactory, without assigning any reasons whatsoever.
24. As per the RBI norms the claim period of BG (bank guarantee) shall be valid up to 12 months from the date of expiry, therefore the BG for EMD , SD and PBG shall be made in line with this clause.
25. **General conditions of the contract:** Unless otherwise specified in the Terms & Conditions above, this order shall be governed by General conditions of contract of purchase of HEC Ltd, which is available in the web site of HEC. (www.hecltd.com).
26. **RESOLUTION OF DISPUTE(s) by ARBITRATION**

The parties to the contract at the first instance shall endeavor to settle by mutual discussion all the questions of disputes all differences arising out of , or relating thereto, all in connection with this contract In the event of failure of settlement , the aggrieved party with prior written permission of other party , shall refer the unresolved dispute(s) or differences(s) to the chairman-cum-managing director of the company(HEC) for adjudication by a sole arbitrator to be appointed with mutual consent by him (CMD of the company) who(sole arbitrator) shall adjudicate the matter in accordance with the arbitration and conciliation act ,1996(For short "ACT") and publish the award. The party shall have no objection if the sole arbitrator so appointed is an Ex- Employee of HEC, superannuated almost three years ago from the date of reference .If the sole arbitrator for any reason , whatsoever , becomes unable to proceed with the arbitration , the chairman-CUM-Managing Director of the company , with mutual consent of both the parties, shall appoint his successor arbitrator who may proceed with the reference from the stage it was left by the predecessor or subject to the provisions of the Act . The venue of the arbitration proceeding shall be at Ranchi in the State of Jharkhand alone.

The other provisions of arbitration & Conciliation act , 1996 , (As amended from time to time) especially as per the provisions of schedule V and schedule VII and sections 6 , 11(2), 12(5) should be considered during the appointment of sole arbitrator .
28. **Law Governing contract-**
 - a. This contract shall be governed by the laws of India for the being in force.Irrespective of the place of delivery, the place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued.



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- b. Jurisdiction of Courts: For any or all types of disputes arising out of the contract, the exclusive jurisdiction of the court (s) shall be Ranchi in the State of Jharkhand alone.
- c. Marking of Stores: The marking of the stores must comply with the requirements of the laws relating to Merchandise Marks for the time being in force in India.
- d. Marking of Stores: The marking of the stores must comply with the requirements of the laws relating to Merchandise Marks for the time being in force in India.

29. Mode of dispatch: By Road to the consignee at In-charge stores /HMBP/HEC Ltd. Ranchi. For the consignments dispatched by road, the supplier shall ensure that the following are observed by them:

- a. All dispatches must be affected only on receipt of written dispatch clearance from the purchaser.
- b. Material shall be dispatched to In-charge stores/HMBP/HEC Ltd, Ranchi.
- c. Care shall be taken to avoid damages during transit to ensure that all the packages are firmly secured.

30. PACKING, FORWARDING & SHIPMENT:

- a. The supplier has to ensure proper packing so that material reaches destination without damage.
- b. The supplier shall notify the purchaser of the date of each shipment from his works with L/R copy and the expected date of arrival at the site for information.

31. Other Terms & Conditions:

Special Note:

While submitting tender pl. mention your Registration No. with HEC as a registered vendor with valid paper.

If not pl. get registered your firm with HEC Limited .

Please indicate whether your firm covered under MSMES/MSES owned SC/ST or covered under SSI separately in Techno-commercial bid.

Please submit the form of Terms & Conditions duly filled in and signed by the tenderer along with your offer in techno commercial (part-1) bid.

For any clarification required mail us at purhmbp@hecltd.com/ vimalkumar@hecltd.com

Mgr/Purchase
Heavy Machine Building Plant
Heavy Engineering Corporation Limited



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Annexure B**(To be filled by bidder and scan copy of the same to be uploaded along with Techno-commercial bid)**

