

# 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.