



BHARAT HEAVY ELECTRICALS LIMITED

CORPORATE RESEARCH & DEVELOPMENT DIVISION
VIKASNAGAR, HYDERABAD - 500 093, INDIA

PHONES: 23774494 (EXCHANGE)

DIRECT: 23882104/23882204/
23778474/23776772

FAX : 91 40 23770698

RD:DP:MPX:F-04

ENQUIRY

To - Enquiry No: 840707421 Enq Date: 05-JAN-08 Due Date: 29-JAN-08 Delivery By:

Pin -

Email :

Attn. .

PLEASE SUBMIT YOUR QUOTATION IN SEALED COVER SUPERSCRIBED WITH ENQUIRY NO, ENQUIRY DATE AND DUE DATE SUBJECT TO OUR TERMS AND CONDITIONS ENCLOSED, FOR THE FOLLOWING MATERIALS SO AS TO REACH US ON OR BEFORE THE DUE DATE BY 12 NOON. THE TENDERS WILL BE OPENED AT 2 PM ON THE SAME DAY

PLEASE GIVE REFERENCE OF ENQ NUMBER , ENQ .DATE AND DUE DATE IN ALL YOUR CORRESPONDENCE FOR PROMPT ACTION. IN CASE IF YOU ARE NOT MAKING THE OFFER PLEASE POST A REGRET LETTER AND RETURN THE DOCUMENTS.

SL NO	DESCRIPTION / SPECIFICATION	UNIT	QTY
1	GAS MOISTURE COOLER CUM CONDENSER TECHNICAL SPECIFICATION IS ENCLOSED IN ANNEXURE -1	NO	1

NOTE: PLEASE SUBMIT YOUR OFFER IN TWO PARTS AS PER GENERAL TERMS AND CONDITIONS OF ENQUIRY & CONTRACT FOR THE PURCHASE OF GOODS/SERVICES IN SEPARATE SEALED COVERS AS DETAILED BELOW:

1) FIRST COVER SHALL CONTAIN THE FOLLOWING:

a) TECHNICAL COMMERCIAL BID ALONG WITH COMPLIANCE STATEMENTS, MENTIONING APPLICABLE DUTIES, TAXES etc., AND DELIVERY TIME CLEARLY, (TERMS, CONDITIONS, AND COMPLIANCE FORM ENCLOSED)

b) A COPY OF TE PRICE BID WITHOUT THE P RICES (UNPRICED PRICE BID)

2) SECOND COVER CONTAINING PRICE BID

3) IF THE PRICE BID IS FOUND TO BE DIFFERENT FROM THE UNPRICED PRICE BID IN ANY WAY, YOUR OFFER WILL BE REJECTED

4) GUARANTEE CERTIFICATE & MANUFACTURER'S TEST CERTIFICATE TO BE ISSUED ALONG WITH MATERIAL.

NOTE: PLEASE QUOTE YOUR SHORTEST POSSIBLE DELIVERY TIME. DELIVERY TIME WILL BE TAKEN INTO CONSIDERATION FOR EVOLVEATION OF YOUR OFFER.

Important:

Taxes & Duties quoted by you will be taken for cost evolution and order placement and no change will be entertained later except in the case of changes made by the Government. Changes in Taxes and Duties because of the changes in Turnover etc. also be to the supplier's account. In case no tax/duty is included, a self declaration for the exemption may be attached along with the offer.

AS WE ARE ENGAGED IN R&D ACTIVITY "C" FORM
WILL NOT BE ISSUED

Yours faithfully
for

PLEASE FILL UP THE ENCLOSED VENDOR REGISTRATION FORM AND SEND IT ALONG WITH BHARAT HEAVY ELECTRICALS LTD



BHARAT HEAVY ELECTRICALS LIMITED

CORPORATE RESEARCH & DEVELOPMENT DIVISION

VIKASNAGAR, HYDERABAD - 500 093, INDIA

ENQUIRY

PHONES: 23774494 (EXCHANGE)

DIRECT: 23882104/23882204/
23778474/23776772

FAX : 91 40 23770698

RD:DP:MPX:F-04

YOUR QUOTATION. OTHERWISE YOUR QUOTATION
WILL NOT BE CONSIDERED. (IGNORE THIS IF YOU
HAVE ALREADY SUBMITTED THIS FORM)

NARASIMHA RAO V.

Sr Engineer

Email: raovn@bhelrnd.co.in

TECHNICAL SPECIFICATIONS FOR GAS MOISTURE COOLER CUM CONDENSER

INTRODUCTION

BHEL has installed a high pressure Thermo Gravimetric Analyser (HP TGA) for determination of reactivity for gas solid reactions. For the studies, steam, carbon di oxide, hydrogen, individually or mixed with nitrogen in different proportions is passed through the reaction chamber. The HP TGA will be operated at any pressure from atmospheric pressure to 50 bar and temperatures upto 1100 Deg. C. In addition to the reactant gases (pure or in mixtures), nitrogen is passed through the sections of the HP TGA to cool the parts. The reactant gases plus nitrogen mixture passing through the reaction chamber and the cooling/purge nitrogen gas combined at the exit of the HP TGA and is vented through a Pressure Reducing Valve (PRV).

