

|                                                                                                   |                                                                                                                                                                          |                         |  |
|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--|
| <br>JSC140/M2053 | BHARAT HEAVY ELECTRICALS LTD.<br>(A GOVT. OF INDIA UNDERTAKING)<br>P.O BHEL Jhansi - 284129, INDIA<br>Tel.:0510-277001/2412260 Fax: 2412120<br>Email : mmx@bheljhs.co.in | <b>PURCHASE ENQUIRY</b> |  |
|                                                                                                   | ENQ NO/DT: E6470052 11/11/17<br>REV NO/DT: 1 05/12/17                                                                                                                    | PAGE <u>1</u><br>4      |  |

  

|                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------|-----------|---------------------|---------|-------------------------|-----------|------------------------------------------|-------|--|------|------------------------------------------------|-----|-------------------|-------------|-----------|-----------|---------|-----------|---|-----------|-------------|---------|----|
| M/s PRESS TENDER ENQUIRY, P80550<br>DUMMY CODE GIVEN FOR PRESS TENDER<br>ENQUIRIES ONLY.<br>JHANSI<br>NA FOR FOREIGN SUPPLIER INDIA<br>TIN NO : | OUR ABOVE ENQUIRY OF PREVIOUS REV & DATE IS AMENDED WITH<br>FOLLOWING CHANGED / ADDED ITEMS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| REQUIRED: TEST CERT/ GUARANTEE CERT                                                                                                             | <table border="1"> <tr> <td>Enq Due on:</td> <td>19-12-17 TUESDAY</td> </tr> <tr> <td>Close at:</td> <td>13:15 Open at:14:00</td> </tr> <tr> <td>Matcat:</td> <td>644999 NON PMD CATEGORY</td> </tr> <tr> <td>Validity:</td> <td>120 days from Technical bid opening date</td> </tr> <tr> <td>ITEM:</td> <td></td> </tr> <tr> <td>TOP:</td> <td>60 Days after receipt &amp; acceptance of Material</td> </tr> <tr> <td>RA:</td> <td>RA not applicable</td> </tr> <tr> <td>Est. Value:</td> <td>Item wise</td> </tr> <tr> <td>Bid Type:</td> <td>TWO BID</td> </tr> <tr> <td>Tot Item:</td> <td>1</td> </tr> </table> <table border="1"> <tr> <td>Delivery:</td> <td>FOR BHEL Jh</td> </tr> <tr> <td>E-Proc:</td> <td>No</td> </tr> </table> | Enq Due on: | 19-12-17 TUESDAY | Close at: | 13:15 Open at:14:00 | Matcat: | 644999 NON PMD CATEGORY | Validity: | 120 days from Technical bid opening date | ITEM: |  | TOP: | 60 Days after receipt & acceptance of Material | RA: | RA not applicable | Est. Value: | Item wise | Bid Type: | TWO BID | Tot Item: | 1 | Delivery: | FOR BHEL Jh | E-Proc: | No |
| Enq Due on:                                                                                                                                     | 19-12-17 TUESDAY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| Close at:                                                                                                                                       | 13:15 Open at:14:00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| Matcat:                                                                                                                                         | 644999 NON PMD CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| Validity:                                                                                                                                       | 120 days from Technical bid opening date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| ITEM:                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| TOP:                                                                                                                                            | 60 Days after receipt & acceptance of Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| RA:                                                                                                                                             | RA not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| Est. Value:                                                                                                                                     | Item wise                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| Bid Type:                                                                                                                                       | TWO BID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| Tot Item:                                                                                                                                       | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| Delivery:                                                                                                                                       | FOR BHEL Jh                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |
| E-Proc:                                                                                                                                         | No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |                  |           |                     |         |                         |           |                                          |       |  |      |                                                |     |                   |             |           |           |         |           |   |           |             |         |    |

  

|                          |                     |
|--------------------------|---------------------|
| ITEM NO : 1              | PSL QTY/UM: 2.00 NO |
| MATL CODE : JS8242181040 | PO QTY /UM:         |
| DESTINATION: JS          |                     |

  

| DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DELIVERY | QUANTITY (PSL UM) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------|
| SPARE FOR CURING OVEN OF<br>ENCAPSULATION PLANT<br>TEMPERATURE PROFILE CONTROLLER<br>Input : Thermocouple type- J<br>Range : Full +ve range of the selec<br>ted input 0-760 Deg C<br>Resolution :1 Deg C<br>Sampling rate / Display rate :<br>The input is sampled @40mS / the di<br>splay is updated @1 second. The con<br>trol loop is also executed @ 40 mS.<br>Indicating Accuracy +/- 1 Deg C for<br>Thermocouple throughout the range<br>Display:(7-segment LED display)<br>PV:4 digit 0.5" Red<br>SV:4 digit 0.5" Green<br>Control Algorithm:PID mode for heat<br>ing control - (reverse action).<br>Tuning :Auto / Manual tuning of PID<br>values PID values Proportional Ban<br>d (P)= 0.0 to 100.0% of Span,<br>Integral value (I)= 0.00 to 5.00 re<br>sets/minute,<br>Derivative value (D) = 0.00 to 5.00<br>minutes,<br>Cycle time (CYC) = 2 to 100 seconds<br>and Hysteresis(HYS)= 1 to 99 DEG.C<br>Control Outputs [Switching]<br>Switching Outputs - DC pulse for<br>external SSRs.<br>Ramp/Soak Steps 1 to 16 Steps. (No<br>restrictions in programming ? a ram<br>p can be followed by a ramp and a s<br>oak can be followed by a soak)<br>No of Programmes : Single Profile<br>Set Temperature Programmable for | DEC-17   | 2.00              |



BHARAT HEAVY ELECTRICALS LTD.  
(A GOVT. OF INDIA UNDERTAKING)  
P.O BHEL Jhansi - 284129, INDIA  
Tel.:0510-277001/2412260 Fax: 2412120  
Email : mmx@bheljhs.co.in

## PURCHASE ENQUIRY

ENQ NO/DT: E6470052 11/11/17  
REV NO/DT: 1 05/12/17

PAGE 2  
4

each steps in the full range of the specified input

Time per Step:1 to 540 mins. (9 Hr. per step)

Program Hold Facility : Manual Hold or Auto Hold (Hold back feature for guaranteed Ramp/Soak facility)

Memory Backup:Retention of PID and Set values in the built in non-volatile memory - in case of power failure and automatic re-execution of control on power resumption.

Supply 90 to 240 VAC ( approx. 5VA) , 50/60Hz.

Sizes ( w x h x d):96 x 96 x 120 mm

Panel cut out:92 x 92 mm +/- 0.5 mm

Enclosure ABS plastic with polycarbonate front graphic

### SPECIAL REMARKS:

1. ENQUIRY IS BEING FLOATED IN "TWO BID" SYSTEM. PLEASE SEND YOUR OFFER IN TWO SEPARATE ENVELOPES AS PER DETAILS GIVEN BELOW:-
  - IN ENVELOPE "A":  
-----PLEASE SEND YOUR TECHNICAL + COMMERCIAL OFFER EXCEPT PRICE. PLEASE INDICATE CLEARLY ON THE COVER OF ENVELOPE "TECHNICAL + COMMERCIAL OFFER" AND ENQUIRY NUMBER WITH DUE DATE. PLEASE ALSO SUBMIT BLANK PRICE BID I.E. WITHOUT RATES ALONG WITH THE TECHNICAL + COMMERCIAL OFFER.
  - IN ENVELOPE "B":  
-----PLEASE INDICATE PRICE ONLY AND INDICATE CLEARLY ON THE COVER OF ENVELOPE "PRICE BID" AND ENQUIRY NUMBER.
- BOTH ENVELOPES A + B SHOULD BE KEPT IN SEPARATE SEALED ENVELOPE ON WHICH ENQUIRY NUMBER AND DUE DATE IS MENTIONED ON COVER.
2. INSPECTION SHALL BE CARRIED OUT BY BHEL AT BHEL JHANSI.
3. FOR CLARIFICATION, IF ANY, PLEASE CONTACT ON PHONE NO.: 0510-2412750  
E-MAIL: mulayam@bhel.in, pbsekka@bhel.in,
4. OUR STANDARD PAYMENT TERMS:  
"100% PAYMENT AFTER 60 DAYS AFTER MATERIAL ACCEPTANCE AT OUR WORKS." IF ACCEPTABLE, PLEASE CLEARLY MENTION IN YOUR OFFER. OTHERWISE PROPER LOADING SHALL BE DONE ON YOUR PRICES.
5. YOUR QUOTATION SHOULD BE VALID FOR ORDERING MINIMUM OF 120 DAYS FROM THE DATE OF TENDER OPENING.
6. SUPPLIER SHALL SIGN & SUBMIT MANDATORY SHEET ALONG WITH TECHNICAL BID.
7. 'PRICE-BID' TO BE SUBMITTED AS PER ATTACHED FORMAT ONLY.
8. THE BIDDER IS INFORMED THAT THE GENERAL TERMS & CONDITIONS OF ENQUIRY, WHICH ARE UPLOADED AT:  
[https://www.bheljhs.co.in/index\\_en.php](https://www.bheljhs.co.in/index_en.php)  
ARE TO BE READ BY THE BIDDER BEFORE SUBMITTING QUOTE IN THE ENQUIRY. BHEL SHALL CONSTRUCT THE PARTICIPATION BY THE BIDDER IN THE ENQUIRY AS ACCEPTANCE TO THE GENERAL TERMS & CONDITIONS OF ENQUIRY.
9. WARRANTY IS REQUIRED FOR 12 MONTHS FROM THE DATE OF SUPPLY AGAINST MANUFACTURING DEFECTS.



