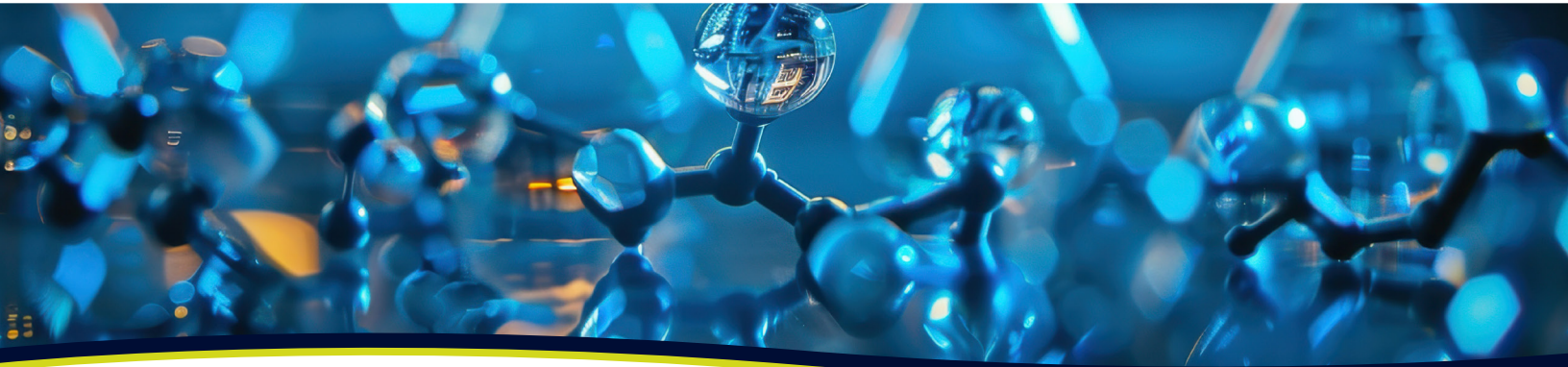


CASE STUDY | Boiler Efficiency



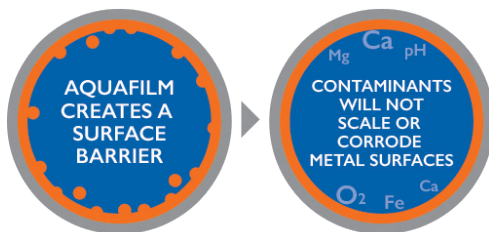
CHALLENGE

A chemical processing facility wanted to implement some energy savings initiatives to reduce water and natural gas usage.



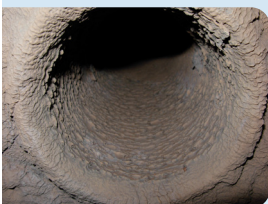
SOLUTION

Watertech recommended moving away from a traditional 3 chemistry program and switching to Aquafilm-V. The facility began using Aquafilm on two steam boilers. Aquafilm removed trace scale from the waterside of the boiler tubes. Combined with its nucleate boiling action on the metal surface, this produced a measurable improvement in heat transfer efficiency during steam generation.

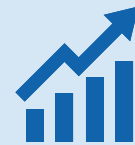


SCALE = FUEL LOSS

The Association of Water Technologies states that every 1/16" of scale results in a 15% increase in fuel loss (due to decreased heat transfer.)



1/32" scale = 9% Fuel Loss
1/16" scale = 15% Fuel Loss
1/8" scale = 25% Fuel Loss
1/4" scale = 40% Fuel Loss
3/8" scale = 55% Fuel Loss
1/2" scale = 70% Fuel Loss



RESULTS

After 12-months using Aquafilm, the results have been so dramatic the plant plans to switch 7 additional boilers to the Aquafilm program.



TOTAL SAVINGS

≈ 3/16" Scale
Successfully Removed

2,715,240

Gallons Water Saved Annually

\$22,758

Gas/Energy Savings Annually

** Soon to be multiplied by switching additional boilers to Aquafilm-V*