



Implementation Guideline

For Companies Requesting a TSSA Certificate of Authorization
for Repairs & Alterations of Boilers and Pressure Vessels

Technical Standards &
Safety Authority
345 Carlingview Drive
Toronto, Ontario
Canada M9W 6N9
www.tssa.org

1.0 Scope of Document

- 1.1 This guideline defines the requirements to be followed when applying for Certificate(s) of Authorization with the Technical Standards and Safety Authority (TSSA) for the repairs and/or alterations to boilers and/or pressure vessels in accordance with CSA B51 and the NBIC NB-23 Part 3.

2.0 Abbreviations

AIA	Authorized Inspection Agency
AI	Authorized Inspector
ASME	American Society of Mechanical Engineers
CSA	Canadian Standards Association
NBIC	National Board Inspection Code
TSSA	Technical Standards and Safety Authority

3.0 Authorized Inspection Agency

- 3.1 The Authorized Inspection Agency in Ontario for repairs and alterations to pressure equipment is the Technical Standards & Safety Authority (TSSA).
- 3.2 The Authorized Inspection Agency for *repairs only* to boilers or pressure vessels may be an Insurance Company as defined by the Technical Standards and Safety Act, 2000.

4.0 Referenced Documents

- 4.1 Quality Program Manual Checklist: *“Guide for Manufacturers, Fabricators, Installers, Repairers, Alterers, and Audit Teams”*
- 4.2 Application for Non-Nuclear Ontario Certificate of Authorization
- 4.3 NBIC NB-23 Part 3 Repairs and Alterations
- 4.4 CSA B51 Boiler, Pressure Vessel & Pressure Piping Code

5.0 Application for Non-Nuclear Ontario Certificate of Authorization

- 5.1 The Company shall:
 - 5.1.1 Complete the “Application for Non-Nuclear Ontario Certificate of Authorization” and submit through the TSSA Client Portal.



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- 5.1.2 Follow the steps as outlined and submit the Quality Program Manual and associated Checklist at the time of submittal.
- 5.1.3 Indicate if the request is for Shop, Field, or Shop & Field.
- 5.1.4 Identify and additional shop location if required.

6.0 Scheduling the Audit

- 6.1 The TSSA BPV will schedule a mutually agreeable time and location with the Company for the audit. The Company is required to submit a copy of the completed Quality Program Manual and Quality Program Checklist to TSSA prior to the audit.
- 6.2 When the audit has been scheduled, the Company shall adhere to the scheduled time and date. Careful attention should be noted, as cancelling the audit less than fifteen (15) working days to the mutually agreed date may result in cancellation charges (see the *Application for Non-Nuclear Ontario Certificate of Authorization* notes).

7.0 The Quality Program & Quality Program Manual

- 7.1 The Company shall implement a Quality Program for repairs and alterations and document it in a Quality Program Manual. The Quality Program Manual shall address all the elements as outlined in the "*Guide for Manufacturers, Fabricators, Installers, Repairers, Alterers, and Audit Teams*"
- 7.2 The Company shall address all the elements as detailed in the Checklist. The Company shall appoint personnel to fulfil the requirements of the Quality Program.

NBIC NB-23 Part 3 Section 1 (Para 1.5) gives specific details to aid in the development of the Quality Program. Use the NBIC as well as the TSSA "*Guide for Manufacturers, Fabricators, Installers, Repairers, Alterers, and Audit Teams*" for any additional Provincial requirements.

8.0 Code Books

- 8.1 The Company shall maintain a copy of, or have direct access to the latest Edition of the following Code books*:
 - CSA B51 Boiler, Pressure Vessel and Pressure Piping Code (Latest Edition as adopted by the TSSA Code Adoption Document)



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- NBIC NB-23 National Board Inspection Code – Part 3 Repairs and Alterations (Latest Edition)
- Any other supporting Codes (as applicable).

*Contact the assigned Quality Assessment Specialist if assistance is needed to determine the required Code books.

9.0 Audit Demonstration Item

- 9.1 The Company shall demonstrate the Quality Program to the TSSA Quality Assessment Specialist. Prior to the audit, the Company shall prepare a demonstration mock-up item that will demonstrate the Company's ability to perform work in accordance with the Quality Program.
- 9.2 The demonstration item shall be a mock job or may be an actual job if agreed upon between the TSSA Quality Assessment Specialist and the Company. The demonstration mock-up item will be reviewed at the time of the audit by the TSSA Quality Assessment Specialist.
- 9.3 When using a demonstration mock-up, the local TSSA AI need not be involved, and registration of the repair and/or alteration mock-up item does not require registration with TSSA.
- 9.4 The demonstration mock-up item does not need to be exactly as shown in the sample below. The Company may provide a different arrangement or item. This is acceptable considering the demonstration mock-up is adequate to demonstrate compliance with the Company's Quality Program.

