

## Procedure 2402: Cam and Groove Coupling to Adapter

effective 07/16

### **Preparation**

- 1. Verify the assembly's intended pressure is within the working pressures as defined in Procedure 4002: Test Pressures and Procedures for Cam and Groove Couplings (page 61).
- 2. Inspect the fittings for damage per Procedure 3003: Inspecting Dixon® Cam and Groove Couplings (pages 53-54).

### **Notes**

- 1. Cam and groove couplings utilize one, two or four "cam arms" to leverage compression of the gasket between the adapter and the coupler.
- 2. When possible, the cam arms should be closed simultaneously using hand force only.
- 3. The use of hammers, or striking the cam arm with other objects, can weaken or damage the fitting.
- 4. Couplings are available in several configurations, some with the ability to lock the cam arms in a closed position, and some requiring the user to provide additional locking devices.
- 5. If the cam arms are not fully closed during assembly, they are at risk of opening unexpectedly while under pressure or during process-induced vibration.
- 6. Opening a cam arm assembly while under pressure can create a violent release of energy and induce damage to life, limb and/or property.

### **Process**

#### *To Connect:*

- 1. Open the arms on the coupler.
- 2. Visually verify the presence of a gasket within the coupler.
- 3. Insert the adapter into the coupler fully until it contacts the gasket.
- 4. Using hands only, evenly close both cam arms fully (make sure the pull ring is not obstructing full closure).
- 5. On four-arm models, close the remaining two cam arms.
- 6. Visually examine the assembly to assure that all cam arms are in the fully-closed position.
- 7. Install locking feature, if present.

#### *To Disconnect:*

- 1. Confirm that all pressure has been removed from the assembly. Do not disconnect the coupling while pressure remains in the system.
- 2. Remove any locking device previously installed or lift the release lever of the EZ Boss™ Lock style cam arms.
- 3. Open one cam arm at a time. If any pressure remains in the system, opening only one cam arm could provide an audible warning of pressure and allow the operator the opportunity to re-close the arm and take appropriate steps to de-pressurize the system.
- 4. Open the remaining arm(s) and remove the adapter from the coupling.