



PU COATING - SALT SPRAY LIFE EXTENSION WITH ELECTRO-POLISHING

Did you know that when it comes to stainless steel, the general Salt Spray Life is around 200-300 hours?

Being in the industry for several years, we understand that stainless steel products can, in fact, rust and corrode over time.

To solve this, KStrong started Electro-polishing stainless steel products which further enhanced the luster of the stainless steel to provide additional Salt Spray Life of 800-1000 hours.

This electrolytic process is a lot like 'Zinc-Plating/Electro-plating' wherein, an additional polymeric layer of Polyurethane gets deposited over Stainless Steel which is about 12-18 microns thick **that provides additional Salt Spray Life of more than 2000 hours!**

The benefits of electro-polishing stainless steel also deliver a smoother surface that reduces product adhesion and improves surface cleanability. More importantly, electro-polishing dissolves free iron, inclusions, and embedded particles from the surface of the workpiece. This process promotes the formation of a very uniform coat throughout the geometry of the product giving it a resistant surface layer.

For example, in certain pipes and sections, we often observe rusting/pitting on inner geometries of products because corrosion-resistant coatings/paints don't get deposited on them. This Polyurethane coat on the other hand gets deposited uniformly throughout the geometry of the product, giving a consistent salt spray life to the product.

If you are using Fixed Line Systems or Personal Protective Equipment and want to extend the lifespan of your stainless steel products, you can do so by obtaining products which use the above process.



ELECTRO-POLISHING BEFORE & AFTER



COATING COMPARISON

PROCESS COMPARISON	BARE STAINLESS STEEL	ELECTRO-POLISHED STAINLESS STEEL	PU COATED STAINLESS STEEL	ED COATED STAINLESS STEEL
Salt Spray Life	300-500 hours	>1000 hours	>2000 hours	>2000 hours
Coating Material	N/A	N/A	Polyurethane	Acrylic Paint
Coating Type	N/A	Electro Etching	Transparent Coating	Opaque Paint Coating
Dry Film Thickness (microns)	N/A	N/A	12 to 18	20 to 25
Surface Finish	Poor	Good	Excellent	Good
Adhesion with Base Metal	N/A	N/A	Excellent	Moderate
Lustre	Dull/Grey	Polished Stainless Steel	Glossy Stainless Steel	Painted Surface