



BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
THIRUCHIRAPALLI - 620014
TAMILNADU (INDIA)

PHONE :2577645
GRAMS : BHARATELEC
FAX NO: 2520719
E-mail: srchandran@bheltry.co.in
Web:

429-002/A

	Enquiry No	Enquiry Date	Due Date for Quotation
	2681500011 - 79	04.11.2015	01.12.2015
<p>Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order.</p> <p>Bid should be submitted in two parts. 1.Techno-commercial bid (Part-I) and 2.Price bid(Part-II) in a separate sealed cover and both covers must be placed in a third cover and sealed. Our Enquiry No., Enq. date & Enq. Due date must be written on all three covers.</p>			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	Upgradation of System bender CNC tube bending machine with New system, servomotors and electrical control panel at Bay 4 / Building 50 Qualifying criteria: As per PART A SCOPE OF SUPPLY AND WORK: As per PART B Note : 1.The system should be interfaced and commissioned by THE SUPPLIER with the existing system with in stipulated time. 2.Accessories and materials required for commissioning of the system and field elements/ cables are with supplier's scope. 3. Vendor must visit BHEL and study the machine before quoting. 4. Before start the manufacturing works, vendor has to obtain drawing approval for electrical and mechanical items and Electrical panel. Inspection will be carried out at supplier works before despatch.	NO	1.000	1.00	16.02.16

General Note:

1. Please submit your detailed offer in three part bid system i.e Part-1. EMD amount of Rs.1,50, 000 in one separate sealed cover. Part-II. Technical bid + Unpriced bid indicating taxes & duties (Annexure-B) + Checklist (Annexure-A) in a sealed cover Part-III. Priced offer in another separate sealed cover.

All the three covers shall be duly super-scribed with tender reference and due date of opening. These covers shall be put in a single cover duly super-scribed with tender reference and due date of opening and addressed to us.

2. Point-to-point confirmation to BHEL's specification and commercial terms & conditions shall be provided Annexure-A. All the Annexures should be filled and submitted along with the technical bid (no row shall be left blank), else your offer is liable for rejection.

The offers should reach us 30 minutes before the time of opening of tenders. The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening.Late and delayed offers are liable to be rejected.

VIGILANCE AWARENESS WEEK
26 th OCT to 31st OCT 2015
FOR VIGILANCE RELATED COMPLAINTS,
CONTACT DGM/VIGILANCE & SM/VIGILANCE
PHONE:0431-2577552,2577636

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**

P.G. ABRAHAM VICTOR
MANAGER / PURCHASE
FOSSIL BOILERS
Purchase / MM / MFG
BHEL, TRICHY - 620 014.



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2681500011 / 04.11.2015

23505

3. Offers with validity of less than 120 days and non-acceptance of LD, RP clause, PBG, EMD & Payment terms, will lead to liable for rejection of submitted offer.

4. If the due date of tender opening happens to be a holiday, the tenders will be opened on the next working day.

5. All clarifications may be sought at least 7 days prior to tender due date, from the undersigned with due written request.

6. BHEL reserves the right to go for a reverse auction (RA) instead of opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions covering RA are given in commercial terms and conditions (Annexure-A/Point no.18)

7. Corrigendum if any, with respect to this tender will be hosted only in the website <http://www.bhel.com> or <http://tenders.gov.in>. You are requested to visit the website regularly for updates.

8. BHEL will consider MSME vendor as per Government guidelines.

9. Vendors are requested to avoid the following points while submitting the Bid Documents:

- Loose or spiral bound bid documents are not encouraged.
- In case of any corrections/overwriting in the tender documents, the same shall be duly attested by the bid submitter.

10. Vendors representative having proper ID proof and authorization letter shall attend the tender opening.

List of Attachments:

- Qualifying Criteria_ Part-A
- Technical specifications _Part-B
- Commercial Terms and Conditions _ Annexure-A
- Price Bid format Annexure-B
- CA Certificate-Annexure-III

All the tenders may be addressed to the following address:

**The Tender Opening Cell / MM
Room No: 26, Building 24, Ground Floor
Bharat Heavy Electricals Limited**

The offers should reach us 30 minutes before the time of opening of tenders. The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

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Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED


MANAGER / PURCHASE
(FOSSIL BOILERS)
Senior Manager
Purchase / MM / MFG
BHEL, TRICHY - 620 014



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TIRUCHIRAPALLI 620014

In case personal delivery of the offer, it shall be dropped into the respective box kept in Room No: 26, after duly entering the data in the system.

Offers will be accepted only up to 14.00 Hrs on the due date. Therefore, vendors shall ensure to submit the offers well before this time. All due date extension requirements should be addressed to the respective Purchase mail IDs. All the due date extension requests from vendors will be considered only up to 48 hours before the due date and time.

Vendors are requested to avoid submission of offers through e mail / fax. In case of any unavoidable situation, offers shall be sent through e mail to the following mail ID only tender_cell@bheltry.co.in.

As tenders are being opened by Common Tender Opening Cell, offer covers should be sealed with tenderer's distinctive seal and super scribed with correct Tender No. item of supply and due date of opening.

The offers will be opened at 14.30 hrs on the due date of the tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

The bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.

Enclosures:

"LD clause has to be confirmed without fail."

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Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED


MANAGER
P.G. ABRAHAM
FOSSIL BOILERS
Senior Manager
Purchase / MM / MFG
BHEL, TRICHY - 620 014

**PART A
QUALIFICATION CRITERIA**

**UPGRADATION OF CNC/IPC SYSTEM, SERVOMOTORS AND BENDING BY SERVO ACTUATORS IN
SYSTEM BENDER**

SECTION – I

The BIDDER / VENDOR has to compulsorily meet the following requirements to get qualified for submitting an offer for UPGRADATION OF CNC/IPC SYSTEM, SERVOMOTORS AND BENDING BY SERVO ACTUATORS IN SYSTEM BENDER

Sl. No.	Description	Vendor to specify details
1	Only those vendors (OEMs/Authorized Associates), who have Manufactured or Retrofitted and Commissioned same type of at least ONE “CNC/IPC TUBE BENDING MACHINE” capable of bending tubes of diameter 38.1 mm to 76.1 mm, thickness up to 8 mm or more in 4 axis machine with Digital CNC/IPC System of Makes as specified in PART B in the last 5 years (as on the original date of tender opening) EITHER (i) In at least one country other than the country of origin to establish vendor's global business activity. OR (ii) In India and the referred machines are presently working satisfactorily for more than one year from the date of commissioning (as on the original date of tender opening).	
2	The vendor should submit following details which are necessary for qualifying their offer.	
2.1	Name and contact details like email, phone number, fax no, etc. of the customer / company where the equipment commissioned.	
2.4	Along with Technical offer, the Vendor should submit performance certificate from minimum one customer for the satisfactory performance of the same, supplied to them in the customer's letter head. Suggestive Format Enclosed in SECTION – II	
3	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false / incorrect, the offer shall be rejected.	

