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# NOTICE INVITING TENDER

in e-Tender mode only on the Central Public Procurement Portal (CPPP) of Govt. of India under the two-cover bid system

for

# Supply and Installation of Universal 3-D Coordinate Measuring Machine (CMM) at IISc - Challakere Campus

Tender No: IISc/Purchase/CDC/2020/14

Date: 27<sup>th</sup> July 2020

Contact Details for this tender: Chair Challakere Empowered Committee Challakere Development Centre Office Indian Institute of Science Bangalore 560012 <u>Email</u>: bgm@iisc.ac.in

CPPP Tender Submission website: <u>https://eprocure.gov.in/eprocure/app</u>

# 1. Introduction

Established in 1909, Indian Institute of Science (IISc), having its main campus at Bangalore (Karnataka, India), is India's leading institution of advanced education and research in the sciences and in engineering. It is a Deemed-to-be-University as per Section 3 of the UGC Act 1956 under Ministry of Human Resource Development (Govt. of India). On the 11th of October 2018, the Indian Institute of Science (IISc) was formally notified as an Institution of Eminence (IoE) by the Govt. of India. From its beginnings, IISc has laid equal emphasis on fundamental investigations and the solution of practical problems in such a setting.

The Institute also has a new campus at Challakere in the Chitradurga district of Karnataka. The flagship project of this 1,500 acre campus has been a training programme for science teachers. This programme has now been recognized as a Centre for Excellence in Science and Mathematics Education by the Government of India.

The Institute invites bids from reputed Original Equipment Manufacturer (OEM) / OEM authorized distributor for **Supply and Installation of Universal 3D Coordinate Measuring Machine at IISc - Challakere Campus**.

Detailed technical specifications are mentioned in the subsequent sections.

The bids must have to be submitted in ONLINE mode through e-procure module of Central Public Procurement Portal (CPPP) of Govt. of India in two-cover bid system.

Tender Publishing Date	27 <sup>th</sup> July 2020			
Deadline of submission of pre-bid query by email	3 <sup>rd</sup> August 2020, 5:00 PM IST			
Deadline for submission of bids on CPPP	21 <sup>st</sup> August 2020, 5:00 PM IST			
Opening of technical bids on CPPP	24 <sup>th</sup> August 2020, 11:45 AM IST			
Listing of technically qualified Bidders on CPPP	To be declared later			
Opening of price bids on CPPP	To be declared later			

# **Schedule of Events**

Any query / correspondence should be sent to the email (**bgm@iisc.ac.in**) given on the title page of this tender. Query / correspondence sent to any other person / official, will not be entertained. IISc has absolute right to modify date & time of an event.

# 2. <u>Technical Specification</u>

# Supply and Installation of Supply and Installation of Universal 3-D Coordinate Measuring Machine (CMM) at IISc - Challakere Campus

- 1. Complete Technical Details for the subject item is mentioned below.
- 2. The bidders are required to provide details of their offered item in the technical bid. If required, bidders may attach extra / separate sheets by giving proper reference here.

#### Scope

The specification covers supply, erection and commissioning of a computer numerically controlled, Universal 3-D Coordinate Measuring Machine with High performance Continuous Scanning probing system, complete in all respects, ready for use with both contact & non-contact probing system.

SN	Item	Basic Description	Technical Compliance (Yes/No) with complete details
a)	Primary S	pecifications:	
1.	Scope of Supply	Coordinate Measuring Machine	
		Support Software	
2.	Machine Configuration	Bridgetype(The working table must be made of Granite provided with threaded insert for clamping of work-piece)	
	Measuring Range	X: 800 mm	
3.	<u> </u>	Y: 1000 mm	
-		Z: 600 mm	
4.	Guide Method	Air bearings for each X, Y and Z axis	
5.	Measuring Method	Glass Scale	
6.	Drive Speed	500 mm/sec or better	
7.	Drive Acceleration	2300 mm/sec <sup>2</sup> or better	
8.	Resolution	0.0001 mm or better	
9.	Probing System	Scanning and Touch Trigger	
10.	Scanning Probe Resolution	0.02µм or better	
11.	Temperature Compensation	Built-in with accuracy valid for the	
		temperature range 16-26°C	
12.	Temperature for guaranteed	Variation per hour: 2 °C	
	accuracy	Variation per day: 5 °C	

### 1. Specifications for Coordinate Measuring Machine

		Gradient/Vertical: 1 °C/m
		Gradient/Horizontal: 1 °C/m
13.	Accuracy as per ISO10360- 2(2009)	Length Measuring Error (E <sub>0,MPE</sub> ): (1.7+4L/1000)µm
		Length Measuring Error (E150,MPE): (1.7+4L/1000)µm
14.	Repeatability range of E <sub>o</sub> (Ro,MPL)	1.3µm
15.	Scanning error ISO 10360-4(2000)	MPE <sub>THP</sub> 2.3µm(50sec)
16.	Single stylus form error ISO10360-5(2010)	PFTU,MPE 1.7µm
17.	Power supply :	220-230 Volts single phase, 50-60 Hz
18.	Load carrying capacity of work table :	1500 kgs (min)
b)	Hard	ware Compatibility:
1.	Probe Head: Motorized Indexable he ±180°.	ad with 2.5° and better increment in A=105° and B=
2.	The machine should have compati	
3.		o add LASER Scanner(Typical Accuracy: ypical Detector range: 360µm to 0.0004µm)
4.	The machine should have built-in t	hermal compensation unit.
c)	Sof	tware Capabilities:
1.	line, plane, circle, cylinder, step cylind tolerance of point, line, plane, straig co-axiality, perpendicularity, angularity, run-ou	
2.	All measured parameter should be dis software.	splayed in 2D/3D graphic view of the
3.	conditional statement, user define	ture likeloop, formula calculator, sub- program, dialog, automatic directory generation to store the asis, export of elements in IGS & DXF format, t like pdf, html, text, excel etc.
4.		ng of known/unknown profile, reverse engineering, ine code like FANUC, Siemens, Mitsubishi,

5.	The software is required to facilitate features such as free-form surface comparison	
	with 3-DCAD model, sheet metal surface comparison with 3-D model and program	
	generation through 3-D model.	

