

POLIGRAT-PRODUCTINFORMATION

POLIGRAT E 391



Electropolishing of titanium and titanium alloys

Due to its strength, corrosion resistance, low weight and biocompatibility, titanium is increasingly used for high-quality, functional workpieces. The application ranges from medical technology to apparatus engineering, vehicle and aircraft construction to sports equipment and jewelry.

The electropolishing of titanium and titanium alloys provides surfaces of the highest quality in terms of purity, cleanability, corrosion resistance and passivity. Electropolished surfaces are free of burrs, scales and particles. Their high gloss makes them attractive for decorative applications.

Properties and effect

POLIGRAT E 391 is suitable for electropolishing pure titanium (grade 1, 2 and 3) especially in the medical technology and the chemical and pharmacological plant construction. The electrolyte has a high throwing power which will much ease the efforts necessary for the cathode construction in case of inner treatment of hollow parts.

POLIGRAT E 391 is free of chromic acid. Silky-matt up to highly glossy, reflecting surfaces can be achieved at a typical stock removal speed of 10 μm / h.

Application

POLIGRAT E 392 is supplied ready for use and used in immersion bathing. The electrolyte works in the temperature range of +15 to +30°C. The workpieces can be processed on a jig. Partial electropolishing is not possible.

After electropolishing the surface must be rinsed clean. The rinsing water is strongly acidic and contains the dissolved metal. It is to be treated and disposed of according to the statutory laws and regulations.



electropolished titanium container for the pharma

Technical data

| | |
|--------------------------|------------------|
| Specific weight/density: | 1.75 – 1.78 g/ml |
| Application: | undiluted |
| Anodizing voltage: | 20 to 30 V |
| Working temperature: | +15 to +30°C |
| Application time: | 0.5 to 3.0 hour |

Supply

Packing units:

| | |
|-----------------------|------------------|
| ▪ Plastic bottle | 1.9 kg (1.0 l) |
| ▪ Single-use canister | 9.0 kg (4.9 l) |
| ▪ Single-use canister | 50.0 kg (27.5 l) |

Your Advantages

- supplied ready for use
- free of chromic acid
- burr-free, metallically pure surfaces
- leveling of micro-roughness
- stress-free material removal