



**राष्ट्रीय प्रौद्योगिकी संस्थान सिक्किम**

**NATIONAL INSTITUTE OF TECHNOLOGY SIKKIM**

*(An Institution of National Importance, MHRD, Govt. of India)*

---

Ref: 173/Purchase of Instruments for Structural Engineering Lab/TEQIP-III/2019

Date: 22.06.2019

**CORRIEGENDUM**

It is hereby informed that the last date for submission of **Shopping Document No.: NITS/TEQIP-III/CE/01 (Instruments for Structural Engineering Lab)** has been extended to 18<sup>th</sup> July 2018, it was noted that some specification of the equipments were not complete, hence re-uploaded after needful corrections.

The bidders are requested as per the updated Shopping Documents.

**-Sd/-  
Nodal Officer (Procurement)  
TEQIP-III**



## INVITATION LETTER

**Package Code: TEQIP-III/2019/ntst/105**

**Current Date: 20-June-2019**

**Package Name: NITS/TEQIP-III/CE/01**

**Method: Shopping Goods**

**Sub: INVITATION LETTER FOR NITS/TEQIP-III/CE/01**

**Dear Sir,**

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure-I:

S. No.	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	Instruments for Structural Engineering Laboratory	As per Annexure -I	NIT Sikkim	YES

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme [TEQIP] - Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

3. **Qualification Criteria:**

The bidder/supplier should have:

- 3.1. **The bid should be accompanied with an EMD (Earnest Money Deposit) of Rs. 1,20,000/- (Rupees One Lakh Twenty Thousand only) in favour of The Director NIT Sikkim in the form of Demand Draft (DD) drawn on any commercial bank payable at Ravangla/Gangtok.**
- 3.2. A minimum of 3 years experience of supplying similar items, substantiated by relevant documents.
- 3.3. A turnover of Rs.50 Lakh in last three years.
- 3.4. Not been blacklisted by any Govt. Institution/Organization.

4. **Quotation:**

- 4.1. The contract shall be for the **full quantity** as described above.
- 4.2. The vendors are requested to quote lowest rate for the supply of all the items in the prescribed **Format for Quotation Submission**.
- 4.3. Corrections, if any, shall be made by crossing out, initialling, dating and re writing.

- 4.4. All duties and other levies payable by the supplier under the contract shall be included in the unit Price.
- 4.5. Applicable taxes shall be quoted separately for all items. The Institute has DSIR certificate (applicable GST would be 5%).
- 4.6. The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- 4.7. The Prices should be quoted in Indian Rupees only.
- 4.8. **The vendor should submit trade licence/certificate of Registration (as applicable) in the required business/field, GST registration number and photocopy of the GST registration certificate, the PAN of proprietor/firm/ company with photocopy of the PAN card. Please attach a certificate that the quoted price is not more than that of any govt. organization/Intuition in India. This has to be mention in the offer letter clearly.**
5. Each bidder shall submit only one quotation.
6. Quotation shall remain valid for a period not less than **45** days after the last date of quotation submission.
7. The quotation should include the following information:
  - 7.1. **Authorization certificate from the OEM/Principal assuring full guarantee and warrantee obligations during the liability period, for the goods offered.**
  - 7.2. **The list of clients (IITs, NITs/Central Universities and other reputed Institution) duly supported by copies of purchase order.**
  - 7.3. **Details of service/supports centres located in India.**
8. **Evaluation of Quotations:** The Purchaser will evaluate and compare the quotations determined to be Substantially responsive i.e. which:
  - 8.1. are properly signed; and
  - 8.2. Confirm to the terms and conditions, and specifications.
  - 8.3. **The vendor should provide complete technical details (printed literature of the manufacturer along with model/make) and the same should be verifiable from the website of the vendor/OEM. Mere copying the technical specification provided in the Annexure-I may lead to cancellation of the bid.**
  - 8.4. **The Institute reserves the right for pre-inspection of the goods/equipment quoted by the vendor.**
9. The Quotations would be evaluated for all items together.
10. **Award of Contract:** The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
  - 10.1. Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of Contract.

