RFQ No.: IIC/TBI/20-21/002 Date: July 30, 2020

RFQ Due on: August 14, 2020 at 18:00 Hrs IST

Bid Opening Date: August 17, 2020

Dear Sir / Madam,

Pandit Deendayal Petroleum University (PDPU) established as a University through the PDPU Act enacted on April 04, 2007 with a vision "To emerge as a world class Institution of Excellence in Energy Education, Research and Innovation which will prepare and sensitize the youth and ultimately the society for radical yet sustainable societal transformation." The University offers programs to address the need for trained human resources in the domains of Science, technology, Management and Humanities. PDPU has NAAC Accreditation with "A" Grade (3.39 out of 4 CGPA) and has been awarded the Graded Autonomy by MHRD, Govt. of India.

PDPU Innovation & Incubation Centre (PDPU IIC) is an incubator established by PDPU, as Section 8 Company, with an aim to transform brimming energy and potential of young students, budding innovators, entrepreneurs and technocrats to innovation driven business ventures leading to technical renaissance. PDPU IIC has incubated more than 90 start-ups.

PDPU IIC invites you to submit your offer in '.pdf' format via e-mail to purchaseatiic@gmail.com & iic@pdpu.ac.in, super-scribing RFQ No.

## Specification and Scope of work for 3D Printer with filaments

The scope of work shall comprise of Design, Engineering, Supply, and Installation & Commissioning of 3D Printer with filaments. Completely packaged unit ready for installation with instrumentation & controls, as per our specifications as below:

1. 3D Printer with filaments with DLP Technology

Sr. No.	Description	Detailed specifications		
1	Quantity	1		
2	Bed Size (L x W x H)	(120 mm x 65 mm x 155 mm) or above		
3	Technology	Digital Light Processing (DLP)		
4	LED Source	HD+ UV LED Projector		
5	LED Source Life	40000 hours or higher		
6	Laser Wavelength	405 nm		
7	Layer Resolution (XY)	55 microns or lesser		

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8	Layer Resolution (Z)	50 microns or lesser	
9	Print Speed	2500 layers / hour or higher	
10	Resin	Cast able/Non-cast able	
11	UV Distortion	0.1%	
12	Curing	UV curing oven	
13	Data Import Formats	STL & STC	
14	Software Support	Perpetual License	
15	Warranty	Minimum 1 year (including projector engine)	
16	Annual Maintenance Contract	Minimum 5 years	

2. 3D Printer with filaments with FDM Technology

Sr. No.	Description	Detail specifications	
1	Quantity	2	
2	Technology	Fused Deposition Modelling (FDM)	
3	Build Volume (L x W x H)	(300 mm x 300 mm x 250 mm) or above	
4	Build Plate	Aluminium heat bed with glass top	
5	Build Plate Temperature	120°C	
6	Material support	ABS, PLA, PETG, HIPS, PVA etc.	
7	Extruder	Dual (for dual colour printing)	
8	Nozzle Diameter	0.4 mm (can be customized to 0.25 mm, 0.6 mm, 0.8 mm)	
9	Layer resolution	50 microns or lesser	
10	Extrusion Temperature	300°C	
11	Build Platform	Preheat temperature control up to 120® Build platform material may be Steel, Glassor any other suitable material that call withstand the temperature	
12	Extruder Head Positional accuracy	15µm or better	
13	Auto bed level	Machine Should have facility to have autobed level for printing precise first layer	
14	Pause & Print function	Machine Should have facility to pause and resume print manually	
15	Resurrection System in case of power Outrage	In case of power shutdown the Printer	

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		power is restored without losing any information of the print data		
16	Auto shut off	Yes (To prevent from overheating)		
17	Chamber	Closed enclosure		
18	End filament Sensor	Machine should have end filament sensor to indicate the filament completion and pause print in case of filament empty. The machine should resume the print from same position after loading new filament.		
19	Data Import Formats	The printer must be able to process STL, OBJ etc.		
20	Communication interface	USB 2.0 and SD card Printer must be standalone		
21	Front Panel	The Machine should have a control panel preferable touch screen that should indicate the progress of current job.  Should have pause, abort, start etc. general features.		
22	Safety feature	Should comply Electrical safety ISO IEC 60950-1 or equivalent.		
23	Electrical	220 V ac with Indian compatible socket.		
24	Software support	Perpetual License		
25	Warranty	Minimum 1 year		
26	Annual Maintenance Contract	Minimum 5 years		

