



The ! Voice

Message from the President

Glenn Walker, President, VST { walker@vsthose.com }



Dear Friends of VST:

As promised VST is implementing our complete control program or “Sphere of Sustainability” for gasoline dispensing. During the upcoming NACS/PEI show we will demonstrate the completion of our development plans that accomplish that goal. Specifically, the combination of our newest, just released GREEN MACHINE™ vapor processor and a patented Pressure Vent (P/V) valve coupled with our forecourt equipment; VST has addressed complete control of service station emissions.

We are introducing our ENVIRO-LOC™ GREEN System that includes our GM Processor, P/V valve, and total forecourt hanging hardware equipment. Once again, and most importantly, VST’s equipment has demonstrated emission reduction of > 99%. As shown by independent laboratories (IMP of Mexico and German TUV), they have tested and proven our technology in actual real life operating conditions. In fact, we have demonstrated the lowest emissions of all forecourt equipment as proven by the California Air Resources Board (CARB) – inclusive of the added safety associated with our unique dripless interlock nozzles. This combination of products offers the best value of any system available today.

Furthermore, VST is announcing our continuous Remote Monitoring System (RMS) as part of our GREEN MACHINE product offering. It assures operators that their system is working properly. Our goal is a total reduction in emissions, as well as compliance with all regulations. On top of those goals, the VST ENVIRO-LOC™ GREEN System provides the safest refueling technology at any cost!

Additionally, with the introduction of the mid-mount SENTRY™ P/V valve, this product allows for the testing and maintenance of the P/V valve at ground level. This benefit helps to eliminate the need for operators to maintain hard to reach valves (12 ft in the air) thereby reducing the probability of costly falls, as well as the associated insurance costs.

In other words, with this comprehensive system solution it is time to put an environmental bubble around your station and improve the world with VST’s approach. The ENVIRO-LOC™ GREEN System reduces HC emissions, virtually eliminating the second highest cause of smog, reduces contact with harmful VOCs for your customers and employees, and ultimately helps in the fight against global warming.

Please stop by our NACS Show 2022 booth #6969 and learn more about what we offer.

Glenn K. Walker

President, VST



VST Mission

To design and manufacture innovative products for retail refueling systems that are specifically engineered to protect the environment and consumers with safety and reliability.



VST Values

R: Respect
Employees,
Customers, Vendors,
and Environment

O: Operational
Excellence, Quality,
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I: Innovative Passion,
Unique, Industry
Leader, and
Committed to
Excellence



VST Vision

VST strives to become the most trusted company in the global gasoline dispensing industry by manufacturing environmentally sustainable products and solutions that reduce harmful vapor emissions to create a future that protects the communities in which people live and work every day.





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VST: The Company

Scott Brown, VP Sales & Marketing { brown@vsthose.com }



Visit VST at NACS 2022 – Booth #6969

VST welcomes everyone to come visit us at the NACS 2022 Show in Las Vegas October 2 – 4, 2022.

This year’s booth will be especially exciting since we will be featuring a new look and multiple new products for the first time.

VST’s continued efforts to bring innovative solutions to the gasoline dispensing market for a better – more sustainable tomorrow, will be on full display.

Come learn about the **VST ENVIRO-LOC™ GREEN System!!!**



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VST SENTRY™ Pressure Vent Valves

Scott Brown, VP Sales & Marketing { brown@vsthose.com }



VST introduces our newest innovative product targeted at reducing fugitive emissions at gasoline dispensing facilities:

UL Listed 2583 Pressure Vent (P/V) Valves.

The VST SENTRY™ P/V Valves are highly-engineered products designed to protect the structural integrity of the Underground Storage Tank (UST) from extreme positive and negative pressure conditions caused by fuel drops and vehicle refueling events. These robustly, unique P/V valves are the latest addition to our product offering aimed at preventing unwanted vapor emissions from escaping into the environment.

VST offers two styles of the SENTRY™ P/V valve:

VST-PV-100

VST-PV-100 is a top-mount model that can be installed near the top of the vent pipe. It can be used as a quick and easy replacement for any traditionally installed P/V Valve.