- 10.2. The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
11. Performance Bank Guarantee: Performance Security has to be submitted by the successful bidder. A Bank guarantee issued by a Nationalized Bank in India towards PBG for an amount equal to 5% of total order value of purchase order and valid till the period of beyond the 2 months of completion of warranty period should be submitted in favour of **Director NIT Sikkim**. In case, the vendor fails to provide satisfactory service, the PBG is liable to be forfeited.
12. Payment shall be made in Indian Rupees as follows:  
**Satisfactory Delivery & Installation - 70% of total cost**  
**Satisfactory Acceptance - 30% of total cost**
13. Liquidated Damages will be applied as per the below:  
Liquidated Damages per Day Min %: 0  
Liquidated Damages Max %: 10
14. **All supplied items are under onsite warranty of 5 years from the date of successful acceptance of items and AMC/Others is NA.**
15. You are requested to provide your offer latest by **17:30** hours on **18-July-2019**.
16. Detailed specifications of the items are at **Annexure-I**.
17. Training Clause (if any) **YES**
18. Testing/Installation Clause (if any) **YES**
19. Performance Security shall be applicable: **5%**
20. Information brochures/ Product catalogue must be accompanied with the quotation clearly indicating the model quoted for.
21. **The vendors should submit the technical and financial bids in two separate sealed envelopes. Financial bids of only the technically responsive bidders will be evaluated.**
- Sealed quotation to be submitted/ delivered at the address mentioned below:  
**The Nodal Office (Procurement),**  
**TEQIP-III,**  
**National Institute of Technology Sikkim,**  
**Barfung Block, Ravangla, South Sikkim**  
**Pin Code-737139.**
22. We look forward to receiving your quotation and thank you for your interest in this project.



**Dr. Achintesh N. Biswas**  
**Nodal Officer (Procurement)**

Annexure-I

Sl. No.	Name of the Item	Quantity	Specification
1.	Automatic Compression Testing Machine Windows Based, Capacity 3000kN/Loading Unit, with NABL Calibration Certificate	1	<p>1. Automatic Compression Testing Machine Windows Based, Capacity 3000kN/Loading Unit as per BS/EN-12390/IS14858:2000.</p> <p>2. Provided with software support compatible in Windows 8 or higher versions to process, edit the obtained result from Automatic Compression Testing Machine in order to plot and interpret stress strain behavior, Young's Modulus of the sample .</p> <p>3. With accessories and software provision to measure all possible strain cases and also with split tensile test attachment for standard concrete cube, cylinder and prism with appropriate brick platen.</p> <p>4. Accessory for flexural test attachment.</p> <p>5. Operatable through laptop, desktop and also standalone means.</p> <p>Range: 3000kN Least Count: 0.1KNMax. Clearance between Platens: 400mm Max. Distance Between Side Plates: 400 mm Platen Size: 320mm<sup>2</sup> Piston Dia.: 272.2mm Piston Stroke: 50mm</p> <p><b>Pumping Module:</b> 0.5 HP, Single Phase, 220V AC motor driven, 2 speed hydraulic pump Bonded Strain gauge based pressure transducer 2 outputs in the manifold with isolating valves. One for opening and closing of the port. One output for Automatic Compression Testing Machine and One for Flexural Testing unit. Complete connection in all respect. Enhanced Digital Indicator: Flexible Calibration Points Peak load, Peak stress, Unique record number Indication Provision of configuring for more than one</p> <p><b>Mode:</b> Mode 1- Compression Mode 2 - Flexure Mode 3 - Prism Mode 4 - Tensile Splitting strength</p> <p>Menu driven sample details Dynamic Calibration Data Storage Facility Data download through RS 232 &amp; Data Logger Universal Inputs i.e. Input channels should be software configurable and should be capable of accepting Volts, Current, Temperature inputs from T/C, RTD etc 3-slot main frame with 6½ digit (22 bit) internal DMM 0.004% basic 1-year dcV accuracy; 0.06% acV accuracy Unit must have 8 plug in modules with up to 120 single-ended(60 2-wire) channels. Programmable, Modular and expandable in nature. It should be able to work as a Standalone unit (if required) without the PC. Both LXI and USB (source and Device) should be available. Graphical web interface for monitoring should be available.</p>

