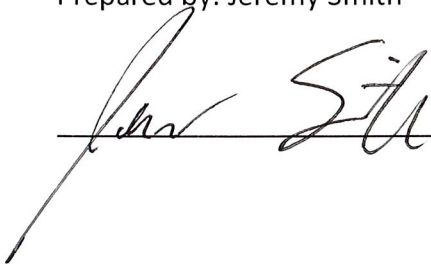


# Quick-Actuating Closures

## BSB 0600-02

Prepared by: Jeremy Smith



Date: **01/30/2023**

Approved by: Don Kinney



Date: **01/30/2023**

BOILER SAFETY BUREAU

STANDARD OPERATING PROCEDURE

## 1.0 Purpose

- 1.1 The purpose of this procedure is to provide guidelines for the inspection of pressure vessels with quick-actuating closures.

## 2.0 Scope

- 2.1 This procedure applies to jurisdictional items requiring inspection. These items include pressure vessels with quick-actuating closures that are operated by an action that releases all holding elements at the same time. Due to the many different designs of quick-actuating closures, potential failures of components that are not specifically covered should be considered. This procedure is based on the guidelines in the NBIC Part 2, 2.3.6.5. This NBIC section should be referenced for further guidance on the inspection of these types of vessels.

## 3.0 Personnel Responsibilities

- 3.1 The Bureau Chief has the overall responsibility for the implementation of this procedure.
- 3.2 The Assistant Bureau Chief is designated as the primary document custodian and is responsible for the control and review of this document.
- 3.3 All Boiler Safety Bureau personnel are responsible for ensuring that only the most current applicable procedures and attachments are used in the performance of work functions.

## 4.0 Health and Safety Issues

- 4.1 This procedure is intended to promote the safety of the inspectors conducting the inspections, as well as that of the employees and public where these vessels are located.
- 4.2 When internal inspections involving confined spaces are conducted, the Confined Spaces procedure BSB 0200-07 shall be followed, and the associated attachment "Boiler Safety Bureau Confined Space Entry Permit" shall be completed. The inspector must also reference BSB 0200-08 Tagout/Lockout Procedure when applicable.

## 5.0 Procedure

- 5.1 An internal, external and operational inspection should be performed at each certificate inspection. This should be scheduled in advance, to allow the owner time to prepare.
- 5.2 Attachment 1 checklist for this procedure shall be utilized.
- 5.3 Important areas to inspect include;
  - 5.3.1 Areas affected by abuse or lack of maintenance.
  - 5.3.2 Seating surfaces, such as gaskets, O-rings, wedges and locking lugs. Check for proper alignment and travel.
  - 5.3.3 Freedom of movement of locking elements and hinges.
  - 5.3.4 Pressure gage, visible from the work platform, at least 1 ½ to 4 times operating pressure, and protected by a siphon or trap if necessary.
  - 5.3.5 Safety interlock devices. These devices shall prevent the opening mechanism to operate while the vessel is pressurized. Manual safety devices that allow leakage from the opening prior to disengagement of the locking elements shall be provided with an audible and/or visible warning device.
  - 5.3.6 Owners operating procedures.
  - 5.3.7 Vessel documents. Maintenance and repair history, and data report if available.
  - 5.3.8 Operation of the vessel and closure through a normal operating cycle, verify procedures are followed.

- 5.3.9 Verify markings on closure (door) match data report if available.

## 6.0 Customer Service Requirements

- 6.1 This procedure is intended to provide the customer, be it the public, employees of the Bureau, or other State agencies, with the most efficient service, information, training, and assistance possible.

## 7.0 Data and Record Management

- 7.1 A copy of the BSB Confined Space Entry Permit (if needed), shall be forwarded to the inspector's respective Administrative Assistant and Supervisor for review and upload to OnBase. ***All documents and records referenced in this procedure shall be maintained in accordance with the Functional Schedule for the North Carolina State Agencies as adopted by State Archives, a division of the North Carolina Department of Natural and Cultural Resources.***
- 7.2 The inspector shall charge the appropriate fees as follows;
- For autoclaves large enough that you will be entering, charge the following;
    - An external certificate fee based on the size of the object
    - An internal non-certificate fee based on the size of the object
      - \*\* This covers you for when you do these on the same day, or must go back on another day to finish
      - \*\* If you do both on the same day, simply choose the internal non-cert fee from the "other fee" drop down
  - For autoclaves not large enough to necessitate entry, charge the following;
    - An external certificate fee based on the size of the object
  - As always, use the special fees for any out-of-the-ordinary issues.