### 2. Machine Capabilities:

1.	•	The machine should be capable of complete automatic inspection of precision components. It should be able to perform inspection of all parameters on five	
		faces of a component from start to finish without the operators' intervention in between.	
	•	It should be possible to carry out the inspection without physical alignment of the work-piece.	
	•	The system should be capable of measurement in point to point as well as in continuous scanning mode.	
	•	The machine should be capable of processing the measuring of all geometric parameters including nominal/actual comparison and evaluation of all form and position errors like flatness, straightness, roundness, cylindricity, parallelism etc. in accordance with ISO 1101 (MMC) simultaneously after the same measuring run.	
	•	For each individual job the machine should produce a printout detailing all actual dimensions as inspected. Dimensions deviating from the laid out tolerances are to be indicated specifically, with the magnitude of deviations, including tolerance band utilization.	

#### 3. Main Features:

1.	• The machine shall be specifically designed and engineered for carrying out high precision measurements of 3 dimensional coordinates in a single set up from all sides and at an angle in flat and box type components.	
	• The machine should have rigid traveling bridge, stationary table type of construction with wrap around Y-guide way to provide high torsional rigidity during bridge movement.	
	<ul> <li>Y guide ways should be covered with bellows to protect the surface and scales from contamination.</li> </ul>	
	<ul> <li>The machine should have air bearings in all axes.</li> <li>Motorized movement in all axes by joystick and CNC programmed measuring traverse for automatic measurements.</li> </ul>	

•	Drive system movements should be motorized, all moving parts should slide on wear-proof guide to achieve minimum stick-slip ratio and long accuracy life. It should be possible to vary the speed of movement of the axes from 0 to 70 mm per second in manual mode with joystick. Travel speed should be up to 250 mm/sec in axial mode and 450 mm/sec in vectoral mode. Should also be able to select speed from software for geometrical features Portable operating panel with joystick and function keys should be provided for motorized manual movement in all axes.	
•	It should be able to call almost all the important functions of the operating Software from the panel. The machine should have compatibility with Multi-sensor (multi probe). The machine must have an option to add LASER Scanner (Typical Accuracy: 1.8µm), Surface Roughness Probe(Typical Detector range: 360µm to 0.0004µm) and Vision Probe	

# 4. Probe head : Indexing Probe Head having following details:

1.	a. Capability to measure in point to point & continuous scanning mode.	
	<ul> <li>Each articulating axis features A +/- 105 deg and B+/- 180 deg setting</li> </ul>	
	range.	
	<ul> <li>Angular increments of 2.5 deg and better.</li> </ul>	
	<ul> <li>Weight &amp; length carrying capacity of the probe head to be mentioned.</li> </ul>	
	Standard Probe kit list details to be attached along with probe kit.	

### 5. Auto/Manual probe changing

•	1.	Probe head must have manual/automatic probe change facility enabling the operator	
		to use different probe configurations without recalibration. Supplier to quote for the	
		necessary accessories allowing user to use minimum 4 probe configuration in one	
		CNC Run without re- calibration.	
			l .

### 6. Computer System:

1.	The Computer should consist of a workstation computer with minimum configuration of 64 GB RAM, with 23" Colour Flat panel monitor, DVD W/R ROM drive and 1 TB hard disk, LAN connection for connecting the machine to our internal LAN network, keyboard, mouse etc. and suitable printer	
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# 7. Application software's:

1.	<ul> <li>Universal geometric measuring program for both manual and CNC operation, including component misalignment compensation in plane and space, form and position tolerance calculations, MMC provision, self-teach capability, batch component position programming, probe tip calibration up to 995 tips. Each geometric element measurable with up to 30000 probing points for the following measuring functions.</li> <li>Geometric Elements</li> <li>Complicated Elements</li> <li>Different Elements linking should be possible.</li> <li>Form &amp; Position Tolerance measurements according to DIN 7184/ISO R 1101</li> <li>Measurement of conic sections</li> </ul>	
	<ul> <li>Alignment facility</li> <li>Self-teaching facility CNC program preparation</li> <li>Auto recognition of standard Geometrical elements.</li> <li>Possibility to import CAD model for making off-line programming.</li> <li>Automatic generation of probe path and measuring parameters for CNC program from the CAD model.</li> <li>Auto decisions during Alignment and Geometry measurements through intelligent interface.</li> <li>Complete graphics user interface.</li> <li>CNC program and parameters for CNC runs are automatically generated while measurement.</li> <li>Movement of the machine is possible in work piece co-ordinate system. Very useful in case of inspection of inclined bores.</li> <li>Intermediate results are possible with graphical assistance in CAD window.</li> <li>Simplified and optimized evaluation routines.</li> <li>Possibility to connect CMM computer to the LAN.</li> </ul>	

### 8. Software for measuring Known / Unknown 2D/3D curves:

1.		The software should be able to measure and provide all GD & T parameters e.g.	
1.	•		
		point, line, plane, circle, cylinder, step cylinder, cone, sphere, different types of slots,	
		position tolerance of point, line, plane, straightness, circularity, flatness, parallelism,	
		concentricity, co-axiality, perpendicularity, angularity, run-out, tolerance to the	
		variables etc.	
	•	Digitizing of unknown 2D Curves & 3D Curves (Reverse Engineering).	

