

Medical Package Seal Strength (Peel) Test

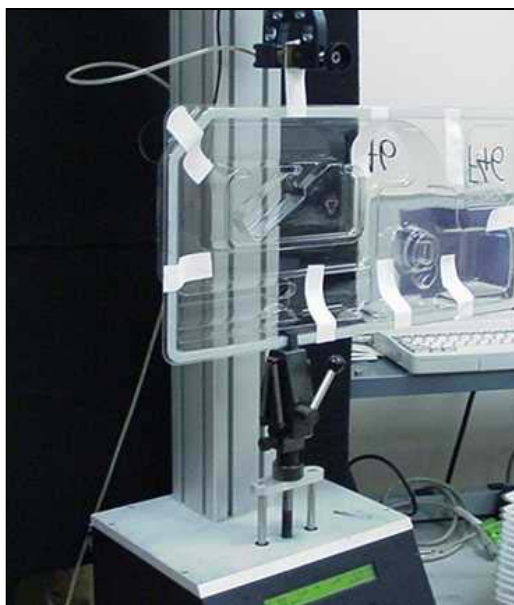


Photo courtesy of DDL Inc

DDL is a customer of TestResources – and offers testing services for medical device package testing. Testing capabilities include package and environmental testing services... accelerated aging, shelf-life studies, transportation simulations and exploration of package integrity and strength. They own several TestResources tensile testers and peel testers for medical device tests, materials tests and package seal strength tests.

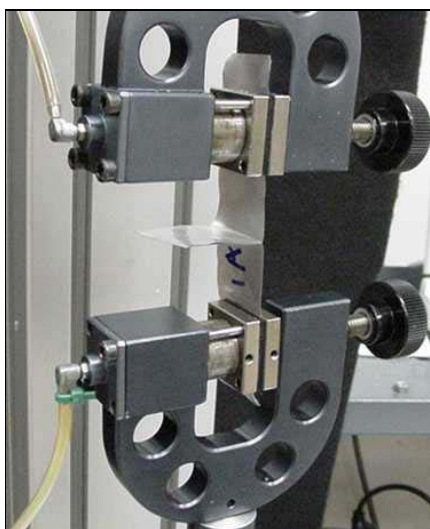
*DDL is a testing services firm
www.testedandproven.com*

Problem – shipping medical devices requires packages to be tested to maintain integrity as they go through handling and distribution environments. Each package design must be validated - a common test measures seal strength of package components.

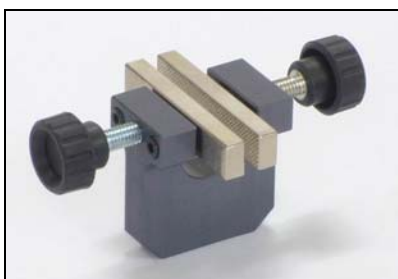


Solution – 100P Peel testers are servocontrolled and so accurate control of speed is guaranteed regardless of load level. At 10 ipm, test speed stays constant within 0.05% (0.005 ipm). The system is ideal for measuring seal strength including both peak and average load values. The most common test is a 90 degree peel of Tyvek or other materials.

Medical Package Seal Strength Test
using G94 Lightweight Air Grip (top) &
G7S Wedge Action Grip (bottom).



G94 Air Grip jaws are 25 mm wide so sample alignment is quick.



G227 lightweight mechanical grips are popular for peel testing



Model S1 Cutters speed the process of cutting samples 1 inch wide

The Model 100P150-6 test system offers excellent control of test speed and high quality load measurement. This enables use of high force load cells which enables the use of the system for other applications.

The machine is controlled at a constant test speed – at speeds up to 25 inches per minute.

The 100P peel tester captures, stores and exports peak load, average load, and energy to break. The 100P tensile tester also captures displacement at break values. The machine can also perform compression strength tests. The 100P expands to the 100Q for more capability, such as curve data display. Up to 1200 test results may be stored, including date/time stamp, sample ID and peak and average load values.

Microsoft Excel - Peel						
File Edit View Insert Format Tools Data Window Help						
A1		Stored Test Report				
1	A	B	C	D	E	F
2	Stored Test Report					
3		DATE	TIME	Specimen ID#	Pk Load (LB)	Avg Load (LB)
4	1	12/7/2000	10:50:40	1	6.5	0
5	2	12/7/2000	10:53:52	2	8.7	0
6	3	12/7/2000	10:53:59	3	6.72	0
7						
8	Statistics: 3 samples					
9				Low:	6.5	0
10				Mean:	7.31	0
11				High:	8.7	0
12				StdDev:	1.21	0
13						

The Wincom data transfer option enables data to be exported to programs such as MS Excel. Wincom Plus plots the curve (100Q model)

For more information – click on this link: http://www.testresources.com/applications/adhesive_peel.aspx