

Peristaltics replace submersible pumps for PAC

Often overlooked, the reliable peristaltic pump has again proved its worth at Coddle Creek Water Treatment Plant, eliminating the mixed results of a few years previously experienced using a submersible pump dosing Powder Activated Carbon (PAC) from a wet well. After more than three submersible pumps failed in just over a year the maintenance and operations management sought an alternative.

The problem was the location of the pump: in the pump room 8 metres above the bottom of the well and additionally, the pump must also be able to resist the PAC's abrasive nature. So the plant called on Verder Inc to help find a solution.

The Verder Inc. consultant recognised that the best pump for the job would be a Verderflex peristaltic pump.

The simple but highly effective peristaltic process results in a pump with a high dosing accuracy, a high suction lift and a low cost of maintenance. Because the fluid is completely contained within the reinforced hose there is no possibility of parts clogging, the only wearing part is the long life hose itself, which is quick and easy to change, keeping downtime to a minimum.

Using a flow paced controller, the Verderflex hose pump can transfer and dose variable flows in accordance with the plant's demand and by their very nature these pumps can gently pump abrasive suspensions such as PAC and lime slurries without any check valves.

Given the flow rate, suction and discharge pressures needed, Verder Inc chose the Verderflex VF15 hose pump with its 15mm diameter natural rubber hose. The VF15 is capable of short term flow rates up to 600 l/hr and continuous flows of 375 l/hr at pressures up to 12 Bar. Use of the high pressure rotor and Verderflex's unique reinforced hose technology creates excellent suction lift and easily manages the 8 metre lift needed by Coddle Creek.

3700 hours running hose

The Verderflex VF15 pump has been installed for over a year and the plant have now had 3,700 hours running on the same hose without problems.

Verderflex manufacture a large range of peristaltic pumps for many process applications, from small custom tube pumps used in OEM equipment through to the VF125, the largest high pressure peristaltic hose pump in the world and SCADA controlled Smart tube pumps that accurately and consistently dosing process chemicals. During difficult economic times customers are increasingly



looking for reliable, low cost of ownership engineered solutions over cheaper but high maintenance alternatives and recent studies indicate that more and more customers will be using peristaltic technology in the future.