



# SMARTSTATION Products and Philosophy

## Product Philosophy:

VTI has long been established as one of the worlds leading suppliers of Calibrated Leaks and Custom Leak Test Systems, a reputation founded significantly on the "Real World Approach" VTI adopts to system design, manufacture and support thereafter. This philosophy is abundantly clear in the **SMARTSTATION** range of Leak Detection workstations.

The 'Real World' concerns itself not with the best possible specification that can be achieved with meticulous care and attention, but with how the system performs on a day-in-day-out basis. Factors such as **response time, simple operation, reliability of result, "Up-Time"** and **field maintainability** are all as critical as the ultimate detection limits of a given system.

VTI addresses these needs with a comprehensive approach to:

- 1) **Individual Component Specifications.**
- 2) **System Operation and Integration features.**
- 3) **System Support and Maintainability.**

### 1) Component Specifications

Component selection is fundamental to the ultimate capability of any system. VTI takes outline system requirements and optimizes each key component insuring flexibility and expansion / integration needs today and in the future. While not applicable to every **SMARTSTATION**, the following are examples of optimizing component selection:

**PC Control** – not your typical PLC, is the cost effective way to permit truly flexible integration with plant computers/database requirements. The **SMARTSTATION** provides this. Whether the PC is a stand-alone unit or built into the AERO VAC Odyssey, the system is not subject to the compromise/limitations imposed by the PLC's used on competitive systems.

**Filtration** – overlooked by many, long term operation without performance degradation is a key requirement. This cannot be achieved without taking the right steps and correct filtration to prevent foreign material from causing system damage is all part of the **SMARTSTATION** philosophy.

**Pumping choices** – VTI uses dry, oil-free, pumps on the **SMARTSTATION** systems with Evacuation capability. Additionally, VTI continues one step further in specifying a pump with between 10 and 15 times the base vacuum capability of the competition. The result is a faster and more complete evacuation/clearing of product. Instead of leaving 14-15% charge in the system, the **SMARTSTATION PD Plus, HS Plus, RS Plus, ES, ES Plus and AIO** leave less than 1% by comparison.

**Valves** – Instead of the typical Solenoids, VTI uses high quality bellows sealed valves. The **SMARTSTATION** therefore offers longer life, higher duty cycle operation and better performance over the alternatives.

### 2) System Integration

For any system to be of real value, it should be capable of integration with both the production plant system AND other test equipment being implemented. In the real world this means more than just a computer interface ....

**Bar Code Scanner** – standard on some, optional on other **SMARTSTATION** models, this provides simple 'quick scan operation' of the station as well as Product Registration / Tracking and the ability to build a product fault database.

**Sequential test interlocking** – if the **SMARTSTATION PD** is used ahead of, say, a VTI Helium Leak Test Station (**SMARTSTATION HS**), interlocking can prevent a Helium leak test until pressure testing has been completed streamlining production and increasing efficiency.

**Computer Network Interface** – of course, none of the above is possible without the requisite computer interface which is a standard feature on **SMARTSTATION** systems.

### 3) Support and Maintenance






**SMARTSTATION** products use components stocked by VTI for fast delivery. System maintenance can be effected on-site and with the minimum of delay. Up time is a critical yardstick and VTI is ever focused on optimizing this performance factor.

**The Real World approach from VTI ...**



# SMARTSTATION

## Product Range Overview

<b>SMARTSTATION Model</b>	<b>Description</b>	
<b>Pressure Decay (PD Series)</b>		
<b>PD</b>	Base Pressure Decay Station	
<b>PDC</b>	Pressure Decay Station with product Charging from Atmospheric Pressure	
<b>PD Plus</b>	Pressure Decay Station with product Evacuation prior to Charging	
<b>PDEC Basic</b>	Basic Pressure Decay Station with product Evacuation prior to Charging	
<b>Helium Sniffer (HS Series)</b>		
<b>HS</b>	Base Helium Sniffer Station	
<b>HS Plus</b>	Helium Sniffer Station with product Evacuation and Charging prior to Sniffer Testing	
<b>Refrigerant Sniffers (RS Series)</b>		
<b>RS</b>	Base Refrigerant Sniffer Station	
<b>RS Plus</b>	Refrigerant Sniffer Station with product Evacuation and Charging prior to Sniffer Testing	
<b>Evacuation Stations (ES Series)</b>		
<b>ES</b>	Base Evacuation Station including Rate of Rise (RoR) test	
<b>ES Plus</b>	Evacuation Station with RoR test and Gas Analysis capability for determining product condition	
<b>Repair Station</b>		
<b>AIO</b>	Comprehensive Repair Station incorporating Pressure Decay, Product Evacuation, Product Charging and Sniffing Capability. Data logging and Product Tracking are also included.	
<b>Data System</b>		
<b>ProLog</b>	Database providing monitoring capability for Product Flow, Operative Activity, Fault Location and integration with Plant Computers for Flow and Quality control purposes	