<ul> <li>Measurement of 2D Curves &amp; 3D Curves against nominal data.</li> <li>Deviation calculation from nominal &amp; measured curves.</li> <li>Best fit calculation of measured curves and output of deviations.</li> <li>Graphical presentation of nominal curves, measured curves &amp; deviations.</li> <li>Import of Curve data from CAD systems in various formats: VDA, ASCII, StI, STEP, IGES &amp; DXF formats.</li> <li>The software must support scanning of known/unknown profile, reverse engineering, export of point cloud data in machine code like FANUC, Siemens, Mitsubishi, Okuma, DXF and IGS format.</li> <li>Export of Curve data in VDA and ASCII format.</li> <li>The software is required to facilitate features such as free-form surface comparison with 3-D CAD model, sheet metal surface comparison with 3-D model and program generation through 3-D model</li> </ul>	
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### 9. Supply conditions:

1.	<ul> <li>This supply should cover Installation / commissioning of a CNC Co-ordinate measuring machine after installation at site.</li> <li>Foundation drawing should be supplied by the manufacturer.</li> <li>Foundation kit such as bolts, dampers and other necessary items should be supplied.</li> <li>The firm should furnish detailed compliance statement according to specifications.</li> <li>Training of the personnel.</li> <li>Warranty - Minimum Three (3) year from the date of installation.</li> <li>Original Equipment Manufacturer Certificate is required.</li> <li>The name &amp; address of the local firms to whom you have supplied the similar machine should be indicated to enable us to see its performance.</li> <li>Mechanical, Electrical and Electronics spares to cover the requirement of 10,000 working hours should be supplied. In addition, any other item considered essential</li> </ul>	
	Original Equipment Manufacturer Certificate is required.	
	<ul> <li>Mechanical, Electrical and Electronics spares to cover the requirement of 10,000 working hours should be supplied. In addition, any other item considered essential for smooth and interruption-free running of the machine should also be quoted separately</li> </ul>	
	• Post 10,000 working hours the supplier musty provide details of the method of procurement of the spares for maintenance as mentioned above.	

# 10. Standard Accessories (To be supplied along with machine)

1.	•	Calibration sphere should be provided for calibration of probe tips.	
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•	Power Requirements: To be specified by the supplier. Reference list of machines installed in India should be provided. Detailed duly signed compliance statement for all the technical points to be Submitted. Details of local Aftersales service support in India should be provided. Following points to be covered: - a) Installation Experience. b) Application training. c) Part programming capabilities. d) After sales Maintenance.	
<ul> <li>d) After sales Maintenance.</li> <li>If installation and commissioning will not be done by the supplier, please indicate your authorized organisation in India who will be responsible for installation, commissioning, application training and after sales service. All these charges should be included in the quote. Separate charge will not be paid for installation and commissioning. However, the manufacturer should take full responsibility of all the activities they will be carrying out.</li> </ul>		

# 11. Standard Accessories (To be supplied along with machine)

Acce	ssories: The bidder shall supply the below items along with the machine:	
Ι.	Recommended spare parts with specifications.	
II.	Integrated computer with the software's pre-installed to run the	
	Supply and Installation of Universal 3D Coordinate Measuring	
	Machine Operational manuals and maintenance manuals.	
III.	Two copies of the operational software (in hard disks) should be made available.	
IV.	Special and essential Infrastructure requirements.	
V.	Provisions required for exhaust arising from the operation of the machine to be cleaned and removed from the premises.	
VI.	Bidder must provide complete list of all recommended spares required for maintenance and smooth functioning of the equipment for a period of 2 (two) years after the expiry of the warranty period and these spares must be supplied and installed by the vendor during AMC	

	pariad without asking for any price				
	period without asking for any price. III. Necessary standard tool kit for O&M purpose -1 nos				
	II. Necessary standard tool kit for Oalvi purpose - Thos				
2.	<b>Training and demonstration:</b> The supplier shall impart training to IISc personnel in Programming, Operation and Maintenance (mechanical, electrical/electronic and CNC System) of the machine at IISc, Challakere campus for a period of 5 (five) working days. All expenses towards lodging-boarding and transportation (for the trainer) shall be borne by the supplier.				
3.	Technical documentation:				
	(a) Following information in full shall be submitted along with the offer:				
	<ul> <li>Machine layout drawing indicating shop floor space and machine weight.</li> </ul>				
	Printed catalogue of the offered machine.				
	<ul> <li>Actual test certificate of similar machine manufactured by the</li> </ul>				
	manufacturer.				
	<ul> <li>Details of customers to which similar machines have been supplied.</li> </ul>				
	(b) Two sets (Hard copy) of the following technical documentation with soft copy				
	in 'English' shall be supplied along with the machine:				
	<ul> <li>Instruction/ Operational manual</li> <li>Spare parts manual</li> </ul>				
	<ul> <li>Programming manuals of machine &amp; CNC system</li> </ul>				
	Detailed maintenance manual of machine with all drawings of				
	machine assemblies /sub-assemblies / parts including Electrical /				
	Electronic circuit diagrams.				
	<ul> <li>Preventive maintenance check list, trouble-shooting charts and guidelines</li> </ul>				
	guidelines.				
4.	Fault diagnosis system: Machine shall have diagnostic system with required software				
	and hardware displaying in the form of alarm. Alarm details, fault cause and fault				
	diagnostics to be provided in the machine manual.				
5.	Shipment clearance				
	• Geometrical and positioning accuracy tests of the machine shall be performed				
	according to the standards at party's site as per manufacturers test plan.				
	<ul> <li>The test certificate as specified shall be sent to us in advance for giving clearance for shipment of machine.</li> </ul>				
6.	Installation and Commissioning:				
	• The machine shall be installed and commissioned at IISc Challakere Campus				
	Complete functional demo of the machine, operational and maintenance has				

