

CSIR-CENTRAL MECHANICAL ENGINEERING RESEARCH INSTITUTE
MAHATMA GANDHI AVENUE, DURGAPUR 713209 WEST BENGAL

MODIFICATION OF BIDDING DOCUMENTS AFTER PRE-BID CONFERENCE

TENDER REFERENCE	PUR/113/ERT/02/2017-18
ITEM	SUPPLY INSTALLATION TESTING AND COMMISSIONING OF PC BASED AUTOMATIC THERMOGRAVIMETRIC[PROXIMATE] ANALYSER
DATE OF PRE-BID CONFERENCE	14 DECEMBER 2017

The following amendments have been made to the Bidding Documents after the Pre-Bid Conference

1. CRITICAL DATES

REVISED DEADLINE FOR RECEIPT OF BIDS	18 JANUARY 2018 UPTO 2.30 PM IST
REVISED DATE AND TIME OF OPENING OF BIDS [TECHNO-COMMERCIAL BID ONLY]	18 JANUARY 2018 AT 3.00 PM IST

2. TECHNICAL SPECIFICATIONS AND OTHER REQUIREMENTS

PC based automatic Thermo Gravimetric (Proximate) Analyzer to determine Moisture, Ash, Volatile Matters and Fixed Carbon of Coal, Coke and any other Organic/Inorganic Materials. It should be controlled through external PC using USB communication port (No interface card should be preferred). The analysis method should comply with **ASTM D 7582** standards test methods for proximate analysis of coal and coke by instrumental procedure for moisture, ash and volatile matters determination.

Sl No	Specifications	Requirement
1	Sample weight	0.5 to 2.0 g or more.
2	Number of samples	Instrument should be capable of analyzing 1 to 20 samples (19 samples + 1 reference) per cycle.
3	Weight loss	0 – 100 %.
4	Balance	Instrument should have integrated four-place balance with readability of 0.0001 g or better. The balance should be shielded and protected for any interference from other internal components.
5	Instrument precision	The instrument must perform a standard weight loss with a precision of 0.02% or better Standard Deviation at different temperature and variable gas flow rate with pure organic compound.
6	Calibration	Equipment should be capable of multipoint calibration.
7	Material for heated part	Carousel, Balance Pedestal, Sample Crucibles and Crucible Covers should be made of high temperature resistant Ceramic / Refractory material.
8	Atmosphere	Both oxidizing and reducing atmosphere. Automatic change of atmosphere/gas selection through software.
9	Gas flow rate	Adjustable from 5.0 lpm to 10 lpm

10	Furnace temperature and stability	<p>Temperature range: Ambient to 1000 °C.</p> <p>Stability: ±2°C or better for entire range.</p> <p>Provision for crank shaft with programmable lid for better balancing, stability and longevity</p>
11	Over temperature protection and safety	The analyzer should have at least two thermocouples; one for measuring the real-time temperature of samples throughout the measurement and other for over temperature/safety purpose.
12	Temperature & weight calibration at site	Kits for temperature and weight calibration must be provided by the original equipment manufacturer with the equipment.
13	Hardware	The instrument should have in-built necessary hardware electronic components.
14	Software	Original/licensed copy of software should be supplied with the instrument. Facility for remote diagnostic should be the integral part of the software.
15	External PC & Printer	<p>PC: Reputed branded (DELL/HP/equivalent) PC with Intel i7 or higher processor, 8 GB RAM (min), 1 TB hard disk (min), 4 USB ports (min), DVD RW drive, 21" TFT monitor (min), 1 GB graphics card (min), with all accessories like Key board, Optical mouse, Licensed Antivirus, Integrated 100/1000 Mbps LAN card etc.</p> <p>Licence version of Windows 7 or higher version of operating system.</p> <p>Printer: High speed laser jet colour printer (HP/Canon) with Cartridge.</p>
16	Program storing	The instrument should be able to store minimum 10 nos. of programs depending on the nature of the sample.
17	Result Format	The percentage of ash, moisture, volatile matter and fixed carbon content should be printed at the end of the analysis.
18	Data Transfer	Online data transfer facility using LIMS software must be provided.
19	UPS	10 KVA UPS from reputed brand.
20	Warranty	<p>Minimum 01 (one) year from the date of successful commissioning certified by the user/purchaser of the instrument. In case the equipment/ any accessory does not work for more than one week during the warranty period, the warranty period should be extended for the same number of days.</p> <p>Optional:</p> <p>AMC charge to be mentioned for next two years after one year warranty is over.</p>
21	Consumables	<p>The supply shall be completed with the essential spares, chemicals and consumables for 5000 nos of test</p> <p>Essential tool and maintenance kit: One set</p> <p>Standard sample: minimum 02 or more for IS coal sample, 02 or more for IS coke samples along with certified values of Ash, VOL for day to day calibration.</p>
22	Installation, Commissioning & Training	The instrument should be Installed and commissioned at CSIR-CMERI, Durgapur. After successful commissioning of the instrument at least 3 days on site training should be given free of cost.

		Note: Vendor must have service support branch with efficient engineers in Eastern Region.
23	Qualification criteria	Bidder should have supplied same instrument to at least 05 (five) customers preferably in CSIR Labs/ Govt. of India funded institutions/ PSUs within last 5 years (as on the date of Bid opening). Purchase order/performance certificate shall be enclosed with the bid.

MODE OF EVALUATION

The Techno-Commercial Bids shall be first taken up for evaluation and assessment in the manner described in the Bidding Documents. After due evaluation of the Techno-Commercial bids, the short listed Bidders shall have to arrange for a physical demonstration of the offered model either at Bidder's premises or any location nearest to CSIR-CMERI, where the said model is installed and in use. Bidder shall arrange for such demonstration within 7 days of being notified by CSIR-CMERI. No charges shall be payable by CSIR-CMERI for the demonstration. The demonstration shall be done in the presence of a technical team deputed by CSIR-CMERI. Bidder shall be required to demonstrate the performance of the offered model in respect of the following parameters:

1. Sample Weight.
2. Instrument Precision.
3. Furnace Temperature and Stability.
4. Over Temperature Protection and Safety.

Models which fail to meet the prescribed parameters shall be disqualified and the bid shall be rejected. Price Bids of only those Bidders whose models meet the prescribed parameters shall be opened.

Note : Short listed Bidders mean Bidders whose Techno-Commercial bids meet the tender specifications.

THE ABOVE AMENDMENTS SHALL AMOUNT TO AMENDMENT OF ALL RELEVANT PROVISIONS OF CSIR-CMERI BIDDING DOCUMENTS.

OTHER PROVISIONS OF THE BIDDING DOCUMENTS REMAIN UNCHANGED.