

# भारतीय प्रौद्योगिकी संस्थान इंदौर सिमरोल, खंडवा रोड, इंदौर, पिन- 453552

Indian Institute of Technology Indore Simrol, Khandwa Road, Indore- 453552

# GeM Bidding Document For Supply and Installation of Large Direct Shear Apparatus



Document to be submitted online on GeM for (Technical & Financial Bid as per Schedule of requirement)

### <u>अनुभाग-1 /SECTION - I</u> विशेष नियम एवं शर्तें / SPECIAL TERMS AND CONDITIONS

- 1. Any bidder from a country sharing 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 vide Ministry of Finance OM No. 6/18/2019-PPD dated 23<sup>rd</sup> July 2020 and its subsequent amendments.
- 2. <u>Benefits to Micro and Small (MSEs)/Start-Up will be applicable</u> under PP Policy 2012 and its subsequent amendments for MSEs as per guidelines issued by Ministry of MSME.
- 3. The Public Procurement (preference to Make in India) will be applicable under Order 2017, DIPP, MoCI Order no. P-45021/2/2017-B.E.II dated 15<sup>th</sup> June 2017 and its subsequent amendments.
- 4. Payment: No advance payment will be made in any case. Payment will be released through bank NEFT/RTGS transfer after supply, installation testing, inspection & commissioning of the item(s) and if found satisfactory with regard to quality, quantity and specifications ordered. The payment will be released after statutory deductions within 30 days. For the payment, the firm has to submit Supplier's Invoice indicating, inter alia description and specification of the goods, quantity, unit price, total value; challans(s), manufacturer's guarantee certificate; bank details/cancelled cheque, installation report, performance bank guarantee etc. to the Assistant Registrar, MM Section, IIT Indore.

### The payment terms will be:-

- (i) 80% of the unit cost will be paid against delivery of the goods received in good conditions at IIT Indore and accepted by the user department.
- (ii) 20% of the balance of each unit cost will be paid after Satisfactory Installation, Commissioning, Testing & Training (if required) of the IIT employees and submission of performance bank guarantee.

### 5. Performance Security:

- a. Within Fifteen days (or any other period mentioned in Tender Document or Contract) after the issue of Contract/Purchase Order by the Procuring Entity, the firm shall furnish to the IITI, performance security, valid up to **sixty days** after the date of completion of all contractual obligations by the contractor, including the warranty obligations.
- b. The <u>5%</u> amount of the order value shall be stipulated in Tender Document or Contract denominated in Indian Rupees or the currency of the contract and shall be in one of the following forms:
  - I. Unless otherwise stipulated in Tender Document or Contract, Account Payee Demand Draft or Fixed Deposit Receipt is drawn on any commercial bank in India, favoring the authority mentioned in therein (or FA&CAO of the Procuring Organization, if not mentioned).
  - II. Bank Guarantee issued by a commercial bank in India, in the prescribed form provided in Form X.
- c. If the contractor, having been called upon by the Procuring Entity to furnish Performance Security, fails to do so within the specified period, it shall be lawful for the Procuring Entity at its discretion to annul the award and enforce Bid Securing Declaration (in lieu of forfeiture of the Bid Security), besides taking any other administrative punitive action like 'Removal from List of Registered Suppliers' etc.

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6. BANK DETAILS:

Account Holder: Registrar IIT Indore

Account No. : 36948979864 IFSC Code : SBIN0030524 Bank Name : State Bank of India

Branch Address: Simrol, Khandwa Road, Tehsil- Mhow, District- Indore (M.P.)

7. Award Criteria: The Purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive, technically qualified and has been determined to be the lowest responsive evaluated bid in terms of quoted price.

- 8. **Pre dispatch Inspection (If required/asked)** The firm should arrange the pre-dispatch inspection prior to packing & dispatching of the item if asked by the IIT Indore. The firm should share the entire details of the quoted items with original images, catalog and schematic diagrams before packing. Virtual/Online or physical inspection may be done by the IIT Indore technical committee.
- 9. Items should be delivered only on working days (Monday to Friday) during office hours only i.e. between 10:00 a.m. to 05:00 p.m.
- 10. <u>PRE- INSTALLATION</u>: Please also mention the pre-installation requirements for the equipment like ambient temperature, humidity, civil work, weather specifications, power specifications, etc. When items are provided full performance satisfaction should be demonstrated.
- 11. **Liquidated Damages:-** As time is the essence of an order, the date of delivery should be strictly adhered to, otherwise the delivery in full or in part may not be accepted and penalty for late delivery will be imposed @ 0.5% (Half Percent) per week subject to a maximum of 10% of the total value of supply order & beyond 10% subject to approval of IIT Indore. In case of delay in satisfactory Installation Commissioning, Testing, Inspection, Certification etc. also the same rate of penalty shall be liable. Non- Delivery of material/service may lead to forfeiture of PBG and debarment of the supplier.
- 12. **Delivery:** Free delivery at IIT Indore.
- 13. In case the equipment offered requires maintenance after the expiry of the warranty, please indicate the approximate cost of comprehensive and on-call basis maintenance and also the availability of local support or otherwise.
- 14. IIT Indore reserves the right to modify/alter/Insertion or deletion on any part of the tender document to ensure fulfillment of its material & service requirement at any stage.
- 15. The instructions about bidding given in this advertisement and the tender documents should be read thoroughly before bidding. IIT Indore reserves the right to accept or reject any or all quotations at any stage without assigning any reason whatsoever it may be.
- 16. **Breach of Terms and Conditions**: IIT- Indore reserves the right to accept or reject or cancel any or all inquiries or quotations at any stage without assigning any reason thereof. In case of cancellation of order due to Non-compliance of with Terms and Conditions and Breach of the Contract, no compensation will be paid towards the progress of order/procurement.
- 17. **Governing Law:** The order placed will be a contract between the supplier and the buyer and shall be governed by the laws of India and under the contract shall be taken by the parties only