Sl. No.	Name of the Item	Quantity	Specification
			<p>Wide selection of different types of Multiplexer Units Window based Software for Data transfer to PC, Documentation etc. Measurement of different Parameters like Temperature with all types of thermocouples, RTDs, Thermistors, Voltages, Current, Frequency, Period. Direct Measurement of Parameters without any separate front end unit. Software functions like Mx+B Scaling, Alarm settings, X-T and X-Y recording of data, Basic math functions. Software capable of Transferring data to other user packages like EXCEL. No. of Input Channels : 20, optionally expandable. Scan rates up to 450 ch/s l) Measurement range a) DC Volt : 100 mvolt to 300 Volt. b) Resistance : 100 ohm to 100 Mohm. c) Current : up to 1 Amp. d) Thermocouple : B, E, J, K, N, R, S, T Memory : 50,000 readings in Nonvolatile memory with time stamp. Storage should be available in USB Drive also Basic Measurement accuracy: 0.004 % in DCV. Single Channel Measurement rates <b>Function Resolution Readings/Sec</b> DC Voltage, 2 Wire resistance 6½ Digits (10plc) 6(5) 5½ Digits (10plc) 54(47) 4½ Digits (0.02plc) 500 Thermocouple 0.1°C (10 plc) 6(5) 0.1°C (1 plc) 54(47) (0.02plc) 280 RTD Thermistor 0.01°C (10 plc) 6(5) 0.1°C (1 plc) 52(47) 1°C (0.02plc) 200 acV 6½ slow (10plc) 0.14 6½ Med (10plc) 1 6½ Fast (0.02plc) 8 6½ 100 Frequency &amp; Period 6½ Digits (1 s gate) 1 5½ Digits (100ms) 9 4½ Digits (10ms) 70 Interface: Standard USB and LXI, Import/export instrument configuration files, save volatile readings and screen captures. Instrument should have LCD screen and soft buttons for easy configuration and measurements display in multiple formats (number, bar meter ,trend chart, histogram) Scan conditions : Programmable scan interval and conditions Two, Three &amp; Four Wire configurable for measuring strain. The equipment must be analysing the result on board instrument as well as on PC/Lap using software. User Manual &amp; Calibration Certificate : Required Possibility of User set break point 2% overload facility to enable calibration up to full capacity Peak stress calculation based on sample type and shape Automatic Pace rate control to set value Facility to change Pace rate during test progress Auto close / release of dump valve Multifunction keyboard</p>

Sl. No.	Name of the Item	Quantity	Specification
			<p><b>Electronic Hardware:</b>            The compression testing machine is fully controlled by computer running under Microsoft Windows Operating System            Pump control is by PID controlled EDI.            EDI is connected to PC through RS 232 or any serial to USB Converter            Easy to use and intuitive GUI            Displacement measuring device interface for Strain measurement            Login and access control            Online help file            Multiple calibration files for different configurations            Least count of 0.1kN</p> <p><b>Software Scope:</b></p> <ul style="list-style-type: none"> <li>• Software designed for 32 bit operating system</li> <li>• Desktop computer with licensed Windows XP service pack 2 or Windows 7 or latest</li> <li>• Test Method Library, Test Editor, Tabbed Test and Recall Area</li> <li>• Multiple Machine Control</li> <li>• Output Editor</li> <li>• Multilingual</li> <li>• Method Editor</li> <li>• Result Editor</li> <li>• Multifaceted Security</li> </ul>
2.	Automatic Flexure Testing Machine Windows based/Capacity : 100 kN, with NABL Calibration Certificate	1	<p><b>Automatic Flexure Testing Machine Windows based/ Capacity : 100 kN</b>            1. Conforming to EN 12390-5, EN1339, 1340.            2. Operatable through laptop, desktop and also standalone means.            3. Provided with software support compatible in Windows 8 or higher versions to process result from Automatic Flexure Testing Machine.            Automatic and windows based</p> <p><b>Type of Pumping:</b>            Electrical operated Loading            Capacity: 0 -100kN            Least Count: 0.01 KN</p> <p><b>Type of Loading:</b>            Third Point Loading</p> <p><b>Centre Distance between Supporting Rollers:</b>            600 mm / 400 mm</p> <p><b>Centre Distance between Loading Rollers:</b>            200 mm /133mm</p> <p>Beam mould, cast iron 100x100 x500mm            Beam mould, cast iron 150x150 x700mm            A Spacer for testing different size of beams            Suitable for operation with 220 volts, 50 Hz, single phase, AC supply.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Light Weight, rugged high strength frame</li> <li>• Double action hydraulic pump</li> <li>• Self-aligning roller assembly</li> <li>• Hydraulic jack provided with retraction spring</li> </ul>

