

Annexure-A

Scope for Retrofitting of Batliboi Knee type CNC milling machines (Model No. BFH-15) Plan No. 2-459 & 2-460, TBM, BI-3, BHEL Haridwar

Brief About Machine: Each machine comprises of three axes and one spindle. All three axes are CNC controlled & spindle is contactor controlled induction motor with star-delta changeover. Existing CNC Systems are Sinumerik 810GA1 and have to be retained. Existing measuring system are 11 microamperes of Heidenhain make and have to be replaced. Existing drives are 6RB2030 DC feed drive with 1HU3 DC servomotors which have to be replaced.

Sl. No	Description	Quantity for Machine 1 (2-459)	Quantity for Machine 2 (2-460)	Accepted (Yes/No)	Deviation	Remarks
1.	MATERIAL SUPPLY INCLUDING SCOPE OF WORK					
1.1	AC SERVO MOTORS					
1.1.1	1FT6 Siemens AC servo motor for X axis Mn=18 Nm or above; 2000 RPM or above; Shaft with fitted key and keyway. Outlet connector direction should opposite to shaft end of the motor. The motor dimensions should be less than or equal to 1FT5076-1AC71 due to space constraints during movement. The motor enters into housing under the table during movement.	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.1.2	1FT6 Siemens AC servo motor for Y axis with holding brake Mn= 37 Nm or above; 2000 RPM or above; Shaft with fitted key and keyway	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.1.3	1FT6 Siemens AC servo motor for Z axis Mn= 18 Nm or above; 2000 RPM or above; Shaft with fitted key and keyway.	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.2	AC SERVO DRIVES					

	Siemens make Simodrive 611U/ Sinamics AC Servo drive for Feed motor control with input voltage of 415 VAC (+/- 10%), 3 phase 3 wire system.					<u>Vendor to provide details & comply</u>
1.2.1	Vendor to include input transformer (if required)	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.2.2	Servo drives to be provided with analogue speed reference 0 to +/- 10 VDC					<u>Vendor to provide details & comply</u>
1.2.3	IR / Active Line module of suitable capacity	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.2.4	Line filter with HF Commutating Choke of suitable capacity	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.2.5	LT/ Single line module/Double motor module of suitable capacity (for X & Z axis motor)	01 Set	01 Set			<u>Vendor to provide details & comply</u>
1.2.6	LT/ Single line module of suitable capacity (for Y axis motor)	01 Nos.	01 Nos.			<u>Vendor to provide details & comply</u>
1.2.7	Controller card/ Control unit for X, Y & Z axes feed motors	01 Set	01 Set			<u>Vendor to provide details & comply</u>
1.2.8	Pre-assembled Encoder cables 10 meters or above for 1 FT6 motors	03 Nos.	03 Nos.			<u>Vendor to provide details & comply</u>
1.2.9	Power cable 10 meters or above (for X axis)	01 Nos.	01 Nos.			<u>Vendor to provide details & comply</u>
1.2.10	Power cable with brake 10 meters or above (for Y axis)	01 Nos.	01 Nos.			<u>Vendor to provide details & comply</u>
1.2.11	Power cable 10 meters or above (for Z axis)	01 Nos.	01 Nos.			<u>Vendor to provide details & comply</u>
1.2.12	Shield terminal plates and earthing schematic for all the modules	01 Set	01 Set			<u>Vendor to provide details & comply</u>
1.2.13	The AC Servo drive will have a common enable for the DC Link section and individual enables for the feed drives.					<u>Vendor to provide details & comply</u>
1.2.14	The AC Servo drive should provide potential free contacts for possible alarms, drive ready for individual axes for interfacing with the CNC control.					<u>Vendor to provide details & comply</u>

