

Pumping Polyelectrolyte in wastewater treatment

An industrial waste water treatment company required a cost-effective solution to pumping polyelectrolyte. Existing helical rotor pumps were expensive to run and maintain; the Verderflex Dura Hose Pump offered the customer a dosing solution that offered long hose life and lowered maintenance costs.

The Challenge

An industrial wastewater treatment company required a cost-effective solution to pumping polyelectrolyte.

The plant engineers approached Verderflex distributor, Global Pumps Australia for a solution to the following problems:

- The existing helical rotor pumps were expensive to run and maintain
- The replacement pump would have to be able to transfer liquid polymer, which is a thick, viscous liquid mixed with a 30% kerosene (hydrocarbon) carrier.
- The pump had to be compatible with the client's existing system
- The hose would have to last a minimum of 3 months.

Solution

Global Pumps analysed the customer's current systems and the Verderflex peristaltic Dura hose pump was selected for the following reasons:

• Peristaltic pumps have a low-shear operation; ideal for shear-sensitive products like polymers



- The Dura has the ability to handle viscous liquids
- The dosing capability is within ±5% accuracy
- A service is easy as the hose is only one wearable part in contact with the fluid. The innovative flange design allows quick and easy removal and fitting.
- "The Dura provides longer hose life than conventional pumps

Result

Verderflex's Dura Hose Pump has now been installed for more than 1 year. The customer has reduced their process downtime, improved their operational efficiency and reduced the overall maintenance cost after moving to peristaltic pumping technology.

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