



DEPARTMENT OF CIVIL ENGINEERING  
**Indian Institute of Technology Madras**  
I.I.T.P.O., MADRAS-600 036

Form for Inviting Quotations

Ref.No.CIE//2019/AMLA/LVDTS

Date: 11-11-2019

**DUE DATE: 22-11-2019**

To

Dear Sirs,

1. Quotations are invited in duplicate for the various items shown below / overleaf / Enclosed list.
2. **The Quotations duly sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the undersigned and contain in 2 bid system i.e. Technical bid and Commercial bid in two separate envelopes should be enclosed in a single envelope only so as to reach on or before the due date stipulated above.**
3. The Quotations should be valid for ninety days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
5. 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, should be submitted free of charges, and collected back at the supplier's expenses.
6. Local Firms : Quotations should be for free delivery to this Institute. If Quotations for Ex-Godown delivery charges should be indicated separately.
7. Firms Outside Madras : Quotations should be for F.O.R. Madras. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If Ex-Godown, packing, forwarding and freight charges must be indicated.
8. The rates of GST and other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for GST/General Taxes will be admitted at any stage and on any ground whatsoever. IIT Madras is eligible for concessional GST. Relevant certificate will be issued. In case of import supply the price should be quoted without custom duty. I.I.T. Madras is exempted from levy of IGST on Imports and eligible for concessional custom duty (not exceeding 5%) and the price should be quoted on **EX-WORXS** and **CIP** basis indicating the mode of shipment.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment : Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later.

Yours faithfully,

  
[PROF. AMALAN K SENGUPTA]

- Note: (i) Quotation should be sent by SPEED POST only or to be delivered directly to the concerned.  
(ii) Firms are requested to submit the specifications of their product along with supporting technical Documentation / brochure instead of reproducing the specifications sent by us.

## TECHNICAL SPECIFICATIONS FOR LVDTs

**NOTE:** 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.

<b>1 General</b>	<b>Yes / No</b>	<b>Remarks</b>
Linear Variable Displacement Transducers (LVDTs) of different travel lengths to measure the displacements under testing of concrete specimens. The LVDTs should satisfy the following performance criteria.		
<b>2 Specifications</b>		
2.1 Travel lengths: 20 mm; Unit: 02		
2.2 Travel lengths: 50 mm; Unit: 02		
2.3 Travel lengths: 100 mm; Unit: 02		
2.4 Displacement transducer type: Plunger		
2.5 Inductive: Full bridge measurement system		
2.6 Nominal displacements: $\pm 10$ mm, $\pm 25$ mm, $\pm 50$ mm		
2.7 Linearity division: $< 0.2\%$		
2.8 Sensitivity: $\pm 1\%$		
2.9 Room space to mount the LVDT: 250 mm		
2.10 Compatible with the HBM data acquisition system (QuantumX MX1615B) using Catman software		
2.11 Supporting cable length: 3m		
<b>3 Technical Support: Installation, Training, Warranty and Maintenance</b>		
3.1 The manufacturer/supplier must provide training to selected personnel at IIT Madras, on the operation and maintenance of the unit		
3.2 The manufacturer/supplier must have a qualified technical support team to immediately attend the repair of any unit, if required.		
3.3 Warranty period of minimum 1 year		

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## TECHNICAL SPECIFICATIONS FOR LOAD CELL

**NOTE:** 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.

1 General	Yes / No	Remarks
Load cell to measure the load acting under testing of concrete specimens. The load cell should satisfy the following performance criteria.		
<b>2 Specifications</b>		
2.1 Load capacity: 500 kN; Unit: 01		
2.2 Load cell type: Ring load cell		
2.3 Type of load: Axial tension/compression		
2.4 Strain gauge measuring system: 350 ohms		
2.5 Linearity division: < 0.2%		
2.6 Sensitivity: $\pm 2$ to 2.5 mV/V		
2.7 Accuracy class: 0.5		
2.8 Self-temperature compensated		
2.9 Base of load cell should be deformation/deflection free		
2.10 Compatible with the HBM data acquisition system (QuantumX MX1615B) using Catman software		
2.11 Supporting cable length: 3m		
<b>3 Technical Support: Installation, Training, Warranty and Maintenance</b>		
3.1 The manufacturer/supplier must provide training to selected personnel at IIT Madras, on the operation and maintenance of the unit		
3.2 The manufacturer/supplier must have a qualified technical support team to immediately attend the repair of the unit, if any		

*3.3 Warranty period of minimum 1 year*

## **TERMS AND CONDITIONS**

1. The quoted price should be inclusive of all taxes/freight/installation charges, etc.
2. The quote should be prepared based on 5% GST considering Educational Institute / Research purpose.
3. Customs/Excise Duty exempted price should also be quoted.
4. The quotation should have at least three months validity.
5. Brand name of the equipment should be mentioned and brochure to be enclosed.
6. Warranty conditions, details of the nearest servicing centers, user reference, necessary supporting catalogues and demonstration should be provided.
7. The right to accept or reject quotes without assigning any reason rests entirely with the undersigned.
8. Authorized dealer certificate should be attached with tender.
9. If the date of receipt and opening of quotation is declared a holiday, the next working day shall be the last day for the purpose.
10. The item mentioned in the tender is for research purpose. Any Specification which is above or below the defined values is not compatible for the studies and hence not fit to purpose and will be rejected. Only the specifications which is exactly or most close will be considered for the next stage of the tender process.