	<ul> <li>to be given out at IISc Challakere campus while installation</li> <li>Final acceptance of the machine shall be based on satisfactory completion of the activities mentioned.</li> </ul>		
7.	<ul> <li>Machine acceptance: Machine supplier shall arrange following tests as listed below         <ul> <li>(a) Tests and demonstration shall be performed by supplier after machine installation.</li> <li>(b) Geometrical accuracies of the machine shall be checked as per standard test chart provided by the supplier with inspection tools &amp; accessories arranged by supplier.</li> <li>(c) Machine positioning accuracies &amp; repeatability shall be measured using laser interferometer. Laser interferometer shall be arranged by the supplier.</li> <li>(d) Practical demonstration of all functionalities of the machine to the IISc personnel.</li> </ul> </li> </ul>		
8.			

Note: -

1. All major components such as probe head, glass scale, controller & software must be supplied by the same vendor.

# 3. General Terms and Conditions

- 1. The bid must be valid for at least 180 days from the actual date of opening of the technical bid.
- 2. The Bidder's firm should have been in existence for a minimum of 3 (three) years. (Enclose Company Registration Certificate).
- 3. The Bidder should have qualified technical service personnel for the instrument(s) based in India.
- 4. If the Bidder is a local distributor/dealer/Agent, it is mandatory to attach authorization certificate along with the bid from the original equipment manufacturer.
- 5. Two bid system (separate technical and financial bids) will be followed.
- Technical bids will be opened first. IISc may seek clarifications after opening of technical bids. IISc may issue corrigendum(s), which will be integral part of the tender. IISc reserves the right to accept or cancel a bid. Decision of IISc regarding evaluation of technical bids or price bids will be final and binding.
- 7. Price bids of only technically qualified vendors will be considered, and the vendors will be informed the day of opening the price bids through CPPP only.
- 8. The price bids must be offered on FORD-IISc Challakere campus basis only.
- 9. Bid Security / Earnest Money Deposit (EMD) must be deposited through NEFT / RTGS. Micro and Small Enterprises (MSEs) are exempted from this deposit provided they submit a valid certificate and Bid Securing Declaration. Performance Bank Guarantee (PBG) of 10% of the total order value must have to be provided by the successful bidder within two weeks of placement of order.
- 10. The BOQ Price Bid is divided in three-line items: (a) Main Equipment Cost (b) Equipment Accessories Cost, and (c) onsite comprehensive AMC Charges for two years per year basis.
- Price for Main Equipment and Equipment Accessories may be given either as (a) Import order USD quote, or / and, (b) Indigenous order - INR quote. AMC Charges line item must be quoted as Indigenous order – INR quote only.
- 12. In case of indigenous order, 100% payment will be released after complete delivery and satisfactory installation. In case of import order, Institute may consider payment through Letter of Credit (payment of 80% of the equipment costs, against dispatch of documents and the rest after complete delivery and satisfactory installation). Payment will be subject to deduction of TDS as per rules/laws.
- Indigenous order must be on FORD-IISc Challakere Campus basis, whereas Import order should be preferably on DDP-IISc Challakere basis, however IISc may consider CIP-Bangalore basis. It should be clearly mentioned in the technical bid.
- 14. IISc is a DSIR recognized research organization and hence eligible for concessional / exempted rate of Custom Duty (for import items) and concessional / exempted rate of GST @5% (for indigenous items). Since these items are required for research purpose, IISc will issue Custom Duty Exemption Certificate (CDEC) (for import items) or GST Exemption Certificate (for indigenous items). For the same item, both certificates will not be issued. Bill of Entry must be in the name of IISc for import items. While quoting, the bidders may consider this point. Import items must be

quoted in USD (US Dollor) for availing our CDEC and Indigenous items must be quoted in INR (Indian Rupees). Details of the foreign firm, on which the foreign order has to be placed must be clearly mentioned (with name of the firm, complete address, contact details, email IDs, bank details etc.) in the technical bid with its authorization letter in favour of the bidder / authorized Indian agent.

