

Case Study

Acqualatina, Italy A Systematic Approach to Widespread Savings



Acqualatina wastewater treatment plants

The Sulzer Difference

- Energy savings of 20-30% depending on equipment type
- Reduced equipment blockage and cleaning needs
- Lower maintenance costs
- Better operational control

Acqualatina manages the integrated water services in ATO South 4, a part of Italy's Lazio region. The area includes 63 treatment plants, a sewer network of about 1500 km (932 miles) and 510 pumping stations, needed to handle about 68 million m³ (18 billion gallons) of wastewater per year.

As an organization, Acqualatina is a relatively young. When the company was founded in 2002, however, it took over an existing operation that included a large number of pumping stations with varying performance. Since monitoring and analysis had not been undertaken by the previous owners, Acqualatina found itself handling equipment whose history and characteristics were largely unknown.

Four Steps to Improvement

Rather than continue working with unfamiliar and underperforming equipment, Acqualatina turned to Sulzer Pumps. By working with experts, the company hoped to identify and correct suboptimal conditions and solutions.

The methodology chosen was the ABS 4-step process. The ABS 4-step process is a working procedure developed by Sulzer Pumps for the optimization of sewage pumping stations. It consists of the following phases:

- Hands-on site surveys to gather accurate data about the characteristics and operating conditions of the stations
- Detailed analysis of the collected data and the identification of potential improvements in energy consumption and operating costs
- Implementation of proposed and accepted improvements
- Verification of the achieved results



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Ennio Cima
Operations Director
Acqualatina

Energy-Efficient Pumping and More

Analysis of Acqualatina's operations with the ABS 4-step process showed that significant improvements could be made, for example by replacing underperforming pumps with more energy-efficient ABS submersible sewage pumps XFP. ABS submersible sewage pumps XFP were the first submersible pumps to feature premium-efficiency IE3 motors, and their energy efficiency is matched by high reliability and exceptional resistance to blockage.

Since making the recommended changes, Acqualatina has experienced energy savings of 20-30% depending on the type of equipment involved. In addition, the company has seen a reduction in operating costs related to equipment blockage and the cleaning of its lifting stations. Not only have the improvements reduced maintenance costs, they have also led to better control over the company's operations.

Key Benefits

- Energy savings of 20-30% depending on equipment type
- Reduced equipment blockage and cleaning needs
- Lower maintenance costs
- Better operational control

"Sulzer's ABS 4-step process helped us achieve greater know-how in terms of design and operation. We transferred this into our investment plan, thereby optimizing the duty points of the equipment – which has resulted in savings of 20-30% depending on the types of equipment involved."

Ennio Cima
Operations Director, Acqualatina

Contact

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Applicable Markets

Water and Wastewater

Applicable Products

ABS 4-step process
ABS submersible sewage pump XFP