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- in Indore, M.P India to competent jurisdiction. All Domestic and International disputes are subject to Indore, M.P. jurisdiction only.
- 18. Please note clearly that the Bids sent through FAX, E-mail, by hand and/or by any post/courier shall not be accepted/ processed, in any case.
- 19. All other General Terms & Conditions will as per GeM GTC 4.0 v1.12.
- 20. All communications with respect to the tender shall be addressed only to:

Assistant Registrar, Materials Management Section 4th Floor, Abhinandan Bhawan (West Wing), Indian Institute of Technology, Indore Khandwa Road Simrol, Indore- 453552 Tel.: 0731660- Ext. 3546/3551

Email: ja4mms@iiti.ac.in/ mms@iiti.ac.in

- 21. The Quantity mentioned above is also indicative and might change in the final order.
- 22. Format for Price Breakup (FORM-XI) must be uploaded at the time of Price bid submission. Non-Compliance of the above condition by the bidders will amount to non-eligibility for which tender has been floated and its bid shall be liable to be rejected summarily.
- 23. General Instructions (From Packing at Supplier's factory to Installation at Purchaser's destination):
  - a) Site Preparation: The supplier should inform the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier has to state in detail the floor Space, electrical power/UPS and air-condition requirements in the technical bid. The supplier should continuously monitor the pre-installation requirements and see that everything is ready before the equipment is transferred to the site for installation.
  - b) Packing and Transportation: The supplier should provide the Goods with high quality packing which can prevent their damage or deterioration during transport to their final destination. The packing should be able to withstand the rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. While transferring the Goods to final destination, their packing case size and weights should be taken into consideration. Further, at all transit points, the heavy handling facilities should be used for smooth handling purposes.
  - c) Insurance: The Goods supplied under the Contract should be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. The insurance shall be obtained by the suppliers in an amount equal to "the value of the goods + the value total tax" from "warehouse to warehouse" (final destinations) on "all risks" basis including war risks and strikes.
  - d) Delivery and Unloading: The equipment should be delivered to IIT INDORE as per the delivery period mentioned in the Purchase/Contract Order. The supplier should ensure to unload all the materials (equipment and other related accessories etc.) to the installation site at IIT INDORE. Unloading of the goods at IIT INDORE is the responsibility of the supplier. No manpower will be provided by IIT INDORE.
  - e) Installation and Demonstration: Installation should be done by the supplier at free of cost within 30 days from the date of delivery of the item. Installation, complete interfacing of the

system with its subsystems, and commissioning is to be carried out by the vendor's factory-trained engineers, followed by a demonstration of the system's performance fully to the user's satisfaction. Supplier should show the performance of the equipment as per specifications agreed based on claims made in their brochures or specification sheet.

- f) Inspection: The inspection of the system will be done by an IIT INDORE technical expert in the presence of the supplier's representative. In case of receipt of the material in short supply or damaged condition, the supplier will have to arrange the supplies/replacement of goods free of cost pending the settlement of the insurance case wherever applicable on FOR basis at IIT INDORE.
- g) Warranty: The warranty period should begin from the date of successful installation, commissioning and training at IIT INDORE. Main equipment and all accessories must have comprehensive warranty, and warranty should cover all parts & labour work involved. Supplier will have to undertake comprehensive maintenance of the entire hardware components, software, equipment, support and accessories supplied by the supplier at the place of installation of the equipment. The supplier warrants that all the Goods are new, unused, not substandard and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the contract. The supplier further warrants that all Goods supplied under this contract will have no defect arising from design, materials or workmanship. The defects, if any, during the guarantee/warranty period rectified free of charge by arranging free replacement wherever necessary. Collecting faulty Hardware from onsite and provisioning the replacement of hardware under warranty at onsite should be the responsibility of the supplier. If the supplied material is not used during the service period for replacing the faulty item, the supplier should extend the warranty period equal to the period during which material is not used.
- h) Training (if required/asked): Onsite training should be provided by the supplier at free of cost to the users designated by IIT INDORE on all specified capabilities of the instrument by the company person. At least 3 days training should be provided each year during the warranty period. During training the hardware, software, operation, safety procedure, handling emergency situations and maintenance of the instruments should be explained.

### ADVISORY ON FRAUD CALLS/MESSAGE MADE IN THE NAME OF IIT INDORE

- (a) This is to inform you that no officials from the IIT Indore make any telephone calls/messages/emails/whatsapp seeking personal or irrelevant information from the bidder. In case any additional documentation is required from bidder, it is sought only through the official email(s) originating from the institute domain name i.e. @iiti.ac.in.
- (b) No tender/application/documentation fee is applicable for any type of the tenders being floated by this institute.
- (c) The IIT Indore hereby advises all the bidders to refrain from entertaining any suspicious telephone calls/messages/emails/whatsapp made in the name of IIT Indore asking for money on behalf of the institute. They are also advised not to reveal any personal information or transfer any money in response to such calls/messages/emails/whatsapp.
- (d) Moreover, they should bring such matters to the notice of the institute viz email to mms@iiti.ac.in.
- (e) In case any bidder responds and becomes pray to any such fraudulent communication the responsibility shall not lie with this institute.

