

## GL&V Sweden AB in Karlstad is specialised in products and solutions around the field „Chemical Pulping“

GL&V Sweden AB is one of the leading manufacturer in this product area.

On the strength of their own development department they are constantly improving their products. Their technology is

therefore based on the latest state of the art.

The product portfolio of GL&V „Chemical Pulping“ includes, among others, solutions for cooking, washing, oxygen delignification, bleaching, MC-pumps as

well as mixers.

Renowned experience combined with permanent research and further development ensure the high specialisation and quality standard in all areas of the GL&V company.

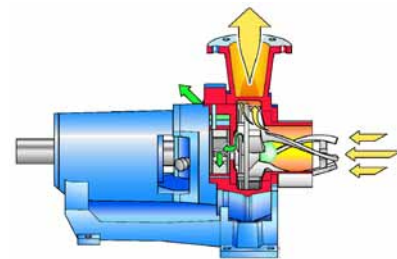
## MC-Pumps and Mixer

### Duflo™-Pump

The new generation of the DUFLO™ Pump excels in pumping of medium consistency pulp.

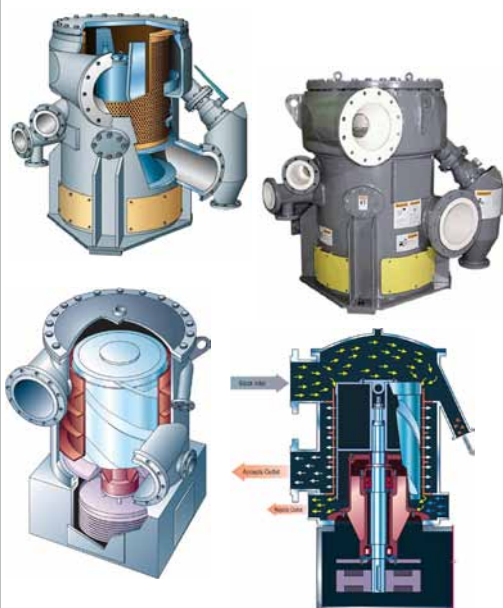
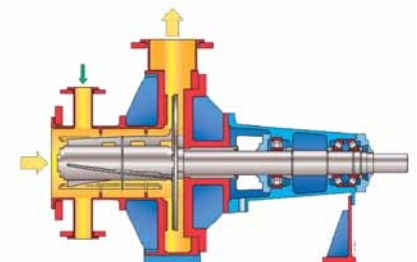
The clean and robust design with integrated vacuum pump and direct drive arrangement reduces the total installed cost and minimize the need for maintenance.

- low power consumption
- low total installed cost
- low maintenance cost



### Dual™-Mixer

Der DUAL™ Mixer solutions are available for steam, oxygen, chlorine dioxide and ozone. The heavy duty design and the extended mixer house with optimized steam inlet nozzles ensure stable operation. Sufficient retention time for the chemicals at full fluidization of the pulp delivers efficient and vibration free mixing at low maintenance costs.



## Screening

### HI-Q® Pressure Knotter

Der HI-Q® reject separator is very compact and operates with a minimum of fibre loss to the washed and dewatered knots and coarse rejects.

The most important advantages:

- High unit capacity
- Low consistency, low volume rejects
- Efficient knot removal with minimal fiber loss
- Inward flow design protects rotating element and hydrofoils from damage while avoiding break-up of brittle knots
- Exceptional operating stability due to patented high-pulse, low profile hydrofoils
- Designed for continuous, remote, unattended operation

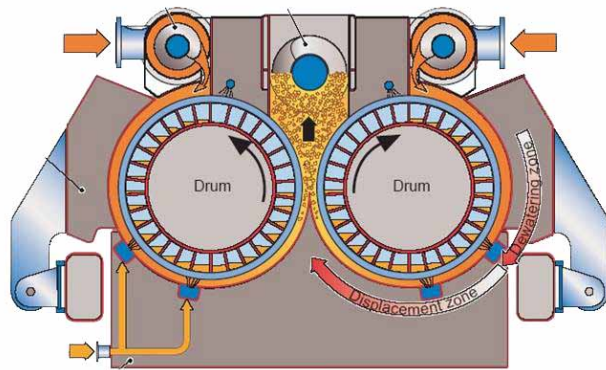
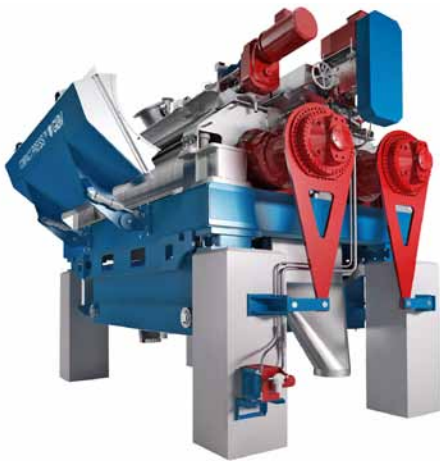
### HI-Q® Fine Screen

High capacity and efficiency pressure screen for brown stock screening. Can be supplied with the Stingray rotor for proven performance or the new Luthi rotor for reduced wear and power. Smallest slots in the industry and minimum good fiber loss. Modular design uses the same bearing assembly as the HI-Q® Knotter and HI-Q® Rejects Separator. Great reputation in the industry with a very large installed base.

