

Techno-commercial Scope of Work

Name of work:-Reconditioning of 5 nos. of HMT-make lathe machines (Model-LB 20/17).

Description of Work- Work of reconditioning and accuracy restoration is to be carried out at BHEL- Hardwar for 5 nos. of HMT make lathe machines (Model-LB 20/17).

NIT No: - 20160042/NIT/WEX/MCR/LB-20/17/2016-17,Dt.27.07.2016

Machine Description:-

Designation	LB 17	LB 20
L X B X H (mm)	3200 X 1270 X 1880	3200 X 1270 X 1880
Height of Centre (mm)	170	200
Centre Distance (mm)	700 - 1000	700 - 1000
Swing over Bed(mm)	350 mm	410 mm
Width of Bed (mm)	312	312
Spindle speed Range	23- 1000 rpm in slow range 45-2000 rpm in standard range (Total no. of steps =18)	16 to 800 rpm in slow range. 32 to 1600 rpm in standard range (Total no. of steps = 18)
Spindle Bore & Taper	42 mm , Metric 50	42 mm , Metric 50
Metric Thread pitches(mm)	0.5 to 14 (32 Nos.)	0.5 to 14 (32 Nos.)
Inch Threads (Tpi)	2 to 56 (35 Nos.)	2 to 56 (35 Nos.)
Cross Slide Travel (mm)	230	230
Tailstock sleeve travel (mm)	200	175
Motor capacity	7.5 KW/ 3000 rpm	7.5 KW/ 3000 rpm

Clause No.	Description	Vendor To confirm
1.	<u>Scope of Work & supply:</u>	
1.1	Cleaning and electrical disconnection of the machine.	
1.2	Dismantling of major assemblies like- speed gear box, Headstock, Tailstock, belts, Cross-slide, Tool post, Lead screw, Feed shaft.	
1.3	Dismantling of all electric components and motors.	
1.4	Dismantling of Headstock sub-assemblies i.e spindle bearing, spindle shaft, gears, clutches, and lubrication system.	
1.5	Dismantling of speed gear box different shaft assemblies, cluster gears and bearings.	
1.6	Dismantling of cross-slide subassemblies i.e. Lead screw, Lead nut, bearings.	

1.7	Identification of damaged parts of Speed gear box assembly, Headstock and Tailstock and cross slide assembly.	
1.8	Scraping and matching of bed guide ways with cross slide, cross slide matching surface, Tail stock with Bed guide ways, preparation of wedges, Turcite fixing and its alignment.	
1.9	Repair of main spindle guide bush and replacement of spindle bearing.	
1.10	Repair of tailstock quill or replacement with new one subject to the availability at BHEL.	
1.11	Assembly of speed gear box with replacement/repair of damaged parts.	
1.12	Assembly of Head stock with replacement/repair of damaged parts.	
1.13	Rectification of all lead screws and nuts is to be done by BHEL while any manual work required for matching of lead screw and nut is to be done by vendor i.e. use of emery paper to remove extra material.	
1.14	Replacement of all oil seals, O-rings, gaskets and other rubber/sealing items.	
1.15	Replacement of all pipes/hoses and their fittings.	
1.16	Replacement of lubrication unit including pipes/hoses and fitting along with repair of plunger pump.	
1.17	Installation and replacement of push buttons/switches, wiring , switch gears for operator control desk located on the machine.	
1.18	Mounting of all electrical components and motors.	
1.19	Refurbishment of operator pendant.	
1.20	Installation of the reconditioned machine at original work place.	
2.	Acceptance and Final Commissioning of Machine :-	
2.1	After complete assembly of the machine, vendor will have to carry out the accuracy test as per OEM test chart.	
2.2	Operation of the machine will be checked through a test piece to check all speeds, feed, and gear shifting under different loading conditions.	
2.3	Commissioning certificate will be issued after successful running of the machine for a period of 7 days from the date of hand over to production.	
3.	<u>INSPECTION OF MACHINE BY BHEL-</u>	
	After dismantling of the machine and cleaning of the parts by the vendor, a joint inspection of the machine will be carried out by BHEL representatives &	

