## **GOVERNMENT COLLEGE OF ENGINEERING, KEONJHAR**

(Formerly Orissa School of Mining Engineering [Degree Stream], Keonjhar)
At: Jamunalia, P.O.: Old Town, Dist., Keonjhar, Pin: 758002 (Odisha)
Tel: 06766-213180, 213181 (O)/ 254230 (Fax), Web: www.gcekjr.ac.in

### **INVITATION LETTER**

Package Code: TEQIP-III/OD/geco/13

Current Date: 30-Aug-2019

Package Name: CNC Machine

Method: Shopping Goods

To.

### Sub: INVITATION LETTER FOR CNC Machine

### 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	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	CNC Machine	• 1	PRINCIPAL GOVERNMENT COLLEGE OF ENGINEERING, AT-JAMUNALIA, POST-OLD TOWN, DIST-KEONJHAR, ODISHA-758002	NA

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

- 3.1 The contract shall be for the full quantity as described above.
- 3.2 Corrections, if any, shall be made by crossing out, initialling, dating and re writing.
- 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit Price.
- 3.4 Applicable 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.
- Quotation shall remain valid for a period not less than 30 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.
  - 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.
  - 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:

	<b>Expected Delivery Period (in Days)</b>	Payment Percentage
Daymont Describition		100
Satisfactory Delivery & Installation	30	

- Liquidated Damages will be applied as per the below:
  Liquidated Damages Per Day Min %:N/A
  Liquidated Damages Max %:N/A
- All supplied items are under warranty of 24 months from the date of successful acceptance of items and AMC/Others is NA.
- 12. You are requested to provide your offer latest by 14:00 hours on 15-Sep-2019.
- **13.** Detailed specifications of the items are at Annexure I.
- 14. Training Clause (if any) TRAINING REQUIRED AS PER THE DETAILS MENTIONED IN THE SPECIFICATION
- 15. Testing/Installation Clause (if any) TESTING, INSTALLATION & COMMISSIONING AFTER

  DELIVERY OF ITEMS AT GCE KEONJHAR

- 16. Performance Security shall be applicable: 0 %
- 17. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
- 18. Sealed quotation to be submitted/ delivered at the address mentioned below, Government Engineering College, Keonjhar,The Principal At-Jamunalia, Post-Old Town, Dist-Keonjhar, Pincode-758002
- 19. We look forward to receiving your quotation and thank you for your interest in this project.
- 20. Eligibility of Bidder:
  - The Bidder must be a reputed Original Equipment Manufacturer and/or the Authorized agent dealer of a reputed manufacturer. Manufacturers must provide all documents relating to their Manufacturing Capabilities. If the Bidder is an Authorized Dealer/Agent of a reputed manufacturer, necessary certificate to this effect from his manufacturer must be enclosed.
  - The Bidder must be registered with GST
  - The Bidder must have cleared GST and Income Tax payment up to date. Attested copies of GST Clearance Certificate or non-assessment certificate from the concerned Sales Tax Authority valid up to date and attested copy of Income Tax Clearance Certificate or non-assessment certificate, as the case may be, from the competent authority, up to date and PAN Number must be enclosed along with the Quotation documents.
  - Bidder must have supplied minimum 05 Nos of CNC Machine of similar type of specifications in previous 3 years.
  - The Bidder must provide evidence of purchase order and successful execution of supply of orders with installation and successful after sales support in reputed organizations like NITs/IITs/IIESTs/IISERs/NISER/IISc/Central Research Laboratories/ Government Engineering Colleges of Odisha. Bidders must submit a list of systems supplied for a minimum period of 5 years with complete contact details of the end users such as phone number, fax number, e-mail ID etc.
  - The Bidder must have the willingness for providing comprehensive maintenance support of the Machine supplied by him for at least two years after expiry of the warranty period.
  - Bidder must possess ISO 9001 2008 accreditation.
  - Firm should visit our facility and make a technical presentation of the product being offered.
  - Bidders should have Single Source Local Service Support Facility preferably in Kolkata/Bhubaneswar and should submit address and contact details.
  - Firms should give an undertaking for supply of Software upgrades if any, during the warranty period of one year, free of charge.

