



Innotech

Engineering Devices Pvt.Lt

Make -IEDPL
Model No. IUTM-200KN

Computerised Electro Mechanical Universal Testing Machine **200 kN Capacity**

Tension | Compression | Flattening | Bend Testing



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KEY SPECIFICATIONS

Load Capacity: 200 kN | **Accuracy:** Class 0.5 (ISO 7500-1) | **Speed:** 0.5-500 mm/min

Resolution: 10N (Load), 0.001mm (Displacement) | **Control:** AC Servo, 3-Loop Closed

Standards: IS 1828, ISO 7500-1, ASTM E4, ASTM E8, ASTM E83

Compliant with IS 1828 | ISO 7500-1 | ISO 17025 Calibration

1. TECHNICAL SPECIFICATION

- Load Capacity: 200 kN (Pan cake type load cell)
- Load Range: 0 - 200 kN
- Calibration Standards:
- Class 0.5 or Class 1 (ISO 7500-1, IS 1828)
- ASTM E4, ASTM E8, ASTM E83
- Test Load Accuracy: +/- 1% or better
- Load Resolution: 10N or better
- Measuring Range: +/-1% from 2%-100%
- Displacement Resolution: 0.001 mm
- Displacement Accuracy: +/-0.5%
- Control Mode: 3 closed loop (stress, strain, displacement)
- Crosshead Speed: 0.5 to 500 mm/min
- Speed Accuracy: +/-0.5%
- Crosshead Control: Computerised & Manual
- Testing Space: 1130 mm
- Max Tensile Space: 630 mm
- Test Width: 550 mm
- Dimensions: 1010 x 560 x 2038 mm
- Drive: AC Servo Control System
- Power: 1.5 KW, 1Ph AC 220V +/-10%, 50/60Hz
- Temperature: 10-50 deg C



3. SAFETY FEATURES

- Emergency stop push button
- Over load protection and Over travel protection
- Auto stoppage once sample test is over
- Safety shield with interlocking mechanism
- All electrical switches/cables: L&T, Schneider, Anchor, Finolex, Polycab, Havells

4. MECHANICAL FEATURES

- **Load Frame:** Strong, compact design; <0.1 mm deformation at full load. Highest flexibility and lateral crosshead stiffness.
- **High Accuracy:** Preloaded precision ball screw with high speed, low noise for position measurement accuracy.
- **High Stiffness:** 4-column frame with heavy duty pre-loaded bearings, precision guidance columns, symmetrical drive system.
- **Safety:** Auto-stop when test force exceeds specified value. Dual over-travel limits on front console.
- **Graduated Rule:** Along column for presetting limits to specific distances.

5. REPORTS & DATA OUTPUT

- Customised reports as per user requirement
- Direct display: Max Load, Displacement, UTS, % Elongation, % RA, Yield Load, YS, Proof Load, 0.2% Proof Stress, Young's Modulus, Breaking Load
- Graphs: Load vs Displacement, Stress vs Strain (online during test)*
 Selectable units: N, kN, kg, lbf, mm, cm, inch, MPa, N/mm², Kg/mm², Kg/cm²
 Print results with graph after test completion

6. ACCESSORIES, TOOLS & FIXTURES

- Auto wedge gripping system - 1 set
- Grip inserts for Flat samples: 0-10 mm, 10-20 mm
- Grip inserts for Round samples: 3-10 mm, 10-20 mm, 20-30 mm
- Bare attachment with split bush (Round dia 5-30 mm): 5, 10, 20, 30 mm
- Bend Test: 3-Point loading, adjustable span 250 mm+, rollers dia 10-20 mm, width 150 mm, mandrels dia 10 & 20 mm
- Compression plates: Dia 150 mm - 1 set

7. Electronic Extensometer: As per ASTM E8

- Capable for testing 0.1 % to 1.0% proof stress value: Software shall give alert to user to remove Extensometer when load crosses the proof load value. Suitable for Round and Flat specimen.
- Extension: 2 mm Minimum.
- Gauge length: 50 mm with reducer adapter for 25 mm.
- Least count: 0.001mm



Innotech Engineering Devices Pvt. Ltd.

(AnISO 9001:2015& CECertified Co.)

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