PRV is most effective for non-condensable gases and it is the recommendation of the HP TGA OEM vendor to keep the moisture content in the vent gases at PRV inlet to bare minimum so that no condensation takes place in the valve body during pressure reduction. Hence, it is proposed to install a moisture condenser in the gas vent line from HP TGA upstream of PRV.

DESCRIPTION OF THE CONDENSER

The condenser is meant to condense the moisture in the gas by using the chilled coolant from a refrigerated chiller unit. The gas outlet temperature leaving the condenser should be designed in such a way that it does not exceed 5 Deg. C. The condenser shall be designed to condense the water vapor from non condensable gases. The heat transfer area of the condenser shall be designed for this purpose.

The water vapor content in the vent gas will vary in each experiment depending on the volume % of steam in the gaseous mixture entering the HP TGA reaction chamber. The volume % of water vapor in the vent gas can vary from the few per cent to about twenty five per cent. The volumetric flow rate of the reactant gases passing through the HP TGA will vary between 600 ml/min. to 1000 ml/min. depending on the experimental condition. As the HP TGA will be operated at any pressure from slightly above the atmospheric to 50 bar, the mass flow rate of the water vapor laden vent gases will be different at each experimental condition. However, the condenser shall be designed for the maximum mass flow condition of the vent gas and for the maximum of water vapor content in the vent gas specified in the specification table to maintain the gas exit temperature at or below that specified in the technical data sheet (Annexure 1). The condenser shall be mechanically designed for the maximum operating pressure and vent gas temperature specified.

CONSTRUCTIONAL FEATURES

A schematic of the vent condenser assembly and the total assembly consisting of condenser unit, condensate removal unit and chilled coolant circulation unit is shown in **drawing no. 4-BYN-07-874-003**. The system envisaged consists of a condenser unit made out of helical tubular heat transfer surface housed in a vessel. The vent gas from HP TGA shall enter the tube side from the top and the water condensate along with non-condensable gases will leave from the bottom of the tube which terminates in a gas separator vessel. The condensate shall be separated from the gases in this vessel. The non-condensable gases shall pass through the exit line provided at the top of the vessel with a tight shut off isolation valve BV04. The separated condensate will drain into another large vessel called condensate collection vessel, wherein the condensate shall remain stored over the entire duration of the experiment. Tight shut off isolation valve, BV03 shall be provided at the bottom of the collection vessel. During operation, the bottom valve (BV03) shall remain closed. After completion of the run, BV 03 is opened to drain out the condensate after depressurizing the entire gas stream.

The gas separator vessel and condensate collection vessel shall be designed to withstand maximum operating pressure with adequate design margin. All valves shall be rated for operation at 50 bar pressure. Additional gate valves or other types of tight shut off valves, may be provided after BV 03 and BV 04 to ensure maintenance of required pressure.

Technical specification for gas moisture condenser is given in **Table-1**.

General notes

1. The vendor shall furnish details such as specification and manufacturer's name of all the components/subsystems of gas moisture condenser along with quotation. All the instruments offered shall be with latest technology and shall be equipped with advanced sophisticated features.
2. The vendor should fill up the technical parameters as offered in the column titled 'vendor's offer'.
3. Detailed technical catalogues of all the major components of gas moisture condenser should be furnished along with the quotation. Only such quotes which include complete technical details and catalogues will be considered. Vendor shall include all such technical details which will address the specification requirements.

4. The vendor should furnish guarantee certificate/ warranty certificate and test certificate for pressure parts of gas moisture condenser. Any part/component not covered under the guarantee and/or warranty shall be mentioned exclusively.
5. Any deviation from the specification may be brought-out clearly by the vendor in the technical bid.
6. **The performance of gas moisture condenser should be demonstrated at rated conditions as specified in the specification table-1 at BHEL, R&D Division.**
7. **Vendor's scope also includes erection and commissioning of gas moisture condenser at BHEL, R&D Division**
8. **The scheme provided for Gas moisture cooler cum condenser (Drawing No. 4-BYN-07-874-003) along with this purchase enquiry is only a tentative scheme. The vendor can design/choose his own scheme which meets the specification requirements stipulated in Table-1 and submit along with the quotation. However, BHEL reserves the right to either accept or reject the vendor's proposed scheme.**