- 15. For DDP-IISc Challakere basis, please note that IISc will not be involved in custom duty / airport charges payment, custom clearance, forwarding and transportation / shipment of import items; IISc will only provide relevant documents for availing concession / exemption in Custom duty / IGST subject to submission of documents (viz. Invoice, Bill of Entry, Bill of Lading, airway Bill, packing list etc.) by the vendor. Bill of Entry must be in the name of IISc. Customs duty must be paid by the vendor. Before release of final payment, all original documents with regards to import must be handed over to IISc, failing which final payment may not be released.
- 16. For CIP-Bangalore basis, IISc will get the consignments cleared from custom from its own CHA. The vendor must provide all documents (viz. Invoice, Bill of Entry, Bill of Lading, airway Bill, etc.) in advance, required for custom clearance. If there will be delay at the vendor's end in providing the correct documents, then any fine / demurrage / additional charges paid by IISc in custom clearance and its forwarding will be deducted from the vendor's bill at the time of final payment.
- 17. **Warranty:** For the complete set of this equipment, warranty of 3 (three) years is mandatory. Warranty period will start only after the complete supply and installation and acceptance by IISc of the provided item / solution. including free supply of spare parts and labour from the date of functional installation. If the instrument is found to be defective, it has to be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.
- 18. AMC: Comprehensive Annual Maintenance Cost (CAMC) for the 2 (two) years (after warranty) must be quoted. For AMC, separate order will be issued after completion of warranty period. For AMC, payment will be released on half yearly basis after completion of each half year. AMC will be comprehensive.
- 19. Supply and installation should be completed within 2 (two) months of placing of order.
- The items should be delivered, successfully installed, and demonstrated at: "Skill Development Center, Indian Institute of Sience (IISc) - Challakere Campus, Kudapura, Challakere Taluk, Chitradurga Dist. – 577536, Karnataka (India)"
- 21. IISc reserves the right to cancel or modify the tender at any time without assigning any reason thereof.
- 22. Payment Terms for Equipment and accessories: (a) For INR quote After release of purchase order (PO) on successful bidder, 100% payment will be released only after complete supply, installation, testing, commissioning of the equipment and its acceptance by IISc subject to submission of PBG followed by its verification of genuineness. (b) For USD quote Bidder may opt for same payment terms as for INR quote or may opt for payment through LC as mentioned in sl. no. 12. It should be clearly mentioned in the technical bid. (c) Any payment will be subject to deduction of LD / TDS as per law.
- 23. As time is essence for this procurement, the successful bidder must have to adhere by the delivery

and installation schedule as per purchase order, failing which Liquidity Damage (LD) will be imposed for late delivery and installation at the rate of 1% of total order value for delay per week or part thereof (maximum up to 10% LD). IISc may consider formal request for extension in delivery and installation schedule on genuine grounds, however it will be absolute right of the IISc to accept or reject such request of the vendor. IISc reserves the right to cancel the order if there is delay without a formal approval by IISc.

- 24. If the quality of the product and service provided is not found satisfactory, IISc reserves the right to cancel or amend the contract.
- 25. IISc may ask for technical clarification / documents during technical evaluation from all / some bidders. IISc may ask for price justification / price break-ups from all / some bidders during financial evaluation. If bidders are asked for technical clarification / documents or price justification / price break-ups, then bidders must have to provide all the details, failing which EMD will be forfeited and bid may be declared non-responsive.
- 26. Any dispute may be resolved by mutually agreed arbitrator in Bangalore only, for which all costs will have to be borne by the bidder only. Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.
- 27. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is however, advised not to furnish superfluous information. Any information furnished by the bidder found to be incorrect / false, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc and in such case, EMD / PBG will be forfeited.
- 28. After submission of the bids online via CPPP, the bidder must submit a hard copy (printout and spiral bound in one volume only) of the complete technical bid (as submitted by the bidder on CPPP), which must reach to us (address given on first page as contact details for this tender) at least one day prior to the technical bid opening date through speed post / courier / by hand. For any delay or loss in transit, IISc will not be responsible. It will be sole responsibility of the bidder to ensure delivery of this hard copy at IISc on time. Non-receiving of this hard copy technical bid may lead to rejection of the technical bid. In case of any deviation in the hard copy technical bid from the online technical bid, the content on the online (CPPP) technical bid will only be considered. Price Bid (BOQ) <u>MUST NOT</u> be sent in hard copy format.
- 29. The bidder may visit the installation site before submission of tender, with prior intimation on their own cost.
- 30. The bidder may submit their pre-bid query by email only latest by the date & time as mentioned in this tender. IISc reserves right to reply a query or accept / reject a request.
- 31. All amendments, time extension, addendum etc. (if any), will be communicated through CPPP. No extension in the due date / time shall be considered on account of delay in receipt of any document(s).

# 4. <u>Earnest Money Deposit (EMD)</u>

- 1. All Bidders must submit Rs. 1,00,000/- (Rs. One Lakh only) as Bid Security / EMD or bid security in the form of RTGS/NEFT transfer, the Bidder must submit e-receipt as a proof of EMD submission along with the technical bid. Failure to comply with this requirement will result in rejection of the bid. The account details of IISc are provided below.
- 2. After the placement of the purchase order on the successful Bidder, the EMD amount will be returned to the unsuccessful Bidders without interest.
- 3. The EMD amount will be returned to the successful Bidder after the Institute places a firm purchase order for the procurement and the successful Bidder then submits a performance security/bank guarantee followed by its verification.
- 4. Micro and Small Enterprises (MSEs) or Startups firms will be exempted from submitting EMD as per GFR 2017 (amended from time to time). Such a Bidder must submit <u>copy of valid certificate</u> (from appropriate agency of Govt. of India) and <u>Bid Securing Declaration (Annexure-5)</u> with the technical bid, failing which their bid will be declared as a non-responsive bid.
- 5. The bid must be valid for at least 180 days from the actual date of opening of the technical bid. Withdrawal of the bid within the period of validity will result in forfeiture of the EMD amount.