| Sl No. | Terms & Conditions | Desired BY HEC | Bidders Comment (Accepted / Not accepted) | Remarks |
|--------|--|---|---|---------|
| 1 | All Items of NIT to be quoted by bidder in line with the technical instruction TI-4301.75.100 attached in Annexure-H | To be accepted | | |
| 2 | Price Term (Ex-Works / FOR HMBP) | FOR HMBP Stores | | |
| 3 | Packing, Fwd. and Freight Charges (Extra/Included/Not Applicable) | To be included in quoted price. If not included then clearly indicate amount. | | |
| 4 | GST Registration certificate | To be furnished | | |
| 5 | TAXES (GST) | % of Applicable Taxes to be indicated Extra | | |
| 6 | Payment Terms | To be confirm in line with NIT Clause No.4 of NIT's annexure-A | | |
| 7 | Validity of Offer | Minimum 90 days from the date of opening of tender | | |
| 8 | Price Variation Clause | Prices will be firm till the execution of order. (To be confirmed) | | |
| 9 | Delivery Schedule | Within 2 months from the date of placement of PO. | | |
| 10 | Inspection | By QCA/HMBP | | |
| 11 | Tender Cost of Rs.750.00 (Mandatory) | DD from any nationalized bank in favor of HEAVY ENGINEERING CORPORATION LIMITED, payable at Ranchi (Exempted for NSIC/SSI /MSME registered firms) | | |
| 12 | EMD | Rs 1,50,000/- in the form of DD or BG to be submitted (Exempted for NSIC/SSI /MSME registered firms) | | |
| 13 | Guarantee/Warranty Certificate | To be provided (The materials supplied shall be guaranteed for a period of 12 months from commissioning or 18 months from date of receipt & acceptance of material whichever is earlier) | | |
| 14 | Security Deposit for 5% of PO value. | To be deposited by successful bidder within 21 days after placement of order by HEC. This clause is mandatory and has to be accepted by the bidder.If Security deposit clause is not accepted then the offer of the bidder shall not be considered. | | |
| 15 | Performance bank guarantee for 10% of order value. | BG for performance from any nationalized bank in favor of HEAVY ENGINEERING CORPORATION LIMITED, Ranchi as per tender enquiry. This clause is mandatory and has to be accepted by the bidder. If PBG clause is not accepted then the offer of the bidder shall not be considered. | | |



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| | | | | |
|----|--|--|--|--|
| 16 | L/D Clause Acceptable (Yes/No) | To be Accepted (As per NIT's annexure-A) | | |
| 17 | Special terms (If Any) | | | |
| 18 | Acceptance of Risk Purchase Clause (Yes/No) | To be Accepted as per NIT's clause no-21 of annexure-A | | |
| 19 | GCC of HEC (available in tender section at HEC website : www.hecltd.com) | To be accepted as per NIT's clause no-25 of annexure-A | | |
| 20 | Confirmation of Supplying the materials as per Enquiry Schedule | YES/ NO | | |
| 21 | All NIT conditions are acceptable | Yes/No, if no then state the clause wise deviation | | |
| 22 | Local Content declaration as per NIT Clause No 5. | To be declared as per annexure F of NIT | | |
| 23 | If firm is owned by SC/ST Entrepreneurs | To be indicated | | |
| 24 | UAM (Udyog Aadhar No)/ UDYAM registration No if registered under MSME | To be mentioned by bidder if applicable | | |
| 25 | Whether registered with RXIL on TReDS platform | To be confirmed (YES/NO) | | |
| 26 | List of recommended operational spares for two years. | List shall be furnished with the quantities for each year separately with part-1 of the tender | | |
| 27 | Any commissioning spares, other than at Sl. No. A.6 & A.7 of scope of supply table shall be included with offer and the same shall be supplied along with the equipment. | To be accepted | | |

NOTE:

1. Please indicate whether your firm is covered under MSEs/MSEs owned SC/ST or covered under SSI separately in Tech. Bid.
2. Terms & Conditions duly filled in and to be submitted along with offer otherwise your offer may not be evaluated.

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Bidders Sign
Seal and Stamp



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Annexure- C

FORMAT FOR

BANK GURANTEE FOR EARNEST MONEY DEPOSIT

NO.

Dated:

TO
MATERIAL MANAGEMENT DIVISION
HEAVY MACHINE BUILDING PLANT
HEAVY ENGINEERING CORPORATION LTD.
RANCHI-834004, JHARKHAND
INDIA

Dear Sirs,

In consideration of your agreeing to accept the Earnest money deposit of Rs.----- (Rs-----
-----) furnishable to you by M/s-----
----- (Hereinafter Referred to As Contractor) In terms of the Enquiry No. -----
----- Dtd. ----- for Supply of ----- (Hereinafter Referred
to as the Contract) in the form of a Bank Guarantee in the Manner hereinafter contained we -----
-----, having registered office at -----do hereby covenant
and agree with you as follows.

1. We hereby undertake to indemnify you up to a sum of Rs. ----- (Rs. -----
----- only) against any loss or damage caused to or suffered by you or that may be caused to or suffered by you
by reason of any breach or breaches on the part of the contractor of any of the terms and conditions contained in
the said contract and in the event the Contractor shall make any default or defaults in carrying out any of the
works under the said contract or otherwise in the observance and performance of any of the terms and conditions
relating thereto in accordance with the true intent and meaning thereof, we shall forthwith on demand and without
any protest or demur pay to you such sum or sums not exceeding in total the said sum of Rs.-----
(Rs. -----*amount*-----only) as may be claimed by you as your losses and/or damages, costs,
charges or expenses by reason of such default or defaults on the part of the contractor.

