



# **Bharat Heavy Electricals Limited**

Boiler Auxiliaries Plant Ranipet – 632406, Tamilnadu Materials Management / Capital Purchase

Ref No. : HE line/Corrigendum3 DATE: 19.06.2020

EOI no : BHEL/ MTD&TE/ HE LINE/2020 dt 09.03.2020

Title of EOI : Global Expression of Interest for Supply, Erection, Commissioning and Performance

prove out of Special Purpose Roll Forming Machine for Manufacturing of Air Pre-

Heater Heating Element at BHEL, Ranipet.

**EOI date**: 09<sup>th</sup> Mar 2020

Event	Existing Date	Revised Date
Last date for receipt of offers	08 <sup>th</sup> June 2020 1400 HRS IST	10 <sup>th</sup> July 2020 1100 HRS IST
Bid opening date & Time	08 <sup>th</sup> June 2020 1430 HRS IST	10 <sup>th</sup> July 2020 1130 HRS IST

(3 ans

(Sachin Saini) Sr. Engineer /Capital Purchase

# Invitation for (EoI) Expression of Interest

1	Name of the Organisation	BHARAT HEAVY ELECTRICALS LTD., RANIPET TAMILNADU (INDIA)
2	Type of the organisation	Engineering & Manufacturing Company
3	Category	Public Sector Undertaking, Ministry of Heavy Industries
4	Sub Category	Category-I, CPSE
5	EOI Title	Global Expression of Interest for Supply, Erection, Commissioning and Performance prove out of Special Purpose Roll Forming Machine for Manufacturing of Air Pre-Heater Heating Element at BHEL, Ranipet.
6	Date of Announcement	09.03.2020
7	Last date for submission	11:00 Hrs (IST) on 10.07.2020
8	Broad configuration of the machine	Special Purpose Roll Forming Machine required for manufacturing of Air Pre-Heater Heating Element
9	Pre-Qualification Criteria	Capable and reputed manufacturers / suppliers having proven capability for manufacturing of similar kind of Special Purpose Machine.
10	Bid Documents (if any)	Enclosed prescribed format available on website
11	EOI should be submitted to	Addl General Manager (M&S, MTD&TE) Bharat Heavy Electricals Limited Ranipet-632406, Tamilnadu (INDIA)
12	Date & Time of opening	10 <sup>th</sup> July 2020 at 11:30 Hrs (IST)

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Notice inviting GLOBAL EXPRESSION OF INTEREST for Supply, Erection, Commissioning and Performance prove out of Special Purpose Roll Forming Machine required for 'Manufacturing of Air Pre-Heater Heating Element' at BHEL, Ranipet.

### A. Introduction:

Sealed Expression of Interest is invited by Bharat Heavy Electricals Limited, Ranipet (Tamilnadu) for procurement of Special Purpose Roll Forming Machine from interested capable and reputed manufacturers having proven capability and who meets BHEL requirements.

# B. About Bharat Heavy Electricals Limited (BHEL):

BHEL is one of the largest Engineering and manufacturing companies of its kind in India engaged in design, engineering, construction, testing, commissioning and servicing of a wide range of products and services with over 180 product offerings to meet the evergrowing needs of the core sectors of economy. BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing organization in India, catering to the core infrastructure sectors of Indian economy viz. Energy, Transportation, Heavy Engineering Industry, Defence, Renewable and Non-Conventional Energy. The energy sector covers generation, transmission and distribution equipment for hydro, thermal, nuclear and solar photo voltaic. BHEL has been in this business for more than 50 years and BHEL supplied equipment account for around 53% of the total generating capacity in India. BHEL is also listed in Indian stock exchanges. The company has a widespread network of 16 manufacturing units, 8 service centres, 15 business offices, 4 regional offices, 2 repair centres, 1 subsidiary and 150 plus project sites across India and abroad.

