



Engineering College, Bikaner, Karni Industrial Area , Pugal Road, Bikaner  
Rajasthan

## INVITATION LETTER

Package Code: TEQIP-III/2019/RJ/gebk/82

Current Date: 04-Dec-2019

Package Name: ECB/TEQIPIII/Foundry Lab Package

Method: Shopping Goods

### To Be Published On ECB Website

#### Sub: INVITATION LETTER FOR ECB/TEQIPIII/Foundry Lab Package

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,

Sr. No	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	Universal Sand Strength Machine, Accessories for Universal Sand Strength Machine	1	Engineering College Bikaner, Karni Industrial Area, Pugal Road, Bikaner	YES
2	Sieve Shaking Machine	1	Engineering College Bikaner, Karni Industrial Area, Pugal Road, Bikaner	YES
3	Sand Permeability Tester	1	Engineering College Bikaner, Karni Industrial Area, Pugal Road, Bikaner	YES
4	Sand Clay content tester	1	Engineering College Bikaner, Karni Industrial Area, Pugal Road, Bikaner	YES
5	Sand Moisture content tester	1	Engineering College Bikaner, Karni Industrial Area, Pugal Road, Bikaner	YES
6	Rockwell cum Brinell Hardness Tester (Branded)	1	Engineering College Bikaner, Karni Industrial Area, Pugal Road, Bikaner	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. **Quotation**

- 3.1 The contract shall be for the full quantity as described above.
- 3.2 Corrections, if any, shall be made by crossing out, initialling, dating and re writing.
- 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit Price.
- 3.4 Applicable taxes shall be quoted separately for all items.
- 3.5 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.
- 3.6 The Prices should be quoted in Indian Rupees only.

4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **100**days after the last date of quotation submission.
6. Evaluation of Quotations: The Purchaser will evaluate and compare the quotations determined to be Substantially responsive i.e. which
  - 6.1 are properly signed; and
  - 6.2 Confirm to the terms and conditions, and specifications.
7. The Quotations would be evaluated for all items together.
8. 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.
  - 8.1 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.
  - 8.2 *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*
9. Payment shall be made in Indian Rupees as follows:

Payment Description	Expected Delivery Period (in Days)	Payment Percentage
Satisfactory Delivery & Installation	30	10
Satisfactory Acceptance	30	90

10. Liquidated Damages will be applied as per the below:  
Liquidated Damages Per Day Min %:0.05  
Liquidated Damages Max %:7
11. All supplied items are under warranty of **36** months from the date of successful acceptance of items and Manufacturer/Supplier must have NABL or any other international calibration certificate for measuring instruments.
12. You are requested to provide your offer latest by **13:30** hours on **18-Dec-2019** and the quotation will be opened on 18<sup>th</sup> December 2019 at 14:00 PM.
13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any) **yes**
15. Testing/Installation Clause (if any) **yes**
16. Performance Security shall be applicable: **7%**
17. Information brochures/ Product catalogue, if any must be accompanied with the quotation clearly indicating the model quoted for.
18. Preference will be given to ISO 9001:2015 certified manufactures/ suppliers which can insured be manufacturing of machine as per required standards/BIS and within the specified tolerance limit, bidder has to provide the necessary certificate along with the tender.
19. Sealed quotation to be submitted/ delivered at the address mentioned below, **Engineering College, Bikaner, Karni Industrial Area , Pugal Road, Bikaner Rajasthan**
20. We look forward to receiving your quotation and thank you for your interest in this project.

  
 (Authorized Signatory)  
 Name & Designation  
**Engineering College**  
**BIKANER**



## Annexure I

### 1. Universal Sand Strength Testing Machine

Universal sand strength testing machine is used to check various strengths of sand like compression, tensile, transverse, shear and because of wide range it can be used for all type of sands. Foundry sand testing is a process used to determine if the foundry sand has the correct properties for a certain casting process.

#### Technical Specifications:

	Approximate parameters
Compression	0 to 13 kg/cm <sup>2</sup>
Shear	0 -10 kg/cm <sup>2</sup>
Tensile	0-50 kg/cm <sup>2</sup>
Transverse	0-500 kg/cm <sup>2</sup>
Least count	200 gm/cm <sup>2</sup>

The machine should be provided with all standard dimensions used in institute /laboratories. Please provide standard and best specifications not stick to mentioned above.

Note: Equipment must be provided with all necessary attachments/ accessories required for above mentioned sand tests.

### 2. Sieve Shaker Machine For Grain Fineness Number

To determine the Grain fineness number of the foundry sand.

