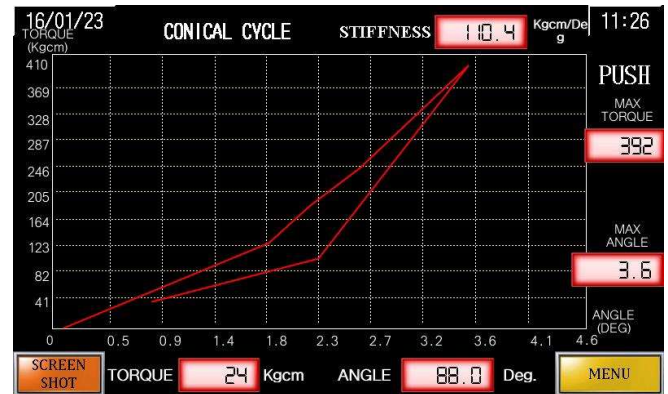
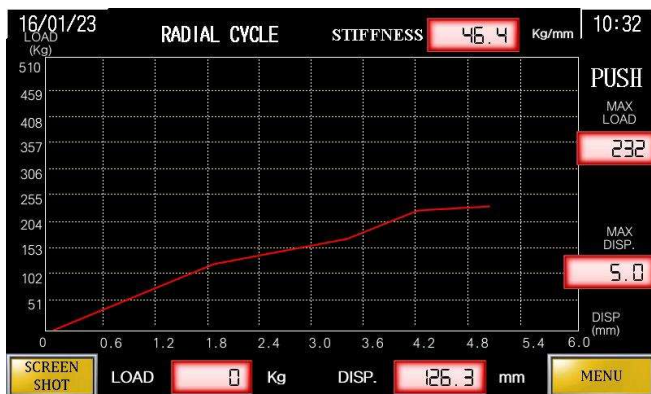
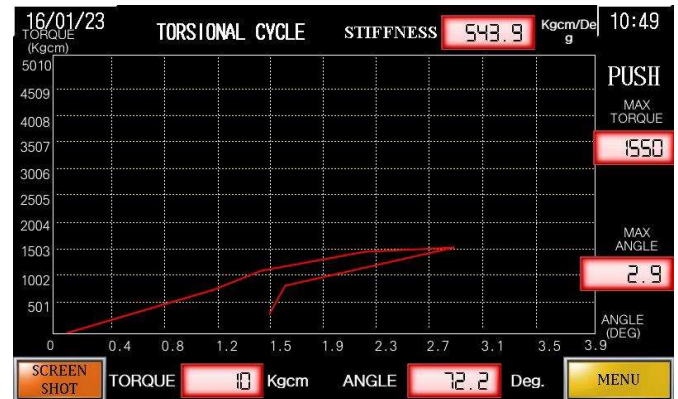
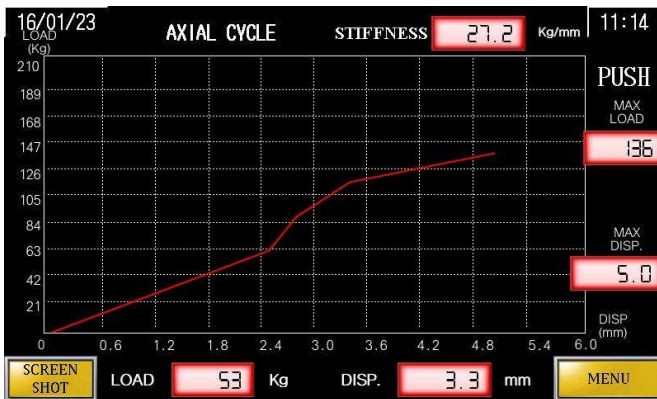


# Load Deflection Test rig

This test rig very precisely tells the resulted or obtained deflection over the application of some quantifiable load. This system is designed to carry out load v/s deflection measurement of different materials like bellows, springs etc. It tells the state of deformation of a Workpiece from its original shape under the work of a force or load or weight.





### ➤ Features:

- The complete setup is fitted on a strong and sturdy fabricated frame structure made of square pipes and plates.
  - a. Overall size 0.8meter x 0.5meter x 0.8meter height.
- Two hard chrome plated rods of 40mm, @ 0.6meter length are provided with top and bottom plate.
- Two additional plates with linear bearings are provided to move up/down using hard chrome bars as guide.
- Bottom plate is fixed to a screw and nut arrangement for moving the plate up/down using a geared motor. Suitable component holding fixture is provided.
- A 0.5 HP geared motor with 50 RPM output speed along with variable drive is used to move the plate at set speeds.
- The upper plate is fixed to another screw and nut arrangement with hand wheel for adjusting height of upper plate depending upon test component height.
- A universal load cell of 500 kg capacity is fixed to upper plate for load measurement.
  - a. Capacity: **1ton, 1.5-ton, 10 ton.**
- A wire rope type linear displacement sensor is provided for measuring the deflection of the test component.
  - a. Range: 0 – 300mm.
  - b. Least count: 0.1 mm.

- Electrical control panel comprises of: -
    - a. Digital load indicator.
    - b. Digital displacement indicator.
    - c. 0.5 HP variable frequency drive.
  
  - Other electrical accessories such as MCB, push buttons, Indicator lamps set.
- **Product parameters:**

Overall size	0.8meter x 0.5meter x 0.8meter height
Electrical Power Supply	415V, 50Hz,3Kw
Geared motor	0.5 HP, 50 RPM output speed
Universal load cell	Capacity: 500kg, Least count: 0.1kg
linear displacement sensor	Range: 0 – 300mm, Least count: 0.1 mm
variable frequency drive	0.5 HP