### C. About Boiler Auxiliaries Plant (BAP):

BAP is one of the major manufacturing units of BHEL dedicated to manufacturing of Boiler auxiliaries for Power Plants since 1981. It is located at Ranipet 100 kms west of Chennai capital of Tamilnadu. The major products being manufactured and supplied by BAP includes Electrostatic Precipitators, Fans, Air Pre-Heaters, Guillotine-Gates, Dampers (Louvers, Bi-Plane & Control), Flue Gas Desulphurization (FGD) systems & Water Treatment systems. The BHEL Ranipet unit has a manufacturing facility established over an area of around 1200 acres. The Unit is accredited to Quality Management System (ISO 9001:2015), Occupational Health & Safety Management System (OHSAS ISO 45001:2018), Environmental Management Systems (ISO 14001:2015) and Energy Management System (ISO 50001:2011).

### D. About the product (for which the roll forming machine is required)

The heating element basket consists of pair of sheets of different profile (in majority of the cases) that is the alternate sheet is of the same profile that is formed lateral to the direction of movement of the sheet along the machine. The product length is reduced from the raw sheet length.

Refer below details and sample profile of individual and stacked sheet.

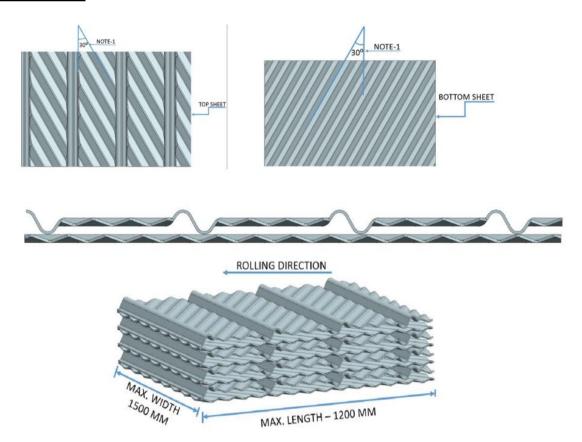
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SL. NO.	PROFILE	MATERIAL	SHEET THICKNESS	SHEET LENGTH	MAX. COIL WIDTH
1	А	Carbon Steel	0.63 mm & 0.8 mm	1200 mm	1500 mm
2	В	Corten Steel	1.214 mm	1200 mm	1500 mm
3	С	Carbon Steel & Corten Steel	0.63 mm & 0.8 mm	1200 mm	1500 mm
4	D	Corten Steel	1.214 mm	1200 mm	1500 mm
5	Е	Corten Steel	1.214 mm	1200 mm	1500 mm

The material designation and yield strength is as per below:

- IS513DD (Yield Strength 220 MPa)
- CORTEN A / ASTM A 606 (Yield Strength 310 MPa)

### Sample Profile



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### E. Scope of EOI:

The desired new configuration of (Heating Element) roll forming machine shall consist of the following Equipments.

Two parallel lines OR Single line which can be decided by the bidder after discussion.

a. Coil Car: 20 Ton capacity

b. Decoiler: 20 Ton capacity

- c. Sheet Straightener
- d. Programmable shearing machine which can shear desired sheet length.
- e. Slipless conveyor with programmable feeding to crimper (servo feeder).
- f. Crimper with set of integrated rollers that can produce desired profile at the speed of 30 mtr/ minute or above.
- g. Automatic (Pick & Place) system for stacking in the basket.
- h. Roller Conveyor.
- i. Hydraulic Press with auto welding arrangement (Robotic Welding) of the top cover with stacked basket for uninterrupted roll forming of the line. (Speed matching of forming and welding is desired)
- j. Erection, Commissioning and Performance prove out of the offered equipment at BHEL works, by the supplier's representative.

# Apart from the above expected machine requirements, the bidder is also required to share the following details:

- a. Rated output of the proposed machine.
- b. Space requirement for installation and operation of the machine.
- c. Complete machine schematics.
- d. Total power requirement for machine operation.
- e. Additional requirements for installation/ operation of the machine.
- f. Complete and detailed total machine information.
- g. Detailed budgetary quotation of the machine giving separate details of optional and other add-ons parts offered by the supplier.
- h. Please note that generally the stacked basket contains alternate sheets with same profile. Here, the output from crimper or crimpers are required to be stacked (alternate sheets with same profile) automatically without manual intervention i-e (pick & place like system)
- i. Cover welding of the stacked basket will be done in the press where the welding automation is desired.

