



An ISO 9001
Company

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

ENQUIRY NOTICE INVITING TENDER	Phone: +91 431 257 7421/4102/7833 Email : vkarna@bhel.in : hemaatha@bhel.in : vijayak@bhel.in Website : www.bhel.com
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TWO PART BID	Enquiry Number:	Enquiry Date:	Due date for submission of quotation:
Tender to be submitted in two Parts	2601900015	17.04.2019	10.05.2019

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of tender opening.

Item	Description	Quantity
10	Panel Edge Bar Plasma Cutting Machine as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com and https://eprocure.gov.in	1 No.

Important points to be taken care during submission of offer

1. Delivery terms shall be FOR BHEL Stores, Trichy .
2. Compliance Form No: TRY/IND/08 to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
3. Delivery period required is 2.5 months from the date of Purchase Order.
4. Erection and commissioning shall be done at BHEL Trichy by the supplier.
5. Time period required for Erection and Commissioning shall be 2 weeks from the date of intimation by BHEL
6. EMD not applicable.
7. All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media.

BHEL's General guidelines / instructions compliance form and technical specification can be downloaded from BHEL web site <http://www.bhel.com> and <https://eprocure.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "2601900015".

(This is not an E – Tender. Please submit your offer in hard copies)

Tenders should reach us before 14:00 hours on the due date
Tenders will be opened at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present.

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

V. Karunakaran
17/4/19.

V. KARUNAKARAN
Dy. General Manager
Capital Equipment / MM
BHEL / Tiruchirappalli - 620 014

PANEL EDGE BAR PLASMA CUTTING MACHINE, Qty.: 1 no.

PART A

Section 1: Qualifying Criteria

The BIDDER has to compulsorily meet the following qualifying requirements in order to consider their offer for technical evaluation:

S. NO.	PARTICULARS	BIDDER's RESPONSE
1.1	Only those Bidders / OEMs, who have supplied and commissioned at least 1 number of panel edge bar plasma cutting machine or plasma pug cutting machine or mechanized plasma cutting machine are eligible to quote	
1.2	Bidder has to submit at least ONE Performance Certificate from their customer, for satisfactory performance of the plasma power source.	
1.3	BHEL reserves the right to verify the information provided by the Bidder. In case the information provided is found to be false/ incorrect, the offer is liable for rejection.	

Section 2: Information to be provided by the bidder:-

S. NO.	PARTICULARS	BIDDER's RESPONSE
2.1	The BIDDER to furnish Reference List of Customers with Complete contact details where similar machine is supplied.	
2.2	Details of similar Equipment supplied to BHEL units, if any. (Year of commissioning, Application, Type)	
2.3	Details on SERVICE-AFTER-SALES Set-Up in India including the Address of Agents / Service Centers in India.	
2.4	Any Additional Data to supplement the manufacturing capability of the BIDDER for the subject equipment.	

Section 3: The BIDDER to note:

S. NO.	PARTICULARS	BIDDER's RESPONSE
3.1	The BIDDER / VENDOR shall submit the offer in TWO PARTS. 1. Technical Offer [with PART A & PART B] & commercial offer 2. Price Bid.	
3.2	The Bidder's offer against each clause in PART A & B of the offer should be filled by the BIDDER compulsorily with complete details.	
3.3	The BIDDER shall assure a continuous support for Spares and Service for Ten Years, from the date of commissioning of the equipment at BHEL Works.	
3.4	The Technical Offer shall be supported by Product Catalogue and Data Sheets in original and complete technical details / literature on the quoted model of equipment.	
3.5	The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation.	

PANEL EDGE BAR PLASMA CUTTING MACHINE, Qty.: 1 no.

Part B - Technical Specification

S. No.	BHEL SPECIFICATION		BIDDER'S OFFER (with technical details)
1.0	Application	The equipment is intended for cutting the flat fins forming the edge of the boiler panels by plasma cutting application.	
1.1	Job details		
1.1.1	Material to be cut	Alloy steel – T91.	
1.1.2	Max Cutting thickness	5 to 7 mm (vertical) 7 to 10 mm (Bevel)	
1.1.3	Total Cutting Length	around 20 m for one edge of panel	
2.0	Plasma Power source features		
2.1	Type of equipment: IGBT / MOSFET based plasma cutting power source to meet job requirement. Bidder to specify		
2.2	Make of the IGBT / MOSFET used in the equipment shall be of reputed make acceptable to BHEL. Bidder to specify		
2.3	Arc initiation type. Bidder to specify		
2.4	Output Polarity: Direct Current Electrode Negative. Bidder to confirm		
2.5	Output Current Range. Bidder to specify		
2.6	Output Current @ 100% Duty cycle. Bidder to specify		
2.7	Cutting speed: 900 – 1000 mm/min at 100% duty cycle for clean cutting of the job specified in clause 1.1. Bidder to confirm and provide details		
2.8	Severance cutting capacity (in mm) of the power source at 100% duty cycle. Bidder to specify		
2.9	Output Voltage during cutting. Bidder to specify		

