

# Indian Institute of Technology, Delhi

## Notice Inviting Quotation

Date: 26<sup>th</sup> Dec, 2013

Sealed quotations are invited for a “**3D Printer- Rapid Prototype Machines**”. The quotations should be submitted in a sealed cover (separate bids: technical and commercial) to **Prof. Naresh Bhatnagar**, Head, Central Workshop, Indian Institute of Technology Delhi, Hauz Khas, New Delhi 110016 on or before 17.01.2014 (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 3D Printer- Rapid Prototype Machines**”.

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:

### Technical Specifications

For fast and flexible prototyping of various parts/models through a computer file and product mock-ups using non-laser based additive manufacturing technique from a reputed manufacturer.

- Compact model for fast prototyping
- Instrument should be able to prototype using thermoplastics which are durable, strong, capable of withstanding high temperature and suitable for functional prototyping.
- The material should be capable of withstanding temperatures greater than 85°C.
- Layer thickness should be maximum 0.26mm or lesser.
- Material should be an ideal material for conceptual modelling, functional prototyping, manufacturing tools, and end-use-parts.
- Model material should be tough, strong and durable and should have a shelf life of at least 24 months from the date of supply. The material should not absorb moisture during storage.

- The machine should be capable of prototyping / produce complex geometry (including undercuts, overhangs etc) and automatic generation of support structure, which can be removed unattended like soluble/ melting etc.
- Prototyping process has to be safe and clean and should not emit harmful radiation, hazardous or toxic fumes. The operation of the machine and part generation should be in a closed chamber, working unattended after printing command.
- The instrument should come with a support cleaning, typically ultrasonic cleaning system. Support removal should be automated and should not have undesired holes or manual techniques to remove trapped material in hollow part builds.
- Vendors to quote for all the inclusive accessories for handling the machine and also quote for automated and hands free feed of the raw materials.
- The instrument should have easy to use computer interfacing and communication using LAN or USB or RS232 ports.
- Software should be bundled with the equipment from the Original machine manufacturer (OEM) with Windows XP/Windows 7/ Windows 8 compatibility.
- Compatible software should be provided. The software should have the following features:
  - Automatic pre-processing with slicing
  - Support generation
  - Time and material estimate
- Standard power supply to be included with the instrument.
- The Manufacturer should have authorised Service and Application support in Delhi (NCR)

Kindly submit the offer for two such machines with following specification & sizes separately

Specification	Machine 1	Machine 2
Minimum build Size	200 mm x 150mm x 150mm or better	120mm x 120mm x 120mm or better
Layer thickness	0.26mm or better	0.26mm or better

**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 in the quote.
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. This is MUST to qualify, in Technical Envelope
9. In case the items are proprietary products of the company, a proprietary item certificate stating the same may be provided with latest date.
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 equipment.
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**

**Head , Central Workshop**

IIT Delhi - 110016