

Leak Testing (LT)

Applus+ can perform the various methods of leak testing on new components, as directed by relevant codes and procedures, or work with a customer to assist in locating leaks within their operating systems and existing assets.



THE Applus+ SOLUTION

There are numerous methods of leak testing, with the most common being:

- Direct-pressure bubble leak testing
- Vacuum-box bubble leak testing
- Halogen diode detector probe testing
- Pressure-change testing
- Helium mass spectrometer detector-probe, tracer-probe and hood testing
- Thermal conductivity detector probe testing
- Ultrasonic leak detector testing

These methods are used to either determine the location of leaks or to determine an actual leak rate.

Target customers

Leak testing may be performed on systems in almost all industries, whether it be liquid- or gas-piping systems, heat exchangers, pressure vessels, tanks or numerous other system and plant components.

Key customer benefits

The advantages of leak testing are twofold:

- First, it is extremely beneficial to perform a leak test on a component or system prior to it being put into service. For example, a helium leak test on a heat exchanger can verify the leakage rate across the tube-to-tube sheet welds as well as determine if there is leakage in a tube itself. Another example is performing a vacuum box leak test on a tank floor.
- Secondly, if a leak is suspected in a system, performing one of the leak test methods can help determine leak locations for repairs.

Leaking systems can adversely impact on the environment, system performance and/or a company's finances due to the loss of product and significant downtime.