CASE STUDY

CUSTOMER
THE BOW CENTER

LOCATION
CALGARY / 2017

EQUIPMENT
OFFICE TOWER

APPLICATION
CONDENSER WATER LOOP, GLYCOL LOOP, COOLING TOWER, PRIMARY CHILLED WATER LOOP, PRIMARY HEATED LOOP

ROI

$

REDUCTION IN STRING FILTER REPLACEMENT
$10,560

LESS FREQUENT LABOUR EXPENCE
$13,920

CHALLENGE

The Bow Center was concerned with the environmental impact of their existing filtration system. There are 26 filtration units between the condenser water loop, glycol loop, cooling tower, primary chilled water loop, and primary heating loop of The Bow Center. Each uses filters that are not recyclable and the frequency of replacement meant significant and consistent waste. String filters are not recyclable or eligible for traditional landfill facilities.

- Upwards of 2700+ contaminated string filters were being replaced annually at a cost between $5.80 and $7.50 each.
- All 26 filters were being replaced twice weekly involving a full day of labour with each replacement.
- Disposal costs of $175 / ton with a $275 surcharge were also being incurred.

SOLUTION

Install an OEI cleanable, stainless steel ADD-Vantage 9000 in front of all existing sting filters to improve the environmental impact of the Bow Center. Stainless steel, ¾” 9ADV9-VS116 filters were added in front of all 26 existing string filters.

PRODUCT RECOMMENDATION

ADD-VANTAGE 9000 VS STAINLESS STEEL

RESULTS

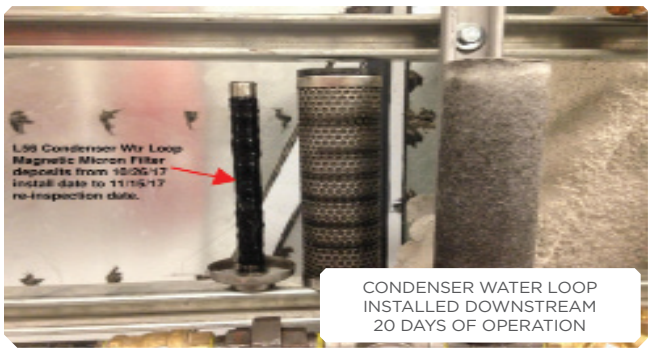
The addition of OEI filtration has significantly reduced the number of filters The Bow Center is sending to the landfill each year.

Condenser loop, glycol loop, and chilled water loop filters are checked weekly and string filters now last over one month before requiring replacement.

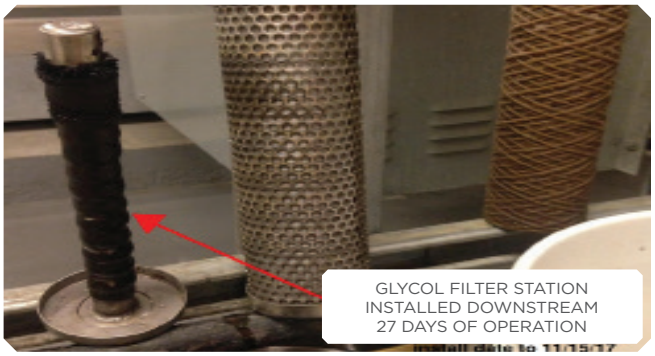
The new filtration process means a reduction in annual filter costs from $15,680 to $5,130, a savings of $10,550 (year 1); because OEI filters are a one time purchase, the annual filter replacement savings increases to $15,690 each following year.

Annual labour costs reduced from $16,640 to $2,720, a savings of $13,920.

The Bow Center is also seeing 1% of sand removed from the cooling tower every 2 days.



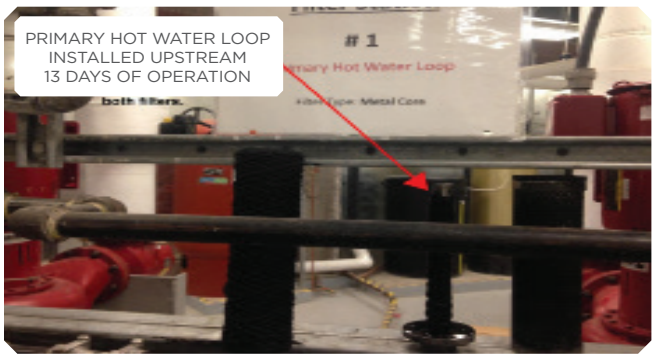
CONDENSER WATER LOOP
INSTALLED DOWNSTREAM
20 DAYS OF OPERATION



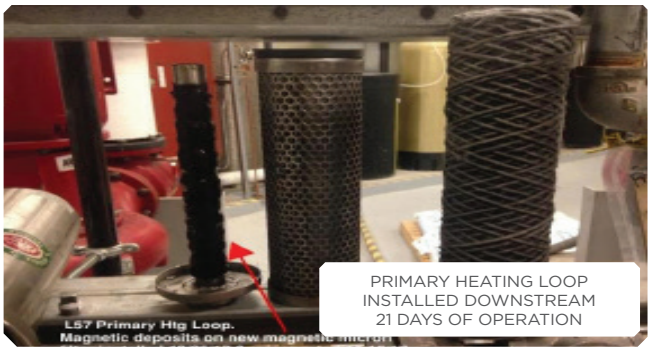
GLYCOL FILTER STATION
INSTALLED DOWNSTREAM
27 DAYS OF OPERATION

LAKOS SAND FILTER
INSTALLED UPSTREAM
15 DAYS OF OPERATION

PRIMARY CHILLED WATER LOOP
INSTALLED UPSTREAM
13 DAYS OF OPERATION



PRIMARY HOT WATER LOOP
INSTALLED UPSTREAM
13 DAYS OF OPERATION



PRIMARY HEATING LOOP
INSTALLED DOWNSTREAM
21 DAYS OF OPERATION