

HEAVY MACHINE TOOLS PLANT HEAVY ENGINEERING CORPORATION LIMITED

(A Govt. of India Enterprise) Ranchi – 834 004 (INDIA)

> Phone: 0651-2400266 E-mail: <u>purhmtp@hecltd.com</u>

Web: www.hecltd.com

Tender Enquiry No. HTP/PUR/172806/BH100HD/SC/22-023 Dtd. 25/07/22

OPEN TENDER

Sub: E-tendering with E-price bids for Supply of Drive & PLC Package.

Open Tenders are invited on line through website. Tenders are to be submitted strictly as per guidelines furnished in the website of **http://etenders.gov.in** here under:

INSTRUCTION TO BIDDERS (ITB)

1.0 **Tender Summary:**

Tender Ref No.	HTP/PUR/172806/BH100HD/SC/22-023 Dtd. 25/07/2022			
Item details	Drive & PLC Package			
Cost of Tender documents/Tender Fee (MSME/SSI/NSIC for exemption)				
Cost of EMD (MSME/SSI/NSIC for exemption)	Rs.1,50,000/=			
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	08/08/22	UPTO 13 Hrs (IST)		
Due date and time for on line opening of tender Part 1 only	09/08/22	AT 15 Hrs (IST)		
(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 register themselves only on at NIC e-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 Class III Digital Signature Certificate (DSC) in parallel which is essentially required for submission of their application. Detailed instructions 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/eprocure/app), on or before the due date and time for submission of bid.

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

2.0 Contents of tender documents:

	Techno-Commercial Terms and Conditions of NIT Annexure "A" & Annexure 'B'
1	(Part 1)
2	Template for Price Bid/BOQ format for online BOQENQ023.xls
	submission by the bidder (Part 2)

3.0 Requirements for Vendors:

- A) P.C. connected with internet.
- B) Registration with Service provider portal https://etenders.gov.in
- C) The vendor should posses a Class III Digital Signature certificate (Mandatory). (Bids will not be recorded without Digital Signature Certificate)
- D) In case of any clarification please contact toll free no available at the site of e.tender.gov.in.
- 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.
- 4.0 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.

5.0 Help for participating in e-tender:

The detailed method for participating in the e-procurement are available in the website 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 who have downloaded the documents from website. Please see websites i.e. http://www.hecltd.com or http://www.etenders.gov.in
- 6.0 The offer should be submitted (uploaded) strictly as per the terms and conditions and Procedures laid down in the website https://etenders.gov.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.

- 7.0 The offers with any deviations to the NIT Terms and conditions shall be liable for rejection.
- 8.0 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.)
- 9.0 It may pleased 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).
- 10.0 There will be no physical sale of the tender documents.

11.0 PREPARATION OF TENDER DOCUMENTS:

Tender is to be submitted in two bid system in the following manner and shall be submitted through electronic mode only:

a) Techno-commercial bid (Part 1) – The offer is to be scanned and uploaded in our portal consisting technical details.

The commercial terms and conditions (as per Annexure B). The format shall be downloaded and the same file duly filled by the bidder is to be uploaded while submitting the offer.

b) Price-Bid/BOQ (Part 2): 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 bid/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 proveness 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:-

Tender opening date will be as per given dates. If any clarification is needed from the bidder about the deficiency in his uploaded documents, 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.

12.0 Please read carefully before you quote :-

Last date of submission of Tender Documen : by 1:00 PM (IST) on 08.08.22 Due date of tender opening (Part 1 only) : at 3:00 PM (IST) on 09.08.22

- 1. Items to be supplied as per the provided specifications.
- 2. It should be quoted on **FOR HMTP Store**.
- 3. **Validity** Minimum 90 days from the date of opening of tender.
- 4. Order will be under L.D. clause.
- 5. Price Bid (Part 2): Price bid to be uploaded as per BOQ of NIT.
- 6. Commercial Terms and condition in Annexure-B to be submitted/uploaded along with Technical (Part 1) bid.

13.0 **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.