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Account's	Registrar, Indian Institute of	Note:
Name	Science, Bangalore	
Bank	State Bank of India	• It is mandatory to write the
Branch	IIS Bangalore	Name & Address of the Bidder
<b>Branch Code</b>	02215	and Tender Reference No. &
Account No.	31728098170	Date on the back side of the e-
IFSC	SBIN0002215	receipt of NEFT/RTGS.
MICR	560002020	
GSTIN	29AAATI1501J2ZV	• Acceptance of the e-receipt of
PAN	AAATI1501J	NEFT/RTGS is subject to its
IEC Code	0788012428	verification from the Finance
ADC	00022158400009	& Accounts section / Bank,
TAN	BLRI0070D	IISc.
Note: No separ	ate KVC will be provided	

Details of the Bank Account of IISc Bangalore for submitting EMD / PBG / KYC

Note: No separate KYC will be provided.

# 5. <u>Performance Security / Performance Bank</u> <u>Guarantee (PBG)</u>

- Successful bidder must submit a Performance Security / Performance Bank Guarantee (PBG) issued by a nationalized bank or a scheduled commercial bank as per RBI list in India within two weeks of the issue date of purchase order. Performance Security / PBG will be for an amount of 10% (ten per cent) of the total purchase order. Performance Security may be furnished in the form of online payment (RTGS/NEFT) or Bank Guarantee in the specified format given in the Annexure-4.
- 2. Performance Security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.
- 3. The Earnest Money Deposit (EMD) of the successful Bidder shall be returned on submission of Performance Security / PBG without any interest.
- 4. EMD of unsuccessful bidder will be returned without any interest after placement of order. EMD will be forfeited, if bidders change their terms & conditions or fail to submit PBG on time or fails to accept the purchase order during bid validity period.
- 5. Performance Security / PBG will be returned without any interest after successful completion of all contractual obligations including warranty period AMC period (if any). However, if the successful Bidder fails to deliver the items / install and commission the items as per the order's terms and conditions within the stipulated period or fail to provide satisfactory services during contractual obligations include warranty period and AMC period (if any), the PBG shall be liable to be forfeited. Decision of IISc in this regard will be final and binding.

# 6. Guidelines for Bid Submission

Bidder are required to submit their bid in e-tender mode through the Central Public Procurement Portal (CPPP: <u>https://eprocure.gov.in/eprocure/app</u>) only. If a Bidder submits a response to the e-tender, then it is assumed that the Bidder accepts all the terms and conditions specified in this document. A bid submitted through any other mode will not be entertained and will be treated as non-responsive.

The submission consists of two parts, viz. a Technical Bid and a Commercial / Price Bid.

The **Technical Bid** should be an *indexed and page-numbered* document containing:

- Duly filled-in and sealed & singed by the bidder (Annexure-1 and Annexure-2)
- E-receipt of EMD (valid MSE / startup certificate in case of EMD exemption)
- BoQ compliance (as indicated in Annexure 3, format in Section:2 Technical Specifications), (without quoted price) and all tables (Table-1, 2, 3 as in Annexure-3).
- o Supporting technical materials for the items in the BoQ.
- o Supporting documents listed in the Overall Compliance Statement.
- A signed document that the Bidder agrees to the Service Terms, Commercial Terms, and Payment Terms set forth in this tender.

#### The Commercial / Price Bid should contain:

 The BoQ table (in the CPPP Excel sheet for this tender) with quoted price of each line item. Price of Equipment and Accessories costs (with all items / sub-items / accessories etc.) should include supply, delivery, installation, demonstration, testing and commissioning with minimum three (3)-year warranty. Price Basis must be indicated in the technical bid.

#### Points to Note:

- 1. Duly filled-in Annexure-1 must be submitted with Technical Bid.
- 2. Prices of items must <u>NOT</u> be mentioned in the Technical Bid.
- 3. Price Bid must be in INR or USD only.
- 4. Bid Ranking (L1, L2, ...) will be decided on the basis of sum of quoted price (including taxes) of all the line items (supply and installation of all equipment cost + accessories cost + AMC cost) in BOQ.
- 5. The commercial bid must be valid for at least 180 days from the actual date of opening of the technical bid.
- 6. A tender not complying with any of the above conditions is liable to be rejected. Incomplete proposals are liable to be rejected.
- 7. The Director, IISc, reserves the right to modify the technical specifications or the required quantities at any time.
- 8. The Director, IISc reserves the right to accept or reject any proposal, in full or in part, without assigning any reason.
- Instructions To Bidder for Online Bid Submission may be downloaded from CPPP website (Download section).

### <u>Annexure 1: Details of Bidders (on the letter head of the bidder)</u> (to be submitted with Technical Bid)

То

The Registrar, IISc, Bangalore - 560012 (India)

Sir,

I hereby submit my bid for your tender no. -....

Details are as under along with all required documents.

