

## **Electropolishing – the most corrosion-resistant surface**

Electropolishing is an electrochemical process that takes place in a highly-concentrated acid bath. During the actual process some of the steel is dissolved, and given that dissolution works downwards from the top of any micro-irregularities, a levelling process slowly takes place which in turn means that the surface becomes smoother and shinier.

Because the traces of abrasive polishing can still be seen, electropolishing is preferable in environments where a high degree of corrosion resistance is required. These can include aggressive maritime environments or in industrial and urban areas where the affects of sulphur and nitrogen oxides are greater, for instance.

The purpose of electropolishing is twofold: Firstly, the surface is thoroughly cured, and secondly the process creates a polished effect. Normal curing will leave a slight roughness on the surface of the object, whereas electropolishing has the opposite effect. The result of electropolishing is an open, metallically-pure surface, which is the best possible starting point for the formation of the perfect passive layer.

An electropolished, stainless steel surface therefore represents the absolute pinnacle of corrosion-resistance - the perfect stainless steel surface.

- Uniformly smooth surface
- Low surface coarseness = easy to clean
- Maximum corrosion resistance