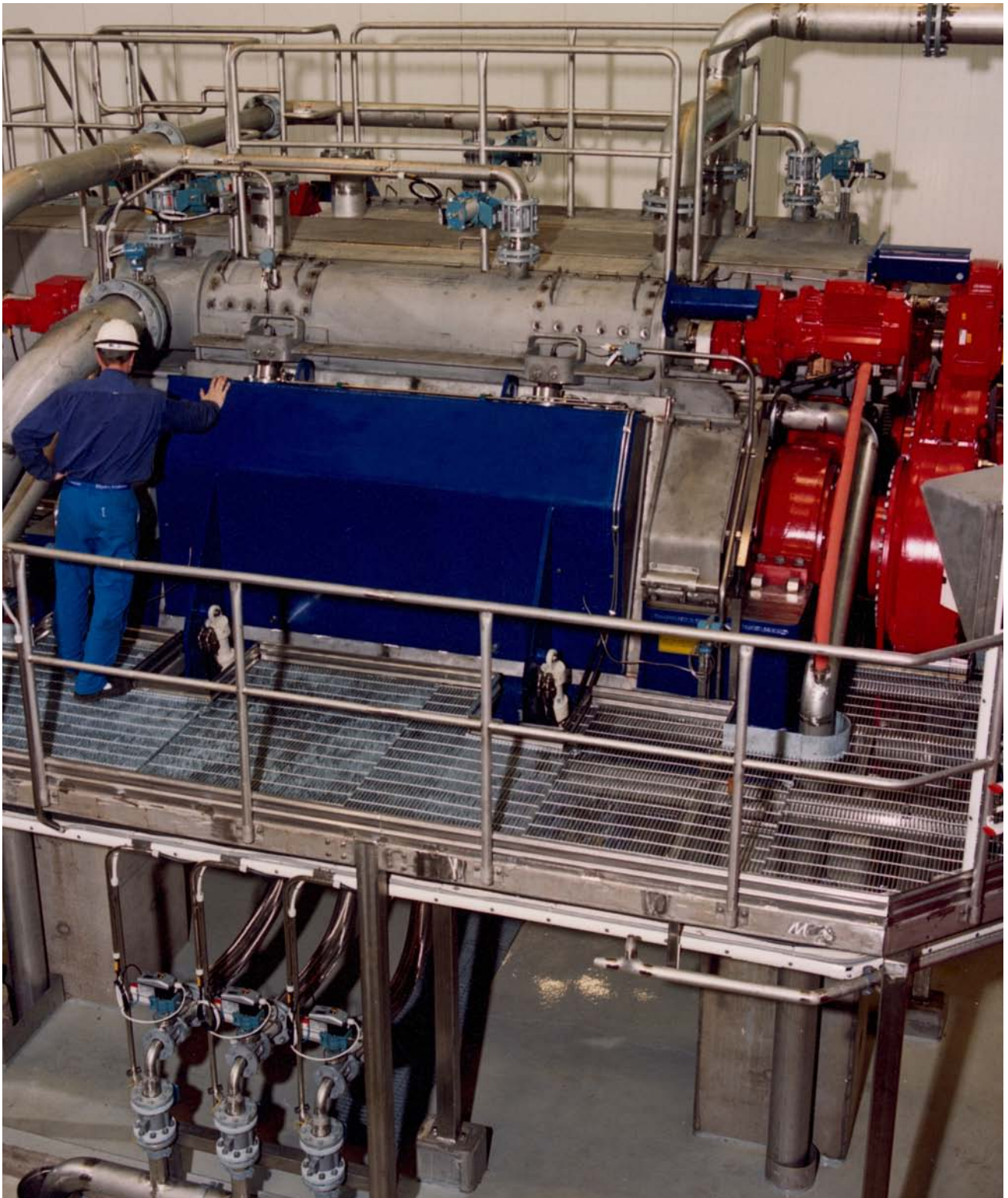


Compact Press[®]

Advanced Technology for Cost-effective Solutions



Applications

Brown stock washing/Screen room washing

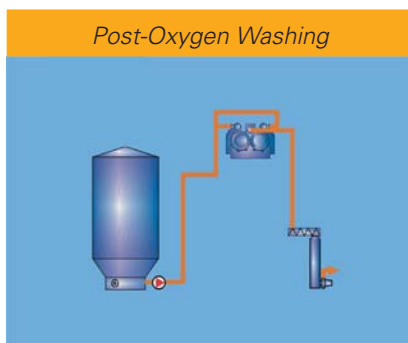
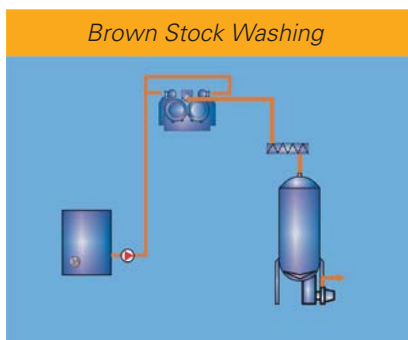
Filter washers have traditionally been used as thickeners and washers after knot separation and pre-screening. Modern screening technology, allowing higher operating consistencies, has resulted in new wash press applications. Mill installations have proved that a wash press is a very good alternative to the traditional wash filter.

Post-oxygen washing

Efficient washing after oxygen delignification is important for reaching low levels of chemical consumption in the subsequent bleaching system and for minimum discharge of organic compounds to the effluent treatment plant.

Bleach plant washing

The Compact Press[®] bleaching system ensures high washing efficiency, low water consumption and optimized steam consumption, resulting in lower operating costs. High discharge consistency gives a good water lock and facilitates easy control of pH, temperature and pulp consistency.



