

Cleaning and maintenance

Cleaning and maintenance of coloured stainless steel

Like all high quality items, stainless steel parts should be cleaned regularly. The cleaning intervals depend on the degree of soiling and personal preference.

The dependence of the maintenance and cleaning work is related to the roughness of the surface: The rougher the surface, the easier it is for deposits (from normal dirt to bacteria) to find a base to adhere to, and the more difficult and complex cleaning becomes.

In the INOX-SPECTRAL® process, a transparent interference layer is created on the surface which, in combination with an electropolish as pre-treatment, has a “sealing” effect:

- Grinding marks and brush strokes are reduced
- The surface is sealed.

The care begins with the processing of the coloured stainless steel sheets: the protective film that is applied to each coloured sheet is resistant, but not indestructible. Any „machining accident“ that damages or scratches a bare, non-coloured surface will also damage the interference layer. Localised / local repair is not possible.

The cleaning intervals depend on the local environmental influences or the impact on the stainless steel surfaces. In principle, the following recommendations should be followed.

<u>Environment</u>	<u>Grade:</u>	<u>AISI 304</u>	<u>AISI 316L</u>
Areas with insignificant atmospheric loads		3-6 months	6-12 months
Urban area / industry		not suitable	3-6 months
Coastal region / close to sea		not suitable	3-6 months

In environments where there is heavy exposure to aggressive substances such as chemicals, salts or other de-icing agents, cleaning every two months is recommended.

Cleaning

Stainless steel surfaces coloured according to the INOX-SPECTRAL® process are water- and dirt-repellent. They can be cleaned easily with all non-abrasive cleaning products. Vigorous rubbing with a soft, clean cloth is often sufficient. Water with the addition of a commercial dishwashing detergent or undiluted dishwashing detergent first and then plenty of water normally removes any soiling.

Not suitable for cleaning:

- All kinds of abrasives (they scratch the surface)
- Chrome, silver and brass care products (they are oxide-dissolving)
- Furniture polishes and other “shine products” (a wax film can change the colour)

Initial cleaning:

If dirt and/or adhesive residues are still visible on the surface after removing the protective film, first remove them with nitro thinner or acetone cleaner. In the second step, as follow-up cleaning, use a neutral soap solution and a soft cloth. Always observe the surface direction of the material as the wiping or cleaning direction. Avoid circular movements.

Maintenance cleaning:

For maintenance cleaning, the above-mentioned intervals must be observed accordingly. When cleaning, it must be taken into account that water must be used to clean the surface of possible abrasive dirt.

Afterwards, the actual cleaning can be done with lukewarm water and neutral soap solution and a soft lint-free cloth. It should be noted that the wiping motion should be carried out according to the surface finish to avoid any surface damage. Finally, the surface should be rinsed with clear water (see notice 3).

Notices:

1. When cleaning a surface with a chemical product, carry out a test on a small, inconspicuous, hidden or non-critical area of the surface to check that the resulting surface still matches the original and that the product does not attack the material.
2. Cleaning products should be approved for use in accordance with the relevant national environmental regulations and should also be prepared and used in accordance with the manufacturer's or supplier's instructions. Solvents may not be used in closed rooms.
3. To avoid water stains, use clean rinse water, e.g. drinking water of sufficient quality. Drying marks can be avoided with an air blower or with clean soft disposable cloths.
4. Solutions containing chlorine, including hydrochloric acid-based cleaners and hypochlorite bleach, can cause unwanted surface discolouration and pitting and should not be used in conjunction with stainless steels. Under no circumstances should concentrated bleach come into contact with decorative stainless steel surfaces. Hydrochloric acid-based solutions, such as solutions for removing cement and mortar, must not come into contact with stainless steel. Bleaching agents containing hypochlorite must be used in the dilutions specified in the manufacturer's instructions and contact times must be kept to a minimum. Thorough rinsing after use is important. A common cause of staining and micro-scattering on stainless steel is a direct result of spraying undiluted bleach solutions and cement or mortar cleaners.

We are happy to answer individual questions about cleaning and maintaining coloured stainless steel.