
	सामग्री प्रबंधन अनुभाग भारतीय प्रौद्योगिकी संस्थान, रुड़की रूड़की-247667, हरिद्वार, उत्तराखण्ड, भारत Phone-(O) 01332-28-4293, 4693 E-mail: mmiitr@iitr.ac.in	Material Management Section Indian Institute of Technology Roorkee-247667 (Haridwar) (Uttarakhand) (India) Phone-(O) 01332-28-4293, 4693 E-mail: mmiitr@iitr.ac.in	
	GSTIN-05AAALI0033R1Z5		
	PAN-AAALI0033R		

निविदा प्रलेख / Tender Document

No. 2025260104/MM-5/CE/RT-1/535

Date of Uploading of Tender -<https://eprocure.gov.in/eprocure/app>

13-Aug-2025

Bids under two bid systems (Technical and Commercial) are invited Online at CPP Portal (<https://eprocure.gov.in/eprocure/app>) from the reputed manufacturer/authorized supplier/dealer for the following items. **Manual bids will not be accepted.**

वस्तु की तकनीकी विशिष्टताएँ / Technical Specifications of item:

Sr. No	Name of item / Specifications	QTY	UOM
1	Digital Deformation Measurement System	1	Set
(For Detailed Technical Specification Plz refer Annexure-V)			
नोट-1: कृपया वस्तु का मूल्य एवं कर अलग-अलग दर्शाए।			
Note-1: Please quote the Rate & Taxes of the item separately.			
Note-2: E-way bill is to be issued by the Venders/Transporter			
Note-3: The HSN / SAC Code of the item must be mentioned.			
For Reasonability of Rates, The firm must enclose the last two supply orders for the same item with Financial Bid (Annexure-III) only.			
Critical Date Sheet			
1	Published Date	13-Aug-2025	(17:00)
2	Bid Document Download / Sale Start Date	13-Aug-2025	(17:30)
3	Seek Clarification Start Date	13-Aug-2025	(18:00)
4	Seek Clarification End Date	18-Aug-2025	(16:00)
5	Pre Bid Meeting Date	Not Required	Not Required
6	Bid Submission Start Date	19-Aug-2025	(15:00)
7	Bid Submission End Date	3-Sep-2025	(15:00)
8	Bid Opening Date	3-Sep-2025	(15:30)

Chapter-1 : Instruction to bidders

- A. The Tender should be enclosed with proper certifications like Agency Certification, Authorization certificate and/or Proprietary Certificate, as the case may be, in support of your offer.
- B. बोली का जमा किया जाना / **Submission of Bids:**
The bids should be submitted online in two parts –
 - 1 (i) The Technical Bid (Annexure-I, II, IV & V) and Tender Acceptance Letter
(ii) The Financial Bid (Annexure-III) & Price Bid in .XLS Format
Rates in .xls format will only be considered for Financial evaluation & further processing.
 - 2 The bids should be on official pad preferably with GST Number of the firm

- 3 The quotations should bear full details and where possible may be duly supported with catalogues, pamphlets, literature, samples of the item/items as the case may be for comparing the quality and rates of the item(s).
 - 4 The transportation cost, insurance charge etc., if any, percentage/ rate of GST or all other taxes and duties should be clearly mentioned.
 - 5 The bids / rates / tenders should remain valid for a minimum period of 90 days from the date of financial opening.
 - 6 The rates shall not be subject to escalation of any nature.
 - 7 The rates quoted should be applicable to educational institutions and any cost advantage received in lieu thereof should be passed on the Institution.
 - 8 While quoting / sending rates, the firm shall give an undertaking as per Annexure-II.
- C. विधि निक्षेप/ Earnest Money Deposit (EMD):**
In lieu of Bid Security/Earnest Money Deposit (EMD), declaration as per Appendix-A should be provided.
- D. निष्पादन बैंक प्रत्याभूति/ Performance Bank Guarantee (PBG):**
In case the total order value of items becomes Rs.25.00 Lakhs or above, 5% of the total order value in the form of Bank Guarantee or FDR pledged in favor of "The Registrar, IIT Roorkee" is required at the time of installation of the equipment which should remain valid at least during the warranty period plus sixty days. No interest shall be claimed by the bidder on the PBG submitted.
- E. बोलियों का खोला जाना/ Opening of Bids:**
- 1 The Technical Bids will be opened online at CPPP Portal (<https://eprocure.gov.in/eprocure/app>)-Plz refer Critical Date Sheet
 - 2 The Financial bids of only the Technically Qualified bidders will be opened. The date and time for opening the Financial Bid will be communicated to the respective firm later by the system (CPP Portal (<https://eprocure.gov.in/eprocure/app>))
 - 3 Representatives of the firms(s) may be present at the time of openings, if they so desire.

