



Indian Institute of Technology Madras

I.I.T.P.O., MADRAS-600 036
DEPARTMENT OF CIVIL ENGINEERING

Form for Inviting Quotations

Ref. No.CE/SMAT/2016-17/Mem. Test/SPI

Date: 28/02/2017

SPEED POST

To

Dear Sirs,

DUE DATE: 22/03/2017

1. Quotations are invited in duplicate (two bidding covers) 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 Head of the Department and contain in 2 bid system i.e. Technical bid and Commercial bid in two separate envelopes should be enclosed in a single envelope 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 rate of sales / General Taxes and the percentage of such 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 Sales / General Taxes will be admitted at any stage and on any ground whatsoever. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non Government Educational Institutions run with no profit motive for which a concession. Sales Tax Certificate will be issued at the time of final settlement of the bill.
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

HEAD OF THE DEPARTMENT
HEAD

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

Membrane Test skid

The specification and details of the Membrane Test Skid are given below. The quote should also include additional set of both rectangular and circular flow cells.

Item/Terms/Condition	Description about the Digital Membrane test skid
Cell Type	The flow cell should have the provision to test parallel units from single flow. The skid should be made up of stainless steel housing
No. of cell required	1
Membrane sample size	Rectangular flow cell: 19 x 14 cm Circular flow cell : 4.6 cm diameter and housing should be of size less than 35 cm
Membrane Area	0.45 m ²
Feed Flow Rate	6.7 Liters per minute (LPM)
Feed Control	Provision should be there for concentrate pressure control valve and bypass flow control using valves
Operating pressure	0-1000 psi
Electrical Supply	220V/60 Hz, 1 phase
Pump and Motor	Pump should be of Positive Displacement type and the unit should be included with washguard electric motor
Weight	The whole weight of the unit should be less than 300 kg
Data monitoring	The skid should include digital data monitoring system for flow rate, pressure, temperature, conductivity and weight.
The item should include the additional features such as	<ul style="list-style-type: none"> ➤ Provision to operate as 1 or 2 lines in parallel ➤ Provision for digital pressure and flow meter ➤ Provision for digital temperature and conductivity sensors
Warranty required	<ul style="list-style-type: none"> ➤ Minimum one year warranty ➤ Quote separately for additional one year extended warranty ➤ Quote separately for additional three years annual maintenance contract
Other requirement	<ul style="list-style-type: none"> ➤ Supplier should have a good supply record of the same item in India and with high customer satisfaction rating.

S. M. S. 28/12/12