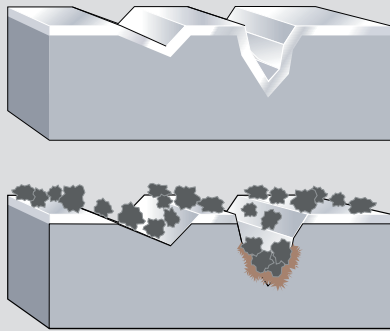


Maintenance Cleaning of Stainless Steel



Stainless steel is not equal to maintenance free

Stainless steel is often chosen because of its beautiful finish, long life and minimal maintenance needs, but even stainless steel can be stained over time by dirt, oil, grease, paint and rust. With a regular maintenance program you can prevent discoloring and staining. This preserves the shine, feeling and overall impression of stainless steel.

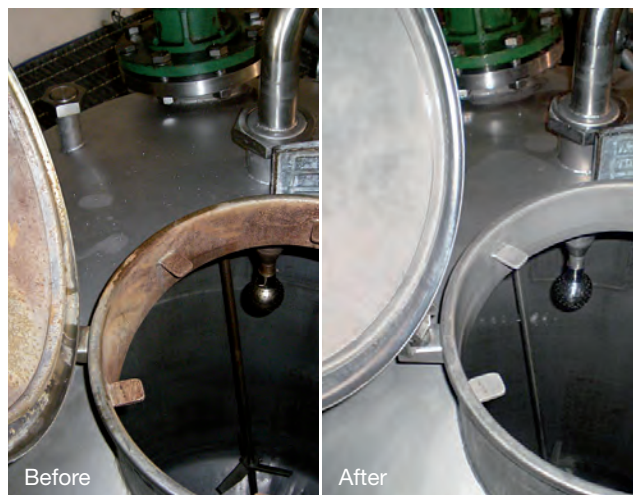
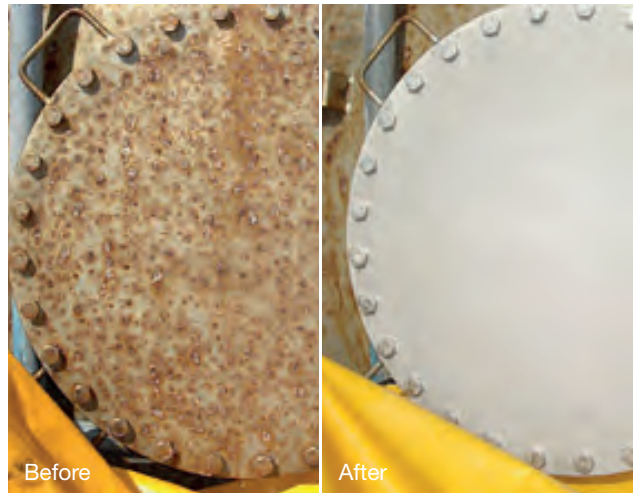


The self-healing capacity of stainless steel

Stainless steel is protected from corrosion by its passive layer – a very thin surface layer that is primarily chromium oxide. The chromium in the steel reacts with the oxygen to which the steel surface is exposed and thus forms this invisible film. If the oxide film is damaged it will be spontaneously healed when the surface comes into contact with oxygen.

On a contaminated stainless steel surface, the deposits will block the contact with the oxygen which is required to maintain the chromium oxide layer at an optimum level. Chlorides may penetrate under the deposits, leading to corrosion and rust.

Proper cleaning of the surface right down into its pores will considerably reduce the risk of corrosion.



Common causes of rust and spots on stainless steel

- If it is exposed to air that is polluted by chlorides and SOx in industrial zones, marine and coastal environments, road salt, traffic pollution.
- If the surface has a rough finish that provides a foothold for corrosive substances and corrosion products from the environment.
- If it has an inappropriate design that creates pockets and narrow grooves.
- If it is polluted by iron particles from the environment through the use of carbon steel tools and particles from vehicle brakes.
- If it has been mounted with fixtures of ordinary steel or are in direct contact with unalloyed steel.

Common uses

External	Buildings	Bridges	Vehicles	Trains	Ships	Tanks
Internal	Pipes	Tanks	Autoclaves	Process equipment	Food equipment	
Indoors	Lifts	Entrances	Kitchens	Doors	Wall panels	Sanitary installations

