

Integrated Terminal Management Solution Meets Critical Inventory Control and Safety Requirements

Case Study

“Honeywell’s comprehensive terminal management and inventory control solution will help us maximize our operations with accurate and on-time information, precise measuring technologies, and improved safety.”

– Alphonso Bowe, Managing Director, Triton Global Petroleum Limited

Background

Accurate inventory is critical to terminal operations. However, the dynamic nature of the industry can make it difficult to deal with complex product movement and custody transfer issues. This can increase operational costs, affect customer service and ultimately impact the bottom line.

Like other operating companies, Triton Global Petroleum Limited requires an effective terminal management solution. They need a complete, integrated automation and control system that can manage product receipts from ships, customer accounting, inventory, truck dispatch, and safety instrumented system (SIS) functions.

Triton is a worldwide supplier of aviation fuel to resellers, commercial aircraft operators, and government and corporate aircraft operators. The company offers a quick and easy way to locate the best fuel price available.



Triton Global Petroleum operates a multi-user terminal with automated inventory controls.

Triton’s new Clifton Pier Aviation Fuel Terminal receives, stores and delivers jet fuel to customers in The Bahamas. The facility is comprised of seven (7) jet fuel tanks with a total capacity of 2,315,900 gallons. This capacity is an operational capacity.

Challenge

Triton Global Petroleum sought to address operational issues that can lead to product transfer delays, low throughput, and the resulting damage to profitability. The specific challenges facing the Clifton Pier terminal included:

- Reducing uncertainty caused by shipping schedules, asset availability, etc.
- Ensuring accurate gain/loss accounting
- Improving traffic management
- Eliminating measurement ambiguity
- Optimizing Health, Safety, Security and Environment (HSSE) coverage

Alphonso Bowe, managing director for Triton, commented, “At our new terminal, we wanted reliable, accurate measurement of product inventories with capability for density measurement integrated with our terminal management system. The terminal management system needed to be modular, scalable and configurable to meet our current and future needs serving customers like United, American Airlines, British Airlines, etc. Our goal was to put the right information in front of the right people, at the right time, to help them make the best choices.”

Triton identified a number of key requirements for an advanced terminal management solution. They ranged from eliminating manual measurement of product level and density, and thus ensuring overfill protection, to automatic alarming of abnormal situations, an automated order-to-cash capability, reporting for operational and business support decisions, and product reconciliation.

The main goal for the Clifton Pier facility was to run a multi-user terminal with automated inventory controls that were reliable and robust.

Today, the success of any liquid bulk or distribution terminal operation depends on how well it meets key business objectives. The primary concern is maintaining a high level of safety, inventory control and trouble-free operation.

About Honeywell

Terminal Operation Solutions

Honeywell's Terminal Operation solutions help customers respond quickly to market conditions, while ensuring accuracy and safety. Real-time inventory monitoring and precise custody transfer protects margins, while advanced software helps manage assets effectively and improve personnel and equipment effectiveness.

Solution & Benefits

Triton Global Petroleum considered various alternatives for meeting its overall terminal management needs. The company decided upon Honeywell due to its advanced technology, proven track record and broad industry acceptance.

Honeywell's system helps in managing a terminal's entire operations to address crucial issues, deliver greater cost efficiency and increase lifecycle support. It monitors and controls all critical processes to ensure smooth and safe operation, such as handling multiple products and regulatory requirements. The system also offers the benefits of a centralized solution, including monitoring, management and reporting processes to supply accurate data to all stakeholders.

The Honeywell solution consists of:

- Experion® PKS Distributed Control System (DCS) providing powerful features such as alarms, events and notifications, trending and interfaces to other devices
- Honeywell Experion Terminal Manager to automate product receipt from ships, product storage, inventory management and truck loading
- Experion eServer delivering secure access to real-time and historical process data
- C300 controllers providing robust process control for the Experion platform
- Honeywell Enraf automated servo-based tank gauging and overfill protection compliant with API RP 2350.
- Truck loading custody transfer metering skid using Honeywell Enraf MSC-L Preset
- Honeywell fire and spill detection system

Triton now has an effective terminal management system that includes terminal automation for process controls and business administration to facilitate the enterprise operation. It is also assured of improved HSE performance. Accurate and secure inventory data

keeps operations safe, protecting personnel, assets and the environment. It prevents overfills and potential disasters. Intelligent, programmable alarm handling helps operators react quickly to mitigate and avert accidents that could otherwise cause damage and downtime.

Results

With the Honeywell system, Triton personnel have an integrated terminal automation solution for product receipts through ships, as well as product inventory and dispatch through trucks combined with reliable safety features. The system provides accurate flow measurement for tank truck filling, high-accuracy product inventory measurement and stock reconciliation, automated quantitative measurements of product density, workflow automation for tank truck filling, and abnormal situation management using fire & spill detectors.

In addition, Triton has implemented an integrated and open platform system for greater visibility of users and customers, with flexibility in responding to changing business requirements. The company can also operate with the proven Experion platform for a longer product lifecycle.

Looking to the future, Triton plans to implement similar terminal automation systems at the Lynden Pindling International Airport Terminal in Nassau, and the Freeport Bahamas Marine Terminal in Freeport.

Conclusion

Nowadays, ensuring that a terminal operates in a secure, safe and well-planned manner is imperative for business success. Terminal owners need to accurately monitor and control their inventory, manage custody transfer, and streamline regulatory and financial reporting.

With the right approach to terminal management, operating companies like Triton Global Petroleum can increase efficiency and productivity through enhanced automation. They can also gain the visibility and control to confidently meet environmental, safety and legal metrology standards and boost performance.

For More Information

Learn more about Honeywell's Terminal solutions, visit www.honeywellprocess.com or contact your Honeywell Account Manager.

Honeywell Process Solutions

1250 West Sam Houston Parkway South
Houston, TX 77042

Honeywell House, Skimped Hill Lane
Bracknell, Berkshire, England RG12 1EB UK

Building #1, 555 Huanke Road,
Zhangjiang Hi-Tech Industrial Park,
Pudong New Area, Shanghai 201203

www.honeywellprocess.com

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