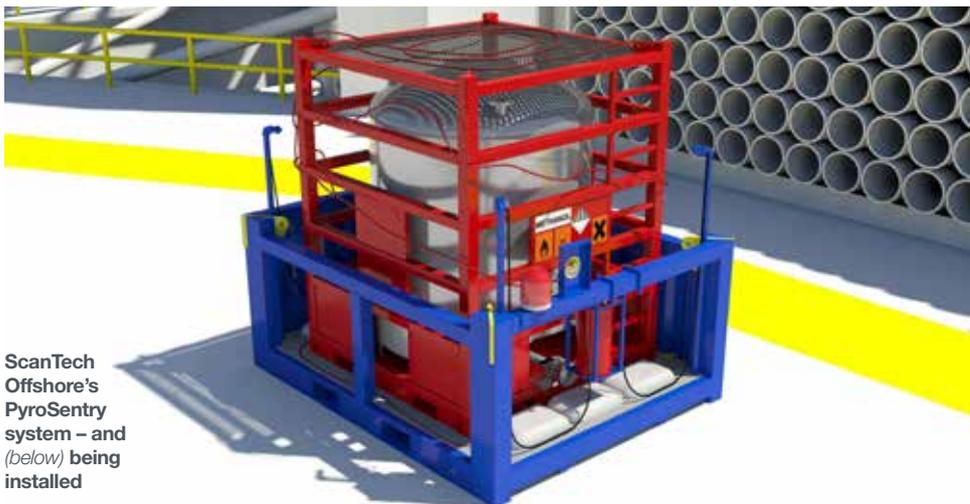


Offshore Support

PyroSentry™ adds to rig safety portfolio

An innovative new product from ScanTech Offshore provides increased fire detection and instant suppression for methanol supplies on offshore installations.



ScanTech Offshore's PyroSentry system – and (below) being installed

Methanol is used by many offshore rig operators to keep flow lines from the oil or gas well head from becoming restricted or blocked. This simple alcohol (CH₃OH) is highly effective in preventing the waxing of oil or formation of hydrate crystals in natural gas lines, particularly for deep water wells.

A unique fire hazard

Although effective in preserving flow assurance, Methanol brings its own hazards to the offshore environment. As Robbie Garden, business development manager for ScanTech Offshore explains: "Methanol is a clear, colourless liquid with the appearance of water, and it has no discernible odour in low concentrations. It is however extremely flammable and releases vapours at or below ambient temperatures. It burns in air with a flame that gives off very little visible light and as such, it can be difficult to see a fire or to estimate its extent in daylight. Special fire protection measures are therefore crucial in ensuring the fire-safety of offshore methanol installations."

The new PyroSentry methanol fire detection and suppression system from ScanTech Offshore aims to address this requirement in the form of an independent protection system for offshore methanol storage installations. The unit, which can be installed and running in as little as six hours, is banded to avoid any leakage of methanol to the rig structure.

From inspiration to innovation

"I came up with the initial idea for PyroSentry

when working in Australia with our new sales director, Mike Aitken," explains Garden.

"We were asked if we could come up with a methanol fire detection system – there was nothing on the market but I was aware of FireTrace products that are widely used in vehicle applications. I contacted FireTrace and we developed the concept based around their existing, well-proven components. They had not previously approached the oil and gas sector and so were happy to work with us, providing ScanTech Offshore with global exclusivity for the PyroSentry product in this sector."

The system consists of a charged fusible loop of FireTrace Detection Tubing® (FDT) encompassing the containment area. In the event of a fire, contact with the flame ruptures the tubing activating the unit's fire suppression system which is based on alcohol-resistant aqueous film-forming foam (AR AFFF) extinguishers to which the tubing is connected via pressure switches. In addition to providing audible and visual alarms, the unit automatically disperses the foam into the banded area through stainless steel piping and directional nozzles, focusing it on the protected area.

The FDT is charged with dry nitrogen to mitigate the risk of thermal expansion leading to false and premature activation,

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Robbie Garden, business development manager, ScanTech Offshore

resulting in a safe, reliable and stable detection system. PyroSentry installations can be designed and installed according to client requirements and specifications. For example, protection systems can be installed within the banded areas on offshore installations prior to well test operations and then dismantled and removed after the well test operations have concluded. In addition to the base system, AR AFFF equipped fire-fighting trolley units can also be supplied as a secondary protection measure, together with a thermal imaging camera to support methanol fire assessment and safety.

"The PyroSentry product is already proving of interest to numerous offshore operators including Total, Chevron, ENI, and Exxon Mobil," continues Garden. "I am convinced that this system can make a major contribution to methanol fire safety in the offshore environment." ■