(Authorized Signatory)
Name & Designation

Govt. College of Engineering Keonjhar

# Annexure I

# TECHNICAL SPECIFICATION FOR CNC MILLING MACHINE WITH FANUC CONTROLLER

S. No.	Description
	Field of Application
1.1	Machining of single jobs and batch production.  Standard machining of press tool plate, die plates, mould plates, fixtures, Precision machining jobs in :
1.2	Standard machining of press tool plate, die plates, modit
	Face, shoulder and pocket milling.
	Drilling & Boring application Tapping.
	Die and Mould Machining
2	Material Stainless steel Casting steels, low, & medium
2.1	Material  Tool steel, low-medium-high alloyed(Toughened & ,Stainless steel ,Casting steels, low,& medium carbon steels, Cast iron, Grey cast iron & Nodular cast iron ferritic / pearlitic type HRB 125-200 (Non hardened) etc.
2.2	Non ferrous metals like Aluminium and aluminium alloys ,Copper and copper alloys and Brass
3	Technical Data
3.1	Work Area Dimensions
0.1	X-Axis - 750 mm (min)
	Y-Axis - 300 mm (min)
	Z-Axis - 400 mm (min)
3.2	Machine Table
	Table size: 900 mm × 300 mm (min.)
	Work holding: 3 Nos.(min.) T-slot, 14/16 H7 Wildin
	Table loading capacity Min. 300 kg.
3.3	Machine Spindle & Head Stock
0.0	Spindle speed: 6,000 rpm (min)
3.4	Drive System: Gear Drive/Direct Drive
1	Spindle Motor Power: 5 kW min. (continuous)
	7.5 kW min. (15 Minute )
3.5	Digital controlled AC Spindle Motor drive  Spindle with Pneumatic operated tool changing and through spindle air blow cleaning while tool
3.6	change.
3.7	Adjustable external coolant nozzles
3.8	Tool adaptor / holder - ISO40 / BT-40 / BB1-40 / SK-40
3.9	Power failure detection module
3.10	Centralised Lubrication System
4.	Coolant System
4.1	Coolant Tank & filter unit
4.2	First Fill of Coolant  Axic Drives & Control
5.	Axis Drives & Control  Digital controlled drive and motors for all axes.  Govt. College of Engineering
5.1	Keonihar
5.2	LM Guide ways  Reoning  Reoning
5.3	Closed pitch ball screws, supported at both ends, pre-tensioned
	Rapid speed for all axis (Min) 10 m/min

5.5	Machining feed range in 3-Axis simultaneously resulting feed rate (Min) 5 m/min or higher.
6	Accuracies
6.1	Positional accuracy in each axis: 0.012 mm or less
6.2	Repeatability : 0.01 mm or less
6.5	Run out (Max): 0 003 mm run out at nose.
6.7	Note:-Positional accuracy and repeatability values should be reported as per ISO 230-2 standard. If the manufacturer follows any other standards such as VDI/DGQ, JIS, ASME/ANSI for these measurements, the values should be reported as per the respective standard. Testing should be done through Laser Calibration.
7	CNC Control Unit Features
7.1	Controller: FANUC 0i MF
7.2	Page for machine error compensation
7.3	USB Support and I/O Interface Ethernet/LAN Port
7.4	Rigid tapping function
7.5	Emergency stop on control panel, remote control
7.6	CNC controller to take care of Stored pitch error Compensation
7.7	Backlash compensation for cutting traverse
7.8	Backlash compensation for rapid traverse
7.9	Min. 8.4" LCD Colour Monitor with soft keys.
7.10	Swiveling panel with in-built keyboard, monitor & operating knobs.
7.11	Machine hour reading
7.12	Spindle load display
7.13	Power Failure & Self diagnostic function
7.14	Panel AC
8	Accessories
8.1	Fully enclosed splash guard with sight window, fully encapsulated housing with safety type window, door safety
8.2	Chip Collection Tray to be provided
8.3	Fully encapsulated housing with safety type window.
8.4	Leveling pads
8.5	Door safety interlock
8.6	Manual Pulse Generator (MPG)
8.7	Work-piece washing gun.
9	Maintenance Tool Kit:
9.1	6-19 mm Drop Forged Combi. Spanners (Set 14), 1 no.
9.2	1.5-10 mm Allen Key Set (Set 9), 1 no.
9.3	1/16"-3/8" Allen Key Set (Set 10), 1 no.
9.4	Tri-Line Driver (Set 6), 1 no.
9.5	Automatic Voltage Regulator Capacity 20 kVA, 1 no.
9.6	Ultra Isolation Transformer, Capacity 20 kVA, 1 no.
9.7	Panel AC for CNC Control Panel
10	Essential Tooling Set & Work Holding Devices (as enlisted below)
10.1	Dia 80 mm, 63mm & 50 mm Face milling Cutter, 1 no. each
10.2	Face milling Inserts, 20 nos, each for Dia, 80 mm, 63mm & 50 mm
10.3	Face milling Adaptor (for Dia. 80mm and 63 mm Face milling Cutter) 1 no. each
10.4	Fnd mill cutter Insert type Dia 16 mm, 20mm and 25mm, 1 no. each
10.5	Find will inserte 20 No. each for Dia 16 mm, 20mm and 25mm
10.6	solid adapter- for Dia 16 mm, 20mm and 25mm, 1 no. each
	Collet adapter with collets from Dia 3-25 mm in step of 1 mm
10.7	Collet adapter with collets from Dia 3-25 mm in step of 1 mm Govt. College Keonjhar

