

 एच.ई.सी. ISO 9001:2015	<p style="text-align: center;">HEAVY MACHINE TOOLS PLANT HEAVY ENGINEERING CORPORATION LIMITED (A Govt. of India Enterprise) Ranchi – 834 004 (INDIA)</p>
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Phone : 0651-2400266
E-mail : purhmt@hecltd.com
Web : www.hecltd.com

Tender Enquiry No. HTP/PUR/172790/BH100HD/SC/22-021 Dtd. 18/07/22

OPEN TENDER

Sub : E-tendering with E-price bids for Supply of Control Cubicle etc.

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/172790/BH100HD/SC/22-021 Dtd. 18/07/2022	
Item details	Control Cubicle	
Cost of Tender documents/Tender Fee (MSME/SSI/NSIC for exemption)	Rs.300/=	
Cost of EMD (MSME/SSI/NSIC for exemption)	Rs.30000/=	
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	03/08/22	UPTO 13 Hrs (IST)
Due date and time for on line opening of tender Part 1 only	04/08/22	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 :

1	Techno-Commercial Terms and Conditions of NIT (Part 1)	Annexure "A" & Annexure 'B'
2	Template for Price Bid/BOQ format for online submission by the bidder (Part 2)	BOQENQ021.xls

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 possess 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://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 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 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 Documents	: by 1:00 PM (IST) on 03.08.22
Due date of tender opening (Part 1 only)	: at 3:00 PM (IST) on 04.08.22

1. Items to be supplied as per the provided specifications.
2. It should be quoted on **FOR HMTF 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 :-

Sl	Material Code	Description	MAKE	Qty.in Sets.
1	-	CONTROL CUBICLE, 557.EA1.04	RITTAL/BCH/ PYROTECH/ VIDYUT/ ELDON/TTS/ TRANSGIETZ	2
2	-	PENDANT PANEL, 557.EA1.05	RITTAL/BCH/PYROTECH/ VIDYUT/ ELDON/REPUTED	2
3	-	TERMINAL BOX 'B', 557.EA1.06	ELMEX/WAGO/CONNECT WELL/PHOENIX	2
4	-	TERMINAL BOX 'D', 557.EA1.07	ELMEX/WAGO/CONNECT WELL/PHOENIX	2
5	-	TERMINAL BOX 'E', 557.EA1.08	ELMEX/WAGO/CONNECT WELL/PHOENIX	2
6	-	TERMINAL BOX 'F', 557.EA1.09	ELMEX/WAGO/CONNECT WELL/PHOENIX	2
7	-	INDEX PLATES (COMPONENT), 557.EA1.10	-	2
8	-	2-YEARS MAINTENANCE SPARES, 557.EA1.11	-	2
9	-	COMMISSIONING SPARES, 557.EA1.12	-	1
(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 <u>ANNEXURE-F</u> (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”

Sl. No	Points to be confirmed/replied by bidder	Bidder comments
1.	If ratings and type of any item is required to be changed or any other item to be required for satisfactory operation of equipment that must be supplied by the bidder without any cost implication up to 2% of P.O value.	
2.	The successful bidder will have to submit the adaptation drawing of controller, drives/converters mentioned in the tender, layout drawings (G.A) of control cubicle, pendant panel and B.O.M for approval within two weeks from the date of LOI issue.	
3.	Execution has to be carried out only as per approved drawings.	
4.	2 sets of final G.A. drawings, final B.O.M, final schematic drawings to be supplied along with the equipment.	
5.	Satisfactory operation of machine with the supplied wiring and electrics have to be demonstrated by the bidder at HMTP with the machine on full load condition.	
6.	Controller, Drives, PLC, DRO and other accessories mentioned in the tender (as HMTP supply in designation column) will be provided by HMTP. All these components have to be mounted and fully wired by the supplier at their premises / HMTP as per the decision of M/s HEC Limited. Accordingly, space has to be provided in the control cubicle. All other interconnecting cables and components required for successful mounting and interfacing of controller, drives and PLC inside control cubicle have to be supplied by the supplier.	
7.	Screen cables must be provided for low signals (10V or below) wiring.	
8.	Signal and power cables must be separated inside the control cubicle and other panels.	
9.	Two copper earth bus bars (Power Earthing & Electronic Earthing) of suitable size with earthing symbol have to be provided inside the panel. The Electronic earth must be isolated from the power earth and they have to be visibly marked using index plate.	
10.	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 purhmt@hecltd.com or give a call on Mob : 9934333442

Commercial terms and conditions:

1. Offers to be submitted on FOR HMTTP 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 16 **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 HMTTP 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 expressly understood and agreed by and between =====.(Name of foreign party / firm) and M/s Heavy Engineering Corporation Ltd .(for short "HEC") that HEC is entering into this agreement solely on its own behalf and not on behalf of any other person or entity. In particular it is understood and agreed that Government of India is not a party to this agreement and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that HEC is an independent legal entity with power and authority to enter into contracts Solely on its own behalf under the applicable laws of India and general principals of contract law. The Company expressly agrees, acknowledges and understand that HEC is not an agent, representative or delegate of Government of India.
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 No		HMTP/HEC Requirement	Bidders confirmation
1	Price Terms (F.O.R. HMTP) Inclusive of P & F charges, Freight and Insurance charges upto HMTP Stores Ranchi (NIT clause NO:1)	FOR HMTP Stores	
2	GST	To be quoted separately indicating HSN no of material and GSTN of firm	
3	Payment Terms (NIT clause NO:6)	Within 60 days after receipt of material at HMTP Stores	
4	Validity of offer	3 months.	
5	Price variation clause	Not applicable	
6	Delivery Schedule (NIT clause NO:5)	16 weeks from PO date.	
7	L D Clause (NIT clause NO:7)	To be accepted	
8	Inspection (NIT clause NO:11)	To be accepted	
9	Test Certificate and Guarantee Certificate	To be provided by manufacturer.	
10	Guarantee (NIT clause NO:10)	12 months from the date of commissioning or 18 months from the date of supply whichever is earlier	
11	EMD	Rs. 30000/=	
12	Tender Fee	Rs. 300/=	
13	Security Deposit (NIT clause NO:8)	5% of Basic value	
14	PBG (NIT clause NO:9)	10% of order value valid till guarantee period.	
15	UDYAM CERTIFICATE if registered under MSME	To be mentioned by bidder if applicable	
16	Acceptance of Risk Purchase clause (NIT clause NO:12)	To be accepted	
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

