

# Fatigue Testing Machine

Model: Fatigue Pro-200



Easy to Operate



Compact & Sturdy Design







### **Fatigue Testing Machine**

Model: Fatigue Pro-200

#### Features:

- Table type model, no need of foundation
- · Easy to operate and adjust the load for bending moment
- · Compact and sturdy design.
- Test as per IS 5075
- User friendly.

#### Description:

Fatigue failure is a phenomenon in which a component fail due to repeated loading. Repeated loading condition in a component arrives when the stresses in it due to the load applied vary of fluctuate between maximum and minimum values.

The machine member subjected to replaced loading have been found to fail at stresses which are very much below the ultimate strength and very often below the yield strength.

Fatigue testing machine is used for the test the fatigue strength of material by various material manufacturer, institute and laboratories

On this basis we can plot the S-N diagram for that particular material. Basically this is rotating beam type machine in which load is applied in reverse bending direction.

In this machine test material specimen of diameter 8mm is held at the two ends with the help of collets, then load is applied at center for uniform bending moment and rotate it with 4200 RPM by motor.

During each revolution reverse stresses in all fibers of specimen is produced. Bending moment is applied with lever mechanism system so various weight can be easily replaced.

After completing the test process whatever number of revolution taken by specimen up to its break point is displayed on the digital counter.

The machine working phenomenon meets all the requirement of IS 5075-1959.



View of Grippers



Revolution Counter & Reset

#### Specifications:

Maximum Bending Moment	200 kg. cm.
Bending Moment Adjust	100, 150 & 200 kg. cm.
Gripping Specimen Diameter	12 mm
Test Specimen Diameter	8 mm
Rotating Speed	4200 RPM
Accuracy of applied Bending Moment	<u>+</u> 1%
Revolution Counter	Digital (8 Digit)
Power Required	0.5 HP
Motor Specifications	3 ph, 0.5 HP, 440 V, 50 Hz
Machine Dimensions (LxWxH)	1000x560x900 mm
Test Specimen Mounting Height	850 mm
Overall Weight	150 kg.

Due to constant Research & Development, Specifications and Features are subject to change without notice.

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