



Dept. of Applied Mechanics,
Indian Institute of Technology Madras
Chennai - 36

Dr. A. AROCKIARAJAN
Associate Professor

Phone: 044-2257 4070
Fax : 044-2257 4052

Date: 30.04.2014

Ref. No.: APM/AARO/2014/ENQ1
Single column universal testing machine

Dear Sirs,

DUE DATE: 21.05.2014

1. Quotations are invited in duplicate for the various items shown in Enclosed list (Annexure - I).
2. The Quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The Quotations should be valid for sixty days from the due date and the period of delivery required, warranty terms etc. should also be clearly indicated. A minimum of one year warranty required.
4. Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.
5. Compliancy certificate is to be provided indicating conformity to the technical specifications.
6. 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.
7. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges, and collected back at the supplier's expenses.
8. Packing and delivery charges must be clearly indicated.
9. 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.
10. Goods should be supplied carriage paid and insured.
11. Goods shall not be supplied without an official supply order.
12. 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.
13. 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 software.
14. 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.
15. **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.

Yours faithfully

Arockiarajan, Department of Applied Mechanics.

ANNEXURE – I

Ref.. No.: APM/AARO/2014/ENQ1

Date: 30.04.14

DUE DATE: 21.04.04

Specification	Details
Tester Load Capacity	Single column with load cell of 5kN: The load cell type can be selected from 12 types; 1 N, 2 N, 5 N, 10 N, 20 N, 50 N, 100 N, 200 N, 500 N, 1 kN, 2 kN and 5 kN.
Load Method	High-precision constant-speed strain measurement using backlash-free ball screw drive
Test Force Measurement with Standards	± 0.5 % of indicated value (within 1/500 to 1/1 of load cell rated capacity) Conforms to JIS B 7721 class 1, ISO 7500-1 class 1, EN 10002-2 grade 1, and ASTM E4..
Test Force Measurement Calibration	Automatic calibration using calibration cable
Crosshead Speed Range	0.001 to 1000 mm/min
Crosshead return speed	1500 mm/min
Crosshead speed accuracy	Within ± 0.1 % of test force
Distance between Crosshead & Jig mounting surface	920mm
Maximum Grip space	700 mm (5 kN load cell + 5 kN screw type flat grips)
Depth of Test Space	100 mm (table section)
Crosshead position detection measurement & display	Optical encoder measurement, digital display (display resolution: 1 μ m)
Crosshead position detection accuracy	0.1% of indicated value or 0.01 mm, whichever is greater
Standard Functions	Auto-stop and auto-return functions when specimen fracture is detected (crosshead auto home-position return); Display function: Actual test force display or stress display (user settable); Crosshead displacement display in mm or %/GL (user selectable); Test force and displacement analog output: 0 V to 5 V DC full scale, respectively (for external recorder); USB interface; Manual crosshead position fine adjustment; Adjustable controller; Touch load alarm
Compression Jig	Upper compression plate (dia 8mm, dia 10mm, dia 15mm, dia 20mm, dia 30mm, dia 118mm) Lower compression plate, dia 118mm
Tensile Jig	5kN tensile grips for round and flat samples

Note:

The sealed quotation to be sent to

Dr. A. Arockiarajan
Dept. of Applied Mechanics,
IIT Madras, Chennai-600036,
Tamil Nadu, India