

INVITATION FOR QUOTATION

TEQIP-III/2018/gbec/Shopping/16

12-Jul-2018

Sub: Invitation for Quotations for supply of Goods

Dear Sir,

1.You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Brief Description	Quantity	Delivery Period(In days)	Place of Delivery	Installation Requirement (if any)
1	Computer Integrated Manufacturing Setup	1	45	GBPEC, Pauri-Garhwal	YES

2.Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme[TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

3.Quotation,

3.1The contract shall be for the full quantity as described above.

3.2Corrections, if any, shall be made by crossing out, initialing, dating and re writing.

3.3All duties and other levies payable by the supplier under the contract shall be included in the unit price.

3.4Applicable taxes shall be quoted separately for all items.

3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.

3.6 The Prices should be quoted in Indian Rupees only.

4. Each bidder shall submit only one quotation.

5. Quotation shall remain valid for a period not less than **45** days after the last date of quotation submission.

6. Evaluation of Quotations,

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

6.1 are properly signed ; and

6.2 confirm to the terms and conditions, and specifications.

7. The Quotations would be evaluated for all items together.

8. Award of contract:

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

9. Payment shall be made in Indian Rupees as follows:

Delivery and Installation - 90% of total cost
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Satisfactory Acceptance - 10% of total cost
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10. All supplied items are under warranty of **36** months from the date of successful acceptance of items.

11. You are requested to provide your offer latest by **11:30** hours on **27-Jul-2018** .

12. Detailed specifications of the items are at Annexure I.

13. Training Clause (if any) **Yes**

14. Testing/Installation Clause (if any) **YES**

15. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.

16. Sealed quotation to be submitted/ delivered at the address mentioned below,

G.B. Pant Institute of Engineering & Technology, Ghurdauri, Pauri Garhwal, Uttarakhand.

17. The supplier must submit the undertaking that the quoted equipment specification should be strictly conforming the desired specifications. If any deviation is found between quoted equipment specification and desired specification, their claim may not be considered in technical evaluation.

18. The Same machine to be upgraded into CIM (computer Integrated Manufacturing system) in the future. Hence the machines should be capable for the same. (Catalogues for the same should be submitted along with the tender).

19. The supplier must provide the list of institutions/organizations where they have supplied the said machine.

20. The supplier should provide the training to at least 3 candidates at the installation site to make them familiar with smooth operation of the equipment.

21. The supplier must provide the details/documents/drawings of items required for commissioning the equipment to the college before dispatching the machine/equipment.

22. The payment must be released only after the successful installation/commissioning and successful completion of hands on training on machine at the department. This activity must be completed within one month of reaching the machine at the college campus. During installation/training period company representative/engineer must be physically present in the college campus.

23. The documents/ instructions manual related to the operations and maintenance of the machine must be supplied by the supplier before commissioning.

24. We look forward to receiving your quotation and thank you for your interest in this project.

Annexure -A

S. No	Name of items	Specification of items (Attach Separate Sheet if required)	Qty.
1.	<p>CNC Technology/Material Handling Technology</p> <p>a. Computer Numerical Control (CNC) Turning Machine</p>	<p><u>Key Features:-</u></p> <ul style="list-style-type: none"> • Standalone machine production machine • 8 Station programmable turret • SIEMENS industrial controller. • C3 ball screw for axis movement • Centralized lubrication system • Linear motion guide ways for slides <p><u>Range of Operations:-</u></p> <ul style="list-style-type: none"> • Turning • Facing • Chamfering • Drilling • Boring • Threading • Grooving • Parting <p><u>Technical Specification:</u></p> <p>2-axis CNC slant Bed Bench Turning with closed servo motor</p>	01

