Notice Inviting Tender

Supply and Installation of Multi-Jet 3D Printer
Tender No: CPDM/ACB/2023-24/007

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

Aug 2023
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Section 1 -</td>
</tr>
<tr>
<td>2</td>
<td>Section 2 -</td>
</tr>
<tr>
<td>3</td>
<td>Section 3 -</td>
</tr>
<tr>
<td>4</td>
<td>Section 4 -</td>
</tr>
<tr>
<td>5</td>
<td>Section 5 -</td>
</tr>
<tr>
<td>6</td>
<td>Section 6 -</td>
</tr>
<tr>
<td>7</td>
<td>Section 7 -</td>
</tr>
</tbody>
</table>

1. Section 1 - Bid Schedule
2. Section 2 - Eligibility Criteria
3. Section 3 - Terms and Conditions
4. Section 4 - Technical Specifications
5. Section 5 - Technical Bid
   - Annexure: 1 Bidder details
   - Annexure: 2 Declaration of regarding experience
   - Annexure: 3 Declaration of regarding clean track
   - Annexure: 4 Declaration of acceptance to tender terms and conditions
   - Annexure: 5 Details of items quoted
6. Section 6 - Commercial Bid
7. Section 7 - Check List
## SECTION 1 – BID SCHEDULE

<table>
<thead>
<tr>
<th></th>
<th>Tender No</th>
<th>CPDM/ACB/2023-24/007</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Tender Date</td>
<td>4&lt;sup&gt;th&lt;/sup&gt; Aug 2023</td>
</tr>
<tr>
<td>3</td>
<td>Item Description</td>
<td>Supply and Installation Multi-Jet 3D Printer</td>
</tr>
<tr>
<td>4</td>
<td>Tender Type</td>
<td>Two Bid System</td>
</tr>
</tbody>
</table>
| 5 | Place of Submission and tender opening | a) Technical Bid (Part-A)  
b) Commercial Bid (Part-B)  
The Chairman  
Centre for Product Design and Manufacturing  
Indian Institute of Science, Bangalore – 560012, India |
| 6 | Last Date & Time for submission of tender | 24<sup>th</sup> Aug 2023, 1700, hours |
| 7 | For further clarifications | The Chairman  
Centre for Product Design and Manufacturing  
Indian Institute of Science, Bangalore – 560012, India  
Email: chair.cpdm@iisc.ac.in  
with copy to marora@iisc.ac.in |
SECTION 2 – ELIGIBILITY CRITERIA

Prequalification criteria:

1. Quote should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
2. The quotations should be on FOR-IISc Bangalore basis in INR only.
3. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales.
   service support like AMC/CMC, etc., as local value addition.
4. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.
5. The Bidder should belong to either Class 1 or Class 2 supplier distinguished by their “local content” as defined by recent edits to GFR. They should mention clearly which class they belong to in the cover letter. Additionally, the bidder should submit – Annexure 6 with details of local contents.
   a) Class 1 supplier: Goods and services should have local content of equal to or more than 50%.
   b) Class 2 supplier: Goods and services should have local content of equal to or more than 20 % and less than 50%.
6. Purchase preference as defined by the recent edits to GFR (within the “margin of purchase preference”) will be given to Class-1 supplier.
7. The Bidder's firm should have existence for a minimum of 3 years (Enclose Company Registration Certificate).
8. The bidder should sign and submit the declaration of Acceptance of Terms and Conditions as per - Annexure 4.
9. The Bidder must be not 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 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 of 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.
10. The vendor shall include up to five testimonials from existing users of a similar system indicating performance and maintenance satisfaction.
11. The vendor must submit a list of all Indian customers (only Government of India organizations) where similar systems have been installed. References from this list can be used to disqualify vendors with a poor track record of service, build quality, system performance, or poor availability of spares. Additionally, IISc shall have the absolute right to take the opinion of other departments/institutes for their opinion/experience about the bidder’s services/sales. Based on such input, IISc may decide about the rejection of a bid of such bidder(s).
12. The vendor shall include up to five testimonials from existing users of a similar system indicating performance and maintenance satisfaction.
13. IISc reserves the right to relax any or all the above conditions without assigning any reason.

14. IISc reserves the right to verify the accuracy and seek clarification of submitted specifications after opening the technical bids. Based on such clarification, if specifications are found to be unsuitable, the technical committee reserves the right to disqualify vendors. Any discrepancy between the promised and verified specifications will be deemed as technical non-compliance.

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.
E) Pre-requisites:
The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

F) 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 must be replaced or rectified at the cost of the bidder within 5 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the Vendor shall provide 3D printing services on an equivalent machine to IISc during such period at its cost and the warranty period shall be correspondingly extended. During the warranty period the Vendor shall periodically conduct the maintenance activities (at least once in three months) to ensure that smooth operation and running of the machine.

G) Annual Maintenance Contract(AMC):
During the annual maintenance contact period vendor will be responsible for free supply of spare parts and labour from the date of functional installation. If the instrument is found to be defective, it must be replaced or rectified at the cost of the bidder within 5 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the Vendor shall provide 3D printing services on an equivalent machine to IISc during such period at its cost and the maintenance contract shall be correspondingly extended. During the maintenance contact period the Vendor shall periodically conduct the maintenance activities (at least once in three months) to ensure that smooth operation and running of the machine. The bidder shall provide an annual maintenance cost. The AMC will not be the part of the current order but its value as quoted is non negotiable after three years for a period of one year. The vendor shall hold the quoted price towards AMC for one year after the warranty period.

