

**Product Name :**  
Astra Scientific Fatigue Testing Machine

**Product Code :**  
MAT-LAB-0003



**Description :**

Astra Scientific Fatigue Testing Machine

**Technical Specification :**

wide range of fatigue testing systems to suit your testing requirements. Higher capacities for each system can be accommodated based on customer needs.

A fatigue test helps determine a material's ability to withstand cyclic fatigue loading conditions. By design, a material is selected to meet or exceed service loads that are anticipated in fatigue testing applications. Cyclic fatigue tests produce repeated loading and unloading in tension, compression, bending, torsion or combinations of these stresses. Fatigue tests are commonly loaded in tension – tension, compression – compression and tension into compression and reverse.

This machine is used to test the fatigue strength of materials and to draw S-N diagram by research institute, laboratories, material manufacturers and various industries. This is rotating beam type machine in which load is applied in reversed bending fashion. The standard 8 mm dia specimen is held in special holders at its ends and located such that it experiences a uniform bending moment. The specimen is rotated at 4200 rpm by a motor. A complete cycle of reversed stresses in all fibers of the specimen is produced during each revolution.

FEATURES:

- Simple lever system for changing load.
- Calibration in Nm available on request.
- Light weight, Simple design, Compact Size.

SPECIFICATIONS Mech.CS.FT

Max. Bending moment (Kg. cm) 200

Bending moment adjustable (Kg.cm) 25 - 200

Ranges: 1 - Kg.cm II - Kg.cm 25- 125 125-200

Gripping dia of specimen (mm) 12

Testing dia of specimen (mm) 8

Rotating speed in RPM 4200

Accuracy of applied bending moment  $\pm 1\%$

Mechanical Counter: No. of digits Multiplying factor 6 3

Power required in HP 0.5

Main Supply 3ph 440v 50hz



## Astra Scientific

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