Annexure A

SCOPE OF SUPPLY:-

SI	Material Code	Description	MAKE	Qty.in Sets.
1	-	SERVO DRIVE AND PLC PACKAGE SYSTEM WITH COMMISIONING, TESTING & TRAINING	SIEMENS	01
		(DETAILS AS PER ANNEXURE-"E")		

IMPORTANT NOTES TO THE BIDDER:

1.	Offer should clearly mention the <u>make</u> (one or multiple), that bidder wish to supply, from the mentioned makes in the tender and their <u>respective type numbers</u> for all the items (mandatory)
2.	Wherever ratings are not specified, bidder must indicate the same along with respective type number and make in the offer (mandatory).
3.	Point wise reply has to be provided to all the points in the ANNEXURE-F (mandatory).
4.	Complete offer including BOM has to be submitted only on the letterhead of the bidder. (mandatory) .
5.	Bidder can contact/visit M/s HEC Limited for any technical queries/clarification or to understand the application of Horizontal boring machine.
6.	If offer is incomplete, offers are liable to be rejected.

ANNEXURE-"F"

SI.	Points to be confirmed/replied by bidder	Bidder comments
No		
1.	Any equipment, rating of the equipment, type number of the equipment has to be modified / newly incorporated in the BOM for the successful Interfacing/commissioning of the Drive package and PLC package with 2 No's of Horizontal boring machines according to the specifications in tender has to be incorporated in the submitted offer by the bidder.	
2.	Any items related to drive package and PLC package, if required additionally at the time of interfacing, wiring, commissioning and testing of the same with 2 No's of Horizontal boring machines as per specifications in tender have to be supplied by the bidder at free of cost.	
3.	If the specified documentation in BOM is not available in hard copies, Soft copies of the documentation have to printed, book binded and have to be supplied as per approved BOM.	
4.	Successful bidder has to provide the training schedule within one month of the placement of the order and training has to be arranged as per the schedule approved by M/s HEC Limited as per the availability of trainees. Travelling, boarding and lodging	

	of trainees of M/s HEC Limited will be in the scope of M/s HEC Limited.	
5.	Schematic Drawing and PLC Program according to the functional requirement of conventional Horizontal boring machine have to be developed in coordination with M/s HEC LIMITED. Successful bidder has to provide details of a single point contact, technically capable for the same, along with the communication regarding acceptance of purchase order.	
6.	Bidder should confirm that quoted offer complies all the technical specifications mentioned in the tender enquiry.	

Note: For any clarification including drawing etc. please give an email on purhmtp@hecltd.com or give a call on Mob: 9934333442

Commercial terms and conditions:

- 1. Offers to be submitted on FOR HMTP Stores basis. The rate quoted shall be inclusive of all packing & forwarding, freight and transit insurance charges.
- 2. The Price quoted by the tenderer 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 three months from the date of opening of the tender.
- 4. Quotations erased or over written are likely to be rejected unless all corrections are authenticated with the tenderer's signature.
- 5. **Delivery** Within 12 weeks from the date of order placement.
- 6. **Payment Term:** 100% payment with 100% GST through RTGS/Cheque will be made within 60 days of the receipt of supplies at destination duly inspected, against submission of PBG of 10% order value valid till guarantee period.
 - "The payment shall be made within 60 days of the receipt and acceptance of supplies at the destination. The rate of interest to be loaded on the firm for the payment term offered other than as specified in NIT for calculating landed cost to decide L-1 status will be 1% per month i.e. 12% per annum (Maximum)"
- 7. **Delivery Time/Period:** 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:
 - i) **LD Clause -** The purchaser to recover from the contractor a sum of 0.5 % per week (completed week) of the price of the stores (up to maximum 10 %) as liquidated damages, which the contractor has failed to deliver as aforesaid or,
 - ii) 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,
 - iii) to cancel the contract or a portion thereof.
- 8. **Security Deposit (SD)** Successful bidder has to deposit Security Deposit to the extent of 5% of total Purchase Order value within 21 days from P.O. date and it should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier.

Security Deposit may be furnished in the following forms :-

- a) Demand Draft on any of the Nationalized Banks in favor HEC Ltd. Ranchi.
- b) Bank Guarantee from any Nationalized Bank (**BG Format Annexure C**)
- c) Electronic Money Transfer in case of e-tendering.

