

**GOVERNMENT ENGINEERING COLLEGE, THRISSUR
NOTICE INVITING E TENDER**

D2/8854/22/GECTCR

25.11.2022

Tender No. : D2/60/22-23

Superscription : Purchase of Hydraulic Jack to Civil Department

Bidding fee : Rs. 2478 /-(2100+18%GST)
 EMD required : Rs. 14,000 /-
 Address of the Officer to : THE PRINCIPAL, GOVERNMENT
 whom hardcopy is to : ENGINEERING COLLEGE,
 be sent. : THRISSUR-680009

ITEM SPECIFICATION

Sl. No.	Name of item and specification	Quantity
	<p><u>15 Ton Hydraulic Double acting Actuator of precise linear motion with electrical feedback & suitable power Pack integrated manifold system.</u></p> <p>Supply and installation of dynamic testing equipment as per the following technical specifications.</p> <p>- Double acting hydraulic actuator with +/- 100 mm(200mm) stroke length-Precise linear motion guide & integrated feedback system.- The unit need to be Automated with solenoid control valves and electrical control panel (Counter circuit enabled) with Manual and auto cycle start stop push button.-Extension frames for actuator and suitable for using with 60 cm tank.- The unit shall be implanted with HMI system to provide actuator displacement, cyclic loading data and load readouts ,Servo Valve : 20LPM In built Displacement sensor : 500 mm (+100mm * 0.01mm) Test Speed : 100mm/sec- Power pack oil : Hydraulic oil 68No.- Electric motor: Any company with good quality and safety features , -Hydraulic pump: Any company with good quality and safety features.</p>	

-Load cell to be provided for accurate load measurement.

Technical Specification Load cell

It is a strain gauge-based type with full wheat-stone bridge configuration. It is made up of Alloy steel, electro less nickel-plated structure for outstanding corrosion resistance. It is a fatigue rated load cell and can be loaded in compression and tension over few million numbers of times in both static and dynamic loading.

Capacity : +/- 15T Accuracy : +1% of readout value

Full Scale Output : 2.0 mV/V Non-Linearity : < + 0.10% FSO ;Hysteresis : < + 0.10% FSO Non-Repeatability : < + 0.15% FSO ;Creep (30 minutes) : < + 0.04% FSO ;Excitation Voltage : 10 Volts DC Safe overload : 150%

Operating Temperature : 0⁰C to +60⁰ C

Fatigue Life : > 10⁹ -A Linear transducer / Digital encoder to be provided for precise displacement measurement.

Technical specification of Displacement

Transducer

The variation in strain, deflection etc. is measured with help of Micro pulse Linear Transducer/ digital encoder. Salient feature of Micro pulse Transducer:

- Very high resolution, repeatability and linearity.
- Immunity to shock, vibration, contamination and electrical noise.
- An absolute output signals.
- Automatic signal regulation.

Range: 200mm

Resolution: 0.01mm

Independent Linearity : + 0.02% of FS

Excitation Voltage :

Full Scale Output: 10.0 Volts 24 Volts DC

Sampling Time : 1ms

Operating Temperature : - +30⁰ C to +75⁰C

Protection Class : IP67

Conditions

1. All the items specified above has to be **quoted together** and only those eligible quotations with will be accepted
2. The companies have to produce **letter from the manufacturer** to show the authenticity of the product and they have the authority to sell the product at this part of India
3. Details specifications of the machines should be attached to check **the product quoted is meeting all the requirements**
4. The companies may call for demonstration, **if required** to check the accuracy of the product.
5. The model number of the product with Brand and Make name should be mentioned in the quote.

sd/-

PRINCIPAL

Forwarded / By order



Accounts Officer
Pras
✓