



ASSET TRACKING

Asset tracking transforms the business of Oil and Gas extraction by using RFID

BUSINESS CHALLENGE

Imagine tracking over 13K assets on a tablet.

Numerous equipment parts need to be accurately monitored in order to maintain a safe environment. In many situations, equipment must be serviced or replaced after just 3 to 6 months of use. Even rugged 20,000 lb pressure valves are routinely checked for structural integrity.

Beyond the safety concerns, it's valuable to track all facility equipment and anticipate either service or replacement requirements. With increased accuracy and information, fewer on-hand spares are required.

SOLUTION



When contracting in various oil yards, it is necessary to provide to the owners, visibility of all the equipment pieces and their associated safety status. A global Oil and Gas company sought to automate this tracking with RFID.

To achieve its transparency and efficiency goals, the contractor moved forward with RFID tags.

Today, in its North American operations alone, the contractor has more than 500,000 RFID tags in the field, all feeding information into a mobile- and desktop-enabled app, which then sends key data points to an enterprise resource planning dashboard. Now that the system is operating efficiently, the contractor plans to implement this system in the company's eastern hemisphere operations.

Digital tracking steps

1. Tagged equipment already in the field
2. Evolved to embedding tags on new manufactured equipment ordered from OEM—now equipment is designed with dedicated, protected locations for the tags
3. Streamlined software access for certification partners, so everyone who inspects and certifies iron in the yard has access to the information
4. Transitioned from time-based maintenance triggers to usage-based ones—it's the usage that jeopardizes equipment integrity, not just elapsed time
5. Switched to a mobile device with an iOS-based application

Key data provided with asset tracking

- Last inspection date
- Next inspection date, which indicates whether the equipment is ready for use
- Location of the equipment within the yard
- Historical information: lockout/tagout, service log, equipment replacement, date, time and location stamp
- Use data to develop a digital twin
- Information that is available in a variety of devices: laptop, tablet, computer, smart phone



ADVANTAGES

Perhaps the reasons this Oil and Gas contractor prefers asset tracking, specifically RFID tags, are the access to data and the rugged tag construction.

Rugged and weather-resistant

- Withstands extreme temperatures, vibration and challenging environments

Designed for a variety of use cases

- Options available for adherence to a range of surfaces, such as metal, insulated cables, glass and other nonmetal materials

Custom development available

- Cost-effective custom tags designed within weeks

Molex Asset Tracking Solutions encompass RFID tags, real-time asset tracking architecture and software, and professional services that include the following:

- Installation and ongoing assistance
- Cost-effective, efficient and accurate monitoring of valuable inventory and assets



For more about RFID solutions in the oil and gas industry visit www.molex.com

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