



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 7653

Fax :

Email : skaruna@bheltry.co.in

Web : www.bhel.com

TWO PART BID

Tender to be submitted in two Parts

Enquiry
Number:

2631600063

Enquiry
Date:

02.09.2016

Due date for submission
of quotation:

01.10.2016

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 tender should be submitted online on or before the due date by 14.00 Hrs (IST). Tenders received after 14.00 Hrs (IST) will not be considered for evaluation.

Item	Description	Quantity	(Indigenous Vendors) Matl. will be Delivered to
10	Portable Laser Marking Machine as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in or https://bheleps.buyjunction.in)	1.00 No.	FOR, BHEL, Stores, High Pressure Boiler Plant, Tiruchirappalli - 620014

Important points to be taken care during submission of offer

1. Material shall be delivered to: Indigenous Vendors: As stated above.
Foreign Vendors: CFR Chennai Seaport / Airport
2. Delivery required 3 months from the date of purchase order.
3. Erection & Commissioning period required 2 Weeks from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
4. EMD for this Tender will be (INR) : 40,000.00
5. Compliance Form No: TRY/IMP/03 & TRY/IND/03A to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
6. 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 (refer MM / CE / EPROC / GENL / 001-EMD) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from <https://bheleps.buyjunction.in> or BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under above Enquiry reference.

Tenders should be submitted online at our above indicated web portal before 14:00 hours on the due date

Tenders will be opened online at 14:30 hours on the due date.

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

DGM / Capital Equipment / MM

S. KARUNANIDHY
Dy. General Manager
Capital Equipment / MM
BHEL, Tiruchirappalli - 620 014.

PORTABLE LASER MARKING MACHINE, Qty. – 1 no.**PART A**

Sl. No.	PARTICULARS	BIDDER's RESPONSE
1.0	Qualifying Criteria: The BIDDER has to compulsorily satisfy to the Qualifying criteria to get qualified otherwise the technical offer will not be considered.	
1.1	The Bidder/Vendor (OEM) shall have a minimum of five Years of Continuous Experience in the field of Design, Manufacture and Supply of Portable Laser Marking Machine . Vendor may indicate the actual no. of years of experience in the field	
1.2	Only those Bidders/Vendors (OEM) who have supplied and commissioned at least 2 numbers of Portable Laser Marking Machines, in the past five years (on the initial date of opening of Tender) should quote.	
1.3	Vendor has to submit at least one performance certificate for satisfactory performance of Portable Laser Marking Machine similar to the model quoted against this tender for a minimum period of one year from the date of commissioning (as on the initial date of tender opening) from any of their customers. For obtaining the Performance certificate, a suggestive format is provided in Annexure.	
1.4	BHEL reserves the right to verify the information provided by the vendor. In case the information provided by the vendor is found to be false/ incorrect, The offer shall be rejected.	
2.0	Bidder to provide the following information:	
2.1	Year of launch of the model quoted against this tender	
2.2	Number of Portable Laser Marking machines supplied till date.	
2.3	Details on SERVICE-AFTER-SALES set-up in India, Contact details (Name, Phone number, email ID) including the Address of Agents / Service Centres in India to be provided.	
2.4	List of customers to whom similar Laser Marking Machines were supplied, installed and commissioned till date.	
2.5	Specify details of Portable Laser Marking machines supplied to other units of BHEL, if any (Year of commissioning with details etc.)	
2.6	Details on Standards followed in Design and Testing of Portable Laser Marking machines.	
2.7	Details of Quality System followed (Furnish the salient aspects of the Quality Assurance System followed)	
2.8	BIDDER has to indicate the Country of Origin for the supply of equipment.	
2.9	Any Additional Data to supplement the manufacturing capability of the BIDDER for the subject equipment.	

PORTABLE LASER MARKING MACHINE, Qty. – 1 no.**PART A**

Sl. No.	PARTICULARS	BIDDER's RESPONSE
3.0	Vendor to note the following:	
3.1	The BIDDER shall submit the offer in Two Parts – 1. Technical [with PART A & PART B] & 2. Commercial and Price Bid.	
3.2	The VENDOR's RESPONSE against each clause in PART A & B of the offer should be filled 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 and complete technical details / literature on the quoted model.	