Chapter-2 : Conditions of Contract

- F. ठेका देना/ Award of Contract:**
The final selection of the bidder for the award of the contract will be made on the basis of the lowest commercial bid amongst the Technically Qualified Bidders.
Prices of optional item will not be considered to identify lowest price bid.
- G. पूर्व-आपूर्ति निरीक्षण/ Pre-supply Inspection:**
Authorized representative of the Institute shall make the final inspection before supply of the item at site of the firm, if required.
- H. वस्तु की आपूर्ति/ Supply of Item:**
The whole supply as per order shall have to be completed within the time mentioned in the order failing which the I.I.T. Roorkee shall have the right to accept or reject any quantity of items ordered. The firm will have to arrange for supply of the material in good condition.
- I. भुगतान की शर्तें/ Payment Terms:**
- A. Payment in INR for supply of goods:**
Where installation is not required: 100% payment will be made after satisfactory delivery of material duly certified by the HOD/P.I.
OR
Where Installation is required :100% payment will be made after satisfactory delivery and installation of the material duly certified by the HOD/P.I.
OR
80% payment will be made on receipt and acceptance of goods and balance 20% on successful installation and commissioning duly certified by the HOD/P.I.
- B. Payment in INR for AMC/Service:**
Quarterly/Halfyearly after satisfactory completion of work/service duly certified by the H.O.D./P.I.
- J. दंड/Penalty:**
A penalty of 0.5% of the total order value per week shall be levied for the delay subject to a maximum of 5% of the total order value.
In case of the non-supply of the item/service after the acceptance of the work/supply order, EMD & PBG (if submitted) will be forfeited by the Institute. Also, the firm will be debarred from any future bidding process of IIT Roorkee for a period of a minimum two year.
- K. अप्रत्याशित घटना/Force Majeure:**

For the purpose of and within the scope of contract by way of indication and not of limitation, the term “Force Majeure” shall mean acts of nature, strikes, Lockouts, or other industrial disturbances, act of public/enemy, wars, blockades, insurrection, riots, epidemics, landslides, earthquakes, storms lightening, flood, washouts, civil disturbances, explosion and any other similar even not within the control of either party on which by exercise of due care and diligence neither party is able to prevent or overcome.

L. मध्यस्थता / Arbitration:

If any dispute which may arise with respect to any term and condition or with respect to the interpretation of any term and condition of the Purchase Order/Work Order, which may be issued to the qualified and successful tenderer subsequently, the same shall be settled strictly in accordance with and in compliance of the Arbitration procedure which is mentioned descriptively in the Purchase Order/ Work Order.

M. बोली अस्वीकृती के लिए मानदंड / Criteria for bid rejection:

- 1 If technical bid found without the required undertaking (Annexure-II), EMD & Self Certificate (Annexure-IV)
- 2 If it found at a later date that any information given in the bids is Incorrect/false then the bid is liable to be disqualified/rejected.
- 3 Canvassing in any form will result to disqualification.
- 4 If “extra, as actual” etc. are mentioned against any of the price components in the bid the bid will be rejected.
- 5 If the firm quotes 'NIL' charges / consideration, the bid shall be treated as unresponsive and will not be considered.
- 6 If financial bid is found along with technical bid in pdf on CPP Portal, then the bid shall be rejected outrightly.
- 7 If any bidder submitting two/multiple bids for the same item of a tender, both/all the bids of that bidder will be outrightly rejected.

