

Product information real metal coatings Boundaries of Application

Employing the real metal coatings, P.S. Oberflächen creates a thin metal skin (layer thickness: approx. 0,07 – 0,2 mm) through a spraying method at room temperature. The metal liquid consists of 95% of real metal powder. It can be produced on almost any substrate and has no electrical conductivity. The real metal surfaces by spraying method show similar properties as cast or forged metal in terms of magnetism, heat conductivity or reactivity with oxygen, water or other environmental influences.

Parts processed with real metal surfaces by spraying are not an equal replacement for similar parts produced from solid metal. Especially the resilience properties depend immensely on the building material of the whole part.

- As it finally is real metal, the surfaces change gradually in time in the very natural way metal surfaces usually change. Depending on stress, surface finish and type of metal, surfaces may become matt or, by reacting with environmental influences (UV-light, damp, oxygen, etc.), surfaces generate blackness, patina, corrosion, etc. The customer takes notice, that this evolution is natural and cannot be blamed on the processing by P.S. Oberflächen GmbH.
- Parts with heavy duty applications or mechanically functioning parts cannot be considered equivalent to parts produced from solid metal. Durable stress may damage the metal skin.
- The parts for processing have to be temperature resistant for more than 60°C otherwise the real metal surface may deform, discolour or distort during the coating process.
- By applying polishes or clear coats the customer's desired surface effect can be preserved for a short or longer time. In case of such a clear coat sealing the surface is bound to lose many of the above mentioned properties of cast metal.
- If any parts shall be coated one-side-only, the customer needs to make sure the original part's construction and substrate/material possesses adequate reinforcement in order to totally prevent distortion of the part during the application and drying process.
- Improper use of the real metal surface (as follows) may cause damage of the metal layer which may result in further optical changes, damages, e. g. flaking.
- The processing of real metal coatings is handmade. Visible damages like bubbles, dust enclosures in the lacquer, orange peel or discolorations cannot be excluded. Minor deviations in gloss level, structure and colouring are unavoidable.

Appropriate handling of real metal surfaces:

- Do never treat real metal 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, cut edges, mechanical and thermal deformation etc. that could damage the metal surface have to be done before applying the coatings. If the PS real metal coating is damaged, it must be reworked immediately.
- Cutting or deforming of the coated surfaces, which might cause damage, are not permitted.
- Highly stressed parts (mechanical functional parts) are not to be regarded as equivalent to solid metal parts after coating with PS real metal. The permanent stress can lead to damage to the metal skin.

- Please apply decals or stickers in wet condition only. Do not strip them with mechanical force or heat.
- 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 metal surface. A direct connection to the surface might cause flaking due to minor damages.
- Heating over 60°C has to be avoided.
- To handle metal surfaces e. g. with rings, watches and screwdrivers or other sharp edged objects may damage the coated surface and can result in the above-mentioned defects.
- Please use only specifically prescribed detergents and sealing products for surface servicing otherwise changes of colour or flaking may occur on the coated surface.
- 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 real metal coating has to be adhered to, so that the described phenomena of coating damages 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 real metal surfaces we recommend to treating all goods and surfaces in consultation with P.S. Oberflächen GmbH in Sassenberg.

Care instructions:

PS real metal – patinated, unsealed surfaces:

The raw, unsealed and patinated surfaces will slowly but steadily continue to oxidize and thus change their appearance. If necessary, you can wipe the surfaces with a dry and soft cloth or rub them with fine steel wool 0000 to treat the patina.

PS real metal – polished, unsealed surfaces:

The polished, unsealed surfaces will slowly but steadily continue to oxidize and thus change their appearance. If necessary, surfaces can be treated with metal cleaning agents such as Sidol or Polyboy. These products clean the surface and restore the metal shine and protect the surface against pollution and change only for a **limited** period.

PS real metal – surfaces with wax sealing:

If surfaces are treated with wax, further oxidation and change of appearance in outdoor use is prevented for several months, indoors for approximately 1 year.

PS real metal – surfaces with clear coat sealing:

Surfaces which have been sealed with varnish/clear coat are permanently protected. If necessary, you can wipe these surfaces with a dry / damp and soft cloth in order to clean it. Slight soiling can be wiped with rinsing water or glass cleaning agents, for example, Sidolin and a soft cloth.