Assistant Registrar Material Management Section

> (सामग्री प्रबंधन विमाग) Assistant Registrar

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### <u>अन्भाग-2 / SECTION- II</u>

### आवश्यक योग्यता मानदंड/Essential- Qualification Criteria

### <u> भाग – 1 /PART - I</u>

### LIST OF DOCUMENTS TO BE UPLOADED WITH TECHNICAL BID

SI. No.	Details	Supporting Document Should be Submitted
1.	Bidder Information	As per enclosed FORM – V
2.	The Bidder should be OEM/ Authorized - Distributors/ Dealers/ Firms and should have the existence of firm for a minimum period of 5 years.	Valid certificate of Incorporation/ Registration of the firm.
3.	Bidder should submit a valid manufacturers authorization (in case bidder is not an OEM) and warranty support declaration from the OEM specific to this tender.	The same should be on the Letterhead of the concerned OEM. In case of Authorized- distributor/ dealer/ firm, a copy of the valid authorization certificate shall be enclosed. (As per FORM – I) Note- Offer submitted without proper authorization shall be liable to be rejected summarily.
4.	Udyam Certificate if bidder claim MSEs should be as per GeM_GTC Clause 04, Point no (xiii), m, (i)  Note- Exemption for MSME's under this clause shall be given to only those bidders who are OEM and have a valid UDYAM certificate with major activity as "Manufacturing".  (Traders/Authorized dealers shall not be eligible for any exemption).	Self-certified copies of documents.
5.	Startup Certificate if bidder claim as a startup to this tender item.	Self-certified copies of documents.
6.	WORK EXPERIENCE: The Vendors / Bidders should have work experience as per the following parameters.  Three similar completed work costing not less than Rs. 4,50,000/- in last 3 (Three) financial years for any Govt./Semi Govt./Centrally Funded Technical Institutes (CFTI) which includes IITs, IISERs, IIMs, NITs, IIITs, IISc and IIEST, CSIR Institutes,	Work orders and satisfactory completion valid certificates issued by respective buyer organization of the above order in support of experience to be enclosed. Without submission of completion certificate the experience will not be considered.
	Central Universities and /or DAE Institutes (NISER, TIFR).	The valid certificate should be in Letter Head of the concerned government organization with

TENDER No.: IITI(MM)/CE/1/1A/259/LB/2025-2026	
Two similar completed work costing not less than <b>Rs.</b> 6,00,000/- in last 3 (Three) financial years for any Govt./Semi Govt./Centrally Funded Technical Institutes (CFTI) which includes IITs, IISERs, IIMs, NITs, IIITs, IISc and IIEST, CSIR Institutes, Central Universities and /or DAE Institutes (NISER, TIFR).	authorized signatory.
OR One similar completed work costing not less than Rs. 10,50,000/- in last 3 (Three) financial years for any Govt./Semi Govt./Centrally Funded Technical Institutes (CFTI) which includes IITs, IISERs, IIMs, NITs, IIITs, IISc and IIEST, CSIR Institutes, Central Universities and /or DAE Institutes (NISER, TIFR).  Note: Similar work means Supply & Installation of Large Direct Shear Apparatus	
7. List of other Govt. Departments, Public Sector units and Central Autonomous Bodies for which the bidder is supplying material or having the similar type of contracts and a valid certificate regarding the satisfactory performance of the contract.	As per enclosed FORM VI
Bidder Acceptance of Tender Document	As per enclosed FORM VII
9. The bidder should not have been blacklisted by any Government / Semi Government / Board /Corporations /Autonomous Body/ PSU. An undertaking/declaration in this regard should been closed. If any such matter i.e. of blacklisting /suspension is subjudice, even then the concerned firm shall be technically disqualified.  "If any one or more Partner/ Directors of any debarred/blacklisted agency promotes or forms a new contracting firm or a sisterconcern firm of the said debarred/blacklisted agency, then it shall also be considered as a debarred /blacklisted firm".	
10. The quoted products should not be under end of sales or end of support in next 05 (five) years from the date of submission.	As per enclosed FORM XII
11. Make In India*- Class-I or Class-II Local Supplier.	A Self-Declaration Certificate regarding "Class-I or Class-II Supplier" for the tendered item as per the <b>Form-II</b> - is to be submitted.

### 12. FINANCIAL TURNOVER:

The Bidder Annual Financial Turnover should more than **Rs. 14,00,000/-** during the last three financial years namely 2022-23 2023-24 and 2024-25.

#### And

In case of OEM, the Average Annual Turn Over should be **Rs. 59,00,000/-** during the last three financial years namely 2022-23 2023-24 and 2024-25.

The Vendors / Bidders should not have incurred any loss during the last 3 (Three) financial years upto 31st March, 2025. Profit after Tax should be positive for the abovementioned period.

As per enclosed **FORM VIII** and Attach a separate neatly typed sheet on the letter head of Registered Chartered Accountant OR enclose copies of audited Balance Sheet and Profit & Loss Statement for the previous 3 financial year as specified in bid document and further details if required may be asked from the contractor after opening of technical bids. There is no need to upload entire voluminous balance sheet.

#### Note:-

1. Non-Compliance with any of the above conditions/points by the bidder will amount to non-eligibility for which tender has been floated and its bid shall be liable to be rejected summarily.

