

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES) DHANBAD**Tender No. CE-INS-CPPP-109-25-26****Date: 26.09.2025****E-TENDER NOTICE**

The Indian Institute of Technology (Indian School of Mines) Dhanbad invites Bids from eligible, qualified, and capable manufacturer/dealer/suppliers for **Supply and Installation Structure Platform, Bending Stress in a Beam and Bending Moment in Portal Frame** according to the requirements as defined in the Tender document.

Sl. No	Tender No.	Particulars	Required Quantity	Amount of EMD
1.	CE-INS-CPPP-109-25-26	Supply and Installation Structure Platform	01	36,000/-
		Supply and Installation Bending Stress in a Beam	01	
		Supply and Installation Bending Moment in Portal Frame	01	

Earnest Money Deposit (EMD) in form of Demand Draft should be drawn in favour of Registrar, IIT (ISM) Dhanbad payable at Dhanbad. EMD can also be deposited in the form of a Term Deposit Receipt/Fixed Deposit Receipt/Bank Guarantee drawn in favour of Registrar, IIT (ISM) Dhanbad. A scanned copy of EMD should be uploaded on www.eprocure.gov.in along with the technical bid.

The hard copy of the same in the original is to be sent to the address mentioned below duly super scribing the Tender Number and Name on the envelope and the same must reach in the IIT (ISM) Dhanbad on or before the due date and time for the opening of technical bid. If not received within 05days after last date of submission of bid, the bid will be rejected summarily.

Sl. No.	Description	Date	Time
1	Tender Publication Date	26-09-2025	18:50 PM
2	Pre Bid Conference date and time	03-10-2025	11:00 AM
3	Bid submission start date and time	06-10-2025	06:00 PM
4	Bid submission end date and time	28-10-2025	06:00 PM
5	Technical Bid opening date and time	31-10-2025	11:00 AM
6	Financial Bid opening	Technically qualified bidders will be informed about date and time of opening of financial bids through CPPP.	

IIT (ISM) Dhanbad reserves the right to accept or reject the tenders without assigning any reason.

The original EMD should be sent to:

Deputy Registrar (Purchase and Stores)
IIT (ISM) Dhanbad,
Distt. Dhanbad – 826004
Jharkhand.

Deputy Registrar
(Purchase & Stores)

Annexure-I

Instructions to the bidders for online bid submission

The bidders are required to submit their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal to prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information for submitting online bids on the CPP Portal may be obtained at <https://eprocure.gov.in>.

1. Registration:

- (a) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in>) by clicking on the link “**Online bidder Enrollment**” on the CPP Portal which is free of charge.
- (b) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- (c) Bidders are advised to register their valid email addresses and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- (d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India, with their profile.
- (e) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible for ensuring that they do not lend their DSC's to others which may lead to misuse.
- (f) Bidder then logs in to the site through the secured log-in by entering their user ID / Password and the password of the DSC / e-Token.

2. Searching for tender documents:

- (a) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- (b) Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS/E-mail in case there is any corrigendum issued to the tender document.
- (c) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

3. Assistance to bidders:

- (a) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.
- (b) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

4. Submission of the bid:

All interested eligible bidders are requested to submit their bids online through CPP Portal: <http://eprocure.gov.in> as per the criteria given in this document:

- a. Technical Bid should be uploaded online in cover-1. One single pdf containing all Technical documents, duly filled and signed Annexures, copy of EMD etc. must be uploaded.
- b. Financial Bid should be uploaded online in cover-2

Both Technical and Financial Bid covers should be placed online on the CPP Portal <http://eprocure.gov.in>.

(A) Technical bid:

Signed and Scanned copies of the Technical bid documents must be submitted online on CPP Portal: <http://eprocure.gov.in>.

**List of Documents to be scanned and uploaded with Technical Bid (Under Cover-1).
The enclosures have to be attached in the serial order as mentioned hereunder:**

- (i) Scanned copy of EMD deposited in the form of Demand Draft, Term deposit receipt/Fixed deposit receipt drawn in favour of Registrar, IIT (ISM) Dhanbad.
- (ii) A scanned copy of the certificate mentioning the status of the Firm/Agency/Company/proprietary/ partnership (as applicable) from the competent authority.
- (iii) Scanned copy of PAN Card (as applicable to the type of tenderer) and Goods and Services Tax Registration Certificate.
- (iv) Scanned copy of duly filled **Annexure-A, Annexure-B, Annexure-C, Annexure-D, Annexure-E, Annexure-F and Annexure-G.**
- (v) Scanned copy of duly signed and stamped **Annexure-I, Annexure-II and Annexure-III.**
- (vi) Scanned copy of purchase/work/supply order as proof of past performance.
- (vii) Scanned Copy of Original catalogue/brochures of the items quoted.

Note: (a) All the above-mentioned documents must be scanned and merged as a single PDF along with the Technical Bid. This single PDF of Technical Bid should be uploaded under Technical Cover in CPP Portal.

- (b) The technical bid may be summarily rejected, if above mentioned documents are not attached.
- (c) For the tender value up to Rs.10 Crores, Self-Certificate for local content, and for the tender value above Rs.10 Crores, Certificate for local content from Statutory Auditor/Cost Auditor/Cost Accountant/CA, must be attached.

