Labthink

i-Leaktek 6600 Leak and Seal Strength Tester

i-Leaktek 6600 Leak and Seal Strength Tester, is applicable to quantitative determination of seal strenth, leakage and burst pressure of flexible packages, aseptic packages and other packages that are processed by heat sealing and hot tack.



Product Features Note2

Professional Functionality

- Positive pressure method and two testing modes including restrained inflation and unrestrained inflation
- Standard test methods including Burst Test, Creep Test and Creep-to-Failure Test
- Two test ranges are available, which can maximally be extended to 1.6 MPa and meet the requirements of different materials
- Various accessories for package testing both qualitatively and quantitatively
- Display test parameters and test results in multiple units

High-end Design

- Embedded computer control system provides safer and more reliable data management as well as test operation.
- The instrument can be easily operated with a mouse, a keyboard, and a monitor, without requiring a PC.
- The instrument is equipped with four USB ports and dual Internet ports for convenient data transmission.
- Universal power input for easy access

Intelligent Software

- **Interface:** Windows-based operating interface
- Statistics: easy calculation for historical results, instrument usage, energy consumption, and large statistical information
- **Data Comparison:** by presetting target value and range, the system automatically generates data comparison after each test and intelligently judges whether the specimen passes or fails the test
- Test Report: can provide detailed test reports in various customized patterns
- User Management: multi-level account management for better data management and protection
- Operation Log: system automatically records all the operations by the user, which is easy to review
- The instrument supports Labthink's exclusive DataShield^{TM Note3}(Optional), which can provide the users with reliable management of test data and test reports.

Test Standards

This instrument conforms to various national and international standards:

ASTM F1140, ASTM F2054, ISO 11607-1, ISO 11607-2, GB/T 10440-2008, GB 18454, GB 19741, GB 17447,



GB/T 17876, GB/T 10004, BB/T 0025, QB/T 1871, YBB 00252005, YBB 00162002

$Applications ^{Note2} \\$

Basic Applications	Film Materials	Test the ability to withstand pressurization stress of the completely sealed or three-sided sealed and one-sided open packages made of plastic films, aluminum films, paper-plastic or aluminum-plastic composite films
	Pilfer-proof Closures	Test seal performance of various pilfer-proof closures, e.g. closures used for packages of Coke, mineral water, beverage, edible oil, sauce (soy, vinegar and cooking wine), three-piece cans (beer and beverage cans), and paper cans (cylinders and potato chips)
	Aerosol Valves	Test seal performance of various aerosol valves, e.g. vales of pesticide, hair spray, auto spray paint and medical spray packages
	Flexible Tubes	Including various flexible tubes used in daily chemical products and other industries, e.g. flexible tubes of toothpaste, face cream, cosmetics, pharmacies and food
	Medical Blister Packs	Test the ability to withstand pressurization stress of medical blister packs
Extended Applications (Additional Accessories Required)	Air Bags and Air Cushions	Test the seal performance of the air bags or cushions, e.g. air bag restraint system, life saving device and air cushion for transportation
	Infusion Bags or Bottles	Test the seal performance of the medical infusion bags or bottles
	Sterilized Bags	Test the seal performance of the sterilized bags for medical purpose (LSSD-01P Fixtures for Open Package Unrestrained Test is required)
	Quantitative Closed Package Restraining Test	Measure the heat seal strength, the quality of heat seal, the burst pressure and the seal-leakage characteristics of each heat seal edge of flexible packages that are made by various kinds of heat seal technologies. It is internally pressurized and enclosed within restraining plates, such as the packages and laminated packages of food and medicines and etc. LSSD-01R Fixtures for Closed Package Restraining Test is required.
	One-sided Open Flexible Package	Test the burst strength, seal performance and failure resistance of the one-sided open packages made by heat seal processing. LSSD-01P Fixture for Open Package Restraining Test is required.
	Pilfer-proof Closures	Test the index between torque and airproof, capsule disengaging strength, stress force of materials and the data of airproof, press resistance and burst resistance for whole bottles. LSSD-01C Fixture for Plastic Pilfer-proof Closure Test is required.
	Flexible Tubes	For the quantitative testing of leak characteristics, compression resistance, capsule disengaging strength, cap body joint strength, seal-edge seal strength and butting strength of flexible tubes, for example medical polythene/ aluminum/ compound polythene tubes/ aluminum medical tubes/ cosmetic flexible tubes and etc. LSSD-01F Fixture for Flexible Tube Test is required.



Aerosol	Valves

For quantitative measurement of fluency, leak pressure, leak rate, seal performance and pressure resistance of aerosol valves. LSSD-01A Fixture for Aerosol Valve Seal Performance Test is required.

Technical Specifications^{Note1}

Test Demos	1.5 ~ 600 KPa; 0.22 ~ 87.0 psi
Test Range	0.004 ~ 1.6 MPa; 0.58 ~ 232.1 psi (optional)
Resolution	0.1 KPa
Test Accuracy	±0.25%FS
Con Indian Hard	Φ10 mm (standard)
Gas Injection Head	Φ4 mm, Φ1.6 mm (optional)
Con Secondar December	0.5 ~ 0.7 MPa
Gas Supply Pressure	(outside of supply scope)
Port Size	Φ8 mm PU Tubing
Instrument Dimension	300 mm (L) x 310 mm (W) x 180 mm (H)
Dimension of Testing Platform	305 mm (L) x 356 mm (W) x 325 mm (H)
Power Supply	220VAC 50Hz / 120VAC 60Hz
Net Weight	23 kg

Configuration

Standard Configuration	Instrument, Professional Software, Monitor, Keyboard, Mouse, Test Frame, Printer
	LSSD-01R Fixture for Closed Package Restraining Test, LSSD-01P Fixture for Open
Ontional Danta	Package Unrestrained Test, LSSD-01C Fixture for Plastic Pilfer-proof Closure Test,
Optional Parts	LSSD-01F Fixture for Flexible Tube Test, LSSD-01A Fixture for Aerosol Valve Seal
	Performance, DataShield ^{TM Note3}

- Note 1: The parameters in the table are measured by professional operator in Labthink laboratory according to relative requirements for laboratory standard conditions.
- Note 2: The described product features, test standards and configurations should be in line with Technical Specifications.
- Note 3: DataShieldTM provides safe and reliable data application support. Multiple Labthink instruments can share one single DataShieldTM system which can be purchased as required.

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. Labthink reserves the rights of final interpretation and revision.