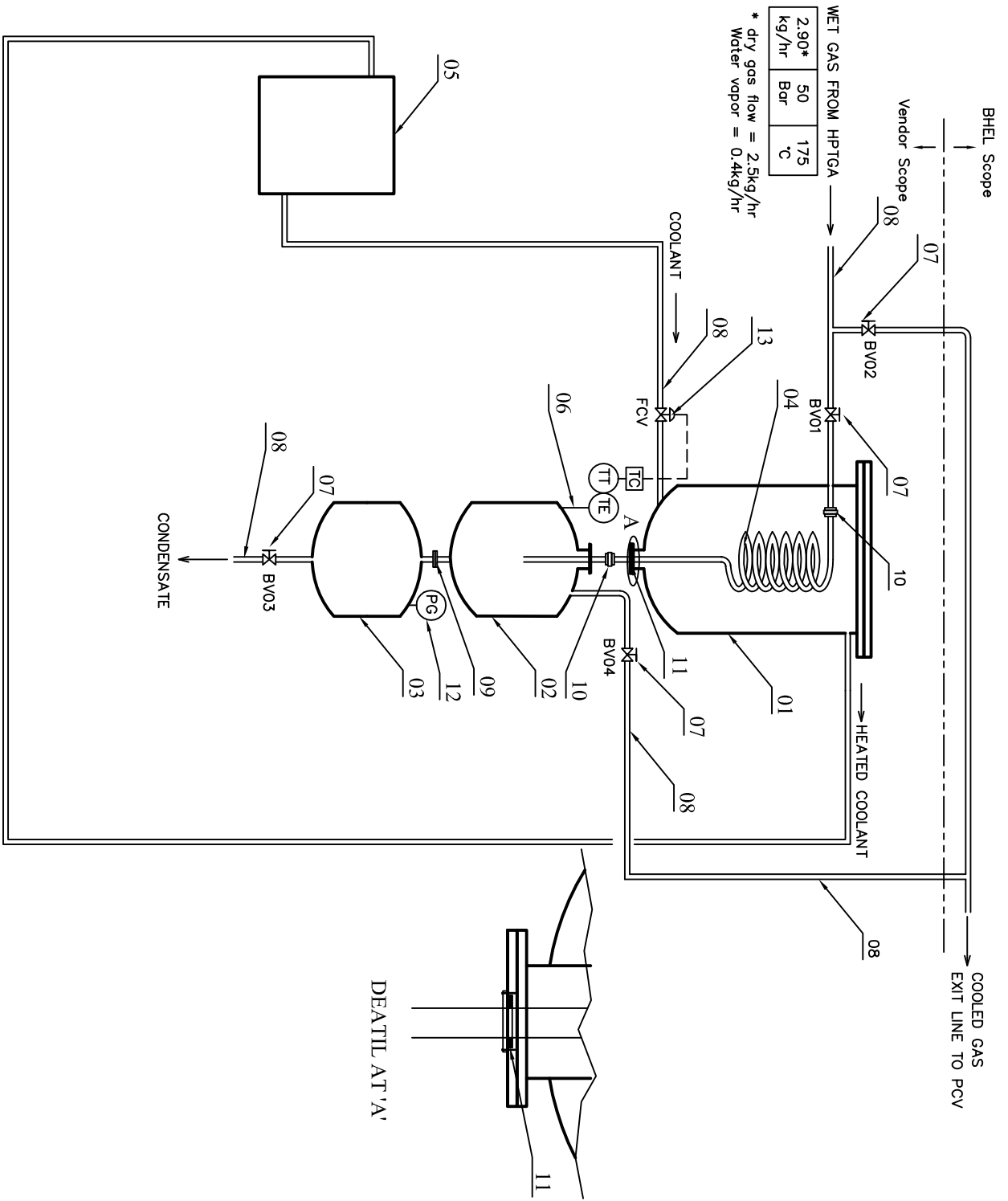
Table 1 - SPECIFICATION FOR GAS MOISTURE COOLER CUM CONDENSER

Sl No	Description of specification	Indentor's specification	Vendor's offer
1.0	Moisture Condenser		
1.1	Type of condenser	Indirect contact cooler with wet gas flowing through helical tube/s and liquid coolant surrounding the tube on the shell side. The condenser tube side max pressure will be 50 bar and shell side pressure will be the max of liquid coolant pressure.	
1.2	Inlet wet gas flow Range		
1.2.1	Dry gas flow range at 2 bar	100-125 grams/hr	
1.2.2	Dry gas composition	Nitrogen(or Argon or Helium)and Carbon-dioxide	
1.2.3	Minimum water vapor flow along with dry gas at 2 ata pressure	5 grams/hr	
1.2.4	Maximum water vapor flow along with dry gas at 2 ata pressure	20 grams/hr	
1.2.5	Dry gas flow range at 50 bar	2500-2800 grams/hr	
1.2.6	Dry gas composition	Nitrogen(or Argon or Helium)and Carbon-dioxide	
1.2.7	Minimum water vapor flow along with dry gas at 50 bar pressure	100 grams/hr	
1.2.8	Maximum water vapor flow along with dry gas at 50 bar pressure	400 grams/hr	
1.3	Inlet wet gas pressure Range		
1.3.1	Minimum Pressure	2 bar	
1.3.2	Maximum Pressure	50 bar	
1.4	Inlet wet gas temperature Range		
1.4.1	At 2 ata pressure	100-120 °C	
1.4.2	At 50 ata Pressure	200-225 °C	
1.5	Outlet gas temperature		
1.5.1	Design Temperature	5 °C	
1.5.2	Normal Temperature	5 °C	

Sl No	Description of specification	Indentor's specification	Vendor's offer
1.5.3	Min Temperature	2 deg C	
1.6	Outlet wet gas pressure Range		
1.6.1	Minimum Pressure	2 bar	
1.6.2	Maximum Pressure	50 bar	
1.7	Coolant		
1.7.1	Type of coolant	Vendor to specify the details	
1.7.2	Flow Range	Vendor to specify the details	
1.7.3	Inlet and outlet temperature Range	Vendor to specify the details	
1.8	Condenser configuration		
1.8.1	Wet gas side	Passing inside the tube in helical coil immersed in coolant	
1.8.2	Tube ID & heat transfer area	Vendor to specify the details	
1.8.3	Condenser heat duty	500 Kcal/hr	
1.8.4	Tube design pressure	60 bar at 225 °C	
2.0	Gas separator vessel		
2.1	Design pressure	60 bar	
2.2	Design temperature	5 deg C	
2.3	Hold up volume	4 liters.	
2.4	Vessel diameter	150 mm	
2.5	No. of nozzles	4 (One each for wet gas inlet, gas outlet, condensate outlet and thermocouple)	
2.6	Material	Stainless steel	
2.7	Nozzle sizes	As per Drawing No. 4-BYN-07-874-003	
3.0	Condensate hold up vessel		
3.1	Design pressure	60 bar	
3.2	Design temperature	5 deg C	
3.3	Hold up volume	5 liters.	
3.4	Vessel diameter	150 mm	
3.5	No. of nozzles	3 (One each for condensate inlet, outlet and pressure gauge)	
3.6	Material	Stainless steel	
3.7	Nozzle sizes	As per Drawing No. 4-BYN-07-874-003	
4.0	Chiller		
4.1	Type	Refrigerated cooler	
4.2	Condenser cooling duty	500 Kcal/ hr max	
4.3	Efficiency of cooler	> 60%	

