



An ISO 9001  
Company

## Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirapalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

### ENQUIRY

### NOTICE INVITING TENDER

Phone: +91 431 257 7421/7297

Email : vkaruna@bhel.in

: hari.r@bhel.in

Web : www.bhel.com

### TWO PART BID

Tender to be submitted in two Parts

Enquiry  
Number:

2631900050

Enquiry  
Date:

24.10.2019

Due date for submission  
of quotation:

18.11.2019

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 should reach physically on or before 14.00 Hrs(IST) on the Date of tender opening. Tenders received after 14.00Hrs (IST) will not be considered for evaluation.

| Item | Description                                                                                                                                                                                                                                                                                                                    | Quantity  | (Indigenous Vendors)<br>Matl. Will be Delivered to                      |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------------------------------------------------------------|
| 10   | Soldering/ Desoldering Station as per the technical specification & commercial conditions applicable (To be downloaded from web site <a href="http://www.bhel.com/tender/tender_home.php">www.bhel.com/tender/tender_home.php</a> or <a href="https://eprocure.gov.in/epublish/app">https://eprocure.gov.in/epublish/app</a> ) | 2.00 Nos. | 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 (By Indigenous vendors): As stated above.
- 2) Delivery required 2 Months from the date of purchase order.
- 3) Erection & Commissioning period required 1 Week from the date of intimation by BHEL to vendor for deputation of their Engineers for E&C.
- 4) Compliance Forms. TRY/IND/08 to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
- 5) 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 / GENL / 001-NO EMD) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site [www.bhel.com/tender/tender\\_home.php](http://www.bhel.com/tender/tender_home.php) or from the Government tender website <https://eprocure.gov.in/epublish/app> under Enquiry reference 2631900050.

Tenders should be submitted before 14.00Hrs (IST) 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*  
24/10/19  
DGM / Capital Equipment / MM

V. KARUNAKARAN  
Dy. General Manager  
Capital Equipment / MM

BHEL / Tiruchirappalli - 620 014

**Part A**

| Sl.No                                                                                                                                                            | BHEL REQUIREMENT                                                                                                                                                                                                                                                                                                                                    | Bidder's Response |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| <b><u>SECTION – 1: Qualifying Criteria</u></b>                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                     |                   |
| <b>The BIDDER has to compulsorily meet the Qualifying criteria indicated in SECTION 1 to get qualified otherwise the technical offer will not be considered.</b> |                                                                                                                                                                                                                                                                                                                                                     |                   |
| 1.                                                                                                                                                               | BIDDER to provide the Profile of their Company including Number of Years of Experience of the BIDDER/ VENDOR in the field of design, manufacture and supply of “ <b>Soldering / De-soldering Station</b> ”                                                                                                                                          |                   |
| 2.                                                                                                                                                               | Only those bidders (OEMs) should quote, who have supplied and commissioned at least 2 number of the High Voltage Tester in the last 3 years.                                                                                                                                                                                                        |                   |
| 3.                                                                                                                                                               | Recent performance certificate from any user is required for a soldering/de-soldering station for items purchased in last three years.                                                                                                                                                                                                              |                   |
| 4.                                                                                                                                                               | BHEL reserves the right to verify the information provided by Bidder. In case the information provided by Bidder is found to be false/ incorrect, the offer shall be rejected.                                                                                                                                                                      |                   |
| <b><u>SECTION – 2: Bidder to provide the following details</u></b>                                                                                               |                                                                                                                                                                                                                                                                                                                                                     |                   |
| 5.                                                                                                                                                               | Bidder to furnish referral list of customers to whom <b>Soldering / De-soldering Station</b> ” were supplied till date. The reference List of Customers to whom similar equipment has been supplied shall be accompanied with the details (Phone Number /E-Mail ID) of the CONTACT PERSON for cross reference by BHEL for performance verification. |                   |
| 6.                                                                                                                                                               | Details of the International/ National Standards followed in design of the equipment.                                                                                                                                                                                                                                                               |                   |
| 7.                                                                                                                                                               | Comprehensive Details on Performance Testing of the Equipment quoted and details of Quality System followed (Kindly furnish the salient aspects of the QA system followed).                                                                                                                                                                         |                   |
| 8.                                                                                                                                                               | Year of launch of the model quoted against this enquiry.                                                                                                                                                                                                                                                                                            |                   |