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### F. Eligibility and Pre-Qualification Requirements (PQR):

The prospective bidder shall meet following requirements as on the date of submission of EOI:

- Only those bidders who have supplied at least 1 No. of special purpose machine in last 10 years (Automated continuous profile formation using coiled sheets) (as on the initial date of opening of EOI) are only eligible to participate.
  - (Reference PO/ Proof must be submitted along with EOI)
- 2. The interested manufacturers/ suppliers should also be required to submit along with Expression of Interest, a list of customers to whom they have supplied such kind of equipment/ systems with details.
- 3. Bidder should submit at least One Performance Certificate from any of the customers (especially from Heavy Engineering / Fabrication, Public/ Private sector companies) for satisfactory performance of the supplied automated special purpose machine for a minimum period of one year from the date of commissioning (as on the initial date of opening of EOI).
  - Full contact details of the customer from whom the performance certificate is obtained are to be provided.
- 4. BHEL reserves the right to verify the information provided by the bidder, in case the information is found to be false /incorrect, the offer shall be rejected.

### G. The Eol submitted by the firm should cover the following:

- 1. Detailed technical specifications of the proposed facility.
  - a. Specification of basic system/ equipment.
  - b. Specification of each module.
  - c. The electrical power requirements.
  - d. Layout and dimensions of the proposed equipment's / system.
  - e. Process flow chart.
  - f. Delivery period.
  - g. Budgetary offer for the proposed system must broadly include taxes/ duties FOR BHEL Ranipet basis.
  - h. Capability of the firm in this field.
  - i. Technical write-up and presentation (if required) on the above equipment/ system and experience on it.
  - j. Time required for successful installation and commissioning of the equipment.
  - k. The participating firm must provide after sales service for at least 5 years for satisfactory performance of the equipment/ system.
  - l. Warranty for 24 months from the date of final commissioning.
  - m. Full details of the Manufacturer like Address of the firm, phone, fax and email addresses and name and designation of the authorised signatory and the contact person.

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### H. Important Instructions To Bidders:

- 1. Only those bidders who will get qualified for this EOI based on their submitted offer shall be considered for further processing/ procurement through limited tender.
- 2. The participating firm is required to submit duly filled in Annexure-1 i.e. Statement of Credential of Interested Firm.
- 3. The Bidders should give a declaration that they have not been blacklisted or debarred for dealing by Government of India or any Government in the past.
- 4. The documents in support of Expression of Interest need to be submitted duly signed by the authorized representative of the applicant with name and designation of the signatory.
- 5. The bidder or its representatives, who wish to attend the EOI Bid opening process, shall be accompanied by in person with the Letter of Authority (Annexure-2) for attending a EOI bid opening.
- 6. All participants are expected to fully get acquainted with the local laws like taxes and duties, statutory regulation, levies and other charges.
- 7. The participants are expected to know all conditions and factors, which may have any effect on their proposal.
- 8. The tenderers participating in this EOI may be called, if required for detailed presentations and discussions of their equipment/ system at BHEL, Ranipet, Tamilnadu (India), the date and time of which shall be intimated individually to each firm.
- 9. EOI submitted without enclosing required documents specified is liable to be ignored being non-responsive.
- 10. EOI submitted without enclosing required documents and 'Statement of Credential of Interested Firm' (Annexure-1) and without the budgetary offer is liable to be ignored for being non-responsive.
- 11. BHEL, Ranipet reserves the right to accept or reject in part or full of any or all the offers received against the EOI at any stage without assigning any reasons thereof and without incurring any liability to the respondents. No correspondence will be entertained in this regard.
- 12. The EOI documents will be opened on 10<sup>th</sup> July 2020 at 11:30 HRS (IST), at Purchase Department, Administration Building, BHEL, Ranipet-632406.
- 13. Proposals received after due date and time will not be considered.
- 14. EOI shall be prepared and submitted in sealed envelope superscribed as "Special Purpose Roll Forming Machine/EOI/2020, dated: 09.03.2020, for "Supply, Erection, Commissioning & Performance prove out of Special Purpose Roll Forming Machine required for manufacturing of Air Pre-Heater Heating Element at BHEL, Ranipet" due for submission on 10.04.2020 till 11:00 HRS (IST)". Non-adherence to this may liable for rejection of their EOI. The full name, postal address, fax and telephone number and website address of the tenderer shall be written at the bottom left corner of the sealed envelope.