Every SENTRY™ P/V valve is shipped with a VST-RC-200 specific style protective rain cap to keep out water and foreign debris.



VST-PV-200

VST-PV-200 is an industry innovation that can be installed and tested at an easily accessible mid-mount vent pipe location. This model allows a tester the opportunity to test-in-place at ground level. No need for a ladder or lift.



Test-In-Place Kit for VST-PV-200 includes:

- Stainless steel TIP stinger
- Testing hose
- Bell adapter for connection to P/V test unit (P/V test unit not included)



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TLS-350 Software Upgrade

Technical Advisory – Veeder-Root In-Station Diagnostics (ISD) Software Update – Version 336.02

Doug Harty, Sr. Application Engineer { harty@vsthose.com }



Periodically, VST is asked about alarm issues pertaining to TLS-350 Veeder-Root ISD software. In early 2022, it was identified that the Onboard Refueling Vapor Recovery (ORVR) Penetration Table in the ISD software had expired on December 31, 2021, and need to be updated.

On January 5, 2022, Veeder-Root posted a Technical Bulletin on their website to address how to fix the issue.

Please refer to the link below for details:

<https://www.veeder.com/us/optional-station-diagnostics-software-upgrade-ca>



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Automatic Nozzle Shutoff

Doug Harty, Sr. Application Engineer { harty@vsthose.com }



I recently helped a customer diagnose nozzle shutoff issues, so I thought it would be a suitable time to explain the fundamentals of how a nozzle shutoff works.

Nozzle shutoff works using a vacuum created by the flow of fuel through the nozzle with a venturi. The vacuum created by the flow of fuel draws air in through the sensing tube at the end of the nozzle spout. When the tank is full and the sensing tube encounters liquid instead of air, the vacuum level will increase. The increase in vacuum causes a diaphragm to move, disengaging the trigger and stopping fuel flow.

Nozzle shutoff is a simple process but requires a good flow rate and fuel that is free from air bubbles. Six GPM or higher ensures proper shut-off.

- Slow fuel flow rates can be caused by:
- A malfunctioning mechanical line leak detector will restrict fuel flow well below 6 GPM. Replacement of failed leak detector and installation of automatic STP re-pressurization can eliminate further issues.
- Dirty fuel filters, failing STP motors/relays, and rags or debris clogging the STP inlet will also restrict fuel flow and cause shutoff issues.

Aerated fuel can be caused by:

- Failed air eliminators in the turbine head or a bad load of fuel can allow air bubbles into the fuel, preventing the venturi from creating enough vacuum to shut off the nozzle.
- A bad load of gasoline with high butane/propane content will create bubbles in the fuel.

Dispensing some fuel into a clear container is a quick way to check for air bubbles. I once found fuel so bad, it made fizz like it was soda.

If slow fuel flow and aerated fuel are not present, check the nozzle spout and confirm its tight and secure, loose spouts can create shutoff issues, but usually in the form of nuisance shut-offs.

- Here is a link to a video that explains the shutoff process <https://www.youtube.com/watch?v=FRYITF02A7g>



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VST Training & Certifications

Susie McLaughlin, Manager, Training & Certifications
{ mclaughlin@vsthose.com }



Training & Certification Links

It's never been easier to get a new VST Certification than it is right now. Below is a list of links taking you directly to the VST online training that is right for you.

All the training can be easily done on your phone, and you will be able to immediately receive and retrieve your certification.

Training Level	Description	Link
Level A	EVR Hanging Hardware Install & Repair	Level A
Level E	CS2 USA GREEN MACHINE™ General Contractor	General Contractor
Level E1	CS2 USA GREEN MACHINE™ Electrical Install	Electrical Install
Level E2	CS2 USA GREEN MACHINE™ Vapor Piping Install	Vapor Piping Install
Level E3	CS2 USA GREEN MACHINE™ Start-Up Contractor	Start-Up Contractor
Level E4	CS2 USA GREEN MACHINE™ Service Contractor	Service Contractor

VST Level A Training on Your Smartphone

Completing your Level A training for certification or re-certification has never been easier – now it can be done on your Smartphone!

Click this link for a short video that walks you through the steps.

[How to Take VST Level A Training on Your Smartphone](#)



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