Chapter-3 : Schedules of requirements

N. टिप्पणी / Note:

- 1 If the supplier/firm is manufacturer/authorized dealer/sole distributor/of the item, the certificate to this effect should be attached.
- 2 Please note that the firms must submit the compliance Statement in an organized and structured manner in respect of all the specifications as per Annexure-V with the supporting catalogue/leaflet of the firm. Annexure-I, II, & IV have to be submitted with Technical Bid and Annexure-III with financial bid.
- 3 It may also be noted that the tender bids received after the stipulated date & time or found incomplete and the tender bids containing false/incorrect information shall be summarily rejected. The Institute shall not entertain any communication in this regard, whatsoever.
- 4 The firm is required to give its Bank Account details with IFSC for the purpose of making e-payment.
- 5 The Indian Institute of Technology (IIT) Roorkee reserves the right to reject any quotation wholly or partly without assigning any reason.
- 6 The quantity shown in the tender can be increased or decreased to any extent depending upon the actual requirement.
- 7 The decision of the institute in all matters relating to eligibility, acceptance, rejection of the bid will be final and binding on the applicants.
- 8 IIT Roorkee discourages High Sea Sale purchase. All tenders with High Sea Sale will be rejected.
- 9 The firms should clearly mention (in the financial bid) the Harmonized System of Classification (HS code) defined by the Central Custom and Excise Board (Govt. of India)- for the item(s) involving import.
- 10 **If the bid opening date happens to be a holiday, then the bid will be opened at 3.30PM of the next working day followed by the holiday.**
- 11 If an agent submits bid on behalf of the Principal/OEM, the same agent can not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
- 12 Indian Agent should submit the certificate from the Foreign Principal that they are the Authorized & Registered Indian Agent.
- 13 The quantity shown against the item is approximate and may vary as per demand of the Institute at the time of placing order. Also, the final requirement of each line item will be decided by the Institute at the time of placing the PO.
- 14 **Any corrigendum/addendum/errata in respect of the Tender Notice/ Enquiry letter shall be made available CPP Portal (<https://eprocure.gov.in/eprocure/app>). Hence prospective bidders are advised to visit the CPP Portal (<https://eprocure.gov.in/eprocure/app>) regularly.**
- 15 Bidders shall be responsible for the correctness of the information provided in the enquiry letter/tender document. If it is found at a later date that any information given in the bid is Incorrect/false then the bid is liable to be disqualified/rejected.
- 16 Before submission of bids, bidders should read the complete enquiry letter/tender document carefully and ensure that the bidders fulfill the eligibility criteria.

- 17 In case the item/product is under rate contract with DGS&D or GeM, then Bidder should certify that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.
- 18 **In Item Wise BoQ .xls sheet, In column M, leave blank for the item/service not provided/quoted by you. If quoted 0 then it will be considered that the item/service will be provided free of cost.**
Or
In Item Rate BoQ .xls sheet, If quoted 0 for the items/services in column M then it will be considered that the items/services will be provided free of cost.
- 19 **The bidder must quote the applicable GST appropriately in the price bid format provided i.e BoQ in .xls format. In case column of GST left blank, quoted 0, or inappropriate, then total quoted amount shows in column BB would be final inclusive of GST & other charges. The difference in GST amount payable – if any will be borne by the bidder. In this case, the basic unit prices will be suitably adjusted by the bidder – if required.**
- 20 **Only 'Class-I local supplier' and 'Class-II local supplier', as defined in the Public Procurement (Preference to Make in India), Order 2017 shall be eligible to bid in tender. For more details please refer: Order No.: P-45021/2/2017-PP (BE-II), DPIIT, Ministry of Commerce and Industry issued Dated: 16th Sept. 2020.**
- 21 **Self-certificate has to be provided in this regard that the item offered meets the local content requirement for 'Class-I local supplier' & 'Class-II local supplier'. (As per annexure-IV)**
The Institute reserves the right to rectify any discrepancy of this advertisement, if found later on. In case of any inadvertent mistake in the process which may be detected at any stage even after the issue of purchase order, the Institute reserves the right to modify/withdraw/cancel any communication made to the bidder.

Chapter-4 : Specifications and allied Technical details

Plz. See Annexure- I, II, IV, V

Chapter-5 : Price Schedule (to be utilized by the bidders for quoting their prices online in .XLS format at CPPP Portal (<https://eprocure.gov.in/eprocure/app>))

Plz. See Annexure- III & Price Bid in .XLS Format

Chapter-6 : Contract Form

Purchase Order is used as Contract Form

Chapter-7 : Other Standard Forms, if any to be utilized by the purchaser and bidders

Tender Acceptance Letter

***उप कुलसचिव (सामग्री प्रबंधन)
Deputy Registrar (MM)**

***Document Digitally Signed on <https://eprocure.gov.in/eprocure/app>**

For any Clarification regarding technical specifications of item Please Contact:

**Prof. Aditya Singh
Department of Civil
Engineering,
IIT Roorkee**

**Department of Civil Engineering,
IIT Roorkee
Ph.-01332-28-4937
Email: aditya.singh@ce.iitr.ac.in**

तकनीकी बोली

विस्तृत विवरण अनुपालन रिपोर्ट के साथ प्रस्तुत किया जाना है (अपने आधिकारिक लेटर हेड पर विक्रेता/फर्म द्वारा प्रस्तुत करने के लिए)

