

# Membrane Protection Filter

INDUSTRIAL FILTRATION | CONTAMINATED CONDENSATE ACID (CCA) RECOVERY

## Condensate Filter | Membrane Protection Filter

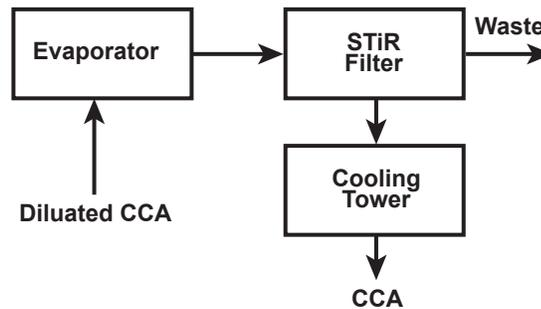
**PRODUCT USED:**

**STiR Filter and Walnut Shell Media Filter**



<b>END USER:</b>	AV Cell
<b>LOCATION:</b>	Atholville, NB Canada
<b>UNITS:</b>	(1) model STiR-113V (113 ft2/filter)
<b>FLOW RATE:</b>	850 gpm <b>(1.3 Million gallons of water per day)</b>
<b>PROCESS:</b>	Evaporator Condensate Filtration

**CONDENSATE FILTER/MEMBRANE PROTECTION FILTER  
-PROCESS FLOW DIAGRAM**



**MORE INFO**

The AV CELL facility, near Atholville, NB is world-class manufacturer of cellulose for use in the production of clothing.

CCA (contaminated condensate acid) is passed through the plants evaporators daily as waste.

Used as part of this condensate treatment system, the Filtra Systems STiR Filter allows CCA to be recovered, and further processed to recover energy from this fluid.

A single STiR unit achieves 90-99% removal of total suspended solids (TSS) greater than 2 micron.

There is a reduction of approximately 25 mg/l to 1 mg/l (inlet vs outlet). The mean particle diameter of the initial CCA solution is reduced from 18 micron to 2.4 micron.

The recovery of CCA allows the mill to reduce its consumption of fossil fuel (Bunker C oil) and wood residues, which

will reduce particulates, sulphur dioxide (SO<sub>2</sub>) and greenhouse gas (GHG) emissions from the power boiler, and protect the ultra-filtration membrane downstream of the walnut shell filter.

The Filtra Systems STiR filter was selected for evaluation due to its ability to remove a high percentage of suspended solids and ultra-filtration. The condensate filter's dynamic backwashing method is self-cleaning, with minimal backwash volume and support time.

And, the walnut shell filter media is a sustainable technology that will last for the life of the product saving you time, money and media replacement headaches.

**Boost your membrane filter protection by getting intouch with us today, 248-427-9090.**