SECTION – II

**PERFORMANCE CERTIFICATE
(On Customer's Letter Head)**

1. Supplier of the machine:
2. Make & Model of the Equipment:
3. Month & Year of Commissioning:
4. Application for which machine is used:
5. Performance of the Machine: Satisfactory / Good / Average /Not Satisfactory
(Strike off whichever is not applicable)
6. After Sales Service: Satisfactory / Good / Average / Not Satisfactory
(Strike off whichever is not applicable)
7. Any other remarks:

Date:

Signature & Seal of the Authority
Issuing the Performance Certificate

PART B

UPGRADATION OF CNC/IPC SYSTEM, SERVOMOTORS AND BENDING BY SERVO ACTUATORS IN SYSTEM BENDER

Scope of supply:

Sl. No.	Description	Vendor Response
1	Up gradation of CNC/IPC System, Servomotors and Bending by Servo Actuators In System Bender. Machine: SYSTEM BENDER Location: Bay-4 / Building-50 (No: 3889-2082)	
1.1	Scope of work involves <ol style="list-style-type: none"> 1. Supply, installation and commissioning of New DIGITAL CNC/IPC system in the existing machine by replacing the available Hinumerik CNC system. Qty: 1 No 2. Supply, installation and commissioning of Servo/Hydraulic actuator in the existing capacity by replacing the old system. Qty: 2 Nos 3. Supply, installation and commissioning of suitable new AXIS servo motors and suitable servo amplifier for carriage axis utilizing the existing gearbox mechanism. Qty: 1 Nos 4. Supply, erection and commissioning of new main control panel (Qty: 1 No) and the operator panel (Qty: 1 No) to suit the above system. Qty: 2 Nos 	
1.2	Machine background: System Bender is supplied by M/s. TELEDYNE, U S A, is used for production of coil formation for power boilers. The machine has Bender 1 and Bender 2 for tube bending with 160KW induction heating equipment for hot bending. The existing machine is operated with Hinumerik 2000 CNC system with Y axis - servo motor for carriage movement (tube handling) and B1 axis and B2 axis - hydraulic operation servo valve for bending operation separately with a design pressure of 270 Bar. The function of machine includes both hot and cold bending.	
1.3	The following are the details of the motor & drive in the existing machine:	
1.3.1	1) Hydraulic motor 1: 25 HP, 970 RPM, 3 PH, 415V"	
1.3.2	"2) Hydraulic motor 2: 25 HP, 970 RPM, 3 PH, 415V"	
1.3.3	BENDER 1 RADIUS DRIVE FORWARD / REVERSE:	
1.3.4	BENDER 2 RADIUS DRIVE FORWARD / REVERSE:	

Sl. No.	Description	Vendor Response
1.3.5	HYDRAULIC OIL FILTERING PUMP	
1.3.6	PIPE ROLLER FORWARD / REVERSE	
1.3.7	SERVO MOTOR (Y AXIS): TYPE: MKD 112B WITH SERVO AMPLIFIER: TYPE: DKC 11.1-040-7-FW	
1.3.8	CNC SYSTEM: HINUMERIK -2000 WITH MEASURING CARD FOR Y AXIS, BENDER 1 AND BENDER 2 ANGLE MEASUREMENT	
1.4	DESIGN AND PREPARATION Preparation of Mechanical Design to replace the existing carriage axis motor and the existing bending operation of hydraulic linear motion with Servo/Hydraulic Actuator for Bender 1 and Bender 2 Axis. Preparation of Bill of Materials for the modification work carried out for Carriage, Bender 1 & Bender 2 Axes. Preparation of Electrical circuit diagram, panel layout, Interconnection diagrams and complete Bill of Material for the up gradation of the machine. Supplier has to submit the corresponding changes in the Mechanical layout (if required - component wise) with necessary drawings to carry out electrical modification with Servo/Hydraulic actuator and its accessories.	
1.5	MECHANICAL MODIFICATION AND RE-ASSEMBLY: 1. Mechanical Modification to replace the existing carriage axis motor should be carried out, carriage axes should be fully reconditioned so that it will regains its original accuracy and smooth functionality 2. Mechanical Modification with Servo/Hydraulic Actuator to be carried out with suitable arrangement in line with the existing specification of the machine capacity (i.e, Requirements of Bending Forces, etc.). 3. All unnecessary hydraulic elements (Actuators including valves, etc.) shall be removed & Plugged, to make trouble shooting easy and comfortable for further maintenance. 4. All the required hydraulic hoses shall be replaced with suitable new hoses for the better machine availability. 5. Hydraulic power pack will be re-designed to accommodate the remaining hydraulic elements after removing required cylinders of Bender 1 and Bender 2 Axes/servo/Hydraulic actuators. 6. Supplier shall submit the modified hydraulic circuit while quoting itself for technical evaluation.	

Sl. No.	Description	Vendor Response
1.6	<p>ELECTRICAL ASSEMBLY AND WIRING: Assembly of Digital CNC/IPC system, servo amplifiers, drive matching transformer, control Transformers, relay module, plug/sockets and connected electrical elements like contactors, MCBS, terminal blocks, push button and lamps as per the Specification required.</p> <ul style="list-style-type: none"> - Electrical cabinet wiring to control all the Digital CNC/IPC system functions & also to incorporate spindle control elements. - Preparing cable conduits to connect Digital CNC/IPC system control panel to the machine elements through flexible cable drag chain and flexible reinforced conduits with suitable end fittings. 	
1.7	<p>DIGITAL CNC/IPC SYSTEM INTERFACING AND PROVE OUT Installation and Commissioning of Digital CNC/IPC system. Commissioning of Servo Drives of Y, B1, and B2, Axes Optimizing the servo drives and loading Digital CNC/IPC system machine parameters. Checking all the inputs and outputs to the Digital CNC/IPC system Develop & prove out of PLC software to incorporate all the Machine functions such as:</p> <ul style="list-style-type: none"> * Axis Positioning. Interfacing between electro mechanical actuator/electric cylinder actuating servo motor encoder, bending angle position sensor. * Automatic lubrication cycle <ul style="list-style-type: none"> - Incorporate display of faults and messages in clear text for easy Operation and Maintenance. - Incorporate all the safety routines to check continuously while machine is operated. - Prove out of all the CNC functions for machine application such as, positioning, bending, Contouring cycles. - Graphic menu driven fixed cycles for the operation. - Custom Made Canned Cycle to make the user friendly program and to save the program time - DNC feature to transfer part programs from the host computer. - 2D/3D simulation software to be loaded in the system 	
1.8	<p>TESTING AND TRAILS: The upgraded Machine complete in all respects should be tested as per standard test procedure mentioned in IS 2063-1962 & the accuracy requirements as per the test chart. Reliability running of the machine for 16 hours continuous. Machine calibration should be carried out using Laser Interferometer.</p>	

