



# BHARAT HEAVY ELECTRICALS LIMITED

( A Government of India Undertaking )

HIGH PRESSURE BOILER PLANT  
PURCHASE DEPARTMENT - FOSSIL BOILERS  
THIRUCHIRAPALLI - 620014  
TAMILNADU (INDIA)

PHONE :2577331  
GRAMS : BHARATELEC  
FAX NO: 2520719  
E-mail: srchandran@bheltry.co.in  
Web:

429-002/A

	<b>Enquiry No</b> 2661500218 - 46	<b>Enquiry Date</b> 24.06.2015	<b>Due Date for Quotation</b> 21.07.2015
<p>Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order.  <b>Bid should be submitted in two parts. 1.Techno-commercial bid (Part-I) and 2.Price bid(Part-II) in a separate sealed cover and both covers must be placed in a third cover and sealed. Our Enquiry No., Enq. date &amp; Enq. Due date must be written on all three covers.</b></p>			

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	<p>Hardgrove Grindability Analyser Hardgrove Grindability Analyser Technical Specifications of Hardgrove Grindability Analyser as per ASTM D 409-12 SECTION-I The Hardgrove Grindability Analyser measures the ease of grinding of a coal sample and the result is given as a numeric value which is commonly known as Hardgrove Grindability Index (HGI). (Row No.) Description (1) General Description &amp; Essential Design Guidelines i.The Hardgrove grindability machine should consist of combination of the following integral parts a. Lower Grinding Element (Grinding bowl) b. Spindle &amp; Top Grinding Element c. Downward vertical force imparting element d. Primary Drive ii.The machine shall be designed as per ASTM standard D409-12. (2) Lower Grinding Element (Grinding bowl) i.The lower grinding element should be designed as per the detailed drawing given in ASTM Standard D409-12-#Standard Test Method for Grindability of Coal by the Hardgrove-Machine Method# (volume 05.05 Gaseous Fuels; Coal, Coke). ii.Grinding bowl should be made up of hardened iron / steel with polished inner surface. iii.Grinding bowl shall have eight no of steel balls over which the top grinding element is placed. (3) Spindle &amp; Top Grinding Element i.The balls are driven by a top grinding element which is connected to the bottom end of a vertical spindle with a top ring at the other end of the spindle. ii.The top grinding element should be rotated at 20 ± 1 revolutions per minute by reducing gears which</p>	NO	1.000	1.00	26.10.15

The offers should reach us 30 minutes before the time of opening of tenders. The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening.Late and delayed offers are liable to be rejected.

Yours faithfully,  
For **BHARAT HEAVY ELECTRICALS LIMITED**  
  
24/06/2015  
D. CHANDRAMOHAN  
Senior Manager / MM / RM  
Purchase / CP & SP  
MANAGER / PURCHASE  
(FOSSIL BOILERS)  
Yours faithfully,



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are in turn driven by an electric motor. For transmitting the rotational force to the shaft from the motor reducing gears should be used and belts are not to be used.

iii. Grease seals are to be provided around the shaft at the bottom of the shaft where it enters the lower grinding element to avoid any leakage to the Grinding bowl.

(4) Downward vertical force imparting element

i. The total vertical force imparted on the balls are from the weights , shaft, top grinding ring, gear and it should be equal to  $29.0 \pm 0.2$  kg

or  $284 \pm 2$  Newton with each of them when weighed

individually should have following weights,

a. External Weights # 25.9 kg

b. Shaft & Gears # 2.0 kg

c. Top Ring # 1.1 kg

Total (1+2+3)#.  $29.0 \pm 0.2$  kg.

ii. The machine shall not impart any more weight than the total weight  $29.0$  kg  $\pm 0.2$  kg from the parts as listed in Row No. 4 from any other parts of the machine.

(5) Primary Drive

Primary drive is an electric motor for driving the shaft through the reducing gears with the following specifications

i. Type: Cap. Start, Induction Run.

ii. Rating : Continuous

iii. Single Phase, 220-240 V, 2.4 Amps, 50 Hz.

iv. Power: 12 Kw.

v. HP :  $\frac{1}{4}$

vi. RPM # 1425.

vii. Insulation Class: A, Temperature Rise limit  $< 60$  deg C(max).

(6) No of Balls

i. Eight no of steel balls of the following dimension are to be supplied along with the instrument.

ii. Dia =  $25.4 \pm 0.13$  mm

(7) Others

The machine should be equipped with a counter for noting the revolutions and an automatic device for stopping the rotation after  $60 \pm 0.25$  revolutions.

(8) Warranty


Commissioning of the instrument should be done by the qualified bidder at BHEL works free of cost. Warranty period is Two years from the date of commissioning of the equipment.

Qualifying Criteria for the Supply of Hardgrove Grindability Analyser  
SECTION-II

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The BIDDER/VENDOR shall compulsorily meet the following requirements to get qualified for

Submitting an offer for supplying the equipment, Hardgrove Grindability Analyser.

