



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 7360

Email : ajayasalkar@bhel.in

Web : www.bhel.com

TWO PART BID

Tender to be submitted in two Parts

Enquiry
Number:

2631800003

Enquiry Date:

09.01.2018

Due date for submission of
quotation:

06.02.2018

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	Hand Held Hardness Tester as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or https://eprocure.gov.in/epublish/app)	2 Nos.

Important points to be taken care during submission of offer

1. Delivery terms shall be FOR BHEL Stores, Thirumayam
2. Compliance Form No: MM/CE/TMM/ IND/ 07 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 months from the date of Purchase Order.
4. Erection and commissioning shall be done at BHEL Thirumayam by the supplier
5. Time period required for Erection and Commissioning shall be 2 weeks from the date of intimation by BHEL
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/GENL/001), compliance form and technical specification can be downloaded from BHEL web site <http://www.bhel.com> or from <https://eprocure.gov.in/epublish/app> under Enquiry reference "2631800003".

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

AJAY VASALKAR
Sr. Manager / Capital Equipment / MM

MM / Capital Equipment
BHEL, Tiruchirappalli - 620 014.

PART - A
QUALIFYING CRITERIA FOR
HAND HELD HARDNESS TESTER

S.No	BHEL Specification	Vendor's Offer
1.0	QUALIFYING CRITERIA	
1.1	The BIDDER / VENDOR (OEM) shall have at least FIVE Years of Experience in the Design, Manufacture & Supply of "HANDHELD HARDNESS TESTER". Vendor may indicate the actual no. of years of experience of OEM in the field.	
1.2	In case Authorized Dealer is representing OEM, Authorized Dealer certificate to be enclosed along with the offer.	
1.3	Only those vendors (OEMs)/Authorized dealer, who have Manufactured, supplied and commissioned at least ONE Hand Held Hardness Tester of Quoted Series , in the last FIVE years [(as on date of this tender opening (first date))] should quote.	
1.4	Vendor has to submit at least ONE Performance Certificate from their customer, for satisfactory performance of Quoted Series of Hand held hardness tester specified in clause 1.2 , supplied to them and such equipment is working satisfactorily for a minimum period of one year [as on date of this tender opening(first date)]. For obtaining the Performance certificate, a suggestive format is provided at the end of part-A.	
1.5	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 will be rejected.	

2.0	INFORMATION TO BE PROVIDED BY VENDOR	
2.1	Vendor shall provide contact details(phone no & email id) including the address of his Agents / Service Centres in India	
2.2	Year of launch of the series quoted against this enquiry	
2.3	Number of "Hand held hardness tester" supplied and commissioned till date in the quoted model. (to quote Hardness testers supplied during the last three years only)	
2.4	The BIDDER/VENDOR to furnish Reference List of Customers (max 10 customers) including Contact details (phone no & email id).	

Suggestive Format of Performance Certificate:

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

PERFORMANCE CERTIFICATE

- | | | |
|---|---|---------------------------------|
| 1 | Supplier of the instrument | |
| 2 | Make & Series of the instrument | |
| 3 | Month & Year of Commissioning | |
| 4 | a. Application for which instrument is used
b. Hardness range measured | |
| 5 | Performance of the instrument
(Strike off whichever is not applicable) | Satisfactory / Not Satisfactory |
| 6 | After sales service
(Strike off whichever is not applicable) | Satisfactory / Not Satisfactory |
| 7 | Any Other remarks | |

Performance certificate Issued date:

Signature & Seal of the Authority
Issuing the Performance Certificate

Contact details of issuing authority

Name & Designation:

Office No/ Mobile no:

Email ID:

PART-B**TECHNICAL SPECIFICATION FOR HAND HELD HARDNESS TESTER****Qty:2 Nos****BRIEF DESCRIPTION:**

Hand held Hardness tester with Standard Accessories is required for finding the hardness of various materials.