Sl. No.	Description	Vendor Response
1.9. ELECTRICAL		
1.9.1	<p>SPECIFICATION OF THE CONTROL SYSTEM</p> <ol style="list-style-type: none"> 1. Control system will have all the standard features of multi axis continuous path 2. Machine control based on powerful 32 / 64 bit microprocessor supported by Graphic processor. 3. 8.4# Colour LCD/TFT display with the following features. 4. Part programme memory capacity of 512KB 5. Thread cutting. 6. Contour programming. 7. Tool Nose radius compensation 8. Input for optical incremental encoder 9. Turning software package. 10. Editing. 11. Fixed cycles. 12. Operator guided programming 13. Built in diagnostics \ alarm text messages. 14. Full circle programming. 15. Feed rate 0.01 to 10000mm \ min. 16. Rapid traverse up to 24 Metres/min. 17. Auto reference \ jogging three axes simultaneously 18. Dry Run and simulation mode 19. Continuous monitoring machine functions 20. Integrated PLC with cycle time between 3-18 millisecs 21. RS 232 C Interface. 22. RS 232 C pulse generator. 23. Manual pulse generator. 24. Ball screw pitch error compensation. 25. Backlash compensation. 	
1.9.2	DIGITAL CNC/IPC SYSTEM Make shall be Fanuc / Yaskawa/ Siemens / Mitsubishi only	
1.9.3	<p>Supply of AC SERVO MOTOR, Suitable for existing Y Axis carriage motor (not below the rating of existing motor) horizontal flange mounting type of suitable Power and Torque rating and speed to match the performance of the existing AC servo motor in the Table/ spindle. Necessary fan for motor cooling and speed feedback device are also to be supplied along with motor. Mechanical items such as machined bracket, coupling to mount the new AC spindle motor with the existing gear box; required fasteners etc., for fixing the new motor shall include</p>	

Sl. No.	Description	Vendor Response
	part of the supply. Provision for Spindle speed indication in the Digital CNC/IPC screen to be made.	
1.9.4	Free Standing Control Panel Within built Werner Finley/Rittal Air Conditioner - 1 No	
1.9.5	Operator Panel for (Near) Bender 1 & 2 Axis with suitable fixing arrangement - 1 No	
1.9.6	Supply of suitable capacity Servo/Hydraulic actuator for B1 & B2 Axes. (Hydraulic cylinder (Existing) is Outer Bore Dia 180mm x Length 1100 mm around) of Make Parker/Rexroth/Moog or Acceptable to BHEL engineers with complete mechanical components/arrangement. Quantity - 2 Nos (Each 1 for Bender 1 and Bender 2). Bidder to give the details for Make and arrangement.	
1.9.7	Supply of new CONTROL PANEL with 4 axes CNC/IPC system with motion controller, AC drives, LCD display unit, PLC system that includes required I/O modules and other subsystems to replace the existing relay and contactor based control logic without modifying present functionality of the working machine. The proposed new CONTROL PANEL shall be supplied as detailed below:	
1.9.8	Control panel of a standard RITTAL make shall accommodate the proposed new CNC/IPC, AC drives and their accessories.	
1.9.9	A new PLC based system to replace existing logical machine controls. (minimum of 128 Input and 128 output, Digital / 4 Analogue modules)	
1.9.10	All the control elements, switchgears, contactors, indicating elements, terminal blocks, control and power wirings shall be accommodated in the new panel.	
1.9.11	Control panel shall include new control elements for the existing motors for tube handling systems.	
1.9.12	The control panel should be of suitable size to accommodate all the above items	
1.9.13	There should not be any component /elements mounted on the base, doors and side covering sheets of the control panel.	
1.9.14	Fluorescent tube light fittings or CFL fittings shall be provided inside the panels for sufficient illumination during maintenance.	
1.9.15	A 230volt, 5 amps, 3 pin, flush type switched wall socket shall be provided in the panel.	
1.9.16	MCCB of suitable rating for incoming supply, MCBs for control circuits and MPCBs at incoming supply for protection of all the motors other than spindle and axes.	
1.9.17	Suitable rating of Control transformer for 24V power supply.	
1.9.18	Suitable capacity PANEL AC UNIT that shall be mounted on the side of the control panel for cooling the power supply module, drive module, PLC and associated components.	

Sl. No.	Description	Vendor Response
1.9.19	Supply of new OPERATING PANEL (free standing type) for all controls of the machine with suitable capacity Panel AC cooling system.	
1.9.20	Supply of OIL LEVEL, FILTER CLOG INDICATOR AND TEMPERATURE SENSORS for the hydraulic power packs. Necessary alarm indications and interlocks to be provided.	
1.9.21	Supply of appropriate INTERFACE CABLES for power, control, feedback and signals as required for the axes and spindle rotation controls. These cables are to be connected between motors and drives as well as between drives, operating pedestal panel and hand held remote control push button station. Most of these cables are standard ones with connectors at both the ends of each cable supplied by OEMs of CNC and drives.	
1.9.22	Supply of NEW CABLES for all other motors in place of old cables. The ratings of these AC motors as listed below will be retained in the machine. Old cables for power, control, feedback and signal in the machine, as applicable for these motors, shall be replaced with new FRC (fire retardant) grade cables. PVC sheathed flexible metal hoses (Anagonda hose) of appropriate capacity and sizes are to be used.	
1.9.23	Supply and fixing of encoders for Bender 1 and Bender 2 and interfacing in the CNC system.	
1.9.24	Interfacing of controls of heating system in the machine with CNC system	
1.9.25	Removing replacing of control cables for Y axis movement and clamping jaw	
1.9.26	Supply of all field elements such as limit switches, proximity switches, pressure switches, machine lamps, etc., in the machine. The above old components shall be replaced with new ones on the machine. New cables shall be laid for these elements.	
1.9.27	Supply of SOCKETS for hydraulic solenoid valves (rated for 24V DC). These sockets shall have indicating LEDs.	
1.9.28	Supply of DIGITAL ENERGY METER (three phase) at the in comer of the machine panel.	
1.9.29	Supply of a PROGRAMMING HARDWARE (a standard laptop PC) of latest version for trouble shooting, up loading, down loading and editing the CNC system parameters, machine parameters, axis parameters. The PC shall have standard features such as PCMCIA, USB, Ethernet ports, DVD(R/W), licensed Windows (LATEST Professional OS), etc. Licensed OEM software for editing and programming ladder logic is to be supplied with necessary hardware interface cables, connectors and carrying case.	
1.9.30	Supply of Cable drag chain of suitable size and length for housing cables to various drive motors and other field elements. Make: IGUS/ Kablescheelp/ Tsubaki only	

