

# MAJOR DAIRY PROCESSING PLANT TESTIMONIAL

## SUMMARY: CIP SYSTEM

The following information is provided by one of Clear Solutions' customers as his personal opinion and information based upon his company's use of Clear Solutions CIP system in their dairy processing plant. We have been the exclusive cleaning chemical manufacturer to this major milk supplier for seven years.

The CIP system had been previously supplied by another major manufacturer of industrial cleaners prior to Clear Solutions. This previous manufacturer was supplying a traditional 40% NaOH plus sodium gluconate-type cleaner. By contrast, Clear Solutions supplies a 90% caustic soda solution (50% diluted) and a 10% "additive package." The additive package is adjusted as necessary depending on the actual water hardness conditions that range from 9-17 grains. The additive package consists of four products that chelate, disperse, and inhibit scale, and it contains a patented surfactant that lowers the high surface tension of caustic soda. The change in cleaner supplier resulted in the following:

<u>PREVIOUS CLEANER</u>	<u>CLEAR SOLUTIONS</u>
2-5% Concentration	1-2% Concentration

This resulted in a **50% decrease** in product usage. In addition, the wash cycle times are summarized as follows:

HTSTs, Separators, and Dryers

<u>PREVIOUS CLEANER</u>	<u>CLEAR SOLUTIONS</u>
2-3.5 hours	1-1.75 hours

Since the customer operates evaporators, the cleaning cycle times are summarized as follows:

<u>PREVIOUS CLEANER</u>	<u>CLEAR SOLUTIONS</u>
4-6 hours	- 20 minutes to remove caustic - 5-10 minutes on the HTSTs, Separators, etc.

This resulted in a reduction of 3 hours as compared to 30 minutes/cycle.

Other cleaning chemicals throughout the plant were a 12% caustic/chlorine cleaner used in lines and tanks. The use of the former chlorine/caustic product was eliminated, making the company chlorine-free. The end result left the unit with high pH requiring more acid sanitizer to be used. The Clear Solutions product was utilized to eliminate the use of multiple products.