Sl No	Description of specification	Indentor's specification	Vendor's offer
4.4	Refrigeration load coolant side	800 Kcal/hr	
4.5	Refrigeration type	Compression refrigeration.	
4.6	Drive	Electrical motor	
4.7	Refrigerant condenser	Air cooled	
4.8	Coolant storage capacity in refrigerator	Vendor to specify but not to exceed 30 liters due to space constraint.	
4.9	Coolant flow rate to condenser and pressure	Vendor to specify.	
4.10	Coolant circulation	With immersion pumps suitable for continuous operation.	
4.11	Coolant level	Level indication and low level protection with audio visual alarm.	
4.12	Coolant temperature control	PID controller with variable set point in the temperature range of (-) 20 to +5 deg C.	
4.13	Refrigeration capacity rating	Vendor to select	
5.0	Constructional details of all vessels and their interconnection	To be provided by vendor along with quotation	
6.0	Isolation valves		
6.1	Type of valve	Gate or ball valve	
6.2	Material	Stainless steel	
6.3	No. of valves	4 (Drawing No. 4-BYN-07-874-003)	
7.0	Piping		
7.1	Line size in wet gas line	Vendor to specify	
7.2	Design Pressure	60 bar	
7.3	Material	Stainless steel	
8.0	Gas Temperature transmitter and controller		
8.1	Temperature range	Vendor to specify details	
8.2	Temperature resolution	Vendor to specify details	
8.3	Controller Type	PID controller	
8.4	Control action	Coolant flow rate	
8.5	Temperature set point	5 °C	
8.6	Flow control valve	Electrically actuated control valve	
8.7	Alarm levels	Very low: 0 °C/ Very high: 10 °C	
9.0	Insulation	Insulation of all vessels, coolant lines and associated piping etc.	

SI No	Description of specification	Indentor's specification	Vendor's offer
9.1	Type of Insulation	Vendor to specify details	
9.2	External surface Temp.	>20 °C	
10.0	Power supply	3-phase, 4 wire 415 V, 50 Hz AC will be provided by BHEL at the battery limit.	



ITEM	DESCRIPTION	MATL	QTY	REMARKS
01	CONDENSER	SS	1	
02	GAS SEPARATOR VESSEL	SS	1	
03	CONDENSATE COLLECTION VESSEL	SS	1	
04	COILED TUBE	SS316	1	
05	CHILLER	SS	1	
06	THERMOCOUPLE (with Transmitter & controller)		1	
07	ISOLATION VALVE		4	LEAK PROOF
08	1/4" TUBE	SS316	AS REQD	
09	1/2" PIPE	SS316	AS REQD	
10	UNION	SS	2	
11	PACKING			
12	PRESSURE GAUGE		1	
13	FLOW CONTROL VALVE	SS	1	

NOTE:
1. VESSELS 2&3 ARE TO WITHSTAND 50 ata & 40°C

Rev		Date		Description	
Project : GASIFICATION REACTIVITY STUDIES					
Customer : BHARAT HEAVY ELECTRICALS LTD.					
Contract No : CORP. RD., DYN., HYDERABAD.					
DRWING NO	DATE	SCALE	BY	CHECKED	DATE
4-BTN-07-874-003	27/207				
THD	GAS MOISTURE CONDENSER				



BHARAT HEAVY ELECTRICALS LIMITED

CORPORATE R&D DIVISION, VIKAS NAGAR, HYDERABAD – 500 093, AP, India

Ph: 0091-40 – 23778474, FAX: 0091-40 – 23770698

General Terms and Conditions of Enquiry & Contract for the Purchase of Goods/ Services

1. The quotation and any order resulting from this enquiry shall be governed by these General Terms and Conditions of enquiry and contract for the supply of goods and the supplier quoting against this enquiry shall, unless specifically stipulates any different terms or conditions, be deemed to have read and agreed to the same.
2. Sealed quotations in double cover with tenderer's distinctive seal, superscribing enquiry number, date and due date are to be submitted so as to reach on or before due date & time, addressed to **Additional General Manager(MM), Bharat Heavy Electricals Limited, Corporate Research & Development Division, Vikasnagar, Hyderabad, Andhra Pradesh, India – PIN-500 093, India.**

