## **Be Safe When Installing Quick Couplings!**

All quick disconnect couplings should be viewed as potential hazards that can cause property damage, personal injury or even death if used or installed improperly!



Couplings should be installed in a location that will allow easy operation of the coupling and accessibility for all necessary installation tools. Care should be given to consider operator safety, especially if spillage upon disconnection could result in fluid ignition or skin and eye irritation.

Only apply wrenches to the hex or machined wrench flats that are provided for assembly purposes, nowhere else. Never clamp on the sleeve of the coupler or the nose of the nipple, this will cause distortion and/or damage.

Finally, always test quick coupling installations before putting into operation by pressurizing the unit to 125% of the working pressure in an enclosed/protective environment.

## Installation of Tapered Thread Connections (NPTF)

The seal for NPTF threads is created by the metal-to-metal contact between the roots and crests of the male and female threads. Too much PTFE tape, or pairing liquid sealant with PTFE tape may cause distortion, poor thread engagement, or cracking of the coupling during assembly.

The total number of tapered threads engaged should be between 3½ to 6. Any number of threads outside this range may indicate either under or over tightening of the joint or out of tolerance threads. After assembly of a NPTF thread connection, always proof-test the connection before operating the system. If the joint proves to be inadequately tightened during proof-pressure testing, tighten it further in 1/8" increments until a reliable seal is attained (do not exceed 2-3/4 T.F.F.T!)

1



Apply 1½ to 2 wraps of PTFE tape, starting one or two threads from the lead edge, in a clockwise direction. For 316 stainless steel, be sure to use stainless grade tape.

3



Finger tighten the connection and create a reference mark on the hex of the hose end/adapter and the coupling. This mark will help identify the number of revolutions during the next step in the procedure.



Check threads to make sure there is no obvious damage on either half and that tape is properly installed. Align male and female threaded connections and carefully begin threading the two halves together.



With even and smooth force applied, wrench tighten according to the 'Turns From Finger Tight' (T.F.F.T.) values listed below. DO NOT OVERTIGHTEN!

SAE Size	NPTF Thread Size	T.F.F.T
-4	1/4" - 18	2
-6	3/8" - 18	2
-8	1/2" - 14	2
-12	3/4" - 14	1.5
-16	1" - 11 1/2	1.5