Punjab Engineering College (Deemed to be University) Chandigarh Sector 12, Chandigarh 160012



E-tender Document

for

Purchase of

3D Printer based on Continuous Fiber Fabrication (CFF)

BY DEPARTMENT OF PRODUCTION & INDUSTRIAL ENGINEERING

PUNJAB ENGINEERING COLLEGE (DEEMED TO BE UNIVERSITY), CHANDIGARH

SECTION I: INVITATION FOR E - TENDER

- 1. The Punjab Engineering College (Deemed to be University), Chandigarh invites e-bids from eligible bidders for purchase of 3D Printer based on Continuous Fiber Fabrication (CFF).
- 2. Interested eligible Bidders may obtain further information from Computer Centre, Punjab Engineering College (Deemed to be University), Sector 12, Chandigarh 160012, India.
- 3. The bidding document can be downloadable from institute website http://www.pec.ac.in http://etenders.chd.nic.in
- 4. All bids must be accompanied by an EMD as specified in the bid document and must be delivered to the office address mentioned below by the date and time indicated below.
- 5. Bids will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time.

TABLE - 1

S. No.	Name of the Work	EMD	Performance Security	
			Deposit	
1	Purchase of 3D Printer based on Continuous	40000/-	@ 5% of the value of	
	Fiber Fabrication (CFF) AS PER TABLE-3 OF SECTION-III		the contract	

TABLE - 2 Time Schedule

TABLE - 2 Time Schedule			
I	Date of publication		
I	Downloading of e-tender document	Start date: 16.02.2018	
		End date: 03.03.2018	
III	Date of submission of e-tender	Start date: 16.02.2018	
		End date: 03.03.2018	
IV	Physical submission of EMD	Start date: 16.02.2018	
		End date: 03.03.2018	
V	Opening of Technical Bid (online) and	Date: 05.03.2018 11:30 AM	
	meeting for scrutiny of technical bid and		
	declaring eligible bidders.		
VI	Opening of Financial Bid of only eligible	To be informed after checking eligibility	
	technically qualified bidder as determined by	of Bidders	
	the Committee.		
VII	Place of opening of bids	Computer Centre	
		Punjab Engineering College (Deemed to	
		be University),	
		Sector 12, Chandigarh 160012	
VIII	Address for communication	Head	
		Department of Production & Industrial	
		Engineering Punjab Engineering College	
		(Deemed to be University),	
		Sector 12, Chandigarh 160012	

Important Notes:

I.	Bidders shall have to submit their bids on-line in Electronic Format with Digital
	Signatures.
II.	All terms and conditions, instructions to bidder regarding e-tendering process etc. may kindly be seen from the Detailed Notice Inviting Tender (DNIT) available on
	Chandigarh Administration website (http://etenders.chd.nic.in) or on the Punjab
	Engineering College (Deemed to be University) institute website (www.pec.ac.in).
	The bidder has to submit the original documents in physical form such as EMD,
III.	eligibility documents and other desired documents on the date fixed for the same as
	above. The failure will entail summarily rejection of its tender.
	The undersigned reserves the rights to reject or accept any or all tenders without
IV.	assigning any reasons.

Director,

Punjab Engineering College (Deemed to be University), Sector-12, Chandigarh

PUNJAB ENGINEERING COLLEGE (DEEMED TO BE UNIVERSITY), CHANDIGARH SECTION II TERMS AND CONDITIONS OF CONTRACT

1. Qualifications for Tendering: Tenderers should possess the following qualifications:

• The Bidder should be either OEM/Authorized service partner of OEM/OEM Dealer

2. Scope of Work

 Supply of 3D printer based on Continuous Fiber Fabrication (CFF) as per table 3 of section III

3. Earnest Money Deposit:

- i. Tender have to be accompanied by an Earnest Money Deposit (EMD) of Rs.40000.00 (Rs. Forty Thousand only) in form of FDR/Demand Draft/Banker Cheque/Bank Guarantee from any commercial Bank in favor of Director, Punjab Engineering College (Deemed to be University) Chandigarh which shall be valid for 45 days beyond final bid validity period. Tender without earnest money shall be considered unresponsive and rejected.
- ii. Performance security @ 5% of the total value of contract will be obtained from the successful bidder awarded the contract in the shape of Fixed Deposited Receipt or bank guarantee from a commercial bank which should be valid for period of 60 days beyond the completion of obligations of the supplier including warranty. Performance security is to be forfeited and credited to the institute in the event of breach of contract obligation by supplier in terms of relevant contract.

