

## Surface finishing

Technically and optically perfect surfaces – we keep an eye on the special requirements.

Whether a twinkling watch or stainless scaffold in outdoor areas – numerous products today are equipped with high-quality functional or decorative surfaces. While silver-plating or coating processes for paper and fabric are often relied upon for end users, painting and electroplating as well as coating of metals are dominant in industrial applications.

For GEMÜ, high flexibility in material selection for valves is the main factor which keeps ball valves, butterfly valves, globe and control valves and diaphragm valves up to date, even with critical parameters. As an option, valves and individual components such as diaphragms can also be provided free from substances that prevent paint adhesion. These are cleaned accordingly and are packed individually in plastic bags. Furthermore, solely silicone-free lubricants are used during assembly.

# GEMÜ solutions for electroplating and painting technology as well as for coating processes

Pre-treatment, intermediate treatment, post-treatment	Mechanical procedures	Chemical/electrochemical procedures		Coating procedures
Cleaning/drying	Grinding, polishing, blasting	Chemical procedures	Electrochemical procedures	Coatings
Flushing before the process Flushing after the process Degreasing and cleaning with and without solvents Plasma cleaning Flushing Air drying Drying with dehydrating liquids/mechanical aids	Grinding and polishing agent production Grinding and polishing agent use Production of blasting material Blasting systems Shot-peening Flow grinding	Iron/zinc/manganese-phosphatization Corrosion protection chromate plating Bluing Layers Electro polishing/stripping Hot dipping Chemical metallizing Passivation	Pickling of unalloyed/alloyed steel Non-ferrous metals Zinc and aluminium materials Plastics	Organic coatings Enamelling Metallic thick films Thin film technologies Chemical and anodic oxide coating

## Application example: Electro polishing and passivation

Electro polishing and subsequent passivation is a standard process used in many sectors, to make surfaces more resistant and smooth. The surface treatment procedure has the primary purpose of creating a smoother, precise surface to reduce the risk of dirt or product residues accumulating. This increases the promised quality properties of the final product, such as cleanability or simply the visual appearance.

Exact dosing and tempering of the pickling agent and electrolyte is of great importance due to the different requirements for the surface finish.

GEMÜ offers a solution here in all sectors – whether in the field of the plant periphery, e.g. for tempering the baths or for the supply and removal of reagents as well as for the treatment of the media used in the corresponding baths.

