

**DIBRUGARH POLYTECHNIC  
LAHOWAL::DIBRUGARH  
ASSAM**

CALL:- 0373 2381749

Email: principaldibpoly@rediffmail.com

Ref: DP / CC-1/PUR / 2017/1647-49

DT.27-10- 2017

**NOTICE INVITING TENDER (NIT)  
FOR SUPPLY & INSTALLATION OF MACHINES & EQUIPMENTS TO DIBRUGARH  
POLYTECHNIC UNDER COMMUNITY COLLEGE SCHEME**

The Principal, Dibrugarh Polytechnic, Lahowal invites quotation affixing court fee stamp of Rs.8.25(non refundable) for supply & Installation of Machines & Equipments as per details at **ANNEXURE-IV**, in **Two Bids** to reach the undersigned on or before **the last date**.

Sl No.	Reference No.	Items	Qty	EMD (Rs.) in the form of DD	Tender Document Fee (Rs.)
01.	DP/CC-1 /PUR/2017/ 1647-49  Dated 27-10- 2017	<b>Supply &amp; Installation of Machines &amp; Equipments</b>  on turnkey basis to be installed at Dibrugarh Polytechnic, Lahowal, Dibrugarh, Assam	<b>One Package</b>	@2%	NIL

- 1). Last date & Time for Submission: 20-11-2017 (14.00 HRS)  
2). Date/Time for Opening of Tech. Bids: 20-11-2017 (14.30 HRS)

**After evaluation of technical bids, financial bids of the successful bidders will be opened on a later date which will be notified in the Institute website  
Venue of Bid Opening at O/O Principal, Dibrugarh Polytechnic, Lahowal Assam**

**BID INSTRUCTION:**

**01.** Quotations will have to be submitted in TWO Bids. i.e. Technical bid and Financial Bid, in hard copy as well as in soft copy (soft copy must be in MS word 2007 provided in separate CDs for Technical Bid and Financial Bid). Both hard copy and soft copy of Technical Bid should be in one sealed envelope specifically mentioning "Technical Bid" on the cover of the envelope similarly for Financial Bid also. Further, these two sealed Bids must be kept inside one big envelop.

The address of the firm submitting the quotation and the Officer to whom the quotation is addressed must appear distinctly on sealed covers. Further, on sealed cover, the following are to be written:

QUOTATION FOR SUPPLY & INSTALLATION OF MACHINES & EQUIPMENTS TO  
DIBRUGARH POLYTECHNIC UNDER AICTE-NEQIP SCHEME .

NIT REF NO DP / CC-1/PUR / 2017/ 1647-49 DT.27-10- 2017

**02 Submission of Compliance Certificate:** Duly filled and signed Compliance Certificates (as

per formats at **Annexure I (A & B)** are must with the Technical bid.

**03. Bid not transferable:** The bid documents are not transferable and the seal and signature of the authorized official of the firm's must appear on all the papers and envelopes submitted.

### **QUALIFICATION REQUIREMENTS**

1. The Bidder should be a firm of reputation having sufficient expertise and experience in the subject tender with sound warranty / service support capability and authorization from manufacturers.

2. The Bidder has to quote for all the items in the NIT under a particular part. Bidders who wish to Quote for all the items may deposit the earnest money by single draft/TDR .

### **NIT TERMS & CONDITIONS:**

1. **Rates:** Rates quoted in the **Price Bid** should be **on DOOR DELIVERY Dibrugarh Polytechnic, Lahowal, Assam basis**, as per details below:

<b>Sl. No.</b>	<b>Particulars</b>	<b>Rate</b>
I	Basic Price (per unit)	
	Total	
	Taxes(pl. give break up)	
	Grand Total for the item up to Dibrugarh Polytechnic campus	

Bidders shall indicate their rates in clear/visible figures as well as in words and shall not alter/overwrite/make cutting in the quotation. In case of a mismatch, the rates written in words will prevail.

02. **Validity of Quotation:** Quoted rates must be valid for **90 days** from the date of quotation.

03. **Warranty:** The quoted equipment and components must be warranted for a minimum of one Year or period specified against the item.

