

Indian Institute of Technology, Delhi

Notice Inviting Quotation

Date: 5th Feb, 2013

Sealed quotations are invited for a

1. **CNC Lathe Machine for Training & Production**
2. **CNC Milling Machine for Training & Production**

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 **27/02/13 (Wednesday)**. 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 “**CNC Lathe and Milling Machines**”.

Institute reserves the right to accept or reject any of the offers without assigning any reasons. The detailed specification of each individual machine is given below:

1. CNC LATHE MACHINE **QTY.** **1No**

Minimum Required Technical Specification

CNC machine suitable for 220 volts single phase AC 50 cycles power supply conforming to the following specifications.

1 Distance between Centers	200 – 250mm
2 Swing Over Bed	up to 180mm
3 Traverse X,Z	50 - 60 mm, 150-175mm
4 Turning Diameter	up to 75mm
5 Turning length	up to 120mm
6 Spindle bore	max. 21 mm

7 Spindle Speed Range	infinitely variable 150 - 4000 rpm
8 Tail stock: Quill stroke / Quill Diameter	up to 120mm / max. 35mm
9 Rapid traverse	min. 5m/min
10 Working Feed	0-5 m/min
11 Tool turret	Automatic
12. Number of Tool holders	min. 8
13 Position variation X / Z	max. 10/10 microns
14 Lubrication Systems	
Main spindle	Life time lubrication
Guide ways and other areas	Manual / Automatic oil or Grease lubrication
15 Safety	Fully enclosed working area and limit switches for axis over travel and door and emergency off switch.
16. Controls	PC-controlled 2-axis Table top trainer & semi industrial CNC Lathe machine with following interchangeable control systems.

**GE FANUC 21 TURNING
SINUMERIK 840D TURNING**

Machine complete with fully enclosed working area, safety units acc. to CE-regulations, 8-station tool turret, manual tailstock, central lubrication, machine lamp, electrical and mechanical preparation for automation,

17. Functions	Diagnostics, data input / output, measuring of tools and positions, Work offset, Tool offsets, skipped blocks, dry run, setting data, graphic simulation in 2D & 3D graphics, detailed error message about Machine and programming
18. Optional	OFFLINE PROGRAMING STATION FOR ABOVE PC CONTROLLED SOFTWARE

30 USERS Pack

2. CNC MILLING MACHINE

QTY.

1No

Minimum Required Technical Specification

1 Traverse X,Y,Z	min. 200 / 150 / 250 mm
2 Distance Spindle to Table	min. 95 – max. 250 mm
3 Clamping surface : Length x Width	min. 400 x 100 mm
4. Tool Changer	Automatic (ATC)

5. Numbers of tools	min. 10
6. Tool clamping device	Automatic
7. Main Drive Motor - power	min.1.0 KW
8. Spindle Range	150 – 5000 RPM
9. Spindle Torque	min. 4.0 Nm
10. Rapid traverse X/Y/Z	5 m/min
11. Work Feed X/Y/Z	0-5m / min
12. Position variation X / Y / Z	max. 10/10/10 microns
13. Lubrication System	
Main spindle	Life time lubrication
Guide ways and other areas	Manual / Automatic oil or Grease lubrication

14 SAFETY DEVICES: Fully enclosed working area and limit switches for all Axes over-travel and door and emergency off switch.

15. CONTROL Type

PC-controlled 3-axis (Optional 4th Axis) Table top trainer & semi industrial CNC milling machine with following interchangeable control systems

GE FANUC 21 Milling
SINUMERIK 840D Milling

Machine complete with fully enclosed working area, safety units according. to CE-regulations,10-station tool drum, central lubrication, machine lamp, electrical and mechanical preparation for automation to 4 Axis machine

16. Functions

Diagnostics, data input / output, measuring of tools and positions minimum 4 Work offset, 32 Tool offset, skipped blocks, dry run, setting data, graphic simulation in 2D & 3D graphics, detailed error Message about Machine and programming

17. NC Dividing Head with 3 Jaw Chuck & Tailstock

Resolution	Infinitely variable
speed	min.8 rpm
torque	min. 45 Nm
Spindle height	at least 50 mm

18. OFFLINE PROGRAMING STATION
FOR ABOVE PC CONTROLLED SOFTWARE

30 USERS Pack

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 possible.

Prof. Naresh Bhatnagar

Head, Central Workshop

IIT Delhi - 110016