1.2.15	Pre-assembled communication cable to connect laptop with the drives for commissioning and diagnostic purposes.	01 No.				<u>Vendor to provide details & comply</u>
1.2.16	Licensed Drives commissioning software on CD/ DVD.	01Set				<u>Vendor to provide details & comply</u>
1.3	<u>MEASURING SYSTEM</u>					
1.3.1	The existing X-axis scale & transducer has to be replaced with a suitable scale & transducers (1 Vss output) of Heidenhain make with +/- 5 micron accuracy grade. Measuring length of scale should be 1240 mm or more. The alignment of the scale and transducer shall be in the scope of work. Ensuring same or better accuracy parameters after completion of work shall be in vendor's scope. The existing scale is Heidenhain make Type LS 707 & the length is 1240 mm.	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.3.2	The existing Y-axis scale & transducer has to be replaced with a suitable scale & transducers (1 Vss output) of Heidenhain make with +/- 5 micron accuracy grade. Measuring length of scale should be 470 mm or more The alignment of the scale and transducer shall be in the scope of work. Ensuring same or better accuracy parameters after completion of work shall be in vendor's scope. The existing scale is Heidenhain make Type LS 704 & the length is 470 mm.	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.3.3	The existing Z-axis scale & transducer has to be replaced with a suitable scale & transducers (1 Vss output) of Heidenhain make with +/- 5 micron accuracy grade. Measuring length of scale should be 470 mm or more. The alignment of the scale and transducer shall be in the scope of work. Ensuring same or better accuracy parameters after completion of work shall be in vendor's scope. The existing scale is Heidenhain make Type LS 704 & the length is 470 mm.	01 No.	01 No.			<u>Vendor to provide details & comply</u>
1.3.4	Signal Converter 1 V ss to 11 microamperes (for interfacing with existing Sinumerik 810GA1 CNC system since the CNC system	05 Nos.	05 Nos.			<u>Vendor to provide details & comply</u>

	accepts only 11 microamperes position feedback inputs)					
1.3.5	Pre-assembled HMT make Position feedback cables from measuring system to CNC system including transducer adapter cables- Length: 10 meters or above with suitable connectors.	04 Sets	04 Sets			<u>Vendor to comply</u>
1.3.6	Mounting brackets, mounting plates etc. for mounting of scales and transducers and other items required for ensuring accuracy and repeatability of the feed axes.	01 Set	01 Set			<u>Vendor to comply</u>
1.4	ELECTRICAL FEATURES					
1.4.1	Operator Panel should be aesthetic & with the following features: a) Free standing floor mounted of suitable height b) CNC System 810GA1, MCP, I/O Boards are to be mounted in the supplied operator panel. c) Height of the operator panel & display to be suitable for person of average height (5'5") d) Fitted with side mounted suitable air conditioner e) Swivel of minimum 180 degrees f) Front side should have handles for rotating by hand g) The rear door should be on hinges and not screw mounted h) Illumination light with switch for working in the operator panel i) 220 VAC/ 5 Amp 3-pin service socket and switch	01 No.	01 No.			<u>Vendor to comply</u>
1.4.2	It is proposed that the existing electrical cabinets -1 Nos. (Size: Height: 127 cm, Width: 125 cm, Depth: 40 cm) are to be replaced. The cabinet should not have rear opening. The starting height of the cabinet from floor level should be 340 mm and the size should be similar as the existing cabinet with suitable side mounted air-conditioner. No elements should be mounted on the back-side of the panel.	01 Set	01 Set			<u>Vendor to comply</u>
1.4.3	L&T/Siemens/ABB/ Schneider Electric make MCCB- 100 Amps with rotary handle kit for switching on the power supply of panel & machine mounted on the outer left side of the panel.	01 No.	01 No.			<u>Vendor to comply</u>

