

Indian Institute of Technology Madras Chennai-600 036 Department of Civil Engineering

## Ref No: CIE/MANU/2012/ENQ/SPLX PROJ 3

Dt: 31<sup>st</sup> July 2012

Sub: Quotations for Corrosion Analyser

DUE DATE On: 24.8.2012

Sir/Madam,

1 Quotations are invited <u>in duplicate</u> for the item/s shown above **/as per enclosed Specifications**.

2. The quotations duly sealed and super scribed on the envelope with the enquiry reference No. & due date should be addressed to the **Project coordinator**, so as to reach **on or before the due date.** 

3. The quotation should be valid for (60) <u>Sixty days from the due date and period of delivery</u> <u>time</u> required.

4. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the quotations, **wherever applicable**. Samples if called for, submitted free of charges and collected back at the suppliers expenses. Additionally, <u>the required</u> <u>information as per specifications are to be provided by the firm</u> participating in this tender

5. Local Firms:-Quotations should be for free delivery to this Institute. If Quotations are for EX-Go down, delivery charges should be indicated separately.

6. Firms outside Chennai: Quotations should be for F.O.R. Chennai. If F.O.R. Consignor station. Freight charges by Train/Lorry/Air/Ship transport must be indicated. If Ex-godown, packing Forwarding and **Freight charges must be indicated**.

7. The rate of **Sales/General Taxes** and the percentages of such other taxes legally leviable and intended **to be claimed should be distinctly shown** along with the price quote. Where this is not done, **no claim** for sales/General taxes **will be admitted at any later stage** and on any ground whatever. The taxes leviable should take into consideration run with no profit motive and which necessary **Concessional Sales Tax Certificate would be issued at the time of passing the bill**.

8. Goods should be **supplied carriage paid and insured**.

9. Goods shall not be supplied without an official supply order.

10. Warranty period: Explicitly Warranty period is to be given for One year by the firms

## TECHNICAL SPECIFICATIONS-CUM-COMPLIANCE TABLE FOR CORROSION ANALYZER

<u>NOTE</u>: For each specification, please enter "YES" or "NO" in the second column of this table. If a cell in the second column is left blank, then it will be assumed that the quotation does not comply with the respective specification/requirement. Provide catalogues, data sheets and/or other documentation to support the compliance of your equipment to the given specifications.

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1 General	
A corrosion potential analyzer (CPA) with single and/or multiple wheel electrod	les for
fast/easy corrosion potential mapping of concrete elements in laboratory and fie	ld.
2 Corrosion Analyzer System	1
2.1 Operating Temperature: 10 to 60°C	
2.1 Operating Temperature: To to ob C 2.2 Measuring Range: -0.9 Volts to +0.3 Volts	
2.3 Resolution: $> 0.0001$ Volts and $< 0.001$ Volts	
$2.5 \text{ Resolution: } > 0.0001 \text{ Volts and } < 0.001 \text{ Volts}$ $2.4 \text{ Impedance: } \approx 10 \text{ M}\Omega$	
2.5 Reference electrode based on Copper/Copper Sulphate electrode	
2.6 Single wheel type electrode with telescopic boom/rod	
2.7 Multiple wheel type electrode with telescopic boom/rod	
3 Software and data storage/display	
3.1 Software package with configuration, measurement, visualization, analysis an documentation	d
3.2 Instrument calibration facility	
3.3 Display: LCD display with backlight	
3.4 Display: It must be able to display at least 200 data points on LCD screen at a	time
3.5 Graphical display of potential data must be possible	
3.6 Memory storage: Simultaneous storage of more than 200,000 potential	
measurements	
3.7 Data output: RS 232 interface with USB adapter	
4 Power requirement	
4.1 Battery power: 1.5 V with minimum 50 hours without activated backlight	
4.2 Battery power: 1.5 V with minimum 25 hours with activated backlight	
4.3 Direct AC power: 220 V (with $\geq$ 5 m long chord/cable)	
5 Training & Performance criteria	
5.1 A one-day hands on training on the corrosion testing and basic maintenance o	f the
equipment needs to be provided at IIT Madras, Chennai	
5.2 The performance must be demonstrated in the laboratory by qualified personn	el of
the equipment supplier.	
6 Manufacturer Experience	·
6.1 The manufacturer must have at least 15 years experience in the field of	
manufacturing corrosion testing equipment. A list of organizations in India w	rith
similar equipment and their contact details should be provided.	

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## Terms and conditions:

- 1. Vendor should submit two separate bids, viz., "Technical bid" and "Commercial bid".
- 2. Technical bid shall contain the following i) detailed specifications for the above equipment for which quotation is being submitted, ii) detailed technical brochure, iii) the Institutions in India and abroad to which these equipment have been supplied with complete contact information for possible verification by the IIT Madras, iv) letter of authorization from the manufacturer stating that the vendor is an authorized/sole dealership, v) details of supplier's customer support office in India with technical support on electrochemical and impedance analysis instruments, and vi) details of infrastructure/technical expertise available for technical support for servicing the equipment during warranty period and also during post warranty period. The technical bid should be sealed and kept in a separate cover that should be marked "Technical Bid"; it should not include any commercial details. Any technical bid with commercial details or without any of the above listed enclosures may be summarily rejected.
- 3. Commercial bid should specify the cost for each items listed in the specification above separately/including cost of different models satisfying the above specifications for which technical bid has been submitted. Provide separately the cost for an add-on warranty option for a period of 2 (two) years, beyond the free warranty period of 1 (one) year from the date of installation. Also, specify clearly the post-warranty Annual Maintenance Contract (AMC) rates in each case separately. The commercial bid shall be kept in a separate sealed cover that should be marked "Commercial Bid". The commercial bid shall include all the terms and conditions including validity of the quotation, taxes, and warranty period. Commercial bid without any of the above listed enclosures may be summarily rejected.
- 4. Write clearly on the top of the respective covers "Technical Bid" and "Commercial Bid". These two sealed covers shall be placed inside another sealed cover and submitted before the last date mentioned below.
- 5. **Method of short-listing:** The technical bids received till the last date will be opened and evaluated by a duly constituted committee. If required, the committee may seek clarification on the technical bids from any or all of the respective vendors. The commercial bids of only those technical bids that satisfy the specifications, as approved by the committee, will be opened. The commercial bids that do not satisfy the requirements will be returned back to the vendors unopened.
- Clarifications, if any required before submitting the quotations, can be obtained from Dr. Radhakrishna G. Pillai, Dept. of Civil Engg. (Phone No: 044 2257 4303), IIT Madras between 9.00 am and 5.00 pm. on all working days (Monday to Friday).
- 7. Last date for the receipt of quotations by speed post, Indian Postal Service, is August 24, 2012 (Friday). Despatch through courier/hand delivery is not permissible.