

Intelligent wastewater pumping

Global technology company Xylem has launched what they describe as breakthrough technology – a water pump that’s smart enough to adapt to changing operating conditions. Xylem’s Oceania brand manager **Kirk Buckley** explains.

Xylem, a global water technology company dedicated to solving the world’s most complex water issues, has developed another breakthrough technology, launching the world’s first wastewater pumping system with integrated intelligence at the recent IFAT 2016 trade show in Munich, Germany.

Flygt Concertor, a smart, sustainable, interconnected solution, significantly advances the sustainability of the wastewater sector by offering unprecedented flexibility and reduced overall cost of ownership while consuming considerably less energy and ensuring consistent, clog-free wastewater pumping. The system senses the operating conditions of its environment and automatically adapts to pumping conditions to deliver optimal pumping performance.

“Flygt Concertor is another example of Xylem’s commitment to developing innovative and integrated designs that can meet the current and future challenges of the industry,” says Tomas Brannemo, President of Xylem’s Transport business.

“This revolutionary new solution represents a step-change in sustainable wastewater management solutions and is a real problem-solver, developed in close collaboration with our customers. Our recent report *Powering the Wastewater Renaissance* shows that adopting energy-efficient wastewater management technologies can slash electricity-related greenhouse gas emissions by almost half.”

There is a growing need for technology that optimises the performance and management of pumping systems. Aging infrastructure, increased global urbanization and rising energy costs make sustainable wastewater pumping systems an urgent priority.

By 2050, 70 percent of the global population will be living in cities – an urban wastewater challenge on a scale never experienced before. Frost & Sullivan’s report *European Smart Pumps Market for the Water and Wastewater Industry* notes that a sustained focus on energy efficiency and a reduction in the total cost of ownership of pumps are likely to lead to increased demand for intelligent pumping solutions. Flygt Concertor can help address these complex challenges in a sustainable manner.

Field tests conducted around the world have validated the benefits that Flygt Concertor delivers including:

Energy savings of up to 70 percent compared to a conventional pumping system by consistently operating at the lowest possible energy level;



Concertor 150 Shadow Approved – Xylem’s Flygt Concertor, the world’s first wastewater pumping system with integrated intelligence.

Reduced inventory of up to 80 percent due to flexible performance – the system self-adjusts or can be adapted to suit different conditions, without changing the impeller or motor size. This versatility eliminates the need for pump station managers to keep large inventory stocks;

A built-in sump and pipe cleaning function – a world first for a wastewater pumping system delivering clog-free pumping and clean wet wells saving up to 80 percent in vacuum cleaning costs; and

Compact design, reducing cabinet size by up to 50 percent compared to conventional designs

Xylem is committed to developing advanced technologies that advance the sustainability of wastewater management systems. For example, Xylem’s recently launched Flygt 4320 mixer with integrated speed regulation optimises

operators’ control over the mixer’s thrust, enabling consistent process results and reduced energy consumption. It is a high efficiency, low-speed, submersible wastewater mixer that can help reduce energy costs by as much as 50 percent.

Flygt Concertor, and the Flygt 4320 mixer, share a rich heritage with other Flygt innovations.

The name Concertor is derived from the Latin ‘concentare’, meaning “working together to orchestrate harmony”. Flygt Concertor combines IE4 motor efficiency, N-hydraulics, integrated power electronics and intelligent controls that work in harmony with each other, resulting in optimal pumping performance for the lowest cost.

Flygt Concertor will be available in New Zealand from early 2017. For more information, visit flygt.com/one-ultimate-system. **WNZ**



Tomas Brannemo, President of Xylem’s Transport business, speaking at the launch of Flygt Concertor during IFAT in Munich.