

ASSEMBLY AND TESTING MACHINES

Endurance Testing Machine

This test set up is designed to conduct Endurance Testing of Rubber Bushes used in vehicle suspensions for repeated radial fatigue loads

Following Tests can be conducted on the machine

- i) Radial fatigue test up to 1000 kg load and 5 HZ frequency.
- ii) Static axial loading arrangement up to 1000 kg.



➤ **Features:**

- A) Bush mounting fixture provided with roller guide split mounting plate to accommodate bush sizes from Φ 25 mm to Φ 70 mm and length 40 to 70 mm.
- B) Radial loading arrangement comprises of-
- i) Geared motor 5 HP, 1440 rpm with variable speed drive to achieve frequency of 5 Hz max.
 - ii) Belt and pulley drive to intermediate bearing block.
 - iii) Eccentric mechanism with guide rods liner bearings and roller guide loading lever. Adjustable eccentricity up to 20 mm max to achieve 1000 kg load.
 - iv) Load cell and microprocessor-based load indicator to measure facility load exerted on test bush with presetting.
 - v) Preset counter 6 digit.
- C) Axial loading arrangement in static condition with screw and nut from both sides of bush using hand wheel. Load measurement by microprocessor based digital load indicator and load cell Range- 1000 Kg with presetting facility.
- D) Rigid fabricated frame structure made of channels and plates to provide sufficient rigidity to the machine.
- E) Electrical control panel to accommodate all the indicators and Controls.
- F) Digital Linear displacement indicator with LV.D.T Sensor.
Range – 0 -20 mm. Least Count -0.1 mm.
- G) Facility of Plotting Load v/s deflection Characteristics of rubber bush in static condition is also provided on the machine.