DERUSTIT
OBERFLÄCHENTECHNIK

DERUSTIT Passivating solution 2016

Properties

Stainless steel owes its corrosion resistance to a very thin oxide layer on its surface. This layer can be locally damaged or broken by welding, grinding, machining, etc., and can be totally removed by pickling.

A clean stainless steel surface will generate a protective oxide film in uncontaminated free air. The stainless steel is then said to be in a „passive“ condition. DERUSTIT passivating solution 2016 chemically accelerate the formation of this oxide layer.

The use of this product is particulare important of the internal surfaces of vessels or fabrications where little air access is available. Under these conditions it can take a cosiderable time to build up the layer and there is a danger that the item could be put into service before the corrosion resistant passive layer has regenerated.

Field of application

The standard range of DERUSTIT passivating solution 2016 is intended for use on the austenitic Cr/Ni-steels but not the free machining grades for which special products are required.

Pre-treatment

Stainless steel surfaces must be thoroughly degreased prior to any passivation treatment. Lubricants, grease, oil and even finger-prints not removed from the surface will prevent successful passivation.
In order to obtain a clean, degreased finish, DERUSTIT stainless steel cleaner 2084 is recommended (Information sheet available on request).

Any foreign matter, for example, ferritic material, welding or heat scale, or any embedded particles interfere with the oxide formation. These contanimants may furthermore corrode and cause the surface to stain or discolour. For the removal of welding scale, etc. DERUSTIT pickling pastes are available and are applied using a suitable brush. Larger contaminated stainless steel surfaces are economically and effectively cleaned by DERUSTIT sprayable pickling pastes. Details of these products are available on request.

Using the product

DERUSTIT passivating solution 2016 is ready for use. The most efficient method is passivation by immersion. The solution can be operated at room temperature using containers made of plastic or stainless steel. The item to be passivated should be immersed in the solution for approx. 15 - 20 minutes.

The product can also be sprayed on with a low pressure sprayer or brushed on with a suitable brush (both equipments obtainable from DERUSTIT). 1 kg of DERUSTIT passivating solution 2016 has a coverage of 5-6 square metres

After passivation, the stainless steel should be thoroughly rinsed free of all solution using clean water.

Attention: The product should not dry on !!

Advantage of additional passivation

- quick formation of the passivating layer,
- rests of pickling agents will be removed by the solution,
- discolorations of the surface which were caused by insufficient rinsing off of the pickling acid will also be removed by the solution.

Effluent treatment

Effluent rinse water resulting from using DERUSTIT passivating solution 2016 should be neutralised
prior to disposal in accordance with local water authority regulations.

Safety precautions

DERUSTIT passivating solution 2016 contains nitric acid and the precausions normally taken when working with this acid should be observed. Protective clothing such as rubber gloves and goggles etc.
should be worn. When spraying or working in confined or poorly ventilated environments, respiratory
equipment must be used.

More comprehensive safety details are available on the appropriate DERUSTIT safety data sheet.

Please note

The information contained in this data sheet is given to the best of our knowledge and is based upon practical and laboratory tests. Our technical service department is willing to offer advice on handling, application and process technics.