

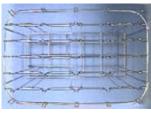
#1083 Brite Ultraclean/ Brite Passivation

Industry: Medical/Dental

Mfg/Method: Wire Forming

Alloy: 304 Stainless Steel

**Problem:** This wire rack is used to hold heat packs for use in sports medicine. The customer was looking to improve corrosion resistance of the wire form beyond the normal corrosion specifications of the alloy.



Top View

The rack is immersed in 120-degree water constantly and the wire parts cannot show any sign of corrosion through normal use.

**Solution:** The part was electropolished making the metal 30 times more corrosion resistant than passivated metals. After electropolishing, these parts were subjected to a 500-hour salt spray test, to qualify for use. The electropolished parts showed no corrosion after the test.

**Note to Engineer:** Normally on parts of this type, corrosion begins in the welded areas. Welding temperatures and oxides provide excellent focal points for corrosion due to the chemical changes and introduction of debris into the stainless steel. We can provide advise and assistance to maximize corrosion resistance on welded products.



Side View