

Location: Australia Application: Stacker Cranes Industry: Logistics



D.P. World a leader in international marine terminal operations, logistics and related services.

Container handling is the company's core business. In 2016, DP World handled around 64 million TEU (twenty-foot equivalent units) across our portfolio. With its committed pipeline of developments and expansions, the current gross capacity of 84.6 million TEU is expected to rise to more than 100 million TEU by 2020, in line with market demand.

Risks Involved & Consequences

A fire from a hydraulic drive and/or a high pressure hose or electrical source can rapidly destroy all equipment. These stacker cranes are the critical to all movements of containers around the port facility. Systems are required to protect and reduce collateral damage across all equipment.

The Task

Design and install a fire suppression system that will protect the Electrical Sub Stations for wharf container stackers cranes at DP World Brisbanes Port facility. The enclosures have diverse fire risks and therefore, the technology needed to be effective against multiple classes of fire. It should also require as little maintenance as possible and be in line with Australian Standards, Health & Safety and protection of the Environment (HSE) strategy. Likewise, the systems needed to autonomously

monitor and protect the enclosures from various fire scenarios.



Why FirePro?

Firstly, the FPC Compound found inside the FirePro generators is effective against various classes of fire (A, B, E). Secondly, the compactness and modularity of the system allows fire engineers to customise the design and efficiency according to project mission and space requirements. Furthermore, the FPC poses no active threat to operators and will remain environmentally friendly even after activation which is in line with environmental policy. As a final point, the generators have a 15-year lifetime cycle and no re-filling requirements thus very low maintenance.

Results & Implementation

Detection and extinguishing systems were installed to electrical control room for the stacker cranes. Looming fires are detected and extinguished at a very early stage while alarms notify the operator and other personel of the fire hazard. The systems can be easily reached providing for a convenient maintenance process. More importantly, there are no Health and Safety issues of concern in regards to the units. Additionally, FirePro's FPC compound 15-year life span and low system maintenance maximises ownership benefits and value for the company.









