

Fueling Connections

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A-to-Z AST Monitoring

SKS, Inc., finds the answer in SiteSentinel® iSite™ tank-monitoring technology

By Jason Kaple, Director of Marketing and New Product Development



OPW's SiteSentinel® iSite™ ATG system was installed on 32 ASTs at SKS Oil's bulk-lube storage facility.

To some people, SKS, Inc., Escondido, CA, is the last of a vanishing breed. The company is a bulk lubes and fuels distributor; operator of commercial fueling stations in the Pacific Pride network; and an installer and servicer of fuel equipment for end-users. Simply put, there are not too many firms that offer their clients a list of services that varied anymore.

“Basically, we’re a full-line jobber, including maintenance and equipment service, and there’s not too many of us left; a lot of people have chopped those maintenance and equipment services,” explained Newell Bowden, Operations Manager for SKS, Inc. “We’ve maintained our technicians in the equipment department because we need the manpower for our own use, as well.”

Ironically, while SKS is one of the last A-to-Z fuel, lube, equipment, maintenance and service providers left, at least in the Southern California market, the company has had great success in inventory management for its lubes business by turning to a revolutionary tank-gauging and -monitoring

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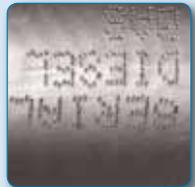
Embracing Oracle ERP
Order fulfillment more streamlined with new software program



In Compliance
Modifications to FT500™ make system ADA-compliant



The Mark of Success
iSite™ Density Sensors now being labeled by pin-marking machine



High and Dry
Canadian distributor alerts customers to benefits of iSite™ for AST monitoring



High and Dry

SiteSentinel® iSite™ enables Hi-Sharp Products to offer the best in AST-monitoring systems

By Jason Kaple, Director of Marketing and New Product Development

To paraphrase an old public-service announcement: “It’s 10 p.m. Do you know what the product levels are in the aboveground storage tanks at your bulk-storage facility?” For many bulkplant operators, the answer to this question would be a tentative (or wishful), “I think so.”

“What you’re generally doing is taking a giant tape measure and measuring the height of the product,” explained Ed Ventura, Operations Vice President for Hi-Sharp Products, Inc., Toronto, Canada, a petroleum-equipment distributor that has been servicing Eastern Canada for 20 years. “With 250,000-gallon tanks, if you’re off by an inch when you measure that can be hundreds of gallons off in recorded inventory. That makes a big difference in what you actually have and what you think you have.”

Therefore, accurate monitoring of product levels is a crucial concern at bulk-storage facilities since these plants are commonly used as collection points in the petroleum-products supply chain. That means that



The iSite ATG system has the capability to monitor ASTs as tall as 50 feet and with capacities as large as 500,000 gallons.

various fuel products—from gasoline (regular and premium) to diesel to even biofuels—are constantly arriving and departing, oftentimes by a variety of means, including pipeline, barge, railcar and truck. There is also the potential for theft, as well as tank leaks that may go undetected for hours or days if the proper monitoring equipment isn’t being used.

Recently, a pair of customers who operate bulk-storage facilities in Canada contacted Ventura. They had the common lament: the systems they were using to monitor their AST product levels just weren’t accurate enough. This time, Ventura had a new solution to offer them: OPW Fuel Management Systems’ SiteSentinel® iSite™ Automatic Tank Gauging System.

“Until the creation of the iSite, there was not a monitoring system out there that adequately did 25- to 50-foot tanks,” said Ventura. “There were some tank-gauging systems out there that worked on ultrasound, but they weren’t reliable.”

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A-to-Z AST Monitoring (Continued from page 1)

system that offers everything from A to Z to its end-users. That system is the SiteSentinel® iSite™ Automatic Tank-Gauging System from OPW Fuel Management Systems.

A key component in SKS’ operations is its bulk-lube storage facility, an operation that features a mix of 32 horizontal and vertical aboveground storage tanks, some of which are as tall as 15 feet, at a tank farm in the Miramar area of San Diego, about 25 miles due south of SKS’ Escondido headquarters. SKS purchased this site a number of years ago, but it was only in late 2007 that it began experiencing some problems with the tank-gauging system at the facility.

“The tanks had commercial gauges in them and our operation continued using those tape-style or refinery-style gauges, but over the years, some of them failed or we just lost faith in their accuracy,” said Bowden. “Beyond that, as lube products became more and more expensive, we started looking harder at more accurately monitoring and controlling our inventory. Any writeoffs of losses of inventory we might have were becoming more and more unacceptable, so inventory management and reconciliation was more and more critical.”

