# Case Study: Arkansas Power Plant

# Final Report

## OVERALL REPORT:

Hello Gentlemen, here are some pictures of what we found inside the unit.

As you can see in the unit, overall cleaning went very well, including the deep cleaning. In the very near future, we would recommend cleaning the HP Evaporator (Both sides of bundle), and Catalyst. We looked at them and discussed on-site about doing the cleaning in February so that we could see a true measurement of the backpressure drop and efficiency. We would also like to discuss with engineers whether or not skyclimber port holes could be installed, due to the tight areas between bundles. If so, it would make cleaning in the future more efficient. In regards to your other unit on-site, we would recommend cleaning the Catalyst and all faces in-between the Catalyst and Stack, this would be possible to perform during your upcoming February Shutdown.

Also, if possible, we would like to know the tonnage of build up we removed from the unit, and also the back pressure drop for future reference.

Dry Ice Blasting of Atlanta would like to thank you for your time and willingness to work with our company. We hope that we meet all your expectations, and we hope we can continue to work together in the future.

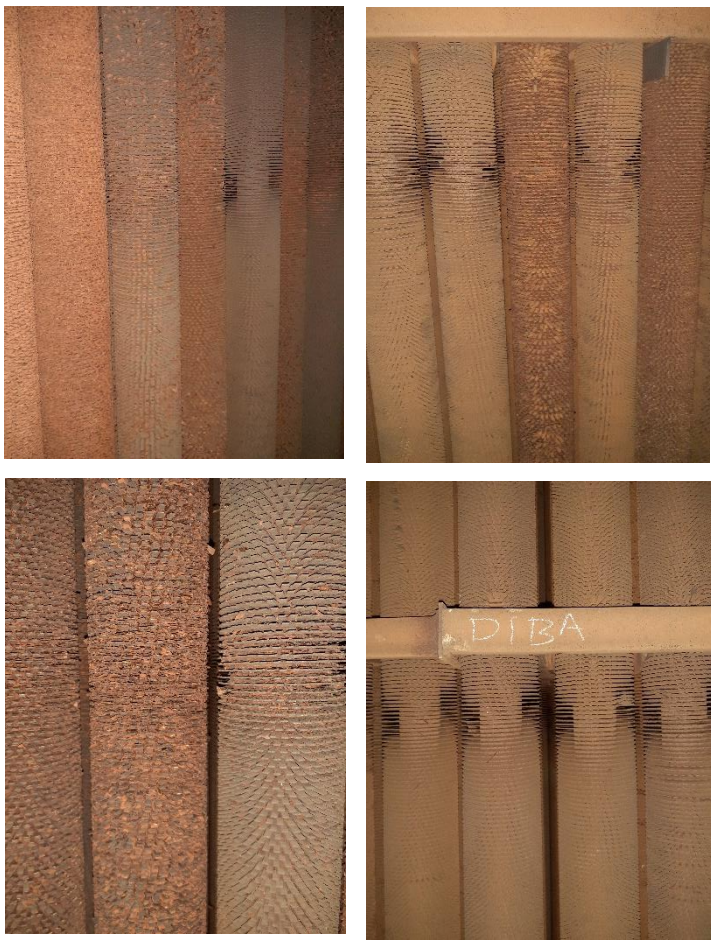
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Dry Ice Blasting
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# Face 1 (HP Evaporator Downstream) Before

