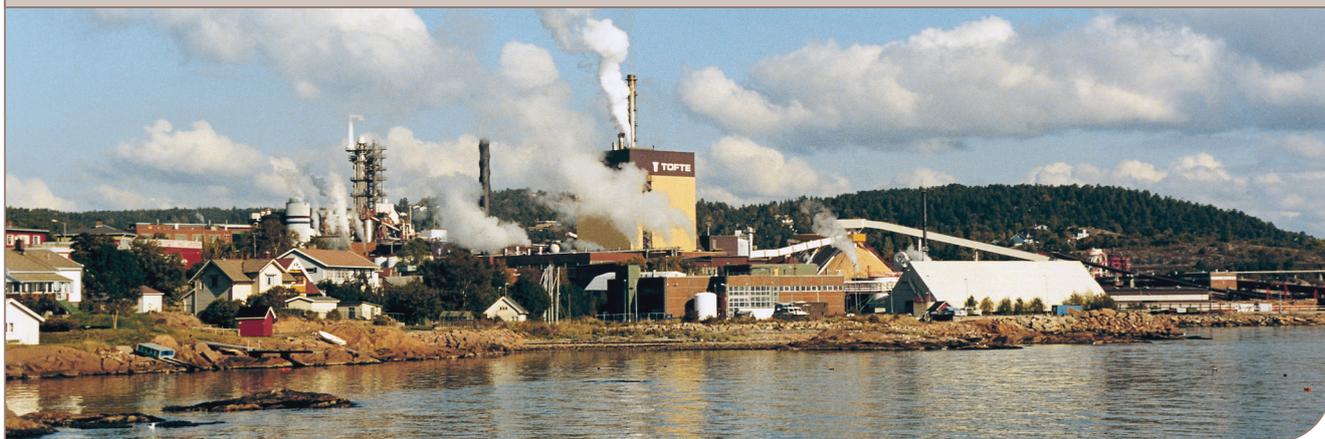




Green liquor dregs dewatering

Cut installation and operating costs with Alfa Laval decanter centrifuges



Using Alfa Laval decanter centrifuges for dewatering green liquor dregs in pulp mills offers many benefits compared to using traditional rotary vacuum filters. A decanter consumes significantly less energy, is much smaller, operates continuously and requires less maintenance and manual labour.

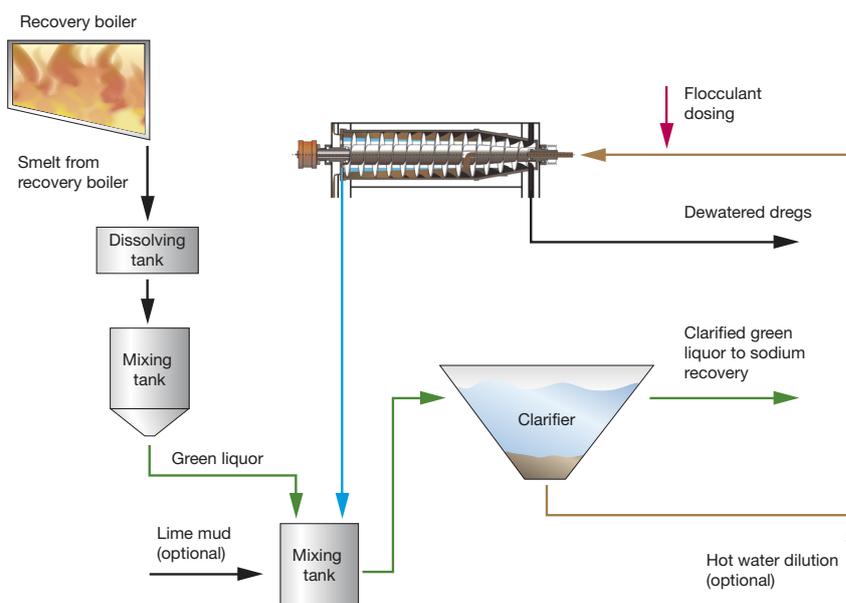
Before being causticized, impurities in the green liquor are removed in a clarifier tank. The dregs from the tank are dewatered in a rotary vacuum filter (RVF) or a decanter centrifuge before being sent for disposal.