1.4.4	Suitable Semiconductor, HRC fuses, fuse bases of GE/ SIEMENS/ BUSSMAN make for overload protection.	02 Sets	02 Sets			<u>Vendor to comply</u>
1.4.5	The complete LV switchgear of the machine including overloads, relays, contactors, MCBs etc. is to be supplied & interfaced by the vendor as per existing scheme.	01 Set	01 Set			<u>Vendor to comply</u>
1.4.6	Electrical Cabinet to be equipped with a) Door limit switch operated panel tube lights with ON/ OFF switch b) 5 Amp & 15 Amp 3-pin service socket and switch	01 Set	01 Set			<u>Vendor to comply</u>
1.4.7	Additional Keys, Push-buttons & Selector switches required on the operator panel for operation of the machine to be provided by the vendor	01 Set	01 Set			<u>Vendor to comply</u>
1.4.8	DC Regulated Power Supply 24V DC, 20 Amps of Siemens/Phoenix/M-System for CNC system & Input/ Outputs.	02 Nos.	02 Nos.			<u>Vendor to comply</u>
1.4.9	DC Regulated Power Supply 24V DC, 10 Amps of Siemens/Phoenix/M-System for machine elements.	02 Nos.	02 Nos.			<u>Vendor to comply</u>
1.4.10	DC Injection braking unit for Spindle motor : 11 KW/ 1440 RPM	01 No.	01 No.			<u>Vendor to comply</u>
1.4.11	Sealed machine light of reputed make for machine illumination (220/24V) to be installed.	02 Nos.	02 Nos.			<u>Vendor to comply</u>
1.4.12	Wires for rewiring of the entire machine including Control signal & Power cabling (including Cabling to Spindle & feed motors). The vendor to note that the entire machine has to be rewired. Input Power Supply to the machine will be provided by BHEL. The cables also include the following:	01 Set	01 Set			<u>Vendor to comply</u>
1.4.12.1	Pre-assembled Round I/O Cables from I/O board to Terminal strip converter (HMT Part no. 6FC9340-8X) for CNC System 810 GA1 of 10 meters length	06 Nos.	06 Nos.			<u>Vendor to comply</u>
1.4.12.2	Pre-assembled Cables for Feed drives from measuring board of CNC system (HMT Part no. 6FC9340-8R) of 10 meters length	02 Nos.	02 Nos.			<u>Vendor to comply</u>
1.4.12.3	Pre-assembled cables from incremental linear measuring system to measuring board (HMT Part no. 6FC9340-8Q) of 10 meters length	04 Nos.	04 Nos.			<u>Vendor to comply</u>

1.4.13	Vendor should provide the proposed electrical schematic along with bill of material to BHEL for approval prior to pre-dispatch inspection.					<u>Vendor to comply</u>
1.4.14	Terminal boxes, screwed terminal blocks, bus bars, transformers etc. as required per the new electrical scheme should be provided of reputed makes viz. Wago, Phoenix contact etc.					<u>Vendor to comply</u>
1.5	OTHER FEATURES					
1.5.1	Design and supply of intermediate flanges, couplings and any other parts required for motor mounting.	01 Set	01 Set			<u>Vendor to comply</u>
1.5.2	One additional set of keys for Electrical cabinet & Operator Panel locks	01 Set	01 Set			<u>Vendor to comply</u>
1.5.3	Oil, chip & dust-proof Metallic/ PVC Cable drag chains and end covers/ brackets of IGUS/ Sur Henning/ Electromag make. Existing drag chain details are as below: a) Drag chain length are 1320mm (for X axis), 750 mm (for Y and Z axis). b) Bending radius: 70 mm (for X axis), 90 mm (for Y & Z axis) c) Tray for drag chain to be repaired/ modified. d) One additional drag chain (for X axis) to be supplied complete with end-covers and brackets.	01 Set	01 Set			<u>Vendor to comply</u>
1.5.4	Lapp make hose pipes, DIN rails (5 meters), cable ducts (5 meters), insulated lugs(0.5, 1.0, 1.5 sq. mm 200 nos. each & 2.5, 4.0 sq. mm 100 nos. each), printed ferrules (0-9 of 1.0 & 1.5 sq. mm 200 each and A-Z of 1.0 & 1.5 sq. mm 100 each) and other material required for the wiring of machine and panel.	01 Set	01 Set			<u>Vendor to comply</u>
1.5.5	Party shall supply all clamps, fixtures and fasteners required to complete the job.	01 Set	01 Set			<u>Vendor to comply</u>
1.5.6	Any other material not mentioned above but found necessary to complete the retrofitting job, shall be in party's scope of supply	01 Set	01 Set			<u>Vendor to comply</u>