1. The VENDOR shall have a minimum of THREE years of continuous experience in the field of Design, manufacture and supply of Hardgrove Grindability Analyser.

2. Only those Vendors, who have supplied, and commissioned in India at least two such Hardgrove Grindability Analyser exactly the same model proposed in the technical offer in the past five years (on the date of opening of Tender) and such equipment is presently working satisfactorily for more than one year after commissioning (on the date of opening of Tender), should quote.

2.1. The vendor should submit a detailed list of customers for the product for which the quote submitted with the following information for qualification of their offer.

2.1.1. Name and postal address of the customer / company where similar equipment is used.

2.1.2. Name and designation of the contact person of the customer.

2.1.3. Phone, FAX no. and email address of the contact person of the customer.

2.1.4. Month and Year of commissioning.

2.1.5. One Performance Certificate from atleast one customer regarding satisfactory performance of equipment supplied to them. The certificate should be current and on the letterhead of the Customer. It should contain information regarding model / year of commissioning and performance of equipment.

3.0. BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false / incorrect, the offer shall be rejected.

#### SECTION-III

4. The BIDDER / VENDOR shall submit the offer in TWO PARTS-Techno-Commercial bid (PART A) & and Price Bid (PART B).


5. The Techno-Commercial bid (PART A) shall be supported by Product Catalogues (original, not photocopy) and description.

6. The Offer shall contain a comparative

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statement of Technical Specifications given by BHEL in Section -I and the Offer Details submitted by the Bidder, against each clause. A mere 'CONFIRMED' or 'COMPLIES' or 'YES' or 'NO-DEVIATION' or similar words in the technical comparative statement [without any supporting technical write-ups, photos and datasheets] may lead to disqualification of the Technical Offer.

7. The BIDDER / VENDOR shall assure a continuous support for the supply of SPARES and SERVICE for TEN years, from the date of commissioning of equipment at BHEL Works.

8. The Techno-Commercial Offer shall contain the Scope of Supply and the Un-Priced Part of the Price-Bid, for confirmation of the inclusion of all the accessories, spares, consumables, etc. with the main and basic equipment, to meet the technical specification requirements.

9. BIDDER has to indicate the Country of Origin for the supply of equipment.

10. In case of preliminary qualification of the offer, on technical grounds, the BIDDER may be called for a detailed technical discussion on the original technical offer at BHEL Works, with a sufficient notice period.

#### SECTION-IV

#### PERFORMANCE CERTIFICATE

(On Customer's Letter Head)

1. Name of the Supplier & OEM :
2. Make & Model of the Equipment :
3. Month & Year of Commissioning :
4. Application :
5. Performance of the equipment : (Strike off whichever is not applicable)

Satisfactory / Good / Average / Not satisfactory

6. Service after Sales : (Strike off whichever is not applicable)

Satisfactory / Good / Average / Not satisfactory

Date:  
Signature & Seal of the Authority  
Issuing the Performance certificate

#### General Note:

All the tenders may be addressed to the following address:

#### **The Tender Opening Cell / MM**

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*D. Chandramohan*  
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Room No: 26, Building 24, Ground Floor  
Bharat Heavy Electricals Limited  
TIRUCHIRAPALLI 620014

In case personal delivery of the offer, it shall be dropped into the respective box kept in Room No: 26, after duly entering the data in the system.

Offers will be accepted only up to 14.00 Hrs on the due date. Therefore, vendors shall ensure to submit the offers well before this time. All due date extension requirements should be addressed to the respective Purchase mail IDs. All the due date extension requests from vendors will be considered only up to 48 hours before the due date and time.

Vendors are requested to avoid submission of offers through e mail / fax. In case of any unavoidable situation, offers shall be sent through e mail to the following mail ID only tender\_cell@bheltry.co.in.

As tenders are being opened by Common Tender Opening Cell, offer covers should be sealed with tenderer's distinctive seal and super scribed with correct Tender No. item of supply and due date of opening.

The offers will be opened at 14.30 hrs on the due date of the tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening. Late and delayed offers are liable to be rejected.

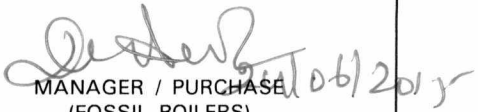
**Enclosures:**

"LD clause has to be confirmed without fail."

