

INDIAN INSTITUTE OF TECHNOLOGY KANPUR
DEPARTMENT OF MATERIAL SCIENCE &ENGINEERING

Enquiry No : MSE/SKA/2013-14 /19

Enquiry Dated: Sept 09, 2013

Closing Date Sept 17, 2013

Enquiry for **CNC TURNING CENTER**_with Fanuc_controller & specifications as per annexure-1 and annexure-2.

Sr. No.	Descriptions/details	Remarks
01	Slant Bed CNC machine with Fanuc control , AC servo for spindle & Axes. A2-5 spindle cartridge type 7.5/5.5 kw power , Basic Hydraulic & coolant systems, Auto Lubrication system, Basic Guarding, TOOL KIT, installation, commissioning @ IIT Kanpur & Std accessories	
02	Electro mechanical 8 station turret/ servo turret- BTP 80 with standard tool holder as per annexure 2	
03	Dia 200 mm Hydraulic operated power Hollow chuck with hollow cylinder.	200mm chuck is must
04	Panel AC.	
05	LM guide ways for axes.	
06	Servo controlled voltage stabilizer of suitable rating.	
07	HAND WHEEL	
08	Hard & soft copy of manual & parameter. PLC hard copy is mandatory.	
09	Warranty should be for three years for all supplied material.	Specify clearly
10	CAD- CAM Software for simulation & programming. It should also accept the program/ design generated through AutoCAD and other commercial cad software (with interfacing system). Software should be supplied with PC/laptop with following minimum configurations (dual core, 4GB DDRAM, 500GB HD, windows-7 business, CD-ROM/ writer, good video card, 23-inch	Quote this separately

	LCD screen) and a laser printer	
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Annexure -1

	Description	Measurement	Size
Control System	CNC System		Fanuc 0i- mate TD
Capacity	Swing Over Bed	Mm	450 or more
	Swing Over Carriage	Mm	260
	Maximum Turning Dia	Mm	250
	Maximum Turning Length	Mm	300
Spindle	Spindle Nose		A2-5
	Bar Capacity	Mm	36
	Bore Through Spindle	Mm	47
	Front Bearing Dia.	Mm	Pl. Mention in quotation
	Max. Spindle Speed	RPM	4000
	Spindle Motor		Beta series
	Spindle Motor Power (15 min. rating)	kW	7.5
	Spindle Motor Power (Continuous rating)	kW	5.5
Work holding	Standard Chuck Size	Mm	200mm
	Standard Chucking Cylinder		P-80
Tooling	Maximum Number of Tools		8
	Maximum Boring Bar Dia.	Mm	40
	OD Turning Tool Size	Mm	25 X 25

X Axis	Type of Guide ways		Linear Motion Guide ways
	X Axis Stroke	Mm	150
	X Axis Rapid Rate	m/min	20
	X Ball Screw Dia X Pitch	Mm	32 X 10
	X Axis Motor		Fanuc; Beta 8i s / 3000
	X Motor Torque	Nm	7
Z Axis	Type of Guide way		Linear Motion Guide ways
	Z Axis Stroke	Mm	300
	Z Axis Rapid Rate	m/min	20
	Z Ball Screw Dia X Pitch	Mm	32 X10
	Z Axis Motor		Fanuc; Beta 8i s / 3000
	Z Motor Torque	Nm	7
Tailstock	Tailstock Base travel	Mm	135
	Tailstock quill travel	Mm	100
	Tailstock quill Dia	Mm	80
	Quill Taper		MT-4
	Tailstock rotating centre type		Add-on
	Tailstock thrust	Kgf	300 @ 12 kg/cm ²
Coolant System	Coolant Pump		Pl mention details in quotation
	Coolant Tank Capacity	(litres)	Pl. specify
Hydraulic System	Hydraulic Pump Capacity	Lpm	Pl. specify
	Hydraulic Power Pack Tank Capacity	(litres)	Pl specify

	Power pack & System Pressure	Kg/cm ²	Pl specify in quotation & make & model of power pack
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ANNEXURE -2.

Following Standard tooling package should be included with the machine along with 8 station turret		
Sr.	Description	Qty
1.	OD tool holder clamping blocks (for size 25x25mm shank)	8 Nos.
2.	Boring bar holders (Bore size Ø40 mm)	4 Nos.
3.	Sleeves for boring bar holders (consisting of Ø32, Ø25, Ø20, Ø16, Ø12, Ø10 and Ø8 mm - 1 No. each)	1 Set
4.	`C'- Holder for facing tool (for size 25x25mm shank)	2 Nos.
5.	Sleeves for taper shank drills (consisting of Ø40/MT-3, Ø40/MT-2 and Ø40/MT-1 : 1 No. each)	1 Set

The closing date for the above item will be 17.09.2013.

Other Terms & Conditions:

1. Maximum educational discount, if any should be offered
2. Prices should be on CIF / FOB separately (If imported). For indigenous items, price should be mentioned as landing prices at IIT Kanpur (include all things as freight, installation, training and pre dispatch inspection etc.)
3. Technical' and 'Financial' bid should be put separately in two different envelopes and both these should be put in one common envelope clearly mentioning the tender number as specified above.
4. Warranty should be for at least three years after installation; otherwise it should be clearly specified.
5. Validity of quotation should be at least for 60 days
6. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc
7. Any other charges from your side should be clearly specified
8. Pl clearly mention local/ nearest service backup details.
9. Delivery should be in six weeks (specify in quotation) from the date of purchase order

10. The supplier should include in the technical bid, a list of various personnel to whom the similar unit has been supplied along with the personnel's affiliation, address and contact numbers. Preference will be given to suppliers who have good experience of manufacturing and installing similar units in recognized laboratories, universities and companies (eg. to list a few are IITs, IISC, IISER, NCL, NML etc.)

Kindly Send your best offer (Technical & financial separate) so as to reach as on or before 5pm on 17.09.2013. to the following address-

Head of the Department
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