2.	<u>COMMISSIONING:</u>					
2.1.	Party shall undertake commissioning of all the supplied components at HEEP, BHEL, Haridwar. All material required for commissioning of both the machines shall be supplied by the party free of cost and obligation. All commissioning materials shall be supplied by party.					<u>Vendor to comply</u>
2.2	Existing PLC program (S5) has to be modified to incorporate all the drive signals, all possible alarms, suitable interlocking and their display on CNC screen. Both the machines are fitted with Sinumerik 810GA1 control, which have to be retained.					<u>Vendor to comply</u>
3.	<u>FINAL ACCEPTANCE:</u>					
3.1	<p>Final Acceptance shall be at HEEP, BHEL, Haridwar after:</p> <ol style="list-style-type: none"> Upon completion of the scope of supply and scope of work at BHEL. Final acceptance shall include clearance of all pending issues related to the work contract. Successful Commissioning & Demonstration of various cycles and control functions as envisaged in the technical scope. Successful machining of presently being machined components as mentioned below: <ol style="list-style-type: none"> Internal fillet on machine plan no. 2-459 for two types of blades (5 nos. each for T4 & TX blades). Internal profile on machine plan no. 2-460 for two types of blades (5 nos. each for T4 & TX blades). The blank raw material, tooling, fixture & programs for machining of the blades will be provided by BHEL. After settlement of all pending issues related to work and supply, a certificate for Completion of works in all respect shall be released within 15 days by Production and Maintenance personnel of BHEL which will be the referred 					<u>Vendor to comply</u>

	document for Final Acceptance and final payment to the vendor.					
						<u>Vendor to comply</u>
4.	<u>DELIVERY:(IF DELIVERY PERIOD IS NOT OFFERED/ ACCEPTABLE, OFFER WILL BE REJECTED</u>					
	i. Material: 24 weeks from the date of release of the Work order. ii. Work : 45 days from date of release of each machine for work. iii. Vendor to note that early delivery shall be acceptable.					<u>Vendor to comply</u> <u>Information to vendor</u>
5	<u>DOCUMENTATION</u>					
	Following documents shall be supplied by the Party:					
5.1	Technical and Service manuals of the AC servomotors in hard copy.	03 Sets	03 Sets			<u>Vendor to comply</u>
5.2	Commissioning and service manuals of the AC servo drive	03 Sets	03 Sets			<u>Vendor to comply</u>
5.3	Parameter lists of Feed drive on CD.	01 Set	01 Set			<u>Vendor to comply</u>
5.4	New electrical schematic of the machine	03 Sets	03 Sets			<u>Vendor to comply</u>
5.5	Instructions for data back-up & restoration for Feed drives	03 Sets	03 Sets			<u>Vendor to comply</u>
5.6	All documentation, Feed Drive parameters & back-up on CD	01 Set	01 Set			<u>Vendor to comply</u>
5.7	Documentation of all bought-out items	03 Sets	03 Sets			<u>Vendor to comply</u>
6	<u>SPARE PARTS (TO BE COMPULSORILY QUOTED OTHERWISE OFFER WILL BE REJECTED) :</u>					
	Party shall compulsorily quote following spare parts:					
6.1	Line filter with Choke	1 Set				<u>Vendor to provide details & comply</u>
6.2	LT/ Single line module/Double motor module (for X & Z axis motor)	01 No. as used on machine				<u>Vendor to provide details & comply</u>
6.3	LT/ Single line module (for Y axis motor)	01 No as				<u>Vendor to provide</u>