- 9. **Performance bank guarantee (BG format Annexure D)** 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).
- 10. Guarantee The stores supplied shall be guaranteed for a period of 12 months from commissioning or 18 months from date of supply whichever is earlier.
- 11. Inspection Clause: Material shall be inspected at firm's works by I/c IQC or his representative. However, HEC reserve the right to inspect the material after receipt of material at HMTP Stores and if it found NOT CONFORMING to our specification at any stage, then the material shall be rejected and firm have to replace it at no extra cost.
 Supplies will be subject to Inspection by our Inspection wing / or inspection Agencies prescribed by us.
- 12. **Risk Purchase Clause:** If the material is not supplied with in the stipulated period then material can be procured at the risk & cost of the firm without giving any notice to the firm.
- 13. 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.
- 14. 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).
- 15. The final quantity may vary at the time of finalization of tender, however the proper clarification / confirmation shall be taken from the firms.
- 16. 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.
- 17. 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.
- 18. Tenderers registered with National Small Industries Corporation/ Small Scale Industries/ Micro, Small scale Industry (MSE) or DGS&D 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, DGS&D 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 registered on RXIL (Receivable exchange of India-Mumbai).
- 19. 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.
- 20. GOVERNMENT OF INDIA NOT A PARTY TO THE AGREEMENT

 - It is further understood and agreed that Government of India is not and shall not be liable for any acts, omissions, commissions, breaches or other wrongs arising out of the contract. Accordingly Corporation (HEC) hereby expressly waives, releases and foregoes any and all actions or claims including cross claims, impleader claims or counter claims against the Government of India arising out of this

contract and covenants not to sue the Government of India as to any manner, claim, cause or action or thing whatsoever, arising out of or under this agreement.

21. Arbitration Clause:-

The parties to this contract at the first instance shall endeavour to settle by mutual discussion all the questions of disputes or differences arising out of, or relating thereto, or in connection with this contract and in the event of failure of settlement, the aggrieved party shall refer the unresolved dispute(s) or difference(s) to the Chairman-cum-Managing Director of the company (HEC Limited) for adjudication by a sole Arbitrator to be appointed by him (CMD of HEC Ltd) who (sole Arbitrator) shall adjudicate the matter in question in accordance with the arbitration and conciliation Act, 1996 (For short "Act") and publish the award. The parties shall have no objection if the sole Arbitrator so appointed is an employee or Ex-employee of HEC Ltd. If the sole Arbitrator for any reason, whatsoever, becomes unable to proceed with the arbitration, the Chairman-cum-Managing Director of the company shall appoint his successor arbitrator who may proceed with the reference from the stage it was left by his predecessor subject to provision of the Act. The venue of arbitration proceeding shall be at Ranchi in the state of Jharkhand, INDIA alone.

Jurisdiction Of court: For any or all types of disputes arising out of the contract, the jurisdiction of court shall be at Ranchi in the State of Jharkhand (INDIA) alone.

22. **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)

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 immediately.

Please indicate whether your firm covered under MSES/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 technical bid.

Annexure B

Terms & Conditions:

SI		HMTP/HEC Requirement	Bidders confirmation
No	D: T (FO D LIMITE)	FOR LIMTE O	
1	Price Terms (F.O.R. HMTP)	FOR HMTP Stores	
	Inclusive of P & F charges, Freight and Insurance charges upto HMTP Stores		
	Ranchi (NIT clause NO:1)		
2	GST	To be quoted separately indicating HSN	
	331	no of material and GSTN of firm	
3	Payment Terms	Within 60 days after receipt of material	
	(NIT clause NO:6)	at HMTP Stores	
4	Validity of offer	3 months.	
5	Price variation clause	Not applicable	
6	Delivery Schedule	12 weeks from PO date.	
	(NIT clause NO:5)		
7	L D Clause	To be accepted	
	(NIT clause NO:7)		
8	Inspection	To be accepted	
	(NIT clause NO:11)	-	
9	Test Certificate and Guarantee Certificate	To be provided by manufacturer.	
10	Guarantee	12 months from the date of	
	(NIT clause NO:10)	commissioning or 18 months from the	
	· ·	date of supply whichever is earlier	
11	EMD	Rs. 1,50,000/=	
12	Tender Fee	Rs. 750/=	
13	Security Deposit	5% of Basic value	
	(NIT clause NO:8)		
14	PBG	10% of order value valid till guarantee	
	(NIT clause NO:9)	period.	
15	UDYAM CERTIFICATE if registered	To be mentioned by bidder if applicable	
	under MSME		
16	Acceptance of Risk Purchase clause	To be accepted	
	(NIT clause NO:12)		
17	General conditions of the contract (NIT clause No 22)	To be accepted	
18	Other Terms and Condition of NIT	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 Tech Bid of offer otherwise your offer may not be evaluated.

