



Oct 2024





Message from the President

Glenn Walker, President, VST (walker@vsthose.com)

VST Product Enhancements: The Platinum System

Dear VST distributor and user customer:

Over the many years Gasoline Dispensing Facilities (GDF's) have been continually asked to update and upgrade their facilities to meet an ever-ending list of new regulations. In the last several years GDF's had to address the latest demand for credit card readers thereby pushing/nudging them into replacement of the gasoline dispensers. More recently GDF's are in the process of updating to the latest Underground Storage Tank (UST) requirements, IE double wall tank configurations. All the latest requirements drive the cost of doing business regardless of your location. From VST's perspective we have always focused on quality first, then service, and finally cost.

In recent years, VST has taken notice of the plight of operators and addressed the overall system quality by providing innovative products and premium service with the result of lowering your cost of doing business.

Let me take a few minutes to highlight a few of our product enhancements.

Our Platinum System demonstrates how we focused on existing (competitive) equipment and developed innovative solutions that can be integrated with our equipment. Thus, a superior approach at a far lower cost.

In California, for example, our Platinum Balance Hanging Hardware has been the industry's choice when converting from the expensive vacuum assist systems to our Platinum Balance System. By utilizing the VST products, GDFs have been able to eliminate expensive components, (vapor pumps, nozzles, breakaways, and hoses) and improve their cost of ownership.

During our development, we incorporated the Clean Air Separator (CAS) processor with our Platinum Balance Hanging Hardware. This solution offered a reasonable upgrade without having to replace/upgrade the expensive vapor processor of your Stage II system. In fact, our field results were so good utilizing the CAS, we decided not to certify our upgraded GREEN MACHINE™. Why ask users to spend additional capital when existing equipment works very well with our products.

Continued next page

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VST Product Enhancements: The Platinum System

In addition, we have updated our balance hoses and nozzles to the Platinum designs that accomplish the following:

- 1. The Platinum hose design incorporates an anti-stretch cable that not only saves your hanging hardware but the entire dispenser system. Specifically, in many cases the meter gaskets may be damaged when a drive-off occurs. In addition, this safer design offers a higher level of protection for consumers and potential vehicle damage.
- 2. The Platinum nozzle incorporates our patented interlock system. When abuse or damage occurs to the interlock mechanism, the nozzle is designed to fail in a safe condition by not allowing fuel to be dispensed, thereby eliminating spills. This combination of consumer and environmental safety corresponds to lower cost of operation.
- 3. When our Platinum Balance System is used in conjunction with proper piping and pumping units, we have demonstrated >9 GPM's along with far fewer nozzle shutoffs as compared to competing equipment. Overall, after many years of field-testing our performance, in most if not all cases, VST equipment has demonstrated higher station throughput due to the robustness of our equipment.

As the industry continues to update their GDF's to comply with the latest tank regulations, it is also a good time to upgrade to the VST Platinum Balance System that is eligible for our latest 2-year factory warranty.

Lastly, VST has just announced our factory assembly program for Platinum Balance Hanging Hardware sets that provides quality assurance along with lower cost of both equipment and contractor labor. We know regulations drive you to spend additional and often unwanted costs. However, with the VST Platinum System, much of those costs over time will be recovered with our superior performance and durability.

Please take a few minutes to review our <u>VST Platinum Hanging Hardware literature piece</u> that goes into great engineering detail on how we achieve the aforementioned results. Please feel free to contact VST's application engineering group if additional information is necessary or how we can assist you in making your equipment decisions.

All our information may be found on our website www.vsthose.com.

Sincerely,

Glenn K. Walker

President

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VST: The Company

Scott Brown, VP Sales & Marketing, VST (brown@vsthose.com)

VST @ NACS 2024

Visit VST at NACS 2024 - Booth #C7268

VST extends an open invitation for everyone to visit with us at The NACS Show 2024 in Las Vegas October 8 -10, 2024!!

Environmental sustainability continues to be a very important topic to VST and around the world.

Innovation focused on unique products for a more sustainable future at gasoline dispensing facilities will be on full display with VST's *Sphere of Sustainability*.

Stop in and learn about the VST ENVIRO-LOC™ GREEN System!!!