(Signature of the Tenderer/Owner)

Name:

Date:

### अनुभाग-2 / SECTION- II तकनीकी विशिष्टता / Technical Specification

भाग – 2 /PART - II

(Bidder should submit compliance matrix along with Technical Bid)

Item details and technical specifications as mentioned below: Supply & Installation of Large Direct Shear Apparatus

Sr. No.	Technical Specifications	Qty	Compliance If Yes/ No	Deviation If Any
2.	Large Direct Shear Apparatus – 300kN (Digital, Servo Controlled) A state-of-the-art facility  Overview  The Large Direct Shear Apparatus is a floor-mounted, self-contained system designed for determining the interface friction angle of different construction materials. It includes a load frame, set of weights, and an electronic measurement system with NABL calibration certificate. The instrument supports USB/RS-232 connectivity for real-time data acquisition and analysis through supplied software, and operates on 415 V, 50 Hz, 3-phase AC supply.  Applications	01 No.		
<i>2</i> .	To determine interface friction angle of different construction materials.			
3.	<ul> <li>a) Continuous 72-hour operation capability. The operating temperature should not vary more than ± 5° Celsius during continuous operation. Or should have cooling facility.</li> <li>b) Minimum 20 minutes power backup.</li> <li>c) Easy to use simple and accurate design. On-site assistance within 24 hours with warranty for 5 years.</li> <li>d) Computerized Servo motor-controlled operation with automated loading procedure, display, and data presentation.</li> <li>e) Powder-coated exterior and hard chrome plated internal components.</li> <li>f) Stainless steel shear box with linear bearings for minimal horizontal friction.</li> <li>g) Aesthetic outer appearance</li> <li>h) Compatible with optical sensors</li> <li>i) It should work between 0 to 55° Celsius temperature.</li> <li>j) Horizontal shear and vertical load capacities as 300 kN.</li> <li>k) Test sample dimensions as 600 × 600 × 300 mm.</li> <li>l) Built-in touch screen HMI &amp; PLC controller with real-time data display.</li> <li>m) Highly sensitive LVDT and programmable logic controller-based digital readout.</li> <li>n) Selectable measurement units: kN, kg, N.</li> <li>o) Servo-hydraulic loading system for vertical and shear loads.</li> <li>p) Heavy duty angle structure with guide roads and drive screws controls the vertical movement for vertical application of loads</li> </ul>			

TEN	TENDER No.: IITI(MM)/CE/1/1A/259/LB/2025-2026							
	PC-based control software for full process automation and							
	analysis.	•						
	g) Precise and accurate	e control through electronic system						
	coupled with dedicated	PC Software						
	r) Facility to start / stop							
	software itself.							
	s) User can precisely co	ntrol and vary the strain rate from the						
	software itself.							
	t) Easy handling of readir	-						
	u) User friendly software ն							
	'	on 415 volts, 50Hz, 3 phase, A.C.						
	Supply.							
	· ·	ition system (feasible for expansion)						
	l · •	e over travel protection through upper	10.0					
		hes for vertical ram and left and right						
	micro switch for horizor	ılarıafii						
	Hardware	Specification						
	Component	600 × 600 × 300 mm – 1 no.						
	Shear box assembly Shear box housing	Large, with ball roller strips – 1 no.						
	Plain gripper plates	2 nos.						
	Perforated gripper plates	2 nos.						
	Perforated spacer plates	2 nos.						
4.	Interface friction	1 no.						
	assembly	1 110.						
	Base Plate	1 no.						
1	Loading Pad with lifting	1 no.						
	handle		,,					
	A soil container or hopper							
	Levelling tools							
	Electronic Component	·····						
	Component	Specification						
	Load cells	300 kN capacity in						
		tension/compression (range 10 kN to 300 kN) – 2 nos.						
	Displacement	±100 mm – 4 nos.						
	transducers	1100 Hill — 4 1105.						
5.	Microforce sensing	0.2 N to sub 10 <sup>-9</sup> N along the sensor's						
	probes	probe axis length: 3mm, thickness:						
		50µm, probe tip: Tungsten						
	Variable channels touch s	creen HMI & PLC Controller, which can						
	be connected to the displa	acement transducers and load cells for						
	measuring load and strain							
	Facility of auto recalibration	n (password protected) without proving						
	ring.							
	Technical Data of Load							
	Parameter	Specification						
	Accuracy	±1% or better						
5.1	Precision Class	C2 or better						
	Rated Output (mV/V)	2 ± 0.008 mV/V						
	Non-Linearity (%FS)	0.02%						
	Hysteresis (%FS)	0.02% 0.01%						
L	Repeatability (%FS)							

	Creen (% ES/20 min)	0.03%			
	Creep (%FS/30 min)	0.03%	-		
	Zara Balanca (0/ EC)	1.40/	-		
	Zero Balance (%FS)	± 1%	-		
	Input Resistance (Ω)	750 ± 10 Ω			
	Output Resistance (Ω)	700 ± 5 Ω			
	Insulation Resistance (MΩ)	≥ 5000 (100 VDC)			
	Excitation Voltage (V)	5 to 12 V (DC)			
	Compensated	-10 to +40 °C			
	Temperature Range (°C)			-	
	Operating Temperature Range (°C)	−20 to +55 °C			
	Temperature Effect on Zero (%FS/10°C)	0.05%			
	Temperature Effect on Span (%FS/10°C)	0.03%			t.
	Safe Overload (%FS)	150%			
	Ultimate Overload (%FS)	200%		<u> </u>	
	Protection Grade (IP)	IP78			
	Technical Specification	ns of LVDT			
	Parameter	Specification			
	Resolution	Infinite			
	Displacement Speed	≤ 10 m/s			
	Displacement Force	≤4N			
	Protection Level	IP54 or better			
	Life Expectancy	>25 million meters or 100 million			
		operations (C.E.U.)			
	Vibration Resistance	5-2000 Hz, amax = 20 g			
:	Shock Resistance	50 g, 11 ms			
	Tolerance on Resistance	± 20%			
	Recommended Cursor Current	< 0.1 mA			
5.2	Maximum Cursor Current	10 mA			
	Electrical Isolation	>100 MΩ @ 500 V DC, 1 bar, 2 s			
	Dielectric Strength	<100 mA @ 500 V AC, 50 Hz, 2 s,			
		1 bar			
	Temperature Coefficient (Output)	<1.5 ppm/°C			
	Working Temperature Range	−30+100°C			
	Storage Temperature Range	–50+120°C	į		
	Case Material	Anodised aluminium, Nylon 66 G25			
	Control Rod Material	Stainless steel (AISI 303)			
	Mounting/Fixing	Brackets with variable longitudinal axis			
	Software Features				***************************************
		on and real-time analysis.			
	Easy to set up and co	-			
5.3		dress on welcome screen			
	i - Company logo and ad	CIOUS OIL WOIDDING SUIDGII			
	<ul> <li>Password protected lo</li> </ul>	ngin screen			

