

पदार्थ विज्ञान एवं अभियांत्रिकी विभाग भारतीय प्रौद्योगिकी संस्थान कानपुर

Department of Materials Science and Engineering
Indian Institute of Technology Kanpur

कानपुर - 208 016 Kanpur-208 016

Enquiry Letter for Quotation of High Temperature Furnace

Enq. No.: BRNS/MET/20130062/Furnace1650

Enquiry Dated: Jan. 27, 2015 Closing Date: Feb. 13, 2015

Sealed quotations (in two separate envelops namely "TECHNICAL ONLY" and second 'FINANCIAL" bid) are required for **High Temperature Furnace.** The specifications for the equipment are in the addendum. The closing date for the above item is Feb. 13, 2015.

The prospective suppliers are required to <u>send quotation in two parts</u> in sealed envelopes, as "**Technical Bid**" and "**Financial Bid**". The two separate and sealed envelopes should be clearly marked appropriately as "Technical Bid" and "Financial Bid".

- (i) The **Technical Bid** should contain detailed technical specification of the product being offered and should not mention any price. This should also mention the guarantee and complete spare parts must be included that are required for functioning of the unit. Please also provide 'performance report' from the places where this equipment is provided.
- (ii) The **Financial Bid** should include the detailed price quotation clearly <u>including</u> the cost of the equipment, taxes, service charges if any, shipping and handling <u>charges</u>.

Terms and Conditions:

- 1. Maximum education discount, if any should be offered
- 2. Validity of quotation should be at least for 60 days
- 3. Prices should be on CIF and FOB separately (if imported)
- 4. Prices should include the installation and training cost
- 5. Warranty should be for at least two years after installation
- 6. Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/inspection)
- 7. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
- 8. An undertaking that the vendor will supply all the spares and services for the equipment for at least 5 years from the date of commissioning
- 9. Delivery must be within 6 months

Technical Specifications for High Temperature Furnace

Kindly submit the Technical and Financial bids in sealed envelopes latest by Feb. 13, 2015 by 5pm, to:

Dr. Kantesh Balani Faculty Building, Room 412, Dept. of Materials Science and Engineering IIT Kanpur, U.P. 208016, India.

e-mail: kbalani@iitk.ac.in Ph: (0512) 259-6194

High Temperature Furnace

Parameter	Specifications*
Specifications	
Temperature	1650 °C (4 hrs) with continuous working at 1500 °C.
Chamber Size	Tube furnace of diameter 50 mm with working area (maintaining
	constant temperature) of up to 6 inch (150 mm).
	The tube ends should have a cover for sealing or maintaining required
	environment (by passing inert gas).
Controller	Computer controlled/ Eurotherm/ Libratherm
	Temperature stability ± 1 °C.
Heating element	MoSi2/ Kanthal
Thermocouple	Attached both at heater and also near-sample chamber
Software	- Complete set to provide the required thermal cycle,
	programmable for more than 16 segments
	- The instrument should be installed with latest available version
	of software for control, operation and analysis.
	- The supplier should upgrade the software as and when the
	upgradations become available for at least five years from
	installation
	- Should have intelligent calibration logic.
Safety Norms	• The instrument should be compliant with international norms for
	safety and environment
Proof of Specifications	• Please provide the proof of specification) of temperature, tube, and controller (in order to ensure high quality of the funace)
History Check	• Provide copy of 'Performance Reports' from standard research
	institute like IITs where the equipment has been supplied. This
	requirement is MUST.
Installation,	• The delivery of the equipment should be considered complete only
Commissioning and	after successful commissioning of the instrument
Training	• The pre-installation requirements should be communicated to IIT
	Kanpur well in advance of the installation
	• The Installation, commissioning and training should be done only by well-trained factory engineers at NO ADDITIONAL COST.
	• The supplier should provide training to at least two candidates at the
	installation site to make them familiar with smooth operation of the instrument

Technical Specifications for High Temperature Furnace

Warranty	Warranty of 2 years with 1 year AMC must be provided at no cost with the high temperature furnace (especially for tube and controller).
After-sales Service	 The supplier should provide a prompt after-sales service such as regular instrument maintenance, troubleshooting and fixing The list of service centers in India should be included.
Spares	 Please provide a list of price for spares (heating elements, thermocouple, tube, etc) and commit this price for next one year (if equipment is purchased from your firm). These prices are to be provided <u>under optional item</u> (and not in the main equipment). An undertaking that the vendor will supply all the spares and services for the equipment for at least 5 years from the date of commissioning
Annual Mainte Cost	enance Include the cost of annual maintenance for each year for time period after three years after the guarantee/ warranty period. Provide the amount and the terms, Note that those providing better after sales service and support with written evidence will be given preference

^{*}Additional optional accessories should be indicated separately along with their price. The above specs are desirable and the actual numbers achievable for your system should be indicated.