Indian Institute of Technology, Delhi

Notice Inviting Quotation

Date: 30th January, 2013

Sealed quotations are invited for a "Laboratory Compression Press with Vacuum Arrangement and Process Controller". The quotations should be submitted in a sealed cover (separate bids: technical and commercial) to **Prof. Naresh Bhatnagar**, Mechanical Engineering Department, Indian Institute of Technology Delhi, Hauz Khas, New Delhi 110016 on or before 15.02.2013 (Friday). Late submission will not be considered.

The sealed Quotations are to be submitted in one envelope having two separate envelopes for;

- A- Technical Quote (Technical Specifications only)
- B- Financial Quote (Technical & Financial)

Both the envelopes A & B should be enclosed in an outer envelope, which should be sealed and addressed to, clearly mentioned on top right of the envelope "Quotation for Laboratory Compression Press with Vacuum Arrangement and Process Controller".

Institute reserves the right to accept or reject any of the offers without assigning any reasons. The detailed specifications of each individual component of the system are given below:

MAJOR Technical Specifications:

1. Capacity of the main Ram	200MT, to be fabricated with closed chamber having vacuum pump & other accessories
2. No. of cylinders	1 main cylinder - single acting type + 2 nos. double acting cylinders
3. Bed Size	500 x 450 mm (minimum clear space)
4. Daylight	700 mm or above
5. Stroke length	600 mm
6. Heating platens	Accurately Grounded, having good parallel accuracy within +- 25 microns .

7. Heating Temp. Range of Part	500 degree C. (maximum)
8. Mode of Heating	Electric Heaters in Ceramics
9. Temperature controllers	PID - Digital (at least 2 nos)
10. No. of daylight	One
11. Water Circulation platen	Separately under the heating platen, needed to cool the Heating platen immediately after the curing.
12. Operation	Automatic Push Button with Electrical Control Panel and PLC - Fully controlled operation. Both Auto and Inching mode needed. The electrical and control cabinet should be protected against overheat or other damage.
13. Panel Display	Needed with showing working pressure, set pressure, set time, time of running, platen temperatures, counter etc. Graph - Curing time or holding time, temperature & Force measurements on continuous processing.
14. Programmable pressing and releasing of platen in one sample preparation cycle	Needed at the start of sample preparation to remove properly any trapped air or volatiles.
15. Vacuum arrangement for the platen area	Needed to avoid any blister formation with good sealing to avoid any leakage during operation at high temperatures.
16. Hydraulic power pack Pressure Gauges	Digital inside the HMI / display
17. Pressure setting to set the working Pressures in cycles	PLC Controlled - value should be set in MMI / HMI
18. Additional Switches	Heaters On / Off switch Auto On / Off Push button Motor On / Off switch Selector Switch (Auto / Manual) Cylinder Up / Down push button Mains On / Off switch AIR on / off

Water circulation on / off
Vacuum pump on / off
Separate manual platen movement switch

Terms and Conditions

Envelope A: Technical Quote: The following details are to be enclosed (Mention clearly on this envelope – Technical Quote)

- 1. Letter from the manufacturer specifically to quote for this tender is to be attached for the authenticity of dealership/ agency and the dealer should be an authorized service provider.
- 2. Technical brochures mentioning all details with complete address of the principals.
- 3. A compliance statement for required specifications should be attached.
- 4. Firm MUST provide a compliance statement vis-à-vis specifications in a "tabular form" clearly stating the compliance and giving justification, if any supported by technical literature with clear reference of page number, paragraph or lines. This statement must be signed, with the company seal, by the tenderer for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification of the tender. The quotation should be complete in all respects. (as per IIT-Delhi rules).
- 5. Any optional equipment / accessory advised to be included separately.
- 6. a) List and addresses of organizations [in India and abroad with contact landline numbers] where the equipment has been supplied in last 3 years. b) Address in India where a live demonstration of the instrument can be arranged, if possible.
- 7. a) Details of similar equipment supplied to preferably Indian Institute of Technology/National Institute of Technology/Indian Institute of Science, India specifying the Department/centre/lab to which the equipment was supplied, with references. b) Mention if the equipment is being maintained by your organization. Address of the technical office, in India, with telephone and FAX numbers. Please clarify the type of support available in India.
- 8. If quote is for imported equipment, Sole Agency-ship certificate on the letterhead of the principal company with current dates, if quotation is from an Indian Agent.
- 9. In the case the items are proprietary products of the company, a proprietary item certificate stating the same may be provided.
- 10. Specifications form should be similar to the given major specifications.

Envelope B: Financial Quote: The following details are to be enclosed/ensured. (Mention clearly on this envelope – Financial Quote)

- 1. The quotations for the equipment in foreign exchange, if it is to be imported. The cost of spares and optional equipment are to be quoted separately. The cost should be based on FOB, Factory. If equipment is indigenous, the quote should be in INR.
- 2. Taxes, terms and conditions should be clearly mentioned.
- 3. Institute makes payment after delivery and successful installation. The payment is by RTGS for which NEFT form need to be duly filled and complied. In case the payment terms are different, it should be mentioned clearly. If equipment is to be imported, the address of the company in whose name the LC is to be opened should be stated.
- 4. Payment terms and conditions should be clearly mentioned. No advance payment is given by IIT Delhi for capital equipments.
- 5. Vendor should get a fresh certificate directly from their product principal's clearly mentioning about warranty for three years of the equipment to be delivered from the date of installation.
- 6. The details of the AMC after the warranty period should be clearly mentioned.
- 7. Cost for Installation and training at site, if needed, to be provided.
- 8. Validity of the quotation should be at least four months. Vendors will do the installation and demonstration of the equipment at IIT Delhi premises without any additional charges.
- 9. The delivery period to be clearly specified and should be at the earliest.

Prof. Naresh Bhatnagar

Mechanical Engineering Department

IIT Delhi - 110016