DRON & DICKSON

CO2 GAS DETECTION INSTALLATION

Success Stories







Delivering a Custom CO₂ Detection Upgrade for a Project

The Background

As offshore infrastructure ages, maintaining compliance and operational safety becomes increasingly challenging, especially when critical safety systems become obsolete. Our client was preparing for a pioneering CO_2 Injection Project in the UK, which required CO_2 gas detection to be added to their existing gas detection system. Their legacy gas detection system lacked the capability to monitor for CO_2 , posing a significant safety and operational risk.

Dron & Dickson were engaged to deliver a full-scope upgrade that would ensure compliance, reliability, and seamless integration with existing systems.

Project Overview

We delivered a turnkey solution which included engineering, supplying, installing, and commissioning a modern ${\rm CO_2}$ gas detection system. The work was successfully completed within the agreed time frame and budget, both onshore and offshore, without impacting ongoing operations.

To accommodate the complexity of the asset and the bespoke nature of the upgrade, the project was split across two core scopes:

Onshore Deliverables:

- Full engineering and design services for the CO₂ detection upgrade
- Custom modification of the existing gas detection control panel
- Supply and integration of CO₂ gas detectors and supporting hardware
- Provision of all supplier documentation in line with client requirements.
- Remote after-sales technical support.

Offshore Execution:

- Installation and commissioning of the new CO₂ gas detectors in accordance with approved construction and commissioning packs
- Deployment of fully certified and experienced offshore technicians.
- Provision of all tooling and test equipment to ensure safe and efficient completion of works.
- Despite the challenges associated with integrating new safety infrastructure into a live production environment, the project was delivered safely, efficiently, and without disruption.



Sensepoint XCD Fixed Gas Detection Product

- Fixed-point gas detector and transmitter for combustible, toxic, and oxygen gas hazards
- Built-in LCD display showing gas concentration, alarm, and battery status
- Magnet swtich allows configuration without opening the unit in hazardous areas
- Weatherproof and robust transmitter design
- Remote sensor mounting up to 30m (100ft)
- Intrinsic safety for hazardous areas
- Self-diagnostics and fauilt detection

Ideal for:

- Oil & gas production
- Chemical processing
- Pharmaceutical manufacturing
- Food & beverage
- Power generation
- Wastewater treatment



The Result

The successful installation and commissioning of the ${\rm CO_2}$ gas detection system enabled our client to move forward confidently with their pioneering ${\rm CO_2}$ Injection Project—equipped with a modern, fit-for-purpose safety system.

This case exemplifies Dron & Dickson's ability to deliver compliant, cost-effective upgrades that de-risk operations and support emerging energy technologies. The client acknowledged our team's flexibility, responsiveness, and technical capability in executing a high-stakes upgrade with minimal operational impact

With expert knowledge in Fire & Gas systems and a commitment to quality delivery, Dron & Dickson continues to support operators across the offshore sector with innovative, safety-critical solutions tailored to each asset's requirements.