

Location: Australia Application: Track Maintenance Industry: Mining



SPENO INTERNATIONAL SA

SPENO RAIL MAINTENANCE AUSTRALIA Pty. Ltd specialising in rail maintenance, technology, diagnostics and rectification.

These machines are designed and built in Western Australia. This company is accredited by BVQI, complying with ISO9001. In addition, we have 'Rail Access Agreements' with each client. These agreements require us to maintain and operate according to strict Railway Regulations and Rail Safety Acts.



Risks Involved & Consequences

A fire from a hydraulic drive and/or a high pressure hose or electrical source can rapidly destroy all equipment. On heavy equipment which must cope with difficult working conditions, these risks become exaggerated. Fire 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 engine bay and hydraulic compartments of the track maintnenace machines. 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. Also, the systems needed to 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. The size of the FirePro units allows for the units to fit within the tight space requirements of the machine. 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 lower maintenance.

Results & Implementation

Detection and extinguishing systems were installed to engine bay and hydraulic compartment of the machine. Looming fires are detected and extinguished while alarms notify the operator and other personel of the fire hazard. The systems can be easily reached providing 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.



