

LIPPKE® Model 4000

Package Test System

The Lippke® Model 4000 package test system is a stand alone, bench top instrument designed to perform virtually all currently accepted test methods used to measure the seal strength, leak detection and package integrity of flexible, rigid, porous, laminate and foil type consumer and medical packaging. It comes equipped with an extensive array of standard features, available accessories and services, and meets applicable ISO & ASTM Standards.

Test Method Capabilities

- **Burst Test**

Measures the bond strength of package seals and material strength by measuring the peak pressure at which the package seals separate or the package material shears. With its high flow feature the Lippke® 4000 can easily test porous as well as non-porous packages.

- **Decay Test**

Measures the hermeticity of package seals by maintaining a constant pressure, usually @ 50% of burst pressure, for a specific period of time to determine whether the package seal or material has a leak.

Optional Capabilities

- **Multi-Test**

Enhance the capability of the Lippke® Package Test System by including the optional Multi Test Package.

The 5 additional test modes are:

- Creep
- Creep to Fail
- Creep and Leak
- Creep and Burst
- Creep, Leak and Burst

This productivity feature enables the researcher to perform combination sets of tests simultaneously on the same package, reducing time and testing cost and providing a better understanding of the dynamics of a package's resistance to peel, overall seal strength and hermetic seal under a broad range of test conditions.



Standards Compliance:

- ISO-11607
- ASTM F1140, F2054, F2095
- 21 CFR Part 11

Optional Services:

- IQ Template
- Test Method Validation Plan Template
- IQ, OQ, Validation Services
- Certified Calibrations

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Typical Applications

- Flexible, Semi-Rigid, Rigid Packages
- Polymer, Paperboard, Metal Based Materials
- Unfilled or Filled (solids, liquids & powders) Packages
- Open or Closed Packages
- Consumer, Food, Pharmaceutical & Medical Packaging

Standard Features

- Choose 1, 3 or 7 Bar Test Pressure Capability
- Menu Driven Digital Tests Set-up and Controls
- Graphical Test Plot Display
- High Air Flow Capability for Porous Material Testing
- High Resolution, Back Lit Display with Brightness Controls
- Serial Printer Interface
- Multiple Test Modes Capability for Seal Strength & Leak Testing
- Accessory Port (Footswitch)
- Seven Program Languages
- Metric & Standard Unit Readouts
- Energy Saver, Low Power Consumption Design

Accessories*

- Printers
- PAC CHECK® Oxygen Headspace Test System
- In-Line Filter Set
- Adapters Options to Test Tubes, Medical Bags and More
- Customized Adapters & Fixtures
- Restraining Plate Enclosures
- Open Package Fixtures
- Engineered Septums

* Accessories sold separately. See our accessories and services brochure for a complete list of optional products.

Technical Specifications

Air pressure supply	4.0 - 8.0 bar / 60 - 120 psi
Supply voltage	100 - 250 V AC with built in surge protection
Frequency	50/60 Hz \pm 1 Hz
Environmental temperature	+15 °C to +40 °C
Ambient Operating conditions	0-90% Relative Humidity (non-condensing)
Electrical	UL Listed, IP54
Pressure readout units	Pounds Per Square Inch (PSI), Millibar (mbar), Millimeter of Mercury (mmHg)
Timer Range	1 second to 9,999 minutes
Three Measuring Ranges of Pressure per Range	14.5 PSI (1 Bar) 43.5 PSI (3 Bar) 101.5 PSI (7 Bar)
Pressure Sensor Accuracy and Repeatability per Measuring Range*	0.007 PSI (0.5 mbar)* 0.03 PSI (2.0 mbar)* 0.07 PSI (5.0 mbar)*
Certifications	CSA, CE
Standards	ASTM F1140, ASTM F2054, ASTM F2095
Languages	English, Spanish, German, Italian, French, Swedish & Polish
Dimensions	Width 13.8 (inches), Depth 13.8 (inches), Height 7.0 (inches)
Weight	14.3 (pounds)
Communication	RS232 Port
Controls	Electronic Pressure & Flow Controls
Display	High Resolution LCD
Power	100-230V, 50/60 Hz, 20 Watts (operation), 10 Watts (stand-by)

* \pm the specified pressure or 1% of value, whichever is greater.

MOCON Commitment

MOCON's testing, consulting and analytical services are another example of MOCON's long-standing commitment to innovation and quality in the support of customers.

Technical Support & Service

MOCON offers a variety of technical services designed to provide you with first class technical support. Whether you require technical support, next-day spare parts delivery, on-site training, N.I.S.T. certification or "turn-key" validation, our technical support staff can tailor a service program to fit your needs. Our goal is to provide the best in product support services.

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MOCON reserves the right to change specifications without notice as part of our continuous program of product improvement.

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