EMD Details (attach e-receipt / MSE certificate)	
Bidder's Name and Address	
(attach incorporation certificate)	
Registration No. / Trade License	
Complete contact details (address, mobile no. / telephone no. / email ID / website address)	
GSTIN (attach GST Regn. Certificate)	
PAN (attach copy of PAN)	
Bank Accounts Details	
(attach copy of cancelled cheque)	
Category – OEM / OEM authorized distributor / Indian Agent of	
Foreign Vendor (mention clearly)	
Authorization letter by the OEM (Yes / No)	
Details of the contact person, address, mobile no. / E-mail ID etc.	
Experience in no. of years and months of the bidder in supply and	
installation of 3-Axix CNC machine (similar to this tender) (in no. of	
years)	
(Attach purchase orders / clients' certificate in support of claim)	

I have carefully gone through the Terms & Conditions and all the contents as mentioned in the above-referred tender document. I declare that all the provisions and contents of this tender document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration. I copy of this tender document (duly sealed and signed on all pages) are being attached with this bid.

Thanking you.

Seal & Signature with name & date and PAN & Aadhar card no. of the signatory

### <u>Annexure - 2: Declaration regarding track record</u> (on the letter head of the bidder) (to be submitted with Technical Bid)

То

The Registrar, IISc, Bangalore - 560012 (India)

Sir,

I hereby submit my bid for your tender no. -....

- (a) I further certify that I am the competent officer in my company / firm to make this declaration.
- (b) I have carefully gone through the Terms & Conditions contained in the above referred tender.
- (c) I hereby declare that my company/ firm is currently not debarred / not blacklisted by any Government / Semi Government organizations / institutions in India or abroad.

#### OR

(c) I declare that my firm is debarred / blacklisted as per following details:

SI. No.	Country in which the company is Debarred /blacklisted / case is Pending	Black listed / debarred by Government / Semi- Government / Organizations /Institutions	Reason	Since when and for how long

(NOTE: In case the company / firm was blacklisted previously, please provide the details regarding period for which the company / firm was blacklisted and the reason/s for the same.).

Thanking you.

Seal & Signature with name & date and PAN & Aadhar card no. of the signatory

# <u>Annexure 3: BoQ compliance</u> (to be submitted with Technical Bid)

A compliance sheet must be submitted in the format given in the Technical Specifications (section: 2 of this tender document).

Bidder MUST NOT write any Price here. PRICE must be written in BOQ Price Bid (Excel sheet) only separately.

Additional sheet / documents / technical brochures may also be attached.

There must be an index page (as the first page of the technical bid), all pages must be page numbered.

Following tables (Table-1, 2, 3) must be properly filled-in and submitted with the Technical Bid: -

Line I	<u>Table-1</u> Line Items in BOQ-Price Bid Excel Sheet are quoted in following currency			
Item	Item Name / Description	<b>Quoted in Currency</b> [USD / INR (any one)]	<b>Price Basis (if USD)</b> [CIP-Bangalore / DDP- IISc Challakere (any one)]	
Item1	Supply of Installation of CompleteMain MainEquipmentpartsitems as per quantity, quality, part names, etc. mentionedintechnical bid			
Item2	Supply of Installation of Complete <u>Equipment</u> <u>Accessories</u> parts / items as per quantity, quality, part names, etc. mentioned in the technical bid			

<u>Note</u>: - It is expected / presumed that some bidders may quote some item(s) as Import from foreign principal vendor and some item(s) as Indigenous. All such bidders may quote all import items as **Main Equipment** in USD and all indigenous items as **Equipment Accessories** in INR. If bidder(s) are quoting all item as Indigenous or all items as Import, then they may bifurcate the items as **Main Equipment** and **Equipment Accessories**, and both may be quoted in same currencies. The complete details and listing for **Main Equipment** and **Equipment Accessories** must be given in the Table-2.

#### <u>Table-2</u> <u>Complete Details and listing of all components / items / sub-items /</u> <u>accessories for the Line Items in BOQ-Price Bid Excel Sheet are as follows</u> (If required, attach separate sheet as Annexure-Item1 / Annexure-Item2)

Item	Item Name / Description	Complete Details and listing of all components / items / sub-items / accessories to be supplied
Item1	Supply of Installation of Complete	
	Main Equipment parts / items as	
	per quantity, quality, part names,	
	etc. mentioned in the technical bid	
Item2	Supply of Installation of Complete	
	<b>Equipment Accessories</b> parts /	
	items as per quantity, quality, part	
	names, etc. mentioned in the	
	technical bid	

If line item(s) are quoted in USD, then complete details of the foreign vendor / principal must be filled-in the Table-3 and authorization letter must be submitted with technical bid:

<u>Table-3</u> <u>Complete details of foreign vendor (in case of USD quote</u> )		
Name and address of the foreign principal vendor $\rightarrow$		
Authorization letter from foreign vendor attached $(Yes / No) \rightarrow$		
Bank Details of the foreign vendor →		
Price Basis for Items (quoted in USD) → (DDP-IISc Challekere OR CIP-Bangalore)		
Payment terms for Import items (Letter of Credit / 100% after complete supply and installation – write any one clearly) $\rightarrow$		
Country of Origin →		
Part-shipment Allowed (Yes / No) →		
Mode of Shipment (Sea-freight / Air-freight) →		

### <u>Annexure - 4</u> Format for Bank Guarantee for Performance Security (Performance Bank Guarantee)

### (to be submitted by the successful bidder after placement of the purchase order)

India	egistrar n Institute of Science (I.I.Sc.) alore – 560 012 ataka	
Subje	ct: Performance Bank Guarantee (PBG)	
Refer	ence: I.I.Sc. Purchase Order No	, dated
Dear	Sir,	
1.	We hereby issue a Bank Guarantee as follows: -	
	Bank Guarantee No	Date:
	Amount of Guarantee Rs,	
	Guarantee covers From	To
	Last Date for Lodgement of Claim:	
2.	e. This deed of Guarantee executed by the (Name of the Bank:	
3.	In consideration of The Registrar, Indian Institu (hereinafter called I.I.Sc.) having entered into a Order No. date	an agreement vide IISc's Purchase

(hereinafter called the Supplier) to carry out the supply and

per their above order, the Supplier agreed to execute a Bank Guarantee for 10% of the total order value viz. Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_\_\_) towards Performance Security / Performance Guarantee obligation for a period of \_\_\_\_ year(s) / month(s) from \_\_\_\_\_\_\_to\_\_\_\_\_.

