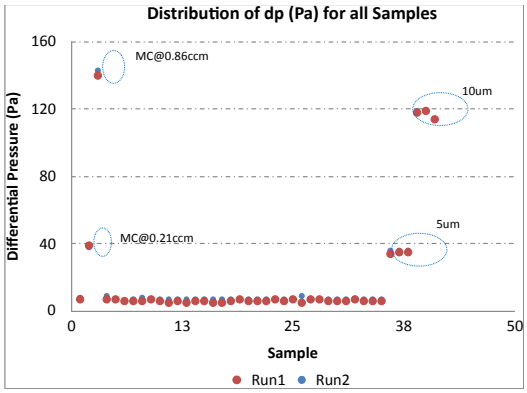
Package Integrity Testing

The most sensitive
The most reliable

VeriPac 400 Series
a PTI technology

VeriPac systems can be easily integrated into the packaging process to improve quality, reduce waste, and provide operators with a clear understanding of package quality.



EVALUATE AND ANALYZE PACKAGE INTEGRITY WITH PRECISION AND REPEATABILITY

VeriPac test systems are non-destructive, non-subjective and require no sample preparation. Test fixtures are designed to inspect flexible, rigid and semi-rigid packaging. VeriPac inspection systems use cutting edge innovation to provide repeatable, more sensitive, and more robust detection of defects.

VeriPac inspection systems utilize an ASTM approved vacuum decay leak test method F2338, which is listed in ISO 11607, USP <1207> and is a FDA recognized consensus standard for package integrity testing. This ASTM method was developed using VeriPac leak test instruments and has proven its capabilities under GMP regulatory guidelines. Applications for VeriPac technology include stability studies, clinical trials, quality assurance testing and statistical process control (SPC). VeriPac testers feature the patented PERMA-Vac manifold system and dynamic test modes that provide the ability to test a wide range of package formats.

Leak detection of high risk applications requires the highest level of test measurement reliability. The VeriPac series has redefined the reliability and accuracy of test measurement systems.

BENEFITS

- Deterministic, quantitative test method
- Defect detection down to 0.034 cc/min.
- Highest level of repeatability andaccuracy
- Cost effective with rapid returnon investment
- Simplifies the inspection andvalidation process
- Results proven superior to dye ingress
- ASTM test method and FDA standard
- USP <1207> Compliant

INSPECTION CRITERIA

- Measures seal integrity of entire container or package
- Measures and verifies container closure integrity
- Altitude package testing

Sample configuration of semi-automatic rotarty test chamber. Tools for flexible packaging and pouches available

TECHNOLOGY

VeriPac leak testers connect to a test chamber that is specially designed to contain the package to be tested. The package is placed inside the test chamber to which vacuum is applied. The single or dual vacuum transducer technology is used to monitor the test chamber for both the level of vacuum as well as the change in vacuum over a predetermined test time. The changes in absolute and differential vacuum indicate the presence of leaks and defects within the package. The sensitivity of a test is a function of the package design, the package test fixture and critical test parameters of time and pressure. Test systems can be designed for manual or automatic operation. This inspection method is suitable for laboratory offline testing and production applications for QA/QC statistical process control. The test cycle takes only a few seconds, is non-invasive and non-destructive to both product and package.

SPECIFICATIONS

	VERIPAC 415	VERIPAC 425
Applications	• Non-destructive leak detection for packages with defect profile typically >15 microns • Altitude package testing	• Non-destructive leak detection for packages with defect profile typically >5 microns • Altitude package testing
Package Type	• Filled & sealed pouches, cups, trays • Empty trays •Tyvek® lidded blisters • Pouches	• Filled & sealed bottles, cups, trays • Empty trays & cups • Pouches
Packaging Materials & Combinations	Tyvek®, Paper, Foil, Film, Aluminum, Plastic & Laminated Materials	Foil, Film, Aluminum, Plastic, Glass & Laminated Materials
Test Configuration	• Offline laboratory • Production line applications	
Test System	Single Transducer PERMA-Vac Technology*	Dual Transducer PERMA-Vac Technology*
Test Method*	Vacuum Decay	Differential Vacuum Decay
Operator Interface	10" Color Touch Screen	
Test Parameter Storage	Up to 20 products (ETHOS 21 CFR, Part 11 software provides unlimited product storage)	
Base Unit Test Sensitivity**	0.86 cc/min (Approximate hole size 10 micron)	0.034 cc/min (Approximate hole size 2 micron)
Application Sensitivity***	3.42 cc/min (Approximate hole size 20 micron)	0.22 cc/min (Approximate hole size 5 micron)
Test Results/Resolution	Pass/Fail Result in mBar units	Pass/Fail Result in mBar and Pascal units
CFR Security Capability	Yes (21 CFR, Part 11) PTI ETHOS Software	
Manufacturing Execution Systems (MES) Integration	Yes	
Data Collection	View on HMI touch screen and electronic data collection	
Printer Option	Yes	
Test Chamber	Manual or semi-automatic	
Recognized Test Method	• ASTM F2338-09–Non-destructive vacuum decay leak testing • ASTM D6653-13–Test method for high altitude package testing – www.astm.org • USP <1207> compliant	
Test Instrument Enclosure Tester	Stainless Steel	
Dimensions	14.5" W – 22" D – 12" H	
Weight	35 lbs.	
Power	100-240 VAC; 50/60 cycles	
Air	90 psi	
Options	Validation Qualification Package (IQ/OQ) / Microcalibrator Flowmeter	