(B) Financial bid:

In preparing the financial bids, bidders are expected to take into account the requirements and conditions laid down in this Tender document. The financial bids should be uploaded online as per the specified “.xls” format i.e. Price Bid Excel sheet attached as ‘xls’ with the tender and based on the scope of work, service conditions and other terms of the Tender document.

5. Other instructions:

- (a) The detailed tender documents may be downloaded from <http://eprocure.gov.in> till the

last date of submission of the tender. The tender can only be submitted online through CPP Portal <http://eprocure.gov.in>

- (b) Bids will be received only online mode through www.eprocure.gov.in up to the date & time mentioned in the E- TENDER NOTICE. No tender/bid will be accepted in physical form and any tender/bid received in such manner will be treated as non-bonafide tender/bid.
- (c) Bid will be opened on the scheduled date and time in the presence of tenderers/bidders or their authorized representatives (if any), who have uploaded their quotation/ bid and who wish to be present at the time of opening the bids.
- (d) All the bids must be valid for a period of 180 days from the last date of submission.
- (e) Bidders are requested to go through the instructions regarding filling and submission of the tender attached herewith. Bidders may forward their points on tender documents and/or depute their technical representative for discussion on tender/drawing and to clarify doubts, if any, on the stipulated pre-bid date.
- (f) Bidders shall upload a scanned copy of the Earnest Money Deposit (EMD) mentioned in the Notice of Tender and shall ensure the receipt of a hard copy of the same in the Purchase and Stores Section, IIT (ISM) Dhanbad, Distt. Dhanbad - 826004, Jharkhand, on or before the scheduled date of opening of bid. In case of failure of the same, the technical bid will not be evaluated.
- (g) In view of delays due to system failure or other communication related failures, it is suggested that the tender/bid be uploaded sufficiently in advance of the last due date and time fixed.
- (h) If any alterations to any of the condition, specifications laid down in the tender documents are found or any new condition is mentioned by the tenderer, in the tender document, such tender/bid will be rejected.
- (i) IIT (ISM) Dhanbad reserves the right to cancel the tender at any point of time without assigning any reason.

Annexure-II

SUPPLY AND INSTALLATION OF STRUCTURE PLATFORM, BENDING STRESS IN A BEAM AND BENDING MOMENT IN PORTAL FRAME TERMS AND CONDITIONS

1. The technical specifications are enclosed as **Annexure-III**. Bidders are required to go through the technical specifications carefully before submission of bids.
2. Tender Specific Authorization letter from Original Equipment Manufacturer (OEM) in favor of the bidder must be uploaded with technical bid for each item quoted.
3. The tenderer should upload detailed technical description/catalogue/brochure along with the technical bid. If not uploaded, the bid may be summarily rejected. If there is any deviation in specifications mentioned in the technical bid and Catalogue/Brochure, then the specifications given in the technical bid shall be considered and shall be treated as final.
4. The tenderer should not have been debarred or blacklisted by any Central / State Government. A self-attested certification to that effect must be uploaded with the technical bid in the prescribed format. The proforma of the certificate is enclosed with the tender as **Annexure-A**.
5. Different types of taxes levied should be quoted separately in a format as provided in the price bid. In case of consolidated prices, it will be pre-assumed that the quoted prices are inclusive of all taxes and other charges. Any taxes/charges which are not mentioned separately will be treated as included in the price quoted. No future correspondence in regard to taxes will be entertained.
6. All the bids must be valid for a period of 180 days from the last date of submission. In, exceptional circumstances, prior to expiry of the original time limit, the Institute may request the bidders to extend the period of validity for a specified additional period beyond the original validity of 180 days. The request and the bidders' responses shall be made in writing. The bidders, not agreeing for such extensions will be allowed to withdraw their bids without forfeiture of their Bid Security.
7. **EMD Exemption:** EMD exemption shall be given to those bidders who are registered with the Central Purchase Organization or NSIC or MICRO and Small Enterprises (MSEs) as defined in MSME Procurement Policy issued by the Department of Micro and Small Enterprises (MSME). To claim the exemption, the bidder must be offering goods manufactured by themselves or providing relevant services. Exemption will not be granted in case the bidder is acting as an agent for some other vendor. Bidders are required to upload necessary certificates to claim EMD exemption.
8. **Instruction to the bidder of countries which share land border with India (Rule 144(xi) GFRs).**
Any bidder from a country that shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT). As per Office Memorandum No. F.7/10/2021-PPD(1) dated: 23.02.2023 issued by the Department of Expenditure (Ministry of Finance), Govt. of India, the bidder is required to submit an undertaking as per **Annexure-D**

9. **MII & Purchase Preference:**

The MII compliances shall be as per Govt. of India guidelines. Only Class-I local suppliers and Class-II local suppliers are eligible to participate in the tender. As per the Ministry of Commerce and Industry Order No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 preference shall be given to Make in India products for which bidders must declare Country of Origin of goods and percentage of Local contents in the product. The purchase preference shall be as per Govt. of India guidelines. All the bidders must upload undertaking as per **Annexure-C** with the Technical Bid.