4. Opening of tenders:

The PEC will open all bids, in the presence of Bidders' representatives who choose to attend, at 11:30 AM on 05.03.2018 and in the following location:

Computer Centre
Punjab Engineering College (Deemed to be University),
Sector 12 Chandigarh 160012

The Bidders' representatives who are present shall sign a register evidencing their attendance. In the event of date of opening of Tender being declared a holiday, the due date of opening of the Tender will be the next working day at the same hours and venue.

- 5. An affidavit as per specimen enclosed as Annexure 2.2 of SECTION II should accompany the tender. The tenderer who has been black-listed or his/her tenders have ever been cancelled or any legal proceedings have ever been initiated/pending or any penalty has ever been levied on account of delay or non-completion of supply order by any State/UT/Central Government, his/her tender will be out rightly rejected. A scanned copy of affidavit shall be uploaded online and in physical form along with EMD.
- 6. The bidder shall submit the covering letter (Annexure 2.1 of SECTION II) duly signed by the authorized signatory.

- 7. The details of EMD specified in the tender documents should be the same as submitted online (scanned copies) otherwise tender will be rejected.
- 8. The conditional bids shall not be considered and may be rejected out rightly in very first instance.
- 9. The financial bids through e-tendering of only those bidders shall be opened who will qualify in the technical bid criteria.
- 10. The bidder shall submit Proprietary article certificate of OEM
- 11. The bidder shall submit Rate reasonability certificate to the extent that the rates quoted by the firm are the same and not higher than those quoted with other government, public sector or private organizations.
- 12. The bidder shall submit Audited copies of Financial Statements for last three financial years i.e. 2014-15, 2015-16 & 2016-2017.
- 13. The bidder shall submit Self-attested copies of PAN/TAN Card/GST.
- 14. The bidder shall submit Authorization certificate from OEM

ANNEXURE – 2.1

From	
Subject: Submission of Tender for purchase of 3D Printer based	on Continuous Fiber
Fabrication (CFF).	
Dear Sir,	
With reference to your above-mentioned notice inviting tenders, I/We her Printer based on Continuous Fiber Fabrication (CFF) as per table 3 o Engineering College (Deemed to be University), Chandigarh. I/We shall supply the equipment truly and faithfully as set forth in the territender document. I/We shall be responsible for all complaints as regards to any dispute; the decision of the Director, Punjab Engineering College (De Chandigarh shall be final and binding on me/us. A FDR/DD NoDateddrawn onintended for the prescribed amount of Rs	f section III for Punjab ms and conditions of the o product and in case of eemed to be University).
Only) in fa	avor of Director, Punjab
Engineering College (Deemed to be University), Chandigarh, payable at Clearnest money as desired. I/WE shall have no claim to the refund of earnest money / performance set this tender in the event of my/our non-compliance of the contract, presimplemented within the period of validity of my/our tender. I/We further understand that my/our earnest money shall stand forfeited is supply of equipment's/service/violation of any term, or if I/We withdraw stage during the period of validity. My/Our tender shall remain valid for a the last date prescribed for submission of the tender against the above-metender along with terms and conditions with relevant columns and annex my/our attestation and with each page of the tender paper including to conditions signed by me/us (in the capacity of sole owner/general or special submitted for your favorable consideration. I/We have read the terms and conditions carefully and have signed the absolute and unqualified acceptance.	curity prescribed against ovided such contract is in case of unsatisfactory w my/our tender at any period of 120 days from entioned notice. My/Our ture duly filled in under the enclosed terms and cial attorney attached) is
Thanking you,	
Place	Yours faithfully,
	Signatures Date with stamp & Full Address

ANNEXURE - 2.2

(To be furnished on non-judicial stamp paper duly attested by the 1st Class Magistrate or Notary Public)

AFFIDAVIT

I/We/ M/s		are registered Company/Ltd
Company etc. as per Registra	tion Certificate No	issued
by hav	ing registered office at _	
		l manufacturing/supply base at
	do hereby	declare and solemnly affirm that I/We
		have ever been cancelled by any
•		either directly or indirectly connected
	• •	ir firm nor any legal proceedings have
•		vied due to delay of non-completion of
work/service/supply order by any S		
work service, supply order by any s	tate, e 1, central Governi	ione of by unity additionity.
Place:		DEPONENT

Dated :		
Verification		
I/We do hereby solemnly declare a	nd affirm that the above	declarations are true and correct to the
best of my knowledge and beliefs.	No part of it is false and r	othing has been concealed therein.
Place :	-	DEPONENT
Dated :		

