

**Annexure-A**

SCOPE OF SUPPLY & WORK FOR RETROFITTING OF SCALES OF X & X1 AXIS  
ON DANOBAT GANTRY MILLING MACHINE PLAN NO. 1-018 IN BL-11

Purpose: Sony Magnescale MSS 101 along with reader head (HA 101), cable, signal processing units (MD-10A) installed on the machine shall be replaced and commissioned with existing CNC controller & drive as per following scope of supply and work. Existing CNC Controllers and Drives used on CNC lathe is SINUMERIK 840C CNC controller & Simodrive 611A. Both the axis X&X1 operates in synchronisation.

S.No.	Description	Qty.	Compliance	Remarks
<b>1.0</b>	<b>Measuring System for X &amp; X1 Axis</b>			Vendor to confirm
1.1	Heidenhain/Sony make scale with housing/protection covers and 4800mm traverse. (1 No. for each Axis X & X1)	1 Set		
1.2	Scanning Head/Reader Head for the above scale. (1 No. for each Axis X & X1)	1 Set		
1.3	Cable along with connectors for connecting the Scanning Head/Reader Head to existing system. Max length of the cable is 15 meter( For X Axis).	1 Set		
1.4	Signal Processing units ( if required) for interfacing the measuring system to CNC System.	1 Set		
1.5	Mounting for the Scales.	1 Set		
1.6	Mounting Brackets for the Scanning Heads/Reader Heads.	1 Set		
1.7	Accessories required to synchronise the reference point of both the axis.	1 Set		
1.8	Protection covers required for protecting the scale.	1 Set		
1.9	Conduits for protecting the cable running from scanning head/reader head to Electrical Panel.	1 Set		
1.10	Any other accessory/item required for installation & commissioning.	1 Set		
<b>2.0</b>	<b>Spare Items:</b>			
2.1	Scanning Head/Reader Head same as supplied above	2 Nos.		
2.2	Signal Processing units (if used)	2 Nos.		
2.3	Preassembled Cable with max length used	1 No		
<b>3.0</b>	<b>Documents (apart from 2 sets hard copy 1 set to be supplied in CD)</b>			
3.1	Document of the Scale with details of mounting & adjustments.	2 Set		
3.2	Document of the Scanning Head/Reader heads with details of the signals & connections.	2 Set		
3.3	Document of the Signal Processing Unit (if used).	2 Set		
3.4	Details of the mounting brackets for scanning head/ reader head	2 Set		
<b>4.0</b>	<b>Scope of work:</b>			
4.1	Dismantling of existing Sony Scale & Reader Head Assembly.			
4.2	Mounting of the new Scale & Scanning head/reader head in place of existing scale.			
4.3	Routing of the cable & interfacing of the new Scanning head/reader head with existing system. All accessories required for mounting and installation of new scale & scanning head/ reader heads shall be supplied by the vendor.			
4.4	Laser calibration of the new installed scales and generation of compensation data.			

