

Notice Inviting Tender

Supply and Installation of 5 axis CNC Machine

Tender No: CPDM/ACB/2018-19/03



INDIAN INSTITUTE OF
SCIENCE

**Centre for Product Design and Manufacturing
Indian Institute of Science
Bangalore – 560012**

July 2018

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SECTION 1 – BID SCHEDULE

1	Tender No	CPDM/ACB/2018-19/03
2	Tender Date	30th July 2018
3	Item Description	Supply and Installation of 5 axis CNC Machine
4	Tender Type	Two Bid System a) Technical Bid (Part-A) b) Commercial Bid (Part-B)
5	Place of Submission and tender opening	The Chairman Centre for Product Design and Manufacturing Indian Institute of Science, Bangalore – 560012, India
6	Last Date & Time for submission of tender	13th Aug 2018, 1700 hrs
7	For further clarifications	The Chairman Centre for Product Design and Manufacturing Indian Institute of Science, Bangalore – 560012, India Email: <i>chair.cpdm@iisc.ac.in</i> with copy to <i>venuallam@iisc.ac.in</i>

SECTION 2 – ELIGIBILITY CRITERIA

Prequalification criteria:

1. The Bidder's firm should have existence for a minimum of 3 years. (Enclose Company **Registration Certificate**)
2. The Bidder should have qualified technical service personnel for the instrument(s) based in India.
3. 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.
4. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.
5. The payment will be through a Letter of Credit.
6. The Bidder must not be blacklisted/banned/suspended or have a record of any service related dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 3.

SECTION 3 – TERMS AND CONDITIONS

A) Submission of Tender:

1. All documentations in the tender should be in English.
2. Tender should be submitted in two envelopes (two bid system).
 - a. **Technical Bid (Part-A) –**
Technical bid consisting of all technical details, check list for conformance to specifications, format in which the price bid is quoted without the actual prices (suppliers who include any indication of prices in the technical bid will be automatically disqualified).
 - b. **Commercial Bid (Part-B) –**
Indicating item wise price for the items mentioned in the technical ~~bid~~, bid, as per the format of quotation provided in tender ,and other commercial terms and conditions
3. The technical bid and price bid should each be placed in a sealed cover, superscripting on both the envelopes the tender no. and the due date and Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscripted with the Tender No & Due Date.
4. The SEALED COVER superscripting tender number / due date & should reach The Chairman, Centre for Product Design and Manufacturing, Indian Institute of Science, Bangalore – 560012, India on or before due date mentioned in the tender notice. In case due date happens to be holiday the tender will be accepted and opened on the next working day.

If the quotation cover is not sealed, it will be rejected.

5. All communications are to be addressed to- The Chairman, Centre for Product Design and Manufacturing, Indian Institute of Science, Bangalore – 560012, India.
6. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document (Indian Bidders only).
7. If price is not quoted in Commercial Bid as provided in tender document the bid is liable to be rejected.
8. The Institute reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without there by incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.
9. Incomplete bids will be summarily rejected.

B) Cancellation of Tender:

Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

- a. To accept OR reject lowest tender or any other tender or all the tenders.
- b. To accept any tender in full or in part.
- c. To reject the tender, offer not confirming to the tender terms.

C) Validity of the Offer:

The offer shall be valid 90 Days from the date of opening of the commercial bid.

D) Evaluation of Offer:

1. The technical bid (Part A) will be opened first and evaluated.
2. Bidders meeting the required criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
3. Pre-qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision in regard to acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and decision in this regard shall be binding on the bidders.
4. The award of contract will be subject to acceptance of the terms and conditions stated in this tender.
5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
 - a. Non-submission of complete offers.
 - b. Receipt of bids after due date and time and or by email / fax (unless specified otherwise).
 - c. Receipt of bids in open conditions.
6. In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore shall construe that the BIDDER had accepted the clauses as of the tender and no further claim will be entertained.
7. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
8. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories for installation, operation, pre-processing and post processing, optional items, recommended **spares, warranty spares, warranty.**

E) Pre-requisites:

The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

F) Mode of Shipment:

In case of foreign bidders, the consignment must be airlifted, insured and transported to the installation site by the bidder. Necessary custom

clearance will be done by IISc, Bangalore, at Bangalore International Airport.

