



Tank Gauging & Inventory Management Solutions

Automation solutions for oil & gas, defense and aviation applications

Varec[®]

FuelsManager[®]

OIL & GAS

FuelsManager[®], Varec's industry-leading software is available in four editions: Standard, Professional, Terminal Automation and Enterprise. This allows you to choose an edition that suits the level of functionality your operation requires.

Available features include:

- Tank gauging
- Alarm management
- Inventory management
- Reporting
- OPC Interface
- Real-time SCADA
- Systems integration
- Configurable user interface
- Extended networking
- Load rack automation
- Inventory reconciliation
- Order entry and management
- Product movement tracking
- SAP integration
- Product movement tracking
- Leak detection
- US EPA Title V
- Automated data output
- Web server

Tank Gauging for Facility Operations

Using features, such as configurable tank displays and powerful alarm tools, your operators are easily able to monitor key information, efficiently managing your bulk liquid inventories and reacting quickly to changing conditions across your facility.

Real-time or Historical Activity Data Analysis

In addition to providing real-time information, FuelsManager archives all data for historical use in tracking trends, performing calculations and reporting inventories. This allows your operators to review daily activities across your facility in a clear and concise manner.

Intuitive SCADA Control & Automation

FuelsManager's SCADA displays provide a true representation of your facility's specific locations, processes and features. Field devices can easily be integrated, data can be input, acquired, validated, displayed or provided to other systems to bring complete automation capabilities directly to your operator.

Configurable, Real-time Product Movement Tracking

FuelsManager's product movement tracking system automatically captures and archives product movement data, allowing your operators to reconcile the movement after it has completed and display/print movement tickets and produce reports detailing the actual amounts of product transferred.

Integrated Tank Emissions Reporting

FuelsManager is able to provide product throughput analysis and estimated emissions for a US compliant EPA Title V permit.

3rd Party Certified Leak Detection Analysis

FuelsManager can monitor underground storage tanks at tank farms and pipeline facilities for leak conditions and alert you to a potential environmental hazard.

Efficient Loading Operations

FuelsManager supports truck, barge and rail racks at all crude, refined product, LPG, chemical, fertilizer and asphalt facilities. If you operate a single, manually-operated rack or multiple facilities with advanced electronic control equipment, FuelsManager will improve the efficiency of your loading operations.

Enterprise Integration

FuelsManager provides a corporate-wide overview of inventories, plant status and reports via the Internet/ Intranet. It also enables remote users and customers to access data relevant to their business operations.

Real-time System Configuration

Operators and administrators interact with FuelsManager via a standard Microsoft Windows[®] interface and a standard browser-based user interface. Any configuration changes that streamline your operations can be completed as your operators work, without the need to shut down or restart the system.



Tank Gauge Interfaces

Data acquisition, open systems architecture and host communications



- Easily expandable through the use of plug-in modules
- Reduces cost by integrating all analog, digital and serial data inputs and outputs
- Each module scans all connected tank gauges for measured data, such as level, temperature, density, water level and alarms
- Connects to most types of sensors or actuators and to PLCs and DCS computer systems

Radar Tank Gauges

Level measurement of liquids in bulk storage tanks for custody transfer (± 1 mm) and inventory control (± 3 to 10 mm) applications



- Continuous, non-contact level measurement with no moving parts, provides extremely low maintenance
- Cost effective installations - choose between 2- or 4-wire intrinsically safe technology
- Easy on-tank commissioning, diagnostics and operation via menu-driven alphanumeric display

Servo Tank Gauges

Measurement of level, interface level, water bottom and density of liquids in bulk storage tanks



- Custody transfer accuracy ± 0.03 " (0.7 mm)
- Integrated level alarms
- Integrated configuration and operation - no additional handheld devices required
- Direct connection of ancillary devices, such as spot or average temperature, water bottom and tank side display

Complete Range of Products

Trust Varec for all aspects of tank farm instrumentation and automation covering design, integration, installation and servicing of gauging, data acquisition and control systems.



Float & Tape Tank Gauges

Simple and reliable automatic tank gauging



- Level accuracy of 0.2-1" inch (4-25 mm)
- Continuous level measurement with no power required - large, easy-to-read display
- Suitable for virtually every tank gauging application
- Complete range of genuine Varec tank gauge accessories available for atmospheric and high pressure installation



Wireless Communications

Utilize reliable wireless data communications for tank gauging applications



- Designed for communications between your instruments and an interface device
- Variety of communications, including Bluetooth, 900 MHz spread spectrum, IEEE 802.11 b/g and cellular
- Supports the complete range of Varec tank gauges or third-party manufactured gauges
- Simple, low cost installation - AC or DC operation