4. **Literature a must:** All the quotations must be supported by the printed technical leaflet/literature and the specifications mentioned in the quotation must be reflected/ supported by such printed technical leaflet/literature. The model and specifications quoted should **invariably be highlighted** in the leaflet/literature for easy reference.

5. **After Sales Service:** Vendors should clearly state the available nearest after sales service facilities in the region, without which their offers will be rejected.

6. **Dealership Certificate:** Dealers or Agents quoting on behalf of Manufacturer must enclose Valid dealership certificate.

07. **Earnest Money:**

Refundable earnest money deposit (EMD) @ 2% on Total Quoted Price through demand draft drawn in favour of "The Principal, Dibrugarh Polytechnic", payable at Dibrugarh, will have to accompany the technical Bid. The EMD of unsuccessful bidders shall be returned after award of contract. EMD of the successful bidder will be released after the safe delivery of items. Offers received without Earnest Money or valid Certificate shall be summarily rejected.

08. **Performance Bank Guarantee (PBG):** In case of items with order value of Rupees five lakh (INR 5,00,000/-) and above, the successful bidder shall furnish an unconditional PBG (as per format at **Annexure II**) for 5% of the Purchase Order value from a scheduled Bank of India, after receiving the purchase order. Where the PBG is obtained by a foreign bank, it shall be got

confirmed by a Schedule Indian bank and shall be governed by Indian Laws and be subject to the jurisdiction of courts at Dibrugarh. The PBG shall guarantee that,

- (a) The Vendor guarantees satisfactory operation of the Equipment & components against poor workmanship, bad quality of materials used, faulty designs and poor performance.
- (b) The Vendor shall, at his own cost, rectify the defects/replace the items supplied, for defects identified during the period of guarantee.
- (c) This guarantee shall be operative from the date of installation till 180 days after the warranty period.

**9. Delivery:**

- a) **Time Limit:** Maximum within 10-12 Weeks from the date of issue of this purchase order.
- b) **Safe Delivery:** All aspects of safe delivery shall be the exclusive responsibility of the vendor. At the destination site, the package will be opened only in the presence of Dibrugarh Polytechnic user/representative and vendor's representative. The intact condition of the package and the seal/indicators for not being tampered with shall form the basis for certifying the receipt in good condition.
- c) **Insurance:** The supplier is to establish 'All Risk Transit Insurance' coverage till door delivery at Dibrugarh Polytechnic Lahowal, Assam.
- d) **Part Delivery:** Acceptance of part delivery shall be a prerogative of the institute.

**10. Conditional tenders not acceptable:** All the terms and conditions mentioned herein must be strictly adhered to by all the vendors. Conditional tenders shall not be accepted on any ground and shall be rejected straightway. Conditions mentioned in the tender bids submitted by vendors will not be binding on Dibrugarh Polytechnic.

**11. Road Permit:** Dibrugarh Polytechnic will not provide any Road Permit to the Vendors.

**12. GST deduction at source:** GST at the prevailing rate will be applicable. Vendors have to quote GST certificate, PAN, and HSN Code with the bid documents.

**13. Late and delayed tender:** Late and delayed tender will not be considered. In case any unscheduled holiday occurs on the prescribed closing/opening date the next working day shall be the prescribed date of closing/opening.

**14. Payment:** payment will be made within 30(thirty) days from date of installation, successful test run and acceptance.

**15. Enquiry during the course of evaluation not allowed:** No enquiry from the bidder(s) shall be entertained during the course of evaluation of the tender till final decision is conveyed to the successful bidder(s). However, the Purchase Committee or its authorized representative may make enquiries/seek clarification from the bidders. In such a case, the bidder must extend full co-operation. The bidders may also be asked to arrange demonstration of the offered items, in a short period of notice.

**16.** The acceptance of the quotation will rest solely with the Principal, Dibrugarh Polytechnic, who in the interest of the Institute is not bound to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotations received without assigning any reasons.