S. No.	BHEL SPECIFICATION		BIDDER'S OFFER (with technical details)
2.10	Open Circuit Voltage. Bidder to specify		
2.11	Power Source Cooling: Forced Air cooled type. Bidder to specify		
2.12	Insulation class: Class H		
2.13	Make & model of power source. Bidder to specify		
2.14	Terminals: Quick fix connector type terminals for connecting torch and earth cables to the power source		
2.15	Input Power Cable for the power source: 5-metre-long electric cable with protective sheathing (for 3 phase with protective earth) to be provided with the power source. Built in storage space for cables along the power source would be preferable.		
2.16	Air filter unit to be provided and with Proper enclosure. Bidder to specify		
2.17	Input air available in shop floor at a pressure of 4.5 - 5 bar. Bidder to note		
2.18	Plasma torch current rating. Bidder to specify		
2.19	Plasma torch cable length in metres. Bidder to specify		
2.20	Plasma Cutting Torch should be able to be mounted on the electrically operated Motorized Tractor. Bidder to confirm.		
2.21	Make & model of Plasma torch. Bidder to specify		
3.0	Electrically Powered Tractor Features:		
3.1	Input Power supply	Single phase AC 230 V $\pm$ 10%, 50 Hz $\pm$ 3% through a 3-core wire. Bidder to confirm	
3.2	Power Cable	10 metres long input power cable to be provided with suitable end connection. Bidder to confirm.	
3.3	Motor type	Fractional Horse Power Geared reversible motor. Bidder to specify Bidder to specify HP and features of the motor.	
3.4	Machine controls	The machine shall have suitable Knobs/switches for adjustment of motor travel speed, ON / OFF, and forward / reverse motion. Bidder to confirm.	
3.4	Speed control	step less variable speed range. Bidder to specify.	

S. No.	BHEL SPECIFICATION		BIDDER'S OFFER (with technical details)
3.5	Angle adjustment	Cutting Torch Mounting Unit should have provision for setting the torch at different cutting angles. An angular scale has to show the angle setting. Bidder to confirm and provide details.	
3.6	Extended arm	a) The machine should have an extended arm (rack) with suitable holder for mounting the torch on the arm. Bidder to confirm b) The torch holder assembly should have Suitable provision for horizontal and vertical adjustment of the torch. Bidder to confirm c) Bidder to specify horizontal adjustment in mm. (It must be sufficient in length to keep the torch and flame away from the machine body). d) Bidder to specify vertical adjustment in mm.	
4	Rail tracks: Extendable Aluminium or steel Tracks with end couplers shall be supplied for a length of around 4 metres. Bidder to provide details		
5	Weight of the machine	Weight of the power source in kg - Bidder to specify Weight of the tractor in kg – Bidder to specify Weight of each rail track in kg - Bidder to specify	
6	Machine size	Bidder to specify the size of the machine (L×W×H) in mm	
7	Total connected load in kVA		
8.0	Scope of Supply:		
8.1	Motorized Tractor Unit - 1 no.		
8.2	Plasma Cutting torch – 1 no.		
8.3	Plasma power source- 1 no.		
8.4	Cutting tips/nozzles - 5 Sets.		
8.5	Input Power Cables and hoses – 1 set.		
8.6	Aluminium/steel guiding rails of total length around 4 m.		
8.7	Electrical & Mechanical Spares for Tractor (fuse, potentiometer, Switch, knob, gears/pinions and control PCB), torch - 1 Set. Unit price of mechanical & electrical spares and accessories quoted or recommended shall be submitted in the sealed price bid. Bidder to confirm and submit along with the offer		

Panel Edge Bar plasma cutting machine / Part B

S. No.	BHEL SPECIFICATION		BIDDER'S OFFER (with technical details)
8.8	Standard Tools supplied along with the machine- Bidder to specify		
8.9	Standard accessories supplied along with the machine- Bidder to specify		
8.10	Operation & Maintenance Manual (Hard copy) – 2 sets. +1 soft copy Bidder to confirm		
9	Relevant product catalogues for the offered equipment and bought out accessories shall be enclosed with the offer. Bidder to confirm		
10	Pre dispatch Inspection	The Supplier shall offer the Equipment for inspection by BHEL at Supplier's works prior to dispatch. Bidder to confirm	
11	Commissioning & Performance prove out at BHEL works	Commissioning and performance prove out of the offered equipment at BHEL works, by the supplier's representative. BHEL will provide necessary jobs for cutting trials.	
12	Training	The Supplier's Service Engineer shall give training in the Operation and Maintenance of the Machine to BHEL Staff, during commissioning of the Machines.	
13	Performance Guarantee	Performance Guarantee shall be for a minimum period of 12 months from the date of commissioning at BHEL Works or 18 months from despatch whichever is earlier.	