



Heavy-Duty Diesel Fire Pump System

Customer: Sedgman Limited – Red Mountain Operation

Location: Millennium Coal Mine – 160km SW of Mackay

Case Study ID: CS-59

Date: April 2014

Overview

Dowdens Pumping and Water Treatment successfully designed, manufactured and commissioned a diesel fire pump system for Sedgman Limited operating the Red Mountain Operation – Millennium Coal Mine.

Traditionally fire pumps are only required to either sit idle in the basement of high rise buildings until the event of a fire where they are run until they self-destruct, or used on mine sites more frequently and for long hours during power outages and for onsite pressure boosting.

The Problem

Here at Dowdens Pumping & Water Treatment we pride ourselves on supplying our customers with systems designed for longevity and continued onsite use. Often this means more money is spent on the

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build initially but this investment is quickly and easily recouped via lower ongoing maintenance and repair costs.

This particular diesel fire pump system utilised a large diesel-driven industrial standard pump capable of operating at slower speeds meeting a duty of 45 L/sec @ 80m head.



Our Solution

The pump and diesel engine were upsized compared to the existing system, ensuring long term problem-free operation. All fabrication, assembly and performance testing conducted by Dowdens Pumping & Water Treatment in Mackay guaranteeing product quality. The controller used is a digital Welling & Crossley Controller which has been successfully used by Dowdens in other fire pump projects.

Key Components

- Lister Petter GWT4 Radiator Cooled Diesel Engine
- Hydro-Titan end suction pump for long-lasting performance
- Welling & Crossley Digital Fire Pump Controller
- SS Diesel Fuel Tank with Gauge & Fuel Level Sender
- Unit Successfully Tested to Australian Standard AS2941
- Heavy Duty hot-dip galvanized pump/motor base



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Brands used in this project



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