



providing world-class leak test and assembly verification solutions

LITHIUM ION BATTERY LEAK TESTING

Market driver:

There is a growing demand for green or clean energy sources. This is fueling battery development and use. For commercial use liquid lithium batteries are gaining a market.

Test requirement:

The liquid lithium batteries frequently consist of a plastic bag style construction that can be shaped to fit the application. The sealed bag contains a liquid cathode chemical and electrodes sealed into the bag walls. The final assembly must be tested to leaks of the liquid chemical.



CTS Solution:

Cincinnati Test Systems developed a test instrument that detects vaporizing liquid in a vacuum. Different liquids boil and vaporize when exposed to specific vacuums. A test stand with interchangeable chambers designed for specific battery designs is connected to the Sentinel MD moisture detection instrument with a vacuum pump. The instrument controls the chamber evacuation. If any liquid escapes the battery, the Sentinel MD monitors the vacuum for indications of liquid vaporization.

