

# TENDER FOR 3D PRINTER FOR PERMANENT CAMPUS OF THE INSTITUTE AT OKHLA PHASE-III, NEW DELHI-110020

(Tender no. IIITD/ECE/3D Printer /036/2024-25)

#### **INVITIATION FOR BIDS**

Indraprastha Institute of Information Technology -Delhi (IIITD), a State University created by an Act of Govt. of NCT of Delhi, invites sealed bids for 3D Printer (as per specifications mentioned under Scope of Work below) for its campus at Okhla Phase-III New Delhi-110020.

- 1. An amount of ₹ 25,000/- (₹ Twenty Five Thousand Only only) towards earnest money (EMD) must be deposited in the form of demand draft in favor of "IIIT-Delhi Collections" account, payable at New Delhi. No interest will be paid on the earnest money deposited by the bidder. Tender Document without earnest money will be summarily rejected. EMD is exempted for MSMEs/NSIC registered suppliers
- 2. The tender document can be downloaded from the Institute's website, may please deposit non-refundable Tender Document Fee of Rs.1,000/-+GST extra i.e.(Rs. 1,180/-) (Rupees One Thousand one Hundred Eighty only) in the form of Demand draft drawn in favour of IIIT-Delhi Collections", payable at New Delhi or may deposit Rs.1,180/-with the F&A division of the Institute and enclose the receipt with the filled up tender document.
- 3. The Extended last date for submission of bid is 13<sup>th</sup> February, 2025 up to 3:00 PM. The Technical bids shall be opened on the same day i.e. 13<sup>th</sup> February, 2025 up to 3. 30PM. The Tender Document should be addressed to:

Registrar, Indraprastha Institute of Information Technology-Delhi Okhla Phase-III (Behind Govind Puri Metro Station) New Delhi-110020.

The document may be deposited in the Tender Box kept in the Store & Purchase department at the A Wing Room no. 107, First Floor, Store & Purchase Deptt. Old Academic Block of the Institute. Bids received after 3:00 PM will not be accepted or considered under any circumstances.

# **Bidding Procedure:**

- 1. Bids are invited in Two Bids System i.e. (1) Technical and (2) Financial.

  Technical and Financial bids should be sealed separately and enclosed in a sealed envelope clearly indicating separately Technical Bid and Financial Bid for "3D Printer" addressed to Registrar IIIT-Delhi, Okhla Industrial Area Phase-III, New Delhi-110020.
- 2. Sealed quotations shall be received not later than 3.00 P.M. on 13<sup>th</sup> February, 2025. No bids will be accepted after this date & time under any circumstances. The Institute will not be responsible for any postal/courier delay and also for reasons beyond control of the Institute.
- 3. Technical bids must contain the EMD for specified amount, along with complete technical details as desired by this tender. Technical bids of all the bidders will be opened on pre scheduled date, time & venue. Technical bids without EMD will be summarily rejected. The financial bid will be opened after evaluation of the technical bid. Financial bid of only those meeting the requirement of the Institute will be opened and no representation in this regard will be entertained. The date, time of opening of financial bid will be communicated later.

# Scope of Work-3D printer

Fused Filament based 3D Object Fabricator Specification					
1	Fabrication Technology	Fused Filament Fabrication (FFF)			
2	Fabrication head	Dual extrusion head with auto nozzle lifting system and swappable feeder nozzle of different sizes. (Ref. serial number 26 for details)			
3	Build Volume	XYZ: 300 X 230 X 290 mm or bigger			
4	Filament diameter	2.85 mm			
5	Layer resolution	20 microns to 600 microns			
6	XYZ resolution	7, 7, 3 micron or better			
7	Min. layer thickness	0.06 mm			
8	Print speed	Upto 23mm³/s			
9	Print acceleration	Upto 3500 mm/s <sup>2</sup>			
10	Build Platform	Reusable Heated Glass/ Aluminum Build Plate			
11	Build Platform temperature	30 - 140 °C adjustable with 1 °C resolution			
12	Build Platform levelling	Automatic and active bed levelling with the help of capacitive sensor			
13	Build plate heat up time	< 4min from 20°C to 60 °C			
14	Nozzle heat up time	< 2 minutes			
15	Operating sound	< 51 dBA			
16	Operating Ambient Temperature	15 - 32 °C , 10-90% RH non- condensing			
17	Compatible Materials	PLA, Tough PLA, ABS, Nylon, CPE, CPE+, PP, PC, TPU 95A, PVA, composite materials etc. Compatible with over 200 materials.			
18	Advanced materials	Must be upgradable to Metal (Green part) 3D Printing solution			
19	Soluble support material	Water soluble & Chemical free support removal process			
20	Dedicated breakaway support material	Support material should be easy and quick to remove (Tear/ Pull / Peel).			
21	Additional materials	Should support third party filaments with 2.85mm diameter			
22	Feeder mechanism	Dual-geared, abrasion- resistance, reinforced for composite materials & Bowden tube.			
23	Feeder Nozzle Diameter	Must support the following diameters - 0.25mm, 0.4mm, 0.6mm, 0.8 mm			
24	Feeder Nozzle Temperature	User adjustable 180 °C to 280 °C			
25	Material Recognition	Auto recognition with NFC scanner			
26	Material runout sensor	Dedicated sensor per material bay			
27	Filament Flow sensor	Dedicated sensor per extruder			
28	Connectivity	WiFi, LAN, USB port (accessible through LCD screen)			
29	Display	4.7" (11.9 cm) colour touchscreen			
	Supported 3D CAD File Types	STL, OBJ, X3D, 3MF, BMP, JPG, PNG			

