CASE STUDY

The Sulzer XFP pump convinces the operator of the Pernes Les Fontaines treatment plant

The Pernes Les Fontaines wastewater treatment plant in France, part of the Rhône-Ventoux mixed water union, treats a daily pollution of 12’000 population equivalents.

Choosing the XFP pump is a guarantee of reduced clogging, lower energy consumption, and lower maintenance costs.

Mr Jérémie Elluecque, Treatment Plant Manager, Rhône sector, Suez Eau France

The challenge

The operator of Suez Eau France, approached Sulzer – a supplier to the Suez Group – raising the problem of clogging pumps. Jérémie Elluecque, who is in charge of choosing the local equipment, was experiencing recurring problems with the clogging of pumps at the entrance to the station. The sewage lifting station is small and no longer contains a screening basket to protect the pumps from rags or any other waste among the wastewater. Wipes are the main reason for the clogging, and the operator must clean the pumps regularly. This maintenance, more frequent in recent years due to the nature of the wastewater, led to significant expenses for the sanitation service.

The solution

To stop the disturbing clogging, Sulzer proposed the submersible sewage pump type ABS XFP 100E CB 1.3 PE 60/4 E50, equipped with a Contrablock impeller specially designed to treat wastewater containing fibrous and solid materials.

Sulzer offered technical advice and a test period that convinced the operator, who bought the pump in September 2017.

"In addition to optimal operational safety and sustained performance over time, Sulzer’s XFP pump offers reduced energy consumption and low maintenance,“ says Mr Elluecque. After two months of use, Suez no longer encountered failures related to clogging. In November 2017, they ordered two additional XFP pumps. “Thanks to this reactivity, Sulzer strengthens our will to continue our partnership”, concludes Mr Elluecque.

The Sulzer difference

- The XFP pump with Contrablock hydraulics limits clogging.
- Cost savings through low energy consumption and maintenance costs.
- Sulzer’s wastewater treatment technology meets the challenges of today’s wastewater.
- As a partner supplier with deep process knowhow, Sulzer supports the customer in finding the optimal solution.
Customer benefit
- Sulzer is a partner supplier that provides innovative and reliable technical solutions.
- The test period convinced the operator in his choice.
- Minimized breakdowns and process interruptions thanks to optimal management of fibrous materials.
- Low maintenance costs and increased reliability.
- Low energy consumption.
- Improved hydraulic efficiency.

Product data
Submersible sewage pump type ABS XFP 100E CB 1.3 PE 60/4 E50
- XFP pump with IE3 premium efficiency motor, 6 kW power, 4 poles (1’450 rpm).
- Contrablock hydraulics limits clogging (free passage 80 mm) and improves pump performance.
- Adjustable bottom plate to easily maintain pump performance and reliability.
- Temperature rise according to NEMA class A (up to 110 kW and class B above).
- Double mechanical seals as standard ensure perfect chemical resistance in sanitation and industry.
- Bearing life corresponding to 50’000 hours up to 9 kW and 100’000 hours above 11 kW (50% of PMR).
- In the Suez case, configuration with a wet well installation with pedestal (90° cast bend, cast iron, DN100).
- The XFP pump range fulfills the Energy Savings Certificate N° IND-UT-123 "Motor premium de classe IE3".