



**INTELLIGENT SEALING  
PERFORMANCE TESTER**

**QualiSeal Auto-D1**

# INTELLIGENT SEALING PERFORMANCE TESTER

## QualiSeal Auto-D1

Experience the cutting-edge technology of the QualiSeal Auto-D1 Intelligent Sealing Performance Tester. Engineered to perfection, it revolutionizes packaging assessment by pressurizing samples to gauge sealing strength and integrity.

Designed with precision, it caters to a wide array of packaging materials, including soft, semi-plastic, and full-plastic variants commonly found in the food and pharmaceutical sectors. Whether you're ensuring the freshness of perishables or the safety of pharmaceutical products, the QualiSeal Auto-D1 delivers unparalleled reliability.

With its versatile test modes, this intelligent tester offers a holistic evaluation of packaging material leak-tightness and integrity. From initial assessment to detailed analysis, it provides comprehensive insights to meet your quality standards. Equipped with multiple functions and a diverse range of accessories, the QualiSeal Auto-D1 is your all-in-one solution.

Compliant with ASTM and ISO standards, you can trust its accuracy and precision for all your testing needs. Elevate your quality standards and stay ahead of the competition with this indispensable tool.



### STANDARDS

ASTM F1140   ASTM F2054   ASTM F2095   ASTM F2096   ISO 11607

# MATERIALS AND APPLICATIONS



**Plastic Composite Bag:** Ideal for pressure rupture testing of various packaging materials such as plastic films, aluminum films, paper-plastic composites, and aluminum-plastic composites used in packaging bags.



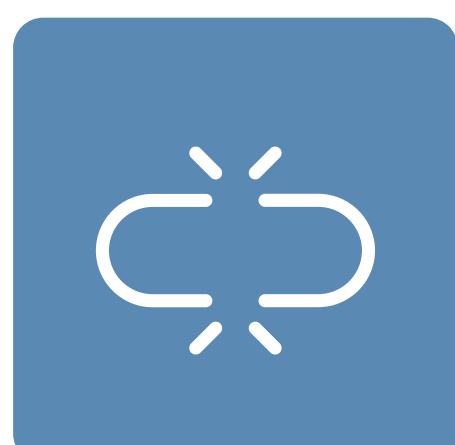
**Aerosol Valve Test:** This test is designed to gauge the sealing effectiveness of aerosol valves across a spectrum of applications, including insecticides, mousses, medicinal sprays, self-spray paints, and various aerosol products.



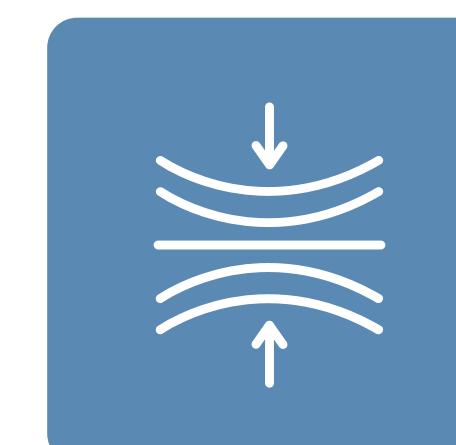
**Hose test:** Designed for testing packaging hoses used in cleaning products and other industries. This includes tubes for toothpaste, facial cleansers, cosmetics, medicinal ointments, food packaging, and more.



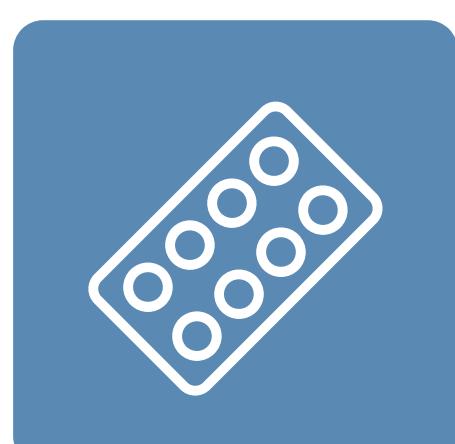
**Three-sided Heat-Sealing Material:** Tailored for precisely assessing the pressure resistance of packaging bags where only three sides are heat-sealed, leaving one side open for thorough examination and evaluation of sealing integrity.