Annexure- C

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.
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.
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'

Annexure- D

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 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 thereunder.Dated at ----- day of ----- Seal of the Bank

CONTROL CUBICLE

The Control Cubicle will be sheet steel clad, floor mounted, fitted with air circulating fans, fully conforming to HMTP's plant standard P.S. 61.01.01G and rigid construction and specification as under:

Sr. No	Item Description	Remark
1	Enclosure IS: 2147	IP54
2	No. of compartments	2
3	No. of door per compartment	3 hinged lockable with 3 point lock key operator 2 no's each. (Front & rear)
4	Overall dimension (approx.)	1600(L) x 2075 (H) x700 (W)
5	Control and protective equipment	As per specification and quantity given below
6	Layout and mounting of equipment	As per general arrangement drg
7	Internal wiring	Completely wired as per Schematic Drawing no. 557/K30108-31C and brought up to terminal blocks/connectors.
8	Coil voltage for contractor/time relays	240V, 50Hz unless otherwise specified
9	Auxiliary contacts of power contactors	2NO+2NC unless otherwise specified.
10	System condition	3-phase, 3 wire, 415V \pm 10%, 50 Hz \pm 3%
11	Site condition	Ambient temperature 50°C max. Humidity 90%, Height <1000m above MSL.
12	Earth Bus	2 nos. (Copper bus bar only has to be used) 1.Power Earthing 2.Electronic Earthing
13	Paint	Powder Coated, Siemens Grey (RAL 7032)
14	Locking System	3-point lock (key operated)
15	make	RITTAL/BCH/PYROTECH/VIDYUT/ELDON/TTS/ TRANSGIETZ

ELECTRICAL EQUIPMENTS

Sl. No.	Designation	Description	Make	Qty.
1.	0A3	SURGE ARRESTOR 4 Universal Socket with Individual Switch and Indicator , 10 Amp each , Auto resettable Over load Protection, Voltage surge Protection, EMI/RFI Noise Filter Supply voltage - 240V AC, Output voltage - 240V AC, Socket - 4 Nos., Type-22660	Anchor	1 No
2.	0A4	S7-1200 PLC SYSTEM Consists of following: <u>POWER SUPPLY UNIT</u> - PM1207-1No. <u>CONTROL UNIT</u> - CPU 1215C-1No. <u>MEMORY CARD</u> -4MB-1No. <u>16DI+16DO Modules</u> - 4 No's. <u>DIN RAIL</u> -35mm, 830mm-1No. <u>PROFINET CABLE</u> - 1No.	Siemens	1 Set

3.	0A5	PANEL AIR CONDITIONER Suitable for 54°C ambient temperature and humidity 90% maximum to maintain 25°C inside temp. Supply voltage – 240V AC, 1-phase, rating – 750 W, with all protection devices, panel mounting type. Type : Turbo 750 R10 MCB R134a	Advance Cooling/ <u>Rittal</u>	1 No
4.	0A7-8	FAN UNIT Air Circulating Fan Input supply – 240V AC, 1-phase, 35 watt Type – 27255A2	Rexnord	2 Nos
5.	1A1	CONTROL UNIT(CU) CU320-2PN along with BOP, compact flash card and required D-CLIQ cables	Siemens	1 No
6.	1A2	TERMINAL BOARD MODULE (TB30) SINAMICS S120,TB30 terminal board for control unit CU320-2	Siemens	1 No.
7.	2A1, 3A2, 3A3	DC ISOLATION MODULE Type - voltage - voltage converter Input - 0 to \pm 10V DC Output - 0 to \pm 10V DC Supply – 240V AC Type : 1VVFU1010-3P	Canopus	3 nos
8.	1F1	SEMI-CONDUCTOR FUSE, 80A ,415 V AC 3 No's fuse links with 3 No's suitable base and other accessories Size of fuse system- NH0, Rating-80 Amps, In: 80 A, Operating class: aR, Un AC: 1000 V , with front indicator Type-(3NE4120)*3+(3NH3120)*3+(3NX3114)*6	SIEMENS	1 set
9.	1G1	SMART LINE MODULE, 36 KW SINAMICS S120 Smart line module, 36KW along with gland plate and the required D-CLIQ cables	Siemens	1 No
10.	2G1	MOTOR MODULE FOR SPINDLE , 60 A SINAMICS S120 Motor Module,60 Amps along with gland plate and the required D-CLIQ cables	Siemens	1No
11.	3G1	MOTOR MODULE FOR FEED AXES (MMF), 18A SINAMICS S120 Motor Module,18 Amps along with gland plate and the required D-CLIQ cables	Siemens	1no
12.	0H1-4, 0H51, 0H52, 0H53	PILOT / INDICATOR LIGHT,RED,24VAC/DC 22.5 mm, round, plastic, red, lens, with holder, LED module, with integrated LED 24 V AC, screw terminal Type : XB5-AVB4/3SU1001-6AA20-0AA0+3SU1401-1BB20-1AA0+3SU1500-0AA10-0AA0	Schneider/ <u>Siemens</u>	7 nos
13.	0H6-9	PANEL LIGHT Latest panel/Enclosure LED lights of suitable wattage, 240V AC complete with all fittings.	Phillips/ Rittal/ Phoenix/ Pyrotech	4 nos
14.	0K1,0K3, 2K2,2K3	AUXILIARY CONTACTOR RELAY , 10A Auxiliary air break AC Contactor, Rated 10A, 500V, 50Hz with 3NO+1NC contacts, coil voltage 230V AC with surge suppressor Type:CAD32P7+LAD4RCU/3RH2131-1AP00+3RT2916-1CD00	Schneider Electric/ <u>Siemens.</u>	4nos

