

## #1038 Brite Passivation

**Industry:** Appliance/Consumer - Manufacturer of spring products used in outdoor swimming pools

Mfg/Method: Wire forming

Alloy: 302 & 420 stainless steel

**Problem:** Customer needed to enhance corrosion resistance of complex compression springs that hold down tarps for swimming pools. Parts were rusting due to contact with outdoor elements and a chlorine environment.

**Solution:** Electropolishing removed contaminants in the outer layer of both dissimilar materials, adding to the corrosion resistance of the 420 material, while giving a decorative finish to the part.

**Note to engineer:** Stainless steel is often specified for highly corrosive environments. However, when fabricated and then subjected to highly corrosive environments, stainless steel will corrode, sometimes faster than expected. If you are having

corrosion problems with stainless steel, consider sending us some sample parts for processing and evaluation.