In the case of **Two-part bid**, each inner cover shall clearly be labeled as a) **Technical & Commercial Bid** containing technical data/ drawings/ catalogues/ quality plans along with commercial terms and conditions & copy of the price bid with the price columns left blank (unpriced price bid), b) **Price bid** containing prices quotes. Installation and/or Commissioning charges shall be spelt out in absolutely lucid terms, taking into account total charges, rather than quoting vaguely, such as charges per man-day or charges per engineer per day etc. **If the price bid was found later to be different from the unpriced price bid in any way, the offer will be rejected summarily.**

3. **Tender/ Technical bid Opening:** Unless specified otherwise, tenders/ technical bids will be opened on appointed date and time as mentioned in the enquiry or as communicated changed date/time, if any, in the presence of such of those tenderers who may be present.
4. **Delayed/ Late Tender:** Tenders, which have been posted by registered post through the postal department in time before opening date but received after tender opening, shall be treated as regular tenders. Other tenders received after tender opening time shall be treated as late tenders and normally they may be rejected.
5. The Quotation should be free from overwriting and erasures. Corrections and additions, if any, must be attested. Supplier should indicate in the quotation dimensions (Size), weight, rate etc., in the metric system unless the enquiry calls for different unit.
6. **Validity of Quotation:** All quotations shall be kept open for acceptance for a period of ninety days from the date of opening of Tenders/ Technical bid and this shall be deemed to be an express condition of all quotations. The rate shall be quoted in both figures and in words.
7. In the case of Two-part bid, the vendor should furnish technical clarifications, if any, within stipulated time mentioned, failing which, it will be construed that the vendor is not interested in the tender and BHEL shall not consider the offer for further evaluation.
8. **Revision of Pricebid:** In the event of any bidder, after finalizing the technical specifications and scope of supply, opting to revise and submit their latest price bid, then BHEL reserves the right to open their original / previous price bid also while evaluating revised bid.
9. **Pricebid Opening:** Unless specified otherwise in the enquiry, the Price bids of technically qualified vendors shall be opened with prior intimation in the presence of such of those tenderers who may be present.
10. **Conformity to Specifications:** The material should be of the best quality and shall be conforming to our specification given in our enquiry. Unless otherwise agreed upon by BHEL, no payment shall be due by BHEL in respect of any sample. Offers without details of specifications/ applicable catalogues will not be considered and are liable to be rejected.
11. **Terms of Delivery:** All suppliers shall quote the lowest prices on ex-works and FOB/FCA basis. Foreign suppliers will also indicate their Indian agent's name and address with percentage of agency commission out of the quoted price, if any. Name and Address of the supplier's Bankers address should also be given. Indian suppliers for the indigenously manufactured/ imported stock shall quote on Ex-works /Free-on-Rail/Road /FOR-destination basis, indicating packing & forwarding charges, if any, separately.
12. **Taxes and Duties:** Unless specified otherwise in the enquiry, BHEL do not provide "C" or "D" Form as it is engaged in R&D. All Indian suppliers shall clearly mention Sales Tax/ VAT, Excise Duty, and Service Tax etc, if any, payable in addition to the quoted price and indicate applicable rates/ percentage, item-wise. It will be paid

only if Registration Number under State(TIN)/ Central Sales Tax or Service Tax is specifically mentioned in the Bill/Invoice. Vendors without a Sales Tax/VAT registration and applicable Service Tax registration will not be considered.

13. **Insurance:** Insurance will be arranged by BHEL in case of Ex-Works as well as FOB basis supplies.
14. **Terms of Payment:** Full payment will be made within 30 days after receipt, inspection and acceptance of the material (and where involved, Erection and commissioning of the material/ equipment at BHEL/Destination) by Crossed cheque and no Bank commission charges are admissible. The Cheque will be sent by registered post and BHEL is in no way responsible if loss occurs due to delay by postal authorities and cheques falling into improper hands or through forgery or fraud. Suppliers having RBI-SEFT-enabled accounts can seek payment through Electronic Fund transfer. For foreign suppliers, the preferred payment term will be on Sight Draft basis and bank charges inside India will be to BHEL account and outside India will be to supplier's account.
15. Suppliers shall quote competitive price and best delivery for all the items mentioned in the enquiry. BHEL reserves the right to reject partial quotations and to place order on overall landed cost basis. Correct date of effecting supplies in the event of an order should be indicated in the offer. If the supplier's quoted terms are different from BHEL standard payment terms, interest @10.5% per annum (or as indicated in the enquiry) will be loaded to the quoted prices for difference of payment period.
16. **Packing:** The supplier shall be responsible for the goods being properly and adequately packed so as to prevent any loss, damage or deterioration during transit and indicate packing charges, if any, separately.
17. **Part/ Split Ordering:** BHEL reserves right to Order part of the item/ quantity of the enquiry and split the order among qualified vendors.
18. In case the goods enquired are on Rate Contract basis with any other unit of BHEL, such fact should be clearly indicated in the quotation giving full particulars of Rate Contract number, validity and price and also your willingness to comply with order if placed against such Rate Contract. A true copy of Rate contract signed by the supplier should be sent with the quotation.
19. **Inspection:** On receipt, the goods shall be subjected to inspection and also test, if necessary, and our decision regarding the acceptability of the goods shall be final and binding on the suppliers.
20. **Consequences of Failure To Deliver:** The time stipulated for delivery of goods shall be deemed to be the essence of the contract and delivery must be completed within the stipulated date/s. In the event of supplier's failure to supply the goods by the stipulated date/s, BHEL shall be entitled to levy a penalty of ½% per week for the delayed no of weeks or part thereof for the undelivered portion of PO subject to a maximum of 10% total order value.
21. **Withdrawal from the Contract:** In case the supplier withdraws the quotation after its acceptance by BHEL or fails to supply the goods as per the terms and conditions of contract, or at any time repudiated the contract wholly or in part, BHEL shall be at liberty to cancel the Purchase Order and to recover from the supplier the extra cost and other loss incidental to the breach of contract on the part of the supplier.
22. **Guarantee/ Warranty certificate and Manufacturer's Test report:** Invariably in all cases where it is so stipulated, the supplier should furnish Guarantee/ Warranty certificate valid for a period of 18 months from date of supply or 1 year from the date of receipt, acceptance and commissioning(or more, if provide by oem) whichever earlier and manufacturer's Test report along with the goods, failing which, BHEL shall have the right to reject the goods.
23. All ferrous/ non-ferrous items shall be colour coded as per bureau of Indian standards/ or IS standards/ BHEL Standards.
24. **Recovery of Dues:** BHEL shall recover any amount due from the supplier or any amount outstanding to the credit of the supplier with BHEL R&D unit or any other BHEL unit(s) and/or by legal action.
25. **Arbitration & Forum for Legal Proceedings:** All disputes arising in connection with indigenous/ foreign supplies shall be settled through arbitration held at Hyderabad, AP, India and arbitration shall be appointed by Arbitration Tribunal of the Federation of Andhra Pradesh Chambers of Commerce and Industry, Hyderabad, AP, India. The Courts at Secunderabad/ Hyderabad, AP, India shall have jurisdiction in respect of any suit or other legal proceeding arising from or relating to this contract