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New Products

Scott Brown, VP Sales & Marketing, VST (brown@vsthose.com)

CARB Certified EVR P/V Valves

VST has earned its latest California Air Resources Board (CARB) Enhanced Vapor Recovery (EVR) Certified product. The SENTRY™ VST-EVRPV series of Pressure/Vacuum valves is VST's first EVR Phase I approved product.

These patented, innovative P/V valves offer the marketplace a unique mechanical design without springs or diaphrams. A simple approach for longer life. Compatible with E0 to E85 fuel blends.

There are two styles of SENTRY™ VST-EVRPV series:

VST-EVRPV-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.

VST-EVRPV-200 is an industry innovation that can be installed and tested at an easily accessible mid-mount vent pipe location. No need for a ladder or lift.





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New Products

Scott Brown, VP Sales & Marketing, VST (brown@vsthose.com)

CARB Certified EVR P/V Valves

CARB Certified EVR P/V Valves, continued

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

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

- ✓ VST-TIP-200 kit includes
- ✓ Stainless steel TIP stinger
- ✓ Testing hose
- ✓ Bell adapter for connection to P/V test unit

(P/V test unit not included)





See the Executive Order on the following pages.

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State of California Air Resources Board

Executive Order VR-101-X

Relating to Certification of Vapor Recovery Systems

Franklin Fueling Systems, Inc. Phil-Tite/EBW/FFS Phase I Vapor Recovery System

Whereas, the California Air Resources Board (CARB) has established, pursuant to California Health and Safety Code sections 25290.1.2, 39600, 39601 and 41954, certification procedures for systems designed for the control of gasoline vapor emissions during the filling of underground gasoline storage tanks (Phase I EVR System), in its Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities Using Underground Storage Tanks (CP-201) as last amended July 12, 2023, incorporated by reference in Title 17, California Code of Regulations, Section 94011;

Whereas, CARB has established, pursuant to California Health and Safety Code Sections 39600, 39601, 39607, and 41954 test procedures for determining the compliance of Phase I EVR Systems with emission standards;

Whereas, Franklin Fueling Systems, Inc. (FFS) requested and was granted certification of the Phil-Tite Phase I Vapor Recovery System (Phil-Tite System¹) pursuant to CP-201 on June 19, 2001, by Executive Order VR-101-A, and last modified on November 8, 2023, by Executive Order VR-101-W;

Whereas, Vapor Systems Technologies, Inc. (VST) requested an amendment to the Phil-Tite System to add the VST-EVRPV-100 Pressure/Vacuum (P/V) Valve and VST-EVRPV-200 P/V Valve with Test In Place (TIP) feature as modifications of the Phil-Tite System;

Whereas, CP-201 provides that the CARB Executive Officer shall issue an Executive Order if he or she determines that the vapor recovery system, including modifications, conforms to all applicable requirements set forth in CP-201;

Whereas, Executive Order G-21-474 delegates to the Chief of the Monitoring and Laboratory Division the authority to certify or approve modifications to certified Phase I and Phase II vapor recovery systems for gasoline dispensing facilities (GDF); and

Whereas, I, Walter Ham, Chief of MLD, find that the Phil-Tite System, as amended to include the modification listed above, conforms with all the requirements set forth in CP-201, and results in a vapor recovery system which is at least 98.0 percent efficient when tested pursuant to test procedure TP-201.1, Volumetric Efficiency for Phase I Systems (July 26, 2012).

1

¹ As used in this Executive Order, the term, Phil-Tite System, shall include Phil-Tite/EBW/FFS Phase I Vapor Recovery System.

Now, therefore, it is hereby ordered that the Phil-Tite System including modifications is certified to be at least 98.0 percent efficient when installed and maintained as specified herein and in the following exhibits. Exhibit 1 contains a list of the certified components. Exhibit 2 contains the performance standards and specifications, typical installation drawings, and maintenance intervals for the Phil-Tite System as installed in a gasoline dispensing facility (GDF). Exhibit 3 contains the manufacturing performance specifications. Exhibit 4 contains the manufacturer warranties. Exhibit 5 is the below-grade vaulted tank configuration.

It is further ordered that compliance with the applicable certification requirements, rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the Office of the State Fire Marshal of the Department of Forestry and Fire Prevention, the Division of Occupational Safety and Health of the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board are made conditions of this certification.