Sl. No.	Name of the Item	Quantity	Specification
3.	Self-consolidating Concrete (SCC) Flow ability: J Ring Apparatus, L Box Apparatus, U box test Apparatus, V Funnel Apparatus	1	<p><b>Self-consolidating Concrete (SCC) Flow ability:</b></p> <p><b>J Ring:</b> J Ring consists of a base plate 915 x 915 mm, one cone of 200mm bottom dia. 100mm top dia. and 300mm height. Complete with J Ring of 300mm dia. with 16 nos. plain rods of mm dia.</p> <p><b>L-Box:</b> L-Box with three smooth bars equally spaced and a gate Bucket capacity of 14 litre Measuring scale 0-600mm Spirit level Stop watch with accuracy of 0.1 second</p> <p><b>V-Funnel:</b> The equipment consist of the following replaceable parts : Bucket capacity 14 litres. Sprit level. Stopwatch with accuracy 0.1 second for Recording the flow time.</p> <p><b>U-Box:</b> The equipment consist of the following replaceable parts : Bucket capacity of 14 litres Measuring scale 0-600mm Sprit level Stopwatch with the accuracy 0.1 second</p> <p><b>Flow table for self-compacting Concrete:</b> The equipment consist of the following replaceable parts : Flow table Slump cone Wooden tamping bar</p>
4.	Concrete Mixer, Pan Type, Capacity 40L	1	<p><b>Concrete Mixer, Pan Type, Capacity 40 L:</b> Mixing Capacity: 40ltrs. Overall Dimension:910mm x 875mm x1250mm Motor: 2 HP, 960 RPM Portable &amp; Compact. Adjustable Blades. Simple to clean &amp; maintain, Easy to operate, Suitable for operation on 440V, 50Hz,3 phase, AC Supply</p>
5.	Cement Autoclave, Analogue with Pressure Gauge & Digital temperature Controller	1	<p><b>Cement Autoclave, with Analogue pressure Gauge &amp; Digital temp controller:</b></p> <ol style="list-style-type: none"> <li>Cement Autoclave, with Analogue pressure Gauge &amp; Digital temp controller.</li> <li>Conforming to following standards: IS : 4031-1968 IS : 1624-1960 ASTM C151-00</li> <li>Provided with Shrinkage Autoclave Bar Mould : IS 10086 &amp; 4031 and Length Comparator : IS 4031</li> </ol> <p>Working pressure: 21± 1kg/cm at 215oC Pressure Vessel : ID150mm X Depth 500mm Weight: 70 Kg Heater : 2000 Watts Supply ; 220V; 50Hz; 1 phase Panel mounted PID controller with International safety certifications. Rubber Gasket, Viton-1 No. Pressure Gauge, 0-42kg/cm Safety Valve Temperature Controller with Sensor</p>



