



# Quick Opening Closure Instructions for Replacement of PECOFacet QOC Drawbolts



To prevent **SERIOUS INJURY** and **PROPERTY DAMAGE**, you should read, understand and follow these Operating Instructions. Keep for future reference.

# 1 Instructions for Replacement of PECOFacet QOC Drawbolts

1.1 This procedure is for replacement of the Drawbolts after the closure has been installed on a vessel or pipeline or has been in service.

1.2 Prior to opening the PECOFacet quick opening closure:



**ALWAYS review and follow all unit specific procedures concerning the service to which the Operator will be exposed. These documents should tell you what precautions need to be taken prior to opening the unit.**



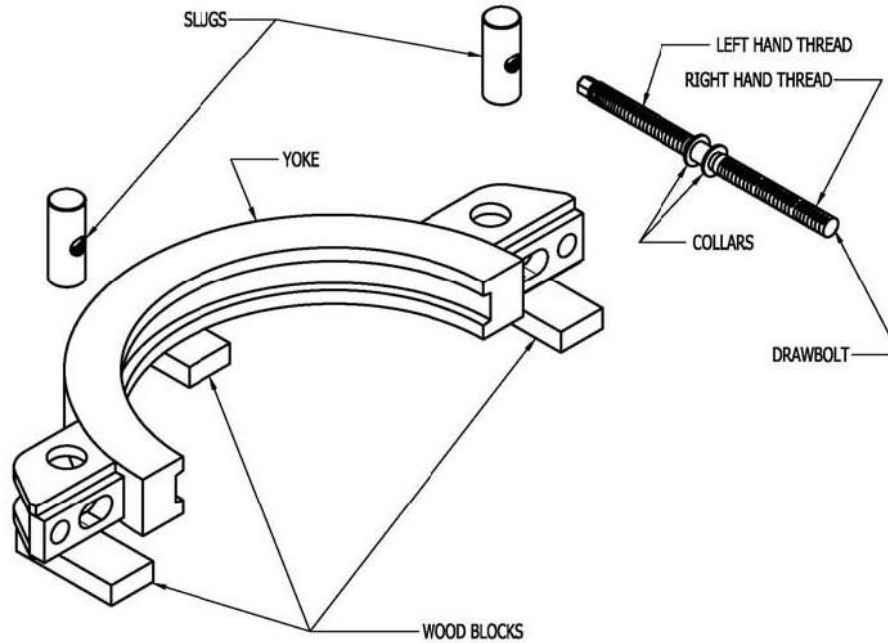
**ALWAYS wear the appropriate Personal Protective Equipment (PPE). If the unit specific procedure does not tell you, ask your Supervisor BEFORE opening the QOC.**

1.3 Open the Quick Opening Closure. Follow the procedures in Section 6 – Closure Opening and Section 7 – Cleaning and Inspection of the Quick Opening Closure Operating Instructions.

1.4 With a hoist or crane, support the left and right yoke halves to take the weight off the top and bottom Drawbolts and Drawbolt Arms.

1.5 With the yoke assembly supported by a hoist or crane, remove the draw bolt arm pins and cotter keys from the top and bottom arm.

1.6 Remove yoke assembly and place it horizontally on 2 x 4 or 4 x 4 wood blocks. The location and orientation of the slugs and Drawbolts must be marked or tagged so they can be reassembled exactly as they came from PECOFacet (See Figure 1).



**Figure 1: Drawbolt Replacement**

- 1.7 Remove the existing Drawbolts and slugs.
- 1.8 With the yoke halves on the wooden blocks, insert the replacement slugs into the lugs. There are left hand slugs and right hand slugs using right and left handed threads. Take the Drawbolts with the collars attached and thread them into the slugs. It is critical that both ends be started evenly. This will assure that the yokes will be centered on the closure and drawn up symmetrically.

**NOTE:** The hex ends of the Drawbolts are to be located on the same side of the closure as the Pressure Warning Device (PWD) bracket.

- 1.9 After the replacement Drawbolts and slugs have been installed in the yoke halves, the yoke assembly can be reinstalled on the closure in reverse order of its removal.
- 1.10 The Drawbolt Arm pins are installed and secured with a cotter key after the Drawbolts have been placed in the Drawbolt Arms.
- 1.11 The closure is ready to be closed following the procedures in Section 7 – Cleaning & Inspection and Section 8 – Closing the Yokes in the Quick Opening Closure Operating Instructions.