Detailed specification cum compliance report to be submitted with the Technical Bid
(to be submitted by the vendor/firm on its official letter head)

(For Detailed Technical Specification Plz refer Annexure-V)

Sr.No	Name & Required Specifications of Item(s)	Qty	UOM	Offered specifications of item(s) by the firm
1	Digital Deformation Measurement System	1	Set	
	Firm's Profile :			
1	Manufacturer/Authorized Agent/Distributor/Dealer/Supplier(valid certificate must be attached)			
2	E-mail I.D. & Telephone/Mobile No. Detail of Bank A/C			
Note:	1. "offered specifications", should be filled up properly in the format provided as per Annexure-I.			
	2. Volume & Weight of the item should also be mentioned.			
	3. The HSN / SAC Code of the item must be mentioned.			

Signature: _____

Name : _____

Designation : _____

Seal of the Organisation

उपबंध / UNDERTAKING

Ref. No. No. 2025260104/MM-5/CE/RT-1/535
Dated:- 13-Aug-25

I/We hereby certify that we or Our OEM are not from such a country which shares a land border with India or, if from such a country, We are registered with the Competent Authority. [Where applicable, evidence of valid registration by the Competent Authority is attached.]" (For details Please refer Order No.: F.No. 6/18/2019-PPD Dt.: 23rd July 2020)

Link of Order: [http://mm.iitr.ac.in/mmweb/public/forms/63374_GFR%20Rule%20144%20\(xi\).pdf](http://mm.iitr.ac.in/mmweb/public/forms/63374_GFR%20Rule%20144%20(xi).pdf)

That all the terms/conditions mentioned in the enquiry letter/tender against which the rates are being given are acceptable to the firm.

It is certified that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.

It is certified that the firm has never been black-listed from any Government Department. (State/Central Govt./ Autonomous/ PSU) in the last three years.

Signature_____

Name_____

Designation_____

Seal of the Firm/Agency

Financial Bid

(to be submitted by the vendor/firm on its official letter head)

Ref. No. No. 2025260104/MM-5/CE/RT-1/535

Date: 13-Aug-25

Rates :

Sr. No	Name of item / Specifications	Qty	UOM	Rate	Amount (INR Only)
1	Digital Deformation Measurement System	1	Set	To be filled in .XLS sheet (attached)	
Total					
Grand Total Rs.					

1) Price of the items should be clearly mentioned if supplied Free of Cost.

Terms & Conditions:

- 1 Prices (quoted in Rs.): FOR Department of Civil Engineering,
IIT Roorkee
- 2 **Payment:** Should be clearly mentioned, As per clause-I of tender document.
- 3 Validity:
- 4 Delivery period:
- 5 Other charges:
- 6 **Warranty:**
- 7 Rejection: Equipment if found not as per the required specification would be rejected.
- 8 Penalty Clause: As per clause-J of tender document.
In case of the non-supply of the item/service after the acceptance of the work/supply order, EMD & PBG (if submitted) will be forfeited by the Institute. Also, the firm will be debarred from any future bidding process of IIT Roorkee for a period of a minimum two year.
- 9 PBG: In case the total order value of items becomes Rs.25.00 Lakhs or above, 5% of the total order value in the form of Bank Guarantee or FDR pledged in favor of "The Registrar, IIT Roorkee" is required at the time of installation of the equipment which should remain valid at least during the warranty period plus sixty days. No interest shall be claimed by the bidder on the PBG submitted.

It is certified that the rate quoted is not over and above (higher side) the rates under RC with the DGS&D or GeM.

Signature_____

Name_____

Designation_____

Seal of the Firm/Organization_____

Details of Institute :

IEC CODE	0100000011	
AD CODE	0001069-2770325	S.B.I., IIT ROORKEE
	0303974-2770324	P.N.B. IIT ROORKEE

(to be submitted by the vendor/firm on its official letter head)

Self-Certificate for Local Content

Tender No.: No. 2025260104/MM-5/CE/RT-1/535

13-Aug-25

We hereby certify that the items quoted by us against above mentioned tender no. has the local content as per below:

Local Content (in %):.....

Local Supplier Class:.....

The details of the Make in India items/parts used in the quoted products is/are as under:

- 1
- 2
- 3

The details of the location(s) at which the local value addition made/manufactured is/are as under:

- 1
- 2
- 3

We also understand, false declarations will be in breach of the code of integrity under rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Signature:

Name:

Designation:

Seal of the Firm/Organization:

Instructions for Online Bid Submission

Instructions to the Bidders to submit the bids online through the Central Public Procurement Portal for e-Procurement at <https://eprocure.gov.in/eprocure/app>. Also, any modification on CPP portal in reference to below will be applicable. Therefore, for more details and update please refer CPP Portal (<https://eprocure.gov.in/eprocure/app>).