		used on machine				<u>details & comply</u>
6.4	Controller card/Control unit for X, Y & Z Axes	01 No. as used on machine				<u>Vendor to provide details & comply</u>
6.5	Scale & Transducers (including signals Converters)	01 No. of each type				<u>Vendor to provide details & comply</u>
7	<u>WARRANTY:</u>					
	Party shall stand warranty for all the supplied material and work executed for a period of one year from the date of successful commissioning of each machine at HEEP, BHEL, Haridwar.					<u>Vendor to comply</u>
8	<u>TRAINING:</u>					
8.1	Party shall impart training to BHEL staff, for operation & maintenance of the system supplied by them during installation & commissioning. Party to provide practical training on how to replace & synchronise the motor encoder using the drive software.					<u>Vendor to comply</u>
8.2	Vendor to arrange one week's training for Maintenance & commissioning of Drive system at SIEMENS training centre. Expenses for Boarding & Lodging of BHEL personnel during training shall be borne by BHEL.					<u>Vendor to comply</u>
9	<u>VENDOR'S OBLIGATION:</u>					
	The Vendor shall bring all tools, tackles and testing equipment with them for successful commissioning of supplied system.					<u>Vendor to comply</u>
10	<u>QUALIFYING CONDITIONS</u>					
10.1	Average Annual financial turnover during the last 3 years, ending 31st March 2011, should be at least ₹ 18.81 Lacs . Vendor should submit Audited balance sheets for the last three years.					<u>Vendor to provide details & comply</u>
10.2	The Vendor must have successfully retrofitted CNC machines with					<u>Vendor to provide</u>

	<p>Simodrive 611/ Sinamics Feed Servo drive system during last seven years ending 31st March 2012 and should be either of the following:</p> <p>a. Three projects of CNC machines retrofitted with Simodrive 611/ Sinamics Feed Servo drive system with each project costing not less than ₹ 25.08 Lacs.</p> <p>or</p> <p>b. Two projects of CNC machines retrofitted with Simodrive 611/ Sinamics Feed Servo drive system with each project costing not less than ₹ 31.35 Lacs.</p> <p>or</p> <p>c. One project of CNC machines retrofitted with Simodrive 611/ Sinamics Feed Servo drive system with the project costing not less than ₹ 50.16 Lacs.</p> <p>The above retrofitted machines should be running satisfactorily for at least 6 months prior to 31st March'2012. 6 months period will be calculated on the basis of commissioning certificates provided.</p> <p>Vendor to provide P.O./ W.O copies and commissioning/ performance certificates 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.</p>					<u>details & comply</u>
11	<u>LATE DELIVERY PENALTY (LD) CLAUSE:-</u>					
11.1	<p>LD @ ½% per week subject to a maximum of 10% of the Material cost including spare parts shall be applicable for delay in deliveries.</p> <p>The time period from invitation date for Pre dispatch inspection from vendor to the date of arrival of Pre Dispatch Team to vendor's works and any other reasons attributed to BHEL will not be accounted for in delivery period. This period will be excluded for the purpose of calculating LD. Vendor should intimate regarding PDI 7 days in advance only</p>					<u>Vendor to comply</u>

