

CASE STUDY

Efficient Submersible Pumps for Pulp Mill Water Intake

SCA Packaging Munksund, a pulp mill located on the northern coast of Sweden, needed to replace its water intake station, which was built as early as 1928. A new pumping station was built in 2009. Four submersible pumps with high flow and low head were required to lift river water up to disc filters, thereafter being distributed by four AHLSTAR end suction pumps.



Pump station with sump inlet

“ With Sulzer we could be sure to have a reliable supplier who knows the pulp and paper industry and delivers efficient submersible pumps. ”

Leif Risberg, SCA Packaging

The challenge

When selecting the supplier, an important condition set by SCA Packaging was understanding the customer requirements:

- Knowledge of the demands of the pulp and paper industry, including local Swedish branch standards SSG
- Thorough know-how in pumping station design and operation
- Reliable management of seasonal variations in water quality and flow
- Energy-efficient pumps

The solution

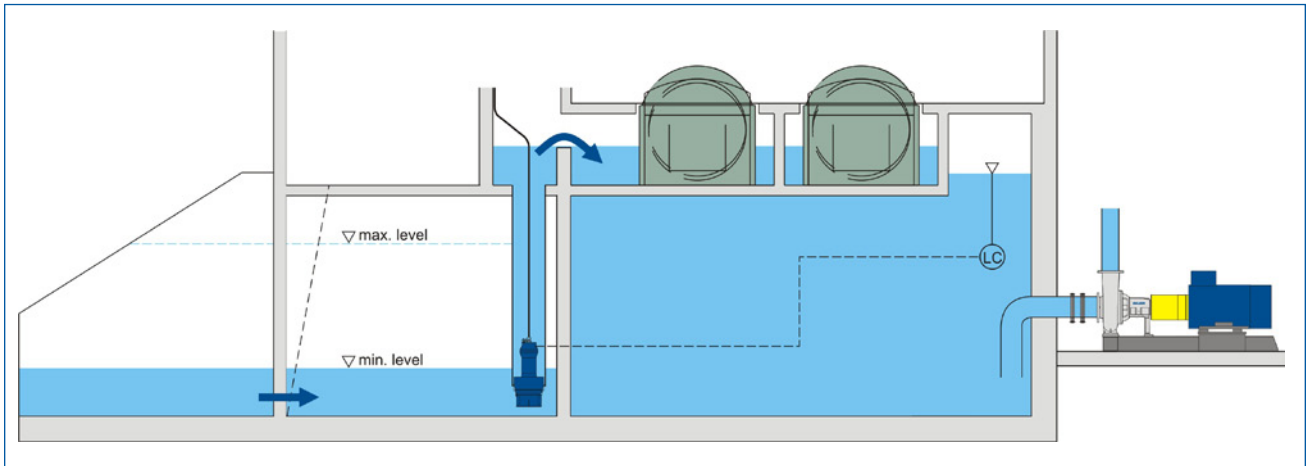
- Supply of four reliable submersible mixed flow column pumps type ABS AFLX, including raiser pipe
- All hydraulic parts and raiser pipe in stainless steel, due to seasonal variations in water quality – pH and humus
- Support for control strategy with variable frequency drives and for how to switch operation between pumps
- Professional assistance in pump sump design
- Trouble-free start-up with Sulzer installation supervision

Customer benefit

As a well-known supplier in the pulp and paper industry, Sulzer understands and is able to fulfill local requirements and standards. The installed pumps were supplied with an option for future upgrades. Today there is a service agreement in place for regular condition monitoring of the pumps, performed by experienced Sulzer service staff. The Sulzer pumps have been operating smoothly and efficiently ever since the start-up.

The Sulzer difference

Sulzer is a world leader in innovative solutions. We apply our hydraulic and mechanical experience and knowledge to find the most reliable and cost effective solution. The submersible mixed flow column pump type ABS AFLX is designed for direct installation in discharge pipes, which gives savings in space and installation costs. With three-blade to five-blade mixed flow impellers, high efficiency is ensured, as well as trouble-free operation for water and wastewater liquids.



One of the AFLX pumps lifted up from the sump before being sent for regular condition monitoring

Product data

Submersible mixed flow column pump type ABS AFLX 0601 M300/6-43	
Flow	1,180 m ³ /h
Head	4.95 m
Hydraulic parts	stainless steel (impeller, shaft, bellmouth, diffuser etc.)
Raiser pipe	stainless steel, length 4,500 mm

Contact

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Applicable markets

PPI, GI, CPI, Water and wastewater

Applicable products

AFLX, AHLSTAR