



An ISO 9001
Company

Bharat Heavy Electricals Limited
(High Pressure Boiler Plant)
Tiruchirappalli – 620014, Tamil Nadu, India
CAPITAL EQUIPMENT/ MATERIALS MANAGEMENT

ENQUIRY		Phone: +91 431 257 7421/7833	
NOTICE INVITING TENDER		Fax :431 257 6826	
		Email : vkarna@bhel.in , vijayak@bhel.in	
		Web : www.bhel.com	
TWO PART BID	Enquiry Number:	Enquiry Date:	Due date for submission of quotation:
Tender to be submitted in two parts	2631900073	04.12.2019	30.12.2019

You are requested to quote the Enquiry number, date and due date in all your correspondences. 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	Qty.	(Indigenous Vendors) Matl. will be Delivered to
10	"Handheld Hardness Tester" as per the technical specification, BHEL commercial terms & conditions applicable (to be downloaded from web site www.bhel.com and https://eprocure.gov.in/epublish/app)	03 Nos.	FOR, BHEL, Stores, High Pressure Boiler Plant, Tiruchirappalli - 620014
20	"Handheld Hardness Tester" as per the technical specification, BHEL commercial terms & conditions applicable (to be downloaded from web site www.bhel.com and https://eprocure.gov.in/epublish/app)	01 No.	FOR BHEL Stores, Power Plant Piping Unit, Thirumayam 622507, Pudukottai Dist.

IMPORTANT POINTS TO BE TAKEN CARE DURING SUBMISSION OF OFFER:

- Material shall be delivered to (By indigenous vendors): As stated below.
 - Item 10 for Qty. 3 Nos. shall be F.O.R BHEL, Stores, High Pressure Boiler Plant, Tiruchirappalli-620014.
 - Item 20 for Qty. 1 No. shall be F.O.R BHEL Stores, Power Plant Piping Unit, Thirumayam-622507, Pudukottai Dist.
- By foreign vendors: CFR/CPT - Chennai Seaport / Airport.
- Delivery required 2 months from the date of purchase order.
- Erection and commissioning shall be done at BHEL, Trichy by the supplier.
- Erection & Commissioning period required 3 Weeks from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
- EMD: INR 1,00,000.00
- Compliance Forms. TRY/IMP/02 & TRY/IND/02A to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
- 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 - EMD), commercial Terms check list (Compliance Form) and Technical Specification can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender <https://eprocure.gov.in/epublish/app> under Enquiry reference "2631900073".

Note: this is not an E-tender, hence Vendors are requested to ensure that the offer is reaching physically at our office before 14:00 Hrs. on the date of tender opening.

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 4/12/19.
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V. KARUNAKARAN
Dy. General Manager
Capital Equipment / MM
BHEL / Tiruchirappalli - 620 014

HAND HELD HARDNESS TESTER

PART – A

S.No	BHEL Specification	Bidder's Response
1.0	QUALIFYING CRITERIA	
1.1	Only those bidders / OEMs who have Manufactured, supplied and commissioned at least ONE Hand Held Hardness Tester of Quoted Series , in the last FIVE years [as on the first date of this tender opening] should quote	
1.2	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 1.1 , supplied to them and such equipment is working satisfactorily for a minimum period of six month [as on the first date of this tender opening]. For obtaining the Performance certificate, a suggestive format is provided at the end of part-A.	
1.3	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	Bidder's Response
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).	

3.0	Bidder to note	
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 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.	

.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 Satisfactory / Not Satisfactory
(Strike off whichever is not applicable)
- 6 After sales service Satisfactory / Not Satisfactory
(Strike off whichever is not applicable)
- 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:

HAND HELD HARDNESS TESTER, Qty. 4 nos.

PART – B

SL.NO	Description	BHEL REQUIREMENT	Bidder's offer with technical details
1.0 Purpose			
1.1	Purpose	Hand held Hardness tester with Standard Accessories is required for finding the hardness of various materials viz. 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. Bidder 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, preferably 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	Bidder to specify	
3.4	Minimum Job thickness	3 mm. Bidder 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. Bidder to confirm and provide details	
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	Bidder's offer with technical details
4.4	Connectivity	Must have USB (OR) RS 232 port connectivity to import data to the computer for report generation	
5.0	Impact devices	Bidder 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	Bidder 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. Bidder 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	Bidder 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	Bidder 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 if requested by BHEL within 7days 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 by the supplier at BHEL works. BHEL Thirumayam – 1 no. BHEL Trichy – 3 nos.	
13.0 Training			
13.1	Training on operation & maintenance	Bidder to provide training in operating the instrument at BHEL works during commissioning	
14.0 Guarantee and service			
14.1	Guarantee	Min.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 within 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	

SL.NO	Description	BHEL REQUIREMENT	Bidder's offer with technical details
		within 15 days from the service call till the original equipment gets rectified/replaced with new one.	