

## **FLEXURAL TEST MACHINE**

### **BE 46**

A flexure testing machine (also known as a flexural testing machine or bend testing machine) is a specialized piece of equipment used to evaluate the flexural strength, modulus of elasticity, and other mechanical properties of materials under bending loads. It applies controlled force to a specimen (typically a beam or bar) supported at two points while loading it at one or more points, simulating real-world bending stresses. These machines are commonly used in materials science, civil engineering, and quality control for testing concrete, metals, plastics, composites, wood, and ceramics.

### **FOLLOWING STANDARD**

IS 516, ASTM C78, EN 12390-5, BS 1881, and ISO 679.

### **KEY COMPONENTS INCLUDE:-**

- A rigid frame with hydraulic or electromechanical loading system.
- Load cells for precise force measurement (often Class 1 accuracy from 2% of capacity).
- Fixtures for 3-point or 4-point bending configurations.
- Digital controls for automated testing cycles, data logging, and reporting.
- For 150 mm x 150 mm x 700 mm beam, the center distance between the rollers is 600 mm, while it is 400 mm for beams of size 100 mm x 100 mm x 500 mm.
- The upper platen has also a pair of rollers whose distance is adjustable.
- It is 200 mm center to center, for 150 mm x 150 mm x 700 mm size beam and 133 mm for 100 mm x 100 mm x 500 mm size beam.
- Total capacity of the machine is 100 kn.

Flexural Strength Testing Machines are Two Models available

BE 46-01	Flexural Test Manual Type or Hand Operating
BE 46-02	Flexural Test Digital Type or Electrical Operating

### **BE 46-01**



**BE 46-02**

