The !Voice

Message from the President

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

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Dear Friends of VST:

VST is set to announce the first total approach for control of gasoline dispensing.

Over the recent number of years, VST has developed a complete array of products that address the various environmental issues associated with gasoline dispensing. Most recently, we have announced the last component to our visionary plan, VST's robust P/V valve.

Now with this final component added to our product line, we will be offering to the industry a complete system that has been demonstrated to be the most environmentally efficient, lowest cost, safest, and more user friendly than any other system available today.

Lastly, VST has added our remote monitoring system that continuously monitors your UST system. It continuously provides "real time" data that assures your system is operational and in control of your system. With this new innovative approach, VST will be offering the complete system for both Stage II vapor recovery as well as standard dispensing. We look forward to visiting with industry executives during the upcoming NACS/PEI convention in Las Vegas to demonstrate this unique approach to gasoline dispensing and the maximum control the VST system provides.

Glenn 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, Delivery, Safety & Cost

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.
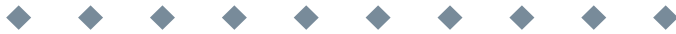
Striving Towards Sustainability

VST: The Company

Gonzalo Perez, Application Engineer { perez@vsthose.com }

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The VST ECO System

The VST ECO system is a complete solution to save gas dispensing facilities (GDF's) money while also saving the environment! The VST ECO system consists of: the ENVIRO-LOC™ ECO Dripless/Spitless Nozzle, the ENVIRO-LOC™ Low Perm Hose, the Sentry Reattachable Safety Breakaway, and the GREEN MACHINE™. Each of these products were designed to maximize safety, quality, and sustainability.

ENVIRO-LOC™ ECO Dripless/Spitless Nozzle

The ENVIRO-LOC™ ECO Nozzle has a unique, patented safety interlock design. The nozzle was designed to be inoperable when the safety interlock becomes damaged. The Dripless/Spitless technology results in fewer spills and a cleaner forecourt.

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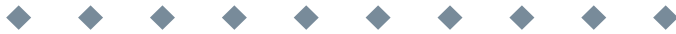
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The VST ECO System

ENVIRO-LOC™ Low Perm Hose

The ENVIRO-LOC™ Low Perm Hose was designed to reduce the exposure of Volatile Organic Compounds (VOC) to the customer and to the environment. The uniquely designed barrier layer dramatically lowers the permeation rate of VOCs, which increases the life of the hose.

The hose additionally features a dual helix wire design for maximum kink resistance. The hose has a patented Lip Seal Swivel Coupling ,which minimizes swivel resistance, eliminates 3rd party hose swivels, directly connects to the nozzle, and eliminates multiple leak points.

ENVIRO-LOC™ Low Perm Whip Hose

ENVIRO-LOC™ Low Perm Curb Pump Hose

650 Pleasant Valley Dr. * Springboro, OH * 45066 * 937-704-9333 * www.vsthose.com

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The VST ECO System

Sentry Reattachable Safety Breakaway

The Sentry Reattachable Safety Breakaway seals both ends of breakaway during a drive off. The specially designed stay-put cushion sleeve protects both customer and dispenser in the event of a drive off. It is an easy field reassembly by hand.The breakaway also compensates for system spike pressures. Most important of all, the breakaway has reliable separation. Over 20 years in the market!

GREEN MACHINE™

The GREEN MACHINE™ is a vapor processor that controls UST pressure without losing product.

It has over 98% vapor recovery efficiency. It also allows hydrocarbons to condense back into fuel.

Thus saving money and the environment!

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Flow Collect Troubleshooting for Balance Systems

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

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Doug's Cheat Sheet

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Out of all the tech support calls I receive, Flow Collect troubleshooting is the most common one by far. I've found that there are many possible solutions and some easy checks to guide you to the correct solution. These are the best troubleshooting steps I've found to best diagnose Flow Collect alarms. They are sequenced them from simple checks to more complicated and involved checks that will require test equipment.

1. Drain affected hose, look for fuel in vapor path.

   - If fuel is found, look for a hanging hardware defect.

   - A dry hose strongly indicates the liquid removal device is functional and fuel hose is intact.

2. Conduct meter creep test (authorize the pump and check for meter movement when not dispensing).

   - Any movement of dispenser meter while nozzle trigger is off is a sign of equipment damage.

3. Check ISD Software version.

   - 1.01-1.05 can create false alarms, update to latest available.

4. Enable ACCEPT HIGH ORVR in EVR Setup on TLS-350.

5. Check TLS for DIM string and add a "G" to DIM init string if missing.

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6. Check flow rates across all gasoline hoses and ensure flow rate is over 6 GPM.

   - Large differences in flow rates between nozzles can cause Flow Collect alarms.
   - Replace fuel filters as needed.

7. Check meter map.

   - Search for out-of-sequence flow meters.
   - If in doubt, do a manual remap.
   - Do not upload the map from a laptop because a manual map will confirm DIM communication with every fueling point.
   - Clear the tank map if needed.

8. Conduct a Dynamic Backpressure test

   - Inspect the vapor piping.
   - Look for piping liquid traps/restrictions and leftover 5/8" copper piping from prior vacuum assist style installations.

9. Conduct a Liquid Removal test.

   - Hose vapor paths tend to stay dry normally, and a failure might not be noticed if the hose is dry on initial inspection.

10. Conduct a Flow Meter operability test.

Flow Collect Troubleshooting for Balance Systems

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11. Conduct a pressure decay test.

- Make sure hoses, breakaways, dispenser piping, and other components are vapor tight.

Remember, with all these ISD Alarms that began at the first of the year because of the ORVR table expiration, sites will still have real alarms caused by real equipment problems, and they will still need a proper hardware diagnosis.

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The !Voice

Pennsylvania Finalizes Stage II Decommissioning Legislation

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

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The Pennsylvania Department of Environmental Protection has finalized their regulations for decommissioning Stage II vapor recovery systems at gasoline dispensing facilities (GDFs). The new regulation, 25 PA. Code Chapters 121 and 129, went into effect on March 26, 2022, and affects 12 counties in the Pittsburgh (Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, Westmoreland) and Philadelphia (Bucks, Chester, Delaware, Montgomery, Philadelphia) metropolitan areas. Comprehensive details about this new regulation may be found at the PA DEP website:

- https://www.dep.pa.gov/Business/Air/BAQ/Automobiles/Gasoline-and-Vapors/Pages/Decommissioning-Stage-II-Vapor-Recovery-Systems-at-Gasoline-Dispensing-Facilities.aspx

What does this mean? It is important to review the specific details of the new regulations and discuss with the appropriate regulatory agencies; however, here are a few highlights:

- Decommissioning Stage II requires the installation of conventional, low permeation hoses and enhanced conventional nozzles – dripless/spitless ECO nozzles.
- GDFs that have Stage II systems that are incompatible with Onboard Refueling Vapor Recovery (ORVR) vehicles must decommission by December 31, 2022. Stage II vacuum assist systems fall within this category.
- GDFs that have a throughput over 120,000 gallons per year are subject to this new regulation.
- Retains the requirement to perform two types of annual vapor leak tests.
- Adds the performance of two additional types of annual leak tests as a requirement.
- Allows the option for owners and operators to forego annual testing by installing a continuous pressure monitor.
- Revises the recordkeeping and reporting requirements for affected GDF owners and operators.

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VST offers CARB certified (Executive Order NVR-1) low permeation conventional hoses and dripless/spitless enhanced ECO nozzles, as well as factory assembled hanging hardware kits.

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VST Training & Certifications

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

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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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