

Product information chrome optics Boundaries of Application

The chrome optics surface, produced by P.S. Oberflächen GmbH, is a special coating process on the basis of a chemical reduction. It does not replace the conventional plating treatment by galvanization. The chrome optics process has been invented for Rapid Prototyping, model- and trial construction as well as for show- and decorative purposes. It is not suitable for objects with permanent exposure or day-to-day use.

Improper use of the chrome optic surface (see below) may cause damage of the protective layer and the silver layer. As a result the entire coating may oxidise and flake.

- Functioning parts with heavy duty applications like door handles, wings, mirror housings, etc. but also parts, which are exposed to friction, stone chip and vibration, are unsuitable for the chrome-optics procedure.
- The parts for processing have to be temperature resistant for more than 60°C otherwise the chrome optic surface may deform, discolour or distort during the coating process.
- In case of some soft plastics and porous substrates, discoloration may occur over several months due to degassing or contamination in the substrate.
- Due to invisible impurities of the substrate, changes of colour or flaking may occur after some time.
- Permanent discolorations due to UV-exposure or improper use cannot be excluded.
- The chrome optics coating is a manual process. Visible damages like bubbles, dust enclosures in the lacquer, orange peel or discolorations cannot be excluded.
- For outdoor use, the chrome-optic coating is not suitable due to the risk of corrosion, because of humid air conditions.
- Do never treat chrome optic surfaces with aggressive detergents, high-pressure cleaner, steam, rough polishes and grinding compounds as well as acids, solvents or other chemicals.
- All treatments which shape the objects like drilled holes and cut edges etc. that could damage the protective lacquer have to be done before applying the coating (chrome-optics). If the clear coat is damaged, it must be sealed with clear lacquer immediately.
- Cutting or deforming of the chrome optic surfaces, might cause damage on the clear coat.
- Please apply decals or stickers in wet condition only. Do not strip them with mechanical force or heat, as the protective coating might peel off and deformation can happen.
- Heating over 60°C after may cause deforming, discoloration and flaking.
- Please do not treat the surfaces with a hot air dryer or other heat sources and take care that the parts are not exposed to sunlight over a longer period. Otherwise discolorations and deforming can happen.
- If the parts are assembled with other parts, please make sure that heads of bolts, clasps or other metallic devices are cushioned with elastic materials on the chrome-optics surface. A direct connection to the surface might cause oxidation or flaking due to small damages and/or chemical reactions.
- Handling chrome optic surfaces e. g. with rings, watches and screwdrivers or other sharp edged objects may damage the painted surface and must be avoided.
- If the clear coat layer is damaged, it has to be coated again immediately with the same clear coat otherwise the above-mentioned defects can happen.
- If the client processes the coated surfaces, produced by P.S. Oberflächen GmbH, the warranty expires. For damage to such components, P.S. Oberflächen assumes no liability.

The described handling of the chrome optic coating has to be adhered to, so that the described phenomena of the coating cannot occur.

We would like to point out that we are not liable for damages occurring during and after the coating of components, which were built and / or prepared for the coating by the supplier.

By placing an order contrary to the above mentioned warning statements, we point out the exclusion of guarantee by German Law (§ 639 BGB). In order to further process parts with chrome optics surfaces we recommend to treating all goods and surfaces in consultation with P.S. Oberflächen GmbH in Sassenberg.