11.2	LD @ ½ % per week subject to a max. of 10% of the Commissioning Charges shall be applicable for delay beyond scheduled commissioning date (which will be 45 days from date of release of each machine for work) for reasons attributed to the party. Net delay for the purpose of calculating LD will be considered as the delay in commissioning of machine 1 plus the delay in commissioning of machine 2.					<u>Vendor to comply</u>
12	<u>PRE-DISPATCH INSPECTION</u>					
12.1	Pre-dispatch inspection of all the items covered under Scope of Supply at Para (1) & spares at Para (6) shall be carried out by BHEL personnel at party's works.					<u>Vendor to comply</u>
12.2	Supplier shall invite BHEL for carrying out pre- inspection.					<u>Vendor to comply</u>
12.3	Deputed BHEL persons shall do pre acceptance of material under scope of supply at vendor works and give despatch clearance.					<u>Vendor to comply</u>
12.4	Expenses of Boarding and lodging of BHEL personnel during PDI shall be borne by BHEL.					<u>Vendor to comply</u>
13	<u>SUBMISSION OF BILL OF MATERIAL (BOM)</u>					
	Before inviting BHEL for Pre-dispatch inspection, vendor shall submit to BHEL the Bill of Material (BOM) and proposed electrical drawing/ schematic for scrutiny.					<u>Vendor to comply</u>
14	<u>EARNEST MONEY DEPOSIT (EMD):</u>					<u>Vendor to comply</u>
14.1	Vendors have to deposit ₹ 1,50,000/- as EMD. EMD may be deposited in cash, through pay order or through demand draft in favor of HEEP, BHEL, Haridwar only.					<u>Vendor to comply</u>
14.2	EMD shall be converted to Security deposit if the work is awarded.					<u>Vendor to comply</u>
14.3	EMD of unsuccessful bidders shall be refunded back normally within fifteen days of acceptance of award of work by the successful tenderer.					<u>Vendor to comply</u>

14.4	EMD shall not carry any interest.					<u>Vendor to comply</u>
14.5	EMD by tenderer will be forfeited as per tender documents if:					<u>Vendor to comply</u>
14.5.1	After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.					<u>Vendor to comply</u>
14.5.2	The tenderer does not commence the work within the period as per LOI/contract.					<u>Vendor to comply</u>
14.6	Offers without EMD will be rejected and will not be considered for evaluation. However in special cases, valid NSIC certificate may be considered at the discretion of BHEL management.					<u>Vendor to comply</u>
15	<u>SECURITY DEPOSIT (SD):-</u>					
15.1	Successful vendor shall deposit security. The rate of security deposit will be as below:					<u>Vendor to comply</u>
	For work Up to ₹ 10 Lakhs : 10% of work order value					<u>Vendor to comply</u>
	Above ₹ 10 Lakhs upto ₹ 50 Lakhs : ₹ 1 Lakh + 7.5% amount exceeding ₹ 10 Lakhs					<u>Vendor to comply</u>
	Above ₹ 50 Lakhs: ₹ 4 Lakhs + 5% amount exceeding ₹ 50 Lakhs					<u>Vendor to comply</u>
15.2	The security deposit should be submitted before the start of work in the following forms:					<u>Vendor to comply</u>
	i) Cash (As permissible under the Income Tax Act)					<u>Vendor to comply</u>
	ii) Pay Order, Demand Draft in favour of HEEP, BHEL, Haridwar.					<u>Vendor to comply</u>
	iii) Local cheques of Scheduled Banks, subject to realization.					<u>Vendor to comply</u>
	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.					<u>Vendor to comply</u>
15.3	EMD of successful tenderer can be converted and adjusted against the Security Deposit.					<u>Vendor to comply</u>
15.4	Security Deposit shall not carry any interest.					<u>Vendor to comply</u>
15.5	100% of the Security Deposit amount shall be refunded to the vendor after final acceptance of work. SD shall be released after					<u>Vendor to comply</u>

