

TracerMate II Nitrogen Purge System

Eliminate the factors affecting the accuracy of your sniff test

Traditional open-air sniffing or conventional clamshell methods cannot reliably detect leaks on critical joints or fittings where the permissible leak rate is as low as 0.5 grams of refrigerant loss per year. The accuracy is affected when the tracer gas or refrigerant signal is much less than that of the background in which the test is being conducted.

CTS enables HVAC-R manufacturers to minimize false rejects and increase repeatability by controlling trace gas background. Our cost-effective solution removes operator dependence on the test and provides an objective, calibrated measurement.



Nitrogen purge leak testing benefits:

1. Allows testing in an elevated background, without the need for an expensive sniffer booth
2. Supplies quantitative measurements and removes operator subjectivity and dependence
3. Helps reduce false failures and makes for a more repeatable test process

Delivers reliable leak test for:



Auto HVAC



Commercial and
Residential HVAC



Appliances



Industrial

The only solution that removes environmental factors affecting test accuracy

The TracerMate II Nitrogen Purge System is a tracer gas leak test system that combines the TracerMate II instrument to control the test and provide results, a mass spectrometer and the CTS purging clamshell, which is clamped onto joint(s) being tested. The unique, patented technology uses Nitrogen to actively purge any trace Helium that is typically present in the environment, providing a more accurate, reliable test. Eliminating the existing Helium prior to the test reduces the number of false failures.



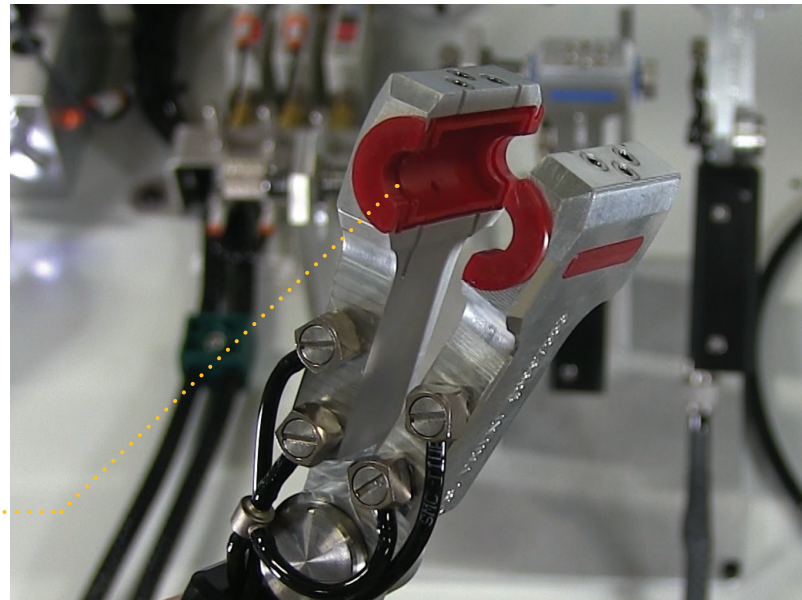
Unique, proven method to accurately detect microleaks in heating and cooling products

- Patented technology
- Low pressure Nitrogen reduces background to 10⁻⁷ atm-cc/s range
- Hand-held and benchtop fixtures available for a range of applications
- Standard sizes fit common joints and fittings in HVAC-R
- Custom design available