2. Notwithstanding anything to the contrary contained in this guarantee your decision as to whether the contractor
has made any such default or defaults and the amount or amounts to which you are entitled by reasons thereof
will be binding on us and we shall not be entitled to ask you to establish your claim or claims or damages or
losses suffered by you but will pay the amount demanded by you under this guarantee forthwith on your demand
without any protest or demur.

3. This guarantee shall continue and hold good until it is released by you on the application by the contractor after
expiry of the related warranty period of the said contract and after the contractor have discharged all their
obligations under the said contract and produced a certificate of due completion of the work under the said
contract and submitted a "NO Demand Certificate" provided always that this guarantee shall in no event remain in
force after the date of----- without prejudice to your claim or claims arisen and demanded from or
otherwise notified to us in writing before the expiry of six months from the said date which will be enforceable
against us not withstanding that the same is or are enforced after the said date.



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4. We-----, further undertake to extend the validity of this beyond the period prescribed in clause 3 or as extended from time to time for such further period as may be required in writing before the Expiry of this and upon such extension(s), all terms and conditions of this shall remain in full force till the expiry of this extended period(s).
5. You will have the fullest liberty without affecting this guarantee from time to time to vary any of the terms and conditions of the said contract or extend the time of performance of the contractor or to postpone for any time or from time to time any of your rights or powers against the contractor and either to enforce or forbear to enforce any of the terms and conditions of the said contract and we shall not be released from our liability under this guarantee by the exercise of your liberty with reference to matters aforesaid or by reason of any time being given to the contractor or any other forbearance, act or omission on your part or any indulgence by you to the contractor or by any other variation or modification of the said contract or any other act, matter or things whatsoever, which, under the law relating to sureties, would but for the provisions hereof, have the effect of so releasing us from our liability hereunder provided always that nothing herein contained will enlarge our liability hereunder beyond the limit of Rs. -----(Rs.-----) as aforesaid or extend the period of the guarantee beyond the said Date of -----unless expressly agreed to by us in writing in terms of clause 4 hereof.
6. This guarantee shall not in any way be affected by your taking or varying or giving up any securities from the contractor or any other person, firm or company on its behalf or by the winding up, dissolution, insolvency or death as the case may be of the contractor.
7. In order to give full effect to the guarantee herein contained, you shall be entitled to act as if we are your principal debtors in respect of all your claims against the contractor hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of suretyship and other rights, if any, which are in any ways inconsistent with any of the provisions of this guarantee.
8. Subject to the maximum limit of our liability as aforesaid this guarantee will cover all your claim or claims against the contractor from time to time arising out of or in relation to the said contract and in respect of which your claim in writing is lodged on us before expiry of six months from the date of expiry of this guarantee.
9. Any notice by way of demand or otherwise hereunder shall be in writing and may be sent by special Courier or Telefax to us or our Local Address as aforesaid.
10. This guarantee and the powers & provisions herein contained are in addition to and not by way of limitation or substitution for any other guarantee or guarantees heretofore given to you by us whether jointly with others or alone and now existing uncancelled and that this guarantee is not intended to and shall not revoke or limit such guarantee or guarantees.
11. This guarantee shall not be affected by any change in the constitution of the contractor or us nor shall it be affected by any change in your constitution or by any Amalgamation or absorption thereof or therewith but will ensure for the benefit or and be available to and enforceable by the absorbing or amalgamated company or concern.
12. This guarantee is irrevocable during the period of its currency and shall not be revoked without your previous consent in writing.
13. We further agree and undertake to pay you the amount demanded by you in writing irrespective of any dispute or controversy between you and the contractor or any reference to arbitration of the said dispute/controversy pending or a civil suit filed by the contract or in respect of the dispute or controversy.



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14. Notwithstanding anything contained herein above our liability under this guarantee is restricted to Rs.-----
---- (Rs. -----only) and this guarantee shall remain in force until -----
---unless a written claim is lodged on us for payment under this guarantee within six months from the date of
expiry of this guarantee . i.e. On or before-----all your rights under this guarantee shall be forfeited and
we shall be deemed to have released and discharged from all liabilities there under, irrespective of whether or not
the original guarantee is returned to us.

15. We have power to issue this guarantee in your favour under the memorandum and articles of association of
the bank and the undersigned has full power to execute this guarantee under the power of Attorney Granted to
them by the Bank.