15.	0K2	AUXILIARY RELAY WITH OFF DELAY TIMER Relay with 1NO+1NC time delay contacts whose timing range 0.6-6 seconds(OFF delay) , 3 NO+1 NC instantaneous contacts and coil voltage 230V AC and with surge suppressor. Type : CAD32P7+LAD-R2+ LAD-4RCU / <u>3RH21311AP00+3RA2815-1FW10</u>	Schneider Electric/ <u>Siemens</u>	1 no
16.	0K51,1K2,1K5 1-54,2K51-63, 3K51-71,4K51- 52, 5K51, Spare.	RELAY MODULE FOR PLC OUTPUT This should consist of 1 miniature electronic relay 4 C/o,6A with protective diode & LED with mounting base, channel mounting supply - 24V DC Type : RXM4AB2BD+RXZE2M114M+RXM040W	Make:- Schneider Electric	50 nos
17.	1K1	POWER CONTACTOR 95A 3-pole, air break AC Contactor rated for 95A (AC-3) 415V AC, 50Hz, with 2NO+2NC auxiliary contacts , coil voltage 230V AC with surge suppressor Type: LC1D95P7+LAD-N22+LA4DA2U / <u>3RT2046-1AP00+3RH2911-1HA22+3RT2946-1CD00.</u>	Schneider Electric/ <u>Siemens</u>	1 no
18.	2K1,3K1, 5K1	POWER CONTACTOR 9A 3-pole, air break AC Contactor rated for 9 A (AC-3) 415V AC, 50Hz, with 2NO+2NC auxiliary contacts, coil voltage 230V AC with surge suppressor Type: LC1D09P7+LADN22+LAD4RCU/ <u>3RT2016-1AP01+3RH2911-1HA22+3RT2916-1CD00</u>	Schneider Electric/ <u>Siemens</u>	3 nos
19.	4K1	POWER CONTACTOR 12A 3-pole, air beak AC Contactor rated for 12 A (AC-3) 415V AC, 50Hz, with 2NO+2NC auxiliary contacts, coil voltage 230V AC with surge suppressor Type : LC1D12P7+LADN22+LAD4RCU/ <u>3RT2017-1AP01+3RH2911-1HA22+3RT2916-1CD00</u>	Schneider Electric/ <u>Siemens</u>	1no
20.	1L1	LINE REACTOR, 36KW SINAMICS line reactor for SLM, 36KW, INPUT: 3-PH 380-480 V, 50/60HZ	Siemens	1no
21	0Q1	MOLDED CASE CIRCUIT BREAKER 160A 3-pole molded case air circuit breaker having following specifications with rotary handle kit and required accessories: Nominal current rating (In): 160A Rated operational voltage : 415V AC Breaking capacity : 55kA @415V AC Overload protection (Ir) : (0.4 – 1.0) In Short circuit protection(li) : (1.5 – 10) In UV release coil : 240V,50Hz Aux contact : 3 C/o 20ms advance Leading Aux contact: 1 C/o. Type: 3VA2116-5HL32-0AA0 +3VA9267-0..11+3VA9908-0BB25+(3VA9988-0AA12)*3+3VA9988-0AA22+Accessories	Siemens	1 No

21	0Q1	MOLDED CASE CIRCUIT BREAKER 160A 3-pole molded case air circuit breaker having following specifications with rotary handle kit and required accessories: Nominal current rating (In): 160A Rated operational voltage : 415V AC Breaking capacity : 55kA @415V AC Overload protection (Ir) : (0.4 – 1.0) In Short circuit protection(Ii) : (1.5 – 10) In UV release coil : 240V,50Hz Aux contact : 3 C/o 20ms advance Leading Aux contact: 1 C/o. Type: 3VA2116-5HL32-0AA0 +3VA9267-0..11+3VA9908-0BB25+(3VA9988-0AA12)*3+3VA9988-0AA22+ Accessories	Siemens	1 No
22.	0Q2	ISOLATION SWITCH 63A 3-Pole ON/OFF, 2 C/o aux. Contact, 63A rating. Type : INS63-3P-28902 + (OF-29450)*2/3LD2504-1TP51	Schneider electric/ <u>Siemens</u>	1 No.
23.	0Q3,0Q7	AC MINIATURE CIRCUIT BREAKER 4A 2P Double pole, rated 4A with short ckt. Release and thermal release having 1NO+1NC contacts, breaking capacity 7.5kA AC characteristic – C, channel mounting. Type : 5SL62047RC+5ST3010/ <u>A9N2P04C+A9N26924</u>	Make : Siemens/ <u>Schneider Electric</u>	2 Nos
24.	0Q4,0Q8	AC MINIATURE CIRCUIT BREAKER 6A 1P Same as above but single pole and current rating - 6A Type :5SL61067RC+5ST3010/ <u>A9N1P06C +A9N26924</u>	Siemens/ <u>Schneider Electric</u>	2 Nos
25.	0Q5	AC MINIATURE CIRCUIT BREAKER 6A 2P Same as above but double pole and current rating - 6A Type : 5SL62067RC+5ST3010/ <u>A9N2P06C+A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No
26.	0Q6	AC MINIATURE CIRCUIT BREAKER 10A 1P Same as above but single pole and current rating - 10A Type : 5SL61107RC+5ST3010/ <u>A9N1P10C+A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 no
27.	0Q9,0Q11	AC MINIATURE CIRCUIT BREAKER 10A 2P Same as above but double pole and current rating - 10A Type : 5SL62107RC+5ST3010/ <u>A9N2P10C+A9N2692</u>	Siemens/ <u>Schneider Electric</u>	2 nos
28.	0Q10,0Q12	AC MINIATURE CIRCUIT BREAKER 16A 1P Same as above but single pole and current rating - 16A Type : 5SL61167RC+5ST3010/ <u>A9N1P16C+A9N26924</u>	Siemens/ <u>Schneider Electric</u>	2 nos
29.	0Q13	AC MINIATURE CIRCUIT BREAKER 10A 3P Same as above but triple pole and current rating - 10A Type : 5SL63107RC+5ST3010/ <u>A9N3P10C+A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 no
30.	0Q14,0Q15,0 Q16	DC MINIATURE CIRCUIT BREAKER 16A 1P Single pole, rated 16A with short ckt. Release and thermal release having 2NO+2NC contacts, breaking capacity 6kA DC characteristic – C, channel mounting. Type:5SL51167RC+(5ST3010)*2/ <u>A9N61511 +(A9N26924)*2</u>	Siemens/ <u>Schneider Electric</u>	3 Nos