of Direct Shear Test

- Manual as well as automatic data recording.
- Calculates area, volume, bulk density, dry density, and moisture content.
- · Real-time plotting of shear test graphs.
- Automatic computation of friction angle and cohesion intercept (peak and residual).
- Export results to Excel or PDF.
- · Password-protected access and operator-level controls.
- Software automatically detects the available Communication Ports (com-ports) to establish RS232 connection
- Facility to identify and display true/false com-port connection by green or red lamp indication within the software, Eliminating human error
- Users can enter new party names and address details to save all test specific information for later work.
- Previously stored party name and address details can also be loaded by browsing the directory of stored data.
- An operator can feed in various input information about the test sample - Test no., Test Material, Sample type, Test Speed, Date & Time, Density of test sample, Sample weight, Moisture content, Location of test sample, Area correction option, No of tests
- Facility to start or stop the complete instrument from software itself
- User can control and vary the Motor Speed from the software itself
- Self test diagnostic features
- Facility to select the area correction option: Yes or No
- Facility to select the type of sample: Drain or Undrain
- Real time graph building during the specific test
- Can store the data of previous test for future use
- Multi-stage test sequences with facility to stop or control tests

#### Results Representation

- Horizontal Displacement vs Shear Force
- Horizontal Displacement vs Vertical Displacement
- Normal stress vs Shear Force
- Display maximum value of the Dilation Angle along with C & ø Values
- Four different graph windows on a single screen for a specific test sample (Four different readings for each test - so each reading can be compared in real time and the last graph displays the overlap of three different readings for easy comparison)
- Tabulated test data, graphs and all test-specific calculations are provided in real time, allowing the operator to monitor tests in process.
- Automatic calculation of Friction Angle & Cohesion Intercept for Peak & residual values
- Can export logged readings easily to Excel or PDF file
- Facility to represent results in 2 different units and Facility for

	of measurin	<u> </u>				
Technical D	ata of PLC	-HMI				
Parameter		Specification				
Display	***************************************	7" WVGA Color TFT	1			
Resolution		800 x 480 pixels	1			
Touch Screen		Analog Resistive, 16-9 Aspect Ratio	]			
CPU		32-bit RISC Processor				
RAM		16 MB				
Power Supply		24 V DC (±20%)	1		 1	
Real-Time Clo		Built-in				
	munication				 <del>                                     </del>	
Ports		terminal, COM2: DB 9-pin)				
Ethernet Port		1 x 10/100 Mbps				
USB Ports		1 x USB 2.0 Host, 1 x USB Type-C			 	
J GGD T GREE		(Programming, Upload, Download,				
		Datalogging)				
mSDHC Card	Slot	1 Slot				—
Pluggable I/O		3 (Analogue/Digital)				
Operating Ter		0 to 55°C			 <del> </del>	
Storage Temp		-30 to 85°C				
	erature				 	
Humidity	L	10% to 90% (Non-Condensing)			 <u> </u>	
Shock Immun	ty	IEC 60068-2-27, 25g, 11 ms, 6				
\" (' )	• •	shocks per axis (X, Y, Z)			 ļ	
Vibration Imm		5 to 150 Hz, 3g peak (X, Y, Z)				
Protection Gra		IP66 (Front panel), IP20 (Rear panel)			 	·····
Dimensions (I	IxWxD)	138 x 186 x 31 mmfcert			 	
Weight		Less than 500 g				
Certifications		CE or equivalent standard certification				
Technical S						
1 '		e: 600 x 600 x 300 mm				
		ss Steel plates. Reinforcements are		Ì		
		es to strengthen them				
		Mild steel material. Fabricated From				
		lates and other sections.				
		ufficient plate thickness & ribs etc. to				
		to prevent buckling at the time of				
application						
1		d application: To be operated with the				
	able Power					
		ications: Double acting type, 300 kN				
		Dia. & 20 cm Stroke				
	g) Power Pack: Power pack with direction control valves to				-	
· ·	operate double acting hydraulic jack				[	
	h) Spherical sear : To be placed above the loading pad for					
1	d distribution	-				
1 '	apacity : 30	0 kN			ļ	
j) LVDT: 100						
1	_	nm/min to 10 mm/min		Ì		
		ed make Servo motor with Servo Drive				
m) Controller:	Touch scree	n HMI & PLC Controller			 	
n) 4 Channels	Data acqui	sition System (Feasible for expansion)				
117 . Onamion						