FOR AND ON BEHALF OF

'name of bank'

'signature with seal'



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Annexure—D

Format for

BANK GUARANTEE FOR SECURITY DEPOSIT

(to be issued by any Nationalized bank preferably State bank of India negotiable at their counters in Ranchi)

TO,

M/S HEAVY ENGINEERING CORPORATION LIMITED

PLANT PLAZA ROAD,

DHURWA,

RANCHI – 4

Dear sir,

In consideration of your agreeing to accept the security deposit of rs.'amount'..... furnishable to you by m/s 'firms name'..... (hereinafter referred to as contractor) in terms of the contract no.'hec's purchase order no'.....for supply of 'details of items'.....(hereinafter referred to as the 'contract') in the form of a bank guarantee in the manner hereinafter contained we.....'bank details'..... branch, having registered office at 'place'..... do hereby covenant and agree with you as follows:

1. We hereby undertake to indemnify you up to a sum of rs.'amount'.....(rupees 'amount in words'.....) against any loss or damage caused to or suffered by you or that may caused to or suffered by you by reason of any breach or breaches on the part of the contractor of any of the terms and conditions contained in the said contract and in the event the contractor shall make any default or defaults in carrying out any of the works under the said contract or otherwise in the observance and performance of any of the terms and conditions relating thereto in accordance with the true intent and meaning thereof, we shall forthwith on demand and without any protest or demur pay to you such sum or sums not exceeding in total the said sum of rs.'amount'.....(rupees 'amount in words'.....) as may be claimed by you as your losses and / or damages, costs, charges or expenses by reason of such default or defaults on the part of the contractor.



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2. Notwithstanding anything to the contrary contained in this guarantee your decision as to whether the contractor has made any such default or defaults and the amount or amounts to which you are entitled by reasons thereof will be binding on us and we shall not be entitled to ask you to establish your claim or claims or damages or losses suffered by you but will pay the amount demanded by you under this guarantee forthwith on your demand without any protest or demur.
3. This guarantee shall continue and hold good until it is released by you on the application by the contractor after expiry of the related warranty period of the said contract and after the contractor have discharged all their obligations under the said contract and produced a certificate of due completion of the work under the said contract and submitted a 'no demand certificate' provided always that this guarantee shall in no event remain in force after the date of ...'*date*'..... without prejudice to your claim or claims arisen and demanded from or otherwise notified to us in writing before the expiry of six months from the said date which will be enforceable against us notwithstanding that the same is or are enforced after the said date.
4. We'*bank name*'....., further undertake to extend the validity of this beyond the period prescribed in clause 3 or as extended from time to time, for such further period as may be required in writing before the expiry of this and upon such extension(s), all terms and conditions of this shall remain in full force till the expiry of this extended period(s).
5. You will have the fullest liberty without affecting this guarantee from time to time to vary any of the terms and conditions of the said contract or extend the time of performance of the contractor or to postpone for any time or from time to time any of your rights or powers against the contractor and either to enforce or forebear to enforce any of the terms and conditions of the said contract and we shall not be released from our liability under this guarantee by the exercise of your liberty with reference to matters aforesaid or by reason of any time being given to the contractor or any other forbearance, act or omission on your part or any indulgence by you to the contractor or by any other variation or modification of the said contract or any other act, matter or things whatsoever, which, under the law relating to sureties, would but for the provisions hereof, have the effect or so releasing us from our liability hereunder provided always that nothing herein contained will enlarge our liability hereunder beyond the limit of rs.'*amount*'.....(rupees'*amount in words*'.....) as aforesaid or extend the period of the guarantee beyond the said date of ...'*date*'.... unless expressly agreed to by us in writing in terms of clause 4 hereof.
6. This guarantee shall not in any way be affected by your taking or varying or giving up any securities from the contractor or any other person, firm or company on its behalf or by the winding up, dissolution, insolvency or death as the case may be of the contractor.
7. In order to give full effect to the guarantee herein contained, you shall be entitled to act as if we are your principal debtors in respect of all your claims against the contractor hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of suretyship and other rights, if any, which are in any way inconsistent with any of the provisions of this guarantee.
8. Subject to the maximum limit of our liability as aforesaid this guarantee will cover all your claim or claims against the contractor from time to time arising out of or in relation to the said contract and in respect of which your claim in writing is lodged on us before expiry of six months from the date of expiry of this guarantee.
9. Any notice by way of demand or otherwise hereunder shall be in writing and may be sent by special courier, speed post or telefax to us at our local address as aforesaid.



