

INDUSTRIAL-STRENGTH CONSTRUCTION

**TASK SAFETY PROCESS** 

TSP Number: P0004 Issue Date: 1/29/2014

Title: Flanged Valve Installation Reviewed By: Doug Patton, Ron Beverly, Chad Smit, Brad Bechinske Revision Date: N/A

## The following are guidelines. Client or Project Specifics may superseded this document. Consult Project Manager with conflicts.

Task Step	Step Hazard	Hazard Mitigation	Picture
Inspect valve and components to ensure proper working condition prior to install:     a. Valve Handle     b. Packing components     c. Damaged flange face/exterior.	N/A	N/A	
2) Set up rigging (if applicable) for placement of the flanged valve.  a. Straps/lanyards/Rope  b. Proper lifting points  c. Tag line	<ul> <li>a. Frayed Ends/sharp corners</li> <li>b. Improper lifting points could cause valve to spin when raised.</li> <li>c. No tag line can cause excessive swinging and loss of control of the valve.</li> </ul>	a. Inspect rigging equipment prior to using. b. Lift plan c. Ensure tagline is in place when lifting a large valve with a crane/lift.	
3) Ensure area is clear prior to placing the valve in its place.  a. Remove material that may be in the way but not necessary  b. Barricade the area to prevent unauthorized access while valve is being installed.	a. Tools/materials not necessary for a large valve placement can hinder work space and create an unsafe environment. b. Barricades with hang tags let others know work is being conducted in the area.	a. Good housekeeping b. N/A	02/23/2012 13:42
Align valve flanges to existing flange(s) (if necessary).     Utilize a spud wrench (if needed) to get hole alignment.	a. Pinch Points when swinging flange in place b. Body Placement c. Dropped tools when at heights d. Wrong valve orientation	<ul> <li>a. Watch finger placement between flange faces.</li> <li>b. On larger size valves ensure you are out of the line of fire and body is positioned to reduce stress.</li> <li>c. Barricade area below or tether tools</li> </ul>	
5) Place bolts in the flanges.	<ul> <li>a. Pinch points with fingers and/or hand.</li> <li>b. Proper PPE – Gloves, hard hat, etc.</li> </ul>	<ul><li>a. Watch hand placement when inserting bolts.</li><li>b. Wear the correct PPE required for the job.</li></ul>	
6) Tighten bolts and nuts to the proper torque value established.  a. Utilize wrench or hydraulic device if necessary. Follow QC specs for torque specification  b. Check stress levels to ensure they are within tolerance.  c. Ensure valve is on coordinates and level prior to final torque.	a. Pinch points b. Body stress placement. c. N/A	a. Always be cautious using hydraulic devices to torque flange bolts. Ensure employees are properly trained to utilize hydraulic devices. Training video available on pipeline. b. Utilize proper torque specs c. N/A	