



# Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

CAPITAL EQUIPMENT / MATERIALS MANAGEMENT

An ISO 9001  
Company

<b>ENQUIRY</b>	Phone: +91 431 257 79 38 Fax : +91 431 252 00 31 Email : <a href="mailto:tvenkat@bheltry.co.in">tvenkat@bheltry.co.in</a> Web : <a href="http://www.bhel.com">www.bhel.com</a>
<b>NOTICE INVITING TENDER</b>	

<b>TWO PART BID</b>	<b>Enquiry Number:</b>	<b>Enquiry Date:</b>	<b>Due date for submission of quotation:</b>
Tender to be submitted in two Parts	<b>2631300042</b>	<b>27.06.2013</b>	<b>29.07.2013</b>

You are requested to quote the Enquiry number date and due date in all your correspondence. This is only a request for quotation and not an order.

Please note that under any circumstances both **delayed offer and late offers will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the Date of tender opening.**

Item	Description	Quantity
10	<b>Microwave Sample Digestion System</b> as per the technical specification & commercial conditions applicable (to be downloaded from web site <a href="http://www.bhel.com">www.bhel.com</a> or <a href="http://tenders.gov.in">http://tenders.gov.in</a> )	<b>1.00 No</b>

**Important points to be taken care during submission of offer**

1. Delivery required 2 months from the date of purchase order.
2. EMD for this Tender will be ( INR ) : 40,000.00
3. Checklist Nos. **TRY/IMP/03** and **TRY/IND/03A** to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
4. All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media.

BHEL's General guidelines / instructions (refer **MM / CE / GENL / 001 - EMD**) including bank guarantee formats and list of consortium banks, commercial terms check-list can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "**2631300042**".

Tenders should reach us before 14:00 hours on the due date Tenders will be opened at 14:30 hours on the due date Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present	Yours faithfully, For BHARAT HEAVY ELECTRICALS LIMITED  Sr. Manager / Capital Equipment / MM
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### Micro Wave Digester

Micro Wave Digester System is intended for dissolving inorganic (coal ash, clinker, deposit, metals and refractory) and organic compounds (oil, sludges) in suitable solvent system. The resulting solution is analyzed for chemical composition using ICP-OES.

S.No.	Technical Specifications	
1.0	Micro Wave Power output	Minimum 1450 W
2.0	Reaction Vessel	
	operating pressure	$\geq 30$ bar
	Vessel Volume	100 ml (approx.)
	Reagent Filling Volume	50 – 60 ml
	Sample Weight	500 mg (max)
	Vessel Material	Vessel material should be capable of withstanding the effects of strong acids like HCl, HNO <sub>3</sub> , HF at high temperatures and pressure. Vessel should have coatings of TFM PTFE Or PFA for withstanding the strong acidic environment.
3.0	No. of Vessels to be loaded on the Rotor	Minimum. 6 Nos.
4.0	Reaction Vessel Temperature	0 ° C - 300° C
5.0	Rotor Speed	a) 5 – 6 rpm. b) All parts of the rotor in contact with the acidic fumes should be made up of materials like PTFE, which are easy to clean.
6.0	Noise Level	$\leq 60$ dB
7.0	User Interface and Equipment Control	A digital user interface unit shall be supplied along with the equipment. It may be attached to the main equipment as one of its parts or it may be separately given with necessary length of connecting cables.

8.0	Consumables & Spares	The standard supply package must include the consumables, spares like reactor vessels, vessel caps, ceramic external vessels etc. for <b>two</b> years of operation. Detailed list of consumables & spares with item wise and quantity for <b>two</b> years of operation should be attached with the offer.
9.0	Safety Provisions	Details about the safety of the equipment like safety interlocks or any other safety aspects in the instrument control software should be provided.
10.0	Other Requirements :	
	a) Power Supply available	230 V , 50 / 60 Hz
	b) Pollution impact Certificate	Certificate regarding the possible emissions from the instrument with emission values shall be provided.
	c) Installation & Training :	Installation and Commissioning of the equipment should be done at Plant Lab, BHEL Trichy. Training should be given to BHEL personnel for one day excluding the no. days for commissioning the equipment.
	d) Warranty	The supplier should give a warranty period of two years from the date of commissioning of the equipment.
	e) The following items shall be given by the supplier along with the equipment in soft and hard copies :	<ul style="list-style-type: none"> <li>I. Application Notes</li> <li>II. Heating program for digesting various materials.</li> <li>III. Instrument operating manual</li> </ul>
	f) The vendor should agree for the pre dispatch inspection at supplier works before shipment of the items covered in the purchase order.	

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## Qualifying Criteria

### Section- I

The BIDDER/VENDOR shall compulsorily meet the following requirements to get qualified for technical evaluation of the offer for supplying the equipment “**Micro Wave Digester**”.

1.0. The VENDOR shall have a minimum of FIVE years of continuous experience in the field of Design, manufacture and supply of Micro Wave Digestion System.

2.0. Only those Vendors, who have supplied, and commissioned in India at least **two such Micro Wave Digester exactly the same model** proposed in the technical offer in the past five years (on the date of opening of Tender) and such equipments are 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 the following information for the above:

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 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 the customers regarding satisfactory performance of the Micro Wave Digestion System supplied to them for a minimum period of one year as on the date of opening of the tender. 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. (As per Annexure A )

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 - II

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

5. The Technical Offer shall be supported by Product Catalogues (original, not photocopy) with specifications, description and drawings.

6. The Offer shall contain a comparative statement of Technical Specifications given by BHEL and the technical specification 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 (AMC) for minimum 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.

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## ANNEXURE –A

### 1. PERFORMANCE CERTIFICATE

(On Customer's Letter Head)

1. Supplier of the Equipment :
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)
7. E- mail ID :
8. Telephone No :
- Satisfactory / Good / Average / Not satisfactory

Date:

Signature & Seal of the Authority issuing the Performance certificate.