

# Measure and Automate Bulk Fuel Storage

## At Tank Farms and Military Fuel Points



## Tank Gauging & Bulk Fuels

*The tasks you need to undertake at your bulk fuels facility are expanding in complexity, for example you need to manage inventory efficiently so that you can accurately report your daily stock position to the enterprise. But you also need to comply with increasingly demanding environmental safety standards, which often means employing new technologies and rigorous staff training.*

### A Single System for Bulk Fuels Management

FuelsManager® Defense (FMD) provides real-time operational information for your entire tank farm. It is a single measurement, control and automation solution you can rely on to monitor key information, manage your bulk liquid inventories and react quickly to changing conditions across your facility. FMD performs the following critical tasks:

- Provides an intuitive interface to display measured values from tank gauging systems and control functionality for pumps, valves, and other automation equipment.
- Utilizes your existing tank gauging instruments to provide tank leak detection, overfill monitoring and safety alarms.
- View and track all product movements, totals and discrepancies, including tank-to-tank transfers, shipments, receipts and water drains.
- Provides a wide variety of inventory reports and automatically updates the FMD Accounting application to enable timely and accurate fuel reconciliation.



### A Window on Your Facility

FMD's tank displays provide inventory management information relating to a single tank, such as measured data collected from tank gauges; calculated information; level and overfill alarm settings; and tank status. Tank Group displays aggregate data relating to multiple tanks to provide clear, concise overviews for groups of tanks or for your entire facility.

### Alarm and Event Management

Unlike a general SCADA system, FMD provides preconfigured alarm settings for each tank; all you need to do is enable them to start monitoring your facility. FuelsManager can integrate with, and notify other systems (PLC or DCS) of events, so that the other systems may take appropriate control and automation actions. Alarms can be shown on SCADA and tank displays using graphics and animations. The system supports up to 32 alarm groups and four alarm priorities, each with its own color and audible attributes.



► FMD offers new features for integrating truck rack operations, such as access control, security, loading/unloading, order entry, transaction management, and daily inventory reconciliation, and accounting.



► Varec also offer a wide variety of support services, such as installation, maintenance, compliance consulting and operator training.

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### Integrate Tank Gauging & Instrumentation

Open communications standards allow seamless integration of multiple technologies - tank gauges, instrumentation, or field devices for collection of process data, remote instrument configuration, and control

### Inventory Management

View all measured, and calculated inventory variables, alarms, and status for a single tank or multiple tanks on concise graphical or tabular displays

### Alarm & Event Management

Continuously monitor your system to check for conditions that may require your immediate attention. If an alarm is triggered, users are automatically provided the relevant information, and tools needed to manage the situation in real-time

### Inventory Reporting

Record, and review daily activities in a clear, and concise manner; reports can be generated from historical or live data, and printed as required, or exported for use in standard business applications

### Inventory Trend Analysis

Gain a greater insight into operations across your entire facility by plotting trends from real-time or historical data

### Tank Farm Automation & Control

Automate your facility, and reduce the amount of time your operators spend in the field by using industry standard open communication interfaces, and FuelsManager's data point architecture

### Inventory Reconciliation

Accurately track, manage, reconcile, and report book vs. physical inventories by manager, owner, and product on a daily, weekly and monthly basis

### Customer & Resource Information Management

Configure, store, and manage all operational data, such as customers, company, driver, card, personnel, allocations and equipment in a single system that allows total visibility, simplified tracking, activity alerts, and security

### Order Tracking & Management

Utilize a flexible order system with built-in event workflows, such as automated BOL printing to simplify owner, operator, driver, and customer operations. Interface to corporate networks, standardize data, and share transactional data with ERP systems

### Driver Access & Loading Control

Control facility access, and facilitate efficient, safe, and secure loading operations by interfacing to the Varec Driver Entry Terminal or 3rd-party automation and safety equipment, such as electronic presets, ESD and grounding systems, or load rack control equipment. TWIC identity verification standards compatible

### Product Movement Tracking<sup>2</sup>

Monitor bulk product transfers to and from your facility or from tank to tank within your facility

### Throughput Calculations

Perform product throughput analysis and estimate emissions for US compliant EPA Title V permits

### Leak Detection

Monitor your facility for leaks, and alert your operators to potential environmental hazards by interfacing to 3rd-party detection systems or use tank level data from your high-accuracy tank gauges