10. **Evaluation Procedure:**

Phase-I: Technical Evaluation

Technical evaluation will be done on the basis of documents submitted by the bidder in the technical bid. Hence bidders are required to enclose all relevant documents along with the technical bid. Discrepancy in relevant supporting documents shall lead to the rejection of technical bids.

Phase-II: Financial Evaluation

- a. Financial bids of technically qualified bidders shall only be opened.
- b. The bid will be awarded to the L-1 bidder.

11. **Delivery and Installation:**

All the items shall be delivered within 45 days from the date of issue of the supply order. Any requirement for installation (if applicable) should be communicated at least one month before installation to make suitable arrangements. Other conditions as per **Annexure-III** should be followed.

12. **Liquidated damages (LD):**

If a bidder fails to deliver the item or any part thereof within the period prescribed for delivery, the Institute shall be entitled to recover as liquidated damages a sum equivalent to 1% (one percent) per week of the purchase order. The total damages shall not exceed 5% (five percent) of the value of the purchase order.

13. **Inspection:**

Institute authority will inspect the supplied item after delivery/installation, whichever is applicable. In case item is not supplied/installed (as the case may be) as per specifications of the purchase order or item is not working satisfactorily, then the same will be rejected.

14. **Training:**

The supplier should be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment. Minimum training period shall be 3 days.

15. **Payment terms:** 100% payment shall be made by NEFT/RTGS against submission of bills in triplicate, only after satisfying following conditions:
- Successful delivery/Installation and commissioning by supplier.
 - Inspection and testing of the items by the Institute authority.
 - Training provided by the supplier.
 - Supply of all manuals, Installation Certificate and calibration Certificate (if any).
 - Submission of Performance security.
 - Submission of duly signed & stamped guarantee / warranty declaration certificate.
 - Payment shall not be made for part supply/work.

16. **Extension of Delivery & Installation Period:**

If the supplier is unable to deliver/install and satisfactorily commission the order within the stipulated time, for which the supplier is responsible, he is required to request in writing for the extension of the delivery period before the stipulated date of delivery. It may be extended at the discretion of competent authority with/without imposing liquidated damages. In case the supplier has failed to complete the order within the stipulated time, the Institute reserves the right to cancel the purchase order and to forfeit performance security and/or EMD.

17. **Guarantee / Warranty:**

- Minimum Guarantee / Warranty** is to be provided for **Five years on the complete system**. If the guarantee/warranty mentioned in the catalogue is less than the specified time, in that case, the supplier has to provide for the remaining period. In case, the product comes with more than the stipulated guarantee/ warranty period, it will be provided by the supplier free of cost.
- Guarantee / Warranty will commence from the date of the satisfactory installation/commissioning of equipment against the defect of any manufacturing and poor quality of components.
- A signed & stamped guarantee/warranty declaration certificate will have to be furnished by the successful tenderer at the time of supply along with the bills.
- In case the supplier has failed to comply warranty obligation during the guarantee/warranty period in a reasonable time not exceeding 3 weeks, the Institute may employ or pay other parties for warranty obligation and all such damages, loss and expenses shall be recoverable from the supplier performance security.

18. **Performance security**

- To ensure due performance of the item, performance security is to be furnished by the successful tenderer.
- The performance security should be furnished within 21 days of the award of supply order.
- Performance security should be for an amount of five percent (5%) of the value of the supply order.
- Performance security may be furnished in the form of a Demand Draft/ Fixed Deposit Receipt / Bank Guarantee from a commercial bank in favour of Registrar IIT (ISM) Dhanbad, payable at Dhanbad.
- Performance security should remain valid for a period of 14 months. The performance security will be refunded without any interest, provided that the performance is satisfactory.

19. **Refund of EMD**

- EMD will be refunded without any interest to the successful tenderer on

receipt of performance security.

- b. The tenderer, who are not qualified for the tender either in technical bid or on any other grounds, their EMD will be refunded within 30 days from the award of the contract.
- c. If supply order is placed and the successful tenderer fails or refuses to supply the item, in such case the EMD will be forfeited.

20. Cancellation of tender

IIT (ISM) Dhanbad reserves the right to cancel the tender at any point of time without assigning any reason.

21. Legal

Any dispute with regard to the meaning, effect or interpretation of any clause of this contract/agreement shall be referred to the sole Arbitrator i.e. Director, IIT (ISM) Dhanbad who would act as the sole Arbitrator and proceedings of such arbitration shall be conducted in accordance with the provisions of the Indian Arbitration Act, 1940 or any statutory modification thereof. The venue of Arbitration shall be IIT (ISM) Dhanbad only and the language shall be English only. In case of litigation, if any, the District Court of Dhanbad (Jharkhand) shall have jurisdiction for any such litigation.

- 22.** All the clauses mentioned in Annexure - III must be fulfilled. All terms and condition of Annexure – III should be fulfilled.

