

LTU8000 Series

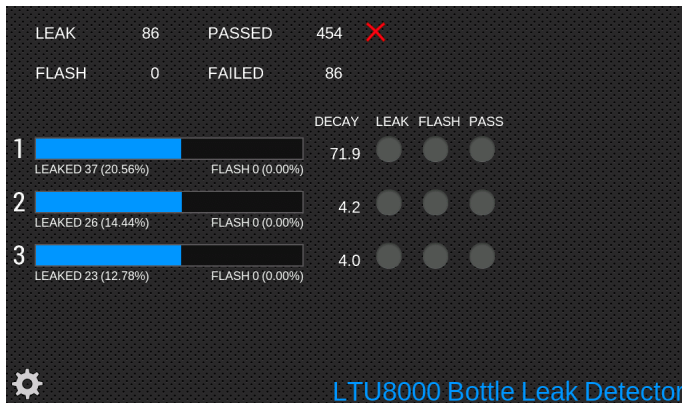
Trimmer Mount Leak Detectors

PLASTECH
CONTROL SYSTEMS



Overview

The LTU8000 bottle leak detector is for indexed-conveyor deflash trimmers. It is an evolution of the LTU6000 which has become a de-facto industry standard, fitted to new machines by the manufacturer. The LTU8000 updates the control panel with a new 10" color touchscreen and all new electronics. The panel assembly alone can also be supplied as a retrofit package for existing LT2 or LTU6000 installations. As with these older models, the complete leak detector is also available as a package for machines in the field, allowing consistent, high performance leak testing where existing solutions are aging, unreliable or inaccurate. Customers experience dramatic production efficiency improvements after upgrading, due to the elimination of incorrect bottle rejection and machine down-time.

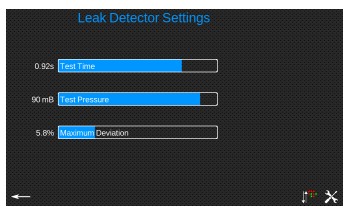


LTU8000 Leak Detector 10" Touch Screen

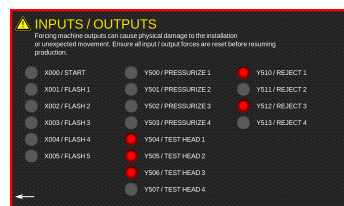
Benefits

• High Quality 10" Color Touch Screen

- Quick and easy display of settings, results, counts, diagnostic and installation configuration
- Multinational Language Displays available
- Bargraph display of pressure, indication of test results for each channel



Settings Screen



Machine Diagnostics

• Pressure Transducers

- Calibrated, temperature compensated pressure transducers. Pluggable for easy field replacement or upgrade.
- dual 24 bit analog to digital converters with high speed sampling of pressure
- digital signal processing of pressure signals
- **CPU**
 - ★ USB device interface for easy field upgrades of software from a PC.
 - ★ USB flash drive socket, Ethernet and WiFi
- **Machine Interface**
 - ★ Fault-protected solid state relay outputs for reject signalling / blow-off valves.
 - ★ DC and AC machine interface supported directly by main board. LTU4000 = AC, LTU8000 = DC.
 - ★ Connectors and voltages compatible with LT2, LTU2000, LTU6000. Upgrades by simply exchanging the front panel assembly.

– Improved Production Efficiency

- ★ Eliminates incorrect bottle rejection without compromising test accuracy.
- ★ Individual counts per test head identifies setup problems early reducing product wastage.

– Reliability

- ★ Interference Immunity
- ★ 50 million cycle rated valves
- ★ Self-Diagnostics, self setting capability
- ★ short-circuit proof outputs capable of directly driving trimmer bottle blow-off valve coils

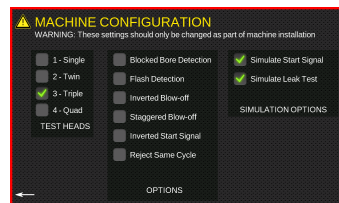
– Accuracy

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

– Safety

- ★ No behind-panel access required for machine setting
- ★ 24V DC versions available
- ★ Panel Mounted Pneumatic Controls

– Simple Installation and Maintenance

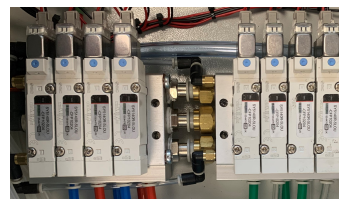


Installation Configuration Screen



Password Protected

- ★ Simplified machine connection
- ★ Simplified Internal Wiring (all electrical functions integrated onto single pcb)
- ★ Low operating power - reduces load on system supply
- ★ 110VAC (LTU4000) or 24VDC (LTU8000) models
- ★ Valves can be changed without removing pipes - all access from front of control enclosure.
- ★ Manual override buttons on all valves
- ★ Uniform design + same PCB for 1,2,3 and 4 channel versions
- ★ Specially designed one-piece aluminium manifold to eliminate internal leakages
- ★ LED state indication on valves



Solid aluminium manifold



1-4 Channels

Configurable Options

- * Flash Detection
- * Blow-off Chute Backup Detection
- * Inverted Reject
- * Data Logging / SPC

Specification

Hole Size Detected	0.1mm (for a 500ml bottle and a 2 second test time). See Performance Graphs for other sizes.
Number of Test Channels	1,2,3 or 4 (Specify when ordering)
Cycle Time	0.5 - 20.0 seconds, adjustable
Minimum Bottle Volume	250ml (1/2 pint)
Maximum Bottle Volume	25 litres (6 gallons)
Test Pressure	Adjustable, 5-100 mB
Power Supply	100-125VAC single phase or 23-26VDC@750mA (specify when ordering)
Power Consumption	30 VA maximum
Air Supply	60-150 psi (4-10 bar)
Air Consumption	1 litre per minute typical
Dimensions	Control system enclosure 470x300x180mm, all models (1,2,3,4 channel)
Leak Test Method	Ratiometric Adaptive Pressure Decay, Auto-zero, Auto-Scale. Adaptive pressurization algorithm.
Transducer	Semiconductor strain gauge diaphragm, 0.00 - 100.00 mB, 0.02% resolution, x10 Over-pressure Protection.

Ordering Information

**AC LTU400X e.g.
LTU4003**

X = Number of heads

**DC LTU800X e.g.
LTU8003**

X = Number of heads

For more details contact the office, our distributors or see our web site www.plastech-controls.com, where you can obtain complete on-line sales literature, user manuals and technical documentation.

Performance Graphs

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