TECHNICAL SPECIFICATION

SL.NO	Description	BHEL REQUIREMENT	Vendor offer
1.0 Purpose			
1.1	Purpose	Hardness testing of various metals and weldments, Valve Castings & Forgings and machined components.	
1.2	Jobs to be analyzed	- Pipes(Dia 88.9 to 1500mm; Thickness:12.7mm to 150mm), - Tubes(Dia 38.1 to 88.9mm ;thickness:3mm to 15mm) - Plates, Fittings, Castings & Forgings, Machined components, Weldments etc Material: Carbon Steel, Alloy Steel, Stainless Steel & also stellite welding, Inconel etc.	
1.3	Accessories for cylindrical jobs (optional)	Accessories if any for holding the impact device in proper position on tubes and pipes of various dia mentioned above. Vendor to confirm and specify the details.	
2.0 Principle of operation			
2.1	Principle of operation	Basic Equipment must support/compatible to a) Leeb's Principle and also b) UCI Principle.	
2.2	Probes	Suitable probes must be offered for meeting the above requirement. Unpriced item wise list to be provided in the technical offer.	
3.0 Machine Configuration			
3.1	Weight	Handheld, less than 2000gms.	
3.2	Power Source	The equipment shall work with rechargeable battery pack. One complete recharge should give minimum 8 Hrs of operation.	
3.3	Battery type and quantity	Vendor to specify	
3.4	Minimum Job thickness	3 mm. Vendor to specify the method/procedure to measure hardness of these minimum thickness jobs in leeb and UCI probes	
3.5	Testing Range	Equivalent Brinell Hardness Number ranging 100 BHN to 650 BHN	
3.6	Hardness scale conversion	HV, HRB, HRC,BHN etc in compliance with ASTM E140 or equivalent. Should display both the leeb value and user selected scale simultaneously.	
3.7	Accuracy & Variation	Should comply as per ASTM A 956 standard/equivalent	
3.8	Memory	Minimum 100 Readings	
3.9	Statistics	Display of mean values	
4.0 User Interface			
4.1	Display	Colour Digital display screen-Touch type of minimum 5 inch size to be provided	
4.2	Keypad	Keypad provided must be water proof, resistance to oil/grease.	
4.3	IP	IP 54 protection or better to be provided.	

SL.NO	Description	BHEL REQUIREMENT	Vendor offer
4.4	Connectivity	Must have USB (OR)RS 232 port connectivity to import data to the computer for report generation	
5.0	Impact devices	Vendor to offer the various impact devices and their spec along with the offer item wise. The same list shall be quoted in the commercial offer with item wise price break up in a sealed cover.	
6.0	Calibration Blocks with calibration certificate	Vendor should offer minimum three certified calibration blocks along with calibration certificate for each type of probe. These three Calibration Blocks should verify the hardness to minimum, middle and maximum range of the Hardness Scale of the probe. The calibration certificate provided for the calibration blocks must be traceable to national/ international standards. Vendor to provide the details with approx. hardness of the offered blocks	
7.0 Accessories			
7.1	List of accessories to be provided along with offer	Vendor has to specify the entire list of accessories like probe holders ,Battery charger, Equipment carry case etc	
8.0 Spares			
8.1	List of essential spares	Vendor has to provide the spares list like cables etc if any	
9.0	Service manual	One Hard copy and one soft copy per instrument has to be provided	
10.0	Test Certificate	The total assembly of equipment shall be tested for its performance by the supplier at supplier's work prior to dispatch of the equipment and test certificate shall be given.	
11.0 Demonstration of the equipment			
11.1	Demonstration at BHEL Thirumayam	The supplier must demonstrate the equipment along with the offered probes at BHEL Thirumayam free of cost, if requested by BHEL with in 7 days of request to ensure the equipment suitability for the jobs specified.	
12.0 Installation & Commissioning			
12.1	Installation & commissioning & performance prove out	Installation & Prove out has to be done at BHEL Thirumayam works by the supplier.	
13.0 Training			
13.1	Training on operation & maintenance	Vendor to provide training in operating the instrument at BHEL works during commissioning	
14.0 Guarantee and service			
14.1	Guarantee	12 months from the date of commissioning or 18 months from the date of dispatch whichever is earlier.	
14.2	Service	a) Supplier must be available at BHEL works with in 10 days from the service call by BHEL during guarantee period. b) In case the equipment/accessory cannot be rectifiable at BHEL works, supplier must arrange an alternative equipment/accessory on returnable basis with in 15 days from the service call till the original equipment gets rectified/replaced with new one.	