

ANNEXURE -A

NAME OF WORK : REPAIR OF HIGH SPEED MOTOR SPINDLES (10 nos.) OF STARRAG HX-MODEL MACHINES OF NBS.

Brief description: The spindles are Starrag make high frequency motor spindles of 15000 rpm with hybrid ceramic bearings used on 5 axis CNC machining cells manufactured by M/s Starrag, Switzerland. Details of available spindle data is attached as Annexure-D

Sl. No.	Description	Quantity	Accepted (Yes/No)	Deviation	Remarks
1	SCOPE OF WORK (For one spindle)				
1.1	ESSENTIAL WORKS	As fitted in the spindle			
E1	Replacement of ceramic hybrid/ special bearings.				
E2	Replacement of draw bar, hydraulic piston-cylinder for tool clamping.				
E3	Replacement of OTT tool clamping system.				
E4	Replacement of all hydraulic, coolant and pneumatic seals.				
E5	Tool clamping position setting i.e., clamps with tool, clamp without tool and unclamp position settings.				
E6	Other minor problems found after dismantling of the spindles, in addition to (E1) to (E5) above, have to be done by the vendor.				
1.2	<u>Optional works:</u>				
O1	Replacement of encoder (Lenord+Bauer, GEL-244) and encoder wheel.	1 No. each			
O2	Rewinding of the HF motor spindle.	1 No.			
O3	Replacement of analog sensor (ANALOG SENSOR OUTPUT SIGNAL 0-10 VDC, LINEAR RANGE SI 1 TO 5MM, UE 24 VDC BALLUFF PART NO. BAW M18ME-UAC50B-BP002-GS04)	1 No.			
O4	Replacement of temperature sensor (KTY_2066192)	2 nos.			
O5	Replacement of electrical connectors for encoder (Spindle side- EPIC_1437390, Machine side- EPIC_1437373)	1 No. each			
O6	Replacement of electrical connectors for sensor (Spindle side- KPTCE14_19PCMA_1719753, Machine side- KPTC6F14_19SDMA_1719744)	1 No. each			

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2	<u>SELECTION OF L1:</u>				
2.1	The selection of L1 will be made on the basis of the total of Material cost (Essential & Optional), Labour charges, packing & forwarding, freight & insurance and all taxes, duties as applicable (Cost to BHEL).				
2.2	Freight & transit insurance charges from BHEL, Haridwar to vendor's works and back shall be borne by the vendor. Vendor shall collect the defective spindles from BHEL, Haridwar and deliver the repaired spindles to BHEL, Haridwar.				
2.3	Packing & Forwarding, transit insurance, to & fro transportation charges, Applicable ED, Sales Tax, Service Tax etc should be clearly mentioned in the price bid.				
3	<u>SPLITTING THE CONTRACT:</u>				
3.1	In order to develop more indigenous vendors for the spindle repair, competitive pricing and completion of work in shortest possible time, it is decided to split the contract in 70-30 ratio. The vendor at L1 will be awarded the 70% of total work. Rest 30% of the work will be awarded to the vendor who matches the L1 rate. The L2 vendor will be given priority for 30% work and in case L2 disagrees for L1 rate then L3 will be considered and so on. In case no vendor other than L1 accepts the 30% work (at L1 rate), then the total contract will be awarded to L1 vendor.				
4	<u>PRE QUALIFYING CONDITIONS:</u>				
4.1	The vendors are to submit the documental proof, along with the techno-commercial bid, of manufacturing / repair of high frequency motor spindles of at least 15000 rpm and at least 20 KW in last five years. The vendors have to provide satisfactory performance letter from their customers.				
5	<u>INSPECTION OF THE SPINDLES BY THE BIDDERS BEFORE QUOTING:</u>				
5.1	The Vendors are advised to inspect the Spindles prior to quoting to ascertain all the relevant details required for successful completion of the work				
5.2	The vendors can inspect the spindles to be repaired, with prior intimation on any working day from 9:00 hrs to 16:00 hrs before the last date for submission of tenders.				