1	1 W 100 and analing 150 mm depth min 50mm
10.9	Swivel machine vice jaw width 100 mm and opening 150 mm depth min 50mm
10.10	4 sets of Strap clamp with studs and supports to hold the job height upto 150 mm.
10.11	3 Jaw Chuck to hold 100 mm dia job
10.12	2 sets of Parallel blocks 10 mm X 33 mm, hardened and ground
10.13	Important Note for Tooling :-  A) Cutting tool inserts should be of suitable "Coated Cemented Carbide" grades from reputed suppliers
	A) Cutting tool inserts should be of suitable "Coated Cernented Carbide" grades from the Coated Cernented (Seco. Tool) for
	such as (Mitsubishi Materials / Sandvik / Kennmetal / Seco Tool) for
=	A.1) Light to heavy machining of un-alloyed & low alloy steels [Grade ISO P30(P10-P40)] equivalent
	A.2) Light Roughing of Steel [ ISO H25 (H10-H25) equivalent ]
	R) Make and equivalent ISO Grade of the tools offered should be mentioned here.
	C) Make of Cutting Tool Holders offered should be mentioned here
11	Documentation
11.1	Machine Manuals
11.1	Machanical maintenance manual 2 sets each (one hard copy and one soft copy)
	Electrical maintenance manual 2 sets each (one hard copy and one soft copy)
11.2	Detailed Layout plan
11.3	Operating and Programming Instruction
11.4	Installation and Commissioning instructions
11.5	Quality Test and Accuracy Test Chart Records
	Circuit Diagrams
11.6	Maintenance / Repair Charts
11.7	Preventive Maintenance Instructions
11.8	L. Ling Chart & Lubrigant list
11.9	Instruction manual for supplied Coolant Concentrate, 1 <sup>st</sup> Filling and Coolant Maintenance
11.10	Instruction manda for supplies a
	Detailed packing list of all Items and devices and detailed prospect of machine & all other Accessories
11.11	to be enclosed in the respective boxes. Lifting instruction to be shown in packing list.
	to be enclosed in the respective boxes. Enting mediation to a second sec
40	Installation & Commissioning
12	The supplier site. The suppliers to
12.1	the "Task Components" in all aspects. Acceptance and Qualification during the Dispatch
	Inspection (PDI), at the supplier end. Release of machine for dispatch after successful completion of
	accentance test post PDI.
	the machines at
12.2	A final accuracy test with an identified test component to be conducted a
	Line Learning Final accuracy test report is to be signed jointly by Pulchase reconsigned and
	the purchaser/consignee. Final accuracy test report is to be again, supplier. Final acceptance would be given after conducting the accuracy test at the installation location.
	Supplier. I man deserging
13	Training  Training  Training  Training
13.1	To be provided for one machine at each of the final destinations
13.2	Operator training and programming training - 5 days.
13.3	Maintenance course mechanical, electrical and electronics - 5 days.
14	Operator training and programming training - 5 days.  Maintenance course mechanical, electrical and electronics - 5 days.  Accessories
14.1	Isothermal transformer
14.2	Compressor  Cutting tools and Tool holder  Country  Count
14.3	Cutting tools and Tool holder  Govt. College of Lits  Keonjhar

# FORMAT FOR QUOTATION SUBMISSION

(In letterhead of the supplier with seal)

Date:

Quoted Unit rate in Rs.  (Including Ex-Factory price, ise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and and and rarranty/ guaranty commitments)	Sales tax and other taxes payable	In figures (B)				
Quoted Unit rate in Rs. (Including Ex-Factory price, sise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and and rarranty/ guaranty commitments)	Sales tax and ot	% uI				
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)				
	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 Cost
	Sl. No. Description of Qty. Unit	goods \ (with full Specifications)				
Description of Qt goods \(\text{(with full}\) Specifications\(\text{)}\)	SI. No.					

months shall apply to the offered items and we also confirm to agree with (Amount in figures) We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. --amount in words) within the period specified in the Invitation for Quotations.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery. We confirm that the normal commercial warranty/ guarantee of terms and conditions as mentioned in the Invitation Letter.

Signature of Supplier Name:

Address: Contact No.