**17. Force Majeure:**

If the performance of the obligation of either party is rendered commercially impossible by any of the events hereafter mentioned that party shall be under no obligation to perform the agreement under order after giving notice of 15 days from the date of such an event in writing to the other party, and the events referred to are as follows:

i. Any law, statute or ordinance, order action or regulations of the Government of India,

- ii. Any kind of natural disaster, and
- iii. Strikes, acts of the Public enemy, war, insurrections, riots, lockouts, sabotage.

**18. Applicable Law:**

- (a) The contract shall be governed by the laws and procedures established by Govt. of India and subject to exclusive jurisdiction of Competent Court and Forum in /Dibrugarh/Guwahati/Assam.
- (b) Any dispute arising out of this purchase shall be referred to The Principal, Dibrugarh Polytechnic, Lahowal, Assam and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an Arbitrator, who should be acceptable to both the parties, to be appointed by the Principal of the Institute. The decision of such Arbitrator shall be final and binding on both the parties.

**Sd/-**

**Principal**  
Dibrugarh Polytechnic,  
Dibrugarh - 786010

Encl.: **ANNEXURE-I, ANNEXURE-II, ANNEXURE-III & ANNEXURE-IV**

NO: DP/CC-1/PUR/17/1647-49

DTD. 27-10-2017

Copy to:

1. Institute Notice Board for Display.
2. Accountant/ Cashier, Dibrugarh Polytechnic for necessary action.
3. Institute Website [www.dibrugarhpolytechnic.org](http://www.dibrugarhpolytechnic.org) .
4. File.

**Principal**  
Dibrugarh Polytechnic,  
Dibrugarh - 786010

**Annexure -I**

**A. COMPLIANCE CERTIFICATE FOR NIT TERMS (To be enclosed in the Technical bid)**

<b>Sl. No.</b>	<b>NIT Terms and Conditions</b>	<b>Yes/No</b>
01	<b>Rate</b> quoted as per instruction	
02	<b>Validity</b> of quoted rate for 90 days agreed	
03	<b>EMD</b> submitted (appropriate certificate enclosed)	
04	<b>PBG</b> term agreed	
05	<b>Payment</b> term agreed	
06	<b>Delivery terms</b> agreed	
07	<b>Warranty period</b> agreed	
08	<b>Literature:</b> Printed Literature provided	
09	<b>Dealership / distributorship</b> certificate (in case of dealers/agents) provided	
10	<b>Sales Service:</b> address of after Sales Service centre in India (for imported goods)/ in the region provided	
11	<b>Applicable law</b> terms agreed	

Signature with Seal:.....

Vendor: M/s.....

**B. COMPLIANCE CERTIFICATE FOR SPECIFICATIONS (One for each item must to be enclosed in the Technical bid)**

<b>Item Sl. No.</b>	<b>Specifications as per Annexure-IV</b>	<b>Quoted Item Specs.*</b>	<b>Complied (Yes/No)</b>

Signature with Seal:.....

Vendor: M/s.....

**\* Vendor must quote the parameter specification of the quoted product in this column and not just copy the specification from the tender call document. Failure to do so will lead to rejection of the tender.**

**Annexure -II**

**PERFORMANCE BANK GUARANTEE**

To:

The Principal , Dibrugarh Polytechnic  
Lahowal, Dibrugarh Assam

whereas\_ ..... (Name of Supplier)  
hereinafter called "the Supplier" has undertaken, in pursuance of Contract No..... dated,.....  
20... to supply..... (Description of Goods and Services)  
hereinafter called "the order".

**AND WHEREAS** it has been stipulated by you in the said order that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the order.

**AND WHEREAS** we have agreed to give the Supplier a Guarantee:

**THEREFORE WE** hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of ..... (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the order and without cavil or argument, any sum or sums within the limit of ..... (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the ..... day of..... 20.....

Signature and Seal of Guarantors

.....  
.....  
.....

Date..... 20....

Address:.....

.....  
.....

All correspondence with reference to this guarantee shall be made at the following address:

The Principal , Dibrugarh Polytechnic ,Lahowal Dibrugarh,- 786010 Assam



Annexure -III

MANUFACTURERS' AUTHORIZATION FORM

No.

