

Agilent Harsh Environment Probe for Helium Leak Detection



Applications

- Power generation
- Heat exchangers
- Process gas piping

Power generation facilities, chemical plants and similar facilities require a leak detector to sample gas that is primarily water vapor (steam) that would damage the detector. To prevent this damage from happening, Agilent has developed a specialized probe and leak detector configuration tailored to the demanding requirements of these applications.

The HLD Harsh Environment (HE) Probe is designed to withstand the wet environment and high temperatures inside condenser piping without the need for dryers, chillers, a secondary vacuum pump, or throttling valves. The probe can either be held or installed in the exhaust of a pump on the condenser system, or can be flange-mounted directly into the piping of the system under test. The probe is connected to the flange via an adjustable compression fitting so the probe tip can be positioned in the center of the pipe. This guarantees the probe tip is in the maximum helium flow for the best sensitivity.

Features	Benefits
Permeable Membrane Technology	Prevents water from contaminating and damaging the leak detector.
Can be inserted directly into piping	Faster response time and better sensitivity.
Extremely Durable	Withstands hot, wet environments.
Easy to Use	Simple system connection. No maintenance or adjustments.
Economical	Less expensive than dryers and repeated purchases of sacrificial pumps.

HE Probe for helium leak detection

Equipment damage due to corrosion from water in the leak detector or roughing pump is eliminated. The HE Probe is able to withstand water and amines (ammonia derivatives), and operate at temperatures up to 95 °C (200 °F). The probe is connected directly to an Agilent HLD leak detector with no additional water trapping or auxiliary pumping required.

The probe consists of a corrosion-resistant 316L stainless steel tube with a composite permeable membrane at its tip. The membrane readily permeates helium tracer gas while protecting the leak detector from water vapor and chemicals that would destroy the pumps, valves, and spectrometer.

When the HE Probe is used in conjunction with an HLD leak detector equipped with a wireless remote, the work needed for a leak test can be cut in half. A single operator can spray helium remotely from the location where the detector is sampling gas, yet can still monitor the instrument's response.

Ordering information

The HE Probe is compatible with any Agilent HLD leak detector. Specify Option 106.

www.agilent.com/chem

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