4.5	Referencing & synchronisation of both axis.		
<b>5.0</b>	<b>Warranty:</b>		
5.1	Party shall stand a Warranty for all the supplied material & work for a period of 12 months from the date of successful commissioning & final acceptance (Clause No. 6.0).		
<b>6.0</b>	<b>Final Acceptance:</b>		
6.1	Final Acceptance shall be at HEEP, BHEL, Haridwar after: a) Completion of the scope of supply and scope of work at BHEL as in Clause No. 1 to 4 above . b) Successful Commissioning & Demonstration of various functions as per scope of supply & work.		
<b>7.0</b>	<b>Delivery:</b> ( if delivery period is not offered/ accepted, offer will not be considered for further processing)		
7.1	<b>Material:</b> Max. 4 months from the date of award of contract. Early delivery shall be acceptable subject to approval by BHEL.		
7.2	<b>Work :</b> Within 10 days from the date of release of machine for work.		
<b>8.0</b>	<b>Late Delivery Penalty (LD) Clause:</b>		
8.1	LD @ 0.5% per week subject to a maximum of 10% of the material cost including spare parts shall be applicable for delay in deliveries.		
8.2	In case of delays in commissioning after handing over the machine as per Clause No. 7.2 penalty @ 2% per week subject to a max. of 10% of the Commissioning Charges shall be applicable for delay beyond scheduled commissioning date of work for reasons attributed to the party. Net delay for the purpose of calculating late commissioning will be considered as the delay in work completion.		
8.3	However total LD on account of Clause No. 8.1 & 8.2 will be limited to 10% of Work Awarded Value.		
<b>9.0</b>	<b>Submission of Bill of Material (BOM)</b>		
<b>9.1</b>	Party has to submit the Bill of Material (BOM) to BHEL for approval 7days before the dispatch of the material. Dispatch is subject to clearance.		
<b>10.0</b>	<b>Earnest Money Deposit (EMD):</b>		
10.1	Vendors have to deposit Rs. 40,000/- as the EMD. EMD may be deposited in cash ( as permissible under Income tax Act), through pay order or demand draft in favor of Account Officer, HEEP, BHEL, Haridwar payable at Haridwar only.		
10.2	EMD shall be converted to Security Deposit if the work is awarded.		
10.3	EMD of unsuccessful vendors shall be refunded back normally within 15 days of acceptance of award of work by the successful vendor.		
10.4	EMD shall not carry any interest.		
10.5	EMD by vender will be forfeited as per tender document, if a) After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates. b) The tenderer does not commence the work within the period as per LOI/Contract.		

Vendor to confirm

10.6	<p><b>Offers without EMD will be rejected and will not be considered for evaluation.</b> 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 -1 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 deficiency 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>		Vendor to confirm
<b>11.0</b>	<b>Security Deposit (SD):</b>		
11.1	<p>Successful vendor shall deposit security. The rate of security deposit will be as below:</p> <ul style="list-style-type: none"> <li>- For work Up to Rs. 10 Lacs : 10% of work order value.</li> <li>- Above Rs. 10 Lacs up to Rs. 50 Lacs : Rs. 1 Lac + 7.5% amount exceeding Rs 10 Lacs.</li> <li>- Above Rs. 50 Lacs: Rs. 4 Lacs + 5% amount exceeding Rs. 50 Lacs.</li> </ul>		
11.2	<p>The security deposit should be submitted before the start of work in the following forms:</p> <ul style="list-style-type: none"> <li>i) Cash (As permissible under the Income Tax Act)</li> <li>ii) Pay Order / Demand Draft in favour of Account officer, HEEP, BHEL, Haridwar payable at Haridwar</li> <li>iii) Local cheques of Scheduled Banks, subject to realization.</li> <li>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.</li> </ul>		
11.3	Security Deposit shall not carry any interest.		
11.4	EMD of successful tenderer can be converted and adjusted against the Security Deposit.		
11.5	100% of the Security Deposit amount shall be refunded to the vendor after final acceptance of the machine. SD shall be released after the submission of Performance Bank Guarantee(PBG) by the vendor.		
<b>12.0</b>	<b>Performance Bank Guarantee (PBG):</b>		
12.1	Vendor shall be required to submit a performance bank guarantee (PBG) for 10% of the total work order value which shall be valid for total warranty period as per Clause No. 6.1 after final acceptance of machines.		
12.2	The PBG shall be submitted on a non-judicial stamp paper of value not less than Rs.100/- issued by any one of the nationalised banks.		
<b>13.0</b>	<b>Payment Terms:</b> (Note : No advance payment shall be made to the vendor.)		
13.1	<p>Part payment will be made after completion of following milestones:</p> <ul style="list-style-type: none"> <li>i) First payment of 80% of material cost along with 100% taxes &amp; duties (Excise duty, CST/VAT as applicable) shall be payable after receipt of material at HEEP, BHEL, Haridwar and inspection (in presence of vendor) &amp; acceptance of material. Vendor has to ensure that all relevant documents are submitted.</li> <li>ii) Final payment of balance 20% of material cost, 100% of commissioning cost including service taxes as applicable and refund of 100% of the Security Deposit amount will be made after final acceptance, subject to submission of PBG as per Clause No. 12.0 above.</li> </ul>		

