

## **SOM-003    FATIGUE TESTING MACHINE**



### **DESCRIPTION :**

A specified mean load (which may be zero) and an alternating load are applied to a specimen and the number of cycles required to produce failure recorded. Generally, the test is repeated with identical specimens and various fluctuating loads

### **RANGE OF EXPERIMENTS :**

1. To Perform Fatigue Test

### **TECHNICAL DESCRIPTION :**

This machine is used to test the fatigue strength of materials. This is a 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 loaded 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. The bending moment is applied with a lever system and can be easily changed by moving a weight over the lever. Total number of revolutions at which the specimen fails are recorded by a Digital counter. An interlocking system puts off the motor at specimen failure. Machine meets requirements of IS 5075 - 1969

1. Light weight, compact size, simple design.
2. Table model, no need of foundation.
3. Simple lever system of changing load.
4. Accurately calibrated as per IS 5075.

SERVICE REQUIRED : Power Supply: 440 V, 50 Hz, A.C.Three  
Phase , Foundation As Per Drawing  
SPACE REQUIRED : 1.5 m. ( L) x 1.0 m (W) X 1 m (H).  
WEIGHT : @ 200 Kg