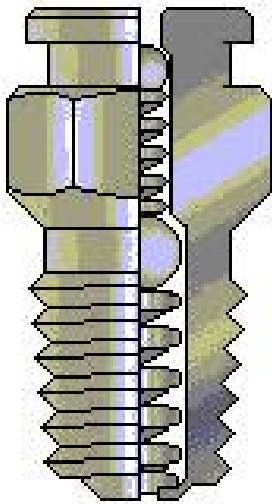


Chapter 9

Different Styles of Sealant Injection Fittings and Specialty Adapters

The next biggest obstacle after you get your pumping equipment loaded and operating properly is being able to connect your pump or gun to the valves sealant injection fitting. Due to the lack of any industry standards regarding fittings, the valve technician has no idea what type to expect when he travels into the field to service valves. Not even the valve manufacturer can tell you because they quite often install many different types of fittings depending on the service, pressure rating or what the fitting manufacturer had on sale that week. Fittings are often replaced by contractors during turn-around and in the absence of a specific company policy; the contractor will often supply whatever is available at the local industrial supply house.

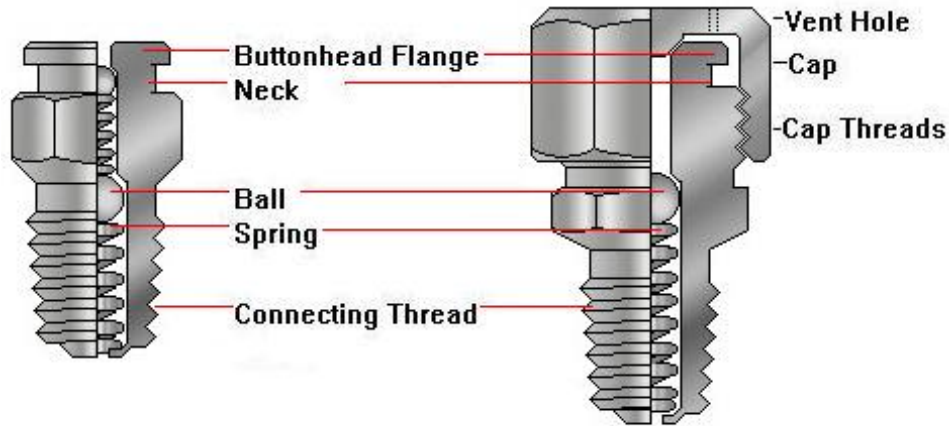


Cutaway View of a Sealant Injection Fitting

Sealweld® has produced a wall chart which illustrates the most popular sealant fittings and accessories. Actual sized photographs make it easy to order the proper replacement. Call your nearest Sealweld® office for a free copy of the Fitting Poster and Gun & Adapters Poster.

In order for Sealweld® valve technicians to be prepared for every different fitting possibility, we carry up to 100 different styles, sizes and grades of fittings and adapters in our vehicles. Just the other day we discovered a new valve manufacturer that featured a new make of fitting which would have no possible way of being utilized without manufacturing another unique adapter. This fitting would also have met the new CSA specification because it featured a one-piece body, giant buttonhead flange and independent internal check valve. The buttonhead flange was too thick so a standard buttonhead coupler (located on the end of the sealant gun hose) would not fit. The threads on the cap were metric so the alternative screw-on style coupler would not fit either. Unfortunately this situation is more often the rule than the exception.

Sealant Injection Fitting Terminology



Sealant Injection Fitting Terminology

During plant and pipeline construction one of the more common mistakes is installing a combination fitting with an NPS thread into a valve body or extension with NPT threads. The illustration below shows the long neck fitting. In many cases the valves are insulated and the long neck NPS fitting was installed in order to extend the buttonhead out through the insulation. If you discover this problem in some of your valves, ALWAYS WAIT for the pressure to be reduced to (0 PSI) zero in the pipeline leading up to the valve before attempting to remove the NPS fitting. Chances are that if the fitting has been in the valve for some time, there is no immediate requirement for replacement. Use extreme caution if injecting lubricant / sealant into valves with this problem. There are probably only (2) two or (3) three poorly fitting threads holding the fitting in place. If there is any obstruction in the fitting, high injection pressures may be required. The use of high injection pressure could result in the threads failing and the fitting blowing out of the valve body, which may result in an uncontrolled leak and / or the risk of personal injury. In this case, you should NOT attempt any maintenance, but wait until the fitting can be safely replaced.

Conventional NPT Type Fitting



Common Tapered Thread Fitting

Conventional NPS Type Fitting



Common Straight Thread Fitting