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6	<u>INSPECTION OF DEFECTIVE MOTOR SPINDLES AT BHEL, HARIDWAR BEFORE DISPATCH:</u>				
6.1	Inspection of all the items covered under scope of Work at Clause 1.2 (O1) to (O6) shall be carried out by BHEL and vendor's representatives at BHEL, Haridwar works.				
6.2	The optional items will be decided jointly by vendor and BHEL before taking the spindles by the vendor.				
7	<u>PRE-DISPATCH INSPECTION</u>				
7.1	Pre dispatch inspection of the spindle after repair work will be carried out by BHEL representatives at the vendor's works to verify the proper functioning of spindles through trial run and witness the checking of run out, overheating if any, clamping force etc. (As per the test chart provided by BHEL, Haridwar) Test chart is attached as Annexure- E.				
7.2	Vendor shall invite BHEL representatives for carrying out pre dispatch inspection after the completion of the work. The vendor shall inform BHEL for pre dispatch inspection at least 30 days in advance.				
7.3	Expenses of boarding and lodging of BHEL personnel during pre-dispatch inspection shall be borne by BHEL.				
8	<u>DELIVERY :</u>				
8.1	Maximum six months or earlier from the date of receipt of defective spindles by vendor at BHEL, Haridwar works to the date of receipt of the spindles at BHEL, Haridwar.				
8.2	<u>All the replaced items covered in Essential and Optional scope of work shall be returned to BHEL, Haridwar along with the repaired spindles.</u>				
9	<u>TRANSPORTATION & INSURANCE:</u>				
9.1	Transportation and transit insurance for the spindles will be borne by the vendor for the transportation from BHEL, Haridwar to vendor's works and back to BHEL, Haridwar.				
10	<u>COMMISSIONING:</u>				
10.1	The commissioning and testing of the repaired spindles on the respective machines will be done by BHEL.				
10.2	Maximum of 5 spindles can be commissioned on machines in one month.				

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11	<u>ACCEPTANCE CRITERIA:</u>				
11.1	After commissioning of the repaired spindles on the respective machines, Spindles will be accepted on the basis of the performance of the spindles w.r.t the following as per the spindle test chart: i) Temperature within tolerance range at maximum rated speeds and load. ii) Run out of the spindles with in the tolerance value. iii) Clamping force as per test chart of the spindles. iv) Voltage Feedback of the sensors within tolerance range for the positions of unclamp, clamp with tool and clamp without tool. v) Encoder signal within the tolerance range.				
12	<u>OFF-LOADING OF WORK:</u>				
12.1	Further offloading of the work either in part or in full is not permitted in any case without prior permission of Manager (WEX-NBS) otherwise contract is liable to be terminated at the discretion of BHEL, Haridwar.				
13	<u>EARNEST MONEY</u>				
13.1	The Earnest Money is to be paid by each bidder. <u>Earnest money must be submitted along with the techno commercial bid, failing which the tender will be rejected.</u>				
13.2	Earnest Money should be deposited in one of the following ways: i) Cash deposit at the cash counter of Finance deptt. of BHEL, Haridwar (As permissible under the Income Tax Act) ii) Pay Order iii) Demand Draft in favour of Sr. Manager (Finance/Works), BHEL Haridwar.				
13.3	Earnest Money deposit of unsuccessful offers shall be returned normally within 15 days of acceptance of award of work by the successful bidder.				
13.4	EMD by the tenderer will be forfeited if: i) After opening of the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates. ii) The tenderer does not commence the work within 15 days of receiving the spindle at its works.				

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14	<u>SECURITY DEPOSIT</u>				
14.1	The rate of security deposit will be as below: Upto Rs. 10 lacs : 10% Above Rs. 10 lacs upto Rs. 50 lacs : Rs 1 lac + 7.5% of the amount exceeding Rs. 10 lacs Above Rs. 50 lacs: Rs. 4 lacs +5% of the amount exceeding Rs. 50 lacs				
14.2	The security deposit should be submitted before the start of work in the following forms: i) Cash deposit at the cash counter of Finance deptt. of BHEL, Haridwar (As permissible under the income tax act) ii) Pay Order, Demand Draft in favour of Sr. Manager (Finance/Works), BHEL, Haridwar iii) Local cheques of Scheduled Banks, subject to realization. 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.				
14.3	Security deposit shall not carry any interest.				
14.4	i) EMD of successful tenderer can be converted and adjusted against the security deposit. ii) Security deposit shall be refunded to the vendor as follows: 50% security deposit amount shall be refunded to the vendor after successful completion of the project. Balance 50% of the security deposit amount shall be refunded after 6 months of maintenance/warranty period.				
15	<u>Bank guarantee for spindles</u>				
15.1	Vendor shall submit a Bank Guarantee for Rs. 2,25,000/= Per Spindle for the duration of the custody of spindles at their works.				
16	<u>Performance Bank Guarantee :</u>				
16.1	Vendor shall be required to submit a Performance Bank Guarantee (PBG) for 10% of the total work order/ contract value which shall be valid for a period of 12 months from the date of final acceptance of the repaired motor spindles.				
17	<u>COST OF TENDER DOCUMENTS:</u>				
17.1	The techno commercial bid must be accompanied with a bank draft of Rs. 1000/- (Rs. One thousand only) in favour of Sr. Manager (Finance/works) , HEEP, BHEL Haridwar towards cost of the tender documents, without which the quotations shall be rejected. The bank draft of tender cost should be enclosed in the Techno-commercial bid envelope.				