(Somnath Chowdhury)
Sr.Manager/Purchase
Heavy Machine Tools Plant
Heavy Engineering Corporation Limited

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 s	sir,										
In	consideration	of	your	agreeing	to	accept	the	security	deposit	of	rs.
	'amo	unt'			fu	urnishable	to	you by	m/s		.'firms
name'			(hereir	nafter referred	to as	contractor)	in term	s of the cont	ract no		.'hec's
purcha	ase order	r	າວ'		for	supply	(of	'de	tails	of
items'.		((hereinafte	er referred to	as the	'contract') in	n the fo	rm of a bank	guarantee ii	n the m	nanner
herein	after contained v	ие' <i>t</i>	oank deta	<i>il</i> s' bra	nch, ha	aving registe	red offi	ce at	.'place'		do
hereby	covenant and a	gree wi	th you as	follows:							
1.	to or suffer and condit defaults in performance meaning the sums not eas may be	nt in wo	ords') you by rea ontained in ng out any ny of the we shall fo ng in total ed by you	against any son of any broat the said corrections and coorthwith on deathe said sum as your lossed against any of the care part of the of the care to	loss or each or otract a sunde ondition emand of rs.	damage can breaches of the said of the sai	used to n the pa vent the contract nereto in any pro t'	or suffered bart of the constant of the contractor story of the contractor story of the contractor of	by you or that tractor of any shall make a e in the obset with the truit pay to you'amount in	t may c y of the any defa servanc ue inter such s n words	eaused terms ault or se and nt and sum or

- 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 untill 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).
- 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.
- 10. This guarantee and the powers & provisions herein contained are in addition to and not by way of limitation of or substitutuion 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 of and be available to and enforceable by the absorbing or amalgamatged company or concern.
- 12. This guarantee is irrevocable during the period of its currency and shall not be revoked without your previsous 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 gurantee shall remain in force untill'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 realeased 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'

FORMAT OF PERFORMANCE BANK GURANTEE

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 Nodated: with 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 Rsbeing 20% of the value of Rsfor 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.
Wefurther 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.
Weagree 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 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 beforeall your rights under the said guarantee shall be forfeited and we shall be released and discharged from all liabilities thereunder. Dated at day of Seal of the Bank

TECHNICAL SPECIFICATIONS:-

 Drive package should include No. AC Spindle motor for spindle rotation and 1 No. AC Servo motor for feed axes movement in each of the <u>2 No's of Horizontal boring machines</u> as per the specifications mentioned below.

Type - SINAMICS S120, Make - SIEMENS

a) AC SPINDLE MOTOR FOR SPINDLE:

Asynchronous AC spindle motor, 1PH8, 22kW, 1500 rpm rated speed, Shaft height-132, forced cooling from DE to NDE, flange mounting (IMB5), IP55, shaft with fitted key, full-key balanced, without holding brake, built-in incremental encoder with Drive CLIQ interface, Terminal box on top, cable entry on right.

b) AC SERVO MOTOR FOR FEED AXES:

Synchronous AC Servomotor, 1FT7, 50 Nm (100 K) stall torque, 1500 rpm rated speed, shaft height-100, naturally air cooled, flange mounting (IMB5), IP67, shaft with fitted key, without holding brake, built-in incremental encoder with Drive CLIQ interface.

- 2. Drive package should also include the complete hardware and software with license to control the quoted motors along with start up tool, mounting and other accessories, training and documentation to suit the operational requirement of **2 No's of Horizontal Boring Machines**.
- 3. Drive package should be capable of regenerative braking of all the above-mentioned motors.
- 4. Drives should be capable of controlling all the motors (infinitely variable speeds) through both 0V to (+/-) 10V analog set point through potentiometer and digital set point through HMI/PLC.
- 5. Drive package should be capable of controlling all the motors in servo mode with the extended set point channel option.
- 6. PLC package should include the complete hardware and software with CPU, start up, programming tools, input modules, output modules, mounting and other accessories, training and documentation to suit the operational requirement of <u>2 No's of Horizontal boring Machines.</u>

Type - SIMATIC S7-1200, Make - SIEMENS

- 7. DI/DO Modules in the PLC Package should be capable of interfacing at least 64 digital inputs and 64 digital outputs in each of the **2 No's of Horizontal boring Machines** from the field.
- 8. All equipment's supplied must be suitable for power supply 415 +/-6+% V AC, 3 Phase, 50+/-3% Hz and for atmospheric conditions of 50 Deg. Max temperature, 90% Humidity, Height <4000 above MSL.