Turning to Paul Nelson, Regional Manager for OPW Fuel Management Systems, Bowden was introduced to the iSite Automatic Tank-Gauging System. The iSite is built on Windows® technology that provides the operational advantages that site operators need to ensure that their sites are being managed as efficiently and effectively as possible. The iSite has been developed to offer easy, low-cost installation; easy-to-manage user interfaces; highly accurate and precise tank-monitoring peripherals; easy reconciliation of inventories and deliveries; a variety of probe and sensor options; tracking of regulatory-compliance reporting; an easy-to-read LCD touch-screen with an icon-based menu structure; and the latest in communications technology that allows access to the system from anywhere in the world.



SiteSentinel®
iSite™
Automatic Tank Gauge

For SKS’ specific application, the iSite is able to handle a facility with 32 tanks, as well as offer 15-foot probes. In his search for a solution, Bowden had found that some other systems can manage locations with no more than 12 tanks equipped with 10-foot probes. The iSite is also more robust in its information gathering and configuration options than competitive systems.

“We had the iSite installed in early 2008 and it’s exceeded our expectations,” said Bowden. “Once we got it configured to the way we needed it to be, it’s been trouble-free ever since. The data management and configuration are super easy, maintenance is super easy, it’s super flexible in the amount and type of information you can push out of it, it’s highly customizable, and the alarm capabilities are far better than others. We’re also continuing to develop it as time goes on. The latest thing we’re doing is to provide pump shutdown in case of an overflow, or near-overflow. Overfills in ASTs are a very costly proposition and we want to use it for overflow protection because it will alert us right away when we might be approaching an overflow event.”

With three bulk lube and fuel storage locations also in the SKS system, Bowden easily foresees a day when the iSite will be utilized at those sites, as well.

“Should we find a need at another location for automatic tank gauging, there wouldn’t be any question that the iSite would be my choice,” he said. “We’re a direct-line dealer and service center for lube and fuel products, and we’re also an end-user. As an end-user, it’s a very simple piece of equipment to operate and manage. It’s very, very user-friendly, and because it’s a Web-application type of device, you can do it from anywhere.” ■

According to Ventura, the key to the iSite's standard-setting operation is the AST Flex Probe. This probe incorporates the same magnetostrictive technology that is used to monitor underground storage tanks and is made of flexible, petrochemical-friendly Kynar (PVDF) that can easily be installed in vertical ASTs up to 50 feet high. It can also utilize an optional water float for enhanced water detection. The heart of the iSite is the "best in class" iSite Console. Featuring a 15-inch color LCD touchscreen display, all of the critical information found on the iSite Console is presented in a cockpit-style view, allowing the user ready access to inventory, delivery, compliance and general site status—all in real-time and without the need for time-consuming menu navigation. The console can be installed anywhere the user wants or needs it—back office, front of building, wall-mounted, desktop, at home, or miles away from the installation.

The information that appears on the iSite Console is transmitted from the probes in the ASTs via the VSmart Module. The VSmart can be wired to the iSite Console, or communicate wirelessly, allowing the site operator the chance to configure the monitoring application in the way that best serves his facility. The easy wiring (or wireless operation) of the VSmart Module also makes life easier for the plant operator during installation.



The iSite VSmart module allows AST operators to connect wirelessly, eliminating the need to break concrete.

antenna from the VSmart to the controller. This saves time and money."

The iSite's Internet capability also allows site operators to set up alarms that can be sent via e-mail when exception events occur. For example, if a tank began leaking at midnight, the leak might not be discovered for six or seven hours, leading to a huge loss of product and potential environmental and personnel safety issues. However, with the iSite the operator can set conditions that monitor product level and will set off an alarm when the certain parameters are met.

The bottom line is that the iSite system is completely programmable by the individual site operator to meet the needs of his site, or multiple sites. After having seen the iSite system in operation, Ventura would have no hesitation is suggesting its use to future customers.

"The big thing is reconciling your products, making sure what goes out in your trucks is being recorded, and the iSite's accuracy is much better for that than reading off a stick," he said. "I highly recommend the iSite if you have a bulkplant." ■

The Mark of Success

One of the key innovations that has helped make the SiteSentinel® iSite™ Automatic Tank Gauging System the

new standard in tank monitoring is the Density Measurement Sensor (or Float). Installed on the Magnetostrictive Probe, the Density Sensor is part of a single in-tank probe assembly that continuously measures product, water and density levels and records even the smallest changes in product quality within the API density range; these density readings can be configured to either nominal or temperature-corrected density. These fuel-density reports can then be displayed on the iSite's Controller or exported to an internal display.