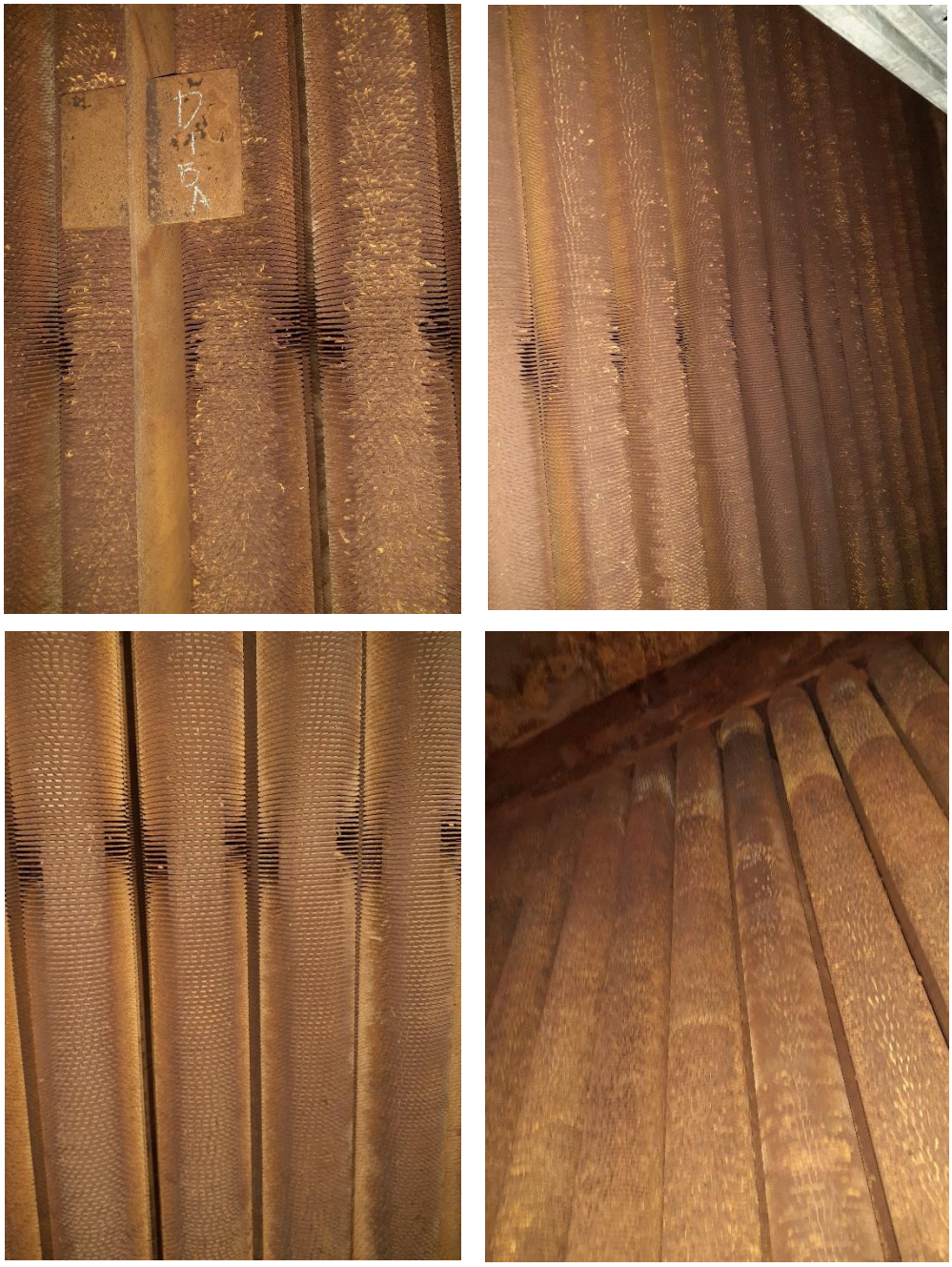


# Face 1 (HP Economizer Downstream) After



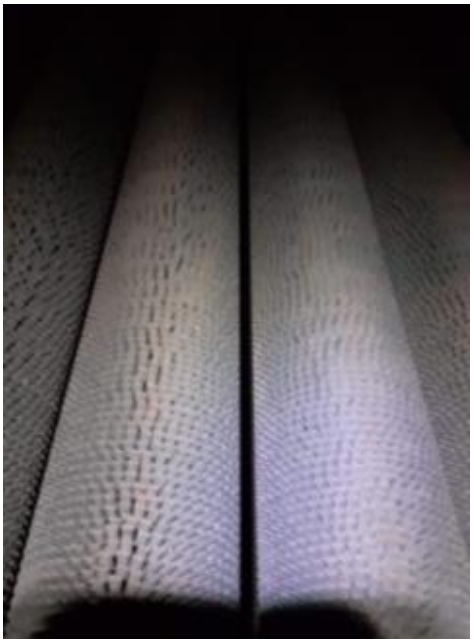
*In Face 1, there was above average build-up, and above average deep build up. The top 2 tube ties had many sections with either weak fins, or missing fins on tubes. Overall face 1 was above average dirty.*

# Face 2 (HP Economizer Upstream) Before



*In Face 2, there was more above average build-up, and above average deep build up. The top 2 tube ties had more sections with either weak fins, or missing fins on tubes. Overall face 2 was above average dirty.*

