Cryogenic Liquid Gas Tank Remote Telemetry Monitoring

The GASOTRAK Advantage

TSPLLC has partnered with AMBRA to provide GASOTRAK, a cloud-based liquid gas tank remote telemetry based monitoring solution that allows you to remotely monitor pressure and the level of liquid within your gas tanks. This partnership allows TSPLLC to offer the GASOTRAK solution worldwide.

GASOTRAK takes the burden out of tank management by providing access to your readings from anywhere using a simple, powerful web-based interface and from any internet connected device. The solution user interface is based on monitoring process flow. Storage of liquid gas pressure and level readings in “the cloud” automatically protects against data loss and allows for limitless information storage. A built-in forecast algorithm shows consumption over the next 24 - 48 hours. Solution will keep you updated wherever you are by sending alerts to your mobile device via e-mail/SMS, reducing the need for emergency calls and letting you effectively manage disruptions.

GASOTRAK solution is integrated with unique AMBRA Technology: A wireless and self-contained compact AMBRA monitor which tightly integrates a highly precise single unit dual sensor for pressure and level with electronics for output signal technology and telemetry for remote monitoring. The monitor uses minimum power and runs on battery-operated solar power, pre-configured and fully assembled making it easy to install, configure, and use.

**Liquid Gas Monitoring Challenges**

- Human intervention for manual data collection. Highly probable that process for periodic daily reading is not followed consistently
- Major training and oversight required to manage manual data collection process and records
- Human error in reading and writing data and typical issue with number transposition errors
- Accuracy of maintaining timely manual records hinders in analyzing data or its effective use
- Leading to potential out-of stock issues and ordering on emergency basis. High delivery cost and business sustainability is at stake
- Ability to produce and deliver gas to meet emergent requirements cost effectively, and downtime may result in irreparable damage
- Underutilized production and storage assets due to inefficient and inaccurate monitoring methods currently in use
- Time inefficiencies and misunderstanding of verbal delivery requests
- Tank asset management, audit, and periodic gas inventory is time consuming and difficult

**Background**

Cryogenic Pressurized Liquid Gas delivery in bulk is becoming the preferred method of delivery over gas in small cylinders. It eliminates working with large numbers of smaller cylinders that are costly to fill, deliver, receive, and track. Industrial gas companies use tankers to deliver cryogenic liquid gas in bulk to customer tanks. As a huge investment, it becomes imperative to use these assets efficiently. Knowledge of inventory and reordering gas at the right time is crucial for customers’ operational status and is a critical element which directly impacts customers’ sustainability.

The current manual tank monitoring process is not consistently followed. The end result is frantic emergency calls to the gas company, often in the middle of the night, requesting delivery of bulk gas immediately. It takes time for production and for delivery to arrive. The non-availability of gas may do irreparable harm or loss of revenue.

Manual records may not be useful as they may not be maintained on a timely basis. Lack of up-to-date data results in the inability to analyze the fact that there is a leakage.
Remote Technology

The GASOTRAK solution employs a wireless compact monitoring device that converts an analog signal from a sensor into a digital signal. A unique identification code identifies the monitoring device. Periodically the digital data is transmitted using GPRS technology to the host data server. The data stream received is recorded and analyzed against a preset custom configuration. Alerts are generated and sent at various thresholds via email/SMS. The devices are robust, have a long lifespan, function well in extreme environments and are housed in IP 65 rated enclosures to withstand extreme weather conditions. Device is powered by battery charged with solar energy.

How it works

Key Features

Robust Monitoring Device with unique AMBRA technology
For the last 25 years AMBRA Sistemi S.R.L., Italy (AMBRA) has been a prominent leader in the cryogenic liquid gas monitoring business. Their solutions are used by AIR LIQUIDE, AIR PRODUCTS, MESSER, LINDE, PRAXAIR, SOL and various other gas suppliers.

Highly Precise compact wireless Solar powered Device
Single unit dual pressure/level sensor with electronics for signal output using minimum power. Runs on battery/solar panel thus eliminates expensive UPS backed power. Pre-configured and fully assembled making it easy to install, configure and use.

Latest Technology using enterprise-Class Architecture
Solution in cloud uses latest technology with user interface rendered for any device and built using robust, flexible, and modular architecture.

Access from Anywhere
Enables customized and controlled access to employees and customers from internet connected device.

Automated Alerts \ Comprehensive Real-Time Reporting
Updates wherever you are by sending alerts via e-mail/SMS, reducing the need for emergency calls and letting you effectively manage disruptions.

Maximum Data Protection
Storage of liquid gas pressure and level readings in "the cloud" automatically protects against data loss and allows for limitless information storage

Predictive Analytics - Schedule Just in Time Delivery - eliminate emergency calls
Built-in predictive analytical technology based reorder alert helps schedule regular/timely delivery and eliminate costly emergency delivery.

Analyze Usage Pattern
Manage production and schedule delivery to maximize revenue.

Schedule a Free Demo via email support@trakaid.com or www.trakaid.com/contactus