G) Customs clearance:

The IISc, Bangalore will furnish the necessary papers for the import of items into India, necessary custom duty exemption certificate and other supporting documents to facilitate the import of the items will be provided.

H) Warranty:

The complete system is to be under warranty period of 3 years 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, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

I) Annual Maintenance Contract:

An annual maintenance contract cost will be negotiated on completion of warranty period. The bidder shall provide an annual maintenance cost.

J) Purchase Order:

1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.
3. If the quality of the product and service provided is not found satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.

K) Delivery and Installation:

The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore from the date of receipt of purchase order. The system should be delivered, installed and made functional within 120 days from the date of receipt of purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore. After successful installation and inspection, the date of taking over of entire system by the IISc, Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed.

L) Payment Terms:

The payment will be through a Letter of Credit and the terms of payment are negotiable.

M) Statutory Variation:

Any statutory increase in the taxes and duties subsequent to bidder's offer, if it takes place within the original contractual delivery date, will be borne

by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.

N) Disputes and Jurisdiction:

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.

O) General:

1. All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.
2. 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.
3. The bidder may visit the installation site before submission of tender, with prior intimation.
4. All imported equipment should be quoted in the currency of the country of origin, and all locally sourced items should be quoted in Indian Rupees.
5. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.

Section – 4 – Technical Specifications

A) Technical Specifications of **5 axis CNC Machine**:

5 Axis CNC Machine Technical Specifications			
Sl No	Parameters	Specifications	Essential/Desirable
1	Type of CNC machine	Simultaneous 5-axis vertical	Essential
2	Travel in X, Y & Z axes	>= 350 mm on each axis	Essential
3	B-axis swivel range	-5° / +100° or more	Essential
4	B-axis swivel speed	>= 20 rpm	Essential
5	C-axis swivel range	360 °	Essential
6	C-axis swivel speed	>= 20 rpm	Essential
7	Max spindle speed	>= 10000 rpm	Essential
8	Positioning accuracy	<= 0.015 mm	Essential
9	Repeatability	<= 0.005 mm	Essential
10	Feed Traverse speed	>= 40 m/min	Essential
11	Max table load	>= 200kg	Essential
12	Tool magazine pockets	>= 24	Essential
13	Max space available for Operation and Maintenance, including accessories	<= 6000 x 5000 x 3000 mm (L x W x H)	Essential
14	Safety Measures	Failsafe systems to protect the machine, tools and operators. Protection from power failure or fluctuation. Protective cabin with visibility of operation.	Essential
15	Connectivity and Data Logging	Ability to tap raw data to external computer for real-time analytics. Remote access through LAN (Wi-Fi desirable).	Essential
16	Spindle drive	Inline (direct-drive) spindle	Essential
		Built-in motorised spindle	Desirable
18	Cooling shall be available for all core components	Spindle, ball screw nuts, guideways and table bearings. Internal coolant supply for tools. Cooling for table bearings (B and C-	Essential

		axes).	
19	Guide way type	Roller Linear Motion Guideways	Essential
20	Tool changer type	Automatic and manual	Essential
21	Position measurement	Direct Measurement, through absolute Linear and Rotary Encoders	Essential
22	Machine shall comprise of	Chip evacuation system	Essential
		Tool condition monitoring	Essential
		Hydraulic / Pneumatic work piece clamping	Essential
		HSK tool holder	Essential

B) Accessories:

The bidder shall supply the below items along with the machine:

1. Recommended spare parts with specifications.
2. Integrated computer with the software's pre-installed to run the **Supply and Installation of 5 axis CNC Machine** Operational manuals and maintenance manuals.
3. Two copies of the operational software (in hard disks) should be made available.
4. Special and essential Infrastructure requirements.
5. Provisions required for exhaust arising from the operation of the machine to be cleaned and removed from the premises.