## Wash Presses

### Compact Press®

For higher outgoing consistency and excellent washing efficiency. The COMPACT PRESS® combines a new technology with well proven components. The specially designed inlet feeding screw makes possible uniform distribution of pulp lengthwise at the same basic weight independent of inlet feeding consistency. In case of need, the Compact Press® can be opened and closed within 20 minutes.

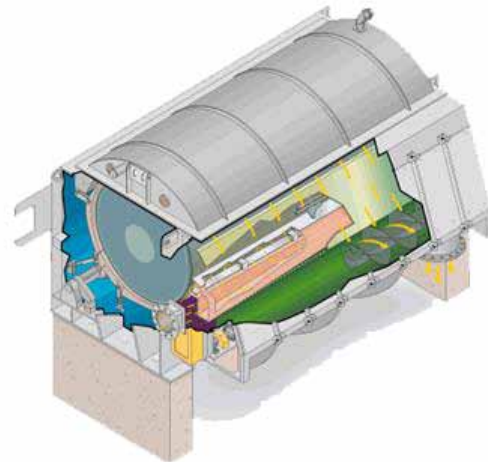


### Baffle Filter

The Baffle Filter with its compact design offers compared to conventional washers low level installation- and investment costs.

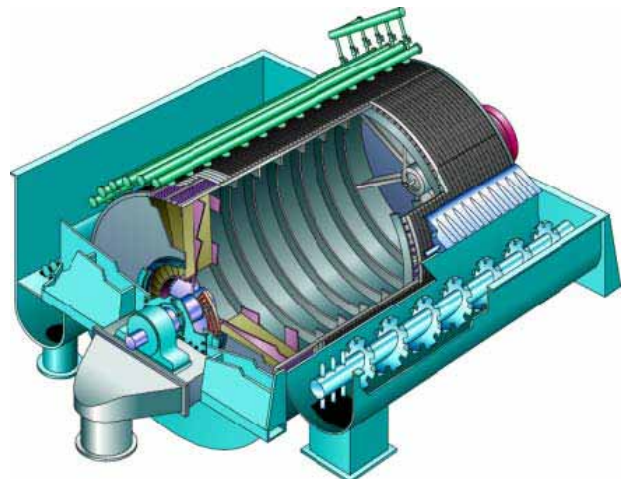
Advantages:

- High washing efficiency
- Unique totally enclosed pressurized system
- Designed for brown stock and bleach applications
- High capacity per unit area of cylinder



### Coru Dek

The Coru-Dek incorporates our corrugated deck into a high capacity center drainage cylinder design. Curved drainage tubes and an integral bucket design provide structural integrity. A flat valve allows for maximum hydraulic capacity. Solid shafts and antifricition bearings ensure low maintenance and allow for flexible drive options.



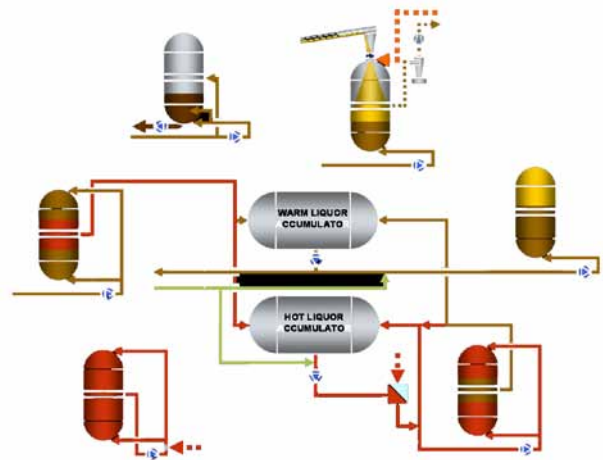
## Cooking and Bleaching

### Dual C™ - Cooking

The Dual C™ cooking combines two-stage black liquor impregnation with carefully controlled alkali and temperature profile delivering pulp with unsurpassed strength properties at reduced steam consumption.

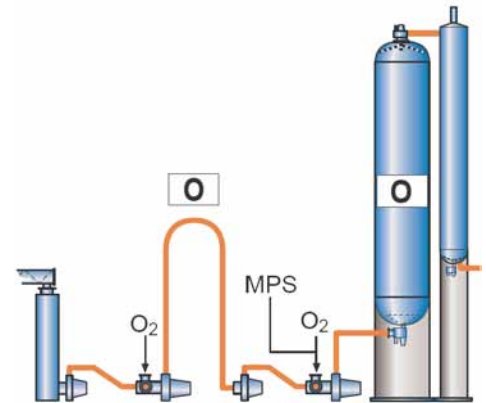
The most important advantages:

- Reduces steam consumption and delivers superior pulp strength
- Accepts poor wood chips quality
- Minimizes scaling in evaporation
- Is easily applied in existing and new cooking systems



### DualOX™ - Oxygen Delignification

An optimized two stage oxygen delignification process. The two stage oxygen delignification process using DUFLO™ medium consistency pumps and DUFLOMIX™ mixers enables an overall optimization both with regards to kappa reduction and selectivity. This design is particularly useful for softwood kraft mills.



### Dual D™ - Bleaching Stage

DualD™ hardwood bleaching reduces the consumption of chlorine dioxide and the effluent load at increased brightness and improved brightness stability.

The DualD™ bleaching stage comprises of an upflow and a downflow tower, which enables good control of the total retention time and eliminates the need for a scraper or other parts requiring maintenance on top of the tower.