SN	Description	Type No.	Qty
1.	DRIVE PACKAGE		
1.1	CONTROL UNIT (CU) (1A1) SINAMICS CONTROL UNIT CU320-2 PN WITHOUT COMPACT FLASH CARD.	6SL3040-1MA01- 0AA0	2 No's.
1.2	COMPACT FLASH CARD SINAMICS S120 COMPACT FLASH CARD BASIC WITH REQUIRED SYSTEM SOFTWARE.	6SL3054-0FC00- 1BA0	2 No's.
1.3	BASIC OPERATOR PANEL (BOP) BOP FOR INTERFACING WITH GIVEN CONTROL UNIT.	6SL3055-0AA00- 4BA0	2 No's.
1.4	TERMINAL BOARD OPTIONAL MODULE ON CU (TB30) (1A2) SINAMICS / SIMOTION TERMINAL BOARD TB30 FOR CONTROL UNIT CU320-X AND SIMOTION D4x5-X	6SL3055-0AA00- 2TA0	2 No's.
1.5	SMART LINE MODULE (SLM) (1G1) SINAMICS S120 SMART LINE MODULE INPUT: 3AC 380-480V, 50/60HZ OUTPUT: DC 600V, 60A, 36KW FRAME SIZE: BOOKSIZE INTERNAL AIR COOLING.	6SL3130-6TE23- 6AA3	2 No's.
1.6	DRIVE-CLIQ CABLE FROM CU TO SLM SINAMICS DRIVE-CLIQ CABLE WITH CONNECTOR AT BOTH ENDS OF LENGTH 0.26 Meter, IP20/IP20.	6SL3060-4AH00- 0AA0	2 No's.
1.8	GLAND PLATE FOR SLM SINAMICS SHIELD CONNECTION SHEET FOR 150 mm LINE/MOTOR MODULES INTERNAL AIR COOLING	6SL3162-1AF00- 0AA1	2 No's.
1.9	LINE CHOKE (1L1) SINAMICS LINE REACTOR FOR 36 KW SMART LINE MODULE INPUT: 3-PH 380-480 V, 50/60 HZ	6SL3000-0CE23- 6AA0	2 No's.
1.10	AC SPINDLE MOTOR FOR SPINDLE (2M1) SIMOTICS M COMPACT INDUCTION MOTOR 1500RPM, 22KW, 140 NM, 56A, 308V, FORCED VENTILATION DE to NDE, IP55, INCREMENTAL ENCODER 19-BIT WITHOUT COMMUTATION POSITION (ENCODER IN19DQ) WITH DRIVE-CLIQ INTERFACE, DESIGN IM B5, SHAFT WITH FITTED KEY FULL-KEY BALANCING, BEARING :PERFORMANCE, VIBRATION SEVERITY GRADE: SPECIAL/B, SHAFT AND FLANGE ACCURACY: SPECIAL,	1PH8137-1SF02- 1LA1	2 No's.