Dated \_\_\_\_\_

The Principal , Dibrugarh Polytechnic, Lahowal  
Dibrugarh, Assam

Dear Sir,

We..... who are established and reputable manufacturers of  
.....having factories at-

.....  
.....  
(address of factory) do hereby certify  
that.....

.....  
.....(Name of the Authorized Dealer)is our authorized dealer to quote against  
your tender enquiry no

.....  
**,Last Date of Submission is:**

No other Company other than .....(Name of the  
Authorized Dealer) is authorized to quote of our products against this Tender Enquiry  
No.....

Yours faithfully,  
(Name)

(Name of manufacturers)

**Annexure –IV**

**1. Technical specification CNC Lathe Machine No. Required= 01 (One)**

Bed Type	Flat
Chuck Size	125 mm (Dia)
Chuck Type	Manual
Minimum Turning Diameter	50 mm
Minimum Turning Length	250 mm
Minimum Center Height	100 mm
Minimum Swing over Cross Slide	80 mm
Minimum Swing Over Bed	200 mm
Minimum Distance between Centre	320 mm
Industrial MOP of Fanuc or Siemens	Industrial Grade MOP for user Interface with Online Speed & Geed Override switches with minimum 16 steps
Power Supply	415V, +-2% 50 Cycles, 3 Phase
	<a href="#">CNC Controller Details:</a>
Controller	PC Based System with PLC Control and Emulation of FANUC, SIEMENS, HEIDEHEIN and TRAUB Controller
Type of Control System	PLC Controller of Servodrives with Modbus communication Facility to PC. Controller Compatible to Fanuc / Siemens / Heidenhein
PLC based system	Axis movements and Spindle On / OFF action should be controlled by PLC
	<a href="#">Spindle:</a>
Spindle Motor	AC Motor
Spindle Motor Capacity	2 HP
Spindle RPM	100 to 3000 RPM with VFD

Spindle Nose Taper	A 2-3 / MT 3
Hole Through Spindle	20 mm
<b>Axes:</b>	
Traverse X axis	220 mm
Traverse Z axis	110 mm
Position Accuracy X / Z	10 micron maximum
Rapid Traverse X / Z	5000 mm / min
Feed Rate	1 to 5000 mm / min
Resolution X / Z	1 micron
Axis Control	Simultaneous Two axis control with Servodrives& servomotors
Axes motors	Standard make, Servo-motor with Encoder Feedback
<b>Turret:</b>	
Tool Changer (Turret)	Automatic
No. of Stations	8
Control	Through Software
<b>Miscellaneous:</b>	
Co-ordinate system	Cartesian Coordinate as well as Polar Co-ordinate programming facility to be provided.
Main Supply	Main supply required (stabilized), 230 volts, 1 phase,50Hz
Main Spindle Controller	VFD Controller with Encoder Feeder for specific position Control
Machine Link	Modbus Communication with Ethernet Port from PC to machine
Software	Programming and operating software and manuals with courseware & project book
Coolant	Flood coolant system of capacity of 4 liters
Guard	Totally enclosed high visibility guard

SAFETY SYSTEM	Emergency stop button, Axes limit switches
Control software features:	
Programming format	Programming format with Siemens and Fanuc and ISO codes
Software Features	Window Based PC Software and should work on Window –XP Platform .It must provide online 3D Graphics
Programming facilities	MDI Programming facilities / Single Block Function / Dry Run Function
Interpolation	Full circular and linear interpolation
Programming units	Imperial / metric programming
Subprogram	Subprogram with repeat facility / program call
Machine Stop	Manual and programmable machine stops
Tool Path	Tool path graphics to verify program prior to machining
Job Scaling facility and canned cycles	Required

### SOFTWARE REQUIREMENTS

Datum shift
Program verification via dry run facility
Tool and program offset can be saved to the disc.
Program verification via dry run facility.
Full G and M code listing with context sensitive help.
Single block or auto execution
Block skip function
Block search facility
2D and 3D simulation: dynamic zooming, color coding of tools, different move types-rapid /linear/arc distinguished by colours, user defined tool shapes and sectional views
Comprehensive tool-path graphics including 2D &3D color simulation, tool-path plot and machining process simulation with tool animation

Directory listing

Program merging facility

Automatic error checking with message

continuous and incremental jog modes with variable feed rates.

