



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

Phone: 044-2257 4060
Fax : 044-2257 4052

Date: 02/06/2014

Ref. No.: APM/PG/001/2014

Name of the item: 5kN Servo-hydraulic fatigue test sy

DUE DATE: 23/06/2014

Dear Sirs,

^{2 Bid System}
~~duplicate~~

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

, Department of Applied Mechanics.

ANNEXURE – I

Ref.. No.:

Date: 02/06/2014 DUE DATE: 23/06/24

SL. NO.	DESCRIPTION	QUANTITY
1	<p>System configuration</p> <p>Single-footprint, fully integrated 5 kN servo-hydraulic fatigue test system Configuration: Loadframe with moveable crosshead and actuator mounted on bottom platen supported on base frame enclosing pump and controls. No external piping or hosing or loose cables. Castors for easy re-location. Total weight not to exceed 160 kgs. Noise during routine operation not to exceed 65-70 dB; Power: Single phase 220V only, up to 2.5 kVA. 3-phase supply unacceptable</p> <p>Detailed Specifications:</p> <p>Load frame Lightweight moveable crosshead not to exceeding 8 kgs with mechanical clamping for easy manual movement and location.</p> <p>Servo - Hydraulic Actuator Fatigue rated double ended, double acting actuator with monolithic piston design, featuring an internally mounted encoder with 0.1 micron resolution for stroke measurement to be offered Actuator should be rated for max. 50Hz frequency operations. Force rating: +/- 5 kN Total stroke: +/- 25mm</p> <p>Contamination insensitive Hydraulic 4 LPM automatic instantaneous flow control pump with passive air cooling. No external forced cooling permissible. No separate site requirements for cooling entertained Contamination insensitive direct drive servo valve, Dual stage valves not acceptable</p> <p>Controls and software High performance 32-bit controller integrated into test system and compatible with off-the-shelf Notebook personal computers running MS-Windows. USB interface preferred. Stroke, Load and Strain signal conditioners with 24-bit data acquisition at up to 7.5 kHz. Autocalibration for all channels DSP-based controller with 32-bit servo-loop update at up to 8 kHz. All application software to be provided with open source to enable editing by user. Real-time graphics package to enable view, recording and export of acquired data. 5-day training at site, 12 month on-site Warranty</p> <p>Accessories:</p> <p>Grips Tensile Grips Mechanical tensile grips to test flat specimens of 0-8 and 8-12 mm in thickness and width : 25 mm</p> <p>Eligibility Criteria: High precision servo controlled test systems to be quoted. Hydraulic machines with servo machines if quoted will be rejected Compliance statement must be submitted with adequate reasoning against each specifications. Just stating comply against each specification is not acceptable Minimum of 3 exactly similar configurations specifically for material testing should have been supplied to any institution/industry in past three years</p>	1

Note:

The sealed quotation to be sent to below address in 2 Bid system .

The Head
Dept. of Applied Mechanics,
IIT Madras, Chennai-600036,
Tamil Nadu, India

Kind attn: Dr. Pijush Ghosh, (Solid M₊)
MSB-224A