How to save up to 80% of the energy used in a membrane-based wastewater treatment system

fluvicon GmbH (Austria) – a "green leader" in their field – has developed a new membrane-based concept by using forward osmosis for cleaning of industrial wastewater.

Danfoss High Pressure Pumps was invited to talk about the possibilities using Danfoss HPPs pump and ERD technologies.

After thorough dialog, fluvicon concluded that the best solution was the Danfoss Gen-Save® concept.

In a membrane-based wastewater treatment system, the concentrate stream typically represents 10% to 90% of the system's total power consumption.

The unique Gen-Save® concept can reduce energy consumption in concentrate stream by up to 80%.

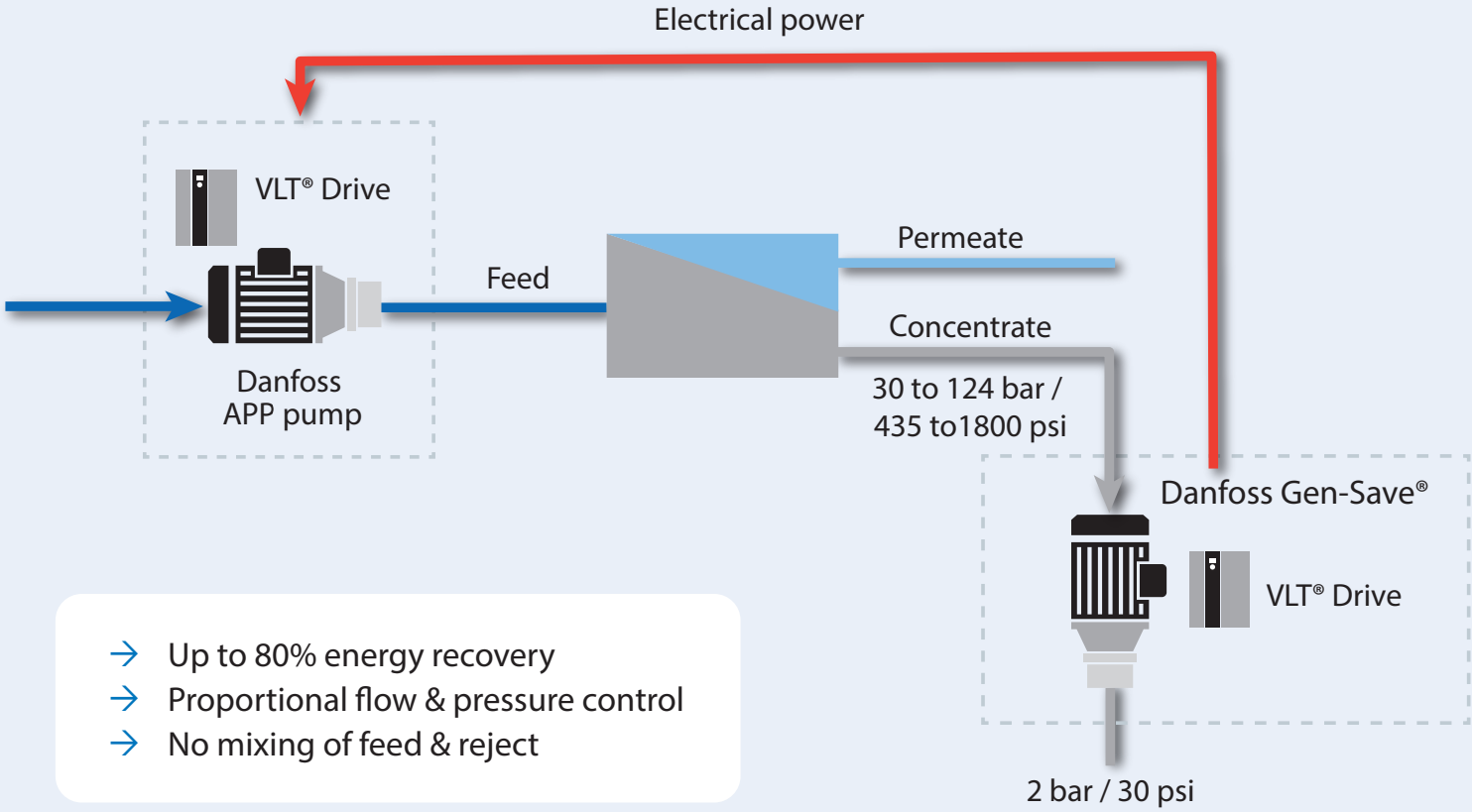
By combining the products from Danfoss Drives and Danfoss HPP, fluvicon was able to design a system with a low energy consumption and an improved controllability.

1st generation of the fluvicon wastewater treatment concept has been build and tested and an up scaled 2nd generation is being designed and offered to customers.

By teaming up with Danfoss Drives and Danfoss HPP, fluvicon was able to design and verify their solution within a short time frame.

Gen-Save®:
Energy recovery solution for no mixing applications

Unlock up to 80% energy recovery and reduce costs with flexible process control.



- → Up to 80% energy recovery
- → Proportional flow & pressure control
- → No mixing of feed & reject

Up-concentration application for membrane processes:

Textile | Chemical | Pharmaceuticals | Food & Beverage | Mining | Steel

and

Brine Mining

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