

Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)
Tiruchirappalli – 620014, TAMIL NADU, INDIA
MATERIALS MANAGEMENT / CAPITAL EQUIPMENT

ENQUIRY	Phone: +91 431 257 70 49
	Fax : +91 431 252 07 19 Email : csguna@bheltry.co.in
	Web: <u>www.bhel.com</u>

		Enquiry Number:	Enquiry Date:	Due date for submission of quotation:	
		2620900058	25.02.2009	09 01.04.2009	
Vou are requested	to auoto	the Enquiry	number date	and due date in all your	

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

Item	Description	Quantity	Delivery (Item required at BHEL on)
10	Ultimate Analyser as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	01 No.	31.10.2009

BHEL commercial terms & conditions with Price Bid and Bank Guarantee formats 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 "2620900058".

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 / MM / Capital Equipment

Coal Research Centre

Ref: CRC Eqpt: QC-A Rev No. 0/Dt. 05.01.2009 Sheet 1 of 3

QUALIFYING CRITERIA

The BIDDER / VENDOR have to necessarily provide the following details, for making an assessment of the firm's capability and competency.

The bid consists of 3 parts namely Qualifying Criteria, Technical bid and Price bid. Vendor shall submit Qualifying Criteria & Technical bid together in a sealed cover. Price bid shall be in a separate sealed cover. BHEL will consider Technical bid only if the vendor/bidder qualifies. BHEL will consider Price bid only if the Technical bid is found acceptable.

[The BIDDER is expected to give complete details against each clause in the table given below and wherever necessary an additional sheet may be attached giving clear reference number to cover the required details]

<u>Name of the product:</u> BHEL uses the title "CRC EQUIPMENT" in this document. Please refer Technical Specification attached herewith for further details

S. No.	PARTICULARS	VENDOR'S RESPONSE
1.0	The BIDDER / VENDOR shall have a minimum of FIVE Years of Continuous Experience in the Design, Manufacture & Supply of "CRC EQUIPMENT". Please indicate the actual experience. This is a qualifying criteria.	
2.0	YEAR of launch of the Model quoted against this ENQUIRY	
3.0	Is there any other model launched after the quoted Model? Otherwise, indicate the likely year in which the next model is likely to be launched.	
4.0	Number of "CRC EQUIPMENT" supplied, installed and commissioned till date in India. Please furnish contact person name, address, phone number, fax number and mail id .Please mention that how many are used for coal analysis purpose.	
5.0	Number of "CRC EQUIPMENT" supplied, installed and commissioned till date outside India. Please furnish contact person name, address, phone number, fax number and mail id. Please mention that how many are used for coal analysis purpose.	

Committee Members	Name & Design.	Signature	Initial
	Kannan K/DGM/CR/CRC		
	Pattabiraman Dr R /SM/Labs		
	Sivasubramanian R/Manager/Labs		
For Specifications having reference numbers	CRC- 3	DATE: 05 – 01 –2008	

Coal Research Centre

Ref: CRC Eqpt: QC-A Rev No. 0/Dt. 05.01.2009 Sheet 2 of 3

6.0	Please enclose Performance Certificate from atleast Five Indian customers for the model quoted. This	
	certificate should not have been received prior to	
	01.Jan.2007. This is a qualifying criteria.	
7.0	Details of Design Set-Up and Technology Back-Up assured from the PRINCIPAL Equipment Maker.	
8.0	Details on Service-after-Sales set-up in India including the addresses of Agents/Service Centre in India.	
9.0	The BIDDER / VENDOR shall assure a continuous support for SPARES and SERVICE for TEN Years, from the date of commissioning of the equipment at BHEL Works. This is a qualifying criteria	
10.0	The <u>"Technical Bid"</u> shall have vendor's responses along with Product Catalogue, Data Sheets in ORIGINAL and complete technical details of 'Bought-Out-Items' with copies of Product Catalogue. All Technical & Commercial terms can be here. NO PRICE DETAIL IS ENTERTAINED HERE.	

