



A total of five wastewater pumping stations in Ventspils were equipped with new full-scale pump solutions from Grundfos.

Ventspils renovates wastewater pumping stations with Grundfos pumps

VENTSPILS, LATVIA: Ventspils is one of Latvia's oldest cities and is located on the coast of the Baltic Sea. For more than 700 years, the city's seaport has been the heart and soul of the city, mainly due to the local maritime climate that keeps the port ice-free all year round. In order to maintain the city's status as the leading export port in the region, it is of utmost importance that the fragile environment of the Baltic is protected. This is why ISPA, an EU organisation helping new Member States meet EU environmental standards, funded the renovation of Ventspils' worn-down waterworks.

The situation

To overcome the problems caused by an old water supply system and wastewater system, it was time for a full-scale renovation of the city's existing installations – including pumps, pipes, water cleaning systems and wastewater pumping stations.

Grundfos provided

- Superior performance and low life cycle costs
- Flexible pumps suitable for ad hoc pumping tasks during transition period
- Assistance during commissioning and installation

The situation (continued)

This called for the renovation of five existing pumping stations. Specifically, two of the main pumping stations required a complete overhaul and pump replacement. With ISPA funding in place, the project was ready to go. The only thing missing was a competent supplier of pumps.

The Grundfos solution

Grundfos provided the ideal solution. The two main pumping stations were equipped with dry-installed pumps, and prefabricated systems with submerged pumps were installed in the other stations.

The solution kept down installation costs because the prefabricated pumping stations were installed in a concrete base, facilitating easy connection to the inlet/outlet pipe network. By adding an easily accessible superstructure on top of the installation, operation and maintenance was made both convenient and efficient.

The outcome

By using dry-installed pumps with cooling jackets, the new system ensures that the pumps run just as well as submerged pumps in case of flooding. An important general advantage of the prefabricated pumping stations is the low energy consumption compared to the pumps previously used. Also, controlling the pumps has been made significantly easier with modern level switches.

During renovation, temporary pumping was required – a solution which Grundfos also provided. The pumps delivered were easily changed from one installation configuration to another, making the renovation process as smooth as possible.

ÛDEKA, the company that manages the city's waterworks, has been very satisfied with Grundfos' solution, especially since the temporary pumps were pumping hard sewage just as well as the pumps that were installed in the finished project.

Grundfos has followed up this project by offering a service agreement that includes regular maintenance and a rapid-response service: pump data are communicated via mobile phones to service technicians who will immediately take action in the event of emergencies.

Grundfos engineer Maris Dervenieks: "The most demanding stage of this project was the orchestration of temporary pumping during renovation. Fortunately, we were able to meet the customer's requirements without any problems."



Grundfos supplied a complete solution, including all electrical and automation systems.

Pumps used

- > 3x 85 kW sewage pumps
Head 27.3 m - Flow 230 l/sec
- > 3 x 28 kW sewage pumps
Head 12 m - Flow 144 l/sec
- > 2 x 17 kW sewage pumps
Head 27 m - Flow 36 l/sec
- > 2 x 2.9 kW sewage pumps
Head 30 m - Flow 12 l/sec
- > 2 x 18 kW sewage pumps
Head 6 m - Flow 37 l/sec

Project data

- > Customer: ÛDEKA Waterworks and Wastewater Management Company, Ventpils