PORTABLE LASER MARKING MACHINE, Qty. – 1 no.**PART A****ANNEXURE**

The performance certificate should be produced **on Customer's Letter Head.**

Suggestive Format of Performance Certificate:

(On Customer's letter head)
PERFORMANCE CERTIFICATE

- | | | |
|---|--|-----------------------------------|
| 1 | Supplier / Make of Portable Laser marking m/c | : |
| 2 | Model of Portable Laser marking m/c | : |
| 3 | Month & Year of Commissioning | : |
| 4 | Performance of the machine
(Strike off whichever is not applicable) | : Satisfactory / Not Satisfactory |
| 5 | After sales service
(Strike off whichever is not applicable) | : Satisfactory / Not Satisfactory |
| 6 | Any Other remarks | : |

Date:

Signature & Seal of the Authority
Issuing the Performance Certificate

PORTABLE LASER MARKING MACHINE, Qty. – 1 no.**Part B – Technical Specification**

S. No.	BHEL REQUIREMENTS		BIDDER's OFFER
1.0	Purpose & Work piece Material		
1.1	Purpose: To laser mark Alphanumeric, special characters logos and symbols on sheets and tubes by a hand held type laser marking machine. The machine shall be moved near to the jobs available at various locations in the shop floor for laser marking.	Vendor to note	
1.2	Material: Stainless steel, Titanium, alloys of special materials. Job Configuration and Dimensions: • Tube Ø 14 – 350 mm & length: 10 – 15 metres. To be marked on the outer surface along the length of the tubes. • Plate sizes: Width : 12 – 350 mm, Length : 10 – 3000 mm & Thickness of 1 mm and above (marking shall be done nearer to any of the edges)	Vendor to note	
2.0	Machine Configuration		
2.1	Laser marker - Hand held type	Vendor to confirm	
2.2	Type: Fibre Laser	Vendor to confirm & give details	
2.3	Make & Model	Vendor to specify	
2.4	Laser Power (Minimum 20 W)	Vendor to confirm & give details	
2.5	Vendor to provide details of the Laser source used eg. make, model etc. and details of major components of the machine with catalogue is to be provided	Vendor to specify	
2.6	Cooling system for Laser power source / control system to withstand continuous usage and ambient conditions in shop floor.	Vendor to give details	
2.7	Laser Wavelength – wavelength / absorption to suit to jobs specified in Clause 1.2	Vendor to specify	
2.8	Laser class	Vendor to specify	
2.9	Marking Depth in mm	Vendor to specify	
2.10	Font Size : 2 to 25 mm (approx.)	Vendor to specify	
2.11	Service Life of Laser source	Vendor to specify	
2.12	Marking Area : 200 mm x 200 mm (approx.)	Vendor to specify	
2.13	Marking speed in mm/s	Vendor to specify	
2.14	Marking format – Alpha numeric and special characters, symbols, logos etc.	Vendor to specify	To be checked by ATP
2.15	Input format for Symbols and Logos	Vendor to specify	

PORTABLE LASER MARKING MACHINE, Qty. – 1 no.**Part B – Technical Specification**

S. No.	BHEL REQUIREMENTS	BIDDER'S OFFER
2.16	Details of Optics (mirrors, prisms, Galvo etc) to be submitted along with technical offer	Vendor to specify
2.17	Details of controls, switches etc. available on the Operator Panel for control of all the functions of the equipment shall be provided.	Vendor to specify
2.18	Length of cables from controller to the hand held laser marker	Vendor to specify
2.19	Total connected load (kVA)	Vendor to specify
2.20	Weight of the handheld equipment	Vendor to specify
2.21	Total weight of the machine	Vendor to specify
2.22	Laptop with essential hardware & software	
2.22.1	Laptop with sufficient length of interface cable, HDD of around 80 GB size, CD / DVD Drive, TFT Display of size 14", essential hardware, RS 232 Port, Ethernet cable, USB port and requisite preinstalled licensed latest software shall be supplied with the machine.	Vendor to provide details
2.22.2	Make of the Laptop shall be Apple / Dell / Asus / Lenovo / HP / Acer / Samsung or any other make acceptable to BHEL	Vendor to provide make and model details.
2.22.3	Software: Original CDs of all the pre licenced software including laser marking software are to be supplied along with the machine.	Vendor to provide details
2.22.4	Vendor has to provide complete item wise list of Laptop, hardware and software - Unpriced list with Technical offer and priced list with Commercial bid.	Vendor to provide details
3.0	Electrical	
3.1	Input power supply: 1 phase AC, 230V $\pm$ 10%, 50Hz $\pm$ 3%.	Vendor to note & confirm
3.2	Input power cable of length around 3m	Vendor to specify
3.3	Tropicalisation: All electrical / electronic equipment shall be tropicalized	Vendor to confirm
3.4	All electrical & electronic controls should be dust and vermin proof	Vendor to confirm
3.5	Ingress Protection to prevent the optical chamber from contamination	Vendor to specify
3.6	Vendor should ensure the proper earthing for the machine.	Vendor to confirm & give details
4.0	Ambient Conditions & Thermal Stability	
4.1	Temperature up to 50°C; Humidity up to 90% but both upper limits do not occur simultaneously.	Vendor to confirm

