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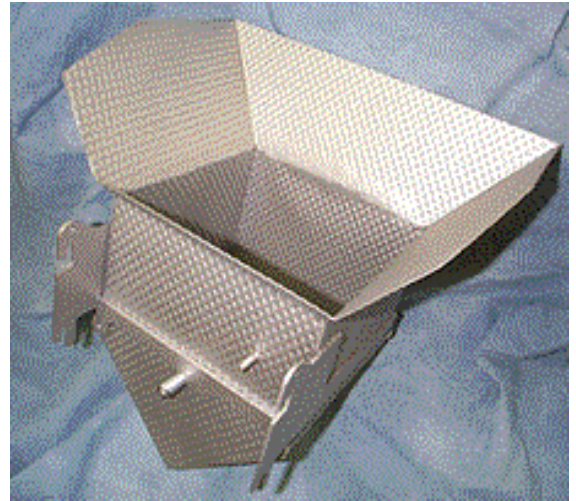
## #1010 - Brite Ultraclean/Brite Passivation

**Industry:** Manufacturers of food packaging equipment

**Mfg Method:** Baffle Chute - weldment, assembly

**Alloy:** 304 stainless steel/ blasted with Al oxide

**Problem:** Our customer is looking to package poultry product with their equipment. The atmosphere in the packaging area is humid and cold. They want to offer their customer the cleanest possible components on their poultry packaging equipment. The poultry industry is setting new clean handling standards in the wake of past contamination episodes.



**Solution:** The food packaging industry has specified 304 and 316 stainless steel to enhance the durability and resistance to corrosion. Unfortunately, many of the same design engineers are disappointed at the performance in actual use. Even after standard chemical passivation, stainless steel can and will be attacked and begin to corrode. This example has two problems: The Al oxide blasting is imbedding oxides. The other problem has to do with the final packaging environment being quite humid. The moisture and the imbedded oxides combine to create galvanic corrosion. This will contaminate the food product. The design engineers have included electropolishing as the metal finishing solution. By removing a controlled amount of metal, electropolishing eliminates any oxides and impurities imbedded from Al oxide blasting. The resultant surface is cleaned, brightened and fully passivated, passing rigorous corrosion tests.