31	Printable format	G, GCODE, UFP	
32	Print Monitoring (Live)	Integrated vision sensor with software support (view from desktop or app)	
33	Remote print control	Start, Stop, Pause & fine tune print setting from desktop or through dedicated mobile application.	
34	Printer Management	Cloud based access to printer within the organization. Should have the ability to share printer, create teams, set access rights and print job approval steps to control what is printed.	
35	Software	Print preparation software to be provided with automatic air and filament manager control system. Software should be capable of automatic support structure generation. Should include remote printing and monitoring capability.  Should have predefined profile settings for more than 45 materials like Ensinger, infinite, BASF, Arkema, DSM, Lehvoss, Jabil, Igus,	
		Owens Corning, Kimya, Clariant, Polymaker, Solvay Solef, Mitsubishi, Lubrizol etc.	
36	Electrical safety	Product should undergo & pass testing according to the IEC 60950-1 and/or IEC 62368-1. Product should undergo and pass Hi-pot testing before shipment.	
37	Mechanical safety	Product should be compliant with the Machine Directive 2006/42/EU	
38	Certification	Product should be BIS, WPC, CE, EU, ROHS certified. Certificates to be provided. ISO 9001: The bidder or the OEM of the offered product must have ISO 9001 certification.	
39	Additional Requirements	1. Bidder should be OEM or OEM authorized Indian representative. In case of authorized representative: OEM authorization to be Provided.	
		2. Bidder should have a 3-year proven record of sales of same or similar category product to reputed Government, research organizations and educational institutes. Relevant proof of the same should be enclosed.	

## **Minimum Eligibility Requirement:**

- Bidder should be OEM/Authorized Partner/service provider of the OEM. In case the bidder is an Authorized Partner or Service Provider a valid Agency-ship/Dealership Certificate (MAF specific to this tender) to quote on behalf of OEM should also be enclosed along with the technical bid. A document in support of this must be enclosed. Bidder should also need to submit Technical Compliance on OEM Letterhead with singed and stamp with the Technical Bid.
- 2 OEM/bidders should have Sales and support office in Country. <u>A self-certified</u> document in support of this must be enclosed.
- 3 OEM/bidder should have service and support office in Delhi NCR. <u>A self-certified</u> document in support of this must be enclosed.
- The warranty provided by the bidder should have a back to back arrangement with the OEM. The declaration should be the part of a Letter of Authorization and signed by competent authority at the OEM.
- The bidder should be ISO 9001 or better certified. **A copy of ISO Certificate should be enclosed.**
- 6 The bidder should have support centre with minimum 3 relevant support/network engineers. A self-certified document in support of this must be enclosed.
- 7 The vendor/OEM should be able to provide 24x7 NOC & Tele support of their own if required by IIITD at agreed terms. A self-certified document in support of this must be enclosed.
- 8 The bidder shall provide the Registration number of the firm along with the valid GST number with PAN Number allotted by the competent authorities. **A self-certified document in support of this must be enclosed.**
- 9 The bidder must not be blacklisted by Central Government, State Government or Government of Corporations in India. A certificate or undertaking to this effect must be submitted.
- 10 If the bidder is an authorized partner or service provider of an OEM, <u>an undertaking from the OEM is required</u> (please enclose) stating that they would facilitate the bidder on a regular basis with technology/product updates and extends support for the warranty as well.
- 11 The bidder must be responsible for supply, deploy and support the infrastructure.
- 12 If vendor /OEM do not meet its SLA, IIITD put the fine of 5000/- Rs per day for first seven days and @ Rs.8, 000/- per day from 8<sup>th</sup> day onwards will be levied.
- 13 Bidders can seek clarifications, raise technical queries etc. related to tender by 07-02-2025 via email to **tenders@iiitd.ac.in** & **ajay@iiitd.ac.in**. The replay to clarifications sought or queries raised will be replied within 6-7 days by 07-02-2025 and uploaded on the website of the institute under www.iiitd.ac.in Based on this the bidders may submit bids as prescribed by the due date the time. No clarifications in any other form will be provided.
- 14. The bidder/tenderer shall submit an undertaking on its letter head, duly signed and stamped, that none of the staff, faculty members, relatives, etc. of the Indraprastha Institute of Information Technology-Delhi are related directly or indirectly to any employees, Directors, or Key Managerial Personnel, etc. of the bidder/tenderer. In the event of the IIIT-D coming to know or pointed about the same, the bidder/tenderer undertakes to deposit a sum of Rs.1,00,000/- (Rs. One Lakh only) as a penalty with the Institute. Such bidders/tenderers shall be liable to be blacklisted and announced on the website of IIIT-D.