Screen axis display for distance to go values.

Full edit mode allowing alters, delete, insert.

Cycle start/hold

Programmable dwell over travel limits and emergency stop

Programmable spindle speed: 150-3000rpm

Programmable federate:0-600mm/min

Constant surface feed

Simultaneous controlled X and Z axes

Diameter / radius programming

Internal/external screw cutting

Roughing and finishing cycles

Canned turning cycles

Tool offsets for 16 tools

Incremental tool wear compensation

Tool nose radius compensation

Interface with CAD/CAM software

Built in virtual micrometer

Password protected machine parameters

#### PC Configuration:

Multi Media PC - Processor: Intel Dual Core 3 GHz, with HT technology, system bus 2GB FSB

Cache: Intel Processor 2.8 to 3.6 with 1MB L2 cache

HDD: Seagate 400GB, 7200 RPM

Graphic card

Modbus Communication Facility

Graphics: On board graphics controller

Ports: 2USB 2.0 ports (one in Front panel of the cabinet), serial – one, parallel – one

Monitor: 15” color monitor

Mouse: Optical scroll mouse PS/2

Keyboard: MM ADCOM / DARTPS/2

DRIVE CD ROM: 52X32X52X

Ether-Net card: Integrated

Drives for all the necessary hardware

#### Training and Manual:

The successful tenderer shall provide sufficient on the job training at the tender’s own cost to at least two (2) nominated teachers for each school in system operations and routine maintenance of the equipment.

1) User manual,

2) Operating Manual,

3) Maintenance Manual

4) Training Video CD

Three days on job training at Institute

## 2. Technical specification for CNC Mill Machine with Servo Motors No. required = 01 (One)

N o.	Parameter	Tender Specifications
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1	Controller	PC Based System with PLC Control and Emulation of FANUC, SIEMENS, HEIDEHEIN and TRAUB Controller
2	Traverse X, axis	300 mm X axis minimum
	Traverse Y axis	200 mm Y axis minimum
	Traverse Z axis	250 mm Z axis minimum
3	Table Size : Length x Width	600 x 225 mm minimum
4	Axis Control	Simultaneous Three axis control with Servodrives & servomotors and optional 4 th Axis Indexing Facility for future extension
5	Maximum table load	60 Kg. min.
6	Tool changer	Automatic Tool Changer through Software
	Tool dimensions :	As per ISO 30 standard
7	Automatic Tool Changer	Automatic 8 Station Tool Changer to be operated by Pneumatic Powerpack (Compressor to be provided by manufacturer)
8	Main Spindle motor – Power	2 Horse Power min.
	Main Spindle motor – speed	150 – 300 RPM
9	Resolution X axis	1 micron
	Y axis	1 micron
	Z axis	1 micron
10	Rapid Traverse	<b>8,000 mm per minute</b>
	Feed Rate	<b>1 to 2000 mm/min</b>
11	Cutting force X / Y / Z	900 / 900/ 1200 N
12	Position Accuracy X / Y / Z *	10 micron maximum
13	Lubrication system Main Spindle, Guide ways and other areas	Automatic Lubrication system to be operated through Software
14	Safety devices needed	Fully enclosed working area. Limit switches for X and Z axes Emergency Off.

15	CONTROL	24 V DC Signal voltage. With surge protection for Sudden ON / OFF of Electrical supply or Surge Voltage or Current
16	Type of Control System	PLC Controller of Servodrives with Modbus communication facility to PC. Controller should be able to emulate Fanuc / Siemens / Heidenhein Controllers
17	COMPLETE TRAINING MODULE	It must have complete CAD-CAM Solution & DNC Facility namely;
		1) 3D Model & 2D facility
		2) CAD program from Industry should be machined on Trainer
18	CAD Software Linking facility	CAD Model linking facility from Autocad, Unigraphics, Proe, Catia should be able to IMPORT
19	Co-ordinate system	Cartesian Coordinate as well as Polar Co-ordinate programming facility to be provided.
	Industrial GRADE MOP	Industrial Grade MOP for user Interface with Online RESET ,
	AXIS DRIVES	Axis movements with Siemens / Fanuc / Mitsubishi Servo motor and Drives with Encoder above 10000 ppr
20	Main Supply	Main supply required (stabilized), 230 volts, 1 phase,50Hz and 415 V 3 Ph
21	Main Spindle Motor	2HP
	Main Spindle Controller	VFD Controller with Encoder Feeder for specific position Control
22	Machine Link	RS-232 link/ RS-485 and USB cable from PC to machine and Ethernet Communication
23	Software	Programming and operating software and manuals with courseware & project book
24	Coolant	Flood coolant system of capacity of 4 liters
25	Guard	Totally enclosed high visibility guard



