



Able Electropolishing Co.
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#1061 Brite Ultracleaning/Brite Passivating

Industry: Other - Manufacturers of components for industrial spraying equipment

Mfg/Method: Machining, brazing

Alloy: Brass

Problem: The customer needed to replace a bright dip operation. In production, the bright dipping caused problems by creating varying end finishes including severely etched conditions. The customer needed a process that would remove the heat discoloration and oxides produced from brazing and achieve a decorative finish, all in one operation. In addition, the end customer was looking for enhanced corrosion resistance.

Solution: After some sample experimentation, a specific and controlled amount of surface metal removal was specified. Because electropolishing removes the outer layer of material, the oxide layers on this part were removed. This simultaneously cleaned up the brazed area and improved the corrosion resistance. Electropolishing also gave the part a more appealing look. Since the process is highly controlled, the threaded surfaces remain within the dimensional tolerances.

Note to engineer: *Bright dipping is a straight chemical process that relies on a direct attack to a metal surface. Varying chemical strength, temperature and load of parts in the batch all cause huge variations in the end result. While bright dipping can be inexpensive, many engineers opt for the more controlled metal removal process that electropolishing provides.*

Before



After

