

Leak Testing (LT)

Applus+ can perform the various methods of leak testing for non-destructive testing (NDT) on new components, according to the specified codes and procedure, 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 in NDT, 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 non-destructive leak test are used to either determine the location of leaks or to determine an actual leak rate.

Target customers

Leak testing can be performed on systems in almost all industries, including 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 for NDT are twofold:

- First, it is prudent to perform a leak test on a component or system prior to service. For example, a welding leak test can deploy a helium leak test on a heat exchanger to 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, such as a vacuum box leak test on a tank floor, can help determine the location of the leak for repairs.

Leaks from installations and systems can adversely impact the environment, system performance and/or a company's revenues due to the loss of product and significant downtime.