| Sl.No                              | BHEL REQUIREMENT                                                                                                                                                                                                                                                                                                                                         | Bidder's Response |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| 9.                                 | Details on SERVICE-AFTER-SALES Set-Up in India including the Addresses of Agents / Service Centers in India.                                                                                                                                                                                                                                             |                   |
| 10.                                | Any Additional Data to supplement the manufacturing capability of the BIDDER for the subject equipment.                                                                                                                                                                                                                                                  |                   |
| <b>SECTION – 3: Bidder to note</b> |                                                                                                                                                                                                                                                                                                                                                          |                   |
| 11.                                | The BIDDER shall submit the offer in TWO PARTS-Technical with unpriced Commercial bid and Price Bid.                                                                                                                                                                                                                                                     |                   |
| 12.                                | The offer shall contain a comparative statement of Technical Specifications given by BHEL and the offered details submitted by the Bidder, against each clause.                                                                                                                                                                                          |                   |
| 13.                                | Merely stating 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words wherever 'Bidder to Specify' details in the technical comparative statement may lead to disqualification of the Technical Offer. Bidder to specify the actual specification of the offered model(s) line item wise.                                                 |                   |
| 14.                                | The Technical Offer shall be supported by product Catalogues & Data Sheets and also technical details of Bought-Out-Items with copies of Product Catalogue & Selection Criteria. Kindly note that mere attachment of the catalog without filling the vendors' confirmation column of the technical specification shall not be considered as valid offer. |                   |
| 15.                                | The Commercial Offer (given with the Technical Offer) shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid.                                                                                                                                                                                                                         |                   |
| 16.                                | The BIDDER / VENDOR shall assure a continuous support for SPARES and SERVICE for TEN Years, from the date of supply of the equipment at BHEL Works.                                                                                                                                                                                                      |                   |
| 17.                                | BIDDER has to indicate the Country of Origin for the supply of equipment.                                                                                                                                                                                                                                                                                |                   |

**Specification for Soldering/De-Soldering Station**

| Sl. No.     | Product Description          | BHEL's Specification/ Requirement                                                              | Bidder's Confirmation* |
|-------------|------------------------------|------------------------------------------------------------------------------------------------|------------------------|
|             |                              |                                                                                                |                        |
| <b>1.00</b> | <b>General Specification</b> |                                                                                                |                        |
| 1.01        | Multi-function               | System must be capable of Hot air reflow, Soldering and de-soldering of SMD and PTH components |                        |
| 1.02        | Vacuum pick-up               | Vacuum pick-up for SMD components                                                              |                        |
| 1.03        | Suction and Hot Blow         | Selectable                                                                                     |                        |
| 1.04        | Temperature Control          | Closed Loop temperature control                                                                |                        |
| 1.05        | Additional Features          | Simultaneous operation of soldering and de-soldering                                           |                        |
|             |                              | In-built digital calibration for temperature                                                   |                        |
|             |                              | Sleep mode.                                                                                    |                        |
| 1.06        | User Interface               | LCD/ LED display with keypad for temperature indicator                                         |                        |
| 1.07        | I/O interfaces               | RS232/ USB [optional]                                                                          |                        |
| 1.08        | Power Requirement            | Universal/ 230V AC, 50 Hz                                                                      |                        |
| 1.09        | Software                     | Lifetime licensed software for the instrument                                                  |                        |
| 1.10        | Interface Cable              | Required as per instrument interface                                                           |                        |
| <b>2.00</b> | <b>Hot Air Reflow</b>        |                                                                                                |                        |
| 2.01        | Heating power                | 1000 watt or better                                                                            |                        |
| 2.02        | Temperature range            | 100 - 450°C or better                                                                          |                        |
| 2.03        | Air flow range               | Up to 120 litres/minute or better                                                              |                        |
| 2.04        | Accessories                  | Set of vacuum integrated hot air nozzles for QFP, SOP, PLCC IC packages                        |                        |
|             |                              |                                                                                                |                        |

| Sl. No.     | Product Description        | BHEL's Specification/ Requirement                                                                                   | Bidder's Confirmation* |
|-------------|----------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------|
| <b>3.00</b> | <b>De- Soldering</b>       |                                                                                                                     |                        |
| 3.01        | Requirement                | 90 Watt or Better De-soldering Gun with Stand and fitted with De-soldering Nozzle                                   |                        |
| 3.02        | Temperature range          | 200 - 450°C or better range                                                                                         |                        |
| 3.03        | Suction                    | 500mm Hg or better                                                                                                  |                        |
| 3.04        | Tip to ground potential    | <3 mV                                                                                                               |                        |
| 3.05        | Accessories                | Set of De-soldering nozzles of various sizes [0.2mm to 4mm], Stand, Sponge, etc.                                    |                        |
| 3.06        | Spares                     | Set of spares required for 3-years trouble free operation to be quoted separately.                                  |                        |
|             |                            |                                                                                                                     |                        |
| <b>4.00</b> | <b>Soldering</b>           |                                                                                                                     |                        |
| 4.01        | Requirement                | 90 Watt or Better Soldering Pencil with Dry & Wet Cleaner Stand, with 24mm Chisel Soldering Tip                     |                        |
| 4.02        | Temperature range          | 200 - 450°C or better range                                                                                         |                        |
| 4.03        | Tip to ground potential    | <3 mV                                                                                                               |                        |
| 4.05        | Accessories to be included | Set of soldering tips of various shapes [Chisel, pointed, sloped, SMD, etc] and standard sizes, Stand, Sponge, etc. |                        |
| 4.06        | Spares                     | Set of spares required for 3-years trouble free operation to be quoted separately.                                  |                        |
| 4.07        | Hot blow cartridge         | 01 No.                                                                                                              |                        |
| 4.08        | Stand /Holder for the Tip  | 01 No.                                                                                                              |                        |
| 4.09        | Diaphragm                  | 01 No.                                                                                                              |                        |
| 4.10        | Soldering Head/Tips        | <ul style="list-style-type: none"> <li>0.8 Ø mm- 1 No.</li> <li>0.8 Ø mm slim tip -1 No.</li> </ul>                 |                        |

