Enquiry Letter for Quotation of High Temperature Furnace

Enquiry No: ME/NS/01/2015-16/HTF

Enquiry Dated: August 28, 2015 Closing Date: September 18, 2015

Sealed quotations (in <u>two separate envelops</u> namely "TECHNICAL ONLY" and "FINANCIAL BID") are required for **High Temperature Furnace**. The specifications for the equipment are given at the bottom. The closing date for the above item is September 18, 2015.

- (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.
- (ii) The **Financial Bid** should include the detailed price quotation clearly <u>including the cost of</u> the equipment, taxes, service charges if any, shipping and handling charges.

Kindly send the Technical and Financial bids in sealed envelopes latest by September 18, 2015 by 5pm to:

Dr. Niraj Sinha Department of Mechanical Engineering IIT Kanpur, U.P. 208016, India. e-mail: nsinha@iitk.ac.in

General Specification for High Temperature Furnace:

- It should be GLP and GMP compliant Non-rust Textured Stainless steel casing tube furnace of T-Max.1500 °C or more & with Continuous Operation temperature: 1450 °C
- PID based Microprocessor temperature controller with LCD display with data input by numeric pad. Should have facility for at least 9 Programs with 40 Steps each; Temperature & time value entry in steps of 1°C and 1 minute respectively; Status messages not as codes but as clear texts. With start time configurable; Operating hour counter; auto tune function; Temperature variable as °C & °F; kWh meter; Real time clock; Skip-button for segment jump.
- SiC heating elements with easy replacement of heating rods with special snap in design and High-quality fibre material for furnace Chamber for the high working temperature.
- Double-walled casing for low external temperatures and high stability.
- Lift up door with hot surface facing away from the operator.
- Adjustable air intake opening in the furnace door, exhaust air opening in the back wall.

- Switching system with semiconductor relay, power tuned to the SiC rods.
- Should have protective gas inlet and flow meter for controlled environment inside chamber.
- Should have provision for measuring temperature inside the furnace.
- Chamber volume of 3 litre or more with outer dimensions of furnace less than W500 x D550 x H550 mm and minimum inner dimensions of W120 x D210 x H120 mm.
- Heating time to T_{max.} less than 55 Minutes.
- Heating capacity 9 kW & 400 V AC / 50 Hz / Three-phase machine.
- Weight: less than equal to 30 kg

NOTE / Terms and Conditions:

- Maximum education discount, if any should be offered.
- Validity of quotation should be at least for 60 days.
- Local vendor must have supplied at least 10 similar furnaces to IITs, IISERs OR other institutes of national repute in the past 5 years. Please attach the reference list of 10 such users with phone numbers and email addresses.
- OEM Manufacturer must be an ISO-9001 company & equipment must be with CE compliance. Please attach both certificates.
- Please attach Principal Authorization letter Specific for this tender.
- Machine must have a warranty of at least 1 year. Please also quote the price for extended warranty of 3 years.
- 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.
- If it is an imported item, please quote FOB charges and CIF charges separately.
- If the product is manufactured outside India, please attach NMIC certificate.
- Prices should include the installation and training cost.
- Normal payment terms for the Institute will be applicable (90% on delivery of the items and the remaining 10% after satisfactory installation/inspection).
- Delivery must be within 6 months.