

# **RUSTING OF STAINLESS STEEL**

Type 304 stainless steel will not rust of itself. However, outside sources can rust on the surface of stainless steel and if allowed to remain can pit or "rust" the metal. The following lists some possible causes of rust. Prevention will follow by avoiding the causes.

## **CAUSES BY THE FACTORY:**

Some polishing compounds such as emery, black grit or bar sometimes have natural iron in the product – if rust is in corners, it may be this. Cartridge roll or mounted point used on steel and then on stainless – if rust is in corner or at welded area. As the steel will rust away this condition will cease in short time. Polishing with scouring compound (Bar Keepers Friend) following the grain will remove all rust.

### **CAUSES BY THE CUSTOMER:**

- 1. Acid in cleaning of brick or tile
- 2. Scouring with steel wool
- 3. Water supply may have iron in it
- 4. Excessive use of chlorine compound type bleaches or rags or towels soaked with chlorine type bleach which remains on sink surface for a period of time.
- 5. Tin cans or steel pots will transfer rust to the surface of the sink
- 6. Dried blood from meats will cause corrosion or pitting
- 7. Soft water chemicals can dissolve brass in pipes and deposit on the table leaving golden or rust color
- 8. Road salt during shipping which is not washed off
- 9. Do not leave rubber mats, wet sponges or cleaning pads in the sink overnight as they will trap water underneath which could lead to staining and discoloration of the sink surface. The unique properties of stainless steel are dependent upon exposure of surface to the atmosphere
- 10. Always dilute any antibacterial product used and wipe up any spills. NOTE: some antibacterial soaps may contain chlorine compounds
- 11. Any accidental contact of the sink with photographic chemicals or soldering fluxes should be addressed by an immediate rinsing and cleaning of the sink
- 12. Certain foods such as pickles, mayonnaise, mustard and salt laden foodstuffs can cause pitting of the sink surface if left unattended for prolonged periods
- 13. Any drain cleaning products containing sulphuric or hydrochloric acid will attack the sink

### TO CLEAN:

Surface rust can be cleaned off with Ajax, inox or Barkeepers Friend by rubbing vigorously with the grain. Surface rust and scratches can be cleaned with a special polishing cloth available from the factory.

### **SPECIAL NOTE:**

Strong acid, caustic or chlorine baths kept in sink should not be allowed to remain for long periods of time, as corrosion can occur, especially with high temperature, at the water or drying line. When emptied, sink should be flushed and wiped to remove residue.

### **ATTENTION:**

The attached Scotch Brite pad can be used to clean discoloration or rust from stainless steel. Be certain to always rub in the direction of the grain. Also, it is best to test on an unseen area to judge how much pressure should be used while cleaning.



# **HOW TO CLEAN STAINLESS STEEL**

To maintain the cleanliness and sanitation equipment should be cleaned frequently and regularly. Here are a few simple cleaning procedures that have been found effective for keeping stainless steel equipment clean, sparkling and bright.

### **GENERAL CLEANING:**

For routine cleaning of stainless steel sinks, table tops, cabinets and other equipment, ordinary soap or detergent and water will usually do the work. To prevent water spots and streaks, rinse equipment thoroughly with warm water and wipe dry with a soft, clean cloth. Addition of rinsing agent will also help prevent spotting. Stubborn spots or stains that resist soap and water usually can be removed with a paste made of water and mild scouring powder. When applying these powders, be sure to rub in the direction of the polish lines on the steel to preserve the original finish. "Bar Keepers Friend" is a good cleaning agent. (Sample included)

### **FINGERPRINTS:**

Fingerprints are sometimes a problem on highly polished surfaces of stainless steel. They can be minimized by applying a cleaner that will have a thin, oily or waxy film. Several cleaners of this nature are available at your local grocery or hardware store. To use these cleaner, simply wipe on and remove excess with a soft dry cloth. After using, subsequent fingerprints will usually disappear when wiped lightly with a soft dry cloth or with a cloth containing a little of the cleaner. If the surface is especially dirty to start with, wash first with soap or detergent and water.

#### **HEAT TINT:**

In and around equipment where temperatures reach 500oF or more, straw colored or slightly darkened areas may appear on stainless steel. This "heat tint" is caused by a slight oxidation of the stainless steel and is not harmful. To control or minimize this condition, never use more heat than is absolutely necessary, avoid concentrating heat in a small area and don't heat empty equipment. Heat tint can be removed by scouring vigorously with stainless steel wool or "Scotch-Brite" pad. Sample available upon request. Again, remember to rub in the direction of the polish lines.

### **SCALE AND HARD WATER FILMS:**

Several types of films and scale can form on stainless steel from the use of hard water and strong detergents. They may be easy or difficult to remove, depending on the harness of the water, and length of time the film or scale has been permitted to build up. Regular cleaning at frequent intervals is the best prevention. Also, softening of water does much to lessen film scale and deposits. Water-softening rinse additives are available through restaurant supply houses.