

PT-LT – Leak Test Apparatus

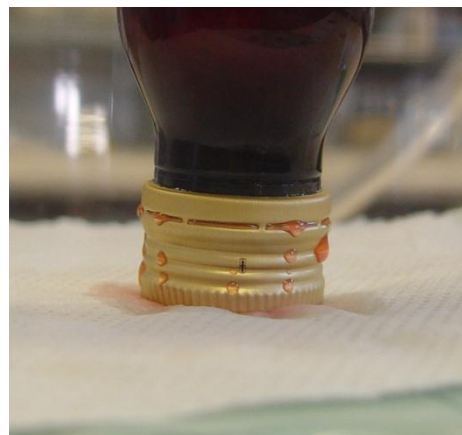


The PT-LT is used to test for the integrity of packed strips, blisters and small sachets containing tablets, granulates, liquids and so on. The instrument is used to test the quality of the packaging process and to check that the seals enclosing the product are perfectly intact. The PT-LT leak tester is designed to find the smallest holes and imperfections in blister packs and other semi-rigid product packaging.

The leak test apparatus is widely applied in the pharmaceutical industry for checking strips, blisters and bottles containing tablets, capsules, syrups and so on. It also finds application in the food industry where it can be effectively used to check the air-tightness of sweet packets, ready-to-eat pre-packed foods, confectionery packaging, packs of noodles, sauces to name but a few.

Samples are placed into the desiccator's housing and the lid is placed in position. The pump starts to produce a vacuum inside the desiccators and the vacuum is held for a pre-set time.

The first issue is that the tested package should keep its shape during this test; otherwise the sealing is not correct. Secondly, as the package is immersed in a colored dye solution (normally Methylene Blue), the venting of the desiccators will allow any holes to be penetrated by the dye and the contents of the flexible packaging will also be stained with the same coloring material. Similarly small bottles can also be tested. A sheet of paper will absorb any leaking fluid.



Operation of the PT-LT Leak Tester

The operation of the PT-LT leak tester could not be any easier. Once on and the sample placed in position, use the <SET>-key and select your “User ID”. Once this has been entered, press the <SET>-key once again and you can enter the “Sample ID”. This is an alphanumeric entry which can be up to 8 characters long. Using the <SET>-key once again allows you to enter the “Number of Samples”. Now enter the “Batch Number” (again with up to 8 characters) and then the “Vac Set”-level which goes up to a maximum of 699mmHg. Finally, use the <SET>-key to enter the “Hold Time” (up to a maximum of 99 minutes). Now press the <ENTER>-key to accept the entered data.



Pressing the <RUN>key will now start the programmed sequence. The vacuum pump then generates a vacuum in the desiccator, holds it and then releases it using the time periods entered previously in the program.

Example Print-Out

A typical print out is illustrated below. All results are presented in a convenient data block:

LEAK TEST APPARATUS	
SERIAL NO. 0711120	MODEL NO. PT-LT
TEST REPORT	
DATE	: 08-04-2008
TIME	: 11:42
USER ID	: 944888
SAMPLE ID	: TEST
NO. OF SAMPLES	: 01
BATCH NO.	: 20711120
SET VACUUM	: 500mmHg
SET TIME	: 05 MINS
TRIP VAUUM	: 498mmHg
REMARKS	: ACCEPTED
	: REJECTED
SIGNATURE	:

Advantages

Some of the highlights the PT-LT offers are:

- Ensure the quality of your packaging process
- Easy operation by programmed sequence
- Fully automated microprocessor controlled equipment
- Stainless steel housing to fit well into a production area
- IQ/OQ documents included free of charge

Features

The main features of the PT-LT are:

- Test the integrity of strips, blisters and bottles
- Large 16 x 2cm LCD shows vacuum and electronic countdown timer
- Enter all test parameters such as date, time, user ID and sample ID
- No. of samples and batch number can be set via the keypad
- Set vacuum and trip vacuum can be set via the keypad
- Built-in rugged, oil-free vacuum pump
- Automatic slow vacuum release from the desiccators
- Printer port for parallel dot-matrix printers
- Automated print-out of test report

Standard Scope of Supply

The PT-LT comes ready to use with the following standard scope of supply:

- PT-LT instrument with built-in vacuum pump
- Comprehensive documentation folder including:
 - User manual
 - IQ documentation
 - OQ documentation
 - Instrument logbook

Options

In addition to the standard scope of supply Pharma Test offers a broad range of accessories and options including:

- Desiccators with 250mm, 200mm or 150mm diameter
- Full range of certified validation tools available

Technical Data

Parameter	Specification
Vacuum Level	Better than 600mmHg
Vacuum Setting	Vacuum can stabilize for a set value from: <ul style="list-style-type: none"> ▪ Less than 400mmHg: $\pm 10\text{mmHg}$ within 30 seconds ▪ Above 400mmHg: $\pm 5\text{mmHg}$ within 30 seconds
Display	Large 16 x 2cm LCD
Data Entry	Function key
Timer	Can be set up to 99 minutes
Desiccator Sizes	250mm, 200mm or 150mm diameter (optional)
Printer	Parallel port for dot-matrix printers
Power	Nominal 220 – 240V
Dimensions	Approx. 400mm x 240mm x 220mm (D x W x H)
Packaging Dimensions	Approx. 780mm x 580mm x 600mm (D x W x H)
Net Weight	Approx. 14,5kg
Gross Weight	Approx. 20,5kg
Certification	All components certified to USP / EP requirements
CE / EMC Certification	All CE / EMC Certification provided
Validation	All IQ & OQ documents included

