



## **Vector** **Advanced Leak Detector Option**

### **The Challenge Confronting Leak Rate Testing**

Because of the effects of adiabatic cooling, extra time must be allocated for testing to allow these effects to dissipate. Otherwise, the adiabatic cooling effects will mask the detection of pressure or mass flow change. The challenge, then, is to find a way to conduct testing during the cooling process.

The usual work-around to compensate for the cooling effect has been to increase the test time. This strategy is acceptable in situations where reduced speed can be tolerated. However, many manufacturers are looking for a better solution — a way to increase the speed of their lines without sacrificing accuracy.

### **The Solution: The Uson Advanced Leak Detector**

To meet this challenge, Uson makes available the Advanced Leak Detector. Uson's patented technology is behind this breakthrough and permits leak detection during the adiabatic cooling phase. \*

### **Leak Rate Modeling Speeds the Process**

Uson's Advanced Leak Detector generates and stores a model of the adiabatic cooling cycle of the component tested. During component testing, the ALD's Leak Rate Model is used to accurately determine the leak rate of the part under test. The result is less time to test and more accurate results.

*U.S. Patent No. 6,741,955 B2 System and method for leak rate testing during adiabatic cooling*

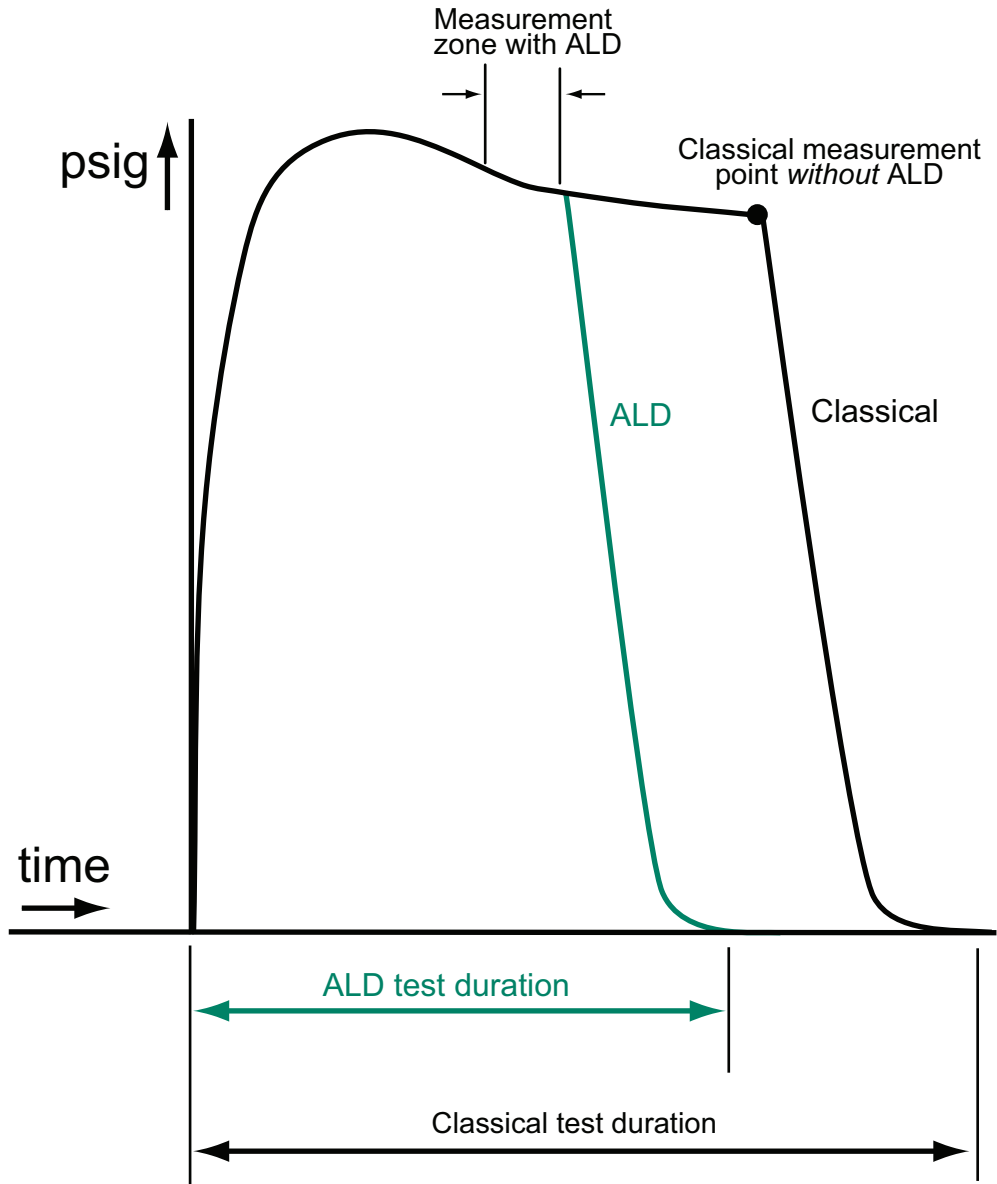


*The Advanced Leak Detector option is available for every Vector model*

### **Features of the Advanced Leak Detector**

- 33 ms sampling rate
- Easy test setup
- Automatically uses multiple test runs to optimize the Leak Rate Model of a component
- Results are based on all test step data samples and not on a single data point

# ALD Pressure Decay Example



Uson's patented ALD allows a shorter test duration while maintaining or exceeding the accuracy of the classical method.

Uson may make changes to specifications and product descriptions at any time without notice.

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**Uson Delivers.**