Sl. No.	Description	Vendor Response
1.10 Mechanical		
1.10.1	Supply of all the components required for system modification with Servo/Hydraulic actuator and its arrangement.	
1.10.1	Supply of Hydraulic system and controls for redesigned power pack.	
1.10.2	All the components shall be designed in standard metric systems unless otherwise specified. All the bought out items shall be recommended to select the standard and easily available for at least 3 - 5 years for easy maintenance	
1.11 General		
1.11.1	Supply of THREE sets of the following DOCUMENTS along with the system	
1.11.2	Commissioning and troubleshooting manuals including ladder diagram, parameter list and documents in English	
1.11.3	Interface wiring drawings, circuit diagrams for the new panels, bought out items including part number	
1.11.4	Detailed drawings, Catalogues, Part dimension, Specification with part number of all mechanical items including like Electro mechanic actuators, machined brackets, gear boxes, coupling devices, connecting shafts, etc., which are supplied with the system.	
1.11.5	Supply of TWO sets of MANUALS in the form of hard copy for CNC/IPC and Drives (as supplied by OEMS) for description, maintenance, parameter, operation and interface of CNC/IPC system and description, parameter, maintenance manuals for spindle and servo motors shall be supplied.	
1.11.6	Supply of ONE set of SOFT COPY in CD(s) for all the above documents	
1.11.7	TRAINING for two persons on the maintenance and programming aspects of CNC, PLC and drives and two persons on the CNC/IPC Programming at OEM's Training Centre shall be arranged.	
1.12 GENERAL FEATURES AND CONDITIONS:		
1.12.1	Before submitting offer the vendor shall visit BHEL shop to study the existing working machine, its functions and the quantum of work required for retrofitting.	
1.12.2	The complete electrical shall be designed to suit 3 phase, 3 wire system (No neutral connection).	
1.12.3	The rating and type number of all the motors and other components selected shall be indicated in the offer and the technical leaflet showing the parameters and dimensional details shall be enclosed.	
1.12.4	All the existing INTERLOCK features to be retained	
1.12.5	The AC servo motors and drives shall be of SIEMENS / FANUC / Mitsubishi/ Yaskawa make only rated for 3 phase 415V input supply instead of 3 phase 220 V AC with transformer.	

Sl. No.	Description	Vendor Response
1.12.6	PLC, I/O modules and Power supply units shall be M/s. Siemens/ Fanuc / Yaskawa / Mitsubishi make only.	
1.12.7	The control panel shall be of Rittal or Hoffman make. Panel AC unit shall be of Rittal/Werner Finely Cooling System make.	
1.12.8	Control panel, Operator pedestal and Push button control station shall confirm to the IS / BS/ EN / Indian electricity Regulations from safety aspects. The panels shall be of indoor floor mounting type with IP 55 enclosure and made of 1.6mm/ 2mm sheet steel for the non-load bearing/ load bearing sheets with necessary MS angles/ sections includes the suitable size "EYE bolts for lifting. It shall undergo full degreasing, derusting, phosphating treatment process before painting with red oxide and two coats of Siemens / Apple green enamel paints outside and white enamel painting inside for better visibility.	
1.12.9	All control elements like contactor, relay, push buttons, MCCB, MCB, MPCB, Proximity switches and limit switches shall be M/s. Siemens / L&T / Telemecanique / Technik make only (with DIN rail mounting).	
1.12.10	All the control and power wires shall be M/s. IGUS or Lapp makes only or BHEL approved make.	
1.12.11	All the control and power wiring from control panel to field elements shall be protected with suitable sizes of PVC sheathed flexible metal hoses and ducts.	
1.12.12	The proposed electrical circuit diagram, component lay out, panel drawings with dimension, Bill of Materials, Mechanical drawings and other details for mechanical items such as Machined bracket, gear boxes, coupling arrangements, electric cylinder/electro mechanical actuator (including ball screws and ball nuts details) shall be submitted to BHEL officials for approval before starting manufacturing. Supplier shall submit these details for approval to BHEL engineers within 8 - 10 weeks from the date of PO/LOI.	
1.12.13	All the materials as per scope of supply shall be offered for inspection at supplier's works before dispatch. Recommended to call for pre-dispatch inspection on 18-20 weeks after PO/LOI placement.	
1.12.14	Before dismantling the existing wiring & drive, the vendor should check and record the performance of the m/c like i) operation of machine ii) output iii) Accuracy and Quality of job etc.	
1.12.15	The vendor shall give guarantee for trouble free operation for the period of one year after commissioning of the machine.	
1.12.16	The offer shall clearly indicate the list of material to be supplied under scope of supply and the list of activities to be carried out under scope of work with break up details	

Sl. No.	Description	Vendor Response
1.12.17	Vendor is to submit the offer in TWO parts separately. Part-1: TECHNICAL BID having complete technical details, catalogues and point wise confirmation & deviations if any. Part-2: PRICE BID.	

Scope of Work:

Sl. No.	Description	Vendor Response
2.1	Electrical:	
2.1.1	Assembly of Digital CNC/IPC system with motion controller, servo amplifiers, drive matching transformer, control Transformers, and relay module, plug/Sockets and connected electrical elements like contactors, MCBS, terminal blocks, push button and lamps as per the Specification required. - Electrical cabinet wiring to control all the CNC functions & also to incorporate spindle control elements. - Preparing cable conduits to connect CNC control panel to the machine elements through flexible cable drag chain and flexible reinforced conduits with suitable end fittings.	
2.1.2	Establishing new servo/hydraulic actuator for Bender 1 and Bender 2.	
2.1.3	Introduction of oil low level, filter clog, pressure gauges (required where ever with minimess couplings) and temperature raise indication and other interlocks for hydraulic tanks in the power packs.	
2.1.4	Integration of all the subsystems with the machine.	
2.1.5	Commissioning of the new control panels including programming of CNC/IPC, PLC and drives to suit the present job conditions	
2.1.6	Prove out of the machine performance - including verification of all functions of the machine, interlocks, testing the machine with no load and with full load (Including Servo motors for Carriage, Benders 1 & 2, to ensure smooth running and to record). The machine performance is to be better than or at least the same as the previous performance level before retrofitting in all respects.	
2.1.7	Laser calibration to be done after retrofitting for accuracy & repeatability (Ref. Std: VDI/DGQ-3441 shall be followed).	
2.1.8	Training the operators and maintenance staff at BHEL works after commissioning for minimum three days	

