ABLE^{Electropolishing}

Deburring Stainless Steel Medical Devices

Advanced Metal Improvement Technologies

INDUSTRY:

Medical device

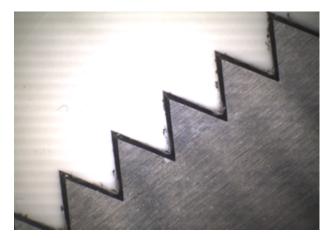
MFG/METHOD: Machining and grinding

ALLOY: 440A stainless steel

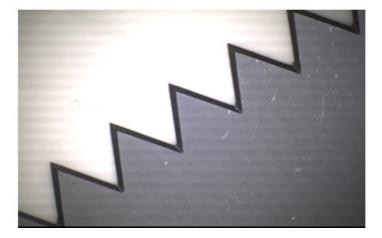
PROBLEM:

The grinding operation used to manufacture this stainless steel part left the teeth of the blade with large, hanging burrs. The client needed a deburring solution that would maintain the sharp, uniform condition of the edges. Hand deburring was neither an economical nor a consistent solution, however-the client needed a process that would be efficient, cost-effective and consistent on every edge of every part.

Before:



After:



SOLUTION:

As a controlled metal removal process, electropolishing proved to be a highly efficient and consistent method of deburring these parts. Electropolishing is highly precise, allowing us to remove the burrs while retaining the sharp blade that the client needs. In addition to deburring the part, electropolishing creates an ultraclean, exceptionally corrosion resistant surface across the entire part. This is particularly useful in medical applications such as this, in which unexpected corrosion can have serious consequences. By electropolishing the part, we were able to provide deburring and improved corrosion resistance in one cost-efficient operation.