Feeding consistency and material

The Compact Press system can be fed from 3% up to medium consistency. The machine can be manufactured in stainless steel or other materials like Duplex or SMO (6 Mo) to fit the conditions in a washing stage.

Compact Press, Gruvön mill Sweden

The first full size unit has been operating at Gruvön



mill since May 2000, having been sold to the mill a year before. It was environmental concerns which motivated the mill to replace a filter washer with the Compact Press unit but the space consideration was also very important. The unit was designed for a production of 1200 tonnes/day and for an inlet consistency of around 5%.

Final wash stage

The Compact Press unit was installed as the final wash stage before the bleach plant and manufactured in SS2343 stainless steel. D0 filtrate is used for dilution after the press to minimize bleach plant effluent. Condensate and warm water are used separately as wash liquid and the filtrate from the Compact Press unit runs counter-currently in the fiberline. After a good start-up, the mill's ambitions for the project investment have been fulfilled.

On softwood, an outlet consistency above 32% is possible and operational experience has been characterized by high availability. "Our operators are very pleased," says production superintendent Christina Larsson. "The Compact Press unit doesn't leak and is very clean," she adds.

The Compact Press system has proved itself able to handle large variations in inlet consistency without sacrificing runnability. Washing results have been very good with low COD carry-over to the bleach plant.

New and proven

The Compact Press system combines new technology with well proven components. Two specially designed distribution screws are located at the top of the machine, one on each side, designed to secure a uniform lengthwise distribution of pulp at the same grammage, independently of the feeding consistency.

Inside the unit are two drums. The flap/vat configuration is designed to reduce the machine's sensitivity to consistency variations. The use of 3/4 of the drum for dewatering and washing is largely responsible for the compact size of the press.

The two distribution screws as well as the two drums have variable speeds, controlled by the pulp flow, in order to give optimal washing at different production levels.

With a uniform pulp web, optimum conditions are created for efficient washing. Other main features include two opening flaps and one opening vat, one shredding screw and a rigid frame.

Bearings are located outside wet areas.

In the washing zone, special inlets are used to distribute the wash liquid in order to provide efficient, high displacement washing.

Low operating costs and high performance

- Excellent wash results
- High outlet consistency
- Superior runnability
- Low energy consumption

Low downtime and maintenance costs

- Automatic flushing after stop
- Superior availability
- Completely dry and tight machine
- Designed for easy maintenance
- Short stop for cleaning

Cost-Efficient

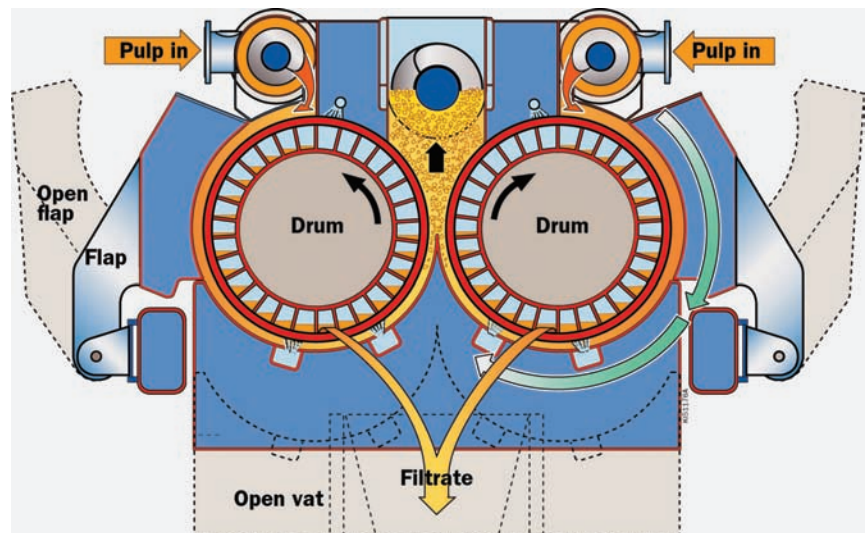
- Excellent for retrofits
- Compact design, small size and low weight
- Quick installation
- Short erection time

High capacity due to:

- Excellent pulp formation lengthwise by distribution screw
- Using 3/4 of the drum for dewatering and washing
- Ideal flap vat configuration

High washing efficiency due to:

- Excellent pulp formation - the key to washing efficiency
- Excellent distribution of wash liquid lengthwise
- Use of nozzles and flow control
- Displacement washing at high consistency
- Pressing to high outlet consistency



Installations

Compact Press, Munksjö Aspa mill Sweden

The unit has been operating at Aspa mill since May 2001, having been sold to the mill a year before. In October 2002 the mill started up two more Compact Presses.

Press of major importance

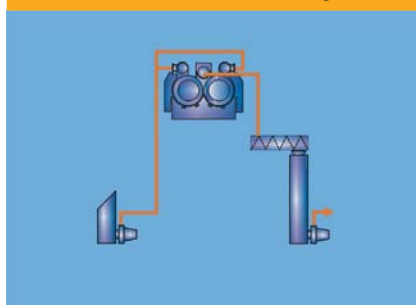
Hans Wallgren, Operations Manager at Aspa mill, is very satisfied with the new pre-bleaching wash press. The Compact Press unit, despite its size, has proven to be very efficient in bleach plant applications.

Capacities

The Compact Press system covers capacities between 500 and 3,000 tonnes/day and is designed for a wide range of inlet consistencies. It provides high loading in terms of tonnes/m², thanks to the compact design, which also makes it an obvious choice for retrofits.



Bleach Plant Washing



Screen Room Washing

