

# ADPAS Liquid

## Optimizes Polymer Efficiency at Integrated Steel Mill for \$52.5K Annual Savings

### Background

Early in 2020, the unprecedented cold snap in southern North America created a shortage of certain ingredients for water chemicals nationwide. One specific latex chemical used by this integrated steel mill was impacted by this issue. This latex polymer is used to clarify wastewater from the galvanizing and pickle lines. As this mill was a point-source discharger, this product was extremely critical to maintaining production and environmental compliance. If the waste treatment plant cannot process, mill production lines would be halted and discharge limits may be violated.

### Solution

Nalco Water approached the mill with an innovative solution to their product-supply challenge and introduced ADPAS Liquid, a new, proprietary polymer make down technology. ADPAS Liquid is designed to activate polymers at levels approaching 100%. With this technology, the plant was able to optimize the efficiency of the polymer, transforming the efficiency of the flocculation process.

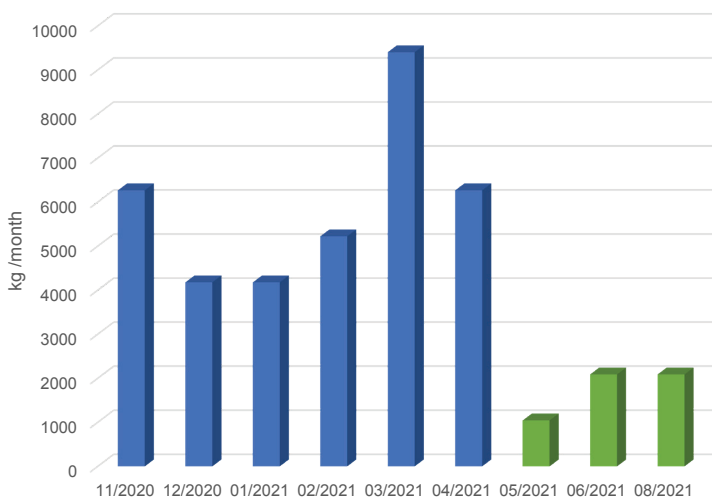
The plant was optimistic that ADPAS Liquid would help mitigate upsets in the feed-water consistency.

### Results

With ADPAS Liquid, polymer activation increased from 65% to 95% which reduced dosage by 55%. This application uses approximately 80,000 lbs a year—so this reduction equates to 44,160lbs or \$52.5K a year. Improved floc formation and settling were observed even during upset condition, delivering consistent performance and compliance.

The waste solids generated by the treatment process indicate a healthy improvement in solids content of the filter cake which led to reduced sludge disposal costs year on year.

Latex Flocculant Usage Per Month



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