Sl. No.	Description	Vendor Response
2.2	Mechanical:	
2.2.1	Dismantling and removal of the existing hydraulic systems with motor, other hydraulic components which are required for retrofitting.	
2.2.2	Removal of required mechanical subassemblies with motor.	
2.2.3	Check all the lubricating points, pipe lines on the slide ways, gear boxes and ensuring the healthiness. Damaged lubrication tubes, if any, are to be replaced, for which the materials required will be provided by BHEL at free of cost.	
2.2.4	Necessary hand & power tools shall be under the scope of the vendor.	
2.2.5	Necessary crane facility shall be arranged by BHEL for dismantling and assembling.	
2.2.6	Required cleaning materials like cotton waste, kerosene shall be issued by BHEL at free of cost.	
2.2.7	All the removed waste materials are to be moved to the respective bins as per instruction of Maintenance in-charge.	
2.2.8	Assembly of required hydraulic systems/components while retrofitting with mechanical arrangements shall be under the scope of the vendor.	
2.2.10	Shop Compressed air Pressure shall be 4 - 4.5 bar at 1" line	
2.2.11	Supplier shall indicate the any additional required components/systems which are required to make the system functional (if required) one.	
2.2.12	<p>MAKE OF THE BOUGHT OUT ITEMS</p> <p>Makes of all bought out items shall be as follows unless otherwise specified elsewhere</p> <ol style="list-style-type: none"> 1. BELTS (V - BELT, TIMING BELT & OTHER BELTS): FENNER/SKF/GATES/DUNLOP/GOODYEAR 2. HYDRAULIC HOSES: GATES/PARKER/AEROQUIP 3. HYDRAULIC VALVES,CYLINDERS &PUMPS: REXROTH/PARKER/MOOG 4. POLYURETHENE TUBES & ONE TOUCH FITTINGS: FESTO/ SMC/PARKER/REXROTH 5. CHAINS, CONNECTING LINK&SPROCKETS: DIAMOND/ ROLLON/ SKF/ TUSABAKI 6. PNEUMATIC VALVES &PUMPS, SYSTEM : FESTO/ SMC 7. HYDRAULICS SEALS, SPRING LOADED OIL SEAL& ORINGS: PARKER/ MARKEL/ SIMRIT FREDUNBERG/BUSHAK & SHABAN/ HUNGER/ HALLITE/ JAMES WALKER 8. REDUCTION GEAR BOX: MGM/CROMPTON GREAVES/ BONFIGLIOLI 9. GEARED MOTOR: MGM/BAUER / BONFIGLIOLI / SEW /CROMPTON GREAVES 10. COOLANT PUMP:BE / SUGUNA / SEAPUMP / KSB / RAJAMANI 11. HYDRAULIC JACKS: ACCEPTABLE TO BHEL EXECUTIVES 12. ALL HYDRAULIC SYSTEM: BOSCH REXROTH/PARKER/MOOG 13. PRESSURE GAUGE: REXROTH/WIKA/WAREE 	

Sl. No.	Description	Vendor Response
	14. ALL COUPLINGS WITH GUARDS: SKF/FENNER/HYDAX 15. HYDRAULIC FITTINGS: PARKER/SWAGELOC/HYLOC 16. WATER CHILLER/OIL CHILLER/PANEL CHILLER - REFRIGERATED TYPE ONLY RECOMMENDED: WERNER FINLEY/RITTAL 17. MOTORS: ENERGY EFFICIENT EFF II: SIEMENS/NGEF/KIRLOSKAR 18. CONTACTORS: SIEMENS/L&T/SCHENIEDER/TELEMECHANIC 19. PUSH BUTTONS AND SELECTOR SWITCHES: SIEMENS/TELEMECHANIC/ESPEE 20. TEMPERATURE GAUGE: WIKA/WARRE/REXROTH/PARKER/SRIDHAR 21. LM GUIDE WAYS: THK/HIWIN/NSK/IKO/THOMPSON 22. BEARINGS/PILLOW BLOCKS/PLUMMER BLOCKS: SKF/FAG/NTN/TIMKEN/IKO 23. GEARED COUPLINGS: WMI / FENNER / ALFEX / SKF 24. BREAK LINING: FERRODA / COMPAQ 25. FASTNERS (GRADE: 10.8/12.9 AS PER IS.2269/IS 1367): TVS/UNBROKO/LPS	
3.1	PACKING: Sea worthy & rigid packing for all items of complete machine and all accessories and other supplied items to avoid any damage/loss in transit. When machine is dispatched in trailers, all small loose items shall be suitably packed in boxes.	
3.2	Delivery: Shall not exceed 16 - 20 weeks from date of Purchase order/LOI.	
3.3	GUARANTEE: 12 months from the date of acceptance of the machine at BHEL or 18 months from dispatch whichever is earlier	

BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI

CAPITAL PURCHASE

Annexure-A

ACCEPTANCE OF COMMERCIAL TERMS AND CONDITIONS BY THE VENDORS.

(This should be essentially filled in and sent along with the techno-commercial offer without fail. If this check list is not filled and submitted along with techno-commercial offer (Part I) or if the vendor does not confirm acceptance to the terms and conditions proposed, BHEL reserves the right to reject such offer)

CHECK-LIST FOR VENDORS

SI No	DESCRIPTION
1.	<p>The Bidders shall submit the offer in THREE INNER ENVELOPES as indicated below which shall be sealed in one outer envelope.</p> <ul style="list-style-type: none"> ❖ Envelope I: This sealed envelope should be clearly marked as “ Part I: EMD Amount” and must contain the required EMD amount of Rs. 1,50,000/- EMD shall be payable as per the instructions, otherwise the offer will not be considered. Pay order / DD No / Cash receipt no. & date should be furnished separately. ❖ Envelope II: This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked “Part II - Technical and Commercial bid”, indicating Enquiry No., Due Date and Address & Reference of the Bidder. ❖ Envelope III: This sealed envelope should contain price details. This envelope should be clearly marked “Part III - Price bid”, indicating Enquiry No., Due Date and Address & Reference of the Bidder. This part should contain the schedule of price particulars and must be co-related to the technical details provided in Part II. <p>All the three envelopes (Part I,II&III) shall be put in one cover, duly sealed, super scribing as “Part-I,Part-II and Part-III of Enquiry No., due date of opening” and the address and reference of the Bidder. The offer received without the above guidelines, will not be considered for opening.</p> <p>Offers will be accepted & received till 14.00 hrs on the due date. Therefore Vendors shall ensure to submit the offers before this time. Late offers will not be considered.</p> <p>The Tenders should be addressed to the following address to</p> <p style="text-align: center;">The Tender Opening Cell/MM Room No-26 , Building – 24 , Ground Floor Bharat Heavy Electrical Limited Tiruchirapalli- 620014 .</p> <p>In case personal delivery of the offer, it shall be dropped into the respective box after duly entering the data in the system kept in room no 26 .</p> <p>Vendors are requested to avoid submission of offers through email / fax . In case of any unavoidable situation, offers shall be sent through email to the following mail ID only “ tender_ cell@bheltry.co.in ”</p> <p>As such Tenders are being opened by Common Tender opening Cell , offer covers should be sealed with tender’s distinctive seal and super scribed with correct Tender NO, item of supply and due date of Opening</p> <p>Tenders should be free from CORRECTIONS AND ERASURES. Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. In case of any difference between amount quoted in words and figures, amount quoted in words shall prevail.</p> <p>Offers should be in ENGLISH and accompanied by detailed technical literature, catalogue and detailed dimensional drawings in ENGLISH or otherwise, the offers will not be considered.</p>
2.	<p><u>OPENING OF TENDERS</u></p> <p>The part I – EMD would be opened on the tender opening date and if EMD is not furnished the offer will be duly rejected.</p> <p>The Part II - Technical & commercial bid would be opened on the Tender opening date.</p> <p>Part III - Price bid of technically suitable Bidders alone would be opened after complete evaluation of Part-II. BHEL reserves the right to go for a Reverse Auction (RA) instead of opening the submitted sealed bid, which will be decided after technical evaluation. Information and general terms and conditions covering RA are given in this Annexure-A (Point no.18). Date and time of Price Bid (Part-III) opening / RA conducting date shall be intimated to the technically and commercially acceptable bidders only. Clarifications if any required by BHEL for Technical evaluation would be sought from bidders before opening of Part III - price bid/ (RA).</p>

