

FirePro.

BHP Broken Hill



Location: Australia Application: Hydraulic Power Pack Industry: Mining

BHP

Operating since 1885, BHP is part of one of the world's largest mining companies. Broken Hill was the origin of the company's rich history in a silver, lead and zinc mine.

BHP engaged in the discovery, development, production and marketing of iron ore, copper, oil and gas, diamonds, silver, lead, zinc and a range of other natural resources. BHP was also a market leader in value-added flat steel products.

Risks Involved & Consequences

A fire from a hydraulic drive and/or a high pressure hose or electrical source can rapidly destroy all equipment. All mining equipment 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 hydraulic power pack for a mining shaft drill rig. The enclosures have diverse fire risks and large ventilation. 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. The system is operated manually via a remote switching panel.



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. Finally, 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 in various compartments. The system is operated manually. It also has the added benefit of the self activation temperature of 300°C when the machine is not in use. 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.