	the submission of Performance Bank Guarantee(PBG) by the vendor.					
16	<u>Performance Bank Guarantee (PBG):</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 for both the machines (Date of Final acceptance of last machine will be taken for this purpose).					<u>Vendor to comply</u>
16.2	The PBG shall be submitted on a non-judicial stamp paper of value not less than ₹ 100/- issued by any one of the nationalised banks.					<u>Vendor to comply</u>
17	<u>PAYMENT TERMS:</u> (Note : No advance payment shall be made to the vendor.)					
17.1	Part payment will be made after completion of following milestones					<u>Vendor to comply</u>
17.1.1	Payment of 80% of material cost along with 100% of all taxes & duties (Excise duty, CST/VAT as applicable) shall be payable after inspection & acceptance of material at HEEP, BHEL, Haridwar. Vendor to ensure that all relevant documents are submitted.					<u>Vendor to comply</u>
17.1.2	Final payment of balance 20% of material cost, 100% of commissioning charges including service taxes as applicable amount will be made after Final acceptance of the machines (As per Clause 3). The payment shall be made subject to submission of PBG as per "Para 16".					<u>Vendor to comply</u>
17.2	All the payments shall be made through e-payment after submission of following documents along with first bill					<u>Vendor to comply</u>
17.2.1	E-payment form duly filled (Form will be provided by BHEL)					<u>Vendor to comply</u>
17.2.2	Income tax exemption letter(if applicable)					<u>Vendor to comply</u>

17.3	Excise duty & CST/VAT will be paid on material cost and service tax will be paid on commissioning charges at actuals. Related original documents to be submitted for availing MODVAT credit by BHEL.					<u>Vendor to comply</u>
18	<p><u>Risk Purchase Clause</u> : 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.</p> <p>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.</p>					
19	<u>GENERAL CONDITIONS:</u>					<u>Vendor to comply</u>
19.1	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.					<u>Vendor to comply</u>
19.2	The Vendor is advised to inspect both the machines prior to quoting ascertain all the relevant details required for successful completion of the work.					<u>Vendor to comply</u>
19.3	The proposed electrical schematic & Bill of material for both the machines shall be provided by the vendor prior to pre dispatch inspection.					<u>Vendor to comply</u>
19.4	Complete specifications such as part no./Model/Type, power, torque, Rated and maximum RPMs, Rated and maximum currents of the motor and drive controllers shall be stated in the offer by the party. Ordering brochure/catalogue should be attached.					<u>Vendor to comply</u>

19.5	Vendor must compulsorily quote the quantity exactly as per the Scope of supply. No reduction in quantity as per the above Scope of supply is permissible.					<u>Vendor to comply</u>
19.6	Vendor must quote the Spare parts separately in the offer otherwise the offer will be rejected.					<u>Vendor to comply</u>
19.7	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					<u>Vendor to comply</u>
19.8	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)					<u>Information to vendor</u>
19.9	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.					<u>Information to vendor</u>
19.10	Check List as per Annexure 'C' must be enclosed with techno-commercial bid					<u>Vendor to comply</u>
20	<u>BHEL'S OBLIGATION/ FACILITIES:</u>					
20.1	Existing electrical schematic of the machines shall be provided by BHEL to the vendor.					<u>Vendor to comply</u>
20.2	Crane facility along with lifting tackles, trolleys etc. will be made available free of charge while working in BHEL premises only. Any civil work required for the erection of panel shall be done by BHEL.					<u>Vendor to comply</u>
20.3	Facilities of minor welding, brazing, minor machining limited to fitting work /rework etc. will be made available free of cost inside BHEL premises.					<u>Vendor to comply</u>
20.4	Consumables like lubricants, kerosene oil, cotton waste etc. will be supplied free of cost by BHEL during execution of works inside BHEL premises. Contractor should make his own					<u>Vendor to comply</u>

	arrangements for all types of hand tools including pneumatic/electrical drill machines, grinders, scraping tools along with the general purpose measuring instruments, straight edges etc.					
21	<u>OFFER :-</u> The offer should be submitted in two parts and in following manner.					
21.1	<u>Techno-commercial Bid :</u>					
21.1.1	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'.					<u>Vendor to comply</u>
21.1.2	The envelop shall be super scribed with "Techno-Commercial Bid", Name of work & NIT No.					<u>Vendor to comply</u>
21.1.3	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.					<u>Vendor to comply</u>
21.1.4	The vendor must note that no prices are to be quoted/ mentioned in the techno-commercial offer.					
21.2	<u>Price Bid :</u>					
21.2.1	The second envelope shall contain only the price bid with separate price for material, spares, work & applicable taxes & duties on Price Bid Format only as per ANNEXURE 'B'.					<u>Vendor to comply</u>
21.2.2	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.					<u>Vendor to comply</u>

