

Stainless steel products

Care of stainless steel roll-up grilles

1. Important information for the care of stainless steel products

Stainless steel is the classification used to describe a group of particularly corrosion-resistant and hygienic steels. They contain at least 10.5% chromium and, in many cases, other alloying elements, in particular nickel and molybdenum. The corrosion resistance of stainless steel comes from an invisible passive layer formed by the ingress of oxygen, which, if damaged, almost always automatically reforms.

Certain materials can attack even stainless steel if care is not taken and so the following points should be noted when dealing with stainless steel:

- The use of hydrochloric acid-free cleaning agents on or near stainless steel products is strictly prohibited. Hydrochloric acid destroys the passive layer and causes rust to form on the surface of the stainless steel.
- Stainless steel products, which are not continually rinsed by pool water, such as, over flow channels or roll-up grilles, can suffer from a serious build-up of chlorides, if allowed to dry out.
- As this can seriously damage the stainless steel, it is imperative that the chlorine level of the water is continually monitored to ensure that it is not exceeded.
- Early chloride build-up can be washed off with normal tap water.
- Ferrous abrasion or abrasive deposits from other unalloyed steels can produce corrosion if the latter come into contact with stainless steel.

IMPORTANT

The formation of rust on stainless steel products is caused by external influences. The manufacturer cannot accept liability in these circumstances!

2. Cleaning and care of stainless steel

The corrosion-resistance of this material is ensured by the addition of alloying elements, such as chromium and chromium-nickel etc. and thus there is no need for the application of specific lacquers or varnishes.

A thin oxide layer (passive) is formed on the surface of the stainless steel, which protects the material against corroding. Additional protective layers may contain elements, which over a period of time can cause discolouring in the material, and, in some cases, act counter-productively by corroding the material itself. In order to avoid damage to the material, we recommend regular care of the stainless steel product.

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Type of dirt	Cleaning	Specific agents	Additional tips
- Dust, soot*	1. Wipe with soft, dry cloth, rinse with water, then dry (1).		To avoid watermarks.
- Finger marks - Fatty or oily deposits - Ashes - Grit - Remnants of laminating film - Felt-tip pen marks - Pen marks - Logo imprints - Spray paint - Solder (colourless)	2. Wash with household cleaning fluid (non-scouring), rise with water, then dry (1). 3. Wash with organic solvent, such as toluene, xylene, carbon tetrahydrochloride or mineral oil distillate, such as petrol (lead-free), nitrous thinner, acetone, methyl-ethyl-zetone, perchloric ethylene, alcohol etc. 4. Clean as in 1 - 3 then apply light oil- or wax-containing preserving fluid.	Cif D7 Stainless Steel Cleaner 3M Stainless Steel Cleaner and Polish	Hard water can leave lime deposits. Addition of a small amount of vinegar in rinsing water can remove these. These materials cause combustible fumes. Use only in well-ventilated rooms. Surface is less sensitive to renewed dirt. Must be periodically recoated.
- Hardened dirt - Concrete, plaster - Welding discolouration (slight)	5. Wash with cleaning fluid (scouring), rinse with water (1), then dry. 6. Clean with a nylon scouring pad (also with aluminium oxide coating) using water, organic or mineral solvent. 7. Clean with abrasive cloth or brush. Thoroughly clean with water (1), using pressure to prevent build-up of rust.	Ajax, Vim etc. Scotch-Brite	This is not suitable for 2D, 2B or BA surfaces as traces of scouring powder can remain. Ground and brushed surface should be cleaned in the same direction as the grinding/brushing. Only use brushes with stainless steel bristles.
- Welding discolouration - Solder (coloured) - Rust	8. Clean electrolytically with corrosive fluid Oakite no. 33. At the same time clean as described in 6 and 7. To improve surface discolouration: Rub with 20% nitric acid or phosphoric acid, then rinse (1).	ARMCO DURCO Handelsübliche Beizmittel	Neutralising with water is imperative.
- Scratches	Can be removed by filing. On cold-rolled surfaces, it is difficult to achieve good results even if polished or steeped in corrosive fluids.		Work should be carried out using a protective film.
- Rust (substantial)	Clean as described in 7 and steep in corrosive fluid.		Check resistance of material to corrosive products.

* Generally contains sulphur and phosphorus, thus is highly corrosive. Can cause serious corrosion.

** Contains chlorine, can become corrosive when damp (type 304 - corrosion)

(1) Rinsing with hot water, with some pressure, produces better results.

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KAMPMANN GMBH • 49794 LINGEN (EMS)
Friedrich-Ebert-Straße • Postfach 60 44
Tel. +49 (591) 7108-0 • Fax +49 (591) 7108-300
info@kampmann.de • www.kampmann.de