- 1 Possession of valid Digital Signature Certificate (DSC) and enrollment/registration of the contractors/bidders on the e-Procurement/e-tender portal are prerequisite for tendering.
- 2 Bidder should register for the enrollment in the e-Procurement site using the "Online Bidder Enrollment" option available on the home page. Portal enrollment is generally free of charge. During enrollment/registration, the bidders should provide only valid and true information including valid email id. All the correspondence shall be made directly with the contractors/bidders through email id as registered.
- 3 Bidder need to login to the site through their user ID/ password chosen during enrollment/registration.
- 4 Then the Digital Signature Certificate (Class III Certificates with signing key usage) issued by SIFY/nCode/eMudra etc. recognized by Controller of Certifying Authorities (CCA) India on eToken/SmartCard, should be registered.
- 5 The registered DSC only should be used by the bidder in the transactions and should ensure safety of the same.
- 6 Contractor/Bidder may go through the tenders published on the site and download the tender documents/ schedules for the tenders.
- 7 After downloading/getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as required, otherwise bid will be rejected.
- 8 Any clarifications may be sought online through the tender site, through the contact details or during pre-bid meeting if any. Bidder should take into account the corrigendum if any published before submitting the bids online.
- 9 Bidder may log in to the site through the secured login by the user id/ password chosen during enrolment/registration and then by submitting the password of the e-Token/Smartcard to access DSC.
- 10 Bidder may select the tender in which he/she is interested in by using the search option and then move it to the 'my tenders' folder.
- 11 From my tender folder, he may select the tender to view all the details uploaded there.
- 12 It shall be deemed that the bidder has read and understood all the terms and conditions before submitting the offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the incomplete bid shall stand rejected.
- 13 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ schedule and ordinarily it shall be in PDF/xls/rar/jpg/dwf formats. If there is more than one document, all may be clubbed together and provided in the requested format. Bidders Bid documents may be scanned with 100 dpi with black and white option. It is advisable that each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/rar and the same if permitted may be uploaded. The file size being less than 1 MB the transaction uploading time will be very fast.
- 14 The Bidders can update well in advance, the documents such as certificates, annual report details etc., under "My Space option" and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.
- 15 Bidder should submit the Tender Fee/ EMD as specified in the tender. Scanned copy of the same should be uploaded as part of the offer. (if applicable)
- 16 While submitting the bids online, the bidder shall read the terms and conditions and may accept the same to proceed further to submit the bid packets.
- 17 The bidder has to select the payment option as offline to pay the Tender FEE/ EMD as applicable and enter details of the same. (if applicable)
- 18 The details of the DD/any other accepted instrument, physically delivered, should tally with the details available in the scanned copy and the data entered during bid submission time, otherwise submitted bid shall not be acceptable or liable for rejection. (If applicable)
- 19 The bidder has to digitally sign and upload the required bid documents one by one as indicated. Every act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read, understood and agreed with all clauses of the bid document including General conditions of contract without any exception.

- 20 The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid may be rejected.
- 21 If the price bid format is provided in a spread sheet file like BoQ_XXXX.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Priced-bid/BOQ template shall not be modified / replaced by the bidder; else the bid submitted is liable to be rejected for the tender.
- 22 The bidders are advised to submit the bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission due date and time (as per Server System Clock). The TIA shall not be held responsible for any delay or the difficulties faced during the submission of bids online by the bidders.
- 23 After the bid submission (i.e. after Clicking "Freeze Bid Submission" in the portal), the acknowledgement number indicated by the system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender and also be used as entry pass to participate in the bid opening.
- 24 The time settings fixed in the server side and displayed at the top of the tender site, shall remain valid for all actions of requesting, bid submission, bid opening etc., in the e- Tender system. The bidders should follow such time during bid submission.
- 25 All the data being entered by the bidders would be encrypted using Public Key Infrastructure (PKI) encryption techniques to ensure the secrecy of the data. The data entered is not retrievable by unauthorized persons during the bid submission and until the time of bid opening by any person.
- 26 Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 27 The confidentiality of the bids is maintained with the use of Secured Socket Layer (SSL) 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 28 The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
- 29 For any queries regarding e-Tendering process, the bidders may contact at address as provided in the tender document. Parallely for any further queries, the bidders are advised to contact over phone: **0120-4001005** or send an e-mail to – cppp-nic@nic.in.