H) 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.

I) 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 30 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.
J) Payment Terms:
The payment will be through a Letter of Credit and the terms of payment are negotiable.

K) 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.

L) 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.

M) 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 later, 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 Multi-Jet 3D Printer

<table>
<thead>
<tr>
<th>TECHNICAL PROPERTIES</th>
<th>Requirements</th>
<th>Essential/Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing technology</td>
<td>Multi/Poly jet for Polymer printing</td>
<td>Essential</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>18-24 degree Celsius</td>
<td>Essential</td>
</tr>
<tr>
<td></td>
<td>15-30 degree Celsius</td>
<td>Desirable</td>
</tr>
<tr>
<td>Operating humidity</td>
<td>30-70% relative humidity</td>
<td>Essential</td>
</tr>
<tr>
<td></td>
<td>20-80% relative humidity</td>
<td>Desirable</td>
</tr>
<tr>
<td>Supports</td>
<td>No support needed or dissolvable support</td>
<td>Essential</td>
</tr>
<tr>
<td>Post processing</td>
<td>Post processing machine (if required) must be included</td>
<td>Essential</td>
</tr>
</tbody>
</table>

## PRINTING SPECIFICATIONS

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Build volume (XxYxZ)</td>
<td>&gt;200x200x125mm</td>
<td>Essential</td>
</tr>
<tr>
<td>Accuracy</td>
<td>± (0.025mm per 25.4 mm) of part dimension in X,Y and Z direction (even on support side)</td>
<td>Essential</td>
</tr>
</tbody>
</table>

## MATERIALS

<table>
<thead>
<tr>
<th>Build materials</th>
<th>Engineering plastics</th>
<th>Bio-compatible plastics (with ISO 10993/USP Class VI or equivalent certifications)</th>
<th>Essential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elastomeric</td>
<td>Rigid plastics</td>
<td>Essential</td>
</tr>
</tbody>
</table>

## SOFTWARE AND NETWORK

<table>
<thead>
<tr>
<th>Cloud monitoring and print capability</th>
<th>Yes</th>
<th>Essential</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS support</td>
<td>Windows® 7, Windows 8 or Windows 8.1 (Service Pack), Windows 10, Windows 11</td>
<td>Essential</td>
</tr>
<tr>
<td>Input data files supported</td>
<td>STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, IGES, IGS, STEP, STP, MJPDDD</td>
<td>Essential</td>
</tr>
</tbody>
</table>

## OTHER REQUIREMENTS

(Applicable to 3D printer and post-processing equipment)

1. Setup and installation included.
2. Warranty: At least 3 years.
3. Warranty and Annual maintenance terms as per section 3.H & 3.I
4. Spare part availability for at least 10 years. No obsolescence.

## 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 Multi Jet 3D printer 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 annexures (1 to 5) given below and to be submitted to the following address in a sealed cover.

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:

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Name of the Bidder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nature of Bidder&lt;br&gt;(Attach attested copy of Certificate of Incorporation/ Partnership Deed)</td>
</tr>
<tr>
<td>2</td>
<td>Registration No/ Trade License, (if any attach copy)</td>
</tr>
<tr>
<td>3</td>
<td>Registered Office Address</td>
</tr>
<tr>
<td>4</td>
<td>Address for Communication</td>
</tr>
<tr>
<td>5</td>
<td>Contact person- Name and Designation</td>
</tr>
<tr>
<td>6</td>
<td>Telephone No</td>
</tr>
<tr>
<td>7</td>
<td>Email ID &amp; Website</td>
</tr>
<tr>
<td>8</td>
<td>PAN No.(attach copy)</td>
</tr>
<tr>
<td>9</td>
<td>GST No.(attach copy)</td>
</tr>
</tbody>
</table>

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: XXXXXXXX
Dated: XXXXX

Supply and Installation of Multi Jet 3D Printer

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 installation of Multi Jet 3D printer.

(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: XXXXXX
Dated: XXXX

Supply and Installation of Multi Jet 3D Printer

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.

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Country in which the company is debarred/blacklisted/case is pending</th>
<th>Black listed/Debarred by Government/Semi Government/organisations/Institutions</th>
<th>Reason</th>
<th>Since When and How long</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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: XXXXX
Dated: XXXX

Supply and Installation of Multi Jet 3D Printer

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:

<table>
<thead>
<tr>
<th>Company Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td></td>
</tr>
<tr>
<td>Part / Catalogue number</td>
<td></td>
</tr>
<tr>
<td>Part / Catalogue number</td>
<td></td>
</tr>
<tr>
<td>Detailed technical specifications</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Description</th>
<th>Catalogue Number</th>
<th>Quantity</th>
<th>Unit Price</th>
<th>Sub Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Instrument price (inclusive of software)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Accessories for operation and installation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>List and cost of consumables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Warranty (3 years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cost of Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>FOR IISc, Bengaluru</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Grand Total

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. Envelope “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.

------------------------------------------------------------------------------------------

Specification reviewed and approved by purchase committee:

Prof. Manish Arora                      Dr. Shivakumar N D

Dr. Souradeep Gupta                   Ms. Aparna Kandi

Prof. Amaresh Chakrabarti

------------------------------------------------------------------------------------------