Tank Side Monitors and Displays

Convenient monitoring, integration and control of all tank sensors



- Intrinsically safe power supply, communication and grade-level display for Varec radar tank gauges
- Connect up to 6 HART devices via intrinsically safe 2-wire communications
- Integrated configuration and operation - no additional handheld devices required
- Approved for use in explosion hazardous areas

Float & Tape Tank Gauge Transmitters

Integrate a float & tape tank gauge into your inventory management system



- Varec supports all the major manufacturers' digital tank gauging protocols
- Simple calibration at the gaugehead - no additional handheld devices required
- Precision designed and manufactured absolute encoder utilizes gold plated reflective tracks for optical level measurement
- Die-cast aluminum, explosion-proof housing FM approved for use in hazardous areas

Level Switches

Increase the level of safety at your facility with an independent level device for high level alarms and overfill protection



- Varec offers a choice of cost effective devices, including a vibration switch, displacer switch or radar tank gauge
- Peace of mind with intelligent self checking and redundancy
- 2-wire, radar technology offers continuous measurement for primary alarm and secondary level

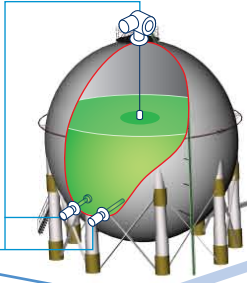
Temperature and Water Bottom Sensors

Transmitters, spot and average temperature sensors and water bottom probes can be combined and configured for your specific requirements

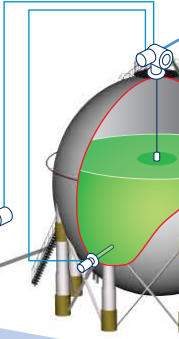


- Intrinsically safe device, allowing for the safest electrical configuration possible
- Universal configuration - compatible with other manufacturers' products
- Variety of process connections and cable entries allow a wide range of compatibility, easy installation and worldwide classifications