The rights and remedies of BHEL stated in these General terms and conditions shall be in addition and supplemental to its rights and remedies under law and custom or usage of trade or business and shall in no way be deemed to limit, curtail, supercede or derogate from its said rights and remedies.



ANNEXURE “AA
BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE RESEARCH & DEVELOPMENT DIVISION
VIKASNAGAR, HYDERABAD – 500 093. INDIA

MATERIALS MANAGEMENT DEPARTMENT
(Information for Technical & Commercial bids with general terms)

ENCLOSURE TO ENQ No:

DATE:

- a) Please indicate() for applicable or () for not applicable against each clause of the enquiry
- b) Vendor shall confirm their compliance for applicable clauses () in their offer without deviation.

1) Technical offer:-

- a) Vendors to confirm compliance to all points of specifications, attached if any. Deviations if any should be specified in the offer.
- b) Vendors shall furnish relevant technical Documents / Catalogues. Drawings and Quality plan duly taking care of Purchase Specification and Quality requirements along with their offer in duplicate for Purchaser’s review / Verification.

2) Two Part Bid:-

Vendor shall submit their offer in 2 parts.

2.1 Technical Bid:- Containing relevant technical data, drawings, catalogues, Quality Plan etc, along with Commercial Terms and Conditions and a copy of the price bid with the price columns left blank (unpriced price bid). If the price bid was found later to be different from the unpriced price bid in any way, the offer will be rejected.

2.2 Price Bid:- Containing the Price(s) quoted. Installation and or commissioning charges shall be spelt out in absolutely lucid terms taking into account the total charges rather than quoting vaguely such as charges as per man day or charges per Engineer per day etc.,

Technical bids will be opened on the due date of the enquiry or any other date fixed by BHEL. Further, vendor should furnish clarifications, if any, required within seven days after the same is sought by Purchaser. If no clarifications/reply received within 7 days, it will be construed that vendor is not interested in the tender and Purchaser will finalise tender accordingly. Price bids received on due date along with technical offers will be recorded and opened subsequently with due intimation to vendors after finalising of technical scope of supply.

These bids shall be submitted in separate sealed covers superscribing the nature of the offer (technical bid or price bid). BHEL Enq No. Due date etc.

Note: In case of non-compliance with the TWO_-PART-BID ie.. clause number 2 and subclauses 2.1 and 2.2. Purchaser reserves the right to summarily reject all such offers.

3) Delivery:-

Vendor shall confirm supply of materials as per the delivery schedule indicated in the enquiry.

4) Negotiations:-

Vendor shall quote competitive price and best delivery to avoid negotiations.

5) Commercial Terms & Conditions:-

Terms of Delivery:

- a) **Vendors shall clearly indicate terms of delivery Viz: Ex-Works/FOR Despatching station/FOR Despatching station FOR Destination/FOB port of loading/FAS Port of loading in their offer. If the terms of delivery is Ex-Works, then vendors shall clearly indicate the following:**
 1. **Packing and forwarding charges.**
 2. **Documentation / Handling charges if any**
 3. **FOB FAS charges (Inland Freight & Insurance charges from vendor works to port of Loading).**
- b) **All Indian Vendors shall clearly specify the Excise Duty in percentage applicable for their supplies. Offers containing expressions such as “Extra as applicable” or “As applicable at the time of Delivery” will be summarily rejected.**
- c) **CST/Local Sales Tax in percentage shall be clearly indicated.**

6) Validity of Quotation:-

Validity of offer should be 90 days after the opening of price bid.

7) Part or split ordering:-

Purchaser reserves the right to order part of item / quantity of the enquiry.