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# COMMERCIAL TERMS& CONDITIONS

# ANNEXURE-III(m)

Bharat Heavy Electricals Limited, Tiruchirapalli – 620 014, Tamilnadu

MM: CP & SP

(Check List - to be filled and submitted along with Techno-Commercial Bid)

Sl. No.	BHEL Commercial Terms and Conditions for Indigenous Supplies	Vendor's Confirmation / Comments
1	Bid should be submitted in <b>Two Parts</b> . 1. Techno-commercial Bid (Part-I) and 2. Price Bid (Part-II) in a <b>separate sealed cover and both the covers must be placed in a Third Cover and Sealed. Our Enquiry No., Enq. Date &amp; Enq. Due date must be written on all Three covers</b>	
2	Technical confirmation to BHEL's Specification shall be furnished. If needed additional sheets shall be used.	
3	<b>Prices shall be quoted item wise only.</b>	
4	Delivery INCO TERMS- Price quoted <b>-FOR BHEL TRICHY, STORES or ex- WORKS Basis or, FOR WORKS (DESPATCHING STATION)</b> <b>In case of EX works / FOR WORKS basis, indicate the Despatching station.</b>  Prices shall be quoted on <b>"FIRM PRICE"</b> basis only.	
5	<b>Validity of offer</b> shall be for a minimum period of 120 days from the date of Tender opening	
6	<b>Delivery period</b> from the date of Letter of Intent / Purchase order	
7	Liquidated damages shall be 0.5% of the total order value per week or part thereof subject to a maximum of 10% of the total order value. For staggered delivery schedule, LD shall be 0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the total order value. Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).	
8	<b>Payment term for supply portion:</b> Payment term is 100% direct payment after 45 days from the date of receipt and acceptance of materials. <b>Note:</b> Only Direct Payment after goods receipt & acceptance will be accepted .Above payment term acceptance is essential for consideration of your offer  <b>Any deviation in the above payment term will attract loading as mentioned below.</b> <b>"Base rate of SBI (as applicable on the date of bid opening. Techno-commercial bid opening in case of two part bids) + 6% shall be considered for loading for the period of relaxation sought by bidders.</b>  Payment through Bank is not preferred. In case of Payment through Bank is opted by Supplier, BHEL prefers documents submission through bank with copy of LR and door delivery of Goods to Stores with Consignee copy attached. In this case Loading will be 3% on the offered value. Offers of indigenous Suppliers with payment terms as <b><u>LC/Advance Payment are liable for rejection.</u></b> <b>Important Note: BHEL will consider the ranking after the loading is applied as referred vide Sl. No. 7&amp; 8 above wherever deviations are observed.</b>	
9	<b>Following Risk Purchase clause</b> shall be applicable: The purchaser at his option will be entitled to terminate the contract and to purchase elsewhere at the risk and cost of the seller either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated or if the same were not available, the best and the nearest available substitute therefore. The supplier shall be liable for any loss which the Purchaser may sustain by reason of such risk purchases.	
10	<b>Erection / commissioning: (if applicable only)</b> Erection / commissioning charges if any has been mentioned in the offer or else confirmation that Erection / commissioning shall be done at free of cost is available in the offer.	
11	The equipment shall be guaranteed as per tender condition from the date of receipt & acceptance./(commissioning (commissioning date ,if applicable as per tender condition)  Normally No deviation permitted and the <b><u>deviated offers are liable for rejection.</u></b>	

# COMMERCIAL TERMS& CONDITIONS

# ANNEXURE-III(m)

12	Equipment will be inspected at vendor's works prior to dispatch if applicable. However final inspection and acceptance of equipment will be after installation at BHEL, Trichy, Tamilnadu.	
13	The vendor shall provide necessary drawings, Test Certificates and Operating Maintenance Manuals etc., as called for in the Technical Specification, in the required number of copies at no extra cost.	
14	Any warranty replacement during warranty period shall be supplied free of charge on FOR BHEL, Trichy, Tamilnadu basis.	
15	Performance Bank Guarantee, if applicable as per tender condition. Normally No deviation permitted and the <b><u>deviated offers are liable for rejection.</u></b>	
<b>OTHER DETAILS REQUIRED</b>		
16	% of Excise Duty with cess	
17	% of TAX (VAT) (TNGST with FORM-17)	
18	% of TAX (VAT) without form	
19	% of TAX (CST) (CST with C-FORM)	
20	% of TAX (CST) without form	
21	Packing & Forwarding Charges ( <b>in % only</b> )	
22	Freight& transit insurance charges, if any( <b>in % only</b> ) Freight charges from Dispatching station to BHEL, Tiruchirapalli (Note: If the delivery terms is Ex Works the materials has to be sent through BHEL approved carrier only ,in this case the freight will be borne by BHEL)	
23	Approximate Net weight of the total consignment	
24	Approximate Gross weight of the total consignment	
25	Approximate Dimensions of the Consignment	
26	Name of the contact person	
27	Land Line Number	
28	Fax Number	
29	Mobile Number	
30	E-mail ID	
31	PAN No.	
32	CST No.	TIN No.

- a) It is confirmed that all the terms and conditions stipulated in the Enquiry have been fully understood by us and all clarifications & details have been obtained.
- b) Applicable % of ED, Sales Tax -CST or VAT, Service Tax), Freight, Insurance and Installation and Commissioning Charges etc., are indicated in offer.

Full postal Address:

Signature & Office Seal of the vendor

**Note:-**

Your specific acceptances to our Payment terms, LD & Risk Purchase (RP) Clause are essential for consideration of your offer. Otherwise your offer is liable for rejection.  
No row shall be left blank. Please indicate NA, in case the item is "not applicable"