



## Solar Powered Emergency Shower and EyeWash Station

**Customer:** Downer EDI Mining Blasting Services

**Location:** Jellinbah, QLD

**Case Study ID:** CS-67

**Date:** March 2013

### Overview

Downer EDI Mining Blasting Services commissioned Dowdens Pumping and Water Treatment to design, customise, and install portable and self contained Solar Eyewash and Safety Shower Station.

Dowdens supplied the portable Solar EyeWash and Safety Shower station to Downer EDI Mining Blasting Services for use at the Jellinbah Group's Jellinbah Mine (located 30km North-East of Blackwater, QLD). These were designed and manufactured to comply with Australian Standards AS4775-2007.

### The Problem

Downer EDI Mining Blasting Services required a portable eyewash and deluge shower solution for their open cut coal mines.

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## Our Solution

Dowdens Pumping and Water Treatments in house design can be positioned inside workshops or out in the field with its heavy-duty battery pack and two 95 Watt Solar panels. The solar panels power a Grundfos pressure water pump monitored by the voltage regulator and power inverter control panel.

The Dowdens solution fulfilled the brief from Downer EDI Mining Blasting Services.

## Key Features

- The station uses the sun's energy to charge 6V batteries via 2x 95W solar panels.
- This energy is then stored and converted to 240V power which in-turn drives the electric Grundfos pump.
- The Power Inverter Control Panel contains the solar charger module and the power inverter module.
- The self-contained Solar Eye Wash and Safety Shower station is designed and manufactured to comply with Australian Standards AS4775-2007.

## Project Design Philosophy

Dowdens Pumping & Water Treatment design philosophy for this project was:

- Cost-Effectiveness
- Innovation
- Ease of Installation
- Simple & Effective Pump Operation
- System Reliability & Reduced Ongoing Maintenance

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## Brands used in this project



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