1. ELIGIBILITY CRITERIA FOR BIDDERS

- 1.a The bidder should be a **Registered OEM** or an Authorised Distributor.
- 1.b The original equipment manufacturer (OEM) should have least 5 years of experience in the field of supplying laboratory equipment.
- 1.c The bidder must have supplied at least three different types of equipment from our specified list to a minimum of two reputed organizations such as IITs, IISc, IISERs, NITs, or government laboratories like DRDO, DMRL, or ISRO within the last three years. Alternatively, the bidder can qualify if they have supplied equipment to three reputed international institutes that rank within the top 250 in the Times Higher Education World University Rankings of 2023 for the subject of Engineering and Technology.
- 1.d The equipment manufactured by the bidder should be of high quality and demonstrate consistent performance.
- 1.e The bidder should not be under liquidation or blacklisted by any State Govt. or Central Govt. organization or any PSU's
- 1.f Bidder have to provide minimum 5 years spares support after warranty period on cost basis.
- 1.g *Product specifications submitted by the bidder have to be supported by printed OEM technical leaflet/literature with photo of the quoted model. Merely copying our specifications and stating "yes" for compliance without any documented evidence will not be accepted. In case it is a specially customized model, the vendor must provide the details (i.e. brand, specifications) of sensors, controllers, compressor etc.*
- 1.h *The bidder should mention the product make and model no in the Technical Specification and Technical Compliance Report. Technical Specification, Product Datasheet and demonstration videos should be available on the OEM website. Bidders should clearly mention URLs of the quoted products.*
- 1.i The Bidder/OEM should have a functioning service centre in India. Details with contact number should be provided.
- 1.j The bidder must submit a bid for all the equipment listed in our specifications. Failure to bid for any of the equipment will result in the rejection of the bid.





2. LIST OF CONFIRMATORY DOCUMENTS

Sl. No.	Submission of Documents related to Eligibility Criteria	Scanned copy of documents to be uploaded by bidder in support of information/ declaration furnished online by the bidder against Eligibility Criteria (CONFIRMATORY DOCUMENT)
Clause 1.a	OEM	Registration document or OEM Authorisation Certificate
Clause 1.b	Experience of supply	Company Registration document/ Certificate of Incorporation
Clause 1.c	Proof of supply & Users	Bidders have to submit Purchase Order and Successful Installation report. In case the tender specification of a model closely meets our requirement, the purchase committee can relax this criterion. Also submit the complete user list along with their contacts.
Clause 1.d	Quality performance and of equipment	Bidder should submit minimum two performance reports from the existing users. Details of the purchasing authority with contact no and email id of the concerned person shall be provided to verify the current performance of the equipment.
Clause 1.e	Non-liquidation and non-blacklisting status	Affidavit of Non-Liquidation and Non-Blacklisting: A notarized affidavit or declaration by the authorized representative of the bidder stating that the company is not under liquidation and has not been blacklisted by any State Government, Central Government organization, or any Public Sector Undertakings (PSUs).
Clause 1.f	5 Year after sales support	Commitment Letter/Declaration: A letter from the bidder stating their commitment to providing after-sales support for a minimum of five years. This letter should specify the scope of support, including maintenance, spare parts availability, technical assistance, and service response times.
Clause 1.g	Technical Specification of equipment	Product specifications submitted by the bidder have to be supported by printed technical leaflet/literature with photo of the quoted model. Merely copying our specifications and stating "yes" for compliance without any documented evidence will not be accepted. In case it is a specially customized model, the vendor must provide the details (i.e. brand, specifications) of sensors, controllers, compressor etc
Clause 1.h	Web URLs	Web URLs for datasheet, videos of quoted products
Clause 1.i	Service centre	Address and contact details of service centres along with escalation matrix.
Clause 1.j	Bid for all the equipment	Compliance report
	Other	Technical Compliance Report
** Submission of irrelevant document may lead to rejection of the bid.		

3. ACCEPTANCE/ REJECTION OF BIDS:

The Institute reserves the right to reject any bid not fulfilling the eligibility criteria. Submission of incomplete bid/ incomplete bid format would lead to rejection of bids. All documents required to be submitted should be the part of the bid. If any document is not submitted, the bid will be treated as incomplete and this would lead to rejection. No communication in this regard will be entertained.



4. DELIVERY AND DOCUMENTS:

Delivery of the goods should be made within the maximum period specified in the 'SCHEDULE' from the date of placement of the purchase order. Within 24 hours of shipment, the supplier shall notify the purchaser via e-mail of the full details of the shipment, including the contract number, railway receipt number/AWB, date, description of goods, quantity, name of the consignee, invoice, and other relevant details

The supplier shall be responsible for covering all costs associated with unloading, unpacking, and placing the equipment in the designated laboratory. The supplier is also required to arrange the necessary manpower and cranes for these tasks. However, in the event of early written notification, the buyer department may provide contact information of local labour contractors or crane services to facilitate the unloading process. The delivery must be done at working hours with prior intimation to the buyer department.

The supplier shall submit following documents to the buyer:

- I. Manufacturer's/Supplier's warranty certificate;
- II. Inspection Certificate issued by the nominated inspection agency, if any
- III. Supplier's factory inspection report; and
- IV. Certificate of Origin (if possible by the beneficiary);
- V. Two copies of the packing list identifying the contents of each package
- VI. Standard Operating Procedure (SOP)
- VII. Operational Manual for Controller
- VIII. IQ, PQ, OQ protocols certificate.
- IX. Calibration certificate of all controlling modules with traceability.
- X. Certificate of MOC.
- XI. Test Report of chamber prior to supply with mapping certificate.
- XII. Wiring diagram for ease of service maintenance.

