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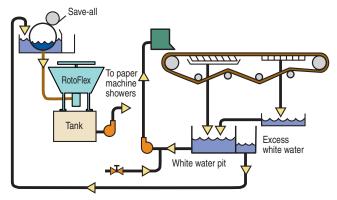
## DOCTORING, CLEANING, FILTRATION

# RotoFlex™ Resource Recovery Strainer Applications

#### **Helps Mills Save Energy**

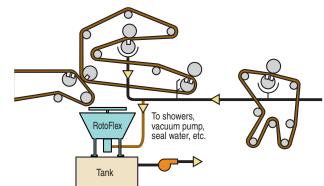
The RotoFlex resource recovery strainer is designed to filter a wide range of mill process water to levels that allow the water to be reused in paper machine showers. Solids from 50 to 250 micron can be removed. The fiber, energy and water savings, coupled with low operating costs can provide a quick return on investment.

#### **Save-all Applications**



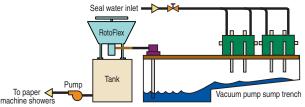
Occasional save-all upsets prevent the effective use of white water for showers. The RotoFlex resource recovery strainer handles upsets, enabling dependable use of white water in the showers.

#### **Press Section Applications**



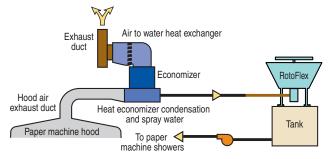
Effluent from press save-all pans, guard board trays, and felt cleaning equipment is heavily contaminated with felt hairs. The RotoFlex resource recovery strainer is captures felt hairs for efficient reuse of press section water.

#### Vacuum Pump Seal Water

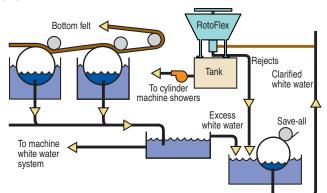


Water heated by a liquid ring vacuum pump and discharged can be reused economically in various paper machine showers. This greatly reduces the energy required to heat the shower water to white water temperature.

#### **Heat Economizer Condensate**



Heat economizers recover heat from the dryer hood air exhaust. In the process, they release a considerable amount of condensation in addition to the cold water that has been sprayed into the air stream to drop the humid air temperature below the dew point. Paper dust and scale contaminate this water. A RotoFlex resource recovery strainer will remove these contaminants permitting this preheated water to be used in the paper machine showers.



Clarified white water from a cylinder machine save-all generally can not be reused without additional treatment. A RotoFlex resource recovery strainer will remove suspended solids that would blind the coarse bottom felts and plug shower nozzles.

## **Energy Savings ROI**

#### Energy Savings and White Water Reuse, the Key to Increased Profitability

The high cost of energy has become an important factor effecting the profitability of papermaking. Reuse of white water offers most paper mills a means of achieving energy savings. For example, a recent mill survey indicated that 1200 GPM of water could be reused rather than being sent to the waste treatment plant.

To calculate the energy savings:

Savings in Dollars = 0.012 x GPM x (System Temperature °F - Fresh Water Temperature °F) \* x Cost/Million BTUs

#### Example:

Flow to RotoFlex resource recovery strainer - 1200 GPM

White Water Temperature - 115°F

Fresh Water Temperature - 45°F

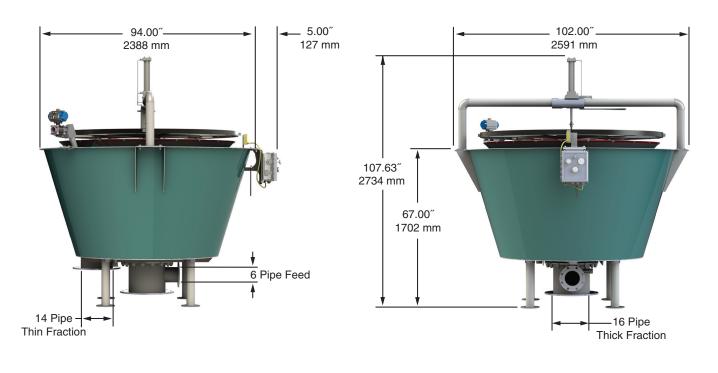
Cost/Million BTUs - \$7.00

Savings = 0.012 x 1200 x (115 – 45) x \$7.00 = \$7056/day savings

There are additional savings in treatment of the fresh water entering the system and treatment of the discharged water. In addition there are savings in high-quality fiber being recovered by the RotoFlex resource recovery strainer.



### **Dimensional Information**



#### www.kadant.com

Kadant is a global supplier of high-value, critical components and engineered systems used in process industries worldwide.

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Tel: +1 508-791-8171 Email: info@kadant.com RotoFlex Resource Recovery Strainer Applications-1002 US 05/2019 Replaces All Previous Versions © 2019 Kadant Solutions Division