It is further ordered that each component manufacturer listed in Exhibit 1 shall provide a warranty for the vapor recovery component(s) to the initial purchaser. The warranty shall be passed on to each subsequent purchaser within the warranty period. The warranty shall comply with all warranty requirements in section 16.5 of CP-201 including ongoing compliance with all applicable performance standards and specifications. Manufacturers may specify that the warranty is contingent upon the use of trained installers. The manufacturer warranty tag, included with each component, shall be provided to the service station owner/operator at the time of installation.

It is further ordered that the certified Phil-Tite System shall be installed, operated and maintained in accordance with the CARB-Approved Installation, Operation and Maintenance (IOM) Manual for the Phil-Tite System as certified by Executive Order VR-101-X. Equipment shall be inspected quarterly and annually per the procedures identified in the CARB Approved IOM Manual. These inspections shall also apply to systems certified by Executive Orders VR-101-A to W. A copy of this Executive Order and IOM shall be maintained at each GDF where a certified Phil-Tite system is installed.

It is further ordered that equipment listed in Exhibit 1, unless exempted, shall be clearly identified by a permanent identification showing the manufacturer's name and model number.

It is further ordered that any alteration in the equipment parts, design, installation, or operation of the system provided in the manufacturers' certification application or documents and certified hereby is prohibited and deemed inconsistent with this certification, unless the alteration has been submitted in writing pursuant to the process for Executive Order amendments set forth in Section 18 of CP-201 and approved in writing by the CARB Executive Officer or his or her delegate. Any sale, offer for sale, or installation of any system or component without CARB's approval as set forth above is subject to enforcement action.

It is further ordered that the following requirements be made a condition of certification. The owner or operator of the Phil-Tite system shall conduct, and pass, the following tests no later than 60 days after startup and at least once every three (3) years after startup testing, using the following test procedures:

- TP 201.3, Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities (July 26, 2012),
- TP 201.1B, Static Torque of Rotatable Phase I Adaptors (October 8, 2003), and
- either TP 201.1D, Leak Rate of Drop Tube Overfill Prevention Device and Spill Container Drain Valve (July 12, 2021) or TP 201.1C, Leak Rate of Drop Tube/Drain Valve Assembly (July 12, 2021) depending on system configuration.

Shorter time periods may be specified in accordance with local district requirements. Notification of testing, and submittal of test results, shall be done in accordance with local district requirements and pursuant to the policies established by that district. Local districts may require the use of alternate test form(s), provided they include the same minimum parameters identified in the datasheet referenced in the test procedure(s). Alternative test procedures, including the most recent versions of the test procedures listed above, may be used if determined by the Executive Officer or his or her delegate, in writing, to yield comparable results. Testing the Pressure/Vacuum (P/V) Vent valve will be at the option of the local districts. If P/V valve testing is required by the district, the test shall be conducted in accordance with TP 201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves (October 8, 2003) and Exhibit 2.

It is further ordered that the Phil-Tite System shall be compatible with gasoline in common use in California at the time of certification, including E85 (85 percent ethanol/15 percent gasoline) for specific components listed in Exhibit 1. Any modifications to comply with future California gasoline requirements shall be approved in writing by the Executive Officer or his or her delegate.

It is further ordered that GDF installations permitted for dispensing E85 fuel shall be subject to a throughput limitation of 1.2 million gallons per year (100,000 gallons per month).

It is further ordered that the certification of the Phil-Tite System shall remain valid through June 1, 2025.

It is further ordered that Executive Order VR-101-W issued on November 8, 2023, is hereby superseded by this Executive Order. Phil-Tite System certified under Executive Orders VR-101-A through W may remain in use at existing installations up to four years after the expiration date of this Executive Order when the certification is not renewed.

It is further ordered that this Executive Order shall apply to new installations or major modification of the Phase I system of existing gasoline dispensing facilities.

Executed at Sacramento, California, this _____ day of _____ 2024.