	TERMINAL BOX (ABOVE) CABLE ENTRY ON THE RIGHT SIGNAL CONNECTION D-END		
1.11	MOTOR MODULE FOR SPINDLE MOTOR (MMS) (2G1) SINAMICS S120 SINGLE MOTOR MODULE INPUT: DC 600V OUTPUT: 3AC 400V, 60A FRAME SIZE: BOOKSIZE C- TYPE INTERNAL AIR COOLING OPTIMIZED PULSE SAMPLE AND SUPPORT OF THE EXTENDED SAFETY INTEGRATED FUNCTIONS.	6SL3120-1TE26- 0AC0	2 No's.
1.12	DRIVE-CLIQ CABLE FROM SLM TO MMS SINAMICS DRIVE-CLIQ CABLE WITH CONNECTOR AT BOTH ENDS OF LENGTH 0.36 Meter, IP20/IP20	6SL3060-4AM00- 0AA0	2 No's.
1.13	GLAND PLATE FOR MMS SINAMICS SHIELD CONNECTION SHEET FOR 100mm 45A/60A MOTOR MODULES INTERNAL AIR COOLING	6SL3162-1AD00- 0AA0	2 No's.
1.14	POWER CABLE FOR SPINDLE MOTOR PREASSEMBLED MOTOR POWER CABLE TO SPINDLE MOTOR FROM MMS WITH CONNECTOR AT BOTH ENDS, LENGTH-15 MTR	6FX8002-5CR52- 1BF0 + Connectors on both sides.	2 No's.
1.15	SIGNAL CABLE FOR SPINDLE MOTOR ENCODER PREASSEMBLED SIGNAL CABLE TO SPINDLE MOTOR ENCODER FROM MMS WITH CONNECTOR AT BOTH ENDS, LENGTH-15 MTR.	6FX5002-2DC10- 1BF0	2 No's.
1.16	AC SERVO MOTOR FOR FEED AXES (3M1) SIMOTICS S SYNCHRONOUS MOTOR, 50NM (100K), 1500 RPM, 6.6KW, NATURALLY COOLED, FRAME SIZE-IM B5 (IN V1 IM V3) RECESSED FLANGE (MORE COMPACT), POWER CONNECTOR ROTATABLE, INCREMENTAL ENCODER 2048 S/R WITH DRIVE CLIQ INTERFACE(ENCODER I-2048) CONNECTOR ROTATABLE, SHAFT WITH FITTED KEY: W/O HOLDING BRAKE: ACC.TOLERANCE N VIBRATION SEVERITY GRADE A, DEGREE OF PROTECTION IP67	1FT7105-5AB70- 1DA2	2 No's.
1.17	MOTOR MODULE FOR SERVO MOTOR of FEED AXES (MMF) (3G1) SINAMICS S120 SINGLE MOTOR MODULE INPUT: DC 600V OUTPUT: 3AC 400V, 24A FRAME SIZE: BOOKSIZE D-TYPE INTERNAL AIR COOLING OPTIMIZED PULSE SAMPLE AND SUPPORT OF THE EXTENDED SAFETY INTEGRATED FUNCTIONS.	6SL3120-1TE22- 4AD0	2 No's.

1.18	DRIVE-CLIQ CABLE FROM MMS TO MMF SINAMICS DRIVE-CLIQ CABLE WITH CONNECTOR AT BOTH ENDS OF LENGTH 0.36 Meter, IP20/IP20	6SL3060-4AM00- 0AA0	2 No's.
1.19	POWER CABLE FOR SERVO MOTOR OF FEED AXES PREASSEMBLED MOTOR POWER CABLE TO SERVO MOTOR OF FEED AXES FROM MMF WITH CONNECTOR AT BOTH ENDS, LENGTH-15 MTR.	6FX5002-5CN46- 1BF0+ Connector on both ends	2 No's
1.20	POWER CABLE FOR SERVO MOTOR OF FEED AXES PREASSEMBLED MOTOR POWER CABLE TO SERVO MOTOR OF FEED AXES FROM MMF WITH CONNECTOR AT BOTH ENDS, LENGTH-15 MTR.	6FX5002-2DC10- 1BF0	2 No's
1.21	SINAMICS S120 COMMISSIONING SOFTWARE STARTER LICENSE SOFTWARE ON DVD:STARTER COMMISSIONING TOOL FOR SINAMICS AND MICROMASTER V5.4HF2 DVD	6SL3072-0AA00- 0AG0	2 No's.

SN	Description	Type No.	Qty
2	PLC PACKAGE(0A5)		
2.1	DC POWER SUPPLY UNIT FOR PLC SIMATIC S7-1200 POWER MODULE PM1207 STABILIZED POWER SUPPLY INPUT: 230 V AC, OUTPUT: DC 24 V/2.5 A	6EP1332-1SH71	2 No's.
2.2	CONTROL UNIT(CPU) SIMATIC S7-1200, CPU 1215C, compact CPU, DC/DC/relay, 2 PROFINET ports, onboard I/O: 14 DI 24 V DC; 10 DO relay 2 A, 2 AI 0-10 V DC, 2 AO 0-20 mA DC, Power supply: DC 20.4-28.8 V DC, Program/data memory 125 KB	6ES7215-1HG40- 0XB0	2 No's.
2.3	MEMORY CARD FOR PLC CPU SIMATIC S7, MEMORY CARD FOR GIVEN CPU, 4 MB	6ES7954-8LC03- 0AA0	2 No's.
2.4	DIGITAL INPUT/OUTPUT SIGNAL MODULE SIMATIC S7-1200, DIGITAL INPUT/OUTPUT SM 1223, 16 DI (24 V DC), SINK/SOURCE, 16 DO (TRANSISTOR,0.5A)	6ES7223-1BL32- 0XB0	6 No's
2.5	DIGITAL INPUT/OUTPUT SIGNAL MODULE SIMATIC S7-1200, DIGITAL INPUT/OUTPUT SM 1223, 16 DI (24 V DC), SINK/SOURCE, 16 DO(RELAY,2A)	6ES7223-1PL32- 0XB0	2 No's