- 4. We, the \_\_\_\_\_\_ Bank, \_\_\_\_\_\_ Branch (hereinafter referred to as a Guarantor) at the request of the supplier, irrevocably undertake to indemnify and to keep indemnify I.I.Sc. without any demur to the extent of Rs. \_\_\_\_\_\_ (Rupees \_\_\_\_\_\_) in the event of the aforesaid Supplier failing to comply the Warranty / contractual Obligations as per the agreed terms to the full satisfaction of the Company as mentioned in the I.I.Sc.'s purchase order.
- NOW THIS BANK HEREBY GUARANTEES that in the event of the said Supplier failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / Machinery / service, etc. this Bank shall pay to Indian Institute of Science, Bangalore on demand and without protest or demur Rs \_\_\_\_\_\_ (Rupees \_\_\_\_\_\_).
- 6. We \_\_\_\_\_\_ Bank, further agree that the Guarantee herein contained shall remain in full force and affect during the period that would be taken for the performance of the equipment and / or services as stated in the Purchase Order issued by I.I.Sc. and that it shall continue to be enforceable till the completion of the period and certified that warranty and contractual obligations have been fully carried out by the supplier and accordingly discharges the Guarantee subject. However, I.I.Sc. shall have no right under after the expiry of the Guarantee, i.e. \_\_\_\_\_ (date).
- 7. We, \_\_\_\_\_\_ Bank undertake not to revoke this Guarantee, during its currency except with the previous consent of I.I.Sc. in writing.
- - (b) This Bank Guarantee shall be valid up to \_\_\_\_\_\_.
  - (c) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if I.I.Sc. serve upon us a written claim or demand on or before expiry of date (i.e.\_\_\_\_\_).

- 9. NOTWITHSTANDING anything contained herein above, our liability under this Guarantee is restricted to Rs. \_\_\_\_\_\_ (Rupees \_\_\_\_\_\_\_ only). Our guarantee shall remain in force until, unless a Demand or claim under the guarantee is made on our Bank in writing on or before \_\_\_\_\_\_, all your rights under the said guarantee be forfeited and we shall be relieved and discharged from all liabilities thereunder.
- 10. This Bank further agrees that the decision of Indian Institute of Science, Bangalore as to whether the said Supplier has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.
- 11. This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at \_\_\_\_\_\_ situated at \_\_\_\_\_\_ (Address of local branch) as following details:

Name of the Bank	
Branch Name	
Branch Code	
IFSC Code	
E-mail Id	
Phone / Mobile No.	

Seal & Signature of the Bank

### Annexure - 5: Bid Securing Declaration

#### (on the non-judicial stamp paper and must be NOTARIZED)

(to be submitted with Technical Bid by the bidders not submitting Bid Security / EMD)

То

The Registrar, Indian Institute of Science (IISc), Bangalore - 560012 (India)

Sir,

I / We, ....., hereby submit my / our bid with reference to your notice inviting tender no. -....

I / We, the undersigned on behalf of the bidder ....., hereby declare that:

- I. I / We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration for the bidders not submitting Bid Security / Earnest Money Deposit.
- II.

I / We accept that I / We will be blacklisted and debarred from bidding for any tender / contract with Indian Institute of Science (IISc), Bangalore forever, if I am / We are in a breach of any obligation under the tender / bid conditions, because I / We

- a) have withdrawn / modified / amended, impairs or derogates from the tender, my / our Bid during the period of bid validity or during extended bid validity period as specified in the tender document; OR
- withdraw the proposal or increases the quoted prices or change in technical specifications / brand / model etc. of the item after opening of the bid during the period of Bid validity period or its extended period, OR
- c) having been notified of the acceptance of our Bid by the purchaser (IISc) or a purchase order is placed on us by IISc during the period of bid validity or during extended bid validity, and I / we
  - 1. fail or refuse to execute the contract / purchase order, or
  - 2. fail or refuse to furnish the Performance Security, in accordance with the tender condition / purchase order, OR
- d) indulge in any act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization during the bid process
- III. IISc, Bangalore may inform about our debarment / blacklisting in the form of notice on its website / CPPP / any other organization, if I / we are debarred / blacklisted.
- IV. I / we will pay fine of an amount equal to the amount of Bid Security / EMD of this tender, within fifteen (15) days from receipt of the written demand by IISc, Bangalore if I / we are debarred / blacklisted due to the enforcement of this bid securing declaration.
- V. I / We understand this Bid Securing Declaration shall cease to be valid if I am / we are not the successful Bidder, upon the purchase order is placed on another bidder / vendor.

Seal and Signature with Date of the authorized signatory of the bidder

Name and Designation