

Pickling gel for use and storage in warmer climates

Avesta Pickling Gel 122 is more free-flowing than a pickling paste to facilitate the application and to give a high coverage. It can hence be used to clean with a good result.

Standard applications

This gel is universal and specifically intended for standard brush pickling of weld seams and smaller surfaces of all stainless steel grades.

Characteristics

- Restores damaged stainless steel surfaces, such as weld seams, by removing weld oxides, the underlying chromiumdepleted layer and other defects that may cause local corrosion.
- Improved pickling result, offers a brighter surface with less discolouration than classical products.
- The transparent gel consistency gives good adhesion to the stainless steel surface.
- Can be used and stored in warmer climates (the gel is heatstable up to +45 °C).

**For more information, please visit our website
www.avestafinishing.com
where you can find Safety Data Sheets and other useful information.**

A unique patented, safer-to-use pickling paste!

Many of the processes used for pickling stainless steel lead to the development of hazardous nitric fumes. To improve safety when pickling, Avesta Finishing Chemicals has developed a unique patented low-fuming pickling paste which reduces toxic nitric fumes by 80 %.

Standard applications

Avesta BlueOne™ Pickling Paste 130 is universal, suitable for brush pickling of welds and smaller surfaces of all stainless steel grades.

Characteristics

- Restores damaged stainless steel surfaces, such as weld seams, by removing weld oxides, the underlying chromiumdepleted layer and other defects that may cause local corrosion.
- Improved pickling result, offers a brighter surface with less discolouration than classical products.
- Unique and covered by a world patent.
- Higher yield, decreased consumption, thanks to the visible blue colour and its free-flowing consistency which facilitates application. The paste is easy to apply and highly visible.

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A powerful, low-fuming, safer-to-use pickling paste!

Many of the processes used for pickling stainless steel lead to the development of hazardous nitric fumes. To improve safety when pickling, Avesta Finishing Chemicals has developed a unique patented low-fuming pickling paste which reduces toxic nitric fumes by 50 %.

Standard applications

Avesta RedOne™ Pickling Paste 140 is intended for powerful brush pickling of welds and smaller surfaces of high-alloy steel grades in tough applications. For non-heavy-duty applications we suggest our low fuming Avesta BlueOne™ Pickling Paste 130 in order to improve the environmental impact and safety when pickling.

Characteristics

- Restores damaged stainless steel surfaces, such as weld seams, by removing weld oxides, the underlying chromiumdepleted layer and other defects that may cause localcorrosion.
- Unique and patented.
- Higher yield, decreased consumption, thanks to the visible red colour and its free-flowing consistency which facilitates application. The paste is easy to apply and highly visible.

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A powerful pickling spray for heavy-duty applications

Avesta Pickling Spray 204, is intended for heavy-duty applications and offers an aggressive spray pickling result for larger stainless steel surfaces.

Standard applications

Avesta Pickling Spray 204 is intended for tougher applications such as heavy hot rolled plates, high-alloyed steels such as 904, duplex and SMO, thicker weld oxides and pickling at lower temperatures. For non-heavy-duty applications we suggest the use of our low-fuming Avesta RedOne™ Pickling

Characteristics

- Restores stainless steel surfaces that have been damaged during fabrication operations such as welding, forming, cutting and blasting. It removes weld oxides, the underlying chromium-depleted layer and other defects that may cause local corrosion.
- Has a thixotropic consistency, which makes it stick well to the surface and hence facilitates the application even in difficult positions.
- The process is sensitive to strong sunlight/high temperatures and the spray may dry into the surface and be difficult to remove.

Passivation

To further improve the result we recommend passivating after pickling using Avesta FinishOne Passivator 630, which is a safer acid-free passivation method.

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A unique, safer-to-use pickling spray!

Many of the processes used for pickling stainless steel lead to the development of hazardous nitric fumes. To improve safety when pickling, Avesta Finishing Chemicals has developed a unique low-fuming pickling spray which reduces the toxic nitric fumes by 50 %.

Standard applications

Avesta RedOne™ Pickling Spray 240 is universal and suitable for spray pickling larger surfaces of all stainless steel grades. High alloyed steels and duplex steels may need more than one treatment.

