

Valmet Ultrafiltration for Tissue mills

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Spot  View

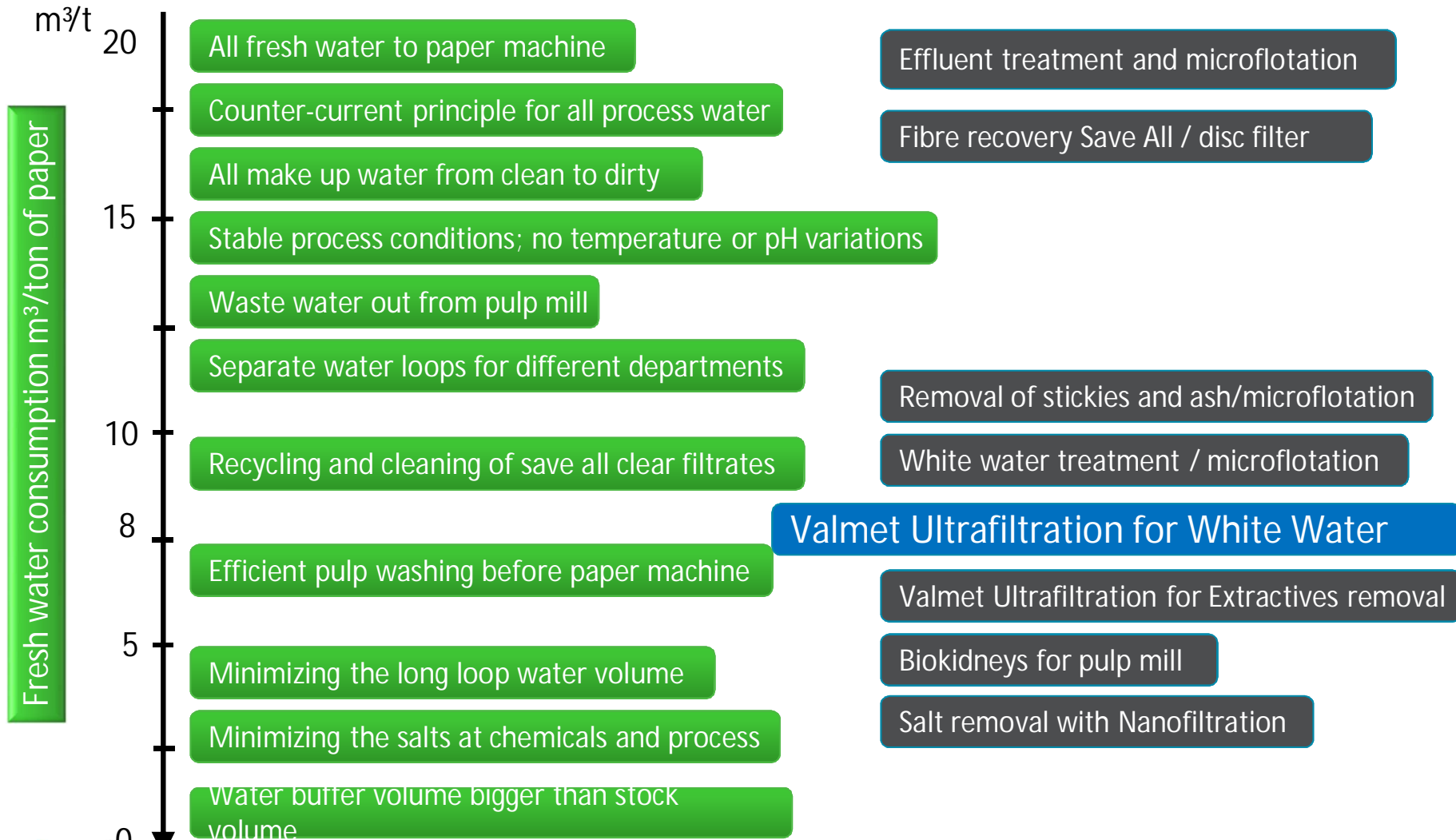


Horizon 2020
European Union Funding
for Research & Innovation



Fresh Water Reduction

Steps to controlled reduction



Valmet Ultrafiltration T

Modular process for Tissue mill white water treatment

- *Valmet Ultrafiltration T* process is designed to produce colloidal and bacteria free ultrapure water from *Tissue mill white waters* to
 - Reduce fresh water consumption
 - Improve tissue machine runnability and efficiency
- Compact and modularized process
 - Includes all needed components for fully automated operation
- Membrane Technology solution with Valmet Ultrafilter CR1010-30



