

NATIONAL INSTITUTE OF TECHNOLOGY  
KURUKSHETRA-136119

No. CED/Trans./NITK/2017/14 /1065

Dated: 9/3/17

M/s INSTITUTE WEBSITE

**Sub: INVITATION OF QUOTATIONS FOR DIGITAL CREEP TESTING RIG 1000KN CAPACITY WITH STRAIN MEASUREMENT SYSTEM.**

1. You are invited to submit your most competitive quotation for the following goods:

Sr.No.	Brief Description & Specifications of Goods	Quantity
1.	DIGITAL CREEP TESTING RIG 1000KN CAPACITY WITH STRAIN MEASUREMENT SYSTEM.	01 Nos.

(Detailed Specifications are attached)

- Necessary literature of the goods may please be sent to facilitate to take decision.
- All duties taxes and other levies payable by the Institute shall be included in the total price. This Institute does not issue Form C or D.
- Payment will be made Online through RTGS/NEFT within 30 days after receipt of material in good condition and according to specifications. The Bank detail for making online payment may be indicated in the quotation.
- The supplier shall deposit Earnest Money alongwith the Quotation amounting to Rs. 22000 /- in shape of Accounts Payee Demand Draft, Fixed Deposit Receipt, Bankers Cheque or Bank Guarantee from any commercial Bank in favour of the Director, National Institute of Technology, Kurukshetra. The Quotations without Earnest Money shall be rejected, the EMD will remain valid for a period of 45 days beyond the final validity period of quotation.
- Performance Security @ 05% of the total value of the equipment may be furnished in shape of Demand Draft, Fixed Deposit Receipt or Bank Guarantee from any Commercial Bank in favour of the Director, NIT Kurukshetra valid upto 60 days after the date of completion of warranty .
- The items must be supplied within delivery period or delivery period extended by the Institute on the request of the supplier on genuine grounds otherwise the penalty for delayed period @ 0.5% of the amount shall be charged for every week or part thereof and the maximum 10%..
- The goods are not required exclusively for Research Purpose. The Duties are payable by the Institute.
- The quotation should remain valid for a period not less than 60 days from the date of submission.
- The right of accepting or rejecting any quotation and to cancel the bidding process and reject all quotations without assigning any reason is reserved with the Institute.
- The due date for receipt of quotation is 21.03.2017 and will be opened on next working day. Please quote on the top of the envelope our Ref. No. and due date of opening.

Deputy Registrar (I/c Stores)



## **Digital Creep testing rig 1000KN Capacity with Strain Measurement System**

### **Reaction frame**

Shall be consists of Upper & Lower Jack plates and Upper & Lower Loading Plates bearing on the ends of the Loaded specimen, load maintaining elements (springs), threaded rods & nuts to take the reaction of loaded system

### **Pumping Unit**

- Motorized pumping of 1000KN housed in a cabinet.
- The motor of the pump should connect to mains through ON-OFF push button switch.
- Slow and fast lever fitted with a knob for to and fro movement of lever for coarse adjustment of rate of loading.
- Fine adjustment can be done by rotating the knob fitted on this lever.
- A release valve to release the pressure by unscrewing the knob.
- Pumping unit is submersed in oil tank and it fitted with oil filler plug cum dipstick and drain plug
- Suitable for operation on 220V, 50HZ, AC supply

### **Hydraulic jack**

- Hydraulic jack system should consist of cylinder and a piston lifting handle fixed on the cylinder body with an inlet nipple for coupling with connecting pipe a Teflon seal is provided on the hydraulic jack to prevent leakage of the oil under pressure
- Jack capacity of 1000KN with an air vent provide in the piston for bleeding out air from the system before the jack is put to use for conducting a test
- Solid piston should be provided in the hydraulic jack so that the piston comes back to its original position after load released.
- Travel of the piston of the hydraulic jack=100mm or more
- As the creep test involves six months long loading, jack should be capable of holding the load for long durations without power supply i.e. power supply should be needed only while increasing the load. Manual loading facility should also be provided

### **Digital indicator should have following feature**

- Pace deviation bar graph.
- Automatic stress determination and display
- Overload safety protection
- Peak Load, Peak Stress, Unique Record No. is displayed.
- Data storage approx. 2000 records
- Data Download thru RS232 in ASCII format
- Start, Stop, Pause & Reset

### **16 channels Acquisition System For strain measurement**

- Robust, Stand alone, low power data logger with USB memory stick support
- 18 bit resolution and built in display
- Easy Configurable Windows Based Software
- Stand Alone & Real Time Data Acquisition
- Remote Monitoring & Control GPRS based
- Removable Terminal Base Assembly
- Modbus for SCADA connection provision
- User definable memory allocation & mode

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24.1.17