# Face 2 (HP Economizer Upstream) After







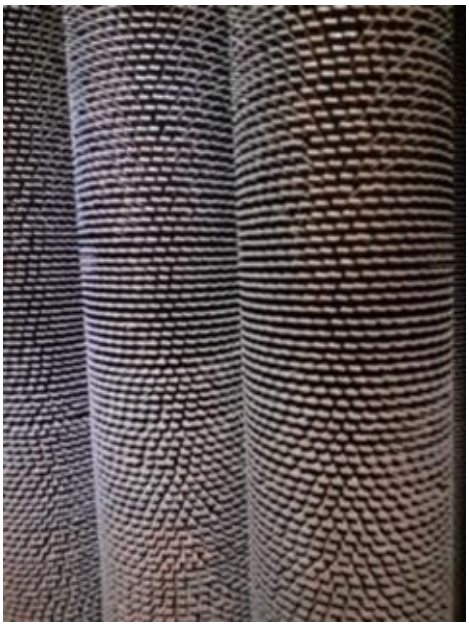


# Face 3 (LP Evaporator Downstream) Before

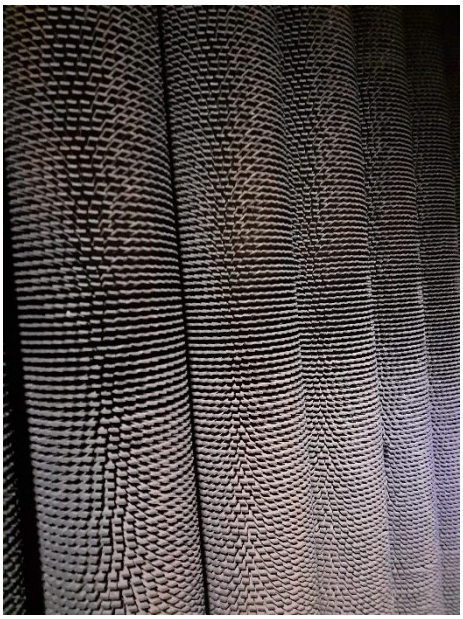


*Face 3 was the 2nd worst face behind Face 4, (Stack Side). The build up overall was worse than faces 1 and 2, including deep build up inside the bundles. As you can see in bottom right picture, there was also an ammonia leak (small on very top). Although, there were no noticeably weak or missing fins on face 3.*

# Face 3 (LP Evaporator Downstream) After



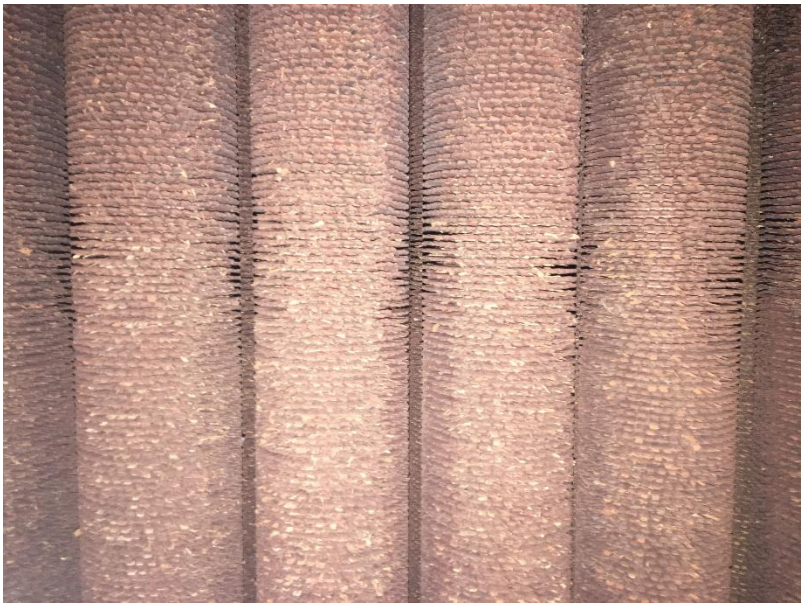






# Face 4 (LP Evaporator Upstream) Before










*From what we noticed, Face 4 was by far the worst when it came to build up. There were full tube lanes clogged with rust, flake, and build up. There was also an ammonia leak 2nd tube tie up from the bottom, which was addressed. There were some noticeable weak fins, missing fins, and warped/damaged tubes.*

# Face 4 (LP Evaporator Upstream) After

