**GILBARCO VEEDER-ROOT**

ILLUSTRATIVE PICTURE

# TLS-350 • TLS-350R
## Automatic Tank Gauge System

The TLS-350 and TLS-350R were developed with the same technology and have the same operational features and functionalities, such as reporting, leak detection and printed and audible alarms. However, the TLS-350R also allows reconciliation of the gas station fuel inventory, eliminating errors in the process and saving time and money.

The TLS-350R is an integrated system that automatically collects dispensing data (pumps), fuel inventory and throughput data and reconciles the totals at the end of each shift, day or user-defined period, through communication with a hub of pumps from any manufacturer/brand.

Oanother benefit of the TLS-350R is the AccuChart® software, which automatically calibrates and maps the fuel tanks using complex algorithmic calculation which are fully transparent to the user. This allows adjusted and accurate tank gauging, regardless of possible variables and/or tank tilt after their installation.

It is possible to upgrade the TLS-350 to TLS-350R. Both systems also have modular structure and can be expanded to monitor the growth of your business and/or any change in environmental legislation.

The TLS-350 snd TLS-350R systems are equipped with a self-checking circuit that oversees correct operation of its probes and sensors, warning the gas station operator through alarms about any occurrence.

### Main Features:
> Continuous product inventory metering. Each console supports 8 to 32 probes.
> Leak detection testing
> Leak detection in tanks' interstices
> Leak detection in pump, tanks and filters sumps
> Detection of fuel vapor in monitoring sumps
> Groundwater fuel detection
> Detection of leaks in supply lines with submersible pump (with installation of line sensors)

### Technical Features
> RS-232 data communication, with option for TCP/IP
> Output and input relays
> Printer integrated to the console or through interface for remote printing
> Fax/modem interface which allows autodialing from the console to the gas station office and vice versa (optional )
> Programmable alarms
> The entire operation, programming, and reporting are in Portuguese

### Inventory Management Coment Reports
> Fuel volume
> Last delivery volume

> Tank ullage
> Volume corrected by temperature
> Fuel level
> Water level and volume
> fuel temperature
> Tank identification
> Fuel identification
> Leak detection
> Date and time for control

The reports can be read on the display of the console or printed on a local or remote printer that is connected to the gas station computer through a RS-232 serial port.
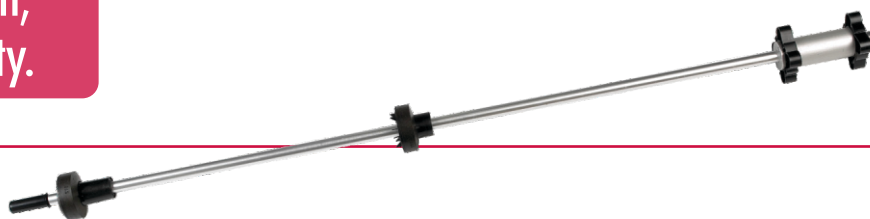
### Alarms
Self-checking circuit that oversees correct operation of its probes and sensors, warning the gas station operator through alarms on:
> High fuel Level
> Low fuel Level
> Minumum fuel inventory (recorder level)
> Overfill
> Water level
> Sudden fuel loss
> Leaks

INMETRO OCP-0029

ABIEPS

**Tradition, reliability.**

**Accurate information.**

# Veeder-Root's Magnetostrictive Probes

Veeder-Root's Magnetostrictive Probe, a by-word instate-of-art gauging technology, was designed to measure fuel inventory of underground storage tanks and aboveground storage tanks (upon request) that require maximum accuracy and reliability for inventory management.

The probe detects water and measures the tank temperature. These functionalities combined with high accuracy of the magnetostrictive principle ensure a reliable measurement of the existing fuel inventory in the tank. This probe can detect leaks of 0.38 l/h or 0.76 l/h in leak detection tests, with 95% probability of valid alarms and up to 5% of false alarms.

Designed to be compatible with all types of fuel, the Magnetostrictive Probe is equipped with a monitoring circuit, a Veeder-Root exclusive device that ensures the probe integrity and operation, informing the gas station about any failure.

**Main Features:**

> Stainless steel body for all types of application.
> Operating temperature: -40°C to 50°C.
> Reduced probe canister diameter with adjustable spacers for quick and easy installation in 2", 3" or 4" pipes.
> For special fuel measurement, verify probe compatibility.

| Models | Leak Detection | Temperature Measurement | Water Measurement |
|--------|----------------|-------------------------|-------------------|
| Mag 1 | Yes - 0,38 l/h rate | Yes | Yes |
| Mag 2 | Yes - 0,76 l/h rate | Yes | Yes |
| Mag 3 | No | Yes | Yes |

**Precision, safety and control.**

**Water and hydrocarbon detection.**

ILLUSTRATIVE PICTURES

# Veeder-Root's Sump and Interstitial Sensors

**SUMP SENSOR**

The Veeder-Root Sump Sensor detects the presence of liquids in the containment sumps, ensuring your gas station and the environment protection. It is easy to install and compatible with TLS-450, TLS4, TLS-350R, TLS-350, ProPlus and TLS-300 automatic tank gauge systems.

This sensor can be installed in fuel tanks sumps, pump sumps and filter sumps.

**Main Features:**

> Composition: PVC pipe Schedule 40
> Type: magnetic and hermetically sealed
> Eletric power supply: intrinsically safe, providaded y the Veeeder-Root systems
> Contact supply: 15 watts
> Operating temperature: -40°C to +70°C
> Storage temperature: -40°C to +70°C
> Switch stroke: 22,2 mm for contact
> Each sump sensor is supplied with an assembly kit

**INTERSTITIAL SENSOR FOR DOUBLE WALL FUEL TANKS**

The Veeder-Root Interstitial Sensor detects the presence of liquids in the interstice of double wall fuel tanks, also known as jacketed tank. Liquids in the interstice can indicate a fuel leak, which is very dangerous.

**Main Features:**

> Operating temperature: -20°C a +70°C with hydrocarbons; 0°C a 70°C with unfrozen water
> Storage temperature: -40°C a +75°C
> Sensor dimenstions: 63,5 mm hight x 38,1 mm diameter
> Cable lenght: 5 meters

Gilbarco Veeder-Root reserves the right to change one or more specifications of its fuel pumps with no prior notice whenever improvements are made. Be sure to check the current product specification at the time of purchase.

The success of your business must be supported by solutions and technology at your fingertips. You need a partner. Someone who listens to you. Someone who can meet your needs, your customers' needs, and your financial needs. We have all the products and services you are looking for. Count on us to help you and provide any further information.

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