Sl. No.	Name of the Item	Quantity	Specification
6.	Laboratory Ball Mill, 5kg Capacity	1	<p><b>Laboratory Ball Mill, 5 Kg capacity</b> Laboratory Ball Mill, 5 Kg capacity with recommended balls of following specifications</p> <p><b>Steel Ball</b> 40mm dia.: (Pack Of 5Kgs) 30mm dia.: (pack of 5kgs) 25mm dia.: (pack of 5kgs) 19mm dia.: (pack of 5kgs) 12.5mm dia. (pack of 5kgs) 20mm dia. : (pack of 5kg) 36mm dia. :(pack of 5kg) Suitable for operation on 415V, 50Hz, 3Phase, AC supply</p>
7.	Flow Table Motorized Apparatus as per IS:9103-1999	1	<p><b>Flow Table, Motorized:</b> The Flow Table conforming to IS:1199, AASHTO T126. The equipment with flow mould and it should be suitable for operation at 220 volts, 50Hz, single phase, AC supply. Diameter of flow table top should be 76.2 cm. Material of the flow table top should be brass. It should have a steel cam which can drop the table by 12.5 mm with the help of a electric motor.</p>
8.	Compaction Factor Apparatus	1	<p><b>Compaction Factor Apparatus:</b> Compaction Factor Apparatus is complete with hopper sand receiver assembly, Tamping Rod of 16 mm dia x 60 cm long having a Hooper and two trowels.</p>
9.	Capping Set, Vertical, for capping 150mm dia. Cylinders and Cores	1	<p>Capping Set, Vertical, for Capping 150 mm,100 mm dia. Cylinders and Cores with capping mould.</p>
10.	Core Case	1	<p><b>Core Case:</b> Core Bit and Water Jacket 50 mm dia x 100 mm long Core Bit and Water Jacket 75 mm dia x 100 mm long</p>
11.	Le-Chatelier Mould, with ISI Certification Mark IS:5514, each	1	<p>Le-Chatelier Mould with ISI Certification Mark</p>
12.	Mould for Flexural Prism with ISI Certification	6	<p>Mould for Flexural Prism</p>
13.	Gauging Trowel, Ref Standard IS: 4031, 100 to 150mm long blade with straight edge.	6	<p><b>Gauging Trowel</b> Ref. Standard - IS: 4031 100 to 150mm long blade with straight edge. Weight 210 ± 10g</p>
14.	Cement Tensile Testing Machine, with NABL Calibration Certificate	1	<p><b>Cement Tensile Testing Machine:</b> Loading speed of the single lever system: 10 +/- 2 N/Sec Loading speed of the double lever system: 50 +/- 10 N/Sec Flexure jaw diameter of the loading roller: 10mm Supporting roller diameter: 10mm Supporting roller distance: 100mm Baffle plate span: 46mm</p>

Sl. No.	Name of the Item	Quantity	Specification
15.	Mould, Cast Iron, for 150mm Cube with ISI Certification Mark	12	Mould, Cast Iron, for 150 mm Cube with ISI Certification Mark, IS:10086
16.	Beam Mould, 100mm x 100mm x 500mm with ISI Certification	6	Beam Mould 100 mm x 100 mm x 500 mm size
17.	Tamping Bar, Steel 25mm x 25mm as per ISI Certification Mark	3	Tamping Rod, Steel, 16 mm dia x 600 mm length rounded at the lower end. Carries ISI Certification Mark IS: 10086. For use with Cube and Cylindrical Moulds.
18.	Compression Frame Jig Assembly with 50mm platens, with NABL Calibration Certificate	1	Compression Frame Jig Assembly with 50mm platens.

**FORMAT FOR QUOTATION SUBMISSION**

(In letterhead of the supplier with seal)

Date: .....

**To,**

.....  
 .....  
 .....  
 .....

Sl.No.	Description of goods\ (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex-Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
<b>Total Cost</b>							

Gross Total Cost (A+B): Rs. ....

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. .... (Amount in figures) (Rupees ..... amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of ..... months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: .....

Address: .....

Contact No.: .....