31.	2Q1,5Q1	MOTOR PROTECTION CIRCUIT BREAKER (1.0-1.6) A Same as above but rated for 1.6A and O/L setting - (1.1-1.6)Amp Type:GV2ME06+GVAN11/3RV2011-1AA10+3RV2901-1A	Schneider Electric/ <u>Siemens</u>	2 Nos
32.	2Q2, 3Q1	MOTOR PROTECTION CIRCUIT BREAKER (0.4 -0.63) A Same as above but rated for 0.63A and O/L setting - (0.45-0.63)Amp Type:GV2ME04+GVAN11/3RV2011- 0GA10+3RV2901-1A	Schneider Electric/ <u>Siemens</u>	2 Nos
33.	4Q1	MOTOR PROTECTION CIRCUIT BREAKER (7-10) A 3-Pole, rated for 10A, 500V, 50Hz with electromagnetic short circuit protection and bimetal overload protection as the setting given below with 1NO+1NC aux. Contacts rated for 4A, 240V AC and panel mounting type. O/L setting - (7-10) Amp. Type:GV2ME14+GVAN11/3RV2011-1JA10+ 3RV2901-1A	Schneider Electric/ <u>Siemens</u>	1 No
34.	2R2-2R3, 3R2-3R8, spare	MULTI TURN POTENTIOMETER 10KΩ Multi turn, 10K ohm, 3W complete with knob, dial and 22mm, metal, round black, complete unit. Type : 3590S-2-103L	BOURNS	11 no
35.	0S2	PUSH BUTTON, GREEN Shrouded type, normal actuator, green colour, 1NO+1NC contact, suitable for panel rear mounting 22mm dia., metal, shiny complete unit. Type : 3SU1050-0AB40-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0/ <u>XB4BA35</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	1 no
36.	0S3	MUSHROOM HEAD PUSH BUTTON EMERGENCY STOP mushroom pushbutton, 22 mm, round, metal, shiny, red, 40 mm, latching, rotate-to-unlatch, without yellow backing plate, with holder, 1 NC+1NC, Screw terminal Type : 3SU1050-1HB20-0AA0+3SU1400-1AA10-1EA0+3SU1550-0AA10-0AA0/ <u>XB4BS8444</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	1 No
37.	0S5-8	DOOR LIMIT SWITCH Momentary contact type in open execution, 1NO+1NC contact block, rated 6 Amps , 250V,50Hz,plunger operated, panel mounting type Type : 3SE5250-0BC05	Siemens	4 Nos
38.	0S9	2- POSITION SELECTOR SWITCH 2-position,round,plastic, black actuator, maintained type, 1NO,1NC contact base mounting type with wink knob and index plate " DOOR INTERLOCK ", ENABLE " & DISABLE " for the two position, mounted inside the cubicle. Type : XB5-AD25 /3SU1002-2BF60-0AA0+3SU1400-1AA10-1BA0+3SU1400-1AA10-1CA0+3SU1500-0AA10-0AA0	Schneider Electric/ <u>Siemens</u>	1 No
39.	1S1+1H51	ILLUMINATED PUSH BUTTON, AMBER/ORANGE, 24V AC/DC Shrouded type, Amber/Orange colour, 1NO+1NC contact block, Suitable for panel rear mounting 22mm dia., metal shiny, complete unit. Bulb rated for 24V AC/DC supply. Type : 3SU1051-0AB00-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0+3SU1401+1BB00-1AA0/ <u>XB4BW35B5</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	1 No

40.	0T1	CONTROL TRANSFORMER, 500VA 1-phase, 500 VA primary taps - 380,400,415,440V secondary taps - 0-240V confirming to IS: 12012-1987/Latest	Indushree/ Reputed	1 No
41.	0T2	CONTROL TRANSFORMER, 1000VA Same as above but 1000 VA	Indushree/ Reputed	1 No
42.	0T3	CONTROL TRANSFORMER, 500VA Same as above but Secondary taps: 0-24V Capacity - 500 VA	Indushree/ Reputed	1 No
43.	0T4,0T5	CONTROL TRANSFORMER, 1500VA Same as above but Secondary taps: 0V-220V,240V Capacity - 1500 VA	Indushree/R eputed	2 Nos
44.	3U1	ELECTRONIC CONTROLLER Panel mounting type for CENLUB control supply voltage – 240V AC Type : ECC1002P Data sheet and operation manual has to be provided	CENLUB	1 No
45.	0V1	REGULATED POWER SUPPLY UNIT,24V DC,20A Input – 3-phase 415V AC Output – 24V DC regulated Rating – 20 Amps Type : 6EP1436-2BA10/ <u>ABL8WPS24200</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	1 No
46.	0V2,0V3	REGULATED POWER SUPPLY UNIT,24V DC, 10A Input – single phase 240V AC Output –24V DC regulated Rating – 10 Amps Type: ABL8RPS24100/6EP1334-2BA20.	Schneider Electric/ <u>Siemens.</u>	2 Nos
47.	1V1,1V2	REGULATED POWER SUPPLY UNIT,12V DC, 2.5A Input – single phase 240V AC Output –12V DC regulated Rating – 2.5 Amps Type : QUINT4-PS/1AC/12DC/2.5/PT-2904605	Phoenix/ Siemens	2 Nos
48.	0X1	PLUG & SOCKET 5-pin and earth, 5A 250V AC with ON/OFF switch.	Anchor	1 No
49.	-	TERMINAL BOARD FOR POWER & CONTROL Containing standard clip-on type terminal, screw type, complete with all fittings, end plates, partition plates, markers and others Type: for 95sq. mm cable - 15 nos. for 1.5sq. mm cable - 150 Nos. for 2.5sq mm cable – 20 No's for 4sq mm cable – 10 No's	WAGO / ELEMEX/ CONNECT WELL/PHO ENIX	1 Set
50.	-	FUSE TYPE TERMINAL - FOR PLC I/O Complete with fuse, clip – on type with LED indication for 24V DC supply of suitable rating for all PLC input & outputs, screw clamping type with all fittings, endplates, markers and others Type: KUDDF4/Equivalent - 150 nos.	WAGO / ELMEX	1 Set