13.2	All the payments shall be made through e-payment after submission of following documents along with first bill. i) E-payment form duly filled (Form will be provided by BHEL). ii) Income tax exemption letter( if applicable).		Vendor to confirm
13.3	Excise duty & CST/VAT will be paid on material cost and service tax will be paid on commissioning charges at actual. Related original documents to be submitted for availing MODVAT credit by BHEL.		
13.4	Timely submission of CENVATABLE invoices along with necessary documents for availing CENVAT (Excise duty, Service Tax & VAT) credit by BHEL. <b><u>Note: Wherever CENVAT credit cannot be availed within given time limit due to delay in submission of invoices or for any other reasons attributed to vendor, loss of such CENVAT credit will be recovered from such vendor.</u></b>		
<b>14.0</b>	<b>Risk Purchase Clause :</b>		
14.1	In case of delays in supplies / defective supplies or non-fulfilment 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.		
14.2	If 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.		
<b>15.0</b>	<b>Vendor's Obligation:</b>		
15.1	The vendor shall bring all types of hand tools including pneumatic/electrical drill machines, Laser equipment's, and grinders along with general purpose measuring instruments and testing equipment with them for successful commissioning of the machine & supplied system.		
<b>16.0</b>	<b>Commercial Terms:</b>		
16.1	Prices shall be quoted on "Firm Price" basis only. The prices should only on F.O.R HEEP-BHEL, Haridwar basis inclusive of Packing, Forwarding Charges, Freight & Insurance. Installation & Commissioning Charges, applicable % of ED, VAT , Sales Tax, Service tax should be clearly indicated in attached price bid format as per Annexure-B.		
16.2	Validity of offer shall be for a minimum period of 120 days from the date of Tender Opening.		
16.3	The material will be dispatched to Central Plant Stores, HEEP, BHEL, Haridwar, with instructions to forward the same to Sr. Engineer (WEX-CNC-Bl. 1), HEEP-BHEL, Haridwar.		
<b>17.0</b>	<b>BHEL's Obligation:</b>		
17.1	Existing electrical schematic of the machine shall be provided by BHEL to the vendor.		
17.2	Crane facility and lifting tackles like slings, D-Shackles shall be made available while working in BHEL premises only.		
17.3	Facilities of minor welding, brazing , minor machining facility required for rectification/fitting of supplied material, subject to the extent available in BHEL, shall be provided in BHEL premises only.		
17.4	Any civil work required for the erection of panel shall be done by BHEL.		
17.5	Electricity, water & air shall be provided by BHEL at one point only.		
17.6	The above requirements should be informed by the vendor in advance.		
17.7	Consumables like lubricants, kerosene oil, cotton waste etc. will be provided by BHEL during execution of works inside BHEL premises only.		
<b>18.0</b>	<b>General Conditions:</b>		