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Notes:

1. The tenderers participating in this EOI may be called for detailed presentations (if

required) and discussions of their equipment / service at BHEL Ranipet. The date and

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time of which may be intimated individually to each firm at their own risk and cost.

2. For security reasons, the firms will be required to provide the Bio-Data, Passport and

Visa details of their representatives, visiting BHEL Ranipet coming from out of India for

this purpose, well in advance.

3. Delay due to postal/courier etc. will not be entertained. EOI tenders received after the

due date and time may be rejected.

4. Venue of all arbitration will be Ranipet, Tamilnadu, INDIA.

5. The bidder is required to fill the details wherever asked and provide supporting

documents in its support and further sign on the pages of EOI document as an

understanding towards the instructions and conditions of EOI document and acceptance

towards the conditions laid out in this EOI.

6. The bidder should also confirm specially that:

i. Applicant is competent and legally authorised to submit and or to enable into legally

binding contract.

ii. Applicant will absolve the purchaser against any infringement of patent rights and

other contract provisions.

7. Address for correspondence and submission of EOI documents:

Addl General Manager (M&S, MTD&TE),

Bharat Heavy Electricals Limited,

Ranipet-632406

Tamilnadu

INDIA.

E-mail: asho@bhel.in

Ph. No.: +91 - 04172 - 284677

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### Annexure - 1: STATEMENT OF CREDENTIAL OF INTERESTED FIRM

1.	App	lica	nt	Par	ticu	ılars
	$\sim$	···			$\sim$	1 (UI )

Category	<ol> <li>Original Equipment Manufacturers ( ).</li> <li>Others (Please mention) -</li> </ol>
Name of the Firm/ Company	
Constitution or Legal Status	
Registration Number	Registering Authority - Date of Registration -
Registered Address Office	
Address of Factory	
Contract Person Name and Designation	
Address for Correspondence	
Contact Numbers	
Applicant Profile	
1. Type of Ownership:	

- Individual ( ) Sole Proprietorship ( ) Partnership ( )
- Concern Firm:

PSU/Govt. Undertaking ( ) Private Ltd. Company ( )

Other, (please specify) ......

- 2.2. Enclosed copies of Articles & Memorandum of Association/ Certificate of incorporation/ Certificate of Registration etc., as applicable.
- 2.3. (a) Do you have ISO 9001 quality certification? Yes / No
  - (b) In case of certification by other accredited institutions, please give details:

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# Annexure-2: Letter of Authority for attending a Bid Opening

Addl General Manager (M&S, Bharat Heavy Electricals Limi Ranipet-632406 Tamilnadu (INDIA)	•			
Subject: Authorization for attending bid opening on (date) in the Tender of				
Following persons are hereby authorized to attend the bid opening for the tender mentioned above on behalf of (Bidder) in order of preference given below.				
Order of Preference	Name	Signature		
I.				
II.				
Alternate Representative				
Signatures of bidder or Officer authorized to sign the bid Documents on				

### Note:

behalf of the bidder.

- 1. Maximum of two representatives will be permitted to attend bid opening. In cases where it is restricted to one, first preference will be allowed. Alternate representative will be permitted when regular representatives are not able to attend.
- 2. Permission for entry to the hall where bids are opened will be refused in case authorization as prescribed above is not produced.