Prequalification

- 1 An undertaking by the firm that it has never been black-listed in the last three years must be attached along with the Bid, failing which the Bid shall be rejected. (As per Annexure-II)
- 2 True copy of Permanent Account Number.
- 3 Details of GST along with a copy of certificate to be attached.
- 4 Submission of samples if required, for all items indicated in the NIT. The make of items proposed to be supplied should be indicated and submitted along with the techno commercial unpriced bid without indicating the pricing components.
- 5 Willingness to execute all orders which are placed to meet emergency requirement on priority basis. The Bidder shall note that standards for workmanship, material and equipment, and references to brand names designated by the Purchaser in the tender document are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in his bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

Tender Acceptance Letter
(To be given on Company Letter Head)

Date:

Sub: Acceptance of Terms & Conditions of Tender.

Tender No. 2025260104/MM-5/CE/RT-1/535

Tender description:

Dear Sir,

- 1 I/We have downloaded/ obtained the tender document(s) for the above mentioned 'Tender No.' from the web site(s) namely:

as per your advertisement, given in the above mentioned website(s).
- 2 I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like section(s), schedules(s) etc.), which form part of the contract agreement and I/we shall abide hereby by the terms/conditions/ clauses contained therein.
- 3 The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.
- 4 I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s)/ corrigendum(s) in its totality/entirety.
- 5 In case any provisions of this tender are found violated, then your department/organisation shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

DECLARATION
(to be submitted by the vendor/firm on its official letter head)

**To,
Registrar,
IIT Roorkee,
Roorkee,**

Subject: Undertaking in lieu of Bid Security/Earnest Money Deposit (EMD)

Tender Ref no: No. 2025260104/MM-5/CE/RT-1/535

13-Aug-25

Dear Sir,

We, the undersigned, offer to Supply the
..... as per tender at IIT Roorkee, in response to your above referred tender no.

We are hereby submitting our proposal/Bid/Quote for the same, which includes Technical bid and the Financial Bid. As a part of eligibility requirement stipulated in above referred tender document, we hereby submit a declaration in lieu of Earnest Money Deposit (EMD) as given below:

1. Our bid shall remain valid for 90-days from the date of financial opening and that we will not withdraw or modify our bid during the validity period,
2. In case, we are declared as successful bidder and an order is placed on us, we will submit the acceptance in writing within 7 days of placement of order on us.
3. In case, we are declared as successful bidder and an order is placed on us, we undertake, to submit a Performance Bank Guarantee(PBG) as mentioned in above referred tender document or as per terms stipulated in the Purchase Order.
4. In case of failure on our part to comply with any of the above said requirements, we are aware that we shall be declared as un-eligible for said tender and /or debarred from any future bidding process of IIT Roorkee for a period of minimum one year.
5. The undersigned is authorized to sign this undertaking.

Signature:

Name:

Designation:

Seal of the Firm/Organization:

Digital Deformation Measurement System Specifications

Key Features:

1. A non-contact-based technique capable of measurement of strain during static, cyclic & Multi axis, fatigue, shrinkage & thermo mechanical testing of various materials and metals.
2. The setup should have a suitable software interface that is capable of post-processing of the images and giving suitable information about the strain distribution arising during various tests.
3. The setup should have an identification of strain hot spots on structures
4. The setup should have investigation of component behavior under thermal- or mechanical load
5. In post-processing, you can attach additional virtual extensometers and strain gauges at any position on the specimen surface to evaluate individual areas in more detail.
6. No background noise or no reflections from the background up to 0%, by using fluorescent speckle, blue light and Orange camera filter

Specifications:

1. Camera – 02 No's

- Sensor Resolution: Minimum of 4080 x 2984 pixels or higher.
- Frame Rate:
At 8-bit digital readout: 172 frames per second (fps) at full resolution or better.
At 12-bit digital readout: 107 frames per second (fps) at full resolution or better.
- Pixel Size: 2.7 μm x 2.7 μm or smaller (better resolution performance).
- Quantum Efficiency (QE): QE should be greater than 70% at peak wavelength.
- Digital Readout Depth: Support for 8-bit, 10-bit, and 12-bit digital output modes.
- Interface:
Camera should support CoaXPress 2.0 (CXP-12) standard.
Data transmission via CoaXPress-12, 2 channels, each capable of 12.5 Gbps or higher.
Frame grabber card must support the above interface and bandwidth, enabling high-speed, full-resolution data acquisition.

