

MediTEST Point-of-Care Seal Integrity Testing Workstation

The MediTEST is a high specification non-destructive seal integrity testing device designed to tackle QA/QC demands in point-of-care-testing (POCT) consumables manufacturing.



The MediTEST is a non-destructive, dry leak seal integrity testing workstation used during QC/QA testing to detect leaks in non-porous test strip packaging, which could be caused by defects such as punctures, pinholes, channel leaks in the seal area or mechanically weak seals. The MediTEST is the natural upgrade from traditional bubble emission and blue-dye leak testing.

The MediTEST consists of a front-loading tray divided into individual compartments (channels), allowing test strip packs to be tested simultaneously. The MediTEST works on the established principle of measuring a reactive force generated by a pack when subjected to vacuum. By monitoring the force readings, it is possible to detect holes down to 10 µm in size in a matter of seconds.

The MediTEST performs a non-destructive, dry seal integrity test, meaning that upon the completion of the test any packaging which is deemed defect-free can be reintroduced back in to the production line, significantly reducing waste and cost.

The workstation has a PC-based virtual instrument control system, featuring an HMI touchscreen providing easy-to-read results, indications and graphical test data for easy analysis. Users can print and store test results and meta-data, in compliance with the standard 21 CFR Part 11.

Features:

- Non-destructive dry leak test method
- Self-adjusting sensors
- Multichannel testing (four & ten channels as standard)
- Can detect holes down to 10µm in size
- Simple to operate
- No specialist tooling required
- Short test cycle time
- PC based control system



Touch Screen Control and Display System



Front panel top level screen.



Display of the test results for a selected sensor position, showing good seal integrity for the test strip packs in question.

Specification

Number of Channels	Four and ten as standard. Other configurations available on request.
Test Strip Size	4 channel: 35H x 90W x 140mmD max 10 channel: 10H x 60W x 100mmD max
Display	4 channel: 8.4" 800 x 600 SVGA. 10 channel: 17" 1280 x 1024 SXGA
Controls	Virtual instrument with resistive touchscreen.
Test Methods	Not limited (other than by storage capacity).
External Interface	2 x USB 2. 1 x RJ45 Ethernet port.
Performance	<ul style="list-style-type: none"> Sensitivity: 10µm hole in a volume of 200mm³ Repeatability: ± 10% of reading (assuming the same start conditions). Maximum test pack dimensions: H 35mm, W 90mm, D 140mm (standard configuration).
Size	4 channel: Height = 1380mm, Width = 780mm, Depth = 650mm. 10 channel: Height = 1495mm, Width = 885mm, Depth = 630mm.
Operating Temperature	0-40°C (Storage 0-50°C).
Humidity	10 to 90% non-condensing.
Power Supply	230V/50 Hz, 350VA (peak) or 110V/60Hz, 350VA (peak) - please specify
Air Supply	6.0 bar
Weight	4 channel system: 105kg 10 channel system: 120kg
Manufacturing Standards	<ul style="list-style-type: none"> Safety: EN 61010-1:2010. Conformity: CE and UKCA marked. Casework: AISI 304 Stainless steel. Test Chamber: HE30 Aluminium, hard anodised.