PUNJAB ENGINEERING COLLEGE (DEEMED TO BE UNIVERSITY), CHANDIGARH

SECTION III Schedule of requirement "Technical Bid"

PRE-QUALIFING CRITERIA

FIRST COVER TITLED as "Technical Bid" should contain the Self-attested scanned copies of following with consecutive Sr. No.:-

- 1. Name of the firm/organization & address Contact person name and telephone/ Mob. No./Fax. No./ on letter pad of the company/firm.
- 2. Earnest money deposit as mentioned in Point-3 of SECTION II of this tender document.
- 3. Audited copies of Financial Statements for last three financial years i.e. 2014-15, 2015-16 and 2016-17.
- 4. Self-attested copies of PAN/TAN Card.
- 5. OEM Authorization certificate
- 6. Certificate of acceptance of terms & condition mentioned in Section II of Tender Document.
- 7. Registration Certificate of the company issued by the competent authority
- 8. Affidavit of not being Black Listed (Affidavit as per Annexure 2.2 of SECTION II)
- 9. Covering letter (Annexure 2.1 of SECTION II)
- 10. Proprietary article certificate of OEM
- 11. Rate reasonability certificate to the extent that the rates quoted by the firm are the same and not higher than those quoted with other government, public sector or private organizations.

NOTE: All the above mentioned documents should be duly in order and are essential to qualify at Technical Bid Stage.

TABLE 3 : Technical Specifications of 3D Printer based on Continuous Fiber Fabrication (CFF)

Specifications	Qty.	Delivery Schedule
The printer should be capable of continuous carbon fiber reinforcement with reliability for the strongest, & versatile end use functional parts.		
The Printer should have capability of bed clicks into place with 10 micron accuracy - allowing you to pause a print, remove the bed, add components, click the bed back in and then continue the part in the exact same position.		
CFF - Continuous Fiber Fabrication		
320 mm x 132 mm x 154 mm		
Onyx or any other Binder		
Carbon Fiber Fiberglass Kevlar HSHT Fiberglass (High-Strength High- Temperature Fiberglass) Pl specify if Printer supports any other Fiber		
100 micron or better		
3D printer and cabinet along with access to control software 800cc Onyx spool 100cc Carbon Fiber 50cc Fiberglass 50cc Kevlar 50cc HSHT Fiberglass 1 TrueBed print bed Pl list any other item required to start	01	30 Days
	The printer should be capable of continuous carbon fiber reinforcement with reliability for the strongest, & versatile end use functional parts. The Printer should have capability of bed clicks into place with 10 micron accuracy - allowing you to pause a print, remove the bed, add components, click the bed back in and then continue the part in the exact same position. CFF - Continuous Fiber Fabrication 320 mm x 132 mm x 154 mm Onyx or any other Binder Carbon Fiber Fiberglass Kevlar HSHT Fiberglass (High-Strength High-Temperature Fiberglass) Pl specify if Printer supports any other Fiber 100 micron or better 3D printer and cabinet along with access to control software 800cc Onyx spool 100cc Carbon Fiber 50cc Fiberglass 50cc Kevlar 50cc HSHT Fiberglass 1 TrueBed print bed	The printer should be capable of continuous carbon fiber reinforcement with reliability for the strongest, & versatile end use functional parts. The Printer should have capability of bed clicks into place with 10 micron accuracy - allowing you to pause a print, remove the bed, add components, click the bed back in and then continue the part in the exact same position. CFF - Continuous Fiber Fabrication 320 mm x 132 mm x 154 mm Onyx or any other Binder Carbon Fiber Fiberglass Kevlar HSHT Fiberglass (High-Strength High-Temperature Fiberglass) Pl specify if Printer supports any other Fiber 100 micron or better 3D printer and cabinet along with access to control software 800cc Onyx spool 100cc Carbon Fiber 50cc Fiberglass 50cc Kevlar 50cc HSHT Fiberglass 1 TrueBed print bed Pl list any other item required to start

Interface	Touchscreen , LAN & Wifi	
Required		
Slicing Software Capabilities	3D Printing with composite fiber is as much about the software as it is about the unique technology of the printers. The software supplied should be powerful and easy to use in a browser, importing the drawing (STL) and slicing it for high strength printing. The software able to reinforce the continues fiber material in isotropic & concentric Real time monitoring with online machine Organization Level Data Management Quick Access to Slice settings	
Certification	CE/FCC or equivalent International Safety Certificate	
Dry Box	Printer should have provision of Dry Box for keeping Polymer Filament under Dry condition while Printing	

${\bf PUNJAB\; ENGINEERING\; COLLEGE\; (DEEMED\; TO\; BE\; UNIVERSITY),\; CHANDIGARH}$

SECTION IV

FINANCIAL BID

SECOND COVER TITLED AS "FINANCIAL BID" CONSIST OF

Financial (Price) Bid for purchase of 3D Printer based on Continuous Fiber Fabrication (CFF) for Punjab Engineering College (Deemed to be University), Sector 12, is to be submitted online in excel sheet provided.