10.0 Audit Demonstration Item

- 10.1 If clarification for the demonstration item is required, or if the Company is also applying for additional Certificates of Authorization, contact the assigned Quality Assessment Specialist for demonstration requirements.

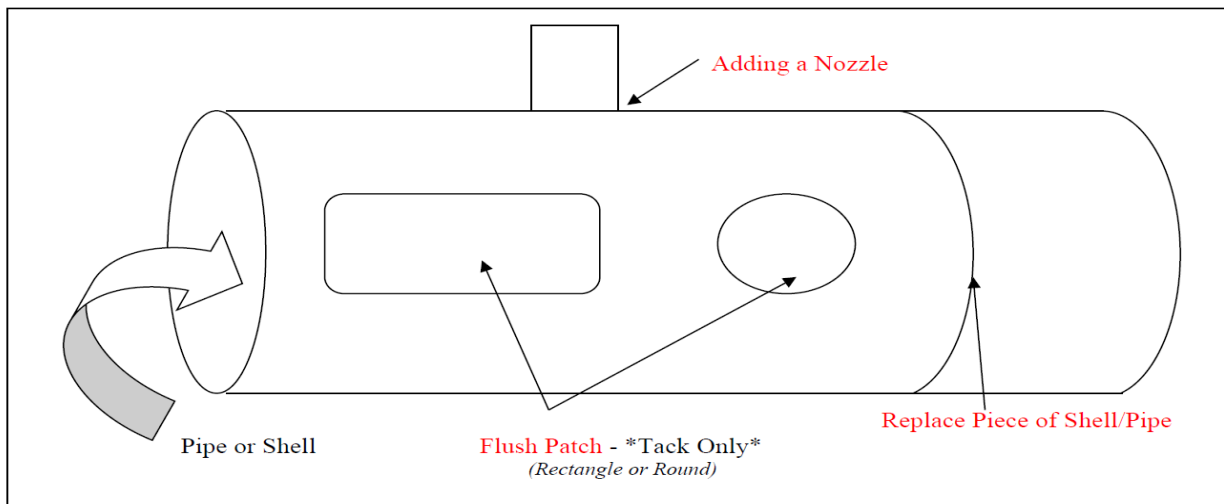
11.0 Audit Documentation

- 11.1 All documentation as required by the Quality Program shall be available for review by the Quality Assessment Specialist.

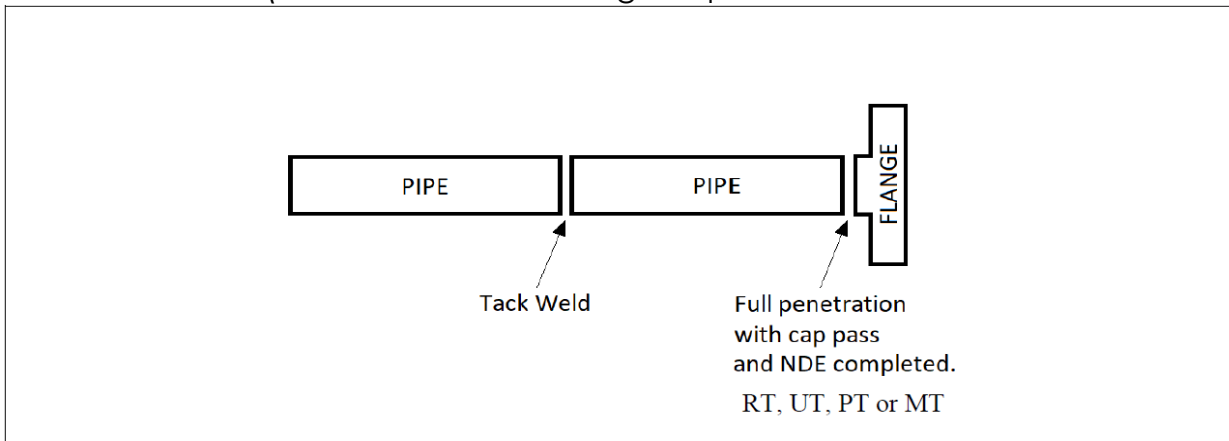
12.0 Audit Renewal

12.1 Certificate(s) of Authorization expire every three (3) years. The Company will receive a renewal notification from TSSA approximately six (6) months prior to the expiry of the current certificate(s). If a renewal package has not been received three (3) months prior to the expiration date, the Company shall contact the BPV Administrative Assistant for guidance.

DEMO SAMPLE 1



DEMO SAMPLE 2 (Simulated Nozzle/Flange Replacement for a Boiler/Pressure Vessel)



Note: This demo pipe spool could be used as the demonstration for Repairs and Alterations of Boilers or Pressure Vessels, provided the documentation package that is provided is in accordance with the Quality Program requirements as a Repair or Alteration.