#### Technical Specifications:

	Approximate parameters
Consists of Sieving mechanism, to accommodate 10 nos. of sieves of 200 mm Dia. & 30-50 mm Ht.	
Sieve set consists of sieves with ISS No.	1700, 850, 600, 425, 300, 212, 150, 106, 73, 53 (in microns) with lid and receiving pan.
Timer	0-15 minutes
Motor	Single Phase

The machine should be provided with all standard dimensions used in institute /laboratories. Please provide standard and best specifications not stick to mentioned above.

Note: Equipment must be provided with all necessary attachments/ accessories required for above mentioned sand tests.

### 3. Sand Permeability Tester

To determine permeability number of green sand, core sand and raw sand. Permeability measures the venting characteristics of green sand. The Permeability meter employs the orifice method for the rapid determination of sand permeability. It is manually operated machine.

#### Technical Specifications:

	Approximate parameters
Specifications: - With Air Tank, Water Tank, Manometer Unit, Permeability Chart, 2 Orifices And Syphon Unit.	
Big Orifice	36 to 2450 No.
Small Orifice	1.1 to 49No.

The machine should be provided with all standard dimensions used in institute /laboratories. Please provide standard and best specifications not stick to mentioned above.

Note: Equipment must be provided with all necessary attachments/ accessories required for above mentioned sand tests.

### 4. Sand Clay Content Tester

This equipment helps to determine dead clay content in the sand sample.

#### Technical Specifications:

	Approximate parameters
Specifications: - Consists of stirrer, glass jar, siphon, timer unit, 53 micron sieve pan, wash bottle.	

The machine should be provided with all standard dimensions used in institute /laboratories. Please provide standard and best specifications not stick to mentioned above.

Note: Equipment must be provided with all necessary attachments/ accessories required for above mentioned sand tests.

### 5. Sand Moisture Content Tester

It is used to determine the water content in Sand by calcium carbide method. It is a method for rapid determination of water content from the gas pressure developed by the reaction of calcium carbide with the free water of the sand. From the calibrated scale of the pressure gauge the percentage of water on total mass of wet sand is obtained



**Technical Specifications:**

	Approximate parameters
Least Count	0.2%
Accuracy	± 0.2 %

The machine should be provided with all standard dimensions used in institute /laboratories. Please provide standard and best specifications not stick to mentioned above.

Note: Equipment must be provided with all necessary attachments/ accessories required for above mentioned sand tests.

**6. Digital Rockwell cum Brinell Hardness Tester**

The digital Rockwell cum Brinell Hardness Tester is a simple and accurate means to produce automatically measure the indentation to give hardness numbers. These testers are suitable for measuring the hardness of precision metallic parts with wide testing range - from soft to hard and their accurate results are widely acclaimed. These testers strictly confirm to IS 1754 - 2002.

**Technical Specifications:**

	Approximate parameters
Major load	60,100,150,187.5,250 kgf
Minor load	10 kgf
Max. Test height approx.	230 mm
Depth of throat approx.	133 mm
Net wt. approx	80 kg
M/c dimensions approx.	L-450, W-175, H-627 (mm)

**Standard accessories:**

Testing table 50mm dia	1
Testing table 38mm dia with "V" groove for round jobs 6-45 mm dia.	1
Diamond indenter - Rockwell RA	1
Steel Ball indenter 1/16" with 5 spare balls	1
Steel Ball indenter 2.5 mm with 5 spare balls	1
Test block Rockwell "C"	1
Test block Rockwell "B"	1
Test block HB 2.5/187.5	1
Allen Spanners	5
Screw Driver	1
Clamping device	1
Wooden box for std. accessories	1
Telescopic sleeves for elevating screw position	1 set
Spare fuse 1 AMP	1
Power cable	1
Brinell microscope	1
Machine cover	1
Instruction Manual	1

These are motorized digital Hardness testers provided with automatic working cycle and digital LCD display for easy hardness measurement. The results are displayed in 0.1 Rockwell resolutions for more accurate measurement.

Various parameters of test can be set on front panel by operation of key board and observing LCD display Viz high/low limits, dwell time, auto/manual start, printer selection, scale selection etc. All set data can be verified edited by pressing SCL key one after another.

Panel will show normal mode for next test. Also when required 'AUTO START' set 'AUTO START' on front panel by operation of key board & observing LCD Display then raise elevating screw slowly through bar indication till "SET" position then it will starts loading/unloading cycle automatically & hardness is shown on LCD Display with High/Good/Low indication.

Parallel output for connecting printer to get results indicating serial no. of tests, hardness scale, hardness value and high/good/low indication.

Serial PC interface & windows software for only Rockwell scales. Brinell scale display on screen.

The machine should be provided with all standard dimensions used in institute /laboratories. Please provide standard and best specifications not stick to mentioned above.

**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>							

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ amount in words) within the period specified in the Invitation for Quotations. Gross Total Cost (A+B): Rs. \_\_\_\_\_ (Amount in figures)  
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. \_\_\_\_\_