51.	-	HEAVY DUTY MULTIPOLE CONNECTOR Multipole connector heavy duty, panel mounting type, top hoods and bottom open type complete with all accessories, 16A rating 24 pin- 3 No's , 48 pin- 2 No's with all fittings and mounting accessories	Sai International / Phoenix	1 Set
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PENDANT PANEL

This will be totally enclosed 2mm thick sheet steel clad, IP54 enclosure, conforming to our PS 61.01.01G having two hinged door and as per **GA Drg No.557/36002-31C**. Following control gears will be mounted on an anodized aluminum index plate as per **Drg No.557/K36006-11C** and this will be fixed on the front side of panel as per GA drg. All the components will be wired up as per **schematic drg. No. 557/K30108-31C** up to the terminal block/Connectors. The complete unit except the index plate should be finish painted with powder coated Siemens grey. The panel must have swingable rear side and a chromium plated handrail. Two no's of earthing screws have to be provided. The height of panel and index plate may increase up to 40mm as per DRO selection, the same will be intimated during approval.

MAKE – RITTAL/BCH/PYROTECH/VIDYUT/ELDON/Reputed

Sl. No.	Designation	Description	Make	Qty.
1.	-	INDEX PLATE (Size 630x450mm, 4mm thick) As per drg. No. 557/K36006-11C		1 No.
2.	0A6	FAN UNIT Air Circulating Fan Input supply – 240V AC, 1-phase, 35 watt Type – 27255A	Rexnord	1 No.
3.	3A1	DRO SYSTEM Digital read out panel for X,Y& Z axes		1 No.
4.	2H53,3H53, 3H54	PILOT LAMP / INDICATOR LIGHT, 24V DC,RED 22 mm, round, plastic, red, lens, with holder, LED module, with integrated LED 24 V AC/DC, screw terminal Type : XB5-AVB3/3SU1001-6AA20-0AA0+3SU1401-1BB20-1AA0+3SU1500-0AA10-0AA0	Schneider/ <u>Siemens</u>	3 No's
5.	2P1	SPEEDOMETER 68x68 mm cutout size, Sensing voltage 0-10V from the spindle drive to display the spindle speed in RPM in the following two ranges corresponding to 0-10V DC sensing voltage. Range I : 0-350 RPM Range II : 0-1110 RPM	MECO/AE/ MB Control/ Agronic.	1 No.
6.	3P1	DIGITAL FEED INDICATOR Bipolar, 96X48 mm size , sensing voltage: (+/-) 10V to display feed in mm/min, max. feed 200.0(with 1 decimal place) mm/min, aux. supply 240V AC Range: {0 to (+/-) 2000} mm/min w.r.t {0 to (+/-) 10V DC} sensing voltage.	MB Control/ AGRAONIC /MECO/AE	1 No.
7.	2R1,3R1	MULTI TURN POTENTIOMETER 10KOHM Multi turn, 10K ohm, 3W complete with knob, dial and 22mm, metal, round black, complete unit. Type : 3590S-2-103L	BOURNS	2 No's

8.	0S1, 2S53, 3S53, 3S56, 5S51	2-POSITION SELECTOR SWITCH 2-positions maintained type, 1NO, 1NC switching angle to suit index plate, 22mm metal shiny complete unit. Type : XB4BD25 / <u>3SU1052-2BF60-0AA0+3SU1400-1AA10-1BA0+3SU1400-1AA10-1CA0+3SU1550-0AA10-0AA0</u>	Schneider Electric/ <u>Siemens</u>	5 No's
9.	0S4	MUSHROOM HEAD PUSH BUTTON EMERGENCY STOP mushroom pushbutton, 22 mm, round, metal, shiny, red, 40 mm, latching, rotate-to-unlatch, without yellow backing plate, with holder, 1 NC+1NC, Screw terminal Type : 3SU1050-1HB20-0AA0+3SU1400-1AA10-1EA0+3SU1550-0AA10-0AA0/ <u>XB4BS8444</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	1 No.
10.	0S51+0H54, 2S51+2H51, 3S51+3H51, 4S51+4H51	ILLUMINATED PUSH BUTTON, GREEN, 24V DC Shrouded type, green colour, 1NO+1NC contact block, suitable for panel rear mounting 22mm dia., metal, shiny, complete unit, bulb rated for 24V AC/DC supply Type : 3SU1051-0AB40-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0+3SU1401+1BB40-1AA0/ <u>XB4BW33B5</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	4 No's
11.	0S52, 2S52, 2S56, 3S52, 4S52	PUSH BUTTON, RED Shrouded type, normal actuator, red colour, 1NO+1NC contact, suitable for panel rear mounting 22mm dia., metal shiny complete unit Type: 3SU1050-0AB20-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0/ <u>XB4BA45</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	5 No's
12.	2S54, 2S56	PUSH BUTTON, BLACK Same as above but black colour Type : <u>3SU1050-0AB10-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0/</u> <u>XB4BA25</u>	Siemens/ <u>Schneider</u> Electric	1 No.
13.	2S55+2H52, 3S1+3H52	ILLUMINATED PUSH BUTTON, AMBER, 24V DC Shrouded type, amber/orange colour, 1NO+1NC contact block, suitable for panel rear mounting 22mm dia., metal shiny, complete unit, bulb rated for 24V AC/DC supply Type : 3SU1051-0AB00-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0+3SU1401+1BB00-1AA0/ <u>XB4BW35B5</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	2 No's
14.	3S54	3-POSITION SELECTOR SWITCH 3-positions maintained type, 1NO, 1NO, switching angle to suit index plate, 22mm metal shiny complete unit. Type : XB4BD33 / <u>3SU1052-2BL60-0AA0+3SU1400-1AA10-1BA0+3SU1400-1AA10-1BA0+3SU1550-0AA10-0AA0</u>	Schneider Electric/ <u>Siemens.</u>	1 No.
15.	-	TERMINAL BLOCK Containing standard clip-on type terminal, screw type, complete with all fittings, end plates, partition plates, markers and others Type: for 1.5sq. mm cable - 80 Nos.	WAGO / ELEMX/ CONNECT WELL/PHO ENIX	1 Set

