

Success Story

Application: Research Study

Industry Classification: Pulp and Paper



Background: Kemfor is a Canadian research firm supporting the pulp and paper industry. Kemfor recently built a scale pilot model of its Cellulose Fractionation process. As part of this model, was the removal of larger particles in order to improve product quality.

A test was conducted with three different automatic filtration units, including the Zero Gravity Filter, to evaluate:

1. Separation efficiency of the larger particles
2. Volume of backwash fluid
3. Maintenance-free operating time

Solution: The first filter was rejected due to particles becoming lodged in the screen and the filter eventually becoming completely blocked. The second filter was not recommended due to poor filtration efficiency. In addition, the mechanical backwash process was completely seized by the fibers.

The Winchester filter completely and automatically cleaned itself of the fibrous particles after each and every backwash.

Conclusion: “Three types of filters were tested between January and June 1999 to separate the large fibrous particles from a cellulose stream.

The design which proved to be the best for this application and which is recommended for installation in an industrial application is the Winchester filter fitted with 125 μ cartridges.”

Please contact Zero Gravity Filters for a copy of the research findings.