IEN	DER No.: IITI(MM)/CE/1/1	A/259/LB/2025-2026	
	Data Analysis System		
	Component	Specification	
	Processor	Intel Core i9, Generation 11 or better	
	RAM	16 (1*16) GB of DDR5 system	
	Storage	memory or better 512 GB SSD	
	Display	24" LED monitor	
	Accessories	Keyboard, Mouse, ATX cabinet with SMPS	
	Conditions:  • The supplier should be	ISO certified company.	
	, .	d be specified on the equipment.	
7.	The supplier should or provide 'No deviation c		
	Supplier should offer dispatch at supplier's c	for inspection/testing of items before ost.	
	<ul> <li>The equipment shall accessories and shall demonstrated in Civil E</li> <li>Training should be proven</li> </ul>		
	Sister Concern. Docui with the bid. Instrun calibration certificates	ve NABL Calibration Facility Own or ments in support should be submitted nents must be supplied with NABL s wherever applicable and NABL n be taken from any NABL accredited	

### Note:

- A. The bidder should submit his acceptance against each column as YES/NO and if No, the bidder should specify the deviation.
- B. Valid proof of the document in support of the claim to be enclosed with the technical bid.
- C. All communications with respect to the tender shall be addressed only to:

Assistant Registrar,

Materials Management Section

4th Floor, Abhinandan Bhawan (West Wing),

Indian Institute of Technology, Indore

TENDED Na . UTUMBNUCE/A/AA/950/LD/9095 9096

Khandwa Road Simrol, Indore- 453552

Tel.: 0731660- Ext. 3546/3551

Email: mms@iiti.ac.in/ja4mms@iiti.ac.in

(Signature of the Bidder, with Official Seal)

Name of the Bidder \_\_\_\_\_

### <u>अनुभाग-2 / SECTION- II</u>

### अमूल्यंकित तकनीकी बोली / UNPRICED TECHNICAL BID

### <u>भाग – 3 /PART - III</u>

(Bidder should provide the following details on Letter head)

TENDER NO.: IITI(MM)/CE/1/1A/259/LB/2025-2026	Date:

Sr. No.	Item Description	Qty	Make	Model	HSN Code	GST %	Country of Origin
a)	Large Direct Shear	01					
	Apparatus	No.					

SI		Other Terms & Conditions	Compliance
No.			Yes/No
1.	Payment	Please refer Section-I Point-4	
	terms		
2.	Delivery	Within 10 weeks from the date of	
	Period	Purchase/GeM Contract Order and also refer Section-I	,
	111111111111111111111111111111111111111	Point-22 (d)	
3.	Installation	Please refer Section-I Point-22 (e)	
4.	Warranty	Onsite 05 years warranty from the date of successful	
		Installation, commissioning, testing and training and	
		also refer Section-I Point-22 (g)	
5.	Charges	Freight, unloading, insurance, delivery and any other	
		kind of charges will be borne by the	
	***************************************	vendor/firm/supplier.	
6.	Service	Bidder should provide onsite service support.	
	Support		
8.	Photographs	and catalogues related to material/items should be	
	enclosed in	the technical bid and Dimensions of material/item,	
	weight and	space requirements should also be submitted in	
	technical offe	er.	

### <u>प्रपत्र -1 / FORM-I</u>

# निर्माता का अनुज्ञा और वारंटी समर्थन पत्र

# MANUFACTURER'S AUTHORIZATION & WARRANTY SUPPORT DECLARATION (ON OEMs Letter head)

	Date.
Tender No / GeM bid no: IITI(MM)/CE/1/1A/259	)/LB/2025-2026
To, The Registrar Indian Institute of Technology Indore	
We, [name of Manufacture Insert type of goods manufactured] having Manufacturer's factories], do hereby authorize submit a bid the purpose of which is to provide us [insert name and or brief description of the and sign the contract.	factories at [insert full address of [insert complete name of Bidder] to the following goods, manufactured by
We hereby extend our full guarantee, warrants support in accordance with the Terms and Cordoods offered by the above firm.	
Authorized representative of the Manufacturer	Authorized representative Bidder
Signature:	Signature:
Name:	Name:
Address:	Address:
Mobile No:	Mobile No:
Email ID:	Email ID:

### <u>प्रपत्र -2 / FORM-II</u>

### स्थानीय सामग्री के लिए घोषणा

### **Declaration for Local Content**

(To be given on Company Letter Head - For tender value below Rs.10 Crores) (To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)

				Date:	
To, The Registra Indian Institu	ar ute of Technol	logy Indore			
Sub: Declar	ration of Loc	al content		•	
Tender No:					
Name	of	Goods	&	Services:	-
1. Country o	f Origin of Go	ods being offered			
2. We herek exact %).	y declare tha	it items offered h	as% loca	al content (Please	provide
3. Details o address	f location at v	vhich local value to	addition will be	e made / made: (C me	omplete ntioned)
value of the (including all "*False declor of the General debarred for	item being of customs dution will keral Financia rup to two youch other ac	fered minus the es) as a proportion of Color of	value of the in n of the total va Code of Integra ch a bidder of 151 (iii) of the	ity under Rule 175 or its successors e General Financia	the item  i(1)(i)(h)  can be
(Signature of Name: Date: Official Seal	the Tenderer	_ /Owner)			

### प्रपत्र -3 / FORM-III

### डीपीआईआईटी पंजीकरण के लिए घोषणा पत्र

### <u>Declaration for DPIIT Registration (on OEM's Letter Head)</u>

### **CERTIFICATE BY BIDDER- DPIIT REGISTRATION**

"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 county, has been registered with the Competent Authority (copy of the Registration Certificate enclosed).

I hereby certify that his bidder fulfils all requirements in this regard and is eligible to be considered.

