



Protecting and Cleaning Stainless Steel

Stainless steel is widely used within the Food and Pharmaceutical industries because of its strength, its ability to resist corrosion and its ease of cleaning. As a result of these virtues, stainless steel is often taken for granted and it is assumed that no problems will arise during its usage; however care is required to ensure that the stainless steel lives up to its reputation.

Most cleaning systems employed to remove grease, fats, food debris pharmaceutical residues etc are water based. Aqueous cleaning products make use of fairly powerful detergents plus surfactants, and occasionally a disinfection agent such as a sulphite or hypochlorite may be incorporated.

The austenitic stainless steels can be prone to pitting and crevice corrosion under certain circumstances, although 316 grade is less problematic than 304 grade due to its molybdenum content, but as both forms of attack are associated with the presence of chlorides it is essential that special care is taken if using a cleaning solution which contains hypochlorite as a bleaching/disinfectant agent.

The sulphites generally do not cause any problems and although most detergents are fairly alkaline they should not attack the austenitic stainless steel, however residues may taint food products if allowed to concentrate.

In each instance whether it be a bleaching/disinfectant or a detergent although rinsing is essential in order to prevent any of the problems noted above.



To summarise, the cleaning process should encompass the following steps:

- a** Wash with either a detergent or bleaching/disinfectant depending on the contamination using a soft cloth.

In extreme cases a nylon scouring pad may be used. If this is necessary any cleaning should be carried out along the grain, should there be a directional polished grain.
- b** Rinse carefully and thoroughly with fresh clean water.
- c** If required dry the item with a soft cloth.

CAUTION:

DO NOT use harsh abrasives and metallic scouring materials, as they will leave scratch marks in the surface, which will become germ traps as well as damage the appearance.

DO NOT use wire brushes, scrapers or contaminated scouring pads.

AFTER USE always remove all cleaning aids from the stainless steel surface to avoid formation of watermarks.

If the above guidelines are adhered to, stainless steel products offer excellent life and should live up to their reputation of being stainless.

Aqueous cleaning products are available from a number of reputable companies who should be able to offer specific guidance on the composition of their product. Cleaning agents should be approved for use under the National Environmental Regulations and, in addition prepared and used with the manufacturers or suppliers Health and Safety and Application instructions.

IT IS ADVISABLE TO USE ONLY CLEANING AGENTS SPECIALLY FORMULATED FOR USE IN THE INDUSTRY IN WHICH IT IS TO BE USED.

This information is provided F.O.C. for guidance only. SYSPAL Ltd neither recommends any given product nor accepts responsibility for cleaning operations undertaken.