Notes:

- 1. Rate should be quoted in Indian Rupees only exclusive of Taxes/Levies as per Indian law.
- 2. The Institute is registered with the Deptt. Of Scientific & Industrial Research(DSIR) for purpose of availing custom duty exemption in terms of Govt. Notification no. 51/96-Customs dated 23.07.1996 and Central Excise Duty Exemption in terms of Govt. notification no. 10/97- Central Excise dated 01-03-1997 as amended from time to time.

PUNJAB ENGINEERING COLLEGE (DEEMED TO BE UNIVERSITY), CHANDIGARH

SECTION VI

GENERAL TERMS AND CONDITIONS

1. Clarification of Bidding Documents

A prospective Bidder requiring any clarification of the bidding documents may notify the PEC in writing or by telex or cable or fax at the PEC's mailing address indicated in the Invitation for Bids. The PEC will respond in writing to any request for clarification of the bidding documents which it receives no later than 15 days prior to the deadline for submission of bids prescribed by the PEC.

2. Amendment of Bidding Documents

At any time prior to the deadline for submission of bids, the PEC may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.

In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the PEC, at its discretion, may extend the deadline for the submission of bids.

3. Language of Bid

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the PEC, shall be written in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the translation shall govern.

4. Period of Validity of Bids

Bids shall remain valid for 120 days after the deadline for submission of bids prescribed by the PEC. A bid valid for a shorter period shall be rejected by the PEC as non-responsive.

5. Warranty

The entire system shall be in warranty (from OEM) for a period of one year from complete commissioning & handing over the system.

6. Payment

- Payment for Goods and Services shall be made in Indian Rupees only as follows:
 - 1. On Final Acceptance
 - 2. 100 percent of the Contract Price shall be paid on the Successful Installation & Training
- The Supplier's request(s) for payment shall be made to the PEC in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted and upon fulfillment of other obligations stipulated in the contract.
- Payment shall be made in Indian Rupees only.
- No advance payment will be made. Payment will be released after satisfactory receipt of goods/ material, demonstration/training and installation

8. Documents comprising the Bids

The Bids prepared by the Tenderers shall comprise of following components:

- Bid to be furnished as per the format for technical specifications.
- Technical literature for each product/service, covering full technical specifications.
- Bid prices should be quoted item wise as per format provided in excel sheet only duly signed and complete as per the format.
- Maximum educational discount as could be offered should be mentioned.

9. Cost of Tender

The tenderer shall bear all costs associated with the preparation and submission of its Bid, including the cost of presentation for the purpose of clarification of the bid, if so desired by the PEC and the PEC will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering Process.

10. Others Terms and Conditions

- An EMD/ bid security of equipment should be submitted in form of FDR/Demand Draft/Banker Cheque/Bank Guarantee from any commercial Bank in favor of Director, Punjab Engineering College (Deemed to be University) Chandigarh which shall be valid for 45 days beyond final bid validity period. Tender without earnest money shall be considered unresponsive and rejected.
- A Performance security @ 5% of the total value of contract will have to be deposited by the successful bidder awarded the supply order in form of Fixed Deposited Receipt or Bank Guarantee from a commercial bank which should be valid for 60 days beyond the completion of warranty/contract period.
- Performance Security will be forfeited and credited to the institute (Punjab Engineering College (Deemed to be University), Chandigarh) in the event the supplier does not honour the warranty/contract and other terms and conditions of the tender.
- Please quote delivery period also. It should be less than 30 days from the date of supply order.
- All legal disputes will be subject to Chandigarh Jurisdiction and will be interpreted under Indian Laws
- The Director Punjab Engineering College (Deemed to be University) reserves to himself the right to reject any or all tenders without assigning any reasons.
- The firm who has been blacklisted by Centre/State Govt/UT/Boards/Corporations/any government authority/Punjab Engineering College (Deemed to be University) are not eligible for the Tender.
- The penalty will be charged @ 0.5% of cost of equipment per week after the expiry of delivery period, mentioned in the purchase order if delivery date is extended by the PEC.
- All the rates will be FOR, Punjab Engineering College (Deemed to be University), Chandigarh.
- The institute being a premier Education and Research Institute funded by Chandigarh Administration, discounts as applicable to Research Institute/Educational Institutes may be provided in the Tender.
- The bidders shall not be allowed to change, alter or modify the bids after expiry of the deadlines for the receipts of bids.
- In a tender, either Indian agent on behalf of the Principal/(Original Equipment Manufacturer) OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same tender for the same item/ product.
- If an agent bids on behalf of the Principal/OEM, the same agent shall not bid on behalf of another Principal/OEM in the same tender for the same item/ product.
- Situation in which EMD/Performance security will stand forfeited if a bidder withdraws its bid during the period of bid validity specified by the bidder on the bid form (SECTION