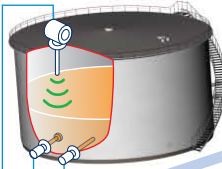
Microsoft
GOLD CERTIFIED
 Partner



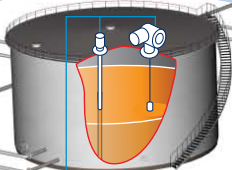
Hybrid (Servo)
 Tank Gauging



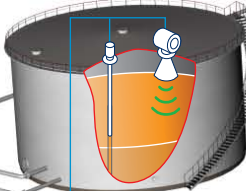
Radar
 Secondary
 Overfill
 Protection



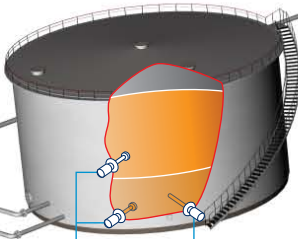
Hybrid (Radar)
 Tank Gauging



Servo
 Custody Transfer
 Tank Gauging



Radar
 Custody Transfer
 Tank Gauging

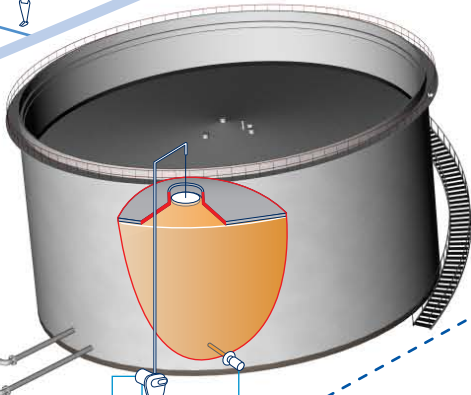


HTG
 Tank Gauging



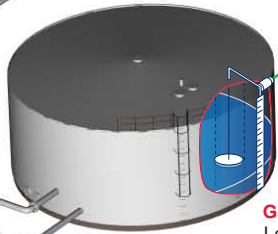
FuelsManager

Annunciator
 Alarm Monitoring



Float & Tape
 Wireless
 Tank Gauging

Displacer
 Independent
 High Level
 Alarm

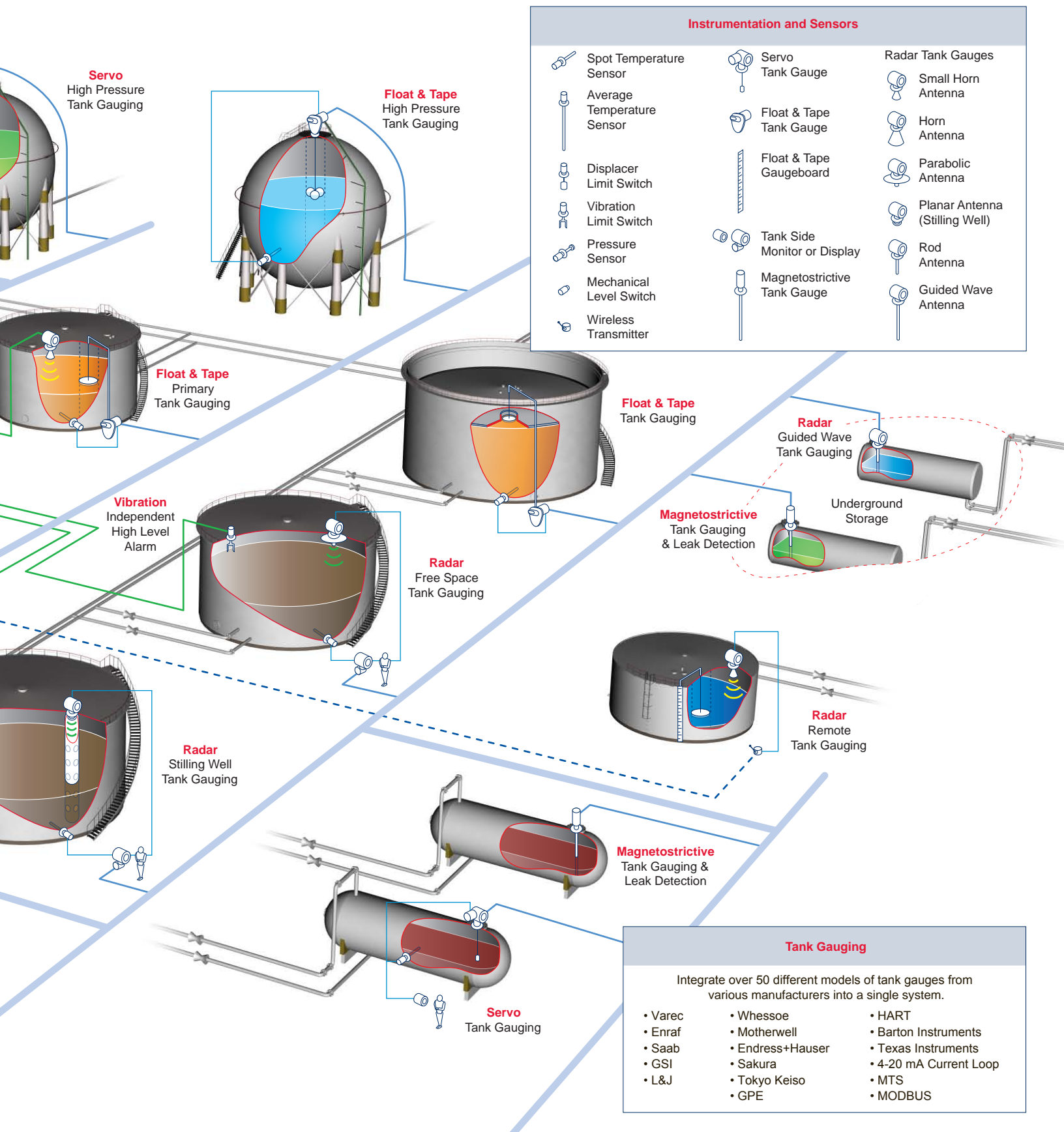


Gaugeboard
 Level Alarms

Communications

- Tank Gauging Loop Communications
- Tank Side Communications
- Wireless Communications
- Independent Communications

Multiple Technologies Single System



Measurement, Control and Automation

Oil & Gas

Varec has been a leading innovator in the petroleum and chemical sectors for over eight decades – delivering automated systems and professional services for most major oil companies worldwide. FuelsManager Oil & Gas is an integrated suite of software applications specifically designed for terminals, refineries and petrochemical plants, integrating with Varec's full product line of automatic tank gauging (ATG) instrumentation, communications interface devices and wireless products to deliver a complete solution.

Defense

Varec provides mission critical, commercial off-the-shelf solutions that are essential to air, ground and naval fueling applications. FuelsManager Defense manages and controls all bulk liquid assets in the dynamic environment of a military or government owned fuels facility, including functionality for transaction and inventory management, SCADA, tank gauging, dispatch and ADC.

Aviation

Varec is a worldwide leader in fuels management systems, providing performance solutions for commercial aviation fueling requirements. Varec's FuelsManager Aviation is an integrated, scalable solution – from simple fuels accounting to a fully automated airport – utilizing the latest mobile computing, web-based services, wireless communications and paperless ticketing technology.

Go to varec.com for more information.

Corporate Headquarters
5834 Peachtree Corners East
Norcross, GA 30092
Tel: +1 (770) 447-9202
Toll Free: +1 (866) 698-2732
Fax: +1 (770) 662-8939

The Varec logo is written in a white, stylized, cursive font with a registered trademark symbol (®) at the end.