

BISS FATIGUE TESTING MACHINE (500kN)



Cap	: 500kN
Experiment	: To find the fatigue Test.
Year of Purchase	: 2019-20
Cost	: 257.00 L

The Median range of servo-hydraulic systems meet practically all the requirements of metals, composites and plastics testing for strength, durability and toughness. It is backed up with a wide choice of application software, transducers and accessories that satisfy the requirements of most standard test practices applicable to such tests. Median system accessories cover the requirements of room and elevated temperature testing of metals for tension and compression properties, low and high-cycle fatigue, fracture and fatigue crack growth. Accessories are also available for testing of composites under ambient and controlled environments for shear, tension/compression and fatigue and testing of joints and fasteners for strength and durability under a wide range of loading conditions, including constant amplitude, programmed block loading and simulated service loading. Custom accessories may be engineered to meet specific customer requirements.

STANDARD FEATURES

- Self-reacting frame
- 500 kN
- 100-300mm actuator stroke
- 0 - 50 Hz Cycling frequency
- Adaptable to wide range of fixtures and grips
- Spacious T-slotted testing bed
- Hydraulic lifts and clamps
- Actuator on top crosshead

- Servo-controlled low noise and energy efficient pump to provide variable flow and pressure
- Up to 40kHz, 32bit digital closed loop control
- 32-bit data acquisition
- User friendly software
- Provision for user programmability

TEST APPLICATIONS

- Fatigue Crack Propagation
- Fracture Mechanics
- Low and High Cycle Fatigue
- Tension, Compression, Flexural
- Low and High Temperature Tests
- Elastomeric Property Determination
- Workability and Formability

MATERIALS

- Rock materials
- Metals and Ceramics
- Polymers and Composites
- Rails and I-channels
- Components

STANDARD FEATURES

- High stiffness (600 to 2000 MN/m), precision aligned load frames
- Double-ended, double acting actuators with optional hydrostatic bearings
- Optional top mount actuators
- High performance 32-bit digital servo-controllers
- Load cells of ISO 7500-1 Class 0.5
- Multiple fixtures adaptable to frame
- Configurable to different hydraulic power packs to suit specific dynamic performance requirements

KEY FEATURES

- Noise-free 0.1 μm resolution of stroke readout for precision control and measurement
- Test-By-Wire/WiFi/Wireless: Absolutely all operator controls accessible through context sensitive and intuitive touch screen display.