| Sl. No.     | Product Description                                    | BHEL's Specification/ Requirement                                                                                                                                                                                                                                                                            | Bidder's Confirmation* |
|-------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|             | Long Life and Pointed Tips suitable for SMD soldering. | <ul style="list-style-type: none"> <li>• 0.8 Ø mm ultra slim tip -1 No.</li> <li>• 1.0 Ø mm tip -1 No.</li> <li>• 1.5 Ø mm tip -1 No.</li> <li>• 1.0 Ø mm De-Soldering Tip -1 No.</li> <li>• 2.0 Ø mm De-Soldering Tip -1 No.</li> <li>• Gull Wing &amp; Round Type SMD Soldering TIP.</li> <li>•</li> </ul> |                        |
| 4.11        | Heating Element                                        | 01 No.                                                                                                                                                                                                                                                                                                       |                        |
| 4.12        | Filter Cartridge                                       | Set of 5                                                                                                                                                                                                                                                                                                     |                        |
|             |                                                        |                                                                                                                                                                                                                                                                                                              |                        |
| <b>5.00</b> | <b>List of Accessories</b>                             |                                                                                                                                                                                                                                                                                                              |                        |
| 5.01        | Lead Free Solder Wire                                  | Diameter 0.5mm or above - 500gram spool x 5 Qty                                                                                                                                                                                                                                                              |                        |
| 5.02        | De-Solding Wick                                        | Super Fine Mesh width 0.5mm or Above – 1.5 m length                                                                                                                                                                                                                                                          |                        |
| 5.03        | Cleaning Sponge / Cleaning Pit                         | Type soldering iron tip cleaner Set– 3 Nos                                                                                                                                                                                                                                                                   |                        |
| 5.04        | Poking /Cleaning Pin Needle Bit                        | For Cleaning the De-soldering Suction Tip suitable for the Tip Diameter / Spare Spring                                                                                                                                                                                                                       |                        |
| 5.05        | Cleaning Drill for Heating Element                     | 1 No.                                                                                                                                                                                                                                                                                                        |                        |
| 5.06        | Ceramic Paper Filter                                   | 10 pieces                                                                                                                                                                                                                                                                                                    |                        |
| 5.07        | Pre Heating Accessory                                  | IRPH—4 infrared Pre-heating Plate 600 Watt                                                                                                                                                                                                                                                                   |                        |
| 5.08        | Flux Bottle                                            | ESD Safe Flux Bottle                                                                                                                                                                                                                                                                                         |                        |
| 5.09        | Side Cutter                                            | ESD Safe SMD Side Cutter (Slim – Relieved Head)                                                                                                                                                                                                                                                              |                        |
| 5.10        | Flux Pen                                               | Spring Loaded No-Clean Flux pen                                                                                                                                                                                                                                                                              |                        |
| 5.11        | Magnifier                                              | ESD safe LED Magnifier                                                                                                                                                                                                                                                                                       |                        |
| 5.12        | Cleaning Brush                                         | ESD Safe Cleaning Brush                                                                                                                                                                                                                                                                                      |                        |

| Sl. No.     | Product Description                                     | BHEL's Specification/ Requirement                                                                      | Bidder's Confirmation* |
|-------------|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------|
| 5.13        | Stand                                                   | Solder Wire Reel Stand                                                                                 |                        |
| 5.14        | Slipper                                                 | ESD Safe Slippers-Size 42                                                                              |                        |
| 5.15        | Bottle                                                  | ESD Safe Dispensing Bottle                                                                             |                        |
| 5.16        | Mat                                                     | ESD Safe Ready-to-use Table Mat Kit of 2 x 4 feet                                                      |                        |
| 5.17        | Apron                                                   | ESD Safe Apron in Any Colour                                                                           |                        |
| 5.18        | Glove                                                   | ESD safe Gloves With PU Coated Finger Tips                                                             |                        |
|             |                                                         |                                                                                                        |                        |
| <b>6.00</b> | <b>Service Requirements</b> (Quote optionally)          |                                                                                                        |                        |
| 6.01        | Installation & commissioning                            | Vendor to Commission and Demonstrate the operation                                                     |                        |
| 6.02        | User Personnel training                                 | At user premises – 1day                                                                                |                        |
| 6.03        | Annual maintenance Contract (AMC) after Warranty period | Quote optionally                                                                                       |                        |
| 6.04        | Spares                                                  | Set of spares required for 3-years trouble free operation to be quoted separately.                     |                        |
|             |                                                         |                                                                                                        |                        |
| <b>7.00</b> | <b>Guarantee / Warranty</b>                             | 12 months from the date of commissioning or 18 months from the date of delivery whichever is earliest. |                        |

\* Vendor confirmation must be clearly spelt out with data. Yes/No answers will be treated as disqualified.