3.	<p>Taxes and Duties : All Taxes and Duties payable as extra to the quoted price should be specifically stated in offers along with CST & TIN No / Tariff No. etc., failing which the purchaser will not be liable for payment of such Taxes and Duties. Our TIN No. 33243560005, TNGST No. 3560005, CST. No. 239383 Dt. 11-06-1991 & BHEL ECC No. AAACB4146PXM012, Service Tax Reg No (STC)- AAACB4146PST006. Assessment circle Tiruverambur.</p> <p>Cenvat credit & VAT credit (for Indian Bidders only): the quotation must indicate Tariff item number and rate of Excise Duty applicable. The original Excise Duty Gate Pass will be required to be furnished in case Excise Duty is applicable. If the bidder is availing Cenvat credit for his input materials, the effect of proforma credit should be passed on to BHEL.</p> <p>Income Tax applicable Any service charges payable towards supervision of E&C, training, performance prove-out etc., will be released after deduction of Income Tax as per Indian Income Tax Act / as per the Govt. of India rules and TDS certificate will be issued by BHEL for such deductions. Applicable service tax on E&C charges will be payable extra. The liability of depositing the same to the Govt. will be of the supplier.</p>								
4.	<p><u>DETAILS OF EARNEST MONEY DEPOSIT & SECURITY DEPOSIT</u></p> <p>Earnest Money is to be paid by the Tenderer either in Cash (as permissible under Income Tax Act), Pay Order (or) Demand Draft drawn in favour of “Bharat Heavy Electricals Ltd, Tiruchirapalli” payable at Tiruchirapalli. EMD by the Tenderer will be forfeited as per Tender Documents if</p> <ul style="list-style-type: none"> ➤ After opening the Tender, the Tenderer revokes his Tender within the validity period or increases his earlier quoted rates. ➤ The Tenderer does not commence the work within the period as per LOI/Contract. (In case the LOI/Contract is silent in this regard then within 15 days after award of the Contract). <p>EMD given by all unsuccessful Tenderers shall be refunded normally within 15 days of acceptance of award of work by the successful Tenderer. EMD shall not carry any interest.</p> <p><u>SECURITY DEPOSIT</u> The successful Tenderer should pay Security Deposit before start of the work and the Rate of Security Deposit will be as below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Value of Contract</th> <th style="text-align: left;">Rate of Security Deposit</th> </tr> </thead> <tbody> <tr> <td>Upto Rs.10 Lakhs</td> <td>10%</td> </tr> <tr> <td>Above Rs.10 lakhs and upto Rs.50 lakhs</td> <td>Rs.1 Lakh + 7.5% of the amount exceeding Rs.10 Lakhs</td> </tr> <tr> <td>Above Rs.50 lakhs</td> <td>Rs.4 Lakhs + 5% of the amount exceeding Rs.50 Lakhs</td> </tr> </tbody> </table> <p>Security Deposit may be furnished in any one of the following forms.</p> <ol style="list-style-type: none"> i) Cash (as permissible under the Income Tax Act) ii) Pay Order, Demand Draft in favour of Bharat Heavy Electricals Limited, Tiruchirapalli payable at Tiruchirapalli iii) Local Cheques of Scheduled Banks, subject to realization. iv) Securities available from Post Offices such as National Savings Certificates, Kisan Vikas Patras etc (Certificate should be held in the name of Contractor furnishing the security and duly pledged in favour of BHEL and discharged on the back) v) Bank Guarantee from Scheduled banks / Public Financial Institutions as defined in the Companies Act subject to a maximum of 50% of the total Security Deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL. vi) Fixed Deposit Receipt issued by Scheduled banks / Public Financial Institutions as defined in the Companies Act. The FDR should be in the name of the Contractor, A/C BHEL, duly discharged on the back. vii) Security Deposit will also be recovered at the rate of 10% from the running bills. However in such cases at least 50% of Security Deposit shall be paid by the Contractor before start of the work and the balance 50% will be recovered from the running bills. viii) EMD of the successful Tenderer shall be converted and adjusted against Security Deposit. <p>Note: Acceptance of security Deposit against Sl.no.(iv) and (vi) above will be subject to hypothecation or endorsement on the documents in favour of BHEL. However BHEL will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.</p> <p>Security deposit shall not carry any interest. Security Deposit shall not be refunded to the Contractor except in accordance with the terms of the Contract</p> <p>Security Deposit shall be payable by the successful vendors as per the above instructions Security Deposit will be refunded within 30 days after successful completion of Contract by the successful vendor.</p>	Value of Contract	Rate of Security Deposit	Upto Rs.10 Lakhs	10%	Above Rs.10 lakhs and upto Rs.50 lakhs	Rs.1 Lakh + 7.5% of the amount exceeding Rs.10 Lakhs	Above Rs.50 lakhs	Rs.4 Lakhs + 5% of the amount exceeding Rs.50 Lakhs
Value of Contract	Rate of Security Deposit								
Upto Rs.10 Lakhs	10%								
Above Rs.10 lakhs and upto Rs.50 lakhs	Rs.1 Lakh + 7.5% of the amount exceeding Rs.10 Lakhs								
Above Rs.50 lakhs	Rs.4 Lakhs + 5% of the amount exceeding Rs.50 Lakhs								

