

Package Integrity Testing



VeriPac 310

a PTI technology

Package Integrity Testing

The VeriPac 310 is a non-destructive, non-invasive inspection system for leak detection and package integrity testing.

VeriPac systems reduce waste and provide operators with a clear understanding of package quality. The VeriPac 310 short test cycle produces real time results from precise quantitative measurements that identify packaging defects before critical process issues get out of control. Tests can be performed in any sequence and even repeatedly on a single sample. Good packages can be returned undamaged to the packaging line. Testing is more reliable, sensitive and efficient than destructive methods such as the water bath or burst test.

VeriPac 310 utilizes the ASTM approved patented vacuum decay leak test method F2338-09 recognized by the FDA as a consensus standard for package integrity testing. This ASTM method was developed using VeriPac leak test instruments.

BENEFITS

- Non-destructive, non-subjective, no sample preparation
- Deterministic, quantitative test method
- Repeatable, rapid and reliable testing
- Cost effective and economical
- Simplifies the inspection and validation process
- ASTM test method and FDA standard

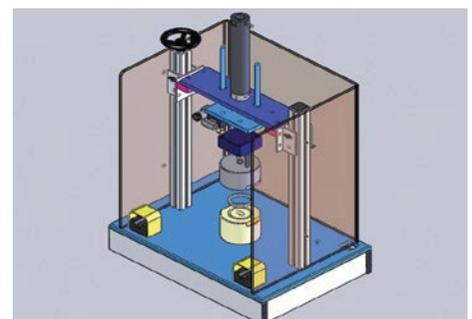


| 11:04:13 28 Feb 2015 VeriPac 310 User: pt Logout | | | |
|--|-------|------|---------|
| Main Parameters Data System Service | | | |
| Test# | mBar | mBar | Comment |
| 6 | 503.4 | 0.2 | ● |
| 5 | 502.9 | 0.1 | ● |
| 4 | 503.0 | 0.2 | ● |
| 3 | 503.1 | 0.3 | ● |
| 2 | 502.8 | 0.2 | ● |
| 1 | 503.0 | 0.3 | ● |
| 0 | 0.0 | 0.0 | |
| 0 | 0.0 | 0.0 | |
| 0 | 0.0 | 0.0 | |
| 0 | 0.0 | 0.0 | |

| Tested | Failed | System Counter | System Flush |
|--------|--------|----------------|--------------------------|
| 6 | 0 | 1144 | <input type="checkbox"/> |
| 0.00 % | | | |

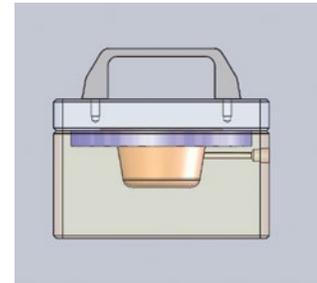
Reset

20.00 sec



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 absolute 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. 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.



INSPECTION CRITERIA

- Measures seal integrity of entire container or package
- Defect detection down to 20 microns

SPECIFICATIONS

VeriPac 310

| | |
|---|--|
| Application | Non-destructive leak detection for dry filled packages with defect profile typically >20 microns |
| Package Type | Filled & sealed pouches containing dry product Rigid containers, cups, trays Lidded flexible & semi-rigid packaging made of non-porous materials |
| Packaging Materials & Combinations | Film, Aluminum, Plastic & Laminated Materials |
| Test Configuration | Offline laboratory Production line applications |
| Test System* | Absolute vacuum transducer with automated pressure regulator |
| Technology* | Vacuum Decay |
| Recognized Test Method | ASTM F2338-09, referenced in USP <1207> |
| Operator Interface | Touch screen |
| Test Parameter Storage | Up to 20 products |
| Test Sensitivity | 3.4 ccm (approximate hole size 20 microns) |
| Test Results/Resolution | Pass/Fail Result in mBar |
| Test Result Trends | Yes |
| Data Collection | Test results on touch screen up to 300 tests. Unlimited test data via electronic data storage Data transfer via Ethernet cable or SD card |
| Test Chamber | Manual or semi-automatic |
| Test Instrument Enclosure | Stainless Steel |
| Tester Dimensions | 12" W – 18.5" D – 10" H |
| Weight | 30 lbs. |
| Power | 100-240 VAC; 50/60 cycles |
| Air | 90 psi |
| Options | Validation Qualification Package (IQ/OQ/PQ) / Microcalibrator Flowmeter |

U.S. Patents 5,513,516 6,513,366

Test results may vary according to application and package specifications.