Stainless Steel Care & Maintenance

All grades of stainless steel will stain and discolor due to surface deposits and can not be considered completely maintenance-free. In order to retain maximum corrosion resistance and aesthetic appeal, the surface of stainless steel must be kept clean. Provided that cleaning schedules are carried out on a regular basis, good performance and long service life are assured.

FACTORS AFFECTING MAINTENANCE

Surface contamination and the formation of deposits must be prevented. These deposits may be minute particles of iron or rust from other sources used in the building of new premises and not removed until after the stainless steel items have been fixed. Industrial and even naturally occurring atmospheric conditions can cause deposits that can be equally corrosive, e.g. salt deposits from marine conditions. A working environment which offers more aggressive conditions, e.g. hot & humid, increases the speed of discoloration and therefore requires maintenance on a more frequent basis. Modern processes use many cleaners, sterilizers and bleaches for hygienic purposes. All these proprietary solutions, when used in accordance with makers' instructions, are safe, but if used incorrectly (e.g. warm or concentrated), can cause discoloration and corrosion on the surface of any quality of stainless steel.

Strong acid solutions should never be permitted to come into contact with metals, including stainless steel. If this should happen, the acid solution must be removed immediately by copious applications of water.

MAINTENANCE PROGRAM

Advice is often sought concerning the frequency of cleaning stainless steel and the answer is quite simple: "clean the metal when it is dirty in order to restore its original appearance". This may vary from one to four times a year for external applications or it may be once a day for items in hygienic or aggressive situations. In salt-water or pollution-filled environments, the stainless steel should be cleaned daily. Frequency and cost of cleaning is lower with stainless steel than with any other materials and will often outweigh the initial higher cost of this superior product.

GENERAL CLEANING METHODS

Stainless steel is easy to clean. Washing with soap or a mild detergent and warm (fresh) water, followed by a clear (fresh) water rinse, is usually quite adequate for domestic and architectural equipment. An enhanced aesthetic appearance will be achieved if the cleaned surface is wiped dry.

Where stainless steel has become extremely dirty with signs of surface discoloration, (perhaps following a period of neglect or misuse), methods of cleaning are detailed in the chart.

Routine cleaning - All finishes	Soap or mild detergent and (fresh) water	Sponge, rinse with clean (fresh) water; wipe dry if necessary.
Fingerprints - All finishes	Soap or warm (fresh) water or organic solvent.	Rinse with clean (fresh) water; wipe dry if necessary.
Stubborn stains/ Discoloration - All finishes	Mild non-abrasive cleaning solutions or creams. i.e. Jif, Goddard Stainless Steel Care	Rinse well with clean (fresh) water & wipe dry.
Oil/grease marks - All finishes	Organic solvents.	Clean afterwards with soap and (fresh) water and wipe dry.
Rust and other corrosion products - All finishes	Various special gels, 10% Phosphoric Acid or Oxalic Acid solution. The cleaning solution should be applied with a swab and allowed to stand for 15-20 minutes before being washed away with (fresh) water. May continue using Jif to give final clean.	Rinse well with clean (fresh) water. For Phosphoric Acid rinse first with Ammonia.(precautions for acid cleaners should be observed).
Scratches on Brush (Satin) Finish	Slight scratches: impregnated nylon pads. Polishing with scurfs dressed with iron-free abrasives. Deeper scratches: apply in direction of polishing, then clean with soap or detergent as per routine cleaning.	Do not use ordinary steel wool, as iron particles can become embedded in stainless steel and cause further surface damage.
Paint / Graffiti	Alkaline or solvent paint strippers according to type of paint.	Use soft nylon or bristle brush.

Precautions: *Acids should only be used for on-site cleaning when all other methods have been proved unsatisfactory. Rubber gloves should be used and care taken to see that acid cleaners are not spilt over adjacent areas. (N.B. Special precautions are necessary with oxalic acid.) Solvents should not be used in enclosed spaces. Smoking must be avoided when using solvents. In all instances follow the manufacturer's safety instructions.*