

# POLIGRAT-PRODUCTINFORMATION

## POLIGRAT E 269

Electropolishing Process for Stainless Steel



### Properties and effect

POLIGRAT E 269 is a high efficient industrial electropolishing process for ferritic, martensitic and austenitic stainless steel, but also for duplex and hasteloy . It achieves bright and smooth surfaces and is widely used for deburring.

The operation range is expanded significantly:

- polishing parameter: 3 - 50 A/dm<sup>2</sup>
- process temperature: 30 – 90 °C
- consistent results and steady polishing parameters from the beginning up an high metal concentration of approx. 120 g Fe/l

The enormous polishing effect of POLIGRAT E268 gains a high degree of gloss in shorter process time and reduced metal removal. The economical saving can be up to 30% in practice.

Especially ferritic steel gets an improved gloss forming even at low process temperature (> 50°C)

The deep polishing effect is improved and good polishing results are obtained at low current density. POLIGRAT E 269 is suited best for treating thin and large scaled work parts, due to its very low starting current density required to establish a stable polishing process.

### Economics

In consequence of the low metal removal to achieve the optimal degree of gloss is the electrolyte consumption reduced up to 30%. The waste costs are reduced accordingly.

The reduction of the current density offer the possibility treating larger work pieces more economically. Alternatively the production capacity of automatic systems is increased significantly by a more efficient loading of the parts onto the jigs.

### Application

POLIGRAT E 269 is operated as immersion process in suitable tanks. The work pieces can be treated either on jigs or as bulk goods in electropolishing barrels or by a special POLIBOX equipment. Due to the low current density contact or burning marks are avoided to the most possible extend.

POLIGRAT E 269 is suitable for the tampon polishing technique too.

POLIGRAT E 269 and the rinse water from the process are acidic and contain the dissolved metal. They have to be treated and disposed according to the statutory laws and regulations.



### Supply

1. Liquid – ready to use or as concentrate

Packing units:

- Single-use canister 50 kg ( 28 l)
- Barrel 342 kg ( 200 l)
- IBC 1.710 kg ( 1.000 l)

2. Concentrate POLIGRAT E 269 K ( 1: 10 )

Mixing for 100 l ready to use electrolyte:

phosphoric acid 85%	50 l
sulfuric acid 96%	40 l
POLIGRAT E 269 K	10 l

- Single-use canister 50 kg ( 49 l)
- Barrel 316 kg ( 200 l)
- IBC 1.580 kg ( 1.000 l)

### Your advantage

- high economics
- rapid gloss forming
- current saving (polishing starts at 3 A/dm<sup>2</sup>)
- deep polishing effect
- low process temperature for ferric and austenitic steel
- suitable for duplex steel