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10. This guarantee and the powers & provisions herein contained are in addition to and not by way of limitation of or substitution for any other guarantee or guarantees heretofore given to you by us whether jointly with others or alone and now existing uncanceled and that this guarantee is not intended to and shall not revoke or limit such guarantee or guarantees.
11. This guarantee shall not be affected by any change in the constitution of the contractor or us nor shall it be affected by any change in your constitution or by any amalgamation or absorption thereof or therewith but will ensure for the benefit of and be available to and enforceable by the absorbing or amalgamated company or concern.
12. This guarantee is irrevocable during the period of its currency and shall not be revoked without your previous consent in writing.
13. We further agree and undertake to pay you the amount demanded by you in writing irrespective of any dispute or controversy between you and the contractor or any reference to arbitration of the said dispute / controversy pending or a civil suit filed by the contractor in respect of the dispute or controversy.
14. Notwithstanding anything contained herein above our liability under this guarantee is restricted to rs.'amount'.....(rupees*'amount in words'*.....) and this guarantee shall remain in force until*'date'*.... unless a written claim is lodged on us for payment under this guarantee within six months from the date of expiry of this guarantee i.e. on or before ...*'date'* + *'6 month'*..... all your rights under this guarantee shall be forfeited and we shall be deemed to have released and discharged from all liabilities thereunder. irrespective of whether or not the original guarantee is returned to us.
15. We have power to issue this guarantee in your favour under the memorandum and articles of association of the bank and the undersigned has full power to execute this guarantee under the power of attorney granted to them by the bank.

FOR AND ON BEHALF OF

'name of bank'

'signature with seal'



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Annexure—E

FORMAT OF PERFORMANCE BANK GUARANTEE

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT & TO BE ISSUED BY ANY NATIONALISED /SCHEDULED BANK AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)

Name of Equipment: ----- Guarantee NO-----

Purchase Order No.:----- dated: ----- Date: -----

Validity -----

Claim period-----

To:

M/s Heavy Engineering Corporation Ltd.
Heavy Machine Building Plant
Ranchi-834004 Jharkhand

In consideration of your having placed an order bearing Purchase Order No.-----dated:----- with-----

----- (hereinafter referred to as Supplier) for the supply of-----

----- (hereinafter referred to as the-----

We ----- do hereby agree with you irrevocably that, should the machinery and equipment fail to give the guarantee performance and achieve the efficiency as stipulated in the Purchase Order within the period of guarantee or should the material and/or workmanship of the machinery and equipment supplied or any part thereof be found defective and/or fully, as per the purchase order, we undertake to pay without any demur merely on demand a sum of Rs. ----- being 20% of the value of Rs. -----for the supply of -----

Your decision whether the supplier have made any such defaults and the amount to which you are entitled by reasons thereof shall be conclusive and bind on us, subject to maximum of Rs. ----- as aforesaid.

We-----further guarantee that the machinery and equipment manufactured and supplied by the supplier shall be new, of good quality materials and of the first class workmanship as specified in the Purchase order and should the machinery and equipment supplied or any part thereof be found defective and that should the defect as pointed out in inspection note be not made good and/or in case of failure within guarantee period same shall be replaced on free of cost or repaired on free of cost to the entire satisfaction of Heavy Engineering Corporation Ltd.

We -----agree that the guarantee herein contained shall remain in full force and effect till the machinery and equipment give the desired performance and it shall continue to be enforceable till your dues have been fully paid and claims satisfied or discharged subject to a period not later than----- . In the event of any extension granted for commissioning/dispatch suitable extension shall be given on your request.

We-----, further agree that any neglect, omission or forbearance or indulgence in enforcing any claim as per the terms and conditions of your purchase order or performance guarantee or any of them or any extension of the time granted for the performance or payment of penalty under the guarantee or any dispute



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between the supplier and yourselves as regard performance of machinery and equipment supplied or issued related to your Purchase order, shall not effect in any way our liability under this guarantee until the full payment, but in any case, shall not extend beyond-----.

This guarantee is in addition and not substitution for guarantee given to you by the seller or by their bankers on their behalf.

We----- lastly undertake not to revoke this bank guarantee during its currency except with the previous consent of the corporation in writing.

Notwithstanding anything to contrary stated above, our liability under this guarantee will be restricted to Rs. ----- and shall remain in force up to -----, unless a demand or claim under this guarantee is made from the date i.e. on or before-----all your rights under the said guarantee shall be forfeited and we shall be released and discharged from all liabilities there under.

Dated at ----- day of -----

Seal of the Bank

'name of bank'

'signature with seal'



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Annexure – F

Local Content Declaration

Date:

To,

M/s HEC Ltd ,
Plant Plaza Road
Ranchi-834004

Sub: Certificate as per clause 9 (a) of Revised Public Procurement (Preference to Make in India Order, 2017 of DPIIT dated 04/06/2020 and 16/09/2020.

