



**Heavy Engineering Corporation
Heavy Machine Building Plant
(A Govt of India Enterprises)
Ranchi- 834004 (INDIA)**

Phone : 0651-2401278/-2401349
Fax : 0651-2401166, 2401571
E-mail : pksingh@hecltd.com
Web: www.hecltd.com

Limited Tender

No. HMBP/PUR/10/322133/EL-2604

Dated :15.12.2010

Dear Sir,

We request you to submit your most competitive offer for the following items as per the given schedule:

ENQUIRY SCHEDULE

Sl. No.	Description of Stores	Unit of measure	Nos. of unit required	Remarks
1	D.C. Drive Panel for Spindle Rotation of H.B.Machine inventory no. 753/I, 753/II, 1189A, 1189B & 1184 at Shop : 043-044/010 HMBP as per enclosed Annexure-I with details specification.	No.	05	

Note Please submit your quotation in two bid system i.e. **Price Bid & Techno-commercial Bid.**

Schedule of Tender receipt by **03.01.2011 upto 1.00 PM**. Opening of Tender on **03.01.2011, at 3.00PM** TENDERS must be submitted in sealed cover with Tender No. and the Due date superscribed on it failing which Tenders may be ignored.

Offers to be submitted in two parts.

In case of Two part bids (as mentioned above, the technical and commercial aspects to be sealed in a separate envelope superscribing Part-1 on it., The Price bid to be superscribed as Part - 2). Also give the un-priced schedule of quoted items (itemwise) with your Techno-commercial bid and both the sealed covers must bear at its top about the enquiry no. and date, due date of tender opening.

Terns & Conditions:

1. The rate quoted shall be on F.O.R : Destination i.e. Store/HMBP/HEC Ltd., Ranchi-834004 basis.
2. The Price quoted by the tenderer should be exclusive of sales tax. The rate and nature of sales tax applicable should be shown separately. Sales tax 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 sales tax and within the delivery period. Any change on the taxes & duty structure beyond the delivery period will not be considered by HEC.
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. Variable price or price variation clause shall not be accepted in any case. Firms offers with price variation clause will not be considered.
4. Unpriced scheduled (blank price format) of items considered in line with scope of supply of tender enquiry shall be furnished alongwith techno-commercial bid.
5. Quotations erased or over written are likely to be rejected unless all corrections are authenticated with the tenderer's signature.
6. Delivery date offered must be specified and guaranteed.
7. Payment terms :100% of the total contract value alongwith 100% taxes and duties shall be released through cheque within 30 days of the receipt of materials complete in all respect alongwith GC,TC, IC (to be issued by HEC), EDGP, original invoice and 10% Performance Bank Guarantee to be valid till full Guarantee Period from any nationalized Bank only in HEC's Format.
8. Full particulars i.e. specification, literature and / or drawing wherever applicable should be submitted alongwith the quotation. The brand and 'Make' name must be Indicated.

9. 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.
10. Supplies will be subject to Inspection by our Inspection wing / or inspection agencies prescribed by us.
11. Order placed as a result of this tender will be subject to the Corporation's General Terms and Conditions of contract which can be down loaded from our website (www.hecltd.com)
- 13 Corporation reserves the right to call for and examine at any time the books of accounts and other documents and papers of the firm for the purpose of ascertaining whether any excess payments has been made or the firm likely to be received / received undue benefit out of execution of the particular contract.
14. Earnest Money (if indicated above specifically) - Earnest money to the extent of 2% of the total value will have to be deposited by demand draft on the State Bank of India, Ranchi Hatia Branch, in favour of Heavy Engineering Corporation Ltd. Ranchi.- 4
15. Security Deposits -Successful tenderers will have to deposit security equal to 5 percent of the value of the contract within the desired period. Failing this, the contract will be cancelled at the risk and expenses of the suppliers.
16. Performance Bank Guarantee : PBG of 10% of the basic order value in HEC's Format form any nationalized bank will be submitted by the firm valid for the warranty/guarantee period.
17. Delivery: The time for and the date of delivery of the Stores stipulated in the acceptance of tender shall be deemed to be the essence of the contract and delivery must be completed not later than the dates specified therein.

Otherwise:

- a) The purchaser to recover from the contractor a sum of 0.5 % per week (completed week) of the price of the stores(upto maximum 10 %) as liquidated damages, which the contractor has failed to deliver as aforesaid or
- b) The purchaser may procure the undelivered stores / similar items from elsewhere, without notice to the contractor at the risk of the contractor without canceling the contract in respect of the consignment not yet due for delivery or,
- c) to cancel the contract or a portion thereof.
18. Guarantee : The material supplied shall be guaranteed for 12 months from the date of commissioning or 18 months from the date of delivery whichever is earlier.
19. Income Tax Clearance Certificate - All tenderers shall submit along with their tender an Income Tax Clearance Certificate duly countersigned by the Income Tax Officer of the circle concerned under the seal of the office. Copy of Permanent Account No. (PAN) (of Income Tax) to be enclosed with the bid.
20. 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.
21. The rates quoted shall also be inclusive of embossing on the material. The Ownership namely HMBP / FFP / HMTP should be at a predominant place of the material to a size / thickness upon the volume of the material.