(Signature of the Tenderer/Owner)

Name:

Date:

### <u>प्रपत्र -4 / FORM-IV</u>

### स्वच्छ छवि/कोई कान्नी कार्रवाई नहीं होने के संबंध में घोषणा पत्र

# DECLARATION REGARDING CLEAN TRACK/NO LEGAL ACTION (to be provided on letter head of the firm)

I hereby certify that the above firm namely	is neither		
blacklisted by any Central/State Government/Public	Undertaking/Institute nor any criminal		
case registered / pending against the firm or its	s owner/ partners anywhere in India		
preceding three years from the date of publishing of	tender.		
•			
I also certify that the above information is	true and correct in any every respect		
and in any case at a later date it is found that any details provided above are incorrect,			
any contract given to the above firm may be summa	rily terminated and the firm blacklisted.		
Date:	Authorized Signatory		
	Name:		
Place:	Designation:		
	Contact No.:		

### <u>प्रपत्र -5 / FORM-V</u>

# बोलीदाता स्चना प्रपत्र

### BIDDER INFORMATION FORM

SI		Details			
1	Company Name				
2	Registration Number				
3	Manufacturer /Distributor for the				
	quoted product				
4	Registered Address				
5	Name of Partners /Director				
6	City /Postal Code				
7	Company's Establishment Year				
8	Company's Legal Status (tick on	1) Limited Company			
	appropriate option)	2) Undertaking			
		3) Joint Venture			
		4) Partnership			
		5) Others (In case of Others please			
		specify)			
9	Company Category	1) Micro Unit as per MSME			
	company category	2) Small Unit as per MSME			
		3) Medium Unit as per MSME			
		4) Ancillary Unit			
		, ,			
		5) SSI			
		6) Others (In case of Others please			
		specify)			
10	Contact Name				
	Email Id				
	MOBILE NO.				
11	BANK DETAILS	Name of Beneficiary :			
		A/c. No. CC/CD/SB/OD:			
		Name of Bank :			
		IFSC NO. (Bank) :			
		Branch Address and Branch Code:			
10	Vendor's PAN No. (Should be	Dianon Address and Dianon Code.			
12	`				
	attached)				
13	Vendor's GST No. (Should be				
10	`				
	attached)				

### <u> प्रपत्र -6 / FORM-VI</u>

# पिछली आपूर्ति आदेश सूची प्रारूप

### PREVIOUS SUPPLY ORDER LIST FORMAT

Order placed by {Full address of Purchaser]	Order No. and Date	Description and quantity of ordered equipment	Value of order	Contact Person along with Telephone no., Fax no. and email address.

<u>Note:</u> The Evaluation Committee may seek additional information from the existing users at IIT Indore or from any other Institutes, these feedbacks will be considered for technical evaluation.

(Signature	of the	Tend	erer/Owner)	
(0.9.18.8.0	01 1110	. 0110	oron owner,	

Name:

Date:

### <u>प्रपत्र -7 / FORM-VII</u>

### निविदा शर्तों की स्वीकृति हेतु ACCEPTANCE OF TENDER TERMS

(To be given on Company Letter Head)

Date:

	The Registrar Indian Institute of Technology Indore
	Sub: Acceptance of Terms & Conditions of Tender. IITI(MM)/CE/1/1A/259/LB/2025-2026"
1.	Dear Sir,  I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' 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 annexure(s), schedule(s), etc), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein and I have no objection for any of the content of the bid document. The rates quoted by me/us are valid and binding on me/us for acceptance till the validity of bid.
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 by any Govt. Department/Public sector undertaking.
5.	I / We do hereby declare that we have quoted our firm rates inclusive of taxes if not mentioned extra.
6.	I/We agree to hold this offer open until 180 days and shall be bound to supply/commission/install/test the equipment and dispatch the same within the specified period.
7.	I/We agree that in case if we fail to deliver the goods/complete the work/supply within the stipulated time, then institute has full power to compound the liquidity damages or forfeit the Bid Security/Security Deposit or any necessary action as deemed fit can be taken by the IIT Indore.
8.	The articles shall be of the best quality and of the kind as per the requirement of the institution. The decision of the IIT Indore, India (herein after called the said officer) as regard to the quality and kind of article shall be final and binding on me. Should the said officer deem it necessary to change any article on being found of inferior quality, it shall be replaced by me/us free of cost in time to prevent inconvenience.
9.	I/We declare that no legal/financial irregularities are pending against the proprietor/partner of the biding firm or manufacturer.

Page 22 of 29

- 10. I/We undertake that the items supplied are as per Demonstration/Catalogue/technical literature description.
- 11.1/We undertake that the quoted rates are not higher than that approved in any other Govt. institutions in India for the same items during the current Financial Year.
- 12. I/we do hereby confirm that the prices/rates quoted are fixed and are at par with the prices quoted by me/us to any other Govt. of State/Central//Institute/Department/PSUs. I/we also offer to supply the Equipment/stores at the prices and rates not exceeding those mentioned in the price bid.
- 13. I/We do hereby confirm that I/we aware about the provisions of "Make in India"/startup initiatives and directives regarding Price Preference Policy to Make in India Registered Bidders and I/We undertake for following the same as per directions of IIT Indore in respect of this E-Bid Enquiry.
- 14. I/we have necessary infrastructure for the maintenance of the equipment and will provide all accessories/spares as and when required.
- 15. I/we also declare that in case of change of Indian Agent or for any other change. Merger, dissolution solvency etc. in the organization of our foreign principles, we would take care of the Guarantee/Warranty/Maintenance of the machinery/equipment and have provided written confirmation for the same.
- 16. I/we undertake to get the equipment repaired/replace within 48 hours of the receiving of the complaint from the institute failing which a penalty of @ 1% of the cost may be recovered from the Bank Guarantee before releasing the same to us after completion period.
- 17. I/we undertake, If as a result of post payment audit any over payment is deducted in respect of any Supply/work done by our Agency or alleged to have been done by our Agency under this bid, it shall be recovered by the IIT Indore from our Agency.
- 18. I/we undertake, If any under payment is discovered, the amount shall be duly paid to our Agency by the IIT Indore.
- 19. I/we undertake that we shall liable to provide all the relevant records copies during the concurrency period of Contract or otherwise even after the Contract is over, whenever required by IIT Indore.