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18	<u>Warranty :</u>				
18.1	Vendor shall stand warranty of the repaired spindles for satisfactory working of Six months after successful commissioning of the repaired spindles.				
18.2	Vendor shall attend the calls for repair during the warranty period within 48 hours.				
19	<u>OFFER:</u> The offer should be submitted in two parts and in following manner.				
19.1	<u>TECHNO-COMMERCIAL BID</u>				
19.1.1	The envelope 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 Registration. No., TIN No., CST No., Experience Certificates, Audited Balance Sheet of last 3 years , Tender cost, EMD and Check List as per ANNEXURE 'C'.				
19.1.2	The envelope shall be super scribed with "Techno-Commercial Bid", Name of work & NIT No.				
19.1.3	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.				
19.1.4	The vendor must note that no prices are to be quoted/ mentioned in the techno-commercial offer.				
19.2	<u>PRICE BID</u>				
19.2.1	The second envelope shall contain only the price bid with separate price for materials (Essential and optional), labour cost, & applicable taxes & duties on Price Bid Format only as per ANNEXURE B				
19.2.2	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.				
19.2.3	The envelope shall be sealed and super scribed with "Price Bid", Name of work & NIT No.				
19.2.4	Price bids of only those vendors shall be opened whose techno commercial bids are acceptable.				
19.2.5	Both the above two envelopes shall be kept in another sealed envelope. The envelope 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, HEEP, Haridwar and it should also contain Bidder address.				

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20	TENDER SUBMISSION AND OPENING:				
20.1	Tender room location : Tender room of Purchase department at the 4th floor of the Main Administrative Building of BHEL, HEEP, Haridwar				
20.2	Tender submission time/ Date: 1:30PM / 11.4.2014				
20.3	Tender opening time/ date and venue : 2:00 PM / 11.4.2014 at venue Tender room mentioned at clause 20.1				
20.4	Accepting authority reserves the right to reject any or all bids without assigning any reason thereof.				
20.5	Quotations must be valid for at least 120 days.				
21	<u>TERMS OF PAYMENT</u>				
21.1	i) No advance or part payment shall be made. ii) 100% Payment will be made within 1 month of the final acceptance of the spindles for satisfactory operation.				
21.2	All the payment shall be made through e-payment after submission of following documents. i) E-payment form duly filled (Form will be provided by BHEL) ii) Income tax exemption letter(if applicable) iii) Details of service tax iv) Regular Invoice v) Payment will be credited directly to vendor's bank account vi) To enable us to avail MODVAT credit for excise duty, all the relevant papers are to be submitted to BHEL				
21.3	Excise duty & CST/VAT will be paid on material cost and service tax will be paid on labour charges at actuals. Related original documents to be submitted for availing MODVAT credit by BHEL.				
22	<u>Late Delivery Penalty Clause :</u>				
22.1	LD @ ½% per week subject to a maximum of 10% of the contract value shall be applicable for delay in deliveries. The date of delivery is as per clause no. 8.1. Reasons attributed to BHEL will not be accounted for late delivery penalty. Vendor should intimate regarding PDI at least 30 days in advance.				

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23	<u>Risk Purchase Clause</u>				
23.1	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. Vendor does not agree to above clause, their offer is liable to be rejected. In case any vendor accepts risk purchase clause initially and subsequently declines to honour the term in the eventuality of RISK PURCHASE, they may be banned for business with BHEL.				
24	<u>General Conditions :</u>				
24.1	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.				
24.2	The Vendor is advised to inspect the spindles prior to quoting to ascertain all the relevant details required for successful completion of the work.				
24.3	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				
24.4	The award of works will be made on basis of the total of Material cost , labour cost, packing and forwarding, freight and insurance, and all taxes, duties as applicable (Cost to BHEL)				
24.5	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.				
24.6	Vendor must compulsorily quote the quantity exactly as per the Scope. No reduction in quantity/ work as per the above Scope is permissible.				
24.7	Vendor shall arrange for adequate protection and packing of the consignment so as to avoid loss and damage during transit and also take appropriate measures to prevent metal parts from rusting and corrosion during transit. Handling instructions shall be clearly printed /painted on the packages. Each package should carry a detailed packing slip.				
24.8	Vendor shall be responsible for any loss/damage during transit due to defective/inadequate packing.				