# Following information must accompany the financial bid:

1	Name, address and telephone number	
	of the firm/company	
2	Name of the contact person and contact	
	details (mobile/telephone number etc.)	
3	Name of the Bank and full address	
4	Bank Account Number	
5	PAN & GSTIN (Attach self-certified copy)	
6	Copy of Partnership Deed/ Certificate of	
	registration of company or any other	
	document evidencing registration of the	
	bidder	
7	Number of Years of Experience	
8	Details of DD	
	towards: Tender Fee:	
	EMD:	
9	Provide the previous PO's of the similar	
	items work executed during last three	
	years (attested copies of the Orders to be	
	enclosed)	
10	List of service canters, nearest location	
	of support centre.	
11	Turnover of the bidder in the financial	
	years:	
	2021-22	
	2022-23	
	2023-24	
	Please attach CA certified copy of	
	the turnover.	

I /We hereby certify that the information furnished above is full and correct to the best of my/our knowledge.

(Signature of the au	thorized Signatory
Name:	
Office Seal.	

Date: Place:

#### **TERMS AND CONDITIONS**

- 1. The financial bid should be valid for a period of not less than 60 days from the date of opening of bid.
- 2. Upon placing of the Purchase Order (PO), the successful bidder is required to submit performance Bank guarantee (PBG) equivalent to 5% of the PO value within 15 days of the date of PO, failing which the EMD amount will be forfeited and the bidder shall be notified as blacklisted. The PBG shall be valid for a period of 60 months from date of purchase order. No interest is payable on the PBG.
- 3 The product to be supplied within a period of 6-8 weeks from the date of the Purchase Order by the Institute.
- The bidder should have their own test and repair facility with certified engineers.
- 5 PBG will be realized by IIIT-D in case of termination of the contract for unsatisfactory performance and/or non-performance of the contract.
- Bids will be opened in the presence of bidder's representatives, who choose to attend on the specified date and time. Only one representative shall be allowed to attend.
- Sealed bid can be sent either by post or by messenger. The responsibility of delivery of bid lies entirely with the bidder.
- 8 The quotes must be CIP IIIT Delhi, India. So, please include cost of shipping, insurance and other cost.
- 9 IIIT Delhi reserves the right to choose the L1 based on the price quoted based on the technical compliance and funds available.
- 10 100% payment will be released only on satisfactory installation as per scope of work as certified by officer in charge of the Institute and after producing the GST invoice. Bidder does not agree to above payment terms are requested not to submit their bid.
- Payment will be paid only if required SLA as mentioned in scope of work is met.
- If the goods are found to be defective, they have to be replaced / rectified at the cost of the supplier within 15 days from the date of receipt of written communication from us. If there is any delay in replacement / rectification, the warranty period should be correspondingly extended.
- In the event of dispute, Director, IIIT-Delhi shall be the sole arbitrator and his decision shall be final and binding on both the parties.
- IIIT-Delhi does not bind itself to accept the lowest or any other offer and reserves the right to accept or reject any or all the offers either in full or in part without assigning any reason.
- In case the bidder is not able to execute the Work as per terms, EMD/PBG shall be forfeited.
- The bidder must be an ISO-9000 certified organization.
- The bidder should be Original Equipment Manufacturer (OEM) or authorized service provider of the OEM (attach documentary proof). The authorization issued by the OEM must be valid and enclosed.