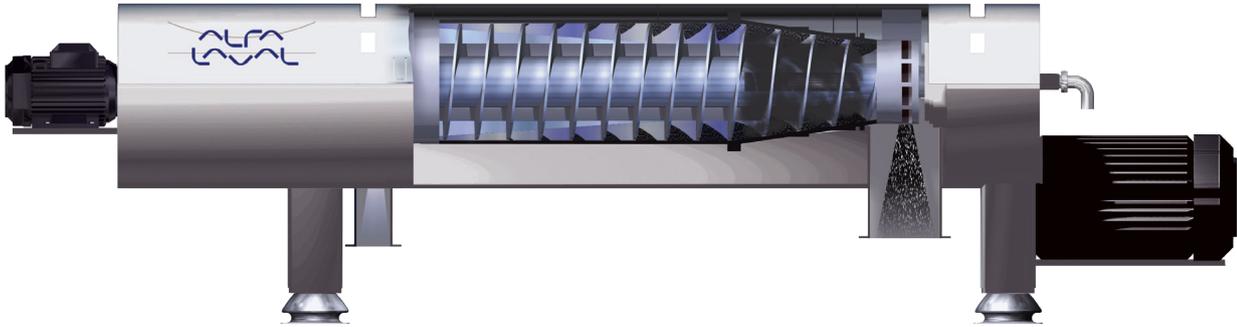
Using a decanter centrifuge instead of an RVF offers a range of advantages, such as lower operating costs, much smaller installation space and the possibility to dewater continuously instead of in batches.

Process overview

White liquor is used for processing wood chips in pulp mills. The spent white liquor, called black liquor, is treated in a series of steps to recover valuable chemicals and produce new white liquor for use in the process.

The black liquor goes through an evaporation system and is then burnt in a furnace – the recovery boiler. The smelt from the recovery boiler is mixed with weak wash process water and forms a solution known as green liquor, containing mainly sodium carbonate and sodium sulfide. The green liquor is then mixed with calcium oxide to form white liquor.





Alfa Laval's P2 decanter centrifuge is the perfect choice for green liquor dregs dewatering in pulp mills.

Benefits of using decanter centrifuges

Decanter centrifuges offer many advantages over RVFs when dewatering green liquor dregs:

- High cake dryness.
- Significantly lower power consumption.
- Reduced maintenance.
- Smaller installation space and lower installation cost. Decanter centrifuges take up just a fifth of the space required for a comparable RVF. This frees up valuable space for expansion, or maximizing space in new plants.
- No need for pre-coating as with RVF, lowering labour costs.
- As opposed to RVFs, lime is not required for the process to work. Excess lime from processes can be added to the green liquor and dewatered in the decanter if required.
- Continuous, automatic operation instead of working with batches.
- No need for complex utility equipment such as vacuum pumps and pre-coating systems.

A job for the Alfa Laval P2 decanter centrifuge

Alfa Laval's P2 decanter centrifuge is the perfect choice for dewatering green liquor dregs. The P2 offers high performance, low operating costs and top reliability, even under the toughest conditions.

Erosion and corrosion protection

The P2 decanter centrifuge range is designed for handling aggressive and erosive slurries. All critical parts are made of wear and corrosive resistant materials and the conveyor is protected by tungsten carbide tiles. This ensures low maintenance costs and high reliability.

High torque – low power consumption

As the slurry can be very viscous it is important the decanter centrifuge has high torque to produce dry cake. The Direct Drive system delivers the highest torque currently available in any decanter centrifuge dedicated to dewatering green liquor dregs. Control is very accurate and the dewatering process highly energy efficient.

Automatic control

The 2Touch control system automatically adjusts operation of the decanter according to the conditions, such as when flow

rate and solids content vary. This guarantees highly dry cake, the lowest possible energy consumption and minimum wear.

Options

A number of options extend the functionality of the P2 decanter centrifuge. With the Power Loss Ride Through option your machine empties itself in case of an unexpected power cut, allowing you to restart without time-consuming cleaning.

Knowledge and experience

Alfa Laval has both the knowledge and the experience to help you improve your dewatering processes. We have supplied decanter centrifuges for green liquor dregs processing in mills across the world.

One of our greatest strengths is our strong local presence. We work closely with customers in nearly 100 countries and our field service engineers are always close at hand. Our local organizations have the full backing of our global experts and R&D departments, ensuring they are up to date on the latest technology.



References

Alfa Laval has references in all major pulp-producing countries. A few examples are:

Country	Decanter type	Year of installation
South Africa	P2-500	2012
Russia	P2-500	2010
Sweden	P2-400	2009
Russia	P2-400	2009
Sweden	P2-500	2009
Norway	P2-400	2006
Australia	P2-500	2005

How to contact Alfa Laval

Up-to-date Alfa Laval contact details for all countries are always available on our website at www.alfalaval.com.