5. PACKING INSTRUCTIONS:

Each package will be marked on three sides with proper paint/indelible ink, the following:

- a) Item Nomenclature
- b) Order/Contract No.
- c) Country of Origin of Goods
- d) Supplier's Name and Address
- e) Consignee details
- f) Packing list reference number



6. INSTALLATION & DEMONSTRATION

The supplier is required to do the installation and demonstration of the equipment within two weeks of the arrival of materials at the IIT(ISM) Dhanbad, site of installation. In case of any damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk.

7. WARRANTY:

- a) *Warranty period shall be 5 years from date of installation of Goods and acceptance at IIT(ISM), Dhanbad.* The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site.
- b) The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall arrange to repair or replace the defective goods or parts within 7 days free of cost in IIT (ISM), Dhanbad. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 07 days. If the supplier having been notified fails to remedy the defects within 07 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.
- c) The warranty period should be clearly mentioned. The maintenance charges (AMC) under different schemes after the expiry of the warranty should also be mentioned. The comprehensive warranty will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components.



8. DEFECTIVE EQUIPMENT:

If any of the equipment supplied by the Supplier is found to be substandard, refurbished, unmerchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the equipment or its part. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 7 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, IIT (ISM), Dhanbad may consider "Banning" the supplier.

9. SITE PREPARATION:

The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter. The supplier may visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre- installation requirements.

10. TRAINING OF PERSONNEL:

The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment. Minimum training period shall be 3 days.

Rahul *Subir* *Samy*

11. SCOPE OF SUPPLY- LIST OF EQUIPMENT

Sl. No.	Details of Equipment	Quantity
1	Universal Test Frame for Structures Experiments	1 Set
	Accessories, Tools, Software & Consumables	
i	All the tools, accessory and software mandatory for operation and maintenance of the equipment	As per requirement
2	Bending Stress in a Beam Test Setup	1
	Accessories, Tools, Software & Consumables	
i	All the tools, accessory and software mandatory for operation and maintenance of the equipment	As per requirement
3	Bending Moments in a Portal Frame Test Setup	1
	Accessories, Tools, Software & Consumables	
i	All the tools, accessory and software mandatory for operation and maintenance of the equipment	As per requirement

12. TECHNICAL SPECIFICATION:

12.1. Technical Specifications for Universal Test Frame for Structures Experiments

12.1.1. Purpose

The Universal Test Frame is required as a modular platform to securely mount and operate interchangeable experimental modules from the Structures Experiment Range, such as:

- Bending Moment in a Portal Frame
- Bending Stress in a Beam

12.1.2. General Features

- Modular, Strong, bench-top universal test frame for structural experiments.
- Designed to securely hold and operate various interchangeable modules and instruments.
- Allows for quick setup, removal, and interchanging of experiments by students.
- Can also function as a storage support for experiments when not in use.

12.1.3. Structural and Mechanical Characteristics

- Material: Rigid extruded anodized aluminum construction

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- Main Beams: Two extruded beams with a minimum cross-section of 98 mm x 48 mm.
- External Dimensions (assembled): 1062 mm (L) x 420 mm (W) x 295 mm (H).
- Platform Weight: Approximately 16 kg.
- Footprint: Not exceeding 1100 mm x 450 mm.
- Adjustable leveling feet: Minimum 20 mm vertical adjustment for stability on uneven surfaces.
- Includes 20 self-positioning captive spring nuts for precise and secure positioning of experimental units.

12.1.4. Data Acquisition System & Connectivity

- Integrated USB Interface Hub to connect Structures experiment modules to a computer.
- Compatible with the proprietary Data Acquisition System (DAS) software:
 - Software must be free to download from OEM website.
 - Fully compatible with latest Microsoft Windows OS (Windows 10/11).
- Should support remote teaching/learning via a Remote Data Acquisition System:
- Hub must be mountable to the frame for a neat and clutter-free setup.

12.1.5. Electrical & Power Requirements

- AC Adapter Input: 100-250 VAC, Single Phase, 50 or 60 Hz, 1 A.
- Power Control Capability:
 - Frame and hub materials must support remote power management.
 - Enables monitoring power usage and automated scheduling (on/off control).

12.1.6. Environmental Conditions

- Storage Temperature: -25°C to +55°C.
- Operating Temperature: +5°C to +40°C.
- Relative Humidity:
 - Up to 80% at 31°C.
 - Decreasing linearly to 50% at 40°C.

12.1.7. Software & Computer Compatibility

The Data Acquisition System must operate with the following minimum computer configuration (computer not in scope of supply):

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Component	Minimum Specification
Operating System	Windows 10 / 8.1 / 8 / 7 (32 or 64 bit)
Processor	Pentium 4M 32-bit or equivalent
RAM	1 GB
Disk Space	5 GB
Display Resolution	1440 x 900
Display Size	15" (381 mm) or larger
USB Port	At least one spare USB 2.0 port

12.1.8. Deliverables

- Universal Test Frame (disassembled, with instructions).
- USB Interface Hub with mountable frame fixture.
- AC Adapter for the Interface Hub.
- Minimum 20 self-positioning captive spring nuts.
- User manuals and assembly guidelines.