**Creep Test and Creep to Rupture:** These tests evaluate the creep performance and resilience of diverse packaging types, including bags and boxes, spanning from initial deformation to ultimate rupture.



**High-pressure Test:** Capable of subjecting packaging materials to rigorous and demanding conditions by exposing them to intense pressures of up to 1.6 MPa, guaranteeing durability and reliability.



**Blister Pack Burst Test:** This test is specifically crafted to meticulously assess the pressure resistance of diverse blister pack designs, ensuring their durability, reliability, and suitability for various packaging applications.



**Anti-theft Bottle Cap:** This test rigorously evaluates the sealing performance of various anti-theft bottle caps across different products, ensuring maximum security and freshness for consumers.

## TEST PRINCIPLE

During air tightness testing, samples are evaluated using destructive air pressurization techniques, either until burst or to a specified pressure. This ensures a thorough examination of the package's integrity and air leakage prevention capabilities.

Various test methods are employed, including burst tests, leak tests, creep tests, and bubble tests, based on standards and requirements. Each method offers unique insights into the package's performance under different conditions.

Detailed data is collected and analyzed, including test pressure, holding time, package position during testing, and leak location. This approach provides a comprehensive understanding of the package's behavior under varying pressure levels and environmental conditions.

Test results are presented in a structured format, aiding decision-making in product development and quality assurance. Manufacturers can identify areas for improvement to enhance overall performance and protect the packaged contents effectively.

## TEST METHOD

- **Burst Test:** This tester gradually increases pressure on the package until it bursts, adhering to standards such as ASTM F1140, ASTM F2054, YY/T 0681.3, and YY/T 0681.9.
- **Leak Test:** The package is inflated to a preset pressure and held for a specified test duration, following standards like ASTM F2095 and ISO 11607-1. Test conditions may involve unconstrained or restricted plate options.
- **Creep Test:** A constant pressure, near the bursting limit, is applied to the package and maintained for a set duration. Sealing performance is evaluated within the specified time frame. Optional test modes include creep and creep to failure, in accordance with standards such as ASTM F1140 and YY/T 0681.3.
- **Bubble Test:** The package is submerged in water, pressurized to a predetermined level, and held at that pressure for a specified time, following standards like ASTM F2096 and YY/T 0681.5.

## FEATURES/ADVANTAGES



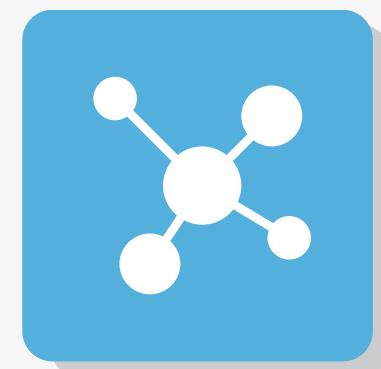
### Efficient Pressure Design:

This system prioritizes simplicity, stability, and reliability, ensuring accurate and dependable results.



### Dual Test Method:

Offering both expansion inhibition and non-inhibition options, it enhances versatility for various testing needs.



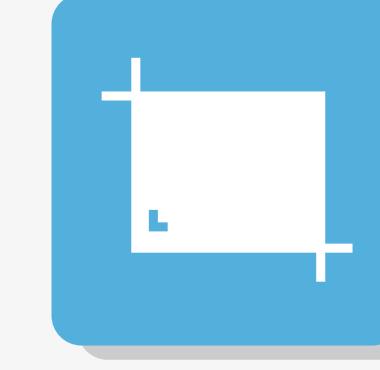
### Versatile Test Modes:

With rupture, creep, and creep-to-rupture tests available, users can choose the most suitable approach for their requirements.



