

# LT2 Leak Tester

## Overview

The LT2 bottle leak detector is specifically designed for indexed-conveyor deflash trimmers. It has become a de-facto industry standard, fitted to new machines by the manufacturer. It is now also available as a retrofit package for machines in the field, allowing consistent, high performance leak testing where existing solutions are aging, unreliable or inaccurate. Customers have experienced dramatic production efficiency improvements after upgrading, due to the elimination of incorrect bottle rejection and machine downtime.



## Benefits

### IMPROVED PRODUCTION EFFICIENCY

- Eliminates incorrect bottle rejection without compromising test accuracy.

### RELIABILITY

- Interference Immunity
- 50 million cycle rated valves
- Self-Diagnostics, self-setting capability

### ACCURACY

- High resolution A/D converter
- High flow rate pneumatics to quickly achieve bottle pressurization
- Optimized for short cycle time leak tests
- Self tuning algorithms to continuously optimize pressurization and threshold settings.
- Adjustable Test Pressure

### SAFETY

- No behind-panel access required for machine setting
- 24V DC versions available

### IMPROVED OPERATION INTERFACE

- Full alphanumeric display of Settings and Results

- Multinational Language Displays available
- Bargraph display of pressure, LED indication of test results for each channel
- Push Button, Front Panel Settings (changes can be locked out with optional key switch)
- Correct Number Failed count for all trimmer configurations
- Panel Mounted Pneumatic Controls
- Alarm Output Option

## SIMPLE INSTALLATION & MAINTENANCE

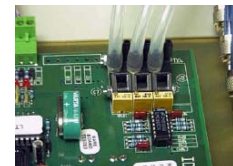
- Simplified machine connection
- Simplified Internal Wiring (all electrical functions integrated into single PCB)
- Low operating power reduces load on system supply
- 110VAC or 24VDC models
- Valves can be changed without removing hoses – all access from front of control enclosure.
- Manual override buttons on all valves.
- Uniform design for 1, 2, 3 and 4 channel versions
- LED state indication on valves



Valves rated at over 50 million cycles – An LT2 installation typically has to do 10 million cycles per year!

## ADVANCED SYSTEM ARCHITECTURE

- Spare I/O for extra functions (Handle Flash Detection, Jam Detection, Vision Systems, Alarms) brought out to Standard connection
- Serial interface available for Data Logging or PLC connection
- Easy upgrade of system to include extra facilities even after installation
- Cost Effective



**Lockable Steel Control Cabinet. Internal door independently locked.**

## LT2 Specification

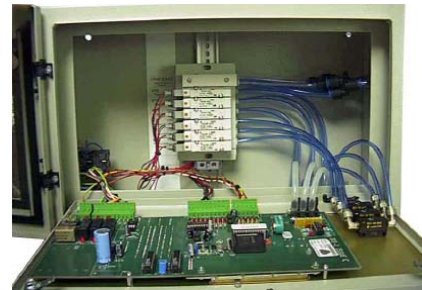
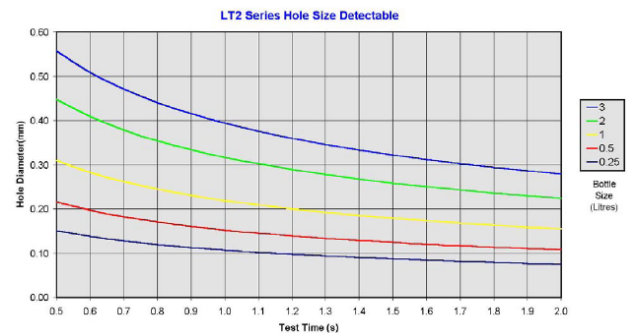
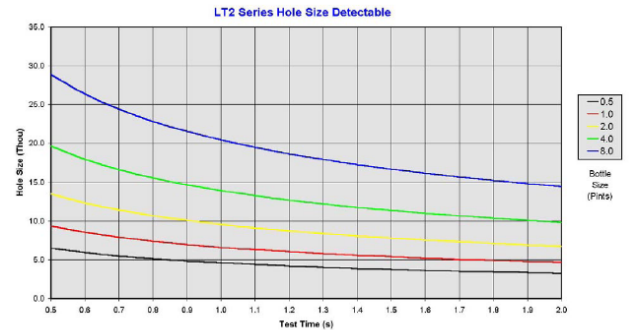
Hole Size Detected / Bottle Throughput	0.1mm (for 500ml bottle and a 2 second test time) See performance graphs for details.
Number of Test Channels	1, 2, 3 or 4 (specify when ordering)
Cycle Time	0.5 - 20 seconds, adjustable
Minimum Bottle Volume	250 ml (1/2 pint)
Maximum Bottle Volume	25 liters ( 5 gallons)
Test Pressure	Adjustable, 5 – 50 mB
Electrical Power Supply	100-125 VAC @ 30VA single phase or 23-26VDC @ 750mA (specify when ordering)
Electrical Power Consumption	30 VA maximum
Air Supply	4-10 bar (60-150 psi)
Air Consumption	1 liter per min. typical
Leak Test Method	Ratiometric Pressure Decay, Auto-zero, Auto-scale, Auto-tuning
Transducer	Semiconductor strain gauge diaphragm, 0.00-65.00 mB, 0.02% resolution, x20 Over-pressure protection