- Bidder must submit an attested copy of every page of the tender
- Bidder should provide details of its support, certification to this effect from the OEM. If vendor /OEM fails to meet the SLAs, a fine of 5000/- Rs per day for first seven days and @ Rs.8,000/- per day from 8th day onwards will be levied.
- 18 The selected bidder has to sign an agreement with IIITD on a stamp paper after issue of Purchase/Work order. The agreement is attached Annexure Y

## ADDITIONAL TERMS AND CONDITIONS

- 1.) Installation, training, commissioning at the delivery place will be handled by the vendor.
- 2.) Special screwdrivers/Special Allen keys (as required with this machine) should be there with this product, required to open the machine parts
- 3.) Both types of print cores (AA/BB) should be included with this product, along with the associated company accessories box
- 4.) The system should be supplied as integrated unit in a ready-to-use condition.
- 5.) The system must be supplied with the required software for slicing and fabrication of 3d objects.
- 6.) System must be compatible with 230 volt, 50 Hz power supply.

#### PROFORMA FOR FINANCIAL BID

S. No.	Details	Qty.	*All Inclusive Cost (Inclusive of GST) (Please quote in INR only)*			
	Supply and installation 3D (As per tender scope of Work)	01				
1						
2	Discount, if any					
3	Total Amount ₹. (all Inclusive of GST)					
	Total Final Cost (in figures) with Installation at IIIT Delhi campus Okhla Phase III,					
	New Delhi.					
	The Bidder may obtain price in Forex (USD) however the quote in					
	financial Bid should be INR only.					
	*If any documents are required for availing custom duty exemption, the IIITD will provide the same. Please quote price accordingly.					
		-				

Please note the price should be quoted for each of the item should be inclusive of all taxes/charges and installation at IIIT-Delhi Okhla Phase III, New Delhi.

The Bidder may obtain price in Forex(USD) however the quote in financial Bid should be INR only.

The discount, if any should be mentioned herein and nowhere else.

Total Cost (all inclusive) of quantity mentioned above (in words) at IIIT-Delhi campus:

We accept that the rate quoted above shall remain valid for a period of 60 days from the last date of the tender document i.e. 90 days from 13<sup>th</sup> February, 2025. It is certified that the rates quoted above are not more than the rates charged from any Central / State Govt. Deptt. / Institution / GeM.

(Signature and seal of the Bidder)

#### Annexure Y

### ON NON JUDICIAL STAMP PAPER OF RS 100/-

AN AGREEMENT made on day of Two Thousand Twenty-Three BETWEEN

(Hereinafter called the contractor, which expression shall include its proprietor, partners, heirs, executors, administrators, legal representatives, successors and assignees) WITH REGISTERED ADDRESS ...... of the one part AND

The REGISTRAR Indraprastha Institute of Information Technology Delhi, Okhla Industrial Area Phase III, New Delhi - 110020 (hereinafter called the IIIT-DELHI, which expression shall include its successors and assignees) of the other part.

Whereas the IIIT-DELHI had invited Bids <Please write tender name> ; vide its Bid Document No. , which shall be deemed to be a part of this agreement; FOR

THE SCOPE OF WORK/SUPPLY

Whereas the contractor submitted its TENDER Bid dated , a copy of the price bid, submitted by the contractor, is annexed hereto as Annexure;

Whereas the IIIT-DELHI has accepted the Bid submitted by the contractor, on the terms and conditions mentioned in the IIIT-DELHI's said Bid Document and conveyed its acceptance to the contractor; vide its letter No.

dated

, AND ANY OTHER CORRESPONDENCE......which shall be deemed to be a part of this agreement;

Whereas the contractor is agreeable to the terms and conditions mentioned in the IIIT-DELHI's said Bid document;

Whereas the contractor undertakes to comply with all relevant laws like Contract Labour (Regulation and Abolition) Act, 1970; Employees' State Insurance and Miscellaneous Provisions Act, 1952; Employees' State Insurance Act, 1948; Minimum Wages Act, 1948; Payment of Bonus Act, 1972; Payment of Wages Act, 1936; Income Tax Act; GST Act etc. and to indemnify the IIIT-DELHI from the contractor's acts of omission or commission, as regards the compliance with the relevant laws;

Whereas the contractor declares that he/she/it shall own all responsibility for any act of omission or commission, as regards the compliance with the relevant laws;

AND WHEREAS the IIIT-DELHI is agreeable to make necessary payment to the Contractor, at the rates mentioned in the Annexure annexed hereto and as per the terms and conditions mentioned in the IIIT-DELHI's said Bid Document;

(Signature of the authorized representative of the Contractor) Name and designation of the contractor's representative

In the presence of

1

2

(Signature of witnesses with full name and full address)

Registrar for and on behalf of the IIIT-DELHI In the presence of

2

(Signature of witnesses with full name and full address)