How it works

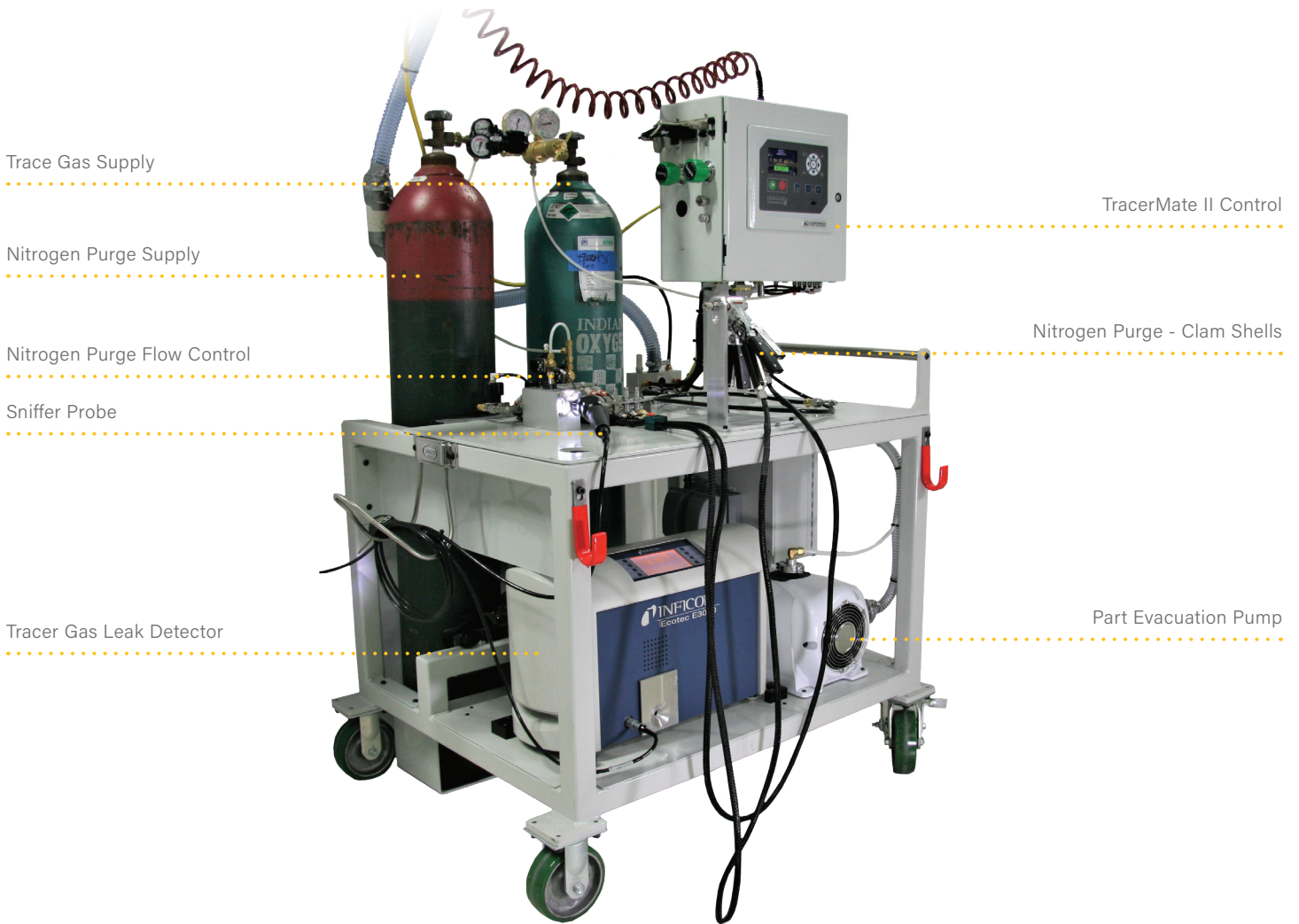
The CTS clamshell device has inner and outer chambers that surround the part test area. The chambers have ports to allow Nitrogen to enter the cavity and force out ambient atmosphere. Nitrogen has no tracer gas which makes it a clean option for the application. During the test cycle, the inner chamber collects the tracer gas leaking from the part. The outer chamber provides a constant low positive pressure Nitrogen curtain to hold back and prevent ambient background from entering, effectively isolating the inner chamber. Without this isolation, accuracy will be affected. (This technology measures repeatably with other trace gases including Forming Gas and Refrigerants.)

Ports in the inner and out chambers allow Nitrogen gas to enter, forcing out ambient background from the leak test area.



We provide the full solution

CTS can integrate the Nitrogen Purge technology into a complete solution like the TracerMate II HVAC-R Portable Leak Test system. The system enables the use of as many probes as required on up to 20 different leak locations.



Get the accuracy you need to test critical appliance, heating, and cooling systems with the CTS Nitrogen Purge.

Contact us for a quote on your application



Your Global Leak and Function Test Solution Experts

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