



Mid-America Fittings, Inc.

To Seal or Not To Seal-That is the Question

Every year millions of hours of system and equipment downtime results in millions of dollars in excess repair and maintenance expenses across the U.S. This can be directly attributed to the failure of threaded fittings. These costs do not include the expenses incurred as a result of millions of gallons of industrial fluids, some of which are environmentally unfriendly, spilling on plant floors contaminating personnel and equipment. The primary root cause of these failures can be traced back to pipe joints.

System engineers and designers do all they can to reduce the number of pipe joints within any given system or piece of equipment, but thankfully for all of us they have not found a way to eliminate them entirely. You cannot effectively create a system or piece of equipment that does not allow for pipe joints in order to access critical repair & maintenance areas, and/or reduce the size and weight of pipe/tube lengths.

Therefore, threaded fittings are the only reasonable and cost-effective alternative. However, in today's age of "Global Sourcing" ASTM, ANSI, ASME, and SAE pipe thread standards and tolerances are often not adhered to. These known industry standards are great when manufacturer's adhere to them, but when a manufacturer ignores, does not fully understand, or have the ability to execute the standard, inferior pipe threads are produced. Pipe threads can also be damaged in transit or by loosening and retightening during repair or inspection. All of these occurrences will result in pathways for leakage. This pathway is usually a spiral pathway that travels where there is a gap in the threads between the root and the crest of the two mating parts until it locates an exit point outside the pipe joint.

You cannot over-tighten your way out of a leak pathway. Teflon® tapes only act as a lubricant for the mating parts and can tear easily resulting in blockage of the flow way. Tapes are often misapplied to male pipe threads resulting in unwinding during joining. This application is also very labor intensive and offers poor vibration resistance due to the slippery nature of Teflon®.

Pastes and dopes can be effective temporary sealing methods, but over time they will create more problems than they initially resolved. Pastes contain potentially harmful ingredients that dry out or break down over time and can enter the flow way contaminating the fluid within.

Pre-applied anaerobic thread sealants do not contain any corrosive or damaging ingredients that can negatively impact the pipe joint over time. They are also impervious to corrosion from a wide variety of caustic chemicals most often used in the plant environment. They resist severe vibration. They remain elastic throughout a wide temperature spectrum. They allow for pipe joint loosening and retightening without reapplication. They greatly reduce assembly labor costs by eliminating the need for secondary sealant application operations.

Once applied, anaerobic thread sealants offer an immediate low pressure (<500 psi) seal. Once cured, many anaerobic thread sealants are designed to perform in applications up to 10,000 psi.

We offer a full line of fittings with pre-applied, cured anaerobic thread sealant in three colors- burnt orange, sky blue, and white. The minimal additional cost of pre-applied thread sealant far offsets the potential losses that may be incurred by your end-user in the form of equipment downtime, fluid loss, excess repair labor expense, secondary assembly labor expense, and total equipment failure expense due to fluid loss seizing.

So, is it more noble to suffer the slings and arrows of outrageous customers, or take fittings with pre-applied anaerobic thread sealant from us and avoid all of that mid-evil abuse? We hope you choose the latter. When ordering simply indicate that you wish to receive all of your fittings with pre-applied anaerobic thread sealant to all of the male pipe threads. For more information on which type of sealant is best suited for your application please call one of our experienced technical sales experts for a complete

In This Issue

- To Seal, or Not To Seal
- Virtual Assembly Guidelines Now Available On Line
- Fitting Spotlight On- "SA" Series Self-Align Compression Fittings
- Enhanced Product Images Now On Line