Committee Members	Name & Design.	Signature	Initial
	Kannan K/DGM/CR/CRC		
	Pattabiraman Dr R /SM/Labs		
	Sivasubramanian R/Manager/Labs		
For Specifications having reference numbers	CRC- 3	DATE: 05 – 01 –2008	

Coal Research Centre

Ref: CRC Eqpt: QC-A Rev No. 0/Dt. 05.01.2009 Sheet 3 of 3

11.0	The <u>"Price Bid"</u> shall have Price Part with following options.	
	In case the offered model requires PC with special	
	hardware and software, then bidder should include	
	the same in their scope. The scope includes 17"	
	TFT monitor, Laser printer B/W, Windows XP+	
	services packages also.	
	In case the offered model requires only general PC hardware and software, then bidder should include	
	only the application software in their scope.	
	Bidder should give detailed Hardware and	
	Software specification for arranging at BHEL.	
	Gottinaro opocinication for arranging at 211221	
	Option 1(Incase bidder supplies PC):	
	Basic Equipment.	
	All PC hardware and software.	
	All software CDs (1 set) with valid license.	
	Installation & Maintenance manuals (2 Hard copies &	
	1 set of CDs)	
	Mandatory spares.	
	Consumables.	
	AMC	
	Option 2(Incase bidder does not supply PC)	
	Basic Equipment.	
	Application software CDs 1 set with valid license.	
	Responsibilities of interfacing BHEL supply PC with	
	Basic Equipment(including interconnecting cables)	
	Installation & Maintenance manuals (2 Hard copies &	
	1 set of CDs)	
	Mandatory spares.	
	Consumables.	
	AMC	

Committee Members	Name & Design.	Signature	Initial
	Kannan K/DGM/CR/CRC		
	Pattabiraman Dr R /SM/Labs		
	Sivasubramanian R/Manager/Labs		
For Specifications having reference numbers	CRC- 3	DATE: 05 – 01 –2008	

Coal Research Centre TECHNICAL SPECIFICATIONS FOR ULTIMATE ANALYSER

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Ref: CRC-3 Rev No. 0/ Dt. 05.01.2009 Sheet 1 of 4

SI. No.	Particulars	BHEL specifications	Bidder's offer [With complete technical details]
1	Confirmation for each point of specification.	Vendor is requested to give specific confirmation for each point. Deviations if any shall be clearly indicated.	
2	Ambient Condition	The uncontrolled ambient room conditions are- a) Temperature: 10 to 50 ° C, b) Relative Humidity: 100 % c) Dusty	
3	Scope of Vendor	 Design, Manufacture, Testing, at vendor's works. Original software, Installation & Maintenance manuals, Consumables, Mandatory Spares. UPS(if required) Training, Installation, Commissioning & Proving performance at BHEL Trichy. On-site Guarantee, On-site Annual Maintenance Contract. 	
4	Name of Equipment	CARBON, HYDROGEN, NITROGEN, ANALYZER	
4.1	Type of instrument	The instrument is used to determine Carbon, Hydrogen, Nitrogen in fuel samples	
4.2	Sample Quantity	Up to 1 gm of weight	
4.3	Principle of operation	The system to be based on the Dumas method of combustion and to provide results within 4 minutes (max) for all elements analysed simultaneously.	
4.4	Analysis cycle	The analysis cycle should involve purge, burn and analyse and the final results should be displayed as weight percentage or in parts per million as determined by the operator. The results to be corrected on a moisture basis.	
4.5	Instrument Range	@ 500 mg Carbon : 50 ppm or 0.005 % to 50% Hydrogen : 200 ppm or 0.02 % to 50 % Nitrogen : 80 ppm or 0.008 % to 100%	
4.6	Precision Range	@ 500 mg	