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Valmet Ultrafilter CR

Technical features

Valmet Ultrafilter CR1010/30

- Membrane area 42 m²
- Membrane diameter 1 000 mm
- Filter cassettes 30 pcs
- Membranes 60 pcs
- Motor 37 kW
- Size, ca 1,8 x 2,1 x 1,4 m
- Membrane pore size 0.02 – 0.05 μm



Valmet Ultrafiltration T

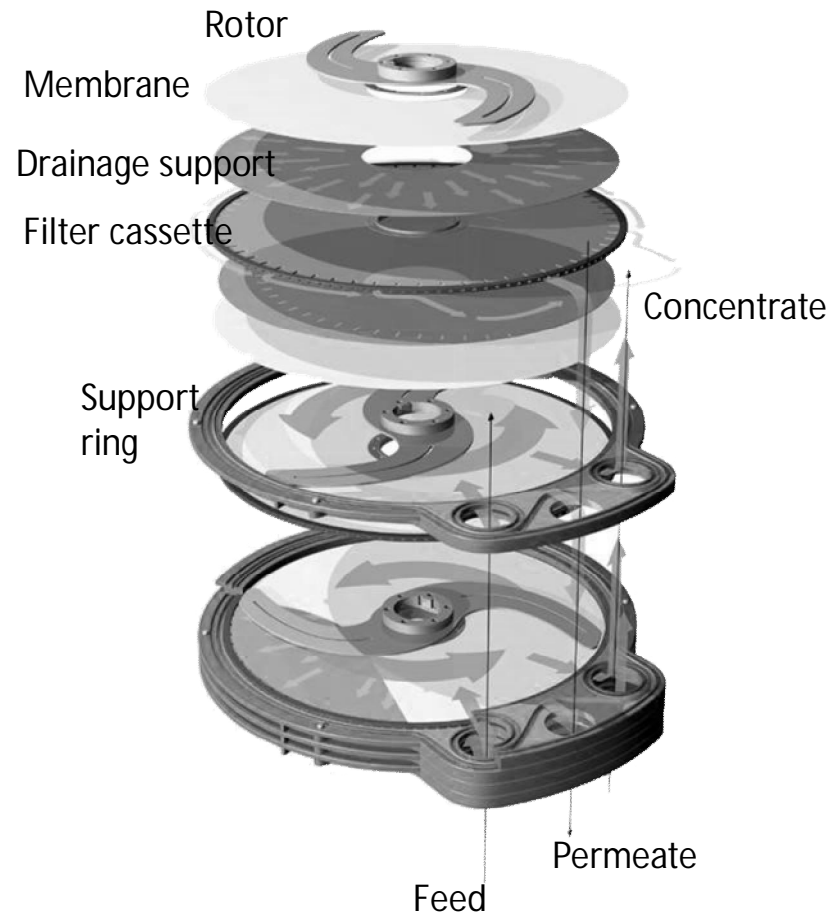
Cross Rotational - Technology

- Y Plate & frame module
- Y Polymeric flat sheet membranes
- Y Cross flow created by rotors

- Y High cross flow velocity (> 10 m/s)
 - High turbulence
 - High and stable capacity
 - Low clogging of membrane

- Y Low pressure difference (< 1 bar)
 - No clogging of membrane
 - High membrane life time

Valmet Ultrafilter



Valmet Ultrafiltration T

The product

The Permeate produced with Valmet Ultrafiltration technology is:

- Free from solid substances
- Free from colloidal material
- Free from turbidity
- Free from secondary and micro sticky
- 50-70 % less anionic trash
- Free from bacteria



Using permeate instead of fresh water decreases the overall water consumption in the tissue-making process and creates savings in the energy used for heating the fresh water.

A modern tissue machine consumes 5–15 m³ of water per ton of paper.

With Valmet Ultrafiltration T solution the consumption is decreased by 1–2 m³.