18.1	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.		Vendor to confirm
18.2	The Vendor is advised to inspect the machine prior to quoting to ascertain all the relevant details required for successful completion of the work. Any part not mentioned above but required for retrofitting and running of the machine shall be in the scope of the vendor.		
18.3	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		
18.4	The award of work will be made on basis of the total of Material cost (including spares), Commissioning charges, P & F, freight and insurance i.e. "Cost to BHEL".		
18.5	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.		
18.6	RULES AND REGULATIONS OF THE CENTRAL/STATE GOVERNMENT: In the event of award of contract, vendor will have to comply and abide by all the laws/enactment of state and central government. Documents regarding registration with Sales Tax and Excise authorities may also to be forwarded along with income tax clearance.		
18.7	BHEL reserves the right to cancel the tender at any stage of tendering till signing of agreement without assigning any reason(s). The tender cost in that event shall not be refunded.		
18.8	If any information/documents submitted by the vender are found false/fake at any stage, the tender submitted by the vender will be cancelled and earnest money deposited shall be forfeited debarring from the future participation in tenders.		
18.9	In case more than one party quotes equal L-1 rates, lottery shall be drawn among L-1 parties to decide one L-1 party.		
18.10	Conditional tender is likely to be rejected.		
18.11	The risk of delay/loss of tender documents by post/courier rest with the bidder.		
18.12	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 ink signed & stamped by the vendor.		
19.0	<b>Offer:</b> The offer should be submitted in two parts and in following manner.		
19.1	Techno-commercial Bid : i) The first envelop shall contain the Techno-Commercial Bid (ANNEXURE 'A') with technical details and commercial terms & conditions along with Unpriced priced bid as per ANNEXURE 'B' with clear undertaking that no deviation from BHEL's price bid format , relevant documents like copies of ESI, PF Code, PAN No., Service Tax Reg. No., TIN No., CST No., Experience Certificates, Audited Balance Sheet of last 3 years, Tender fees, EMD and all the documents related to Clause No. 21 (Demand draft for tender document cost shall also be accompanied in case tender documents are down loaded from BHEL website. Offers without the EMD and Tender fee will not be considered except having valid NSIC certificate). ii) The envelop shall be super scribed with "Techno-Commercial Bid", Name of work, NIT No. and Date of Opening. iii) The vendor must note that no prices are to be quoted/ mentioned in the Techno-Commercial offer.		

19.2	<p><b>Price Bid :</b></p> <p>i) The second envelope shall contain only the price bid with separate price for material, spare, Installation &amp; Commissioning &amp; applicable taxes &amp; duties on Price Bid Format only as per ANNEXURE 'B'.</p> <p>ii) Any other information in the price bid shall not be considered and the quotation is likely to be rejected. Price bid document shall be ink signed &amp; stamped by the bidder at the bottom of the page.</p> <p>iii) The envelope shall be sealed and super scribed with "Price Bid", Name of work &amp; NIT No.</p>		Vendor to confirm
19.3	Price bids of techno commercially accepted vendors shall be opened in presence of available vendors. Date and time will be intimated to the qualified vendors.		
19.4	Both the envelopes shall be kept in another sealed cover. The cover shall be super-scribed with "Tender for (name of work), NIT No. & due date" and shall be submitted in the "Tender Box, placed at Tender Room, at IVth Floor, Main Administrative Building, HEPP, BHEL, Haridwar - 249403 Uttarakhand". It should also have the Bidder's name and contact address.		
<b>20.0</b>	<b>Packing:</b>		
20.1	Supplier 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.		
20.2	Supplier shall be responsible for any loss/damage during transit due to defective/inadequate packing.		
<b>21.0</b>	<b>Pre Qualifying Conditions:</b> (Offer only from the vendors meeting the following conditions will be processed further.)		
21.1	Average Annual financial turnover during the last 3 years, ending 31st March 2015, should be at least Rs. 4.38 Lacs. Vendor should submit Audited balance sheets for the last three years.		
21.2	<p>The Vendor must have successfully completed the similar projects during last seven years ending 31st December 2015 and these projects should fulfil either of the following:</p> <p>a) Three similar projects with each project costing not less than Rs. 5.84 Lacs. or</p> <p>b) Two similar projects with each project costing not less than Rs. 7.3 Lacs. or</p> <p>c) One similar project with project costing not less than Rs. 11.68 Lacs.</p> <p><b>Definition of Similar project:</b> Successfully commissioning of Heidenhain/Sony Scales on CNC machines with Siemens/Fanuc Make CNC Control System or Retrofitting/Reconditioning of CNC machine along with replacement of measuring system with Heidenhain/Sony Make Scales.</p>		
21.3	The above retrofitted machines should be running satisfactorily for at least 6 months prior to NIT date. 6 Month period will be calculated on the basis of Commissioning Certificate/MOM. Vendor to provide P.O./ W.O copies and commissioning / performance certificates / relevant MOM for satisfactory operation of the above retrofitted systems along with Name, Address & Contact details of their customer. BHEL reserves the right to verify the information provided.		

