

**Department of Civil Engineering
Indian Institute of Engineering Science and Technology, Shibpur
Howrah-711 103**

Date: 15 January 2018

NOTICE INVITING QUOTATION

(CE/PL/Conc Lab/ Rebar Corrosion Measuring Device /Dec 2017/18)

Sealed tenders are invited by the Civil Engineering Department, Indian Institute of Engineering Science and Technology, Shibpur, Howrah-711103 for the supply of **Rebar Corrosion Measuring Device** for Concrete and Structural Engineering Laboratory, Department of Civil Engineering, Indian Institute of Engineering Science and Technology, Shibpur.

Sealed Technical and Financial bids are to be kept separately inside a bigger sealed envelope. On the top of that outer envelope the Tender Notice Number and the Agency's name, address, mobile and email are to be clearly mentioned.

Tender Documents containing details of the items and terms and conditions may be downloaded from the institute website and completed bidding documents are to be submitted to the **Head, Department of Civil Engineering, Indian Institute of Engineering Science and Technology, Shibpur; Howrah-711103 within 25.01.2018 (3.00 pm)**.

The rate should clearly indicate the GST break up.

For details contact:

Dr. C. Ray, Professor & Incharge, Concrete and Structural Engineering Laboratory

Enclosed:

Section- I: General Conditions and Important Instructions for Bidders.

Section-II: Specification of the Items

Head, Civil
Engineering Department, IEST, Shibpur

SECTION-I: General Conditions and Important Instructions for Bidders

- It is necessary to submit the original tender documents along with technical and price bids to the **Office of the Department of Civil Engineering, Indian Institute of Engineering Science and Technology (IEST), Shibpur; Howrah-711103.**
- Bidders are to abide by the terms and condition and submit this tender document.
- Last date of receipt of tender is **25.01.2018 (3:00 pm)**. Tenders received late will not be accepted under any circumstances. Tenders will be opened on the **same day at 4:45 pm**. In case the Institute remains closed on the said date tenders will be received and opened on next working day at same time. The duly authorized representative of the agency may be present during tender opening.
- The Price Bid should clearly mention the price in Rupees including the following:
 - ✓ Delivery charges up to Department of Civil Engineering, IEST, Shibpur, Howrah, including loading and unloading charges.
 - ✓ All taxes, GST, duties, levies as applicable.
 - ✓ Demonstration of the item as per the satisfaction of the Laboratory Incharge
 - ✓ Erection, Commissioning and testing charges at Concrete and Structural Engineering Laboratory, Department of Civil Engineering, IEST, Shibpur
- DGS&D rate contract price will be preferred wherever applicable. The Institute will not issue any C or D form availing for concessional Sales Tax/ VAT. The Institute will issue Customs Duty Exemption Certificate or Excise Duty Exemption Certificate for foreign purchase, if required.
- Warranty of equipment should be not less than 12 months.
- The equipment/goods are to be supplied at the Concrete and Structural Engineering Laboratory, Department of Civil Engineering, Indian Institute of Engineering Science and Technology between 11.00 am and 4.00 pm from Monday to Friday except holidays. The bidders will be responsible for any breakage, damage or defect in the equipment detected subsequently.
- Period of delivery of equipment/ execution of work should be within two week from the date of issue of Purchase Order. If the supply/execution is not completed within the stipulated period as indicated in the Purchase Order a Liquidated Damage @0.5% per week will be imposed on the value of purchase order subject to maximum of 5% of the value of work order.
- Invoices in triplicate with GST break up should be presented for payment within 7 days of supply/ commissioning of work. No advance is paid for execution of the order. The Order No. is to be noted on both Challan and Invoices. All bills are to be accompanied by order copies and Challan receipt.
- Payment will be made on submission of Proper Bills, Challans etc. by A/C Payee Cheque or bank transfer and no cash payment will be made under any circumstances.
- All payments are subjected to statutory deductions as and when applicable.
- Tender is to be kept valid for acceptance for 3 months with effect from the last date of submission of the tender without any modifications in its terms and conditions.
- The rates of the items mentioned in Section II should be given separately.
- Following documents are to be submitted with the tender:
 - ✓ Tender Documents, General Conditions and Important Instruction in original duly signed by the Proprietor/ Partner/ Director of the company.
 - ✓ Latest Income Tax, Sales Tax, Professional Tax clearance certificates and copy of valid Trade License
 - ✓ Bid according to specifications.
 - ✓ Certificates and Literature in support of the item.
 - ✓ GST No. and copy of the relevant documents
 - ✓ A certificate in company's letterhead which is to be signed by the authorized representative stating that all conditions mentioned in the Tender Document have been accepted by the company.
 - ✓ Proof of having ISO certification given by appropriate authorities.
 - ✓ Proof of successful completion of at least two work orders at reputed organizations/Institutions, of similar item during last one year (copies of the purchase/work order will have to be enclosed).
- Authority reserves all rights to accept/reject any/all quotation without showing any reason.

Head, Civil Engineering Department, IEST, Shibpur

SECTION-II: Specification of Following Item

1. Rebar Corrosion Measuring Device

The device will be used to determine the extent of corrosion of the reinforced steel in concrete by measuring the corrosion potential at a specified distance in accordance with the ASTM C 876.

The device should be equipped with (i) the highly sensitive Half Cell Reference Electrode (Cu-Cu/SO₄), (ii) A very High Impedance Voltmeter along with a good quality LCD digital display, (iii) Dispensing sponge, (iv) Heavy Duty Coiled connected with Clamps, and a (v) Storage case.

The required technical specification for each component is mentioned below.

(i) Half-Cell Reference Electrode:

The half-cell Reference Electrode should be Copper-Copper /Sulfate electrode. The electrode should be designed in such a way that can use on horizontal, vertical and inverted positions. It should contain long-lasting tip (the flat tip would be better for concrete), strong body for outdoor use, high purity copper, high purity copper-sulfate etc.

(ii) High Impedance Voltmeter

A voltmeter of 20 mega Ω capacity along with a digital LCD display (can display + or - numerals) is needed to supply with this equipment. It must be equipped with 9-12 Volt Battery, Filter AC Interference and 2 volts and 20 volt DC scale. The meter needs to display + and - readings. The readings should be $\pm 0.2\%$ accuracy. It should have a dual scale, Viz., 0-.999 V and 0-19.99 V (1 mV to 20 V).

(iii) Dispensing sponge

The highly electrical conductive dispensing sponge is needed to place the electrode and make a connection with concrete to measure the potential at a particular position of the reinforced concrete. Some reference electrode itself is made of this sponge. If so, the separate dispensing sponge is not needed.

(iv) Heavy Duty Coiled connected with Clamps

The heavy-duty coiled cable reel with the minimum of 5' up to 100' with banana jack and clamps are needed to supply.

(v) Storage case

A storage case with hardcover for safely storing all components of the device needs to supply.