

PHARMACEUTICAL STEAM BOILER CLEANING

A large pharmaceutical manufacturer was having serious fouling issues within their boiler system which supplies heat for five buildings. While evaluating their system they found high head pressures, blocked strainers, significantly reduced flow and very high ΔP across heat exchangers. These findings then prompted them to check the amperage draw on their pump which had increased significantly since installation and confirmed the suspicion of a severely scaled system operating inefficiently. Inquiring for a solution they contacted several chemical companies and consulting services to advise what chemical would be best to clean the system. Based on the effectiveness, environmental impact and safety for their operators they chose **RYDLYME** to get the job done.

The **RYDLYME** was used at a 30% concentration utilizing 330 gallon tote container as an expansion tank to allow for settling of any insoluble items and allow for off gassing as **RYDLYME** dissolved the scale build up. After cleaning the system it was rinsed and brought back online. After analyzing data post-cleaning, the results showed increases in efficiency greater than expected. Comparing the cost to create 1000lbs of steam on a similar day a year prior, the net efficiency gain was almost 23%. In addition, the amperage draw on the system pumps went down significantly as well. After cleaning their system with **RYDLYME** they are saving nearly \$55,000 per year on steam generation and over \$6,000 on electricity due to the reduced amperage draw. Had they not cleaned their system with **RYDLYME** it would have cost them over \$400,000 to replace the components. Unaccounted for is the extended life of the equipment as well as reduced labor costs on comfort calls. Once again **RYDLYME** was the rapid, safe and effective solution to reduce downtime and save thousands of dollars from inefficiency.



CHALLENGE

Water scale in steam boiler system.

SOLUTION

One (1) 330 gallon tote of **RYDLYME**.

RESULTS

Enormous cost savings!

SAVINGS ANALYSIS

1000lb (Mlb) steam per day saved: 5,811

Cost per Mlb steam: \$5.40*

Heating days per year: 175

Steam savings: **\$54,913.95**

*Per eia.gov 2016/2017 average