Ref: HEC Tender / RFQ / NIT Number

I (authorized signatory for M/s) declares the local content for the items of the tender with their location details in the below mentioned table :

| Sl. | Description | Qty | Local Content (in %) | Location details at which local value addition is made (Factory address) |
|-----|--|-------|----------------------|--|
| A | Hydraulic power pack for MLP consist of followings (Material Code: 4430175100 and Drawing No:4301.75.100) , (Material – Assembly) | 1 set | | |
| A1. | Hydraulic Power pack (MEQ11M41CGUX). (Material –Sub Assembly) Axial piston pump split flow type with 4 equal independent out lets, Model No: 37701111. Max. oil flow: 4X0.22 LPM @250bar , Max W.P: 250 Bar or above For each outlet: VMM41 Manual Valve, Pressure Gauges, VRU38 Valve, K73FC couplers, Stainless Steel 10 litre tank, with all accessories like suction strainer, return line filter, pressure gauge, oil level indicator, gauge isolating valve, air breather, etc. And Stainless steel cage for each outlet. The Pump direct coupled with Electric motor, 3 phase, 4 poles, 415V±10%, 50Hz ±3%, Flame Proof, group IIB, IP (enclosure) : 55 or better. Make: F.I.M.M | 1 | | |
| A2. | Hydraulic Cylinders. (Material –Sub Assembly) Type : Double Acting, with pilot check valve arrangement. Capacity : 20.6 ton (Pull mode) & 23.8 ton (Push mode) Stroke : 150 mm, Max. Working Pressure: 250 Bar. Model No.: COT20N150X Mounting Style : Front Flange Mounting with threaded Rod end Accessories: Rod clevis, pivot pin, eye bracket, Hydraulic Cylinder to be supplied along with mounting brackets having maximum width of 250 mm | 6 | | |
| A3. | Hydraulic Hoses. (Material –Sub Assembly) MAX WORKING PRESS 700 BARS , BURST PRESS 2800 BARS, 3/8" NPT END FIT + 2 MALE COUPLINGS. QC/DC END CONNECTIONS ALONG WITH METAL DUST CAPS AT BOTH ENDS LENGTH OF EACH HOSE : 20 M, MODEL NO : SN200MM | 16 | | |
| A4. | Axial Piston Pump. (Material –Sub Assembly) Axial piston pump split flow type with 4 equal independent out lets, Max. oil flow: 4X0.22 LPM @250bar Max W.P: 250 Bar or above WITH FLANGE, DIA. 24 CAM AND BEARINGS Model No: 37701111 | 1 | | |
| A5. | Control Panel for Hydraulic Power pack. (Material –Sub Assembly) The local control panel shall include the following control switches & displays: •Power on / off switches. • Start/stop switch for motor/pump of power pack. • Direction control valves for forward/reverse movement of SSR. • Control valve for controlling the speed of movement of the actuators. • All control shall be provided with LED lamps. | 1 | | |
| A6. | SEAL KIT FOR COT20N150X (Material –Sub Assembly) | 6 | | |
| A7. | SEAL KIT FOR Power Pack MEQ11M41CGUX (Material –Sub Assembly) | 1 | | |
| A.8 | Supervision of commissioning work for complete hydraulic system at our customer site ISRO, SHAR, Sriharikota, India. | 1 | | |

For M/s

Authorized Signatory
(with company seal &Name)



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Annexure G

Instructions for Online Bid Submission

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

*More information useful for submitting online bids on the CPP Portal may be obtained at:
<https://eprocure.gov.in/eprocure/app>.*

REGISTRATION

- (i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://etenders.gov.in/eprocure/app>) by clicking on the link “Online bidder Enrollment” on the CPP Portal which is free of charge.
- (ii) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- (iii) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- (iv) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- (v) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to *ensure that they do not lend their DSC's to others which may lead to misuse.*
- (vi) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- i) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- ii) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- iii) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- i) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- ii) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of *each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.*



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- iii) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- iv) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

SUBMISSION OF BIDS

- i) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- ii) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- iv) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by as specified in the tender documents. The details of the DD / any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- v) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
- vi) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- vii) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- viii) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- ix) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be



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ISO 9001:2000

**HEAVY MACHINE BUILDING PLANT
HEAVY ENGINEERING CORPORATION LIMITED**

(A Govt. of India Enterprise)

Ranchi – 834 004 (INDIA)

- displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- x) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- i) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- ii) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 **CPP Portal** Helpdesk.