VII), and in case of successful bidder, if the bidder fails to supply the equipment or to furnish performance security in accordance with the tender.

- Bids received after the due date will not be considered.
- In case, any free gift scheme / cash scheme is launched by the company same will be offered by the vender to Punjab Engineering College (Deemed to be University), Chandigarh free of cost.
- Generally the bid offer will be received /opened on the day as specified in the schedule. If the scheduled date is declared as a holiday, then the tender shall be received / opened on the next working day at the same time.
- The institute has been exempted from custom and central excise duty.
- Tender validity should be 120 days from the opening of tender.

All the terms and Conditions of this tender document are acceptable to me /us.

Signature of Bidder

PERFORMANCE SECURITY FORM

(on Non-Judicial Paper)

BANK GUARANTEE BOND FOR PERFORMANCE WARRANTY

The President of India, through the Director Punjab Engineering College (Deemed to be University), Sector-12, Chandigarh-160012 Dear Sir, Sub:_____ 1. You, on behalf of President of India, have entered into a contract with reference No. with _____ (herewith after referred to "as the contractor") for the development, fabrication and supply of (herein after referred to as stores) for the price and on the terms and conditions contained in the said contract. 2. In accordance with the terms of said contract the Contractor has undertaken to produce a Bank Guarantee for Rs______being 10% of (Rs_____) of the total value of the said stores supplied to you for the due fulfilment of its obligations to the President of India for due performance as per the contract during warranty period. 3. In consideration thereof, we happily expressly, irrevocably and unconditionally undertake and guarantee as principal obligors on behalf of the contractor that in the event that the President of India submits a written demand to us that the contractor has not performed according to the contractual obligations included in the said contract, we will pay you on the written demand, without demur and without reference to the contractor any sum up to a maximum amount of ___(Rupees.____ Your demand shall be conclusive evidence to us that such repayment is due under the terms of the said contract. Payment by us to you will be made within (30) days from receipt of your written request making reference to this guarantee and on demand. 4. This guarantee shall not be revoked without your express consent and shall not be affected by your granting any indulgence to the contractor, which shall include but not be limited to postponement from time to time of the exercise the same in any manner at any time and either to forbear or to enforce any covenant continued or implied in the said contract or any other course remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising any of your rights with reference to matters aforesaid or any of them or by reason of any other indulgence shown by you or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving our bank from its obligation under this guarantee. Not withstanding anything herein contained, our liability under this guarantee is restricted to Rs. _____(Rupees._____).and the guarantee shall remain in

Τo

6. Unless a demand or claim under this guarantee is made on us in writing on or before the aforesaid expiry date as provided above or unless this guarantee is extended by us all your rights under this guarantee shall be prescribed and we shall be discharge from the liabilities hereunder. 7. This guarantee shall not be affected by any change in the constitutions of our Bank or of the contractor or for any other reason whatsoever. We ______, Lastly undertake not to revoke this guarantee during its currency except with the prior consent from your office in writing. Not with standing anything contained herein: Our liability under this Bank Guarantee shall not exceed Rs. i. This Bank Guarantee shall be valid upto______. ii. iii. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before This Bank Guarantee shall be returned to our Name of the Bank Office Address, once the purpose of the issuance has been fulfilled or upon expiry of this guarantee whichever is earlier. Even return of Original Bank Guarantee is essential for invoking the guarantee with specific request letter from the beneficiary. Wittness: ,Signature Wittness: ,Signature

day of being reported to us by you returned to us duly

force upto and including the

discharged.

Authorized Signatory

For Bank

Authorized Signatory

For Bank