(Signature of the Tenderer/Owner)

Name:

Date:

Official Seal

Yours Faithfully,

### प्रपत्र -8 / FORM-VIII

## वार्षिक कारोबार की घोषणा और

## इनकम टैक्स रिटर्न

# DECLARATION OF ANNUAL TURNOVER AND INCOME TAX RETURN

(To be submitted on Firm/Company Letterhead)

To,	Date:
The Registrar	
Indian Institute of Technology Indore	

Sub: NIT No.- IITI(MM)/CE/1/1A/259/LB/2025-2026

Dear Sir,

I/we hereby declare that, our firm's Annual Turnover as follows, and I/we have also supported an Audited Accounts for your references:

24-25

And, I/we hereby declare that, our firm had filed Income Tax Returns for last 3 years i.e. F.Y. 2022-23, 2023-24 and 2024-25. Supported by copy of ITR of three years.

(Signature of the Tenderer/Owner)

Name:

Date:

### <u>प्रपत्र -9 / FORM-IX</u>

### प्रश्न प्रारूप/ QUERY FORMAT

Name of the Firm:	 /*************************************
Contact Person:	 ···
Address:	 ***************************************
Email ID:	 
Contact No.:	

SI. No	Reference of the Clause No. of the Tender Document	Query/Clarificati on/ Deviation sought	Clarification/Respo nse from IIT Indore
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

### प्रपत्र -10 / FORM-X

# परफॉरमेंस सिक्योरिटी प्रारूप

### PERFORMANCE SECURITY FORMAT

IO,
WHEREAS
AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;
AND WHEREAS we have agreed to give the supplier such a bank guarantee:
NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of
We further undertake to pay the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the supplier(s)/vendor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the supplier(s)/vendor(s) shall have no claim against us for making such payment.
We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.
We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.
This guarantee shall be valid until the day of
(Signature of the authorized officer of the Bank)
Name and designation of the officer Seal: Name & address of the Bank Address of the Branch: Phone No.: E-mail ID:.

### प्रपत्र -11 / FORM-XI

# Format for Price Breakup/Financial Document for Supply and Installation of Large Direct Shear Apparatus

### Name of the Bidder/ Bidding Firm / Company:

SI. No.	Item	Qty.		§	Total Price in INR (₹)
a)	Large Direct Shear Apparatus	01 No.	10.00		

### Note:

- 1. All Terms & Conditions will be as per NIT Document uploaded on GeM.
- 2. Format for Price Breakup (FORM-XI) must be uploaded at the time of Price bid submission.

(Signature of the Tenderer/Owner)

Name:

Date:

### <u>प्रपत्र -12 / FORM-XII</u>

# बिक्री और समर्थन के संबंध में घोषणा

### **DECLARATION REGARDING SALES AND SUPPORT**

(to be provided on letter head of the firm)

To, The Registrar Indian Institute of Technology Indore				
We, M/s. hereby affirm that the engineers listed below are currently employed by our organization and have consistently provided service and support in their region. We attest to their professional competence, dedication, and commitment to delivering high-quality work.				
SI. No.	Name	E-mail ld	Contact No.	
1	Mr.			
2	Mr.			
3	Mr.			
We, M/s declare that we as original equipment manufacturers (OEMs) shall not be subjected to end of sale or end of support within the next five years from the date of submission of this declaration. This commitment aims to ensure the continuity and reliability of products and services provided by us, fostering stability and trust  We also certify that the above information is true and correct in every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.				
(Signate Name: Date: Official	ure of the Tenderer/Owner) Seal			

### <u>प्रपत्र -13 / FORM-XIII</u>

(To be submitted on Firm/Company Letterhead)

### <u>UNDERTAKING</u>

I/We hereby declared that all the Test Reports compliances as per Star mentioned in the NIT Document No:	•
	will be submitted by
us, if required/asked.	,
Further, we will provide all Sta Certificates/Permissions/License/Hardware/Software as required for sm supplied EQUIPMENT including all essential requirements for installation	
Furthermore, I/We hereby declare that, our quoted prices against this E-higher then prices offered by us to any others Govt. Institutions/Departments as per prevailing market prices and we are liable the benefits of GST in terms of cost reduction on account of various tax as per the provisions of GST Act 2017. If any time IIT Indore will get the have supplied items on higher prices in comparison to other institute prevailing applicable prices, we are undertaking that, we are liable depositing back such difference amount to IIT Indore from our side without the supplied items of the prices and the supplied items of the prices in comparison to other institute prevailing applicable prices, we are undertaking that, we are liable depositing back such difference amount to IIT Indore from our side without the prices in the prices and the prices and the prices are the prices are the prices are the prices and the prices are the prices are the prices and the prices are the prices are the prices are the prices are the prices and the prices are the prices and the prices are the prices are the prices and the prices are the pric	Institutions/Other ple for passing of all factors to IIT Indore information that we es on the basis of for refunding and
I/We are also undertaken that the Department of Commerce or Department has been not debarred/blacklisted our firm as per best of our such debarment/blacklisting come to the notice of IIT Indore Authorities Supplies against this E-Bid Enquiry, Indore have right to reject our appropriate action deemed fit against our firm as per prevailing a Regulations.	ur knowledge, if any during execution of proposal and take
(Signature of the Tenderer/Owner) Name: Date: Official Seal	
·	- 