- ❖ Online Data Management System for Packaging Testing-The ultimate cloud computing technology for test data processing and management
- ❖ Designed for the determination of the energy and the weight (mass) of the missile falling from the specified height which causes the plastic film or sheeting to fail under specified conditions of impact of a free falling dart
- ❖ Conforms to multiple standards

Online data management system for packaging testing

Comes with two versions to meet distinct needs of our clients:

The Cloud Version

- Consist of 6 functional modules: Test Management, Target Management, Instrument Management, File Management, Settings, and Online Support.
- Cloud services: storage, calculation, and analysis of mass test data
- Automatically upload original test data to the cloud server to guarantee data security
- Intelligent statistical analysis of test results
- Easily accessible through the internet on PCs, laptops, mobile phones, and other devices anywhere and anytime, to check and review real time test results and historical test reports, as well as analytical graphs and statistical information

The Intranet Version

- Featured with storage space for vast data, correlation analysis, trend analysis, and statistical analysis of test data, as well as report printing and data export functions
- Easily accessible via computers through Intranets
- "One Click Upgrade" to the powerful "Cloud Version"

Functionality

- Windows visual operating interface and TFT touch screen are convenient for settings of test parameters
- 2 test methods including Test Method A and Test Method B and automatic judgment of test status
- Electromagnetic suspension of dart release mechanism effectively reduces the errors caused by manual operation
- Pneumatic clamping, 2 starting modes of manual and pedal switch and built-in observation light are convenient to the user's operation
- Professional software supports multi-unit result display and printing functions which is convenient for users to review test data
- Test data can be printed out by the micro printer
- Sophisticated energy consumption and test environment monitoring and analysis functions for better test accuracy and reliability. The system monitors and displays real-time voltage, current, energy consumption, and inclination angle of instrument as well as ambient temperature and relative humidity during the test, which serves to evaluate test data reliability. (Relevant sensors are needed. For more information, please refer to the configuration in Technical Specifications.）
- Easy calculation for historical results, instrument usage, energy consumption, and vast statistical information

Test Principle

❖ Before testing, select Test Method A or Test Method B, as desired, or as required by relevant material specifications. For a starting point, select a missile weight near the expected impact failure weight and select a proper missile weight increment Δm. Mount the first specimen and start the test. If the first specimen fails, decrease the missile weight by Δm and test the second specimen. Continue testing successive specimens, decreasing or increasing the missile weight by Δm between drops depending on whether the preceding specimen fails or not. After 20 specimens have been tested, count the total number (N) of failures. If N=10 at this point, testing is complete. If N<10, continue testing additional specimens until N=10 then stop testing. If N>10, continue testing additional specimens until the total number of non-failures reaches 10 then stop testing. The system will calculate the results automatically after the test is completed.

❖ This instrument conforms to the following standards:
ASTM D1709, ISO 7765-1-1988, JIS K7124-1-1999, GB/T 9639.1-2008

Applications

This instrument is designed to test the following materials:

Basic Applications	Films	Impact resistance test of plastic films, sheets and composite films (Thickness should be less than 1mm) e.g. PE preservative films, wrapping films, PET sheets and other food package and heavy packages
	Aluminum Foils and Aluminum Plastic	Impact resistance test of aluminum foils and aluminum plastic composite film

	Composite Films	
	Paper and Paper Board	Impact resistance test of paper and paper board
Extended Applications (Additional Accessories Required)	Falling Ball Test	Test the resistance of the specimen against the falling ball. Mount the specimen on specific clamp for falling ball impact test and select falling ball of certain weight for the impact test. Check the status of the specimen and determine the impact resistance of the specimen
	Shoulder Piece Test	Impact test of shoulder piece. Mount the shoulder piece specimen to the specified clamp and select falling dart of certain weight for impact test. Check the status of the specimen and determine the impact resistance of the shoulder piece specimen

Technical Specifications

Test Specs	Test Method	Method A or Method B (Optional)
	Test Range	Method A: 50 ~ 2000 g Method B: 300 ~ 2000 g
	Test Accuracy	0.1 g (0.1 J)
	Clamped By	Pneumatic Control
	Specimen Size	>150 mm x 150 mm
Environment Monitoring Specs (Optional)	Voltage Monitoring Range	AC 0 ~ 250 V, with ±0.5% accuracy
	Current Monitoring Range	0 ~ 15 A, with ±0.5% accuracy
	Energy Analysis Accuracy	±0.5%
	Environmental Temperature Monitoring Range	-10 °C ~ 55 °C, with ±0.1°C accuracy
	Inclination Angle Monitoring Range	-10°~10°
	Environmental Humidity Monitoring Range	0 ~ 100% RH, with ±2% RH accuracy
Other Specs	Gas Supply Pressure	0.6 MPa (outside of supply scope)
	Port Size	Φ8 mm PU Tubing
	Instrument Dimension	Method A: 500 mm (L) x 450 mm (W) x1320 mm (H) Method B: 500 mm (L) x 450 mm (W) x2160 mm (H)
	Power Supply	AC 110 V 60 Hz
	Net Weight	71 kg
Configurations	Standard	Mainframe (Method A accessories), Touch Screen, Micro Printer, Wireless Data Interface
	Optional	Environment Monitoring Sensors (including voltage, current, temperature, humidity, and inclination sensors), Method B Accessories, Accessories for Falling Ball Test
	Online Data Management System for Packaging Testing	Wireless Data Transfer Module, High Gain Antenna

Note: 1. The gas supply port of the instrument is Φ8 mm PU Tubing;

2. Customers will need to provide gas supply.

Please Note:

- ❖ Pictures used are for illustration purposes only and may differ from the actual product received.
- ❖ Labthink International 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 International reserves the rights of final interpretation and revision.