

Emerson's Smart Wireless Technology Used by NAM on Mobile Wellhead Test System

BENEFITS

- Reduced setup time compared to wired test systems
- Fewer installation errors with self-configuring devices
- Enhanced reliability with no connectors to get damaged or corroded
- Improved safety by eliminating trailing cables
- Reduced time spent at each wellhead to restore full production

CHALLENGE

Maintaining oil and gas production at the maximum level is a critical factor for NAM (Nederlandse Aardolie Maatschappij B.V.) – the Netherlands' biggest gas producer. If a well's output drops, it is the job of NAM's Well Test department to investigate. Containers housing mobile test equipment are taken to site to identify and resolve any issues.

Every well has its own characteristics and features. This means that the wired instruments being used had to be individually configured with many cables running around the site. There were problems with corroded connectors, damaged cables, and configuration errors which were time consuming to correct. Although cables were secured where possible, cables on the ground also represented a safety hazard.

NAM needed a universally deployable system that provided accurate and reliable results, and which could be set up and dismantled quickly to reduce the time spent at each wellhead.

SOLUTION

NAM was aware of the benefits of wireless technology, but before making the decision to move to Emerson's Smart Wireless technology for the mobile test rigs, the company carried out extensive testing to check the reliability and security of the technology.

Following these successful trials, NAM now has three mobile test units which are equipped with Emerson's wireless sensors for differential pressure and temperature. The use of Emerson's wireless technology has simplified set up and installation, and reduced the time spent at each well head.



“During our extensive trials we tried everything to affect the wireless signal – we found that security was excellent and the wireless signal was completely reliable.”

André Lahuis
Assistant Operation Supervisor, NAM

SMART WIRELESS APPLICATIONS

When the systems are delivered to site the sensors are fitted, the receiver (also called a gateway) is installed and the system is switched on. Within a few minutes, all the sensors have automatically registered with the receiver and the operator simply needs to enter on the screen which sensor is in which position. This means that the instruments are very quickly configured and working correctly.

RESULTS

The test rigs are continually being moved between wellheads, and the technology is proving entirely suitable for the demands of this challenging application. The wireless devices are reliable, secure, and interchangeable. This makes the system highly flexible and easily configured to suit the individual wellhead. As the test rigs are moved to a new location the team of operators may change, and the uniformity and ease of operation of the Emerson systems and devices has proven to be a significant benefit.

“Emerson’s Smart Wireless technology is enabling us to automate measurements when previously it was either impossible or uneconomic to do so.”

Klaas van Bruggen
Operation Supervisor, NAM



Emerson’s wireless sensors are used by NAM to measure differential pressure and temperature as part of a mobile well head test system.

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