8) For clauses not mentioned in this document see the enclosed “GENERAL TERMS AND CONDITIONS OF ENQUIRY AND CONTRACT FOR THE PURCHASE OF GOODS”

- 9) In case your terms of payment are different from our standard payment terms, interest at the rate of 10.5% per annum (or BHEL’s standard rate of interest) will be loaded to your prices for the difference of period of payment.**



BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE R&D Division
Vikasnagar, Hyderabad – 500093, India.

Suppliers' compliance statement to basic conditions of enquiry

(In case Order to be placed on Indian supplier in Indian currency)

Condition	BHEL R& D's terms	Supplier's compliance (indicate Yes/No. if 'No', state terms desired)
1) Validity of offer	90 days from the tender opening date	
2) Delivery requirements	Free delivery at our stores or FOR destination (as indicated in the enquiry)	
3)Warranty	Unless specifically mentioned in the enquiry, all supplied items to be provided with warrantee for one year (or more, if provided by the OEM) from the date of acceptance/commissioning. In case of equipment involving erection and commissioning, warrantee shall be for 18 months from the date of dispatch or 12 months from the date of commissioning, whichever is earlier	
4) Terms of payment	Full payment will be made within thirty days after receipt, inspection and acceptance of the material at BHEL R&D (and where involved, erection and commissioning of the material/equipment at BHEL/destination), by Crossed Cheque and no Bank commission charges are admissible.	
5) Taxes & Duties	Unless specifically mentioned in the enquiry, we do not provide 'C' or 'D' form. Supplier to specify rates of taxes and duties element wise and related percentages.	
6) Penalty for late delivery	0.5% per week beyond the delivery date as mentioned in the Purchase order on undelivered portion subject to a maximum of 10% of the total order value	

* BHEL R&D reserves the right to reject any offer due to non-compliance with the above conditions and/or non-receipt of this form in duly filled condition

* Any other elements of cost in addition to the above may please be specified in detail

(Signature and Stamp/Seal of Vendor)



BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE R&D Division
Vikasnagar, Hyderabad – 500093.

IMPORTED

Suppliers' compliance statement to basic conditions of enquiry

(In case Order to be placed on the Principal and foreign currency)

Condition	BHEL R& D's terms	Supplier's compliance (indicate Yes/No. if 'No', state terms desired)
01) Validity of offer	90 days from the tender opening date (or as per enquiry)	
02) Delivery requirements	FCA – Nearest International Airport (or as indicated in the enquiry)	
03) Warranty	Unless specifically mentioned in the enquiry, all supplied items to be provided with warrantee for one year (or more, if provided by the OEM) from the date of acceptance/ commissioning. In case of equipment involving erection and commissioning, warrantee shall be for 18 months from the date of dispatch or 12 months from the date of commissioning, whichever is earlier	
04) Terms of payment	Sight draft. All bank charges inside India will be to BHEL R&D account and out side India will be to suppliers account. Documents through State Bank of India, HAL Complex, Balanagar, Hyderabad, AP, India-500 042.	
05) Agency commission	PI specify percentage charges, if any. Indian agency/agent commission will be in Indian Currency only.	
06) Erection/ Commission	As per enquiry	
07) Documentation	As per enquiry	
08) Insurance	BHEL will arrange Insurance based on intimation to our Insurance agency, United India Insurance Co., DO-2, Secunderabad, AP, India.	
09) Penalty for late delivery	0.5% per week beyond the delivery date as mentioned in the Purchase order on undelivered portion subject to a maximum of 10% of the total order value	

* BHEL R&D reserves the right to reject any offer due to non-compliance with the above conditions and/or non-receipt of this form in duly filled condition

* Any other elements of cost in addition to the above may please be specified in detail

(Signature and Stamp/ Seal of Vendor)



BHARAT HEAVY ELECTRICALS LTD.
Corp. R&D DIVISION
VIKAS NAGAR,
HYDERABAD-500 093 (INDIA)

VENDOR REGISTRATION FORM
[FORM TO BE SUBMITTED* BY THE BIDDER ALONG WITH TECHNICAL-BID]

Before filling please refer to instructions on page-4

1.0 VENDOR PROFILE:

1.1 & 1.2 Name and address of the vender: _____

Phone Nos.:

Fax No.:

Email:

1.4 Local representative of the vender in India/ Hyderabad:

Phone Nos.:

Fax No.:

Email:

Contact person:

Mobile No.:

2.0 & 2.1 Type of Organisation:

PROPRIETORSHIP	COMPANY	SISTER CONCERN	ANY OTHER (Please specify)
PARTNERSHIP	CORPORATION	Small Scale Industry	

3.0 Annual Turn Over:

Name and address of the Banker:

Sr.No.	Bank	Address

4.0 REGISTRATION PARTICULARS

4.1 IT Permanent Account No.(PAN):

4.2 & 4.3 State and central sales tax Registration No.:

4.4 ED/ Service Tax Registration No.:

PF Account No.:

Labour Licence No.:

ESI Account No.:

5.2 Contact person:

Mobile No. :

5.3 Total Number of employees:

Graduates (Engr./Scientists/Mgmt/Fin.)	Consultants	Workers		
		Sup./Skilled	Semiskilled	Unskilled

6.0 Wish to register for supplies/ services other than one bidding for :

<u>Sr.No.</u>	<u>Service/Supplies</u>	<u>Capacity</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		

