

Case Study

Slurry Pump Solutions for Gold Processing

Application:

Effects Pond

Slurry:

sand, gravel, debris

Flow rate:

600GPM (136m³/hr)

Head:

127 ft (39m)

Pump:

Warman SHW 100-350

Pump materials:

Hi-chrome Iron

Motor:

40hp (30kw)

1800rpm

Features:

Agitator

Suction Saver



1. Events pond at roaster plant
2. Events pond

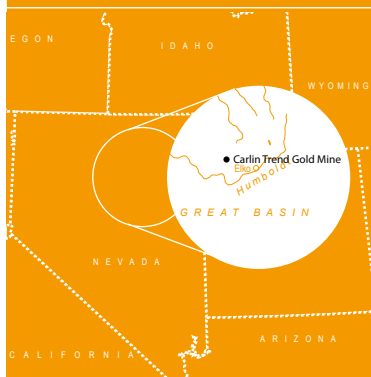
The competitor's pumps lasted two months; the Warman SHW submersible has been keeping it clean for a year.

Located in the western United States on the Carlin Trend, are some of the most prolific Gold mines and processing plants in the Western Hemisphere. Weir Minerals has been a leading supplier to these facilities for many years providing both processing and dewatering solutions.

The operators of this gold processing plant were struggling to keep the Events Pond at the roaster pumped out and clean of solids. They had tried several competitors' pumps but none were up to the task, typically wearing out and failing in 2 months. Due to these frequent failures they were having difficulty keeping the pond clean and solids

were piling up. Looking for a better solution they contacted their local Weir Minerals representative.

A Warman Model SHW 100-350 with an agitator was supplied. The heavy duty chrome iron construction extended the wear life and the agitator allowed them to pump out the solids. The pond was originally filled to the 50% height on the liner, after installing the SHW pump, the mine maintenance team has been able to completely clean the pond and keep it clean!



An Events Pond is designed to handle storm water and spills. When an upset or spill occurs every thing must be washed down and it is collected in the events pond. This means significant amounts of sand, gravel, dirt, and other debris along with a mix of products is collected and must be pumped out and returned to the process.

The client had tried 3 or 4 different competitor's pumps with none lasting more than 2 – 3 months in the service. Frustrated, the client contacted their local Weir Minerals representative for a solution. A Warman heavy duty model SHW 100-350 submersible pump with an agitator was offered as the solution. By the time the SHW was installed, the pond was filled to the 50% mark on the liner and large amount of solids had

collected in the pond. The client had to use a high pressure hose to re-slurry the solids while lowering the pump into the pond. The SHW performed like a champ and the maintenance team was able to completely clean the pond and keep it clean. Even in this tough service the SHW is providing over 4 times the life of the competitor's pumps.

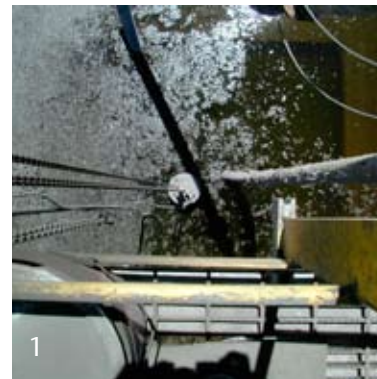
The client was so pleased with the performance of the SHW that they have installed another in their CIP sump.

Weir Minerals offers a full range of pumps, vales, & cyclones for mineral processing and mine dewatering.

1. Warman SHW submersible Pump in effects pond at roaster plant

2. Warman SHW submersible pump in effects pond at raster plant

3. The SHW Heavy Duty Submersible pump is available in sizes up to 450mm and 500 hp



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