PORTABLE LASER MARKING MACHINE, Qty. – 1 no.**Part B – Technical Specification**

S. No.	BHEL REQUIREMENTS	BIDDER's OFFER
4.2	Thermal Stability of the complete machine keeping in view specified Ambient Conditions and trouble free operation of the machine should be ensured by vendor.	Vendor to confirm
5.0	Safety Arrangements: Following safety features in addition to other standard safety features should be provided on the machine	
5.1	Caution and Warning Labels to indicate Laser Radiation from machine parts	Vendor to ensure
5.2	Provision for shields around the marking area to reduce the brightness of reflected light and to prevent injury to operator's eyes from exposure to laser radiation.	Vendor to confirm & give details
5.3	Machine should have adequate and reliable safety interlocks / devices to avoid damage to the machine, work piece and the operator in case of malfunctioning or human error.	Vendor to confirm
5.4	A detailed list of all alarms / indications provided on machine should be submitted by the supplier.	Vendor to specify
5.5	Safety goggles for the operator to be supplied along with the equipment – 5 nos.	Vendor to confirm
6.0	Provision for a diagnostic system which shows detailed cause and remedy for the fault on the display with diagnostic Help guide for maintenance.	Vendor to specify
7.0	Spares - Complete list of spares for machine and accessories with itemised breakup of electrical, optics and electronic spares used on the machine for 2 years of trouble free operation on 3 shifts continuous running basis should be offered by vendor. Specification / type / model and name & address of the spare supplier shall also be furnished	Vendor to provide the list
8.0	Vendor to provide the list of essential accessories, consumables along with the offer	Vendor to provide the list
8.1	Vendor to provide the list of optional accessories, consumables along with the offer	Vendor to provide the list
9.0	Documentation : Three sets of following documents (Hard copies) in English language should be supplied along with the machine	
9.1	Detailed Operation and Maintenance manual of machine with all drawings of machine assemblies /sub-assemblies /accessories /parts including Electrical / Optical circuit diagrams. All Assembly/ Sub Assembly Drawings shall be supplied with the part list.	Vendor to confirm

PORTABLE LASER MARKING MACHINE, Qty. – 1 no.**Part B – Technical Specification**

S. No.	BHEL REQUIREMENTS	BIDDER's OFFER
9.2	Maintenance, Interface & commissioning manuals for Controls, Laser Head and Optics.	Vendor to confirm
9.3	Complete Master List of parts used in the machine shall be submitted by the vendor.	Vendor to confirm
9.4	Catalogues, O&M Manuals of all bought out items including drawings, wherever applicable.	Vendor to confirm
9.5	Program on CD, NC data & PLC data on floppy – if any.	Vendor to specify
9.6	One set of all the above documentation on CD ROM or pen drive , wherever possible.	Vendor to confirm
10.0	Scope of Supply: The Scope includes supply, installation and commissioning of the following mentioned items as per the specifications described in subsequent sections:	
10.1	Portable Laser Marking Machine	Vendor to confirm
10.2	Laptop with essential hardware & software	
10.3	O&M Spares for 2 years trouble free operation	
10.4	Consumables (if any)	
10.5	Essential accessories (if any)	
10.6	Optional accessories (if any)	
10.7	Documentation	
11.0	Pre Despatch Inspection: The equipment and its accessories shall be offered for inspection by BHEL at Supplier's works before despatch.	Vendor to confirm
12.0	Erection & Commissioning	
12.1	Erection, commissioning, prove out, start up, testing of equipment & accessories at BHEL works shall be carried out by supplier's engineer.	Vendor to confirm
12.2	The supplier shall Prove out the capability and demonstrate the features of the equipment, accessories and software etc. during commissioning.	Vendor to confirm
13.0	Training: The supplier's Engineer should impart training to BHEL staff in operation, trouble shooting of the equipment, Electrical, Electronic, mechanical, Optics, Laser Head maintenance etc.	Vendor to confirm
14.0	Performance Guarantee: Performance of the equipment shall be guaranteed for a minimum period of 12 months from the date of commissioning or 18 months from despatch whichever is earlier.	Vendor to confirm