



Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

An ISO 9001
Company

| | |
|-------------------------------|---|
| ENQUIRY | Phone: +91 431 257 79 38 Fax : +91 431 252 00 31 Email : tvenkat@bheltry.co.in Web : www.bhel.com |
| NOTICE INVITING TENDER | |

| | | | |
|-------------------------------------|------------------------|----------------------|--|
| TWO PART BID | Enquiry Number: | Enquiry Date: | Due date for submission of quotation: |
| Tender to be submitted in two Parts | 2621300022 | 05.08.2013 | 07.09.2013 |


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 | Portable Hardness Tester as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in) | 9.00 Nos |

Important points to be taken care during submission of offer

1. Delivery required 4 months from the date of purchase order.
2. EMD for this Tender will be (INR) : 1,50,000.00
3. Checklist Nos. TRY/IMP/02 and TRY/IND/02A to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
4. 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) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from 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 Enquiry reference "2621300022".

| | |
|--|--|
| 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  Sr. Manager / Capital Equipment / MM |
|--|--|

T. VENKATESWARAN
Senior Manager
Capital Equipment / MM
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 a minimum of FIVE Years of Continuous Experience in the Design, Manufacture & Supply of "HAND HELD HARDNESS TESTER". Vendor may indicate the actual no. of years of experience in the field | |
| 1.2 | Only those vendors (OEMs), who have supplied and commissioned atleast TWO numbers of Hand Held Hardness Tester similar to the instrument specified under Part B, in the past two years (as on date of opening of Tender) and such instrument is presently working satisfactorily for more than one year after commissioning (as on date of opening of Tender) should quote. | |
| 1.3 | Vendor has to submit atleast one Performance Certificate from their customers, for satisfactory performance of Hand held hardness tester quoted against this enquiry, for a minimum period of one year (as on date of opening tender). For obtaining the Performance certificate, a suggestive format is provided. | |

| | | |
|------------|--|--|
| 2.0 | INFORMATION TO BE PROVIDED BY VENDOR | |
| 2.1 | Year of launch of the model quoted against this enquiry | |
| 2.2 | Number of "Hand held hardness tester " supplied and commissioned till date in the quoted model. | |
| 2.3 | The BIDDER/VENDOR to furnish Reference List of Customers | |
| 2.4 | Contact details(phone no & email id) including the Address of Agents / Service Centres in India to be provided | |

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 & Model 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 / Good / Average / Not Satisfactory
(Strike off whichever is not applicable)

- 6 After sales serviceSatisfactory / 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**TECHNICAL SPECIFICATION FOR HAND HELD HARDNESS TESTER****BRIEF DESCRIPTION:**

Handheld Hardness tester is required for finding the hardness of various materials.

TECHNICAL SPECIFICATION**Qty: 9Nos**

| SL.NO | Description | BHEL REQUIREMENT | Bidder comment |
|--|--|--|----------------|
| 1.0 Purpose | | | |
| 1.1 | Purpose | Hardness testing of various metals and weldments etc | |
| 1.2 | Jobs to be analyzed | Pipes(Dia 88.9 to 1000mm; Thickness:12.7mm to 150mm), Tubes(Dia 38.1 to 76.1mm;thickness:3mm to 15mm) , Plates,Fittings & Castings, Weldments of Carbon Steel, Alloy Steel, Stainless Steel & also satellite welding etc | |
| 2.0 Principle of operation | | | |
| 2.1 | Principle of operation | Ultrasonic Contact Impedance(UCI) | |
| 3.0 Machine Configuration | | | |
| 3.1 | Weight | Hand held around 500gms. | |
| 3.2 | Power Source | The equipment shall work with rechargeable battery pack. One complete recharge should give minimum 10Hrs of operation. | |
| 3.3 | Battery type and quantity | Vendor to specify | |
| 3.4 | Minimum Job thickness to be measured | 3 mm | |
| 3.5 | Testing Range | 75-560 BHN | |
| 3.6 | Converted hardness Scales | HV, HRB, HRC,BHN | |
| 3.7 | Accuracy & Variation | +/- 10 BHN | |
| 3.8 | Memory | Minimum 100 Readings | |
| 3.9 | Ambient Operating Temperature | 0°C to 50°C | |
| 3.10 | Statistics | Display of mean values | |
| 4.0 User Interface | | | |
| 4.1 | Display | Digital LED/LCD display | |
| 4.2 | Keypad | Keypad with navigation keys to be provided. Must be water proof, resistance to oil/grease. | |
| 5.0 | Calibration Block | Vendor should provide acertified calibration block for each instrument. | |
| 5.1 | Calibration | Supplier should provide calibration certificate | |
| 6.0 Accessories | | | |
| 6.1 | List of accessories to be provided along with offer | Vendor has to specify the entire list of accessories like probes ,Battery charger etc | |
| 7.0 Spares | | | |
| 7.1 | List of essential spares | Vendor has to provide the spares list. | |
| 8.0 | Service manual | One copy per instrument has to be provided | |
| 9.0 | Pre dispatch Inspection | 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. | |
| 10.0 Installation & Commissioning | | | |
| 10.1 | Installation & commissioning & performance prove out | Commissioning & Prove out has to be done at BHEL,Trichy by the supplier | |
| 11.0 Training | | | |
| 11.1 | Training on operation & maintenance | Vendor to provide training in operating the instrument at BHEL,Trichy | |
| 12.0 Guarantee | | | |
| 12.1 | Guarantee | 12 months from the date of commissioning or 18 months from the date of supply whichever is earlier. | |