2.6	DIN RAIL SIMATIC, STANDARD MOUNTING RAIL 35 MM, LENGTH:	6ES5710-8MA31	2 No's.
	830 MM		
2.7	PROFINET COMMUNICATION CABLE FROM PLC CPU TO DRIVE CU	6XV1871-5BH30	2 No's.
	PROFINET COMMUNICATION CABLE FROM PLC CPU TO DRIVE CU WITH CONNECTORS ON BOTH SIDES , 3 Meter.		
2.8	BASIC PROGRAMMING SOFTWARE FOR PLC	6ES7822-0AA06-	2 No's
	SIMATIC STEP 7 BASIC V16 OR LATEST; FLOATING LICENSE; ENGINEERING SOFTWARE IN TIA PORTAL; SW AND DOCUMENTATION ON DVD; LICENSE KEY ON USB FLASH DRIVE.	0YA5 or Latest	
2.9	COMMUNICATION CABLE FROM LAPTOP TO PLC		2 Sets
	COMMUNICATION CABLE FROM LAPTOP TO PLC WITH CONNECTORS ON BOTH SIDES. LENGTH- 5 METERS.		
3	DOCUMENTATION (HARD COPY)		
3.1	SIMATIC S7-1200 PROGRAMMABLE CONTROLLER SYSTEM MANUAL (SUITABLE FOR SUPPLIED CPU 1215C VERSION), ENGLISH,11/2019 Edition or Latest	A5E02486680-A_ or Latest	6 Sets
3.2	SIMATIC S7-1200 GETTING STARTED WITH S7-1200, ENGLISH,11/2009 Edition or Latest	A5E02486791-01 or Latest	6 Sets
3.3	SINAMICS S120 COMMISSIONING MANUAL WITH STARTER, ENGLISH,11/2017 Edition or Latest	6SL3097-4AF00- 0BP6 or Latest	8 Sets
3.4	SINAMICS S120 GETTING STARTED WITH STARTER, ENGLISH,11/2017 Edition or Latest	6SL3097-4AG00- 0BP5 or Latest	8 Sets
3.5	SINAMICS S120/S150 LIST MANUAL, ENGLISH, 06/2020 Edition or Latest.	6SL3097-5AP00- 0BP1 or Latest	6 Sets
4	DOCUMENTATION (SOFT COPY)	(6ES7998-8XC01-	3 No's
	ALL RELEVENT DOCUMENTATION/ MANUAL	8YE0+6SL3097- 2CA00-	
	COLLECTION REGARDING THE SELECTION, PROGRAMMING, COMMISSIONING, OPERATING AND MAINTENANCE OF THE ABOVE DRIVE PACKAGE AND PLC PACKAGE HAS TO BE PROVIDED IN A PENDRIVE.	0YG6/Latest+	
		All other relevant documents and	
	LOTATION DE LINOTO DE LINOTIDED IN ATLENDITIVE.	manuals in pen drive.	

5 TRAINING

TRAINING FOR TWO PERSONS HAS TO BE IMPARTED AT SIEMENS TRAINING CENTER BY M/s SIEMENS Ltd. TRAINER ON THE FOLLOWING TOPICS

- 1. SIMATIC S7-1200 INSTALLATION, PROGRAMMING S7-1200 PLC USING SIMATIC TIA PORTAL, COMMISIONING, MAINTENANCE AND ALL OTHER STANDARD TOPICS RELATED TO S7-1200 PLC- 5 DAYS (Min) FULL TIME.
- 2. SINAMICS \$120 DRIVES INSTALLATION INCLUDING BOOK SIZE SMART LINE MODULE AND BOOKSIZE MOTOR MODULES, COMMISSIONING USING STARTER, MAINTENANCE, ESTABLISHING COMMUNICATION BETWEEN \$7-1200 PLC AND SINAMICS \$120 DRIVES AND ALL OTHER STANDARD TOPICS RELATED TO SINAMICS \$120 DRIVES 5 DAYS (Min) FULL TIME.

6 COMMISSIONING

COMMISSIONING AND TESTING OF COMPLETE DRIVE & PLC PACKAGE with <u>2 No's of Horizontal boring machines</u> ON NO LOAD AND FULL LOAD CONDITON AT HMTP AND CUSTOMER'S PREMISES(MPF,AMBERNATH).