6.1 Reference list :

(Only recognized public and private sector companies, attach if printed copy available)

<u>Sr.No.</u>	<u>Customer</u>	<u>Volume / Year</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		

7.0 & 8.0 Infrastructure / facilities :

<u>Sr.No.</u>	<u>Facility (with specifications)</u>	<u>Age/ Year procured</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		
<u>5</u>		
<u>6</u>		
<u>7</u>		
<u>8</u>		
<u>9</u>		
<u>10</u>		

9.0 Registration with other BHEL Unit/Units:

<u>Sr.No.</u>	<u>9.1.1 Unit</u>	<u>9.1.2 Registration No.</u>
<u>1</u>		
<u>2</u>		
<u>3</u>		
<u>4</u>		

Any Other information :

Declaration:

The information furnished above is true and authentic.

(CEO / Proprietor)

SEAL:

Date:

The competent authority reserves the right to accept or reject the registration. Registered vendors will be informed by mail / email, as convenient. Contact Sr.DGM (MM) for clarification/ additional information on registration.
A separate communication will be sent to you in case of non-registration, citing reasons thereof.

Instructions

1. Answer all items, use NA for items not applicable.
2. BHEL units do not require this registration.
3. Submit the form in duplicate.
4. Use additional sheets for want of space if required.
5. Attach copies of latest documents in respect of items 4.0 (Registration no.s)
6. Photographs of registered office and the chief executive/proprietor shall be furnished.
7. Use A4 sheets for this document and the enclosures.

* REGISTERED BIDDERS, HAVING BHEL (R&D) REGISTRATION NO./ HAVE SUBMITTED THIS FORMAT EARLIER, NEED NOT FURNISH THIS INFORMATION SECOND TIME (UNLESS DESIRE TO UPDATE IT).



BHEL CORPORATE R & D
VIKAS NAGAR- HYDERABAD - 500 093
ANDHRA PRADESH – INDIA
SUPPLIER REGISTRATION FORM

(FOREIGN SUPPLIER)

ALL COLUMNS SHOULD BE PROPERLY FILLED IN THE SPACE PROVIDED FOR. WHEREVER IT IS NOT APPLICABLE PLEASE WRITE “NOT APPLICABLE”. INCOMPLETE OR INCORRECT FORMS MAY NOT BE CONSIDERED.

1.0 GENERAL INFORMATION:

1.1....NAME OF COMPANY

1.2....DETAILS OF HEAD OFFICE:

ADDRESS :
TELEPHONE :
FAX :
.EMAIL :
.WEB SITE :

1.3....DETAILS OF FACTORY/WORKS:

ADDRESS :
TELEPHONE :
FAX :
.EMAIL :
.WEB SITE :

1.4....DETAILS OF MARKETING AGENT

ADDRESS :
TELEPHONE :
.FAX :
.EMAIL :
.WEB SITE :

1.5 CHIEF EXECUTIVE

NOTE: PLEASE ATTACH SEPARATE SHEETS, IF SPACE FOUND IS INADEQUATE

AUTHORISED SIGNATORY



BHEL CORPORATE R & D
VIKAS NAGAR – HYDERABAD – 500 093
ANDHRA PRADESH – INDIA

SUPPLIER REGISTRATION FORM

(FOREIGN SUPPLIER)

- 1.6 CONTACT PERSON(S)
FOR PRODUCT OFFERED
NAME(S)
OFFICIAL CAPACITY
ADDRESS:
TELEPHONE
FAX
E-MAIL
- 1.7 YEAR OF ESTABLISHMENT
- 1.8 PRODUCTION CAPACITY PER ANNUM
- 1.9 PARTICULARS OF PRODUCT INCLUDING
SPECIFICATION AND RANGE OFFERED
FOR REGISTRATION
(ATTACH BROCHERS AND CATALOGUE)
- 1.10 NAME(S) OF BANKERS
- 1.11 BANKER'S CERTIFICATE
- 1.12 PORT OF LOADING
- 1.13 NEAREST AIRPORT
- 1.14 NAME OF THE INDIAN AGENT, IF ANY
WITH AUTHORISATION LETTER
- 1.15 ANY OTHER INFORMATION:

AUTHORISED SIGNATORY



BHEL CORPORATE R & D
VIKAS NAGAR – HYDERABAD – 500 093
ANDHRA PRADESH – INDIA

SUPPLIER REGISTRATION FORM

(FOREIGN SUPPLIER)

2.0 FINANCIAL INFORMATION

2.1...TOTAL CAPACITY

2.2...ANNUAL TURN OVER FOR LAST 3 YEARS

2.3...WHEHER CREDIT LICENSE ACCEPTABLE YES/NO

3.0 QUALITY MANAGEMENT SYSTEMS
ENCLOSED FORMAT PART-B

3.1 EXPERIENCE LIST FOR SAME/SIMILAR ITEMS
TO BE ENCLOSED

4.0.....FUTURE EXPANSION PLANS:
(GIVE DETAILS)

5.0 LIST OF ENCLOSURES:
INCLUDING BROUCHERS, CATALOGUES, TECHNICAL
LITERATURE etc...

6.0 ANY OTHER INFORMATION

SIGNATURE OF SUPPLIER

NAME

DESIGNATION

DATE

.....OFFICIAL SEAL

AUTHORISED SIGNATORY
