

C681M Flex Durability Tester

C681M Flex Durability Tester is professionally applicable to the determination of flex durability of flexible films, composite films and coating films. The instrument can simulate the kneading and creasing behaviors of films happened during production, processing and transportation. The flex durability can be obtained by measuring the changes in number of pinholes or barrier properties after test, which can provide quantitative basis for package design and practical usage.



Product Features^{Note1}

Multiple Test Modes & High Testing Efficiency

- Five standard test modes including condition A, B, C, D, E and one customized mode F, in which the user can set test cycles freely
- Four stations improve the testing efficiency
- Fast switch between long and short stroke
- Testing environment temperature and humidity are displayed in real time and automatically recorded for data comparison

Renowned Brand Servo Control System with Ultra-long Service Life and Ultra-low Failure Rate

- The instrument is controlled by servo motor, which provides more accurate displacement
- Dual protection for hardware and software as well as auto reset provides a safe operating environment for customers

New Patented Intelligent Touch Operating System

- Industrial grade touch screen, one-button operation, user-friendly interface, remote upgrade and maintenance
- Chinese and English languages can be selected
- Automatic data storage and power failure memory functions
- Historical data can be reviewed and printed easily
- Storage up to 1200 test records
- Multi-level user privilege management, log in with password
- Micro-printer for data exporting and data transfer (optional)

Test Standards

ASTM F392

Applications

Basic Applications	Flexible Films, Composite Films and Coating Films	Including plastic films, sheets and composite films e.g. composite films, aluminized films, aluminum plastic composite films, nylon films and coating films for food or drug packages
	Paper Materials	Test the flex durability of paper materials

Technical Specifications

Specification	C681M
Flex Frequency	45 cpm
Test Mode	Condition A (2700 cycles), Condition B (900 cycles), Condition C (270 cycles), Condition D (20 cycles), Condition E (20 cycles partial flex), Condition F (0~20000 cycles)
Tensile & Pressing Force	300 N
Torque	2 Nm
Specimen Thickness	≤2.5mm (Sample clamps are needed for other thickness specimen)
Flex Angle	440° / 400°
Horizontal Stroke	155 mm / 80 mm
Number of Stations	4
Number of Specimens	1 ~ 4 ^{Note3}
Specimen Size	280 mm x 200 mm
Instrument Dimension	760 mm (L) × 410mm (W) × 650mm (H)
Power Supply	220VAC±10% 50Hz / 120VAC±10% 60Hz
Net Weight	85 kg

Configurations

Standard Configurations	Instrument, Adjustable Positioning Ring
Optional Parts	Micro-printer, Sample Cutter and Hose Clamp 64(91mm ~ 114mm)

Note 1: The described test standards, applications and product features should be in line with Technical Specifications.

Note 2: The parameters in the table are measured by professional operators in Labthink laboratory under strictly controlled laboratory conditions.

Note 3: Multiple specimens share the tensile & pressing force and the torque.

Please Note: Labthink is always dedicated to the innovation and improvement of product performance and function. Therefore, technical specifications are subject to change without further notice. Please visit our website at www.labthink.com for the latest updates. Labthink reserves the rights of final interpretation and revision.