12.2. Technical Specifications for Bending Stress in a Beam Test Setup

12.2.1. Objective

The proposed equipment shall be a complete experimental setup for demonstrating and studying the bending stress distribution across the cross-section of a beam. It shall be mountable on a standard structures platform and compatible with an automatic data acquisition system (onboard).

12.2.2. Experimental Scope

The equipment shall enable the demonstration and investigation of the following topics:

- Relationship between **stress and strain** in a loaded beam.
- Use of **strain gauges** as measurement instruments.
- Experimental and theoretical determination of the **neutral axis**.
- Effect of beam **cross-section dimensions** on the **second moment of area (I)** and neutral axis.

12.2.3. Functional Requirements

12.2.3.1. Beam and Loading System

- Beam Type: T-section aluminium beam for mechanical stability and offset neutral axis.
- Beam Length: Approximately 0.85 meters.
- Span Between Supports: Approximately 0.7 meters.
- Supports: Two beam supports included.
- Loading Mechanism: Designed to produce a constant bending moment across the strain gauge region for improved measurement accuracy.

12.2.3.2. Strain Measurement System

- Strain Gauges: Nine (9) strain gauges mounted around the beam cross-section.
- Dummy Gauges: Nine (9) dummy strain gauges for temperature compensation and Wheatstone bridge balance.
- Strain Gauge Type: 350 Ω .
- Gauge Connectivity: Gold-plated quick connectors for reliable signal transmission.
- Strain Gauge Amplifier: Minimum 16 input channels.

12.2.3.3. Force Measurement

- Load Cell: S-Type, with a minimum capacity of 650 N, for precise force measurement.

12.2.4. Instrumentation and Accessories

The setup shall be supplied with the following standard accessories:

- Strain Gauge Amplifier (16 input).
- Vernier Caliper for precise beam cross-section measurements.
- Inclinator for angular displacement measurements.
- Hexagon Tools for assembly and beam fixing.
- Storage Tray for safe storage of smaller components.

12.2.5. Data Acquisition and Software

- The system must be compatible with a structures test frame and HUB.
- Compatible with a data acquisition system (free downloadable software) that supports:
 - Mimic diagram of the apparatus.
 - Diagrammatic representation of the experiment.
 - Input and display of experiment variables and dimensions.
 - Real-time and tabulated results.
 - Simulated experimental results.
- Compatible with remote data acquisition (eLab) system for online/remote teaching and monitoring.

12.2.6. Additional Monitoring Module

A compact, standalone, programmable multi-sensor module shall be included. It must:

- Dimensions: Not exceed 5 cm × 5 cm × 5 cm.
- Weight: Not exceed 35 grams.
- Power Supply: Rechargeable battery.
- Sensors: Include at least 16 integrated sensors capable of real-time data visualization.

Sensors shall include:

- Sound, acceleration, gyroscope, barometric pressure, external temperature, altitude, magnetism, humidity, light, color, gesture, and short/long-range proximity.
- Features:
 - Programmable RGB LEDs.
 - Tone generator for physical computing applications.
 - Tough insulating material for remote-controlled power switching and monitoring.

12.2.7. Environmental and Physical Characteristics

- Dimensions (Assembled): Approx. 850 mm (L) × 130 mm (D) × 500 mm (H).
- Weight (Assembled): Approximately 14 kg.
- Weight : Not exceeding 16 kg.

Environmental Conditions

- Storage Temperature: -25°C to +55°C.
- Operating Temperature: +5°C to +40°C.
- Operating Humidity: Up to 80% RH at 31°C, linearly decreasing to 50% RH at 40°C.

12.2.8. General Requirements

- All components shall be durable and of high quality, suitable for educational laboratory use.
 - The complete system shall be supplied with an instruction manual, installation guide, and experiment manual.
-

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12.3. Technical Specifications for Bending Moments in a Portal Frame Test Setup

12.3.1. Purpose

The proposed equipment shall be a complete experimental setup for demonstrating and studying the bending moments and sway behaviour in portal frames under various loading conditions. It shall be mountable on a standard structures platform and compatible with an automatic data acquisition system (onboard).

12.3.2. Experimental Scope

The equipment must enable the following experimental studies:

- Use of strain gauges as instruments for structural analysis.
- Relationship between measured strain and bending moments.
- Investigation of elastic bending behaviour and linear load-moment relationships.
- Application of the Hardy Cross Moment Distribution Method for calculating internal forces and sway in portal frames.
- Analysis of sway deflections and bending moments due to:
 - Vertical loads on the beam,
 - Horizontal loads at beam-upright junctions,
 - Moments applied to vertical members,
 - Any combinations of the above.
- Plotting and analysis of bending moment diagrams.

12.3.3. Portal Frame Assembly

- Frame Dimensions: 500 mm (width) × 250 mm (height).
- Frame Material: Aluminium flat bar.
- Member Dimensions: 19 mm × 3.2 mm.
- Structure: Composed of one horizontal beam and two vertical members, forming a symmetrical portal frame.
- Fixing: Clamped to the base of the structural back panel.

