

WASTE WATER: WELSH WATER

Watson-Marlow SPX80 pumps improve system performance at Welsh Water's Queensferry STW

Value for life



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Two Watson-Marlow Bredel SPX80 hose pumps have been installed at Welsh Water's Queensferry STW in Wales, significantly improving system performance at the site.

THE CHALLENGE

Queensferry STW Site manager, David Holthöfer, is responsible for a number of sites in the area. Although several of these sites incorporated the use of Watson-Marlow Bredel pumps, some of which have been in use for around 20 years, the STW at Queensferry operated on timer-controlled opening and closing of automatically actuated valves. However, Site Manager David Holthöfer found that in comparison with other sites which he manages, the system performance was markedly lower.

**WATSON
MARLOW** PUMPS
Bredel

THE SOLUTION

In January 2000, two Watson-Marlow Bredel SPX80 heavy duty hose pumps were installed at Queensferry, as part of the primary tank auto-desludging system.

The SPX design allows rapid hose changing when required, as well as simple maintenance. The pumps also feature overload protection, and enhanced corrosion resistance.

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THE OUTCOME

Operating under time-switch control, the pumps run at 23 rev/min, delivering 16,100 l/hr of 3-5% density sludge. They are installed in the open air, without protective covers, and close to the two primary sludge tanks. The pump motors are 7.5kW, and are fitted with heaters and thermistors. Discharge pressure is about 5 bar.

Mr Holthöfer expressed delight with the significant improvement in the overall performance of the de-sludging system that has been observed since the installation, as well as with the high level of resilience displayed by the pumps.

The ability to achieve and maintain accuracy to within $\pm 1\%$ and to handle additives such as lime slurry and easily damaged filamentous flocculants, has led to the pump's widespread adoption for dosing duties in sewage and water treatment processes.