Walter Ham Date: 2024.09.11 15:15:29

Walter Ham, Ph.D., Chief Monitoring and Laboratory Division

Attachments:

Exhibit 1 Phil-Tite Phase I Vapor Recovery System Equipment List

Exhibit 2 Installation, Maintenance and Compliance Specifications

Exhibit 3 Manufacturing Performance Standards and Specifications

Exhibit 4 Manufacturer Warranties

Exhibit 5 Below Grade Vaulted Tank Configuration Installation, Operation and Maintenance Manual









Products

Scott Brown, VP Sales & Marketing, VST (brown@vsthose.com)

More Color Options for VST Nozzle Scuffs

The VST ENVIRO-LOC™ ECO Dripless/Spitless Conventional Gas Nozzle has been a popular solution for many markets that are looking to reduce spillage at gas stations. More markets around the country have been talking to VST about adding this unique nozzle to their regulatory requirements. As the popularity of this product grows, so does the interest in expanding the scuff colors to accommodate specific marketing needs.

VST has expanded our options of nozzle scuff colors. This nozzle is now available with three color options – black, blue, and green.



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Products

Scott Brown, VP Sales & Marketing, VST (brown@vsthose.com)

More Color Options for VST Nozzle Scuffs

More Color Options for VST Nozzle Scuffs, continued

The VST ENVIRO-LOC™ EVR Balance G2 Nozzle has been a popular solution in California since the evolution of Enhanced Vapor Recovery

As the popularity of this product grows, so does the interest in expanding the scuff colors to accommodate specific marketing needs of the station owners.

VST has expanded our options of nozzle scuff colors by adding a few more choices. This nozzle is now available with five color options – black, blue, red, green, and gray.



VST-EVR-NBBK-2



VST-EVR-NBBU-2



VST-EVR-NBRD-2



VST-EVR-NBGN-2



VST-EVR-NBGY-2

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EVR Tips & Tricks

Doug Harty, Sr. Application Manager, VST (harty@vsthose.com)

ISD Negative V/L Results

One question I've been asked quite a few times is why technicians are seeing negative vapor collection results on balance ISD reports.

Some in the industry have claimed that negative V/L's were showing the existence of vapor leakage during fueling events on balance systems, even though you don't see this phenomenon on an assist site. That makes sense, except for the fact that balance sites also run at a vacuum, and air doesn't leak in; it leaks out.

The reality is that the flow of fuel into the fill neck of the vehicle contains air bubbles.

Air bubbles are captured in the fuel stream and go into the vehicles fuel tank, just like the current of a river. ORVR vehicles fill necks are basically a one-way device, fuel goes in, but air/vapor won't come out. This containment of air and vapor creates a vacuum at the interface area between nozzle and vehicle.

This vacuum just proves that our nozzle front end works and seals well.

So expect to see some negative V/L results on your ISD reports; it's completely normal.

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VST Training & Certifications

Susie McLaughlin, Manager, Training & Certifications (mclaughlin@vsthose.com)

You can now print your certification from the VST website!

If you are a VST Authorized Service Contractor (ASC) and are listed on the VST website, you can now access your certificate directly from the website.

To do so:

- 1. Click this link to access the ASCs listed on the VST website: VST ASC List on VST Website
- 2. Find your name on the list.
- 3. Click "Re-send Certificate" and the system will send the certificate to the latest email address you provided us.

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

Continued next page ...

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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	Level E - General Contractor
Level E1	CS2 USA GREEN MACHINE™ Electrical Install	Level E1 - Electrical Install
Level E2	CS2 USA GREEN MACHINE™ Vapor Piping Install	Level E2 - Vapor Piping Install
Level E3	CS2 USA GREEN MACHINE™ Start-Up Contractor	Level E3 - Start-Up Contractor
Level E4	CS2 USA GREEN MACHINE™ Service Contractor	Level E4 - Service Contractor
Level H	GM3 CS2A USA GREEN MACHINE™ General Contractor	Level H - General Contractor
Level H1	GM3 CS2A USA GREEN MACHINE™ Electrical Contractor	Level H1 - Electrical Contractor
Level H2	GM3 CS2A USA GREEN MACHINE™ Vapor Piping Contractor	Level H2 - Vapor Piping Contractor
Level H3	GM3 CS2A USA GREEN MACHINE™ Start-Up Contractor	Level H3 - Start-Up Contractor
Level H4	GM3 CS2A USA GREEN MACHINE™ Service Contractor	Level H4 - Service Contractor

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