

THE OIL RIG. YOUR SPACECRAFT. EVERYTHING ON BOARD HAS A PURPOSE.



DELAYS, ASSET LOSS, AND DOWNTIME MUST BE AVOIDED

On an oil rig, most items have a value that far exceeds their importance back on terra firma, or in a warehouse. Especially with offshore production, there's little room for storage. Everything on site needs to be tracked and accounted for. In that respect, the rig is not unlike a spacecraft.

On the rig, however, if critical equipment or parts are missing or unfit for use, the loss of production and environmental damage can be staggering. All parts and tools have an expected life span but breakage must be anticipated. Keeping the production site supplied and ready is a constant challenge. Long delivery lead times and lack of visibility result in expensive overstocking.

MORE PERILOUS THAN THE AVERAGE SUPPLY CHAIN

Oil and gas producers must be able to get assets and supplies to the point of production, which often means an Arctic or desert location, or an offshore rig. The requisition to delivery process needs to be reliable and rapid. Drilling and extraction equipment, tools, and cargo-carrying units (CCUs) should be tracked en route and on the rig.

If you are like most major producers, you have a long supply chain that starts with hundreds of vendors feeding into warehouse and laydown yards, then to embarkation port and delivery vessel—or on an expensive day, the helicopter. Once



RFID AND GPS ILLUMINATE SUPPLY CHAIN FLOW AND INTEGRITY

With vital and expensive assets such well heads in motion through harsh, unpredictable environments, finding them in real time with GPS, RFID and RTLS (real-time location system) is critical to production, and to profitability. Verifying the integrity of assets such as hydraulic fracturing iron is key to safety and compliance.

Anticipating demand from the rig, and ordering from vendors, is just the starting point. Once requisitioned, items have to be located in the warehouse or laydown yard in minutes, not days.

After loading shipments for each point of usage, to track them en route to delivery calls for a GPS, or satellite communication based solution. After delivery, passive and active RFID can locate parts on the production site for continuous and total accountability over every item on board. Read-write enabled RFID tags make inspections for regulatory compliance, maintenance, and safety faster and more accurate.

arrived, tracking of tools and key rental items is a million-dollar issue.

WILL IT BE THERE WHEN NEEDED?

To sustain production, oil and gas producers must forecast weeks ahead which supplies and parts to order. Finding parts and supplies to fill requisition orders often presents significant challenges. Shrinkage, misplacement and warehouse delays must be minimized because the

cost of shutting down is extremely high.

RENTAL EQUIPMENT CREATES ADDITIONAL CHALLENGES

Oil and gas producers often use high-value rental equipment. Daily rental and overtime fees can run to thousands per day, and millions per month. Tracking rental assets and contracts is a necessity, if only to ensure they are returned on time and duplicates are never rented.