



# Dansensor® **LIPPKE 5000** **PACKAGE TESTING SYSTEM**

Seal strength and package integrity



# BENEFITS & FEATURES

## Leak and seal strength testing using air pressurization

The NEW Dansensor® Lippke® 5000 is a bench-top instrument designed to perform a wide variety of seal integrity tests to exacting standards.

It measures the seal strength and package integrity of flexible, rigid, porous and laminated foil in many applications. These can include modified atmosphere (MAP), vacuum and skin packaging. With an extensive array of features and accessories, it meets applicable ISO and ASTM standards.

Monitoring package integrity is vital in many industries: e.g. Medical (maintaining product sterility), Pharmaceutical (meeting standards and protecting product effectivity) and Food (ensuring food safety and maintaining freshness).

The Dansensor Lippke 5000 offers many improvements over earlier models, including shorter fill times, higher pressures and minimized over-shoot. Data import and export have been made easier with an integrated USB port, cloning and back-up functions and optional accessories, like a barcode scanner and printer.

The graphic user interface gives access to many features and settings. Optional PC software provides additional data graphing and statistical analysis capabilities.

Dansensor Lippke 5000 provides exact, definable and reproducible test results – both in production and laboratory environments.

### Benefits

- Optimized pressure regulation and fill times
- Improved accuracy and short test cycles
- Visual display of test results
- Pump feature easily inflates flat packages
- Broad 1-5 bar pressure range
- Easy installation and data sharing

### Features

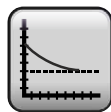
- New, improved measuring algorithm
- Test heads with integrated sense probe
- Touch screen with multilingual GUI
- Data capture, storage & export on all units
- USB port for optional barcode scanner, label printer or keyboard
- Compliant with ASTM and ISO standards
- IQ/OQ available
- PC software option for: FDA 21 CFR, part 11 compliance, test reports (PDF), graphs, combined test, interface with SQL database

## Test Types



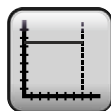
### Burst test

The package is pressurized at a given rate to the point at which the seal bursts. **Complies with ASTM F1140 (unrestrained) and ASTM F2054 (with restraining plates).**



### Leak test

The package is pressurized to a predetermined level and is held at that pressure for the required test time. **Pressure management and leakage testing per ASTM F2095.**



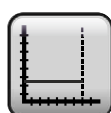
### Creep test

The package is pressurized to a preselected pressure, near the burst limit, and held for a period of time. Optional tests: Creep and Creep to fail. **Complies with ASTM F1140.**



### Combined test

Test a combination of up to three different test types on the same package. Each test is completed on a single sample, reducing sample loss. PC software option is required.



### Bubble test

The package is placed under water, pressurized to a predefined pressure and held there for a predefined time. **Complies with ASTM F2096.**

## Test heads & Needles



Both the handheld and stand-mounted test heads feature an integrated sense probe and can be combined with either a sharp or blunt 4 mm needle

Other handheld needle options include: a twin needle (with cover), dual needles for feed and sense and a mono needle with Y-connector

## Stands & Restraining Plates



Basic stand – the test head can be combined with a sharp or blunt needle or a tube adaptor



Pneumatic Package Clamp (PPC 300 II) – perform burst tests on most types of packages, bags or pouches that are open on one side



Fixture for ASTM F2054 restraining – restrains the package to ensure the pressure affects the package sealings in the correct way

## Septa





A septum ensures an airtight seal and protects the package from tearing. Different types of septa are suited to different packages and needles.

## Additional Accessories



Clockwise from top left: Valve Test Unit (VTU) for degassing valves, IV-bag adaptor, Feed tube filter, Pressure release valve, Barcode reader (USB), Tube adaptor (for threaded connectors), Pressure regulator incl. filter

## Available Variations

| Configurations  | Item no. | Leak | Burst | Creep | Bubble | Combined tests | 21 CFR, part 11 with PC Software | IQ/OQ Documents |
|---|----------|------|-------|-------|--------|----------------|----------------------------------|-----------------|
|  | 600707   | •    | •     |       |        |                |                                  |                 |
|   | 600709   | •    | •     |       | •      |                |                                  |                 |
|   | 600710   | •    | •     | •     | •      |                |                                  |                 |
|  | 600711   | •    | •     |       |        |                | •                                |                 |
|   | 600712   | •    | •     |       | •      |                | •                                |                 |
|   | 600713   | •    | •     | •     | •      | •              | •                                |                 |
|   | 600708   | •    | •     | •     | •      | •              | •                                | •               |
|   |          |      |       |       |        |                |                                  |                 |

## Technical Specifications

| Specifications                     | All models   |
|------------------------------------|--|
| Package types                      | Flexible, semi-rigid and rigid packages  |
| Test types                         | Burst, leak, creep, bubble, combined test  |
| Test package size                  | 1-90 000 ml  |
| Test time                          | 1-500 sec  |
| Measuring range                    | 10-5000 mbar (0.15-72.5 psi) Low range: 10-350 mbar (0.15-5.0 psi) High range: 350-5000 mbar (5.0-72.5 psi)                                  |
| Displayed resolution               | 0-1000 mbar: 0.1 mbar 1000-5000 mbar: 1 mbar   |
| Accuracy of measurement            | Low range: ± 0.5 mbar (0.007 psi) or ± 0.5% of reading High range: ± 5 mbar (0.07 psi) or ± 0.5% of reading                                  |
| Number of test definitions         | 300  |
| Data collection capacity           | Test data from more than 1,000,000 tests   |
| Data collection type               | Exported to CSV file   |
| Dimensions (WxDxH) and weight      | 284 mm x 236.5 mm x 185 mm (11.2" x 9.3" x 7.3") 3.4 kg (7.5 lbs)  |
| IP class                           | IP 20  |
| Ambient temperature                | Operational: +2°C to +35°C Storage: -20°C to +60°C   |
| Relative humidity                  | +2°C to +25°C: 10 to 90 %RH; +25°C to +30°C: 10 to 70 %RH; +30°C to +35°C: 10 to 50 %RH (non condensing)                                     |
| Ambient pressure                   | 900-1050 mbar  |
| Power supply and consumption       | 100-240 VAC, 47-63 Hz Max 40W  |
| Air supply pressure and connection | 4.0-6.5 bar; at least 1 bar above the test pressure Ø6/4mm tube DIN ISO 8573-1:2010 [F4:4:3]   |
| Air consumption                    | Max 100 L/min (depending on test settings)   |
| Connectivity                       | LAN: RJ-45 Ethernet 10/100 Mbit/s, DHCP client or fixed IP<br>USB: 1 x Host, USB 2.0 Type A, 1 x Device, USB 2.0 Type B (max current 500 mA) |
| Compliance                         | CE, China RoHS II  |
| Standards                          | ASTM F-1140, F-2054, F-2095, F-2096, ISO 11607   |

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