



Department of Engineering Design  
Indian Institute of Technology Madras  
Chennai – 600 036, India

Prof. Nilesh J. VASA  
Head of the Department

Phone: 044-2257 4731  
Fax: 044-2257 4732  
email: [edoffice@iitm.ac.in](mailto:edoffice@iitm.ac.in)

REF.NO. ERP/1314016/RESF/SANA  
As per the addresses list enclosed.

Dated: 22-7-2014

DUE DATE: 5/8/2014

Dear Sir,

1. Quotations are invited in duplicate for the various items **shown below**/overleaf/enclosed list.
2. The quotations are to be **in two parts** as  
**Technical Offer and as Commercial offer:**  
The two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in separate envelopes must be enclosed in the one bigger envelope duly sealed and super scribed with reference number and due date and must be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations duly sealed and super scribed on the envelope with reference no. and due date, should be addressed to the undersigned so as to reach him or before the **due date** stipulated above.
4. Quotations should be valid for 60 days from the due date and period of delivery be indicated.
5. Local firms to quote for free delivery to this Institute. If quoted for Ex-Godown delivery charges be indicated separately.
6. Relevant literature pertaining to the items quoted with full specifications.
7. Sales Tax/General Taxes/ED if applicable and such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. If this is not indicated no such claim will be admitted at any stage. 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 is given. Sales Tax Certificate will be issued at the time of final settlement of the bill.
8. Goods should be supplied carriage paid and insured.
9. Goods shall not be supplied without an official supply order.
10. Every effort will be made to make payment within 30 days from the date of bill/acceptance of goods whichever is later.
11. The Guarantee period of the item may be indicated clearly.
12. In case of LC. Payment 90% of the payment will be made after completion of the supply. The balance 10% of the payment will be made after satisfactory installation of the equipment.
13. IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
14. **Acceptance and Rejection:-** I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

Forwarded.

Dr. SANKARA J. SUBRAMANIAN  
Associate Professor  
Department of Engineering Design  
Indian Institute of Technology Madras  
Chennai - 600 036, India.

Yours faithfully,

Head of the Department  
Engineering Design Department,  
IIT Madras  
Chennai 600036.

Items required:

**Computerized Electronic Tensometer (Tensile Testing Machine)  
Basic Unit (Tension Only); Capacity: 20 KN**



**Department of Engineering Design**  
Indian Institute of Technology Madras  
Chennai – 600 036, India

**Specifications of Computerized Electronic Tensometer (Tensile Testing Machine):  
Basic Unit (Tension Only); Capacity: 20 KN.**

1. Frame type: Dual column horizontal type table top
2. Load capacity: 20 kN
3. Required range of load cells: 20 kN, 2 kN and 0.2 kN
4. Accuracy in load measurement:  $\pm 1\%$  of applied load
5. Least count for load cells:
  - i) least count of 20 kN load cell: 10 N
  - ii) least count of 2 kN load cell: 1 N
  - iii) least count of 0.2 kN load cell: 0.1 N
6. Cross head travel: 525 mm approx excluding grip
7. Drive system: D.C. Servo motor  
Torque : 1.1 Nm
8. Drive : Suitable for Motor; Transformer; Double Step Timer Pulley Arrangement.
9. Gripper to hold specimens of thicknesses from 0.05 mm upwards, without slippage and damage to specimen near grip. Grip area is of about 5 mm x 5 mm.
10. Cross-head Speed : Manual with high speed return system.
11. Testing Area : 135 mm approx between Guide rods.
12. Control: Digital readout system for Load and Extension with micro processor based control unit, and high precision encoder for elongation measurement

**Additional Requirements:**

1. Vendors should provide continuous technical support and maintenance of equipment.
2. Vendors have to provide warranty for a minimum of one year. Approximate cost of annual system support/ maintenance contract once the warranty period is over has to be quoted for a period covering 5 years from the date of purchase. Payment for the AMC will be made only at the end of warranty period on yearly basis.
3. Vendors must have sufficient experience in supplying equipment in reputed organizations for research purpose. They must provide references of end users whom we can contact for their experience with the supplied machine. Experience of the end users will also be used as a criterion for the selection of bids that meet technical requirements.
4. Vendors must provide detailed documentation for the equipment.

5. Vendors may be called to visit and give presentation/demonstration on the equipment after opening the technical bid. They need to provide the approximate date for this presentation in the bid. The time period for this presentation would be 14 days from the date of opening of the bid.
6. Vendors must provide training to our technical staff for using the equipment.
7. All the expenses for installation, training and post sales technical support will be borne by the vendor.