3. 3D Printer with filaments with FDM Technology

Sr. No.	Description	Detail specifications		
1	Quantity	2		
2	Technology	Fused Deposition Modelling (FDM)		
3	Build Volume (L x W x H)	(500 mm x 500 mm x 500 mm) or above		
4	Build Plate	Aluminium heat bed with glass top		
5	Build Plate Temperature	120°C		
6	Material support	ABS, PLA, PETG, HIPS, PVA etc.		
7	Extruder	Dual (for dual colour printing)		
8	Nozzle Diameter	0.6 mm (can be customized to 0.25 mm, 0.8 mm)		
9	Layer resolution	50 microns or lesser		
10	Extrusion Temperature	300°C		
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11	Build Platform	Preheat temperature control up to 120®C Build platform material may be Steel, Glass or any other suitable material that can withstand the temperature		
12	Extruder Head Positional accuracy	15µm or better		
13	Auto bed level	Machine Should have facility to have autobed level for printing precise first layer		
14	Pause & Print function	Machine Should have facility to pause an resume print manually		
15	Resurrection System in case of power Outrage	In case of power shutdown the Printer should have inbuilt feature that enables to start the print from the same position after power is restored without losing any information of the print data		
16	Auto shut off	Yes (To prevent from overheating)		
17	Chamber	Closed enclosure		
18	End filament Sensor	Machine should have end filament sensor to indicate the filament completion and pause print in case of filament empty. The machine should resume the print from same position after loading new filament.		
19	Data Import Formats	The printer must be able to process STL, OBJ etc.		
20	Communication	USB 2.0 and SD card Printer must be standalone		
21	Front Panel	The Machine should have a control panel preferable touch screen that should indicate the progress of current job. Should have pause, abort, start etc. general features.		
22	Safety feature	Should comply Electrical safety ISO IEC 60950-1 or equivalent.		
23	Electrical	220 V ac with Indian compatible socket.		
24	Software support	Perpetual License		
25	Warranty	Minimum 1 year		
26	Annual Maintenance Contract	Minimum 5 years		
		28/2		

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## **Bid Evaluation Criteria for 3D Printer with filaments**

#### Instruction to Bidders:

 Bidder should be either a manufacturer or its authorised distributor / dealer of the quoted item. Bidder should submit valid documentary certificate/evidence for being a manufacturer or its authorised distributor/ dealer.

2. Bidder should submit a copy of purchase order for similar supply during any of the preceding three years reckoned from bid due date.

Bid Evaluation Criteria for this Bid will be as under:

## **BID EVALUATION (TECHNICAL)**

- Bidder must have supplied at least one 3D Printer with filaments to any reputed University, Institute or Incubator, during any of the preceding 3 years reckoned from bid due date.
- Documentary evidence in the form of work order & proof of supply for the above mentioned addressable 3D Printer with filaments to be submitted along with the bid.

## **BID EVALUATION (PRICE)**

## Basic guidelines:

## Bid must be submitted in two bid system:

- Offer should be submitted in two-sealed envelope namely a) Technical bid and b) Price bid. Each envelope should bear the Bid No., Closing date, Opening date, Job Title and Title ("Bid for 3D Printer with filaments") of envelope in bold letters.
- 2. The above bid should be addressed to:

Director

PDPU Innovation & Incubation Centre,

7, Amenities Centre,

Pandit Deendayal Petroleum University,

Raisan, Gandhinagar - 382007 (Gujarat)

Sr. Partic	cular	Quantity	Unit Price <sup>1</sup> (in figures & words) &
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<sup>&</sup>lt;sup>1</sup> Price to be inclusive of Taxes and all other Charges

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1	3D Printer with filaments with DLP technology	1 _	State Designation
2	3D Printer with filaments with FDM technology (300 * 300 *250 mm)	2 _	De ed taboris schips Participie e la copa
3	3D Printer with filaments with FDM technology (500 * 500 *500 mm)	2 _	Talest Milliand Ja

Price Basis: Prices shall be including taxes, Duties, P&F, Freight On Road (F.O.R.), etc. at Consignee Address

<u>Delivery Schedule</u>: The material should be delivered at consignee address within 3 to 4 weeks from the date of receipt of P.O.

<u>Terms of delivery</u>: The material shall be delivered at consignee address, on freight paid door delivery basis.

<u>Consignee Address</u>: PDPU Innovation & Incubation Centre, UG Hostel, Pandit Deendayal Petroleum University, Raisan, Gandhinagar – 382007 (Gujarat)

#### Terms of payment:

- 1. 90% payment will be released within 15 days of receipt & installation of material at consignee address, directly to your bank account.
- 2. 10% payment will be released within 15 days after completion of warranty period.

<u>Warranties</u>: The product must be warranted for applicable standard warranty period.

#### Important:

- 1. Percentage of Taxes, Duties, P&F, Freight charges etc. of quoted basic price should be clearly mentioned in the quotation.
- 2. Please submit Catalogue/Specification Details, Test Certificates/Traceability Certificate for accuracy along with your quotation.
- 3. Any deviations from RFQ proposed by bidders, if any, should be attached separately.

Yours truly,

RFQ No.: IIC/TBI/20-21/002

Date: July 30, 2020

For, PDPU Innovation & Incubation Centre

Authorized Signatory

RFQ No.: IIC/TBI/20-21/002

Date: July 30, 2020

#### SELF DECLARATION FORM

To:

Director.

PDPU Innovation & Incubation Centre

Dear Sir,

- I / we, the undersigned do hereby declare that, I / we have never ever been blacklisted and / or there were no debarring actions against us for any default in supply of material / equipments or in the performance of the contract entrusted to us.
- In the event of any such information pertaining to the aforesaid matter found at any given point of time either during the course of the contract or at the bidding stage, my bid/contract shall be liable for truncation / cancellation / termination without any notice at the sole discretion of the purchaser.

Signature of Vendor with Office Seal