Note: For any query related to registration and processing on the Portal please visit FAQ available at <https://etenders.gov.in/eprocure/app?page=FAQFrontEnd&service=page>

You may call the Helpdesk. The 24 x 7 Help Desk Numbers are
0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787

E-Mail: support-eproc@nic.in

Or

You may call to our service provider, Mr. Kushal (7903884318)

E-Mail: kushalniccl@gmail.com

TI - 4301.75.100

SPECIFICATIONS FOR THE DESIGN, MANUFACTURE, TESTING AND SUPPLY OF HYDRAULIC SYSTEM FOR MOBILE LAUNCH PEDESTAL OF GSLV MK III

INTRODUCTION

The Mobile Launch Pedestal (MLP) is a fabricated steel structure used for launching satellite launch vehicles. The strap-on motors of the launch vehicle weighing about 400t are supported on the two strap-on support rings. These strap on motors are to be precisely adjusted laterally using the jacks for the alignment with the central core of launch vehicle for integration purpose. The hydraulic jacks are positioned adjacent to the two strap-on rings (SSR), which are located on top of pedestal desk of mobile launch pedestal.

SCOPE OF WORK

The scope of work includes as per the details given below:

- Understanding of the requirements
- Design of the power pack and other associated sub systems.
- Realization of the total system.
- Testing of the system at the shop.
- Supply to the Department

DESIGN REQUIREMENTS FOR HYDRAULIC CONTROL SYSTEM

1. Weight of each SSR to be positioned: **400 tons.**
2. Approximate Size of SSR to be positioned: 5000mm (L) x 5300 mm (B) x 1800 (H).
3. The SSRs have the provision for making position adjustment (+/- 50 mm) to facilitate the S-200 alignment for L-110 assembly. The SSR (P+) has adjustment provision along P (pitch) axis and SSR (P-) has the adjustment provision along Y (Yaw) axis. A maximum adjustment of 50 mm on either side of the mean position is provided for each SSR.
4. Two hydraulic double acting cylinders are to be used for the horizontal adjustment of each SSR. Both the hydraulic cylinders are to be located on the same side of the SSR. The hydraulic cylinders shall be front flange mounted on a fabricated bracket and the bracket is mounted on the top surface of the MLP. The Piston rod of the cylinders shall be connected to the SSR through a rod and clevis joint so that both push and pull movements can be carried out through the same hydraulic cylinder. It should be possible to carry out SSR position adjustment using one hydraulic cylinder in case of failure of the other hydraulic cylinder.
5. The speed of movement during horizontal positioning of SSR is 5 to 30 mm/ min.
6. The positioning accuracy required for linear movement of SSR during its horizontal position adjustment shall be +/- **0.2 mm**. The hydraulic circuit shall consist of an oil reservoir of suitable capacity. The maximum operating pressure shall be limited to **250 bar**. The hydraulic control system shall ensure that this required positioning accuracy of +/- **0.2 mm** is achieved for the linear movement of SSRs even in steps if required.

SPECIFIC REQUIREMENTS FOR HYDRAULIC SYSTEM

1. DOUBLE ACTING HYDRAULIC CYLINDER WITH MANIFOLD BLOCK:

| | | |
|-----------|---|--|
| Type | : | Double acting Cylinder. |
| Model No. | : | COT 20N 150X |
| Capacity | : | 20.6t in pull mode and 23.8t in push mode. |

| | | |
|-----------------------------------|---|--|
| Stroke length | : | 150 mm |
| Max ^m working pressure | : | 250 bar |
| Mounting style | : | Front flange mounting with threaded rod end |
| Make | : | Euro Press Pack |
| Accessories | : | Rod Clevis, Pivot Pin, Eye bracket |
| Quantity | : | 6 nos. (2 Nos. for each SSR + 2 nos. spare) |

- Cylinder shall have manifold block assembly mounted on it.
- Cylinder shall be supplied along with its mounting accessories (rod clevis, eye bracket, pivot pin etc.).
- The piston rod of the cylinders is connected to the SSR through clevis joint.
- Details of seals with catalogues and sources for the same shall be provided.
- **Spare kit - KCOT20N150X - 6 sets.** (1 set for each cylinder) shall be supplied.
- Duty cycle: Intermittent.

2. HYDRAULIC CONSOLE :

Hydraulic power pack - Model no. MEQ11M41CGUX - 1 No.

The hydraulic system shall be supplied as a hydraulic mobile console. The hydraulic mobile console shall contain oil reservoir, power pack, and its components, valves & manifolds, local control panel for the control of both electric and hydraulic parameters as required to meet the positioning accuracy.

