

TENDER INVITATION NOTICE

The tenders are invited for the following items (**Package No. TEQIP-II-1AMU03-79 entitled “CNC Milling Trainer”**) through “National Competitive Bidding” process of World Bank under TEQIP-II Project.

SPECIFICATIONS				
Item no.	S.No.	Parameter	Tender Specifications	Quantity
CNC Milling Trainer	1.	Traverse X, axis	275 mm X axis minimum	01
		Traverse Y axis	160 mm Y axis minimum	
		Traverse Z axis	200 mm Z axis minimum	
	2	Table Size : Length x Width	600 x 225 mm minimum	
	3	Axis Control	Simultaneous Three axis control	
	4	Maximum table load	50 Kg. min.	
	5	Tool changer Tool dimensions :	Automatic Tool Changer through Software As per ISO 30 standard	
	6	Automatic Tool Changer	Automatic 8 Station Tool Changer to be operated by Hydraulic Powerpack	
	7	Main Spindle motor – Power Main Spindle motor – speed	1.5 Horse Power min. 150 – 3000 RPM	
	8	Resolution Speed	1 micron each axis Infinite variable from min. to maximum	
	9	Rapid Traverse Feed Rate	1500 mm per minute minimum 1 to 1500 mm/min	
	10	Cutting force X / Y / Z	900 / 900/ 1200 N	
	11	Position Accuracy X / Y / Z *	10 micron maximum	
	12	Lubrication system Main Spindle Guide ways and other areas	Automatic Lubrication system to be operated through Software	
	13	Safety devices needed	Fully enclosed working area. Limit switches for X and Z axes Emergency Off. Door Closure switch	
	14	CONTROL	Industrial Grade controller with 24 V DC Signal voltage..	
	15	Type of Control System	PLC Controller of Servodrives with Modbus communication Facility to PC. Controller Like Fanuc / Siemens / Hust etc	
	16	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	
	17	CAD Software Linking facility	CAD Model linking facility from AutoCAD, Unigraphics, Proe, Catia and automatic NC code generation facility and it should be able to link with machine and designed component to be machined on Machine	
	18	Co-ordinate system	Cartesian Coordinate as well as Polar Co-ordinate programming facility to be provided.	
	19	Main Supply	Main supply required (stabilized), 230 volts, 1 phase, 50Hz	
	20	Automatic Code Generation Software	Code generation facility with Vector data	
	21	Axes motors	Servo-motor with Encoder Feedback of reputed make	
22	Machine Link	RS-232 link/ RS-485 and USB cable from PC to machine		
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	To be provided
	Control software features:	
29	Programming format PC Based Software	Programming format with Siemens and Fanuc and ISO codes Window Based PC Software and should work on Window –XP Platform and/or Windows8.0 .It must provide online 3D Graphics
30	Programming facilities	MDI Programming facilities
31	Interpolation	Full circular and linear interpolation
32	Programming units	Imperial / metric programming
33	Subprogram	Subprogram with repeat facility / program call
34	Machine Stop	Manual and programmable machine stops
35	CAD-CAM Software	CAD Model import facility and Automatic Code generation software to be provided along with machine

- Interested bidders may purchase the Bid Document for Rs. 500/- (Non-refundable) from the office of the Principal, ZHCET, AMU, Aligarh.
- The date of commencement of sale of bid document is 04.08.2013 time 10:00 hrs.
- The last date for sale of Bidding Document is 04.09.2013 time 16:00 hrs.
- The last date for receipt of bids is 04.09.2013 time 16:00 hrs.
- Rest of the details will be made available in the bid document.
- The Demand Draft of Rs. 500/- should be in favour of “MHRD/NPIU under TEQIP-II (Z.H.College of Engg. & Tech., AMU)”, payable at Aligarh, U.P.
- The bidder should have registration with Central Govt. Agency (as supplier) or must have DGS&D Registration/ registration in AMU as supplier.
- Quoted amount should be in **Indian Rupees** only.

Principal
 Z.H.College of Engg. & Tech.
 A.M.U., Aligarh
 Phone: (0571) 2700042
 E-mail: principal_zhcet@yahoo.com