



CASE STUDY

Osborn provides cleaning solutions for your most challenging applications.



The Challenge

Two 300-gallon parts washing tanks were being dumped and recharged every 4 hours per machine. There were two same sized wash tanks with two rust inhibitor tanks. The steel parts were electron beam welded to a mating part after wash. These parts had to be cleaned to high standards or the weld would fail resulting in high scrap rates. It was also noticed that the parts came out of the drying cycle with white contamination.

The challenge was to achieve longer bath life with both parts' washers and at a reasonable cost while delivering extremely clean parts. Contamination could not be permitted.

The Solution

We developed a more effective chemistry that could absorb more soil load which would increase the bath life significantly. A high pH chemistry was found to work for both the bath life and the cleanliness of the parts while reducing the high scrap rate. The white spots were created by the salt in the water from a water softening system that was being used to fill the wash tanks.

The Result

The higher pH chemistry along with other additives in the new chemistry proved to be the answer. It increased the parts washers tank life up to one week running two shifts. That provided up to a 20 times longer tank life. The savings in chemistry alone was conservatively estimated between \$250,000 and \$300,000 per year. Additional savings came in the form of reduced down time from dumping the tanks, refilling the tanks and most of all from time lost bringing the temperature of the tanks back within operating range. The white spots they were eliminated once the water source was changed.

About Osborn

- Global leader in surface treatment and finishing solutions
- 1,250 employees worldwide
- Sales offices in 13 countries
- Customers in 120 countries
- Established in 1887

Project

Improve cleaning effectiveness, while reducing waste and down time

Industry

Metal fabrication and welding

Technologies used

Custom formulated chemical cleaners

Customer savings

Greater than \$250,000 per year