

# **Lasting Connections**

# Cleaner 401

### A heavy-duty stainless steel cleaner.

Superficial rust, oil, grease and lime deposits can occasionally appear on any stainless steel surface. Cleaning with Avesta Cleaner 401 eliminates these spots with ease, restoring the surface and returning the stainless steel to its original lustrous look, feel and finish.

#### **Standard applications**

Avesta Cleaner 401 is intended for a wide range of industrial cleaning applications. It offers a good general cleaning result on on stainless steel surfaces:

#### **Features**

Gives a dual cleaning effect:

- » For pre-cleaning to remove organic contaminants oil and grease prior to pickling, this is important since pickling acids have difficulties to remove them and they will inhibit pickling.
- » For maintenance cleaning to restore and brighten stainless steel surfaces that have been contaminated during fabrication or usage. It removes staining caused by sea water, "tea-staining", rain water, "water scale" and road salt. For more severe surface rust, pickling may be required.

**A consecutive passivation steep** using Avesta FinishOne Passivator 630 after using the Cleaner 401 further improves the result and increases time until the next treatment with up to 3 times based on practical experiences.



1100 kg IBCs



20 kg drums

Photos: Available in several packages (Sizes may differ from markets)



Poor pre-cleaning
Photo: Remaining oil on the surface, before pickling, which blocks the pickling acids from cleaning and causing discolorations



Before After
Photo: Maintenance cleaning, Cleaning of tea
staining on a stainless manhole using Avesta
Cleaner 401 and Passivator 630



Photo: Application of Cleaner 401

#### Instructions for use



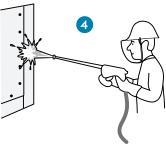
1. Apply by spraying using an acid resistant pump like Avesta SP 25, or by brushing, dipping or circulating depending on application.



2. When spraying, apply evenly on the entire surface.



3. Typical reaction time is 15-30 min. at 20°C. For stubborn (difficult to remove) grease an extra spraying may be needed, mechanical brushing with a nylon brush will also help.



4. Rinse off the residuals by using a high-pressure water jet.
Use deionized water for the final rinsing of sensitive surfaces.
The waste water should be neutralized before discharge.

#### **Packaging**

Avesta Cleaner 401 is supplied in 20 kg polyethylene containers or 1100 kg IBC polyethylene containers. Availability of different packages sizes may differ between markets. All packing material follows the UN regulations for hazardous goods.

#### Storage

Avesta Cleaner 401 should be stored indoors at room temperature. Containers must be kept properly closed, in an upright position and inaccessible to unauthorized persons. The product is perishable and should not be kept in storage longer than necessary. The spray may decompose during storage and hence need to be stirred before usage. It has a maximum shelf life of two years when stored at room temperature. Exposure to higher temperatures (>35 °C) may damage the product and reduce the shelf life.

### Worker safety

Protective clothing. In general, users should wear acid resistant overalls, gloves and rubber boots. Face visor should be used and, if necessary, suitable respiratory protective devices.

Special conditions may apply from one country to another. Consult our website where updated Safety Data Sheets can be found.

#### Waste treatment

The wastewater produced when pickling contains acids and should be treated with Avesta Neutraliser 502 or with slaked lime to a pH-value of 7-10 before discharge. Heavy metals from stainless steel are precipitated as a sludge, and should be sent for deposition according to local regulations.

Empty containers (HDPE) must be cleaned and can then be recycled according to local regulations.

#### Other information

For more information, please visit our website:

<u>www.voestalpine.com/welding</u>, where you can find Safety Data Sheets and other useful information.







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