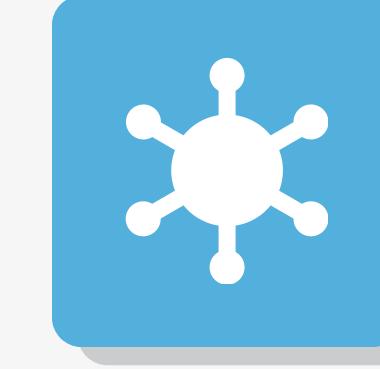
### One-Key Operation:

Streamlining procedures with 'one-key' operation, it optimizes workflow and enhances efficiency during testing.



### High-Resolution LCD Screen:

Equipped with a 7-inch high-resolution color LCD screen, it ensures clear visibility and easy navigation.



### Test Accessory Integration:

Supporting seamless integration of test accessories, it enhances flexibility and expands testing capabilities.

## TECHNICAL SPECIFICATIONS

Item	Technical Parameter	Standard Configuration	Options
Test range	0.1 Kpa~1 Mpa	Main Unit	
Resolution	0.1 Kpa	Open Inflatable Fixture (Unconstrained)	
Test accuracy	0.1 Kpa	Pinhole Fixture (Unconstrained)	
Testing time	1~1000 s		
Test type	Burst, leak, creep, bubble method		
Type of packaging	Soft package, semi-plastic package, all-plastic package		
Air pressure	0.5 Mpa~0.9 Mpa		
Dimensions	400 mm × 415 mm × 272 mm		
Power supply	220V 50Hz (110V available)		
Power	150W		



USA | CANADA | UAE | GCC | EU | INDIA | APAC | AFRICA | LATIN AMERICA

# Connect with us

Contact our **QualiTeam** today to find out how we can help your organization **select the most suitable testing solution** for your application, requirements, and budget.

## Qualitest USA (Corporate Sales Office)

Toll-Free: 1.877.884.TEST (8378) | Fax: 954.697.8211  
E-mail: [info@qualitest-inc.com](mailto:info@qualitest-inc.com)  
Address: 8201 Peters Rd., #1000, Plantation, FL 33324, USA.

## Qualitest KSA (Regional Office)

Tel: +966 11 500 6659  
Address: Level 7, 3.09, District 3, King Abdullah Financial District, Riyadh, Saudi Arabia

## Qualitest Canada & International

Tel: +1.905.944.9825 | Fax: +1.905.944.0304  
E-mail: [sales@qualitest-inc.com](mailto:sales@qualitest-inc.com)  
Address: 70 East Beaver Creek Rd., #9, Richmond Hill, Ontario L4B 3B2, Canada.

## Qualitest Singapore (ASIA PACIFIC Regional Office)

Tel: +65 6393 5480 | E-mail: [singapore@qualitest-inc.com](mailto:singapore@qualitest-inc.com)  
Address: 50 Raffles Place, Singapore Land Tower, Level 46, Singapore, 048623.

## Qualitest Latin America (Mexico and LATAM Region)

E-mail: [ventas@qualitest-inc.com](mailto:ventas@qualitest-inc.com)



## Qualitest FZE (Regional GCC/ME Office)

Tel: +971 4 8819252 | Fax: +971 4 8819262  
Email: [gcc@qualitest-inc.com](mailto:gcc@qualitest-inc.com)  
Address: Jafza One, BB 1610, Jebel Ali Free Zone, PO Box 261440, Dubai, UAE.

## Qualitest India

E-mail: [india@qualitest-inc.com](mailto:india@qualitest-inc.com)  
Address: 15th Floor, Dev Corpora, Pakhran Road No.1, Eastern Express Highway, Thane, Maharashtra, Mumbai, 400601, India

## Qualitest Indonesia (Representative Office)

Tel: +62 21 2985 9522 | Fax: +62 21 2985 9889  
E-mail: [indonesia@qualitest-inc.com](mailto:indonesia@qualitest-inc.com)  
Address: One Pacific Place Level 11, Jl. Jend. Sudirman, Kav. 52-53, SCBD Area, Jakarta 12190, Indonesia.