The Contractor shall supply the Hydraulic mobile console incorporating all the hydraulic components as per the hydraulic circuit. All interconnecting piping / hydraulic hoses between the hydraulic console and the hydraulic cylinder manifold blocks shall also be supplied by the Contractor. The pumps of the power pack and all other electrical systems/components used in the total system shall be explosion proof class II B classification.

The oil reservoir shall be floor-mounted type and shall be made of stainless steel. The oil tank shall be provided with all accessories like suction strainer, return line filter, pressure gauge, oil level indicator, gauge isolating valve, air breather, etc. The Power Pack shall have all hydraulic valves & other control components interconnected with stainless steel pipe work. The operating valves shall be mounted on suitable manifold blocks.

All electrical connections to valves / motor / pumps shall be routed to a common junction box and shall be compatible for explosion proof class II B application.

The Power Pack shall be suitable for outdoor installation in saline and highly corrosive atmosphere.

Spares for power pack - KMEQ11 - 1 SET (List of spares shall be submitted).

PUMP :

| | | |
|--------------------------|---|--|
| Type | : | Axial Piston Pump split flow type with 4 equal outlets |
| Model no. | : | 37701111 |
| Maximum oil flow | : | 4 x 0.22 litre/min. |
| Maximum working pressure | : | 250 bar. |
| Make | : | Euro press pack |

Quantity : 2 Nos. (1 no will be as spare pump)

Pump shall be designed such a way that all four cylinders may be operated simultaneously.

MOTOR :

Type : Electric Motor (AC squirrel cage induction motor)
3 phase, 4 poles, 415V \pm 10%, 50 Hz \pm 3%
Make : F.I.M.M
IP(Enclosure) : 55 or better
Temperature classification : T4 (135° C)
Ambient temperature : 46° C (max.)
Relative Humidity : > 95 %
Quantity : 1 No.

Motor shall have flame proof construction with flame proof starter and necessary flame proof gland(s) (double compression type) suitable for class IIB, with power cables of about 20m (copper conductor, PVC insulated armoured cables) termination.

All the electrical fittings / panels/motor etc. must be flameproof type suitable for Group-IIB, hazardous area as per EN 50018.

OTHER COMPONENTS :

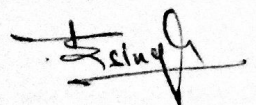
- All the valves/ manifolds (**VMM41, VRU38 etc.**) shall be as per the hydraulic circuit proposed by the party in order to achieve the performance requirements stated in this specification.
- All outlets of the power pack shall be fitted with male/female quick couplers (QC/DC end connections) to suit the interconnecting piping/hoses with male/female quick couplers.
- Pressure Gauge (**Make: TERMAF**) : Range: 0 to 400 bar, Accuracy : \pm 2 % or better. The gauge must be filled with Glycerine.
- Level/ Temperature Gauge: Suitable oil level and temperature gauge shall be provided in the system.
- Trolley: The hydraulic power pack with control panel must be fixed on a rigid frame fitted with castors wheels for easy mobility. Also trolley shall have lifting lugs to handle with crane.
- On/Off valves shall be provided for all the four outlets of Pump, Such that if any numbers of valves are closed the pumped oil shall be bypassed to oil reservoir.

INTERCONNECTING PIPING BETWEEN POWERPACK & HYDRAULIC CYLINDERS:

The interconnecting piping shall consist of required number of hoses of highest quality between the end of supply outlet on power pack and the hydraulic cylinder. Hoses shall be wire braided for longer life and reliability. The distance between power pack and the actuators shall be considered as 20m.

The specification for the interconnecting hoses are as follows:

Working pressure : 250 bar.
Size : Suitable for flow rates.
Minimum factor of safety : 6
Length : 20 m long.
Quantity : 16 Nos. (2 sets)
End connections : Male/Female quick couplers (QC/DC end connections) along with metal dust caps attached at both ends.



Local Control Panel :

A local control panel shall be provided by the supplier for the operation of the various drives of the SSR position adjustment system. Local control panel shall include the following control switches & displays:

- Power ON/OFF isolation switch.
- Start/Stop switch for motor/pump power pack.
- Direction control valves for forward or reverse movement of SSR.
- Control valve for controlling the speed of movement of the actuators.
- All controls shall be provided with LED lamps for on/off identification.

3. REPORTS AND DOCUMENTS :

After completion of assembly, the party shall carry out testing of Hydraulic system and shall submit the following inspection reports and documents at the time of despatch.

- Copies of internal inspection reports.
- Inspection reports for "Bought Out Items".
- Pressure test reports of individual components.
- Dimensional inspection reports.
- Load test and performance reports for the total system.
- Documents to be submitted:
 - > Maintenance manuals.
 - > Operational manuals.
 - > 3 sets of detailed drawings.