No row shall be left blank. Please indicate NA, in case the item is “not applicable”		Vendor's confirmation
5.	<p>Release of Purchase Order: Purchase Orders (separate for supply and service portion if applicable) will be released on the successful vendor (L1 vendor) The retrofitting works are composite in nature and cannot be split-up to more than one vendor. Hence the entire work will be awarded to only lowest bidder of the tender. Work cannot be split-up and given to MSME vendor if they are L2 or above ranking in the tender.</p>	
6.	<p>Payment terms for Supply Portion 80% Payment after receipt and acceptance of material and balance 20% within 45-90 days after receipt, acceptance and commissioning of supply material against submission of 10%PBG for order value.</p> <p>Erection & Commissioning Portion (if applicable only): 100% of the Erection / commissioning charges (in case contract involves erection /commissioning) shall be paid only on completion of such erection / commissioning at BHEL</p> <p style="color: red;">Any deviation in the above payment term will attract loading as mentioned below. “Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.</p>	
7.	<p>Validity: Validity of the offer should be 120 days from the date of tender opening.</p>	
8.	<p>Liquidated damages (LD): The delivery of the goods specified in the purchase order should be made within the time prescribed. LD for delay in ‘Supply’ and/or ‘E&C’ will be applicable to the delays attributed to vendor. LD will be considered separately for ‘Delivery’ and ‘E&C’. Where the seller supplies or dispatches the goods, beyond the delivery period Liquidated damages shall be applicable 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value. Detail of LD mode are shown below</p> <p>Single Delivery Date (Material Dispatched after Due date) Once the delivery due date is crossed, bills have to be clubbed till final despatch and forwarded for processing of payment as a single bunch. LD percentage will be calculated from Delivery due date to final despatch date. (100% Order should be completed for processing the bill)</p> <p>Staggered Delivery -LD shall be 0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the total order value. PO Pending value (each Bill Value) upto Max 10 % of Total PO value)</p> <p>Installation/Erection & Commissioning: The rate of LD for delayed E&C shall be @ 0.5% per week of delay of total PO value (Supply + E&C) in E&C subject to a maximum of 10% of total PO value (Supply + E&C).</p> <p style="color: red;">Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).For the purpose of Imposing LD, the FOB delivery (B/L date) shall be considered. Bidder should indicate the LD mode (single delivery or staggered delivery) on the confirmation column, otherwise single delivery date will be considered for further evaluation.</p>	
9.	<p>Risk Purchase: Alternatively the purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid or if the same were not available from the best and the nearest available substitute. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.</p>	
10.	<p>Performance Bank Guarantee (PBG): The Bidder, in the event of an order, should furnish a Bank Guarantee from an Indian Bank approved by BHEL, at no extra cost in a format prescribed by BHEL, along with the order, for an amount equivalent to 10% (Ten percent) of the value of the contract. The PBG shall be valid for period of 18 months from the date of dispatch or 12 months from the date of receipt / acceptance / commissioning of the equipment at BHEL, Tiruchi whichever is more, with a claim period of two months.</p> <p>The Performance Bank Guarantee shall be obtained from any one of the following banks which is a member Bank in our consortium of Banks.</p> <p>LIST OF CONSORTIUM BANKS 1.DEUTSCHE BANK 2.HDFC BANK 3.ANZ GRINDLAYS BANK 4.CITI BANK 5.STANDARD CHARTERED BANK 6.BANK OF AMERICA 7.ABN AMRO BANK 8.IDBI LTD 9.ICICI BANK LTD 10.THE HONGKONG AND SHANGHAI BANKING .CORPORATION LTD.</p> <p>LIST OF NATIONALISED BANKS</p>	

	<p>1.ALLAHABAD BANK 2.ANDHRA BANK 3.BANK OF INDIA 4.BANK OF BARODA 5.BANK OF MAHARASTRA 6.BHARATH OVERSEAS BANK 7.CANARA BANK 8.CENTRAL BANK OF INDIA 9.CORPORATION BANK 10.DENA BANK 11.INDIAN BANK 12.INDIAN OVERSEAS BANK 13.OREINTAL BANK OF COMMERCE 14.PUNJAB NATIONAL BANK 15.PUNJAB & SIND BANK 16.STATE BANK OF INDIA 17.STATE BANK OF TRAVANCORE 18.STATE BANK OF MYSORE 19.STATE BANK OF BIKANER & JAIPUR 20.STATE BANK OF HYDERABAD 21.STATE BANK OF PATIALA 22.STATE BANK OF MAHARASTRA 23.STATE BANK OF SOURASTRA(SBI-13.09.08) 24.SYNDICATE BANK 25.UCO BANK 26.UNION BANK OF INDIA 27.UNITED BANK OF INDIA 28.VIJAYA BANK</p> <p><u>If PBG is issued by a Foreign counter part of the BHEL consortium Indian Bank, in case of claim against the PBG , it will be lodged in any one of the Indian counters of the Foreign Bank which issued the PBG.</u></p>	
11.	<p>Delivery terms and evaluation process:</p> <p>Indian Bidders should submit their offer on FOR BHEL, Tiruchy basis. Packing & Forwarding and Freight & Insurance charges from works to BHEL, Tiruchy to be indicated separately if extra from basic rate. Applicable % of ED & Sales Tax , Commissioning Charges should be clearly indicated. Evaluation of offers shall be on the basis of delivered cost (Net cash outflow to BHEL)</p>	
12.	<p>Guarantee:</p> <p>Vendors shall provide a guarantee for a period of 12 months from the date of commissioning of the equipment or 18 months from date of supply, whichever is earlier. The date of B/L or AWB shall be taken as the date of supply. Also, a PBG has to be given which shall cover the guarantee period (with additional 2 months as claim period).</p> <p>Normally No deviation permitted and the deviated offers are liable for rejection.</p>	
13.	<p>Short shipment / Warranty replacement:</p> <p>In case of any short shipment in the main equipment / spares, Customs Duty levied on such supplies, shall be borne by the supplier. Any warranty replacement during the warrantee period shall be on FOR, BHEL, Tiruchirappalli, basis.</p>	
14.	<p>Inspection & Testing:</p> <p>All goods shall be subject to inspection by BHEL or its authorized representatives at supplier's works or at BHEL stores or at any other place in India indicated by BHEL as the case may be. The supplier will not charge for the facilities provided for inspection of goods. In case of machine tools, the machine would be inspected and proved at supplier's works prior to dispatch however, final inspection and acceptance of the machine will be carried after installation of the machine at BHEL, Tiruchirappalli.</p>	
15.	<p>Test certificates / Operating and Maintenance manuals :</p> <p>The Bidders shall clearly mention in their offer, that Test Certificates and Operating Maintenance Manuals, etc., as called for in the Technical Specification, in the required number of copies will be provided at no extra cost.</p>	
16.	<p>Payment through Bank is not preferred. In case of Payment through Bank is opted by Supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to Site/Stores with Consignee copy attached. In this case Loading will be 3% on the offered value. Offers of indigenous Suppliers with payment terms as LC/Advance Payment are liable for rejection.</p>	
17.	<p>BHEL will consider the ranking after the loading is applied as referred above wherever deviations are observed.</p>	
18.	<p>Reverse Auction (RA):</p> <p>BHEL reserves the right to conduct on-line internet Reverse Auction ie. ONLINE BIDDING (THROUGH A SERVICE PROVIDER) for finalizing the Tender. This decision will be communicated to the technically qualified vendors after technical evaluation. Details / General terms / guidelines for conduct of RA are shown below</p> <p>Vendors are requested to confirm their acceptance for BHEL proceeding with RA route for finalization of the enquiry.</p> <ol style="list-style-type: none"> For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet. BHEL will inform the vendor in writing in case of reverse auction, the details of Service Provider to enable them to contact & get trained. Business rules like event date, time, start price, bid decrement, extensions etc. also will be communicated through service provider for compliance. Vendors have to fax the Compliance form in the prescribed format (provided by Service provider) before start of Reverse auction. Without this, the vendor will not be eligible to participate in the event. BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to 	