12.3.4. Strain Gauge System

- Total Strain Gauges: 16 linear-pattern strain gauges ($350 \Omega \pm 0.6\%$).
 - 8 on the horizontal beam.
 - 4 on each vertical upright.
- Connection: Gold-plated connectors to a 16-channel Strain Gauge Amplifier (included).

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- Flexural Rigidity: All members to have identical EI (Flexural Rigidity) for theoretical correlation.

12.3.5. Load Application System

- Vertical Load Points: 3 × fixed loading joints on the horizontal member.
- Horizontal Load Application: Via a load cable over pulley system attached to the upper frame corner.
- Moment Simulation: 2 × Moment Arms (included) for simulating internal/external balconies or intermediate floors.

12.3.6. Deflection Measurement

- **Digital Deflection Indicator** : A digital indicator to measure horizontal deflection (sway) at the corner of the of the portal frame.
 - Range: 12.7 mm
 - Resolution: 0.01 mm
 - Accuracy: ≤ 0.02 mm
 - Standard Compliance: ISO R463 / JIS B7503
 - Output: Digital data output compatible with acquisition software

12.3.7. Data Acquisition and Software

- Compatibility: Must fit to the Structures Test Frame and HUB.
- Software:
 - Free to download from OEM website.
 - Compatible with Onboard and elab Remote Data Acquisition Systems.
 - Must support:
 - Mimic diagram of apparatus.
 - Graphical representation of experimental setup.
 - Experiment variables and beam/frame dimensions.
 - Tabulated results and data export.
 - Simulated experiments for remote learning.

12.3.8. Additional Sensor Module

The setup must include a compact programmable multi-sensor module with the following minimum specifications:

- Weight: ≤ 35 g

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- Dimensions: $\leq 5 \text{ cm} \times 5 \text{ cm} \times 5 \text{ cm}$
- Sensors (16 types): Sound, Acceleration, Gyroscope, Pressure, External Temperature, Altitude, Magnetism, Humidity, Light, Color, Gesture, Proximity (short/long range).
- Power: Rechargeable battery with remote ON/OFF scheduling and power monitoring.
- Features: Programmable RGB LEDs and tone generator.
- Material: Tough insulating material to ensure safe remote-controlled operation.

12.3.9. Accessories and Tools

- Included Items:
 - 4 × Mass Hangers
 - 50 × 20 g Weights
 - Vernier Caliper
 - Hex Tools for assembly
 - Storage Tray

12.3.10. Environmental & Physical Parameters

- Assembled Dimensions: 760 mm (L) × 90 mm (D) × 380 mm (H)
- Weight: 9 kg
- Storage Temperature: -25°C to $+55^{\circ}\text{C}$
- Operating Temperature: $+5^{\circ}\text{C}$ to $+40^{\circ}\text{C}$
- Operating Relative Humidity: Max 80% at 31°C , decreasing linearly to 50% at 40°C

12.3.11. Compliance and Documentation

- All equipment must be CE marked and conform to relevant ISO or equivalent international standards.
- OEM/User Manual and calibration certificates must be provided.

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Annexure-A

SELF-CERTIFIED DECLARATIONS FOR TAKING PART IN TENDER

- a. Regarding blacklisting / debarring
- b. Insolvency

1. I / We _____ (Tenderer) hereby declare that the firm / agency / Company, namely M/s _____ has not been declared as **insolvent** by the Central/State Government or any other Organization.

AND

2. I / We _____ (Tenderer) hereby declare that the firm / agency / Company, namely M/s _____ has not been **blacklisted or debarred** in the past by the Central/State Government or any other Organization from taking part in Government tenders in India.

OR

I / We _____ (Tenderer) hereby declare that the Firm/Agency/Company, namely M/s _____ was **blacklisted or debarred** by _____ (Name of organization) from taking part in Government tenders for a period of _____ years w.e.f. _____ to _____.

In case the above information is found to be false at any point of time, I / We am/are fully aware that the IIT (ISM) Dhanbad can cancel the purchase order and forfeit the EMD. Further, I will not claim any payment for any supplied item against cancelled purchase order.

Date:

Place:

Signature: _____

Name: _____

Address: _____

Stamp:

Details of quoted itemTender No. **CE-INS-CPPP-109-25-26****Identification of items.**

1. Name of the tender : **SUPPLY AND INSTALLATION OF STRUCTURE PLATFORM, BENDING STRESS IN A BEAM AND BENDING MOMENT IN PORTAL FRAME**
2. Name of original manufacturer_____
3. Make/Brand:_____
4. Model Number:_____(provide complete literature/catalogue)
5. Warranty Period:_____(months)
6. Delivery Period:_____(days)
7. Specifications: Details of technical specifications of quoted item are as under
Note: Technical Specifications for quoted item should strictly as per Annexure-III)

Technical Specifications	Quantity

Date:**Signature:**_____**Place:****Name:**_____**Address:**_____**Stamp:**

Declaration for Local Content

For the item value below Rs.10 Crores) (To be given by the Statutory Auditor/Cost Auditor/Cost Accountant/CA for the item value above Rs.10 Crores)

Date: _____

To,
The Director,
IIT (ISM) Dhanbad.

Sub: Declaration of Local content.

