

Automatic Pressure Monitoring (APM)

The most installed petrol vapour pressure monitoring technology.

Why Automatic Pressure Monitoring

Veeder-Root's Automatic Pressure Monitoring (APM) is designed to comply with the New South Wales (NSW) *Protection of the Environment Operations (Clean Air) Amendment (Vapour Recovery) 2009 No. 533* regulation. It is the first TUV certified Stage 1 Automatic Pressure Monitoring solution.

Adding to the existing TLS-450PLUS platform, APM continuously monitors the vapour space of all petrol tanks and vapour piping according to the Stage 1 Automatic Pressure Monitoring technical requirements outlined in the *Standards and Best Practice Guidelines for Vapour Recovery at Petrol Service Stations* authored by the Department of Environment Climate, and Water NSW. Furthermore, APM maintains test records, provides test reports, and generates warnings or alarms when fault conditions are detected.



► FEATURES

- IECEx approved
- TUV certified
- Reports available via Remote Access

► BENEFITS

- Uses Veeder-Root's proven pressure sensor technology
- Leverages your current investment in environmental monitoring equipment as it can be added to Veeder-Root's TLS-450PLUS console
- Provides you with a cost effective solution with the Veeder-Root quality and support that you expect.

Monetary Savings with APM

Standard	Test Number	Test Description	Frequency of Test	Procedure Eliminated by APM	Cost Per Event (USD)	Annual Cost (USD)
NSW Standards and Best Practice Guidelines for Vapour Recovery at Petrol Service Stations Section 5.3.3	#1	Integrity test of UST, Fittings, and Lines	Three Year	3rd party testing company	\$8,000	\$2,666
				Permitting	\$900	\$300
				Contract labor	\$2,880	\$960
				Boom or cherry picker rental	\$500	\$166
				Site shutdown/disruption *	\$686	\$228
				Nitrogen expense	\$160	\$53
	Expense for Test #1	\$13,100	\$4,300			
	#2	Inspection of the Pressure Vacuum Valve and Orifice Plate	One Year	Boom or cherry picker rental	\$500	\$500
				Extra contractor when working 1.8 M above grade	\$350	\$350
				Contract labor	\$350	\$350
Expense for Test #2	\$1,200	\$1,200				
#3	Functional Inspection of the Pressure Vacuum Valve	Three Year	Boom or cherry picker rental		Covered In Annual Inspection of Test #2	
			Extra contractor when working 1.8 M above grade			
			Contract labor			
Expense for Test #3						
Total Annual Expenses Eliminated with APM:						\$5,500

(Monetary savings may vary by region and are approximate values that may be subject to change.)

* Based on site throughput on 7M liters per year.

SPECIFICATIONS

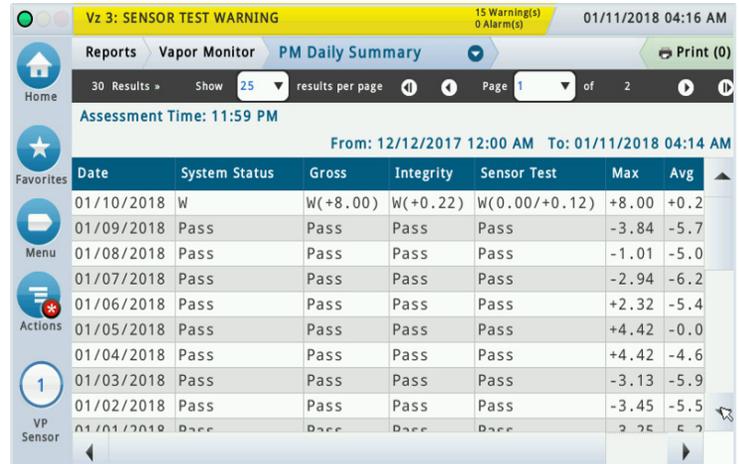
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APM Warning Summary		
Warning	Days to Petrol Shutdown	Test Description
APM Gross Pressure	7	Vapour pressure, over a continuously moving 1-hour test period exceeds 1.25 kPa above ambient atmospheric pressure or 2.5 kPa below ambient atmospheric pressure for at least three minutes.
APM Degrd Pressure	30	Vapour pressure, over a continuously moving 1-hour test period exceeds 0.75 kPa above ambient atmospheric pressure or 2.0 kPa below ambient atmospheric pressure for at least 30 minutes.
APM Sensor	7	Vapour pressure, over a continuously moving 1-hour test period remains within ± 0.05 kPa relative to ambient atmospheric pressure.
APM Sensor Out	7	Failure of an APM sensor self-test.
APM Set-up	N/A	Confirm APM setup programming.

APM Replacement Parts		
Description	Requirement	Part Number
Vapour Pressure Sensor Drying Tube	Recommended Annual Replacement	330020-717

APM Required Components		
Description	Requirement	Part Number
Vapour Pressure Sensor Site Start-up Kit	1 per site	330020-715
Vapour Pressure Sensor Kit	1 per site	861110-002
Universal Enclosure Kit Only required when installing on 2-inch and 3-inch Diameter Vent Stack	Optional: 1 per Pressure Sensor when mounted on Vent Stack	330020-716

Daily Report Screen



TLS-450PLUS Monitoring System Requirements

- Minimum software version 6F
- Required Features: 332972-022 - APM
333672-001 - Region Key



Optional Locations for APM Pressure Sensor