	<p>BHEL standard Commercial terms & conditions) for each of the vendor to enable them to fill-in the price and keep it ready for keying in during the Auction</p> <ol style="list-style-type: none"> 7. Reverse auction will be conducted on scheduled date & time. 8. At the end of Reverse Auction event, the lowest bidder value will be known on the network. 9. The lowest bidder has to Fax/e-mail the duly signed Filled-in prescribed format as provided on case-to-case basis to BHEL through Service provider within 24 hours of Auction without fail. 10. Any variation between the on-line bid value and the signed document will be considered as sabotaging the tender process and will invite disqualification of vendor to conduct business with BHEL as per prevailing procedure. 11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price Bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice. 12. BHEL reserves the right to negotiate if need be, with the "L1" vendor of the Reverse Auction 13. <u>BHEL reserves the right not to consider offers from vendors not complying with the RA process for finalization of the enquiry.</u> 14. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted. 15. In case BHEL decides to go for reverse auction, the H1 bidder(s) (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process. 	
<p>19.</p>	<p><u>Special Provisions for Micro and Small Enterprises (MSE)</u></p> <p>MSE suppliers can avail the intended benefits only if they submit along with offer, attested copies of either EM II (Entrepreneur Memorandum Part 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 as per Annexure - III) applicable for the relevant financial year (latest audited), certifying quantum of investment in plant and machinery within the permissible limit as per the act for relevant status (Micro or small) where the deemed validity of EM II is over. Date to be reckoned for determining the deemed validity will be the last date of technical bid submission. Offer/s received without these documents will lead to consideration of their offer at par with other bidders and MSE status of such suppliers shall be shifted to Non MSE supplier</p>	
<p>20.</p>	<p>ARBITRATION</p> <p>All disputes or differences whatsoever which may arise at any time during execution of the Contract shall be mutually settled by BHEL and Contractor as per provision of the Contract. However, in the event such disputes cannot be settled mutually, such disputes shall be settled as per the Arbitration and reconciliation Act, 1996 of the Govt. of India and its subsequent amendments. In case of disputes with the Central PSUs, the same shall be settled at Tiruchirappalli as per the Guidelines of the Govt. of India.</p> <p>However, during the period such disputes are settled either by mutual discussions between the parties or by legal means, Contractor shall continue to do the work as per terms & conditions of Contract.</p>	
<p>21.</p>	<ul style="list-style-type: none"> ➤ Point to point confirmation for the Technical Specification enclosed to be provided. If there are any deviations, the same should be clearly specified. Offers received without confirmation to our specifications will be liable for rejection. If needed additional sheets shall be used. ➤ Equipment offered shall be "New". Re-built / Re-conditioned / Used equipments will not be accepted. Incomplete offers will not be considered for further processing Fixed price: ➤ BHEL reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BHEL projects / units. ➤ BHEL shall be at liberty to reject or accept any tender, part or in full, at their own discretion and any such action is not liable for any question or claim against BHEL. ➤ Security Deposit shall be payable as per the instructions furnished in clause no.4. ➤ All Equipments / Services including concerned personnel for carrying out the erection and commissioning of the equipment shall be arranged by the vendor. If any Services are availed from BHEL, it is only on chargeable basis unless otherwise specified. ➤ The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost ➤ The Supplier shall arrange for securely protecting and packing the stores to avoid loss or damages during transit. 	

22.	COMPANY DETAILS & CONTACT			
	Full Address of the company for future correspondence.(Copy of address proof & PAN card shall be attached along with Part-II)			
	Company Email ID:		Phone No.:	
	Fax No		Pan No	
	CST /TIN No		Service Tax No.	
	Name of the contact person:		Mobile No.:	
	e-mail ID			
23.	TO BE CONFIRMED BY VENDOR			
	Details of EMD	DD/CR/PO-No.	Dt:	Rs.
	Country of origin:			
	Station of dispatch/Port Of Shipment			
	Delivery Terms (For destination or Ex-works)			
	Packing & Forwarding Charges, if any (in % or Lumpsum) ie. extra from basic rate			
	% of Excise Duty with cess			
	% of TAX (CST/VAT) (TNGST with FORM-17 or CST with C-FORM)			
	Freight & transit insurance charges (if any, in Lumpsum (or) percentage) from Dispatching station to BHEL Tiruchirappalli, (Note:If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only, in this case the freight & Insurance will be borne by BHEL)			
	(If applicable only) Erection & commissioning charge is inclusive (or) exclusive on basic rate			
	Service tax applicable extra or not			
24.	DELIVERY SCHEDULE Supply Portion :Delivery schedule from the date of Letter of Intent / Purchase Order (This should be inclusive of Order acceptance, drawing approval and time period required for receiving goods at BHEL Trichy etc.)			
	Time period required for Installation/Erection & Commissioning from the date of site clearance given by BHEL			
25.	Weight & Cubage of package: Approximate Net weight of the total consignment:- Approximate Gross weight of the total consignment: - Approximate volume of the total consignment:-			
For any queries / clarifications the bidders may contact us through our FAX NO. +91 431 2520719 or through e-mail <pgavictor@bheltry.co.in>				

NOTE:-

- a) Your specific acceptance to our Payment terms, LD, Risk Purchase Clause & Submission of PBG for 10% of the order value are essential for consideration of your offer. Otherwise your offer is liable for rejection.
- b) No row shall be left blank. Please indicate NA, in case the item is “not applicable”

Declaration:-

I/We have gone through and understood the ‘General guidelines & instructions to bidders for submitting offer’ enclosed as a part of the Tender and confirm that our offer has been made in line with the same.

Signature with date:

Name:

Designation:

Department:

(PLEASE AFFIX YOUR SIGNATURE WITH SEAL ON EACH PAGE)

MODEL PRICE BID FORMAT FOR INDIAN BIDDERS

Enquiry No. & Date:

Bidder's Offer No. & Date:

Sl No	Description of item	Unit (SET /No)	QTY	Rate /Qty in Rs. (excluding of all taxes)	VAT/CST in % (TNGST with FORM-17 or CST with C-FORM)	ED in %	Service Tax in %	Total Value in Rs. (inclusive of all taxes)
	Supply portion							
	Erection & Commissioning (if available in tender scope and exclusive from basic rate)							
	Packing & Forwarding charges (if any) in percentage (or) Lumpsum							
	FOR Dispatching station value in Rs.							
	Percentage of Freight & transit insurance charges, if any (Lumpsum or %) Freight & Insurance charges from Dispatching station to BHEL, Tiruchirappalli (Note:If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only, in this case the freight & Insurane will be borne by BHEL)							
	Approximate Net weight of the total consignment							
	Approximate Gross weight of the total consignment							
	Approximate Dimensions of the Consignment							

Signature & Seal of Vendor

The price bid should be submitted only as per the above format. No row shall be left blank. Please indicate NA, in case the item is "not applicable"

Certificate by Chartered Accountant on letter head

This is to Certify that M/S
(hereinafter referred to as 'company') having its registered office at
is registered under MSMED Act 2006, (Entrepreneur
Memorandum No (Part-II) dtd:.....,
Category: (Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as on
date..... as per MSMED Act 2006 is as follows:

1. **For Manufacturing Enterprises:** Investment in plant and machinery (i.e. original cost
excluding land and building and the items specified by the Ministry of Small Scale Industries vide its
notification No.S.O.1722(E) dated October 5, 2006 :
Rs.....Lacs
2. **For Service Enterprises:** Investment in equipment (original cost excluding land and building and
furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED
Act, 2006:
Rs.....Lacs

The above investment of Rs.....Lacs is within permissible limit of
Rs.....Lacs forMicro / Small (~~Strike off which is not applicable~~)
Category under MSMED Act 2006.

Date:

(Signature)

Name -

Membership number -

Seal of Chartered Accountant