



The *SMARTSTATION* PD-Series (*PD, PDC and PDPLUS*) PRESSURE DECAY LEAK DETECTION SYSTEMS

The **SMARTSTATION PD, PDC and PDPLUS** models all employ the 'Pressure Decay' method for leak detection.

All models are PC controlled with a front panel mounted flat display (touch screen optional) and keyboard/mouse arrangement which stores conveniently beneath the cabinet.

SMARTSTATION PD models offer Pressure Decay Testing with fine control over system operating parameters (sequence times), a status screen that shows test progress and prompts the operator as needed, a System Schematic screen that allows test tracking and control, and a real time plot of Pressure vs Time.

SMARTSTATION PDC models add the ability to charge the product being tested with Tracer Gas in preparation for a Sniff test. The charge portion of the cycle is initiated only after a Pressure Decay test has been passed. The unit charges Tracer Gas on top of the residual atmospheric pressure gas remaining in the system when the test piece has been vented after completion of a pressure decay test.

SMARTSTATION PDPLUS models add a vacuum pump to allow the product to be evacuated prior to being charged with a Tracer Gas. When used in conjunction with a Sniffer, the gas, such as Helium, can be recovered at the conclusion of the Sniff operation by adding the Recovery Valve option. (the Sniffer test to be completed using a separate tester such as the SmartStation HS, or RS). This model can also be used as a Pressure Decay Tester with Tracer Gas charging for use with a Pre-charge Leak Test Chamber System.

VTI's attention to detail insures optimum performance of valves, pumps and applies the correct filtration needed for continuous operation on the production line. **SMARTSTATION** products also allow for product integration into the 'test network' with sequential test interlocking, or the 'Plant Management System' with product bar code scanning, test result registration and product tracking.



Touch Screen:



This option greatly simplifies system set-up and operation without the need for a separate keyboard and mouse (which are supplied with the unit).

A simple operator window provides all the controls needed for daily operation.

Features of the PD-Series Models:

- **INDUSTRIAL CONSTRUCTION:** For continuous operation in the manufacturing environment.
- **WIDE CHOICE OF OPTIONS:** Configure the PD Series for your specific test needs with a wide range of pressure, flow and port options.
- **TEST CYCLE OPTIMIZATION:** Allows 'Supervisor' customization of the test to the task(s) required.
- **SIMPLE TO OPERATE:** Minimal user training, single button operation with on screen operator prompts.
- **ACCESSIBLE DESIGN:** Allows easy servicing /scheduled maintenance for maximum 'up-time'.



SMARTSTATION LEAK TEST SYSTEMS

PD -Series Leak Detectors

Specifications (All PD Series):

- **SYSTEM CONTROL:** PC Data collection and control.
- **OPERATOR INTERFACE:** PC, Panel Display, Keyboard, Bar Code Scanner.
- **PRESSURE TRANSDUCER:** system can be built to 25, 100, 500 and 1000 psi specifications.
- **VALVES:** Pneumatically actuated valves. Bellows or o-ring shaft seal on regular and high flow models. Ball valve on highest flow models
- **DATA-LOGGING SOFTWARE:** the PC, allows product serial numbers and test results to be logged along with operator information and date/time stamp. (Talk to VTI about integration of this product with your Plant Wide Information Management System).

Options (All PD Series):

- **CONFIGURATION OPTIONS:** Variables such as Operating Pressure, Flow Regime and Port options are all discussed in the Ordering Information below.
- **TOUCH SCREEN:** for simple operator control.

(PDPLUS Models):

- **RECOVERY VALVE:** Allows the system to be connected to a recovery system for re-cycling of Tracer Gas.
- **EVACUATION PUMP:** 3 CFM oil-less vacuum mechanical pump with 100 Torr ultimate pressure capability.

UTILITIES: Clean, Dry compressed Air for pneumatic control, Clean, Dry Air or Nitrogen for Decay Test, Tracer Gas for Charging, Tracer Gas exhaust line connection points to outdoors, 115 VAC 50/60Hz (10A) - contact VTI for other voltages.

ORDERING INFORMATION

When ordering or requesting a quotation, please provide the Part Number, confirm the Flow Regime needed, and state the specific Pressure Range requested.

PART NUMBER BUILD-UP

The PD-Series Part Numbers are constructed as follows:

SMST-PD(A)(R)-PC(T)-YYY-ZZZ-04

where **PD** = the model (*PD, PDC or PDPLUS*) required,
 where **(A)** = the number of ports (*1 or 2*) required,
 adding an **(R)** here selects the recovery valve option,
 where **PC** = indicates PC control and.
 adding a **(T)** here selects the touch screen option,
 where **YYY** = the code for the valves required,
 where **ZZZ** = the code for the pressure range,
 and **04** = latest revision.

ORDER CODES APPLICABLE:

Please contact us for other fitting requirements.

YYY Code:	Valve Type:
41C	Regular Flow / Low Pressure/Bellows Seal
42C	Regular Flow / High Pressure/O-ring Seal
81C	High Flow / Low Pressure/Bellows Seal
82C	High Flow / High Pressure/O-ring Seal
BV	Highest Flow / High Pressure/Ball Valve
ZZZ Code:	Pressure Range:
025	25psi operation (41C and 81C)
100	100psi operation (41C and 81C)
500	500psi operation (42C and 82C)
01K	1000psi operation (42C and BV only)

MODEL OPTIONS AVAILABLE and EXAMPLE PART NUMBERS

Model (PD, PDC or PDPlus)	Ports (1 or 2) (A)	Rec'y Valve (R)	Touch Screen (T)	Flow Regime (Plus only)	Code for Valves (YYY)	Pressure Range	Code for P' Range (ZZZ)	Example Part Number
SMST-PD	1	N/A	Yes	Regular	41C	25 psi	025	SMST-PD1-PCT-41C-025-04
SMST-PD	2	N/A	No	Regular	41C	25 psi	025	SMST-PD2-PC-41C-025-04
SMST-PD	2	N/A	Yes	Highest	BV	1000 psi	01K	SMST-PD2-PCT-BV-01K-04
SMST-PDC	2	N/A	No	Regular	42C	500 psi	500	SMST-PDC2-PC-42C-500-04
SMST-PDC	1	N/A	Yes	Regular	42C	1000 psi	01K	SMST-PDC1-PCT-42C-01K-04
SMST-PDC	1	N/A	Yes	High	82C	500 psi	500	SMST-PDC1-PCT-82C-500-04
SMST-PDPlus	2	No	Yes	Regular	41C	25 psi	025	SMST-PDPlus2-PCT-41C-025-04
SMST-PDPlus	1	Yes	No	High	81C	100 psi	100	SMST-PDPlus1R-PC-81C-100-04
SMST-PDPlus	2	No	Yes	Highest	BV	1000 psi	01K	SMST-PDPlus2-PCT-BV-01K-04

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