RotoFlex™ Resource Recovery Strainer

Challenge

A U.S. tissue mill wanted to remove an aging disc filter and non-performing Sinclair filter. Demands from the local municipality to reduce fresh water usage was increasing, and the mill needed a solution to cost-effectively remove the fiber from the water for reuse.

Solution

Kadant installed two RotoFlex resource recovery strainers (1200) to filter the water, capture valuable fiber, and reuse the process water.

Results

Fresh water intake by the mill was minimized as the RotoFlex resource recovery strainer system recovered both water and fiber with no loss in water flow rates or capacity.

The recovered warm water was re-introduced into the process and used on two showering systems—a high-pressure shower and a low-pressure lube shower. The high-pressure shower water went through a new 10-station $ErGo^{TM}$ filtration system before reaching the high-pressure showers on the machine.

Fiber yield increased 3%, or three tons per day, and exceeded the mill's expectations. The increased fiber yield resulted in an additional 900 tons per year with no additional input cost. Showering performance also improved as less fiber was re-introduced into the non-brush pipe showers and nozzles clogs were reduced.

Highlights

- Excellent water and fiber recovery
- High volume capacity
- No electrical motors or continuous shower water required