	vendor representative at BHEL works for identification of the parts /components to be repaired /replaced during reconditioning.	
4.	FACILITIES TO BE PROVIDED BY BHEL-	
4.1	All the damaged parts required to be replaced; rectification of Lead screw and Nuts, turcite etc. and all other material required for proper reconditioning of the machine is to be provided by BHEL.	
4.2	Overhauling of all electrical motors is to done by BHEL.	
4.3	All perishable items, consumables like lubricants, Kerosene oil, cotton waste etc. will be supplied free of cost during dismantling and commissioning inside BHEL premises. However the vendor should make his own arrangements for all types of hand tools including pneumatic/electrical drill machines, grinders, scraping tools etc. along with the necessary tooling.	
4.4	Crane facilities along with lifting tackles, trolleys, truck etc. will be available free of charges while working inside BHEL premises only.	
4.5	Facilities of minor welding, machining etc. will also be available inside BHEL premises free of cost.	
5.	<u>TERMS OF PAYMENT:</u> No advance payment shall be made. Payment terms shall be as under-	
5.1	Ninety percent (90%) of the each machine contract value and 100% of Taxes and Duties shall be paid after the completion of the reconditioning work and final Acceptance of the machine by BHEL as per clause no.2.	
5.2	Balance 10% amount of each machine contract value will be paid after 30 days of commissioning. Vendor will have to submit the performance Bank guarantee of amount 10% of the each machine contract value valid up to guarantee period i.e. 12 months from the date of commissioning.	
6.0	<u>Time-Schedule-</u>	
	Vendor will have to complete the reconditioning work within 12 months from date of issue of work order to him for all five machines.	
7	<u>LATE DELIVERY:</u>	
7.1	The LD shall be deducted from the value of unexecuted work if the completion of the reconditioning work in the machine is delayed beyond the scheduled time .LD shall be applicable as 0.50% (1/2 Percent) of the contract value of unexecuted work per week. The maximum amount of the LD shall be 10% (Ten Percent) of the Contract Value of each machine.	
7.2	If there is any delay due to non-availability of machines / rectification of the machine parts / machining of some parts/ any other reasons attributed to BHEL, then this time will not be accounted for work completion time. This period will be excluded for the purpose of calculating LD.	
8	Earnest Money Deposit	
8.1	The Earnest Money of amount Rs. 40000.00 is to be paid by each bidder along with Techno-commercial bid.	

8.2	<p>Earnest money should be deposited in one of the following ways: Cash (As permissible under the Income Tax Act) Pay order Demand draft</p> <p>Tenders not submitted with earnest money are liable to be rejected. Earnest money deposit of unsuccessful offers shall be returned normally within 15 days of acceptance of award of work by the successful bidder.</p>	
8.3	<p>Offers without EMD will be rejected and will not be considered for evaluation. However "MSE suppliers can avail the intended benefits only if they submit along with the offer, attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure –“C” where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiencies in the above required documents are not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer.</p>	
8.4	EMD shall be converted to security deposit if the work is awarded.	
8.5	EMD shall not carry any interest.	
8.6	<p>EMD by the tenderer will be forfeited if:</p> <p>i) After opening of the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.</p> <p>ii) The tenderer does not commence the work within 15 days of receiving the machine at its works.</p>	
9.0	<u>SECURITY DEPOSIT-</u> Successful bidder shall have to submit the security deposit amount as per following -	
9.1	<p>The rate of security deposit will be as below:</p> <p>Up to Rs. 10 Lakhs: 10%</p> <p>Above Rs. 10 Lakhs upto Rs. 50 Lakhs: `Rs.1 Lakh + 7.5% amount exceeding Rs. 10 Lakhs</p> <p>Above Rs. 50 Lakhs: Rs. 4 Lakhs + 5% amount exceeding Rs. 50 Lakhs</p>	
9.2	<p>The security deposit should be submitted before the start of work in the following forms:</p> <p>i) Cash (As permissible under the Income Tax Act)</p> <p>ii) Pay Order, Demand Draft in favour of BHEL, Hardwar</p> <p>iii) Local cheques of Scheduled Banks, subject to realization.</p> <p>iv) Bank Guarantee from Scheduled Banks/Public Financial Institution as defined in the companies Act. The Bank guarantee format should have the approval of BHEL.</p>	
9.3	Security Deposit shall not carry any interest.	

9.4	EMD of successful tenderer can be converted and adjusted against the Security Deposit.	
9.5	Security Deposit shall be refunded to the vendor as follows: 100% of the Security Deposit amount shall be refunded to the vendor after successful completion of the project.	
10.0	Following documents shall be submitted by the vendor to enable Finance dep't. of BHEL to make the payment-	
10.1	Details of Service Tax.	
10.2	Income tax exemption letter, if applicable.	
10.3	Regular Invoice.	
10.4	E-payment form (format to be provided by BHEL) filled and signed by the vendor. Payment will be credited directly to vendor's bank account	
11.0	GUARANTEE: Vendor shall stand guarantee for smooth functioning of the machine, including all the items and parts employed in reconditioning of the machine for a period of 12 months from the date of FINAL ACCEPTANCE of the individual machine.	
12.0	Risk Purchase Clause : In case of delays in supplies / defective supplies or non-fulfillment of any other terms & conditions given in the work order the purchaser may cancel the work order in full or part thereof and may also make the purchase of the material / service from elsewhere / alternative source at the risk and cost of supplier. If the Vendor does not agree to above clause, his offer is liable to be rejected. In case any vendor accepts risk purchase clause initially and subsequently declines to honor the term in the eventuality of RISK PURCHASE, they may be banned for business with BHEL.	
13.0	OFFER: The offer shall be submitted in two parts and in following manner-	
13.1	Techno-commercial Bid :	
13.1.1	The envelop shall contain the Techno-commercial Bid (ANNEXURE 'A') with technical details and commercial terms & conditions along with relevant documents like copies of ESI, PF code, PAN No., Service Tax Regn. No., TIN No., CST No., Experience Certificates, Audited Balance Sheet of last 3 years, P.O copies & Commissioning/ Performance certificates (against Pre-qualifying conditions) , Tender fees, EMD and Check List as per ANNEXURE 'C'.	
13.1.2	The envelop shall be super scribed with "Techno-Commercial Bid", Name of work & NIT No.	