21.2.3	The envelope shall be sealed and super scribed with “Price Bid”, Name of work & NIT No.					<u>Vendor to comply</u>
21.2.4	Price bids of techno commercially accepted vendors shall be opened.					<u>Vendor to comply</u>
21.3	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 addressed to Shri P. K. Singh, Dy. Manager (WEX-CNC), CNC Maintenance Office-TBM, Block-3, HEEP, BHEL, Haridwar-249403 and it should also contain the Bidder’s address.					<u>Vendor to comply</u>
22	Commercial Terms:					
22.1	Prices shall be quoted on “Firm Price” basis only. The prices should be on F.O.R BHEL, Haridwar basis inclusive of Packing & Forwarding, transit insurance & Transportation charges. Applicable % of ED & Sales Tax, Installation/ Commissioning Charges & Service Tax should be clearly indicated in attached Price bid format as per “ Annexure B ”					<u>Vendor to comply</u>
22.2	Validity of offer shall be for a minimum period of 120 days from the date of Tender Opening.					<u>Vendor to comply</u>
22.3	Freight & transit insurance charges from Dispatching station to BHEL, Haridwar shall be borne by the party.					<u>Vendor to comply</u>
22.4	The material will be dispatched to Central Plant Stores, HEEP, BHEL, Haridwar with instructions to forward the same to Dy. Manager (WEX/CNC), HEEP, BHEL, Haridwar.					<u>Vendor to comply</u>
23.	Packing:					
	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					<u>Vendor to comply</u>

	printed /painted on the packages. Each package should carry a detailed packing slip. Supplier shall be responsible for any loss/damage during transit due to defective/inadequate packing.					

ANNEXURE 'B'

PRICE BID FORMAT

Name of Work :

NIT No. & Date :

Bidder's Offer No. & Date :

Sl. No.	Description of item	Unit	Qty	Basic Rate (in `)	Excise Duty (in %)	VAT/CST (in%) (VAT with FORM-17 or CST with C-FORM)	Service Tax (in %)	Total Value (in `)
1	Material	Set	01	₹	%	%		₹
2	Spares	Set	01	₹	%	%		₹
3	Installation & Commissioning	Set	01	₹			%	₹
	TOTAL COST (in Figures)							₹
	TOTAL COST (in Words) :							

Annexure 'C'
CHECK LIST FOR TENDER

NIT No. : _____

Vendor shall ensure that following documents / particulars have been enclosed with tender. This check list shall be enclosed with Techno-commercial Bid.

S. No.	Particulars	YES/NO	REMARKS
1.	Sealed Techno-commercial Bid as per Annexure 'A' of NIT		
2.	Sealed Price Bid as per Annexure 'B' of NIT		
3.	Compliance to all the points of the Annexure 'A' of NIT		
4.	Audited balance sheets for the last three years should be submitted i.e, 2010-11, 2009-10, 2008-09 required as per para 10.1 of Annexure 'A' of NIT		
5.	P.O. copies and Commissioning/ Performance certificates required as per Clause 10.2 of Annexure 'A' of NIT		
6.	Name, address & contact details of their customer required as per Clause 10.2 of Annexure 'A' of NIT		
7.	Tender Fee enclosed		
8.	Earnest Money Deposit (EMD) required as per Clause 14 of Annexure 'A' of NIT		
9.	Complete specifications such as Part no. / Model / Type of Drive and Servo motors, power, torque, Rated and max. RPMs, Rated and max. currents of servo motors. Ordering brochure/catalogue should be attached required as per para 19.4 of Annexure 'A' of NIT		

Sign & Seal