UI-TX10 Automatic Fabric Drapability Tester

1. Application & Test Capabilities



This instrument evaluates both dynamic and static drape properties of all kinds of fabrics, measuring drape coefficient, lively rate, corrugated surface, and aesthetic coefficient. The fully computer-controlled drape-o-meter measures drape properties from the gravity-induced deformation of an initially horizontal annular fabric ring. A circular fabric specimen is clamped concentrically between two smaller horizontal discs, allowing the outer fabric ring to drape into folds around the lower supporting disc. The shadow of the draped specimen projects onto a sandblasted glass matching the size of the unsupported fabric area. A digital camera captures the shadow outline and sends the photograph to a computer, where specialized software determines the shadow area to calculate the drape coefficient relative to the original fabric size.

This instrument is designed to test both the static and dynamic drape characteristics of various fabrics, accurately determining the drape coefficient, lively rate, corrugated surface, and aesthetic coefficient.

Operating under full computer control, the tester evaluates drape performance by measuring the gravity-induced deformation of a horizontally placed annular fabric sample. During testing, a circular specimen is concentrically secured between two smaller horizontal discs, leaving the outer fabric ring unsupported so it naturally drapes into folds around the lower disc. The resulting shadow of the draped fabric is projected onto a sandblasted glass plate matching the dimensions of the unsupported area. A digital camera records this shadow profile and transmits the image to a computer, where dedicated software measures the shadow area and computes the drape coefficient relative to the original specimen size.

2. Features

- **Automated Computerized Control:** Utilizes microcomputer control and CCD imaging technology to automatically process test images and data via full computer operation.
- **Comprehensive Data Management:** Supports statistical analysis, record storage, and the generation of various data outputs and charts.
- **Optical Shadow Measurement:** Adopts a non-contact photographic measurement approach to replace conventional mass-weighing methods.
- **High-Definition Sony Camera:** Fitted with a Sony digital camera to capture clear, high-resolution shadow images.
- **International Standard Compliance:** Built to meet BS testing standards as well as other relevant international standards.
- **High Accuracy & Easy Operation:** Delivers greater measurement precision and simpler operation compared to traditional testing methods.
- **Dynamic Wear Simulation:** Capable of performing dynamic tests to more realistically reflect how fabrics behave during actual wear.

3. Standard

BS5058, FZ/T01045

4. Technical Specifications

Model	UI-TX10
Drape Coefficient Range	0-100%
Accuracy	≤±1.5%
Aesthetic Coefficient	0-100%
Diameter of Specimen Clamp	Φ120mm
Dimension of Specimen(circular)	Φ240mm, 300mm, 360mm
Rotate Speed	3-300±1r/min
Light Sourcing	DV 12V 100W for microscope
Power Supply	AC 220V 50/60HZ
Dimensions(L×W×H)	600×570×1070mm
Weight	60kg