To use the graphs, first choose the graph with the nearest bottle size (shown at bottom). Find a colored line where the required hole size and throughput intersect. Read off the number of heads required from the key on the right of the graph. Contact the office if in doubt.

For further details contact us or visit our web site.

## Performance Graphs

These graphs show the hole size detectable for various bottle sizes and test times.



Simple Maintenance- Friendly Layout – All Electrical Functions on Single PCB



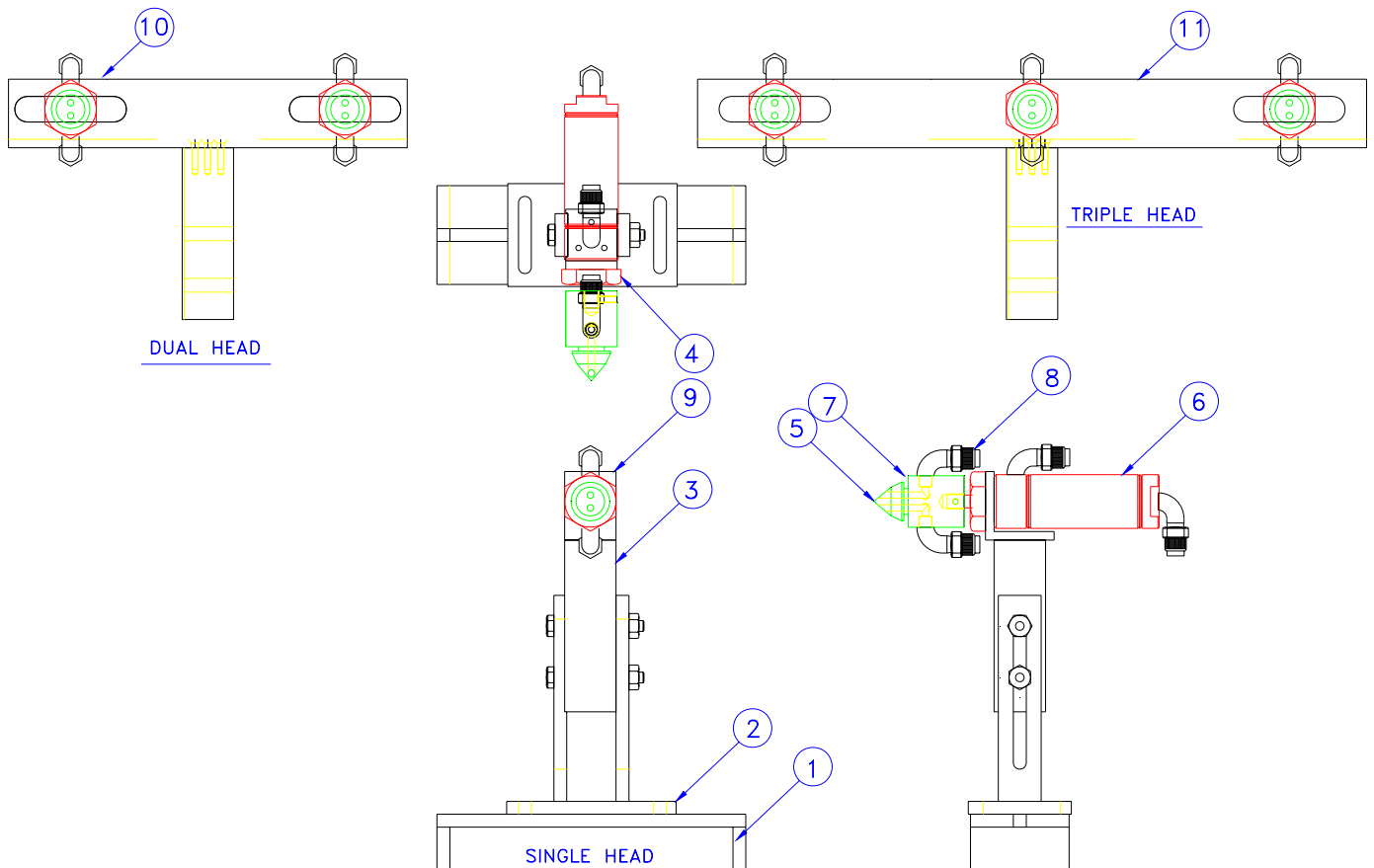
**NECCo has the ability to provide engineering, equipment, installation, service and spare parts for all of your packaging needs. Please feel free to contact us about any of the following:**