Supply Pre Qualifying Criteria.

Bidder's Scope:

- i) The Bidder/Supplier/Party should be either OEM or their valid authorised Industrial channel Partner/Manufacturer/Ancillary/Dealer towards either exclusively for this tender or open to all tenders for which valid documents is to be produced at the time of submission of offer.
- ii) The Bidder/Supplier/Party shall furnish the detail catalogue of the product for which technical specification is required.
- iii) The Bidder/Supplier/Party should submit the similar product supply proof either supplied to Government, CPSE's, State PSU or any other reputed firm/agencies in the last five years.
- iv) The Bidder/Supplier/Party should submit at least one satisfactory report of a similar product received from Government, CPSE's, State PSU or any other reputed firm/agencies in the last five years.
- v) At the time of delivery of material the successful bidder should submit 03 sets of drawing as well as instruction manual.
- vi) Pre-dispatch inspection call to be provided. In case of pre-dispatch Inspection waiver the same has to be carried out at the destination jointly within one week from receipt of material.
- vii) At the time of delivery of consignment the bidder should submit the OEM product test certificate OR Govt. approved Laboratory Test Certificate.
- viii) The Bidder/supplier/party should have satisfactorily supplied the same or similar product as mentioned below during the last seven years ending previous day of the last date of submission of the bill.
 - a) Three similar supplied items average costing not less than the amount equal to 40% of the estimated cost of last 5 years to any Govt./State Govt./Semi Govt./Institution/ Reputed Firm.

OR

b) Two similar supplied items average costing not less than the amount equal to 50% of the estimated cost of last 5 years to any Govt./State Govt./Semi Govt./Institution/ Reputed Firm.

OR

- c) One similar supplied item average costing not less than the amount to 80% of the estimated cost of last 5 years to any Govt./State Govt./Semi Govt./Institution/ Reputed Firm.
- d) Definition of "similar item" should be clearly defined.
- ix) Average annual financial turnover during the last 5 years ending 31st March of the previous financial year, should be at least 30% of the estimated cost.
- x) The bidder/supplier/party should have average solvency of approx 38%.
- xi) The bidder/supplier/party should provide net worth certificate of the Organization duly issued by certified Chartered Accountant (CA).
- xii) The bidder/supplier/party should have valid MSME/SSI/NSIC as applicable .
- xii) The bidder/supplier/party should have valid registration of GST or any other valid statutory document.
- xiv) The bidder/supplier/party can submit the offer item wise.
- xv) The Organization reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified bidder/supplier/party to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
- xvi) After awarding LOI/PO , within a week time , the respective drawing has to be provided to the organization for checking/correction/vetting & subsequent approval as applicable .
- xvii) The bidder/supplier/party not to disclose drawings to any other agency without prior approval from the concerned department/authority.
- xviii) The organization shall never compromise with the quality and for which genuineness of material certificate shall be produced (ie. raw material test certificate and its source) etc as applicable.
- xix) No deviation is permissible without prior approval.

- xx) The bid submitted shall become invalid if:
 - 1) The bidder/supplier/party is found ineligible.
 - 2) The bidder/supplier/party does not deposit original EMD to the office of I/C-(MM).
 - 3) The bidder/supplier/party does not attach/upload/enclose all the documents (including GST registration) as stipulated in the bid document including the scan copy of the EMD.
 - 4) The copy of above documents (Sl.No. (i) to (xviii) of PQC) and the duly signed Pre-Qualification document along with earnest money deposit receipt shall not be uploaded.
- xxi) Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.
- xxii) List of Documents to be scanned and uploaded within the period of bid submission:
 - 1) Enlistment Order of the Contractor in appropriate class/category if any
 - 2) Demand Draft/ Pay Order or Banker's Cheque / Deposit at call Receipt/ Bank Guarantee of any scheduled Bank against EMD (All drawn in favour of the Heavy Engineering Corporation Ltd., Ranchi).
 - 3) Photocopy/scan copy of original EMD /MSME certificate of valid class & category has to be submitted in hard copy. (EMD exemption is allowed for the MSME registered firms (as on last date of submission of bid) having valid registration of the required class of work.
 - 4) Certificate of Incorporation.
 - 5) Certificate of Registration of GST/TDS and any other statutory documents.
 - 6) Any other document as required during analysis of tender about the short comings.