2. Camera Lens– 02 No's

- F-mount, f = 35 mm, min. c-mount

3. Camera Lens– 02 No's

- F-mount, f = 50 mm, min. c-mount

4. Orange bandpass Filter 600 / 40nm – 2 No's

5. Mounting system – 1 No

- It must be accommodation cameras, tripod, rail, camera mount, and LED mount

Aut. Spec

[Signature]

[Signature]

6. LED light source – 02 No.

- 3 × 3 high-power LEDs (total of 9 LEDs per unit).
- blue color triggered to flash and CW illumination
- Illumination (lux): max. 1000
- Capable of synchronized operation with external devices or events via dedicated software

7. Industrial Computer

- Main Board with single processor 10 core
- 4TB SSD Hard Disk
- DVD Writer
- Mouse & Keyboard
- Windows 11 OS
- 27" 4k resolution Monitor

8. High Speed Synchronizer (or Equivalent) – 01 No

- Fully Synchronized Recording: The system shall support fully synchronized data acquisition across all connected devices to ensure time-aligned recording.
- Multiple Device Control: The system shall be capable of controlling and synchronizing multiple hardware devices simultaneously within a unified software environment.
- Phase-Locked Triggering: The system shall support phase-locked triggering to ensure consistent and repeatable synchronization with external signals or periodic events.
- User-Defined Triggers: The system shall allow users to define and configure custom trigger conditions based on application-specific requirements.
- Device Delay Control: The system shall provide precise delay management for each connected device to enable time-aligned operation with sub-microsecond accuracy.
- Graphical Connector Interface (GCI): A graphical interface shall be available for intuitive configuration and management of device connections, trigger paths, and data flow.
- In-System Firmware Updates: The system shall support firmware updates directly within the software environment, without requiring disassembly or hardware replacement.
- Different Frequency Strategies: The system shall support varied frequency configurations to accommodate different timing and synchronization needs across devices.
- Multi-Exposure Capability: The system shall support multi-exposure functionality, enabling multiple exposures within a single frame or sequence, suitable for dynamic range enhancement or motion capture.

9. High-Speed USB Data Acquisition Device – 1 No

- The device shall provide a minimum of 8 differential analog input channels.
- Maximum sampling rate shall be up to 1.25 MHz for single-channel operation.
- The device shall provide 16-bit resolution for high-accuracy signal acquisition.
- The analog input voltage range shall be selectable from ± 10 V down to ± 0.2 V, accommodating various signal amplitudes.

Ent. Mon

Aditya

10. Speckle Pattern Toolkit – 01 Set

- To apply a fine speckle pattern on a sample, it should include a special sponge, foam roller, and, large stamp pad

11. 2D Software for image acquisition and processing – 01 No

- Free Lifetime license will be offered
- It can be installed on any number of computers (Floating License)
- It can control all hardware components

12. 3D Strain software module – 01 No

- Free Lifetime license
- It can be installed on any number of computers (Floating License)
- It will control all hardware components

13. 2D & 3D DIC Strain software module with a license on a USB dongle – 01 No

14. Multi-parameter imaging

- Possible to select cameras that may be used for fluid flow measurement
- Possible to simultaneously measure material deformation and fluid flow in order to measure aero-elastic effects

15. Data processing, management, import, and export

- User can be able to process data without applying any filtering or de-noising. The raw data will be available to the end-user
- Possible to export data in a format which can be directly handled by the Abaqus FEA package such that the experimental data could be used as boundary conditions for a simulation
- Possible to read data format from the DIC system directly into MATLAB, and write data from MATLAB in the same format such that it can be read back into the DIC software
- Possible to display and edit data within MATLAB without the need for additional licenses
- Possible to export data in Paraview format
- Possible to include generic files within the DIC software project such as Word, Excel, and PDF formats, such that these files can be launched from the DIC project
- Simple to import images from external sources in all standard formats for DIC processing
- Include the ability to batch process multiple sets of images (e.g., overnight) with predefined processing parameters
- Software Module available for image acquisition and analysis of 2D deformation field with an accuracy of 0.01 pixel

16. Calibration

Out-How

Aditya

- Capable of calibrating a 3D (Two cameras) setup either by simple scaling, or fitting camera pinhole or complex models
- QR-Coded Calibration plates allow a fully automated live calibration procedure which is quick and easy. Plates are provided with printed speckle pattern on the back side for zero strain test according to VDI standard 2626. Set of validated five single plane calibration plates for use in combination with blue illumination and orange bandpass filter.
- The software has pinhole and polynomial calibration models - the latter is for viewing through optically complex surfaces (for example - curved windows).
- Upgrade: Specialized solution for calibrating a 3D volume with just one image of the calibration plate (2-Level plate), saving time and overcoming any difficulties in environments where the measurement volume is restricted; The calibration procedure is fast and accurate with automatic mark search and detection.

