

## Procedure 2103: Installation of Pre-Formed Band Clamps Using Screw-Action Tool with Roll-Over Tool Attachment

effective 02/08

### Selection

- Select the proper pre-formed band clamp using Procedure 1001: Pre-formed Band clamp Selection.

### Preparation

- Prepare and mark the hose using Procedure 1100: General Preparation Instructions.

### Process

- 1. Slide the clamp(s) over the hose end.  
*Note:* For hoses having a helical wire make certain that the clamp tail and the helical wire are pointing in the same direction. Refer to Procedure 1100: General Preparation Instructions for illustration.
- 2. Insert the coupling. Refer to step 9 of Procedure 1100: General Preparation Instructions.
- 3. Secure the screw-action tool in a vise. Position it so that the tightening handles are on the right.
- 4. Install the rollover attachment onto the screw-action tool head. Make sure that the cutting lever is facing the operator.
- 5. Use the screw-action tool as follows:
  - a. Rotate the tightening handles counter clockwise until the pulling dog head contacts the tool head.
  - b. Insert the clamp tail through the slot on rollover tool until clamp buckle contacts tool head.
  - c. Pre-tension the clamp by pushing down on pulling dog lever.
  - d. Rotate tightening handles clockwise. Continue rotating handles until the pulling dog lever can be released without band slippage.
  - e. Insert the hose through clamp and into its proper position.
  - f. Rotate tightening handles clockwise until the clamp has been properly tensioned.  
*Note:* Testing is the only to know for sure if the proper tension has been achieved. However, as a visual indicator, the clamp O.D. (Outside Diameter) will be equal to or less then the hose O.D.
  - g. *Note:* If tool runs out of stroke before clamp is tight; rotate handles counter clockwise, slide the pulling dog head until it contacts screw-action tool head, push down on the pulling dog lever and rotate the handles clockwise until clamp is properly tensioned.  
*Caution!* Bend excessive clamp tail away from tool handles to avoid being cut by sharp edges.
  - h. Rotate handles counter clockwise (no more than one full turn) while rolling the hose towards the operator. Continue rotating hose until clamp buckle engages cutting bar of attachment tool.
  - i. Quickly pull the cutting lever towards the operator.
  - j. Remove the clamp tail from the pulling dog.
  - k. For assemblies using multiple clamps, repeat the process.  
*Note:* When multiple clamps are used, clamp buckles must be offset to prevent a leak path.  
2 clamps - buckles at 180°, 3 clamps - buckles at 120°, 4 clamps - buckles at 90°
- 6. Inspect results using Procedure 3002: Band Clamp Inspection.
- 7. Test the assembly using Procedures 4000: General Hydrostatic Testing Information and 4001: Hydrostatic Testing.