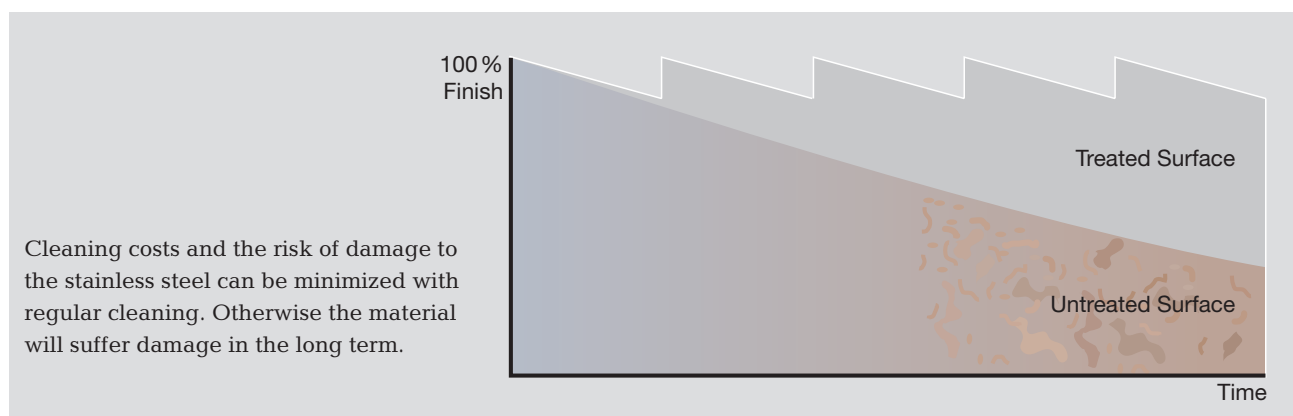
Preventive maintenance

Rain is usually enough to keep a stainless surface clean and free of dirt and deposits on building components of stainless steel. In places with little rain or for surfaces that the rain does not reach, however, regular maintenance cleaning is necessary.

This also applies to building facades, shop entrances and signs, so that the steel will retain its luster and durability. It is also the best way to good overall economy.

Cleaning should always be done before the surface becomes extremely dirty. The appropriate cleaning interval depends on the environment.

A rule of thumb is that the steel should be cleaned as often as the windows. This could mean 3–6 months when slightly dirty and 1–3 months when very dirty and in aggressive environments.



Product program

We have a complete range of products designed to restore the corrosion resistance of stainless steel, whether it concerns light, medium or heavy cleaning, pickling and subsequent passivation we have a product to suit your operation. For very harsh attacks we recommend our wide range of pickling pastes, pickling sprays and pickling baths.

- **Avesta 401**, stainless steel cleaner
Strong cleaning of dirtier surfaces, removal of surface rust, oil, grease and calcium stains.
- **Avesta 130**, pickling paste
Cleaning of rustier surfaces, removal of coarse surface rust caused by pitting.
- **Avesta 630**, acid free passivator
Passivates surfaces after cleaning and restores the rust protection. Gives no hazardous waste.

In safe hands

A well balanced and implemented maintenance cleaning program minimizes maintenance costs, so that the surface of the steel, which is often a major reason for choosing stainless steel in the first place, comes into its own.

In general, all types of cleaning operations must always be carried out in accordance with local regulations. We can help you to arrive at a maintenance program with the best possible method to suit your conditions and to ensure minimal environmental impact.



We are environmentally certified according to ISO 14001 and we are constantly working with these matters. Contact us. Our specialists are ready to help you.



Avesta Cleaner 401 is a heavy-duty stainless steel cleaner.



Avesta Pickling Paste 130 is a unique low-fuming and safer-to-use pickling paste



Avesta FinishOne Passivator 630 is an acid-free passivator

Unrivalled experience and know-how

voestalpine Böhler Welding, Finishing Chemicals is a leading producer of superior pickling products for stainless steels and special alloys. The company is also a part of the voestalpine Böhler Welding, one of the world's largest manufacturers of welding consumables.

For over 50 years we have worked closely with leading producers of stainless steel. We know how to keep steels stainless.

The products are applied and work in a way that introduces no mechanical damage that can weaken the protective layer of the stainless steel.

All our products are well-known, easy to use and have established an impeccable reputation. Start using them now and be absolutely confident that they will solve your problem and restore the surface and return your stainless steel to its original lustrous look, feel and finish.

Our own manufacture

Our products are made in Malmö, Sweden, in our own modern, automated process plant. All products have full traceability from raw material to finished product, which gives us total control of the product quality. Our quality and environmental management systems are certified according to the ISO 9001 and ISO 14001 standards.






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voestalpine Böhler Welding

Welding know-how joins steel

With over 100 years of experience, voestalpine Böhler Welding is the global top address for the daily challenges in the areas of joint welding, wear and corrosion protection as well as brazing. Customer proximity is guaranteed by more than 40 subsidiaries in 25 countries, with the support of 2,200 employees, and through more than 1,000 distribution partners worldwide. And with individual consultation by our application technicians and welding engineers, we make sure that our customers master the most demanding welding challenges. voestalpine Böhler Welding offers three specialized and dedicated brands to cater our customers' and partners' requirements.



Lasting connections – More than 2,000 products for joint welding in all conventional arc welding processes are united in a product portfolio that is unique throughout the world. Creating lasting connections is the brand's philosophy in welding and between people.



Tailor-made Protectivity™ – Decades of industry experience and application know-how in the areas of repair of cracked material, anti-wear and cladding, combined with innovative and custom-tailored products, guarantee customers an increase in the productivity and protection of their components.



In-depth know-how – Through deep insight into processing methods and ways of application, Fontargen Brazing provides the best brazing and soldering solutions based on proven products with German technology. The expertise of this brand's application engineers has been formulated over many years of experience from countless application cases.