Characteristics

- Restores stainless steel surfaces that have been damaged during fabrication operations such as welding, forming, cutting and blasting. It removes weld oxides, the underlying chromium-depleted layer and other defects that may cause local corrosion.
- Improved pickling result, offers a brighter surface with less discolouration than classical products.
- Higher yield, decreased consumption, thanks to the visible red colour and its free-flowing consistency which facilitates application.

Passivation

To further improve the result we recommend passivating after pickling using Avesta FinishOne Passivator 630, which is a safer acid-free passivation method.

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For immersion pickling!

Avesta Pickling Bath 302 is a concentrate that should be diluted with water depending on the stainless steel grade.

Standard applications

The bath fluid is recommended for immersion pickling of small objects and for pickling surfaces that are time-consuming to brush or spray pickle. It can also be used for circulation pickling of pipe systems.

Characteristics

- Restores stainless steel surfaces that have been damaged during fabrication operations such as welding, forming, cutting and blasting. It removes weld oxides, the underlying chromium-depleted layer and other defects that may cause local corrosion.
- Working life; the bath fluid is consumed during usage and the effective working life of the bath fluid is determined by the amount of acids and dissolved metals. The bath fluid should hence be analysed regularly, and new acid should be added when needed in order to obtain an optimal pickling result. Avesta Finishing Chemicals may assist with this analysis service.

Recommended concentrations

Standard grades, such as 304 and 316: Mix 1 part 302 into 3 parts of water. A further dilution can be done if longer pickling times can be accepted.
High-alloyed grades, such as duplex grades (2205) and austenitic grades (904 L) for use in severe corrosive conditions: Mix 1 part of 302 into 2 parts of water.
Very high alloyed grades, such as super-austenitic (254 SMO) and super-duplex (2507) grades: Mix 1 part of 302 into 1 part of water.

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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 your 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 stainless steel surfaces.

Characteristics

- Restores and brightens stainless steel surfaces that have been contaminated during fabrication or usage. It removes surface rust, water staining and lime deposits and organic contamination such as oil and grease.
- Pre-cleans before pickling. It removes organic contaminants such as grease, oil, etc. which will inhibit pickling.
- Removes atmospheric staining caused by sea water, "teastaining", rain water, "water scale" and road salt.

Passivation

Avesta Cleaner 401 can be used in combination with Avesta FinishOne™ Passivator 630, which helps to remove free iron from the surface and regenerate the protective layer in the stainless steel by speeding up the passivation process.

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A traditional nitric acid based, well-proven passivator

Avesta Passivator 601 is intended for use after mechanical descaling treatment of stainless steel such as grinding, polishing and blasting. These processes leave a surface which, because of remaining grinding dust and iron particles, is sensitive to corrosion. The product also restores the protective chromium oxide layer.

Standard applications

Avesta Passivator 601 is intended for a wide range of industrial passivating applications such as passivation after pickling or passivation after grinding, brushing, blasting or other mechanical treatments. The Passivator 601 contains nitric acid. To improve safety and minimize the environmental impact, we also suggest the use of our acid-free FinishOne™ Passivator 630.

Characteristics

- Accelerates rebuilding of the protective layer of chromium oxide.
- Removes surface contaminants and iron particles from the stainless steel surface.

Surface restoration

Avesta Cleaner 401 can be used together with Avesta FinishOne™ Passivator 601, which helps regenerate the protective layer in the stainless steel by speeding up the natural passivation process.

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An acid-free passivator!

Avesta FinishOne™ Passivator 630 passivate without nitric or citric acid. It helps to remove free iron from the surface and regenerate the protective layer in the stainless steel by speeding up the passivation process.

Standard applications

Avesta FinishOne™ Passivator 630 is intended for a wide range of industrial passivating applications. It offers a good general passivating result on stainless steel surfaces

Characteristics

- Restores the passivation layer on stainless steel surfaces that have been damaged during fabrication such as grinding, brushing, blasting etc or usage.
- Improves the result after pickling by speeding up the passivation process.
- Diminishes the risk of discoloured surfaces caused by flash clouds or free iron (smut) when used wet-on-wet.
- Reduces the formation of toxic nitric fumes during rinsing after pickling.
- Prevents water staining caused by poor rinse water.
- Creates no hazardous waste and contains no nitric acid.
- Is easy to handle and classified as non-dangerous goods.

Surface restoration

Avesta Cleaner 401 can be used together with Avesta FinishOne™ Passivator 630, which helps regenerate the protective layer in the stainless steel by speeding up the thickness of the passive layer.

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