

## ES6009 Fire and gas detection/suppression system

Increase the functionality and reliability of your fire and gas protection system



### Engineered solution purpose

This engineered solution incorporates the latest technologies into the fire and gas detection and revises the suppression system to conform with local environmental regulations.

### Applicability

All Rolls-Royce packages.

### Technical description

#### Detection devices:

Flame - Multi-spectrum Infra Red (IR) flame detectors. These are able to discriminate from local heat sources and high reflective light sources.

Gas - IR gas detector. Minimal calibration required.

Temperature - Fixed rate compensated heat detector.

The digital controller (with addressable detection network) includes sensor and system diagnostics for alarming and shutdown.

#### Suppression devices:

Halon based suppression systems are replaced by either Inergen, CO<sub>2</sub> or water mist.

### Benefits

Elimination of halon systems brings installations in-line with environmental and safety regulations. Machinery protection, availability and reliability is improved. Systems have on-board diagnostics and some components possess SIL 2 ratings.



This platform in the Natuna Sea uses CO<sub>2</sub> suppression on its Avon compression package

### Experience

Husky Oil White Rose - Inergen (RB211)

LOOP Inc - CO<sub>2</sub> (501-KB)

ExxonMobil - Water mist (RB211)

ConocoPhillips - CO<sub>2</sub> (Avon, RB211)

Unocal - CO<sub>2</sub> (Avon)

### Scope of work

Detectors, suppression system and controller supplied as required. Suppression agent upgrade from halon to CO<sub>2</sub>, water mist and inergen.

### Bill of materials

#### Detection components

Multi-spectrum IR flame detectors

IR gas and fixed rate temperature detectors

Digital controller and system wiring

Horns, beacons and control stations

#### Suppression system

Suppressor skid, nozzles and piping

### Undertaken

At site

### Bundling opportunities

Complete package refurbishment (ES6001)

Controls upgrade (ES6006)

Instrumentation upgrade (ES6007)