

Leak Detection Solutions

from Interlaken

Interlaken Production Leak Test Systems

Interlaken is offering a new line of modular leak test systems. These systems can be integrated into production lines and work cells or can be used stand alone. Pressures range from full vacuum to 100,000 psi. Many different leak detection technologies can be used.



What technology should I use for my leak detection?

This will depend on the rate of leak that you are looking for. The smaller the leak you need to detect the more sensitive your detection technology needs to be. The most sensitive detection technology widely used is Mass Spec. The least sensitive would be an immersion test where the part is immersed in water and the leak is a visual inspection for bubbles. Many other leak detection methods and technologies are used such as Sniffing, Vacuum Decay, Pressure Decay and Mass Flow. Interlaken will consult with you and choose the leak sensing technology best suited for your specific application.

Where is leak testing used?



Leak testing is used on manufactured components and assemblies that carry a gas or liquid. Many automotive components in the fuel, exhaust and cooling system are routinely checked for leaks as a manufacturing process. Engines, transmissions and axles are also routinely tested. Aerospace and medical device manufacturing rely heavily on leak testing as well. Other applications include:

- Water heaters
- Valves
- HVAC components
- Fire Extinguishers
- Fuel Rails

What are the common components to a production leak test system?

Fixturing - whether the loading is manual or robotic fixturing will be incorporated for part locating and sealing of openings. Part marking is sometimes integrated here for positive identification of a part that has passed leak testing.

Leak Sensor - application specific

Test space enclosure - used if the test specimen needs to be isolated for operator safety or leak test viability.



Control system - Used to program and control the leak testing procedure, actuate sealing plugs, initiate marking and integrate pre and post operations in some cases. Data acquisition is commonly incorporated and used for statistical process control.

Vacuum/pressurization module - A pump will be used to generate the vacuum or supply the pressure up to 5,000 psi. If higher pressures are needed a hydraulic powered intensifier is typically used.

How are the different components of the leak test system put together?

Each system starts at the component to be tested and is designed out from there. All of the components are integrated into a package designed for operator safety, trouble free operation and ease of use. Standard systems are available for many components.



Control System Touch Screen

