

#1097 - Deburring by Electropolishing Stainless Steel Medical Manufacturing Part

Industry:

Medical

MFG/Method:

Stamping

Alloy:

316 Stainless steel





Before

After

Problem:

This part is used in the manufacture of a medical component. It needed to be free of contaminants and to have a smooth surface to improve release characteristics. This part also needed complete deburring and improved corrosion resistance. Because the part has many small holes, hand deburring operations would be time-consuming, expensive and imperfect.

Solution:

Electropolishing stainless steel parts like this one provides all of the benefits that the client required. Because electropolishing removes a uniform amount of surface metal from a part, it eliminates potential initiation sites for corrosion as well as burrs, leaving a smooth surface behind.



Able Electropolishing processed various samples, allowing us to determine the proper parameters for achieving the client's desired finish. Removing .0005" total material removed the embedded contaminants and particulates that can cause corrosion. Electropolishing the stainless steel part also removed the micro-burrs that had hindered it before. Ultimately, Able Electropolishing was able to prevent this part's previously-seen performance issues all in one cost-effective operation. Electropolishing is a highly effective method of removing micro-burrs when conventional hand deburring is not a practical option.