	<p>b. GANTRY LOADING/UNLOADING ARM FOR THE LATHE & MILLING MACHINE</p>	<p>control fitted with industrial Control (Siemens) with options for automation. Full industrial control panel with color monitor , MPG ,operator panel. Standard feature include 8-station tool turret, built-in chip tray, coolant tank, panel cooler for control box. Compact footprint designed for ease of installation in labs for CNC training, prototyping. Can be linked with industrial loading arm, Robot, CAD/CAM and FMS (Flexible Manufacturing System).</p> <p>(Detailed Specification is Attached in Separate Sheet as annexure A)</p> <p>Description of Requirement:</p> <ul style="list-style-type: none"> • Gantry loading /unloading system is designed with robust arms which possesses the capabilities for loading /unloading of work piece over the end of a spindle or position a shaft work piece between chuck and tailstock center. The buffer storage systems used with gantry loading designs are typically conveyor type or tray type, depending upon the amount of unattended operation desired .Work holding fixtures; tools and gantry
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	<p>c. INTERMEDEAT JOB TRANSFER STATION (TRANSFER CONVEYOR)</p>	<p>gripper jaws can be option for accommodating quick change design.</p> <p>Features Required:-</p> <ul style="list-style-type: none"> • Payload range 4.5-5kg. • Leg height, working ranges according to our demands. • Standardized leg design. • Position of legs is variable. • Holding brakes on all motors. • Rack/pinion drive on all linear axes. <p>(Detailed Specification is Attached in Separate Sheet as annexure A)</p> <p>Description of Requirement:</p> <ul style="list-style-type: none"> • This type of conveyor system acts as an intermediate conveyor /material transfer system from one module to another .The modules can transfer between CNC machine to AGV, AGV to ASRS, AGV to Assembly station etc. These platforms of conveyors are fitted with flat belt transmission upon which the pallet containing the material is transferred.
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	<p>d. CNC Tech ware-Single user permanent license with dongle type:-</p>	<ul style="list-style-type: none"> • Material transfer systems integration with ASRS, Loading /unloading system, Manufacturing, Assembly station etc. • Length of conveyor: Approx.500mm(19.7 in) • Width of platform: Approx.300mm (11.8) • Type of transmission: Flat Belt • Drive: DC Geared motor, Feedback control: Fitted with sensors. <p>1. A CNC courseware of multiple sessions in Milling & lathe taking the students from entry (Novice) to intermediate through a systematic manner. The courseware must be License Based in a dongle with permanent license for easy accessibility. The courseware should cover various topics such as Machine configuration, parts and components, work holding devices and their applications, machine functions, tooling systems and machining parameters, safety procedures. The courseware should be able to train the users on programming and operation with knowledge checks. The course should be interactive with explanation in</p>
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		<p>text, audio, video, animations etc.</p> <p>2.The course should have options to learn ISO as well as Siemens.</p> <p>Operation and maintenance supports;-</p> <p>1.An interactive multimedia based systems which will guide the user through various options of the machine its maintenance procedures, basic operations of the machine and troubleshooting activities. This has to be provided in a CD format. It should be video of self-explanatory for easy understanding .it should be with different category and topic for the user to select and navigate accordingly.</p>	

Detailed technical specifications for CNC Technology /Material Handling Technology(Annexure A)

a. Computer Numerical Control (CNC) Turning Machine,

Key Features:-

- Standalone machine production machine
- 8 Station programmable turret
- SIEMENS industrial controller.
- C3 ball screw for axis movement
- Centralized lubrication system
- Linear motion guide ways for slides

Range of Operations:-

- Turning
- Facing
- Chamfering
- Drilling
- Boring
- Threading
- Grooving
- Parting

Technical Specification:

2-axis CNC slant Bed Bench Turning with closed servo motor control fitted with industrial Control (Siemens) with options for automation. Full industrial control panel with color monitor , MPG ,operator panel. Standard feature include 8-station tool turret, built-in chip tray, coolant tank, panel cooler for control box. Compact footprint designed for ease of installation in labs for CNC training, prototyping. Can be linked with industrial loading arm, Robot, CAD/CAM and FMS (Flexible Manufacturing System).

	In metric units	
	CAPACITY	
Chuck size	mm	100
Chuck Type	Type	Pneumatic
Swing over bed	mm	306
Swing over cross slide	mm	80
Swing over way covers/carriage	mm	246
Maximum turning Diameter	mm	80
Maximum turning Length	mm	190
Bed	Type	45deg Slant bed
No. of axes	no	2

