

RS Linear

Moving Head Leak Tester

The ALPS RS Linear moving head leak tester uses an innovative, patented approach to inspect containers through the use of a continuous-motion, no-tooling machine. The system works on demand, monitoring the customer conveyor speed, sensing incoming containers and moving the test probe in sync with the movement of the bottle.

This approach is ideal for hard-to-handle container designs. Typical speeds range from 10 CPM up to the 160 CPM range for the smallest containers.

In addition to the "RS Linear" floor-standing version, the "RS-S Linear" compact conveyor-mount version is also available. This version includes a separate floor-standing control stand, along with a compact probe carriage assembly designed to mount directly to a customer conveyor. An advantage of this version is that it will automatically adjust together with any customer conveyor height adjustments.



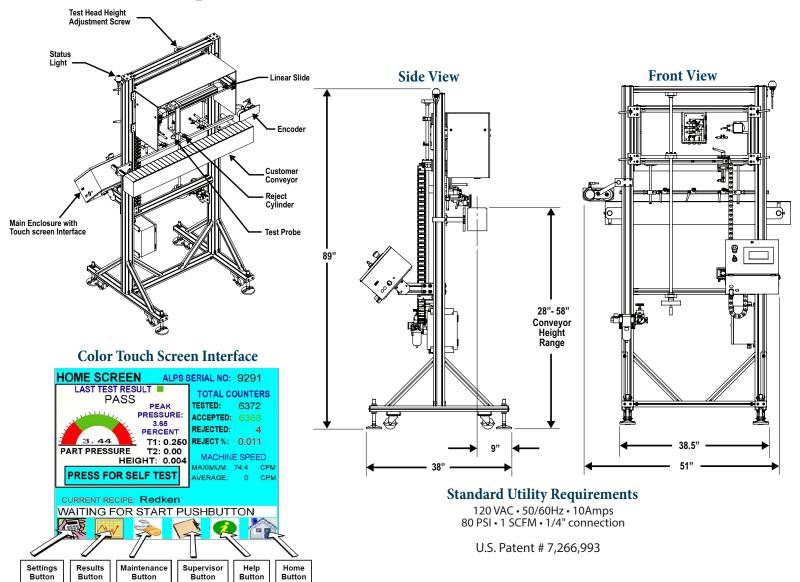
U.S. Patent # 7,266,993

Features and Benefits

Feature	Corresponding Benefit
Test Probe moves with each bottle via use of a servo driven slide	No need to stop bottles or backlog bottles prior to the machine; and no change parts tooling required (e.g. timing screw)
Encoder input is used to monitor line conveyor speed	Automatic matching of probe speed to conveyor speed
Works over existing customer conveyors	Convenient installation and no bottle transfers required for leak testing
Color touch screen interface	High quality interface with numerous features and capabilities
Icon-based menu structure	Ease of navigation with all main functions available within 2 button presses
Graphic displays of part pressure and result calculations	Real time feedback for better understanding of the leak test function
Guided setup software	Ability of a novice user to perform an effective setup on a new container
Recipe storage with alphanumeric naming	Quick and repeatable changeovers with practically unlimited number of recipes to save and recall
Fast, powerful PLC controller	Non-proprietary controls platform that maintains ALPS leak test standards
Integrated 'Self Test' function	Easy and reliable means to verify detection of a defined hole size through the touch of a button (or can be automated)
Automated 'Self Test' capability	Machine can auto-verify its operation after a prescribed number of tests, eliminating the need for personnel to activate Self Test
Password protection	Lock out unauthorized access to critical settings
Numeric display of probe and fill pressure regulators	Easy setup and monitoring of regulator settings which are critical to the leak test
Fiber optic photo-eye with one-touch setup	Accurate and programmable container sensing
Hand crank height adjustment	Quick changeover for different height containers
Height inspection options	Detect tall or short containers on the leak tester, with choice of resolution
Choked Neck Sensing probe option	Detect bottles with neck obstructions, using custom probes with spring-loaded tips and internal sensors
Reject verification option	Verifies that each container is ejected properly from the conveyor

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Standard Machine Specifications



How It Works

The test photo-eye senses container presence and initiates the leak test sequence. A probe is extended onto the container to form a leak tight seal and pressure-based leak test.

A servo-driven linear slide moves the probe carriage in a linear motion, for the stroke length of one container, to follow the container during the test.

After the test is complete, the servo moves the probe head back to home position to wait for the next test. An encoder wheel, riding on the customer conveyor, provides a speed input signal for synchronization of the slide speed to the container/conveyor speed.



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ALPS is the leading North American manufacturer of high speed container leak inspection systems. Our current installed base of machines has capacity to test approximately <u>50 billion containers annually</u>.