Baggers (Automatic)  
 Baggers (Semi-Automatic)  
 Debaggers  
 Annealing Ovens  
 Scrap and Resin Systems

Cable Conveyor  
 Mattop Accumulation Conveyor  
 Tabletop Conveyor  
 Inclines and Declines  
 Ideas In Motion Support

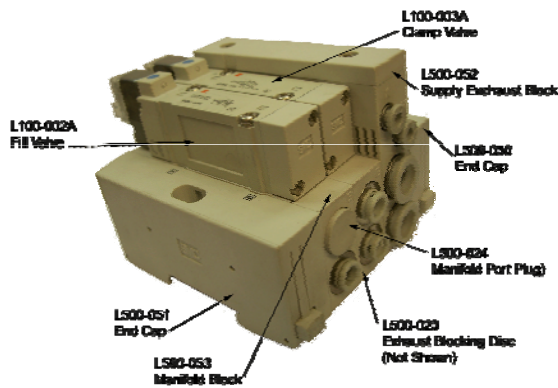
**LT2 LEAK TESTER SPARE PARTS LIST**

<b>PART #</b>	<b>DESCRIPTION</b>	<b>ITEM</b>
10516	Base Bracket	1
10517	Center Mounting Bracket	2
10518	Middle Mounting Bracket	3
	Mounting Nut	4
10631	38mm Nose Cone	5
M100-980	Nose Cone Cylinder	6
M102-118	Nose Cone Gasket	7
M100-520	90° Air Fitting	8
10520	Cylinder Mounting Bracket – Single	9
13580	Cylinder Mounting Bracket – Double	10
11831	Cylinder Mounting Bracket – Triple	11
10409-1	Test Head Assembly – Single	
10409-02	Test Head Assembly – Double	
10409-03	Test Head Assembly – Triple	

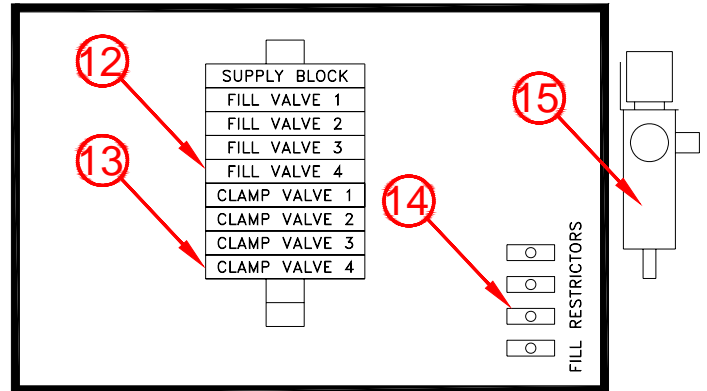


### LT2 LEAK TESTER SPARE PARTS LIST

PART #	DESCRIPTION	ITEM
L100-002A	Fill Valve	12
L100-003A	Clamp Valve	13
L100-004	Fill Restrictor	14
L100-035	Filter Regulator	15
L500-052	Supply Exhaust Block	
L500-050	End Cap	
L500-024	Manifold Port Plug	
L500-023	Exhaust Blocking Disc	
L500-051	End Cap	
L500-007	Manifold Assembly – Single Station	
L500-047	Manifold Assembly – Double Station	
L500-049-1	Manifold Assembly – Triple Station	



FULL 4 CHANNEL SYSTEM SHOWN  
1-3 CHANNEL VERSIONS WILL HAVE  
PARTS OMITTED BUT GENERAL  
LAYOUT IS OTHERWISE IDENTICAL



FRONT VIEW (INSIDE INNER DOOR)

ID3-1	PC Board – ID3 – Single Station
ID3-2	PC Board – ID3 – Dual Station
ID3-3	PC Board – ID3 – Triple Station
L500-001	110VAC Power Supply Board – ID3