Coal Research Centre TECHNICAL SPECIFICATIONS FOR ULTIMATE ANALYSER

Ref: CRC-3 Rev No. 0/ Dt. 05.01.2009

Sheet 2 of 4

			Sheet 2 of
		Carbon : 25 ppm or 0.5 % RSD	
		(whichever is greater)	
		Hydrogen : 100 ppm or 1 % RSD	
		(whichever is greater)	
		Nitrogen : 40 ppm or 0.5 % RSD	
4 7	Detectors	(whichever is greater)	
4.7	Detectors	Individual Detectors for each element should	
		be provided as below:	
		a. Carbon : Optimised, low noise, non dispersive infrared absorption.	
		b. Nitrogen : Optimised, low drift,	
		thermal conductivity, (TC Cell) Detector.	
		c. Hydrogen : Optimised, low noise, non	
		dispersive, infrared absorption.	
4.8	Readability	0.0001 PPM	
4.9	Analysis Time	4 minutes	
4.10	Furnace	Resistance furnace, both primary and after	
4.10	i uillace	burner upto 1000 deg C	
4.11	Autoloader	30 position (stackable to 120 samples)	
4.12	Gases Required	To be indicated by the supplier along with	
	Gases Required	specifications	
4.13	Power supply	230V +/- 10% AC/1 Ph/50Hz- 1 Feeder	
4.14	Data System	In case the offered model requires PC with	
		special hardware and software, then bidder	
		should include the same in their scope. The	
		scope includes 17" TFT monitor, Laser printer	
		B/W, Windows XP+ services packages also.	
		In case the offered model requires only	
		general PC hardware and software, then	
		bidder should include only the application	
		software in their scope. Bidder should give	
		detailed Hardware and Software specification	
		for arranging at BHEL	
5	Along with offer the	a) Scope and interconnection diagrams-2	
	following details in	copies.	
	hard copies shall	b) Catalogs-2 copies.	
	be indicated.	c) Dimensional details for preparing Civil	
		Engg Drawings-2 copies.	
		d) Mandatory spares with Unit price if	
		applicable.	
		e) Consumables along with unit price if	
		applicable.	
		f) Power supply requirement.	
		g) Instrument air and compressed air if	
		required.	

Coal Research Centre TECHNICAL SPECIFICATIONS FOR ULTIMATE ANALYSER

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Ref: CRC-3 Rev No. 0/ Dt. 05.01.2009

Sheet 3 of 4

			Sheet 3 of
6	Installation and Commissioning	 h) PC configuration. i) Vents and drains if required. j) Space requirement around the equipment. k) List of software. The Equipment with all Accessories is to be installed & commissioned at BHEL Works, free 	
7	Performance Prove-Out at BHEL	of cost, by the service engineer of the supplier. The Supplier's Service Engineer has to conduct demonstration & calibration of the Equipment with Accessories.	
8	Inspection & Training at Vendor works.	BHEL's Inspection is applicable. Complete Training for BHEL Engineers is to be given on Operation & Maintenance free of cost.	
9	Training on Operation & Maintenance at BHEL works.	Complete Training for BHEL Engineers is to be given on Operation & Maintenance of the offered equipment at BHEL works, free of cost.	
10	Onsite Performance Guarantee	The Equipment & Accessories (including Bought-Out Items) are to be guaranteed for its performance for a minimum period of one year from the date of performance acceptance at BHEL Works.	
11	Draft and Final Installation and O&M manual in ENGLISH Language	1No Draft Installation, Operation & Maintenance Manual.It shall contain Electric Schematics, Circuit Diagrams, PCB Drawings, Trouble Shooting Charts, Mechanical Sub- Assemblies, Rating of Bought-Out Items, etc. BHEL will review its completeness and inform supplier to make necessary corrections if applicable and ask to furnish 2 more final sets. In addition, one soft copy in CD to be supplied.	
12	Annual Maintenance Contract - AMC	The bidder has to quote for AMC through trained service personnel in India for a period of three years after the expiry of ORIGINAL WARRANTY period. Technical Service for Preventive and breakdown Maintenance , Trouble Shooting and Re- Commissioning of the Equipment INCLUDING the Cost of SPARES and Consumables .Please consider 4 visits per year.	

<u>Coal Research Centre</u> TECHNICAL SPECIFICATIONS FOR ULTIMATE ANALYSER

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Ref: CRC-3 Rev No. 0/ Dt. 05.01.2009

Sheet 4 of 4

13	AMC - RESPONSE	The bidder has to furnish / indicate the	
		response time for the service engineer to be at	
		BHEL works, from the time of reporting	
		breakdown through e-mail or telefax.	