26	SAFETY SYSTEM	Emergency stop button
		Axes limit switches
27	Tool Path	Tool path graphics to verify program prior to machining
28	Job Scaling facility and canned cycles	Required
<b>Control software features:</b>		
29	Programming format	Programming format with Siemens and Fanuc and ISO codes
	PC Based Software	Window Based PC Software which should work on Window –XP Platform. It must provide online 3D Graphics
31	Programming facilities	MDI Programming facilities
32	Interpolation	Full circular and linear interpolation
33	Programming units	Imperial / metric programming
34	Subprogram	Subprogram with repeat facility / program call
35	Machine Stop	Manual and programmable machine stops
36	SOFTWARE REQUIREMENTS For Programming	Datum shift
		Program verification via dry run facility
		Tool and program offset can be saved to the disc.
		Program verification via dry run facility.
		Full G and M code listing with context sensitive help.
		Single block or auto execution
		Block skip function
		Block search facility

	2D and 3D simulation: dynamic zooming, color coding of tools, different move types-rapid /linear/arc distinguished by colours, user defined tool shapes and sectional views
Comprehensive tool-path graphics including 2D &3D color simulation, tool-path plot and machining process simulation with tool animation	
Directory listing	
Program merging facility	
Automatic error checking with message	
continuous and incremental jog modes with variable feed rates.	
Screen axis display for distance to go values.	
Full edit mode allowing alters, delete, insert.	
Cycle start/hold	
Programmable dwell over travel limits and emergency stop	
Programmable spindle speed: 150-3000rpm	
Programmable federate:0-600mm/min	
Constant surface feed	
Simultaneous controlled X and Z axes	
Diameter / radius programming	
Internal/external screw cutting	
Roughing and finishing cycles	
Canned turning cycles	
Tool offsets for 16 tools	
Incremental tool wear compensation	

		Tool nose radius compensation
		Interface with CAD/CAM software
		Built in virtual micrometer
		Password protected machine parameters
37	<b>PC Configuration:</b>	Multi Media PC - Processor: Intel Dual Core 3 GHz, with HT technology, system bus 2GB FSB
		Cache: Intel Processor 2.8 to 3.6 with 1MB L2 cache
		HDD: Seagate 400GB, 7200 RPM
		Graphic card
		Modbus Communication Facility
		Graphics: On board graphics controller
		Ports: 2USB 2.0 ports (one in Front panel of the cabinet), serial – one,
		parallel – one
		Monitor: 15" color monitor
		Mouse: Optical scroll mouse Wireless
		Keyboard: Wireless
		DRIVE CD ROM: 52X32X52X
		Ether-Net card: Integrated
		Drives for all the necessary hardware
38	<b>CAD-CAM Software</b>	CAD Model import facility and Automatic Code generation software to be provided alongwith machine.
		Modeling and code Generation software has to be provided

39	<b>Training &amp; Manual</b>	The successful tenderer shall provide sufficient on the job training at the tender's own cost to at least two (2) nominated teachers for each school in system operations and routine maintenance of the equipment.
		1) User manual,
		2) Operating Manual, +
		3) Maintainance Manual
		4) Training Viedo CD
<b>Miscellaneous:</b>		
40	Three days on job training at Institute	
		Operating instruction & maintenance manual, electric circuit diagrams: 2 Sets
		Courseware & project book: 01 Set
		Set of maintenance tools & necessary spare parts. 01 Set
		Foundation, installation & commissioning at site
		Warranty: One Year

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