Special .Note:

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

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

Signature of Purchase Executive

Sl. No.	Description	Enquiry No. & Date	Tender Opening Date	Remarks
01.	D.C. Drive Panel for Spindle Rotation of H.B.Machine inventory no. 753/I, 753/II, 1189A, 1189B & 1184 at Shop : 043-044/010 HMBP as per enclosed annexure-I with details specification	HMBP/PUR/10/322133/EL-2604 Dated :15.12.2010.	03.01.2011	Limited Tender

TECHNICAL SPECIFICATION FOR SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF DC DRIVE PANEL FOR SPINDLE ROTATION OF HORIZONTAL BORING. M/C.

Existing System:

Name of Machine: (1) Horizontal Boring m/c. make : Russian
 (2) Inventory No.(753/I), (753/II), (1189A) / (1189B) / (1184).
 (3) Shop : 043-044/ 010 / HMBP.

Spindle Drive Motor : DC Motor, Make: Russian
 : KW: 49.5
 : Arm.Voltage: 220V
 : Arm Current : 262 A.
 : Field Voltage: 220 V
 : Field Current: 20A
 : RPM – 1000/2250

Presently Spindle drive motor is running with MG set scheme . It's excitation is being controlled by amplifier system. Output of generator is fed to the Spindle motor.

PROPOSED SYSTEM:

We are planning to install Microprocessor based 4 Quadrant Digital DC Drive panel to control the speed of Spindle DC motor from zero to full voltage ie, 230 V with armature control and beyond base speed with field weakening .

Supplier's Scope of work:

- * Supply, Installation, interfacing, testing and commissioning of new Drive panel..
- * Command switches like Run, Forward, Reverse, start , Stop, Emergency to be incorporated in operator panel.
- * Control wiring to be done from existing operator panel to drive panel.
- * Logic has to be made by the supplier with the existing interlock to run the spindle motor.

Our scope of work:

- (1) Civil work for panel mounting.
- (2) Supervision /Assistance during cable laying /wiring.
- (3) Supply of crane facility during erection and commissioning.

Training:

- (1) Maintenance training regarding optimization of parameters and fault diagnostic for two days to be carried out by supplier at site.
- (2) One week training for 3 persons at manufacturer's place.

Special instruction to tenderer:

- (A) The tenderer must visit the site and see the condition of machine before quoting. Tenderer must submit catalogue of drive with their offer.
- (B) Successful Load test of the machine for one week has to carried out before handing over to production.
- (C) Three sets of complete drawing and documents have to be provided after commissioning.
- (D) The supplier will have to give one year guarantee of the system after commissioning.

Preferred make of electrical items:

- (1) Switchgears: Siemens, Schneider,
- (2) Cooling Fans : EBM NADI
- (3) Cables: Finolex, Polycab,
- (4) Relays: Merlin Gerin, Omron, OEN
- (5) Indicating Lamps: Siemens, Schneider,
- (6) Push button switches and selector switches: Siemens, Schneider,
- (7) Control Transformer and Line Choke: make: Gupta/A.E
- (8) Meters : AE make.
- (9) Potentiometer with dial : 10K ECIL .
- (10) Line reactor: AE, Gupta
- (11) Semiconductor Fuse: Siemens, Bushman

Detailed Specification of Drive Panel:

- i. Converter should be 3 Phase , 4 Quadrant full wave fully controlled microprocessor based digital drive.
- ii. Drive should be of at least 275A at 220V
- iii. It should be suitable for field weakening.
- iv. It should be of regenerative type .
- v. Drive should have capability to accept either tacho/ encoder / armature feedback .
- vi. Steady state speed variation for load (0 to 100%)variation should not exceed 0.5%.
- vii. Fault diagnostic should be user friendly.
- viii. This converter should be housed in powder coated enclosure.
- ix. Suitable Line choke for armature and field must be provided to limit inrush current.
- x. Two nos. of exhaust fan should be there for cooling of panel.
- xi. For measurement of armature voltage, Arm current, field voltage, field current, analogue meters should be provided at the front door. Indicating lamp for drive ready/run, tripped should also be provided.
- xii. One isolation transformer of **suitable rating** of reputed make ,to match the drive should be included in the scope of supply.
Primary Voltage: 3 Phase 415 V, Secondary : 3 Phase 230 V.
- xiii. Drive should be capable to accept the Input voltage (**3 phase, 230 VAC**) through isolation/step down transformer.

Make of Drive: Siemens, ABB, Control Technique only.

Qty: 5 Nos