BHARAT HEAVY ELECTRICALS LTD.  
(A GOVT. OF INDIA UNDERTAKING)  
P.O BHEL Jhansi - 284129, INDIA  
Tel.:0510-277001/2412260 Fax: 2412120  
Email : mmx@bheljhs.co.in

## PURCHASE ENQUIRY

ENQ NO/DT: E6470052 11/11/17  
REV NO/DT: 1 05/12/17

PAGE 3  
4

### 10. QUALIFYING REQUIREMENTS:

- A. OFFER SHALL BE SUBMITTED BY ORIGINAL EQUIPMENT MANUFACTURER (OEM) OR THEIR AUTHORIZED DEALERS IN INDIA.
- B. IF THE OFFER FROM AN AUTHORIZED DEALER, THE DEALER SHOULD FURNISH A VALID AUTHORIZATION LETTER FROM OEM ALONG WITH THE OFFER. THE AUTHORIZATION LETTER SHOULD BE CURRENT, INDICATING VALIDITY & CONTAIN THE CONTACT DETAILS OF THE OEM.
- C. FOREIGN OEM'S SHALL QUOTED ONLY THROUGH THEIR AUTHORIZED DEALER/ REPRESENTATIVE IN INDIA.

### 11. REV-01 IS BEING ISSUED FOR RETENDER.

THE QUOTATION MUST BE SEALED AND BE SENT IN DOUBLE ENVELOPE.  
THE INNER ENVELOPE SHOULD BEAR ENQUIRY NUMBER & DUE DATE AT THE TOP.

In case the bidder has not submitted PAN No, TIN No. and E-mail ID, the bidder has to submit the same along with the copy of PAN No and TIN No. Else his offer will be liable to be rejected.

If you are not in a position to quote due to any reason, you must send regret letter titled enquiry no. etc, failing which you may not be considered for sending future enquiries.

\*\*\*\*\*

ENCLOSERS:



BHARAT HEAVY ELECTRICALS LTD.  
(A GOVT. OF INDIA UNDERTAKING)  
P.O BHEL Jhansi - 284129, INDIA  
Tel.:0510-277001/2412260 Fax: 2412120  
Email : mmx@bheljhs.co.in

## PURCHASE ENQUIRY

ENQ NO/DT: E6470052 11/11/17  
REV NO/DT: 1 05/12/17

PAGE 4  
4

FOR AND ON BEHALF OF  
BHARAT HEAVY ELECTRICALS LTD

*M. Singh* 5.12.17

CHOUDHRY M S VERMA  
DY MANAGER (MMX)  
Email:-mulayam@bhel.in

\*\*\*\*\* END OF PURCHASE ENQUIRY\*\*\*\*\*

### NOTE :

- \* THE BIDDER IS INFORMED THAT THE GENERAL TERMS & CONDITIONS OF ENQUIRY WHICH ARE UPLOADED AT <https://www.bheljhs.co.in> UNDER SUPPLIER INFORMATION PORTAL AT TERMS & CONDITION FOR, ENQUIRY LINK, ARE TO BE READ BY THE BIDDER BEFORE SUBMITTING QUOTE IN THE ENQUIRY. BHEL SHALL CONSTRUCT THE PARTICIPATION BY THE BIDDER IN ENQUIRY AS ACCEPTANCE TO THE GENERAL TERMS AND CONDITIONS OF ENQUIRY.
- \* SUPPLIERS ARE REQUESTED TO INFORM US WITH VALID CERTIFICATE, IF THEY ARE REGISTERED UNDER MSMED ACT'2006. (APPLICABLE FOR INDIAN SUPPLIERS ONLY).
- \* FOR SUPPLIERS SUPPLYING FROM OUTSIDE THE LOCAL AREA OF BHEL JHANSI, ENTRY TAX WILL BE APPLICABLE. SUPPLIERS SHOULD NECESSARILY INDICATE RATE OF ENTRY TAX SEPARATELY WHEREVER APPLICABLE. THEY SHOULD ALSO MENTION THE ENTRY TAX CHARGED SEPARATELY IN THE INVOICE.
- \* FOR SUPPLIERS SUPPLYING FROM OUTSIDE UP, IN CASE THE OFFER IS SILENT ON ENTRY TAX, IT SHALL BE LOADED SUITABLY WITH THE APPLICABLE RATES
- \* IN CASE IF THERE IS ANY DIFFERENCE BETWEEN THE 'SPECIAL REMARKS/ANNEXURES' OF THE ENQUIRY AND THE PREPRINTED TERMS & CONDITIONS (REF JSC140/M2053), THE REQUIREMENT GIVEN IN REMARKS WILL PREVAIL.