557.EA1.06	TERMINAL BOX – ‘B’	-	Must be as per Drg. No. 557/K30113-31C
557.EA1.07	TERMINAL BOX – ‘D’	-	Must be as per Drg. No. 557/K30114-31C
557.EA1.08	TERMINAL BOX – ‘E’	-	Must be as per Drg. No. 557/K30115-31C
557.EA1.09	TERMINAL BOX – ‘F’	-	Must be as per Drg. No. 557/K30116-31C
557.EA1.10	INDEX PLATES(Component)	-	Must be as per Drg. No. 557/K30061-41C

2 YEARS MAINTENANCE SPARES

Sl. No.	Description	Type No. & make	make	Qty
1.	MINIATURE CIRCUIT BREAKER			
1.1.	DC MINIATURE CIRCUIT BREAKER 16A 1P Single pole, rated 16A with short ckt. Release and thermal release having 2NO+2NC contacts, breaking capacity 6kA DC characteristic – C, channel mounting.	Type:5SL51167RC+(5ST3010)*2/A9N61511+(A9N26924)*2	Siemens/ <u>Schneider Electric</u>	1 No
1.2.	AC MINIATURE CIRCUIT BREAKER 10A 1P Same as above but single pole and current rating - 10A	Type: 5SL61107RC+5ST3010/ <u>A9N1P10C+A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No
1.3.	AC MINIATURE CIRCUIT BREAKER 6A 2P Same as above but double pole and current rating - 6A	Type: 5SL62067RC+5ST3010/ <u>A9N2P06C+A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No.
1.4.	AC MINIATURE CIRCUIT BREAKER 10A 3P Same as above but triple pole and current rating - 10A	Type: 5SL63107RC+5ST3010/ <u>A9N3P10C+A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No.
2.	SEMI-CONDUCTOR FUSE, 80A ,415 V AC 3 No's fuse links , Size of fuse system- NH0, Rating-80 Amps, In: 80 A, Operating class: aR, Un AC: 1000 V , with front indicator	Type- 3NE4120	SIEMENS	3 No's

3.	PUSH BUTTON			-
3.1.	PUSH BUTTON, BLACK Shrouded type, normal actuator, 1NO+1NC contact, suitable for panel rear mounting 22mm dia., metal shiny complete unit, Green colour	Type : 3SU1050-0AB10-0AA0+3SU1400-1AA10-1FA0+ 3SU1550-0AA10-0AA0/ XB4BA25	Siemens/ Schneider Electric	1 No.
3.2.	PUSH BUTTON, RED Same as above but Red colour	Type : 3SU1050-0AB20-0AA0+3SU1400-1AA10-1FA0+ 3SU1550-0AA10-0AA0/ XB4BA45	Siemens/ Schneider Electric	2 No's
3.3.	ILLUMINATED PUSH BUTTON,24V DC, GREEN Shrouded type, Green colour,1NO+1NC contact block, suitable for panel rear mounting 22mm dia., metal shiny, complete unit, bulb rated for 24V AC/DC supply.	Type : 3SU1051-0AB40-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0+3SU1401+1BB40-1AA0/ XB4BW33B5	Siemens/ Schneider Electric	1 No.
3.4.	ILLUMINATED PUSH BUTTON,24V DC,AMBER Same as above but Amber colour	Type : 3SU1051-0AB00-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0+3SU1401+1BB00-1AA0/ XB4BW35B5	Siemens/ Schneider Electric	1 No.
4.	PILOT LAMP / INDICATOR LIGHT 22 mm, round, plastic, lens, with holder, LED module, with integrated LED, screw terminal			-
4.1.	Red colour, 24 V AC/DC supply	Type : XB5-AVB4/ 3SU1001-6AA20-0AA0+ 3SU1401-1BB20-1AA0+ 3SU1500-0AA10-0AA0	Schneider Electric / Siemens	3 No's
4.2.	Green colour, 24 V AC/DC supply	Type : XB5-AVB3/ 3SU1001-6AA40-0AA0+ 3SU1401-1BB40-1AA0+ 3SU1500-0AA10-0AA0	Schneider/ Siemens	1 No.
4.3.	Amber colour, 24 V AC/DC supply	Type : XB5-AVB5/ 3SU1001-6AA00-0AA0+3SU1401-1BB00-1AA0+3SU1500-0AA10-0AA0	Schneider/ Siemens	1 No.
5.	SELECTOR SWITCH			
5.1.	2-POSITION SELECTOR SWITCH 2-positions maintained type, 1NO, 1NC switching angle to suit index plate, 22mm metal shiny complete unit.	Type : XB4BD25 / 3SU1052-2BF60-0AA0+3SU1400-1AA10-1BA0+3SU1400-1AA10-1CA0+3SU1550-0AA10-0AA0	Schneider Electric/ Siemens.	1 No.
5.2.	3-POSITION SELECTOR SWITCH 3-positions maintained type, 1NO, 1NO, switching angle to suit index plate, 22mm metal shiny complete unit.	Type : XB4BD33 / 3SU1052-2BL60-0AA0+ 3SU1400-1AA10-1BA0+ 3SU1400-1AA10-1BA0+ 3SU1550-0AA10-0AA0	Schneider Electric/ Siemens.	1 No.