Tender No: **CE-INS-CPPP-109-25-26**

Name of offered the item:

In accordance with the order No. P-45021/2/2017-PP (BE-II) dated 04th June, 2020, I hereby declare that

- i) I am aware of the Order No. P-45021/2/2017-PP (BE-II) dated 04th June, 2020 and abides by the same.
- ii) I declare that for this tender, I am a **Class-I local supplier / Class-II local supplier / Non-local supplier** (Strike out whichever is not applicable) and classification is based on local content of goods/services/work offered by bidder in this tender.
- iii) **Local content (in percentage) for offered item is: _____%**
Whereas 'Local Content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- iv) The local content for all inputs which constitute the said goods/services/works has been verified and bidder is responsible for the correctness of the claims made therein. I am fully aware that false declaration will be in breach of 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.
- v) Details of items, amount and location(s) at which the local value addition is made:

Sl. No.	ITEM (S)	AMOUNT	LOCATION(S)
1.			
2.			
3.			
4.			
5.			

Yours Faithfully,

**(Signature)
Seal**

Certificate by the bidder

Date: _____

To,
The Director,
IIT (ISM) Dhanbad.

Subject: Undertaking regarding type of bidder.

Reference: Office Memorandum No. F.7/10/2021-PPD(1) dated: 23.02.2023 issued by
Department of Expenditure, Ministry of Finance, Govt. of India.

Tender No. **CE-INS-CPPP-109-25-26**

Name of Tender: **Supply and Installation of Structure Platform, Bending Stress in a Beam
and Bending Moment in Portal Frame**

Sir,

1. I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority is attached.]

2. I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all the requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority is attached.]"

Yours Faithfully,

(Signature of the Bidder)

Seal

Tender Acceptance Letter

To,
The Director,
IIT (ISM) Dhanbad.

Subject: Acceptance of Terms & Conditions of Tender.

Tender No. **CE-INS-CPPP-109-25-26**

Name of Tender: **Supply and Installation of Structure Platform, Bending Stress in a Beam and Bending Moment in Portal Frame**

Sir,

1. I / We hereby certify that I/we have read the entire tender document including all annexures. I/we have read all the terms and conditions of the tender documents. I/we hereby undertake that I/we shall abide by the terms/conditions/clauses mentioned in the tender document.
2. The corrigendum(s) issued from time to time by your department/ organization too have also been taken into consideration, while submitting this acceptance letter.
3. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality/entirety.
4. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by any Govt. Department/Public sector undertaking.
5. I / We certify that all information furnished by me/our firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the Earnest Money Deposit.

Yours Faithfully,

(Signature of the Bidder)
Seal

Price Fall Clause Certificate

I/We _____

undertake that we have not offered to supply / supplied / are not supplying same or similar products / systems or sub systems at a price lower than that offered against the **Tender No. CE-INS-CPPP-109-25-26** dated **18-08-2025** in respect of any Organization/Ministry/Department of the Govt. of India or its Subsidiaries or other PSU or any other private organization during the currency of the contract and if it is found at any stage that same or similar product/systems or sub systems was supplied by the bidder to any Organization/Ministry/Department of the Govt. of India or its Subsidiaries or other PSU or any other private organization at a lower price during the currency of the contract, then that very price will be applicable to the present case and the difference in the cost would be refunded by the bidder to buyer, if the contract has already been concluded.

I/We also accept that:

1. I/We have to submit a copy of the last (latest) purchase order for the similar/ordered item(s) received from any Organization/Ministry/Department of the Govt. of India or its Subsidiaries or other PSU or any other private organization.
2. We will inform the purchaser of offer to supply/supply of the similar/ordered item(s) at a lower rate to any Organization/Ministry/Department of the Govt. of India or its Subsidiaries or other PSU or any other private organization during the currency of the contract.

Date:

Signature of the Bidder

Seal of the Firm

BID/TENDER SPECIFIC AUTHORIZATION LETTER
(To be given on OEM Letter Head)

To,
 The Director
 IIT(ISM),
 Dhanbad.

Tender No.: **CE-INS-CPPP-109-25-26**

Name of Tender: **Supply and Installation of Structure Platform, Bending Stress in a Beam and Bending Moment in Portal Frame.**

Equipment Name: _____.

Sir,

1. We, _____,
 who are established and reputable manufacturers of _____ having factories at
 _____ and _____ hereby authorize
 _____ (Name of Authorized Dealer/Distributor/Supplier) to bid, negotiate
 and conclude the contract with IIT (ISM) Dhanbad against this tender for the above goods manufactured
 by us.

2. No company or firm or individual other than _____ are
 authorized to bid, negotiate and conclude the contract in regard to this business against this specific
 tender.

1. We also hereby undertake to provide full guarantee/warranty /Comprehensive Annual Maintenance
 Contract as agreed by the bidder in the event the bidder is changed as the dealers, or the bidder fails to
 provide satisfactory after-sales and service during such period of Comprehensive Warranty /
 Comprehensive Annual Maintenance Contract and to supply all the spares/accessories/consumables etc.
 during the said period.

2. We hereby extend our full guarantee and warranty as per the conditions of the tender for the goods bided
 for supply against this tender by the above firm.

The authorization is valid up to _____

Yours faithfully,

(Signature of the Bidder)

For and on behalf of M/s. _____

(Name of manufacturers)/Principal

Seal: