

FirePro.

The Needles Lighthouse

Location: **Europe** Dealer: **FirePro UK** Application: **Diesel Generator Rooms** Industry: **Offshore**



Trinity House

Serving the mariner since 1514

The Needles Lighthouse is found on the outermost part of the Isle of Wight in Britain. The lighthouse is constructed from granite and it stands 33.25 metres (109 ft.) above sea water. It was designed by civil engineer James Walker in 1859 at a cost of £20,000 - an estimated €2,803,744 today. Till today its light guides vessels in one of most treacherous stretches of water.

The Task

Design, install and maintain a fire suppression solution to replace the existing non-operational HFC227ea cylinder based system of the Needles Lighthouse diesel generators room. The installation is in remote offshore location and thus performance reliability and effectiveness are paramount. Crucially, the system should also have as low maintenance requirements as possible. This solution had to provide protection to the generator room which posed a flammable liquid (diesel and oil) fire risk.

FirePro Systems Used

FP-3000

Why FirePro?

FirePro pre-engineered systems are compact and minimise the weight and space burden during both transportation and installation. They are of proven exceptional reliability and require very little maintenance when compared to other systems. The FirePro FPC compound poses no threat to human health for personnel working on an off-shore site. Notably, the proposed solution was chosen as the most cost effective, saving about 50% over an HFC227ea system replacement.

Risks Involved & Consequences

Despite GPS technology on board modern ships, lighthouses like the Needles are far from redundant. Thus its light beam is considered to be a mission critical apparatus for the thousands of ships passing close to the rocks every year. Failure to protect the light house diesel generators in case of a fire could result in a catastrophic chain of events.



Results of Implementation

FirePro systems were transported by boat and installed by Allfire trained personnel overcoming the challenges presented by this harsh environment. The system is configured to provide alarms back to the monitoring station on fault, first stage fire and extinguishing discharge. Allfire designed the system so that it can conduct a controlled shut down of the generator on first stage fire activation. The unique attributes of FirePro provide assurances to both operators and maintenance teams.