Note: Unless otherwise specified, make & type of 2-year maintenance spares must be same as used in control cubicle, carriage control panel and other panels.

COMMISSIONING SPARES

Sl. No.	Description	Type No.	Make	Qty.
1.	MINIATURE CIRCUIT BREAKER			
1.1.	AC MINIATURE CIRCUIT BREAKER 4A 2P Double pole, rated 4A with short ckt. Release and thermal release having 1NO+1NC contacts, breaking capacity 7.5kA AC characteristic – C, channel mounting.	Type:5SL62047RC+5ST3010/A9N2P04C+ <u>A9N26924</u>	Siemens/ <u>Schneider Electric</u>	2 No's
1.2.	AC MINIATURE CIRCUIT BREAKER 6A 2P Same as above but current rating - 6A	Type:5SL62067RC+5ST3010/A9N2P06C+ <u>A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No
1.3.	AC MINIATURE CIRCUIT BREAKER 10A 2P Same as above but current rating - 10A	Type : 5SL62107RC+5ST3010/ <u>A9N2P10C + A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No
1.4.	AC MINIATURE CIRCUIT BREAKER 16A 2P Same as above but current rating - 16A	Type : 5SL62167RC+5ST3010/ <u>A9N2P16C +A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No
1.5.	AC MINIATURE CIRCUIT BREAKER 6A 1P Same as above but single pole and current rating - 6A	Type : 5SL61067RC+5ST3010/ <u>A9N1P06C +A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No.
1.6.	AC MINIATURE CIRCUIT BREAKER 10A 1P Same as above but single pole and current rating - 10A	Type : 5SL61107RC+5ST3010/ <u>A9N1P10C + A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No.
1.7.	AC MINIATURE CIRCUIT BREAKER 16A 1P Same as above but single pole and current rating - 16A	Type : 5SL61167RC+5ST3010/ <u>A9N1P16C + A9N26924</u> Make : Siemens/ <u>Schneider Electric</u>	Siemens/ <u>Schneider Electric</u>	1 No.
1.8.	AC MINIATURE CIRCUIT BREAKER 10A 3P Same as above but triple pole and current rating - 10A	Type : 5SL63107RC+5ST3010/ <u>A9N3P10C+A9N26924</u>	Siemens/ <u>Schneider Electric</u>	1 No.
1.9.	AC MINIATURE CIRCUIT BREAKER 16A 3P Same as above but triple pole and current rating - 16A	Type : 5SL63167RC+ <u>(5ST3010)*2/A9N3P16C + (A9N26924)*2</u>	Siemens/ <u>Schneider Electric</u>	1 No.

1.10.	DC MINIATURE CIRCUIT BREAKER 16A 1P Single pole, rated 16A with short ckt. Release and thermal release having 2NO+2NC contacts, breaking capacity 6kA DC characteristic – C, channel mounting.	Type : 5SL51167RC+ (5ST3010)*2/A9N61511 +(A9N26924)*2	Siemens/ <u>Schneider</u> <u>Electric</u>	1 No
2.	FUSE			
2.1.	SEMI-CONDUCTOR FUSE, 80A ,415 V AC 3 No's fuse links with 3 No's suitable base and other accessories Size of fuse system- NH0, Rating-80 Amps, In: 80 A, Operating class: aR, Un AC:1000 V, with front indicator.	Type: (3NE4120)*3+(3NH3120) *3+(3NX3114)*6	SIEMENS.	3 No's
2.2.	GLASS FUSE Glass fuse for PLC I/O	Note: Same type and make used in the fuse terminal block	Note: Same type and make used in the fuse terminal block	100 No's
3.	PUSH BUTTON	-		-
3.1.	PUSH BUTTON, GREEN Shrouded type, normal actuator, 1NO+1NC contact, suitable for panel rear mounting 22mm dia., metal shiny complete unit, Green colour	Type : 3SU1050-0AB40-0AA0+3SU1400-1AA10-1FA0+ 3SU1550-0AA10-0AA0/ <u>XB4BA35</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	1 No.
3.2.	PUSH BUTTON, RED Same as above but Red colour	Type : 3SU1050-0AB20-0AA0+3SU1400-1AA10-1FA0+ 3SU1550-0AA10-0AA0/ <u>XB4BA45</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	2 No's
3.3.	PUSH BUTTON, BLACK Same as above but Black colour	Type : 3SU1050-0AB10-0AA0+3SU1400-1AA10-1FA0+ 3SU1550-0AA10-0AA0/ <u>XB4BA25</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	1 No.
3.4.	MUSHROOM HEAD PUSH BUTTON, RED EMERGENCY STOP mushroom pushbutton, 22 mm, round, metal, shiny, red, 40 mm, latching, rotate-to-unlatch, without yellow backing plate, with holder, 1NC+1NC, Screw terminal	Type : 3SU1050-1HB20-0AA0+3SU1400-1AA10-1EA0+3SU1550-0AA10-0AA0/ <u>XB4BS8444</u>	Siemens/ <u>Schneider</u> <u>Electric</u>	1 No.
3.5.	ILLUMINATED PUSH BUTTON,24V DC, GREEN shrouded type, 1NO+1NC contact block Suitable for panel rear mounting 22mm dia.,	Type : 3SU1051-0AB40-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0+3SU1401+1BB40-	Siemens/ <u>Schneider</u> <u>Electric</u>	2 No's

