



Able Electropolishing Co.
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#1020 - Micro Finish Improvement and Brite Passivation

Industry: Electronic/Communication - Manufacturers of pressure regulators

Mfg/Method: Machined

Alloy: 316 stainless steel

Problem: Our customer manufactures pressure regulators for the 'high purity' semiconductor industry. They found the gases used in that industry are moderate to mildly corrosive. Other applications use purified nitrogen. The customer needed the ultimate corrosion protection. In addition some of the surfaces needed to be smooth to eliminate any micro crevices and initiation sites.



Solution: Able® electropolished the regulator body by removing a precise amount of metal. The corrosion resistance is greatly improved and surface finish was improved by as much as fifty percent. The part was cleaned, brightened, and fully passivated in one operation. The customer required fully cleaned ports and holes with no visible evidence of oxides or discoloration. Able also provided special packaging for each part.

Note to engineer: *The semiconductor field has extremely high demands for surface cleanliness and metal surface purity. Components subject to high magnification photography provide clear evidence of the surface cleansing properties of electropolishing. See further case histories in Brite Ultracleaning.*