Distance between centers	mm	300
Height of center from floor		~ 1150
ACCURACY		
Positioning Accuracy	mm	0.01
Repeatability	mm	+/-0.005
SPINDEL		
Spindle nose taper	mm	A2-3/MT3
Bore through spindle		20
Bar stock Dia For Manual chuck		19
Programmable spindle speed	rpm	150-4000
Spindle motor	kw	3.7
CNC DETAIL		
Control system		SIEMENS
TURRET		
Tool cross Section	mm	12x12
No. of Station	No	8
Indexing Time Adjacent Tool &180 Deg	Sec	2.3/9.5
Boring bar size (capacity)	mm	16
Axis		
X-axis travel	mm	95
Z-axis travel	mm	210
Ball Screw X/Z	mm	Ø16x5-C3 class
Programmable feed rate	mm/min	0-5000
Rapid feed rate	mm/min	5000
Axis motor X/Z Type	-	AC servo motor
slides	-	Linear motion guide ways
Tailstock		
Tailstock base travel	mm	170
Tail stroke Quill Stroke	mm	40
Quill Diameter	mm	35
Tail Stroke Taper	-	MT-2
Coolant/Lubrication		
Capacity	L	60
Coolant motor	kW	0.08
Lubrication	-	Automatic
Power Source		
Main Supply(±10%)	-	415V,3Ph,50/60Hz,32 Amps
Stabilizer	-	3 phase servo type 10 KVA
Suitable Compressor	-	100 Lit, Tank capacity 8-10 bar pressure
Machine dimensions		
L x W x H (appox)	Mm	1700x1100x1650
Weight (approx.)	kgs	800
Features		
Compatibility/Upgradable		FMS/CIM system
FMS/CIM Accessories		

a) Pneumatic Chuck dia 100mm	no.	1
b) Automatic Door	No.	1

MAERIAL HANDLING TECHONOLGY:-

b. GANTRY LOADING/UNLOADING ARM (FOR THE LATHE & MILLING MACHINE):

Description of Requirement:

- Gantry loading /unloading system is designed with robust arms which possesses the capabilities for loading /unloading of work piece over the end of a spindle or position a shaft work piece between chuck and tailstock center. The buffer storage systems used with gantry loading designs are typically conveyor type or tray type, depending upon the amount of unattended operation desired .Work holding fixtures; tools and gantry gripper jaws can be option for accommodating quick change design.

Features Required:-

- Payload range 4.5-5kg.
- Leg height, working ranges according to our demands.
- Standardized leg design.
- Position of legs is variable.
- Holding brakes on all motors.
- Rack/pinion drive on all linear axes.

Specification	Gantry Type loading /unloading arm
Y-Axis Travel	900mm(35.4 in)
Z-Axis Travel	700mm(27.6 in)
Feed Rate	5m/min (197in/mm)
Rapid traverse Rate (Y,Z)	15m/min(590.6 in/min)
Positioning Accuracy	0.1mm
Repeatability	±0.05mm(±0.0002 in)
Controller	
PLC& HMI unit	Siemens and HMI

c. INTERMEDIATE JOB TRANSFER STATION (TRANSFER CONVEYOR)

Description of Requirement:

- This type of conveyor system acts as an intermediate conveyor /material transfer system from one module to another .The modules can transfer between CNC machine to AGV, AGV to ASRS, AGV to Assembly station etc. These platforms of conveyors are fitted with flat belt transmission upon which the pallet containing the material is transferred.
- Material transfer systems integration with ASRS, Loading /unloading system, Manufacturing, Assembly station etc.
- Length of conveyor: Approx.500mm(19.7 in)
- Width of platform: Approx.300mm (11.8)
- Type of transmission: Flat Belt
- Drive: DC Geared motor, Feedback control: Fitted with sensors.

E-Learning-courseware:-

d. CNC Teach ware-Single user permanent license with dongle type;-

- A CNC courseware of multiple sessions in Milling & lathe taking the students from entry (Novice) to intermediate through a systematic manner. The courseware must be License Based in a dongle with permanent license for easy accessibility. The courseware should cover various topics such as Machine configuration, parts and components, work holding devices and their applications, machine functions, tooling systems and machining parameters, safety procedures. The courseware should be able to train the users on programming and operation with knowledge checks. The course should be interactive with explanation in text, audio, video, animations etc.
- The course should have options to learn ISO as well as Siemens.

Operation and maintenance supports;-

- An interactive multimedia based systems which will guide the user through various options of the machine its maintenance procedures, basic operations of the machine and troubleshooting activities. This has to be provided in a CD format. It should be video of self-explanatory for easy understanding .it should be with different category and topic for the user to select and navigate accordingly.

Terms:-

1. The same machine to be upgraded into CIM (computer Integrated Manufacturing system) in the future. Hence the machines should be capable for the same.(Catalogues for the same should be submitted along with the quotation).
2. Bidder to submit the reference for CIM (computer Integrated Manufacturing system), minimum for the past three years in the north Region.

Annexure-2

FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date: _____

To:

Sl. No.	Description of goods (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	GST (CGST/ SGST/IGST) and other taxes payable(if any)	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Amount in figures) (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of ————— months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No: _____