When the Density Sensors are manufactured, they are calibrated and their density constants are determined. Each sensor has an A and B density constant for gasoline and an A and B constant for diesel fuel. Once the density constants are determined, they are printed on three different labels—one label on the box in which the sensor is shipped, one inside the shipping box for operator use and a third attached to the sensor itself. A label is placed on the float so that when it is removed from the storage tank, it can be read and the density constants verified. However, this label can become susceptible to degrading over time and often can not be read when removed from the tank, which would not allow the operator to match up the density constants to the label printed on the box. This is especially crucial if a site is employing multiple Density Sensors in multiple storage tanks.



OPW's Density Measurement Sensor shown here with imprinted information.

To rectify this problem, OPW FMS has begun using a pin-marking machine that marks the density constants directly onto the plastic exterior of the Density Sensor.

These pin markings will not fade or degrade over time, so if the operator needs to pull the sensor out of the tank at any time, the density-constant information will be easily identifiable and readable, easing concerns when the tank or probe needs maintenance. ■



Pin-marking machine.

FIT500™ Redesigned for ADA Compliance



OPW Fuel Management Systems has completed a number of design improvements to the FIT500™ Fuel Control System. These design changes enable the FIT500™ to meet the maximum height requirement of the Americans with Disabilities Act (ADA). ADA states that the maximum height of user components must be 54-inches from grade, and with the recent modifications the FIT500™ is now ADA-compliant. In addition, these design improvements reduce the overall weight of the unit by reducing the gauge of sheet metal used for sections of the pedestal.

To attain ADA compliance, the height of the pedestal was reduced by six inches. The front panel was also modified with a 10-degree angle added to the bottom lip that engages the pedestal. This allows for easier installation and removal.

If you have any questions regarding the new ADA-compliant FIT500™, please contact the Tech Support Group at 877-OPW-TECH (877-679-8324) or e-mail info@opwfms.com.

OPW Transitions to Oracle ERP

On July 31, OPW Fuel Management Systems transitioned to an Oracle ERP (Enterprise Resource Planning) system for order fulfillment. Oracle ERP is a software solution that acts as an organization-wide control center. The system collects status information and progress reports from various sources and makes them available to other departments. This information is updated by the users in real-time and accessible at anytime to anyone who needs it.



ORACLE®

By converting to the Oracle ERP system for order fulfillment, the ordering, processing and delivery tasks will be streamlined. There will be some changes on the distributor end with the paperwork received having a different appearance from the previous order-fulfillment system. However, the information in the paperwork will be the same and include sales order acknowledgement, a packing list and an invoice.

Any questions pertaining to the new Oracle ERP order-fulfillment system can be directed to OPW Customer Service at (708) 485-4200.

We'll Be There

Below is the current list of major Industry Trade Shows that OPW-FMS will be attending in the upcoming months.

Automechanika Frankfurt

September 14-19
Frankfurt, Germany

Pacific Oil Conference

September 20-22
Grand Sierra Resort & Casino
Reno, Nevada

NACS/PEI Show 2010

October 5-8
Georgia World Congress Center
Atlanta, Georgia

APEA Conference

October 14
Ricoh Arena
Coventry, England

Autocomplex

October 27-29
Expocentre Krasnaya Presnya Fairgrounds
Moscow, Russia

Training and Support

Training seminars and streamlined support services keep service techs on the cutting edge



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OPW Fuel Management Systems has a goal of making its service technicians more effective through periodic training and re-certification processes. To meet that goal, FMS schedules a year-long series of virtual and on-site training seminars.

Virtual seminars, which usually are held two hours at a time over a two-day period, cover a variety of FMS systems and products and are offered via the Internet through a WebEx connection. On-site seminars are held throughout the country, generally once a month. These intensive training sessions are usually scheduled for three days with a total of 24 hours of intense instruction offered.

For more information on any of OPW Fuel Management Systems' training seminars, and a look at the upcoming schedule, please visit www.opwglobal.com and click the "Service Seminar Schedule" link in the Tech Support section.

In conjunction with its training efforts, OPW Fuel Management Systems recently teamed with OPW Fueling Components and OPW Fuel Containment Systems to form the OPW Technical Support Group. This streamlines the customer-service process by allowing technical support and service questions to be answered through one dedicated technical service assistance number: 877-OPW-TECH (877-679-8324). ■

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