C) Training and demonstration:

Training on usage of the machine (hardware and software) must be demonstrated by the successful bidder at bidder's cost of at least two individuals at IISc, Bangalore.

Section 5: Technical Bid

The technical bid should furnish all requirements of the tender along with all annexure in this section and submitted to

**The Chairman
Centre for Product Design and Manufacturing
Indian Institute of Science
Bangalore – 560012, India**

Annexure-1:

Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Details of the Bidder		
SI No	Name of the Bidder	
1	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
2	Registration No/ Trade License, (if any attach copy)	
3	Registered Office Address	
4	Address for Communication	
5	Contact person- Name and Designation	
6	Telephone No	
7	Email ID Website	
8	PAN No.(attach copy) -if applicable	
9	GST No.(attach copy) -if applicable	

Signature of the Bidder

Name

Designation, Seal

Date:

Annexure-2:

Declaration regarding experience

To,

The Chairman
Centre for Product Design and Manufacturing
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXXXXXX

Dated: XXXXX

Supply and Installation of 5 axis CNC Machine

Sir,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has ---- years of experience in supplying and installing **5 axis CNC Machine Laser Powder Blown Additive Manufacturing System** of this class.

(Signature of the Bidder)

Printed Name

Designation, Seal

Date:

Annexure-3:

Declaration regarding track record

To,

The Chairman
Centre for Product Design and Manufacturing
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXXXX

Dated: XXXXX

Supply and Installation of 5 axis CNC Machine

Sir,

I've carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company/ firm is not currently debarred / blacklisted by any Government / Semi Government organizations / institutions in India or abroad. I further certify that I'm competent officer in my company / firm to make this declaration.

Or

I declare the following

Sl.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
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(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).

Yours faithfully

(Signature of the Bidder)

Name

Designation, Seal

Date:

Annexure – 4:

Declaration for acceptance of terms and conditions

To,

The Chairman
Centre for Product Design and Manufacturing
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXX

Dated: XXXX

Supply and Installation of 5 axis CNC Machine

Sir,

I've carefully gone through the Terms & Conditions as mentioned in the above-referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I'm an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)

Name

Designation, Seal

Date:

Annexure – 5:

Details of items quoted:

Company Name	
Product Name	
Part / Catalogue number	
Product description / main features	
Detailed technical specifications	
Remarks	

Instructions to bidders:

1. Bidder should provide technical specifications of the quoted product/s in detail.
2. Bidder should attach product brochures along with technical bid.
3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

Section 6: COMMERCIAL BID

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned under:

SI No	Description	Catalogue Number	Quantity	Unit Price	Sub Total
1	Instrument price I(inclusive of software)				
2	Accessories for operation and installation				
3	List and cost of consumables excluding powder for 1 year of operation				
4	Warranty (3 years)				
5	Cost of Insurance and Airfreight				
6	CIP IISc, Bengaluru				

Addressed to:

**The Chairman
Centre for Product Design and Manufacturing
Indian Institute of Science,
Bangalore – 560012, India**

SECTION 7 – CHECK LIST

(This should be enclosed with technical bid- Part A)

The following items must be checked before the Bid is submitted:

1. Envelope “A”: Technical Bid

- a) Section 5- Technical Bid (each page signed by the authorized signatory and sealed) with the below annexures:

Annexure 1: Bidders details

Annexure 2: Declaration regarding experience

Annexure 3: Declaration regarding clean track record

Annexure 4: Declaration for acceptance of terms and conditions

Annexure 5: Details of items quoted

- b) Copy of this tender document duly signed by the authorized signatory on every page and sealed.

2. Envelop “B”: Commercial Bid

Section 6: Commercial Bid

Your quotation must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) super scribing on both the envelopes with Tender No. and due date and both of these in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No. & Due Date.