13.1.3	Point-wise compliance of this scope of supply and work is to be given by vendors while submitting their techno-commercial offer in the format provided by BHEL. Each page of the compliance list has to be signed by the vendor.	
13.1.4	The vendor must note that no prices are to be quoted/ mentioned in the techno-commercial offer.	
13.2	Price Bid :	
13.2.1	The second envelope shall contain only the price bid along with applicable taxes & duties on Price Bid Format only as per ANNEXURE 'B'.	
13.2.2	Any other information in the price bid shall not be considered and the quotation is likely to be rejected. Price bid document shall be signed by the bidder at the bottom of the page.	
13.2.3	The envelope shall be sealed and super scribed with "Price Bid", Name of work & NIT No.	
13.2.4	Price bids of only techno-commercially accepted vendors shall be opened.	
13.2.5	Validity of the price bid submitted by the vendor should be minimum of 4 months period from the date of tender opening date (techno-commercial bid opening date.)	
13.3	Both the above two envelopes shall be kept in another sealed cover. The cover shall be super-scribed with "Quotation for (name of work), NIT No. & due date and shall be submitted in Tender Box kept in the Tender room of Purchase department at the 4th floor of the Main Administrative Building of BHEL, HEPP, Haridwar – 249403 and it should also contain Bidder address.	
13.4	In case the date of tender opening happens to be a BHEL declared holiday, tenders shall be opened on the next working day.	
13.5	Bids received mixed with both technical & Price bid documents without individual envelop will be rejected.	
14.0	GENERAL CONDITIONS:	
14.1	A point wise compliance statement shall be submitted by the party with reference to the above scope of supply against each clause/ sub-clause with relevant details & comments. Non-compliance to any of the clauses & quoting inadequate quantity can lead to dis-qualification of the offer.	
14.2	The Vendor is advised to inspect the machine before submitting the bid to ascertain all the relevant details required for successful completion of the work.	
14.3	The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list	

	of banned firms is available on BHEL web site www.bhel.com	
14.4	The Vendor should submit their best price at this stage itself and they will not be allowed to revise the price. Any revision / discount given by the vendor subsequently will be ignored.	
14.5	Check List as per Annexure 'D' must be enclosed with techno-commercial bid.	
14.6	The risk of delay/loss in transmission by post/courier rest with the bidder. Late tender will not considered at any stage of the tender.	
14.7	Conditional tender is likely to be rejected.	
14.8	BHEL reserves the right to go for Reverse Auction (RA) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. All bidders to give their acceptance for participation in RA . Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.	
14.9	The award of works will be made on basis of the total of Material cost, Spare Parts cost, Commissioning charges and all taxes, duties as applicable (Cost to BHEL).	
14.10	BHEL reserves the right to reject the lowest or any tender or accept any tender in full or in part without assigning any reasons whatsoever.	
14.11	If any information/documents submitted by the contractor are found false/fake at any stage, the tender will be rejected and earnest money deposited shall be forfeited debarring from the future participation in tenders.	
14.12	In case more than one contractor quotes equal L-1 rates, lottery shall be drawn among L-1 parties to decide one L-1 party.	
14.13	Documents not signed and stamped by the authorized signatory of the bidder shall not be accepted and considered for evaluation of the bid etc.	
15.0	<u>Pre Qualification Criteria (PQR) for Lathe machine-</u> Offers shall be considered only of those vendors/ manufacturers who meet the below mentioned criteria-	
15.1	Average annual turnover during the last 3 financial years ending 31 st March - 2015 should be at least Rs. 4 lakhs. Copies of balance sheets shall be submitted.	
15.2	Experience of having successfully completed " <u>similar works</u> " during last 7 years ending on 31th March 2016 shall be submitted. <u>Definition of "Similar Works":</u> Similar works means either of the following:-	

	Repair / maintenance/ reconditioning of any Lathe machine /Milling machine /Horizontal boring machine / Vertical boring machine/Radial drill/ grinding machine.	
15.3	Machine builders who have designed, manufactured, supplied and commissioned a machine of the above specifications during last 7 years ending on 31st March 2016 may also submit their offers.	
15.4	<p>Documentary evidence such as P.O. / W.O. Copies giving scope of supply and scope of work, final acceptance, MOM and performance certificate will have to be submitted by the vendor.</p> <p>The machine(s) whose documentary evidence has been submitted by the vendor as above should be running satisfactorily at their customer's premises on the date of publishing of notice inviting tender.</p> <p>Customer's details such as Name, Address, Telephone No., FAX No., email ID shall be submitted by the vendor along with documentary evidences. BHEL reserves the right to verify the information provided by the vendor with the vendor's customers directly. Vendor shall also agree to facilitate the visit of BHEL engineer(s) to his customer's Premises, if considered necessary by BHEL. Travel, boarding and lodging expenditure for such visits shall be borne by BHEL.</p>	

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