	metal shiny, complete unit, Green colour.	1AA0/ XB4BW33B5		
3.6.	ILLUMINATED PUSH BUTTON,24V DC,AMBER Same as above but Amber colour	Type : 3SU1051-0AB00-0AA0+3SU1400-1AA10-1FA0+3SU1550-0AA10-0AA0+3SU1401+1BB00-1AA0/ XB4BW35B5	Siemens/ Schneider Electric	2 No's
4.	CONTACT BLOCK			
4.1.	1NO+1NC contact block, screw terminal, for front plate mounting, suitable for 3SU1/XB4 series controlling and signaling elements	Type : 3SU1400-1AA10-1FA0/ ZBE101+ZBE102	Siemens/ Schneider Electric	5 No's
4.2.	1NO+1NC/1C/O contact block for MCB	Type : 5ST3010/A9N26924	Siemens/ Schneider Electric	2 No's
4.3.	2 NO+2NC contact block for power contactors	Type : 3RH29111HA22/LADN22	Siemens/ Schneider Electric	3 No's
5.	PILOT LAMP / INDICATOR LIGHT 22 mm, round, plastic, lens, with holder, LED module, with integrated LED, screw terminal			
5.1	Red colour, 24 V AC/DC supply	Type : XB5-AVB4/ 3SU1001-6AA20-0AA0+3SU1401-1BB20-1AA0+3SU1500-0AA10-0AA0	Schneider Electric /Siemens	2
5.2	Green colour, 24 V AC/DC supply	Type : XB5-AVB3/ 3SU1001-6AA40-0AA0+3SU1401-1BB40-1AA0+3SU1500-0AA10-0AA0	Schneider/ Siemens	2 No's
6.	AUXILIARY RELAYS			
6.1.	RELAY MODULE FOR PLC OUTPUT This should consist of 1 miniature electronic relay 4 C/o,6A with protective diode & LED with mounting base, channel mounting type-supply - 24V DC	Type : RXM4AB2BD+RXZE2M1 14M+RXM040W	Schneider Electric	5 No's
6.2.	AUXILIARY CONTACTOR RELAY , 10A Auxiliary air break AC Contactor, Rated 10A, 500V, 50Hz with 3NO+1NC contacts, coil voltage 230V AC with surge suppressor	Type:CAD32P7+LAD4R CU/ 3RH2131-1AP00+3RT2916-1CD00	Schneider Electric/ Siemens.	2 No's
7.	DC POWER SUPPLY UNIT			
7.1.	REGULATED POWER SUPPLY UNIT,12V DC, 2.5A Input – single phase 240V AC Output –12V DC regulated Rating – 2.5 Amps	Type : QUINT4-PS/1AC/12DC/2.5/PT- 2904605	Phoenix/ Siemens	4 No's
8.	SELECTOR SWITCH			

8.1.	2-POSITION SELECTOR SWITCH 2-positions maintained type, 1NO, 1NC switching angle to suit index plate, 22mm metal shiny complete unit.	Type : XB4BD25 <u>3SU1052-2BF60-0AA0+</u> <u>3SU1400-1AA10-1BA0+</u> <u>3SU1400-1AA10-1CA0+</u> <u>3SU1550-0AA10-0AA0</u>	Schneider Electric/ <u>Siemens</u>	2 No's
8.2.	3-POSITION SELECTOR SWITCH 3-positions maintained type, 1NO, 1NO, switching angle to suit index plate, 22mm metal shiny complete unit.	Type : XB4BD33 / <u>3SU1052-2BL60-</u> <u>0AA0+3SU1400-1AA10-</u> <u>1BA0+3SU1400-1AA10-</u> <u>1BA0+3SU1550-0AA10-</u> <u>0AA0</u>	Schneider Electric/ <u>Siemens</u>	1 No.
9.	MULTI TURN POTENTIOMETER 10kOHM Multi turn, 10K ohm, 3W complete with knob, dial and 22mm, metal, round black, complete unit.	Type : 3590S-2-103L	BOURNS	5 No's
10.	MOTOR PROTECTION CIRCUIT BREAKER			
10.1.	MOTOR PROTECTION CIRCUIT BREAKER 10A 3-Pole, rated for 10A, 500V, 50Hz with electromagnetic short circuit protection and bimetal overload protection as the setting given below with 1NO+1NC aux. Contacts rated for 4A, 240V AC and panel mounting type. O/L setting - (7-10) Amps	Type : GV2ME16+GVAN11/ <u>3RV2011-</u> <u>1JA10+3RV2901-1A</u>	Schneider Electric/ <u>Siemens</u>	1 No.
10.2.	MOTOR PROTECTION CIRCUIT BREAKER 1A Same as above but rated for 1.0 A and O/L setting - (0.7-1.0)Amps	Type:GV2ME05+ GVAN11/3RV2011- <u>0JA10+3RV2901-1A</u>	Schneider Electric/ <u>Siemens</u>	2 No's
10.3.	MOTOR PROTECTION CIRCUIT BREAKER 6.3A Same as above but rated for 10A and O/L setting - (4.5-6.3)Amps	Type : GV2ME10+GVAN11/ <u>3RV2011-</u> <u>1GA10+3RV2901-1A</u>	Schneider Electric/ <u>Siemens</u>	2 No's
11.	POWER CONTACTOR 12A 3-pole, air break AC Contactor rated for 12 A (AC-3) 415V AC, 50Hz, with 2NO+2NC auxiliary contacts, coil voltage 230V AC with surge suppressor	LC1D12P7+LADN22+LA D4RCU/3RT2017- 1AP01+3RH2911- 1HA22+3RT2916-1CD00	Schneider Electric/ <u>Siemens</u>	
12.	DIGITAL FEED INDICATOR Bipolar, 96X48 mm size, sensing voltage: (+/-) 10V to display feed in mm/min, max. feed 200.0(with 1 decimal place) mm/min, aux. supply 240V AC Range: {0 to (+/-) 2000} mm/min w.r.t {0 to (+/-) 10V DC} sensing voltage.		MB Control/AG RAONIC/M ECO/AE.	2 No's

Note: Unless otherwise specified, make & type of commissioning spares must be same as used in control cubicle, carriage control panel and other panels.



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 atleast 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.