



Stainless Steel Thread Sealing

Due to the extreme hardness of stainless alloys, and the issues with regard to galling, the sealing of S.S. threaded connections can be much more challenging than when working with brass and or bronze alloy fittings. The following information will greatly reduce the problems and frustration that first time users of stainless fittings and accessories sometimes have. The information below explains the issues with sealing stainless to stainless thread connections, and will greatly reduce the learning curve, ensuring a smooth transition into using stainless steel products.

Galling

What is galling? While stainless steel fittings exhibit many desirable properties, a common problem is seizing or pick-upon assembly or disassembly. This phenomenon is know as galling. It is thought to be caused by cold welding of the high points of clean, oxide free metal left when the oxide film is dislodged by surfaces rubbing against each other, especially when threading mating parts of the same grade and surface hardness.



Gray Stainless Steel PTFE Thread Seal Tape

This tape has a gray colored, nickel pigment added for use on all stainless steel fittings. It is specially designed to prevent galling, seizing and corrosion. A quality tap with a high density rating makes this tape an excellent product for sealing coarse stainless steel pipe threads.

Gray Magic Pipe Thread Compound

Gray Magic is an all purpose, non-seizing, industrial grade thread sealing compound that produces a leak-proof seal on all types of plastic and metal including stainless steel threaded connections having superior anti-galling properties. Gray Magic is a non-toxic, smooth, gritfree, completely homogenized, gray industrial grade paste.



Installation Tip

To ensure leak-proof connections in stainless steel it has been proven and highly recommended that the installer first wraps the pipe threads with two or more thicknesses of **Gray Stainless Steel PTFE Thread Seal Tape** then apply **Gray Magic** over the tape. This is a practice that is necessary on large diameter stainless pipes 4" and up. It has been proven to be very effective in preventing leaks in all sizes of stainless steel threaded connections!