



Gas Detection in Off-Shore Applications

In the off-shore industry, dangerous gases are naturally occurring or man-made in petroleum operations. The release of hazardous and flammable gas is a significant contributor to risk in the off-shore oil and gas industry.

These combustible and toxic gas emissions create harsh environments in which the applications are stationed, creating unsafe conditions for personnel. The ignition of flammable gases or vapors can lead to major fire and explosion with highly devastating consequences. Similarly, toxic gases can result in various injuries and fatalities.

Hydrocarbon, hydrogen sulphide, carbon dioxide and carbon monoxide exist within off-shore applications. Hydrocarbon is a flammable gas that may occur under pressure from containment systems. Releases may occur on the rig floor, around the vicinity of the test separator and about the choke manifold of an application. Hydrogen sulphide is a toxic gas that occurs naturally as a contaminant in produced gases from wells. Concentrations often exist on the lowest points of rigs, such as the cellar deck.

While carbon monoxide is a highly toxic gas, carbon dioxide becomes dangerous in high levels of confined spaces. These gas releases result from combustion of fossil fuels to generate electricity and power compressors and pumps, as well as from flaring of excess gas for safety during well testing.

Throughout the off-shore industry, rapid gas detectors are often installed to accentuate the elimination or reduction of the dangerous emissions. Gas detection that can withstand corrosion and extreme weather conditions is vital within these applications to ensure the safety of personnel and the environment.

Otis Instruments offers a variety of wired and WireFree easy-to-use, robust and configurable gas detectors capable of detecting both toxic and non-toxic gases within off-shore applications.

To learn more about our gas detection solutions for your industry, contact Otis Instruments today.