17. Advanced software features

- It must be possible to correct the data for and rigid body shift of the samples.
- It must be possible for the end-user to write macros that can easily be invoked within the provided software.
- Software can incorporate the automatic generation of adaptive mask shapes via a user-defined operation pipeline
- Algorithmic Mask: Useful for complex shapes.
- It must be possible to upgrade the software to process volumetric data to study sub-surface deformation and strain phenomena, i.e., from X-ray CT machines.
- Virtual live extensometer mode (2D and 3D (upgrade)) during recording to control or trigger the test machine - Can be used for strain-controlled testing. Includes live display of extensometer reading (Strain and Change in Distance) as the test is progressing. Multiple live extensometers can be placed on the sample surface
- Throttle mode for dual-rate recording - options for switching the recording rate from low to high frame rate and high to low frame rate using manual and external triggers (limitations apply)
- Drag and drop hardware configuration for easy setup and reconfiguration.
- Algorithmic Mask: A masking procedure that adapts to the image itself using the speckle pattern location to define the valid image area and masking - very useful for complex shapes - can be used in addition to the geometric mask.
- Extensive help with the software including lens calculators, an on-line focusing assistant, and a tool to remap the images to the reference condition to check the fidelity of the results
- Co-ordinate Transform function to re-define the co-ordinate system after calibration if needed
- Wide variety of import and export functionalities. Images can be imported from any source in standard formats. Data can be read/written directly in MATLAB and Python. Export options include formats like Tec plot, Abaqus, Para view, etc.
- The raw and unfiltered data is always available, and the user has full control over the level of filtering and smoothing.

18. Orange-fluorescent paint

- to apply speckle pattern with the Speckle Pattern Toolkit; bottle with 150 ml

Ant. Prosser

Aditya

19. Support and Updates

- Free phone and email support will be provided for the lifetime (e.g., 10 years) of the system
- There must be no annual maintenance cost for support or minor software updates

20. General Unique features

- Remote system control to facilitate the operation of the system in hostile environments from a control room.
- Specialized speckling techniques and speckling tools which are far better than conventional speckling techniques giving excellent image quality for doing DIC without the need for a base coat.
- Multi-parameter imaging: example – Fluid-Structure Interaction (Simultaneous PIV and DIC).
- A specialized solution where multiple cameras can be used to look at both sides of the specimen: The user can have complete control and synchronization of up to 8 cameras, all calibrated in the same coordinate system.
- Upgrade: The system will have a Solution for making stereo DIC setups with a single camera: A low-cost approach for 3D measurements without the need for a second camera (with certain limitations)
- Specialized speckle pattern toolkit for ease of speckling and repeatability of speckle pattern application.
- System will have provision for IR Cameras integrated with DIC cameras and temperature can be read directly in the software.
- Upgrade: Vibration analysis with high-speed and low-speed DIC systems: Options include doing FFTs to obtain resonant frequencies from time signals, obtaining mode shapes via frequency domain analysis, etc.
- The ability to import images from Infrared cameras to facilitate the analysis of strain-temperature correlations in the future.
- Upgrade: The system also has the provision of Digital Volume Correlation (DVC): An extension of DIC which provides full-volume 3D strain and deformation measurements.
- Upgrade: The system will have a provision to upgrade to a micro DIC system with standard microscopes to quantify material characteristics at the smallest scales.
- Upgrade: Speckle Quality information available in recording for Stereo DIC: Based on intensity gradient and noise in the subset.
- Upgrade: Indication of how good the calibration fits to the measurement setup for Stereo DIC: Surface height reconstruction error and stereo Reconstruction error.

21. General Requirements & Qualification Criteria

- Manufacturers should possess ISO 9001 – 2008 accreditation.
- The vendor should have supplied a minimum of 05 Nos of DIC systems preferably to government organizations & institutes in the past 5 years & proof of this shall be submitted.
- Vendors should submit a global list of systems supplied for a minimum period of 5 years with complete contact details of the end-users such as phone number, fax number, e-mail ID, etc.



- Firms should give an undertaking for the supply of Software upgrades if any, during the warranty period of 1 year, free of charge.
- Free support is provided throughout the lifetime of the system via phone/email/remote desktop and there is no annual license renewal fee. Network and multiuser license options are also available. Customers receive free incremental updates to the delivered software platform via a website download area.

Get-Now

Aditya