



ACCREDITATION OF FITTING MANUFACTURERS

TSSA GUIDE FOR REVIEW TEAMS

The Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety Division
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CANADA

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INTRODUCTION

This guide is prepared for the use of TSSA and other survey team leaders, members and applicants for TSSA Certificates of Authorization to manufacture fittings. It is not intended to replace or interpret the requirements of the CSA B-51 Standard. The checklist does not list all of the detailed requirements of CSA B-51, but rather lists the highlights that the applicant is required to include in the written Quality Control (QC) Manual.

In addition, to assist the TSSA survey team, this guide is provided to applicants for TSSA Certificates of Authorization for their use in identifying and verifying the paragraph(s) where their QC Manual addresses all applicable control requirements of the CSA Standards. The QC Manual must contain the description of the controls necessary for implementing the QC Program but, it is not required to contain all of the programmatic requirements which will be found in the QC Program, such as written procedures.

The guide is based upon CSA B-51 requirements. The guide is subject to revision based on changes made to CSA B-51, from time to time.

A survey must cover a QC Manual and its implementation. It is recognized that the scope of work, QC Manual and Manual implementation will vary from one applicant to another, therefore, only those activities to be performed under the scope of an applicant's TSSA Certificate of Authorization are required to be addressed in the QC Manual. TSSA survey teams are advised that this guide may not outline all possible aspects of each survey. The QC Manual need not follow the format of this guide.

Questions of possible need for Interpretation raised by survey team members or the applicant shall be submitted to the TSSA Chief Inspector for an answer, and when submitted by the applicant a copy of the inquiry and reply should be provided by the inquirer to the applicant's Inspection Agency and any known involved enforcement authority.

HOW TO USE THIS GUIDE

To the applicant:

Review each checklist item in the checklist against the QC Manual and:

- 1) Check (√) the applicable column - "Yes", "No" or "N/A" (Not Applicable)
- 2) Note the paragraph number in the QC Program Manual which covers the subject addressed in the column labelled "Manual Reference / Comments".

Submit one copy of the completed checklist with one controlled copy of the QC Manual to TSSA Head Office for review, at least one month prior to the scheduled implementation review date.

To Team Leaders Using this Guide for Survey:

- 1) Check (√) the applicable column - "Yes", "No" or "N/A" (Not Applicable)
- 2) Provide a reference response for each question in the "Manual Reference / Comments" column.
- 3) Complete the Surveyor and Agency Identification on the last page and provide your recommendation to TSSA.



QC Manual Review Checklist for the Manufacture of Fittings as Required by CSA B51

Company Name: _____
 Plant Address: _____ Contact _____
 Products Fabricated: _____

ITEM No.	SECTION	MANUAL REFERENCE / COMMENTS	YES	NO	N/A
1.0	FACING PAGE				
1.1	Is the Company name & Plant address shown on the facing page?				
1.2	Is the issue # and date of issue shown on the facing page?				
1.3	Is the Manual a controlled or uncontrolled copy?				
1.4	What Code sections / standards conformance are applicable?				
1.5	Is approval and acceptance by the person(s) responsible for QC Program and jurisdiction representative?				
2.0	MANUAL REVISION CONTROL				
2.1	Is the Manual revision by page or by section? Are the controls clearly described?				
2.2	Who is responsible for revising the QC Manual (title of person)?				
2.3	Who is responsible (title of person) for reviewing ASME Code addenda and making any required changes to the Manual six (6) months from the addenda issue date?				
2.4	What is the provision for review and approval of the QC Manual to maintain it current?				
2.5	Is there provision for submittal of QC Manual revisions to TSSA for acceptance prior to implementation, including timely updating of all copies to reflect approved revisions?				
3.0	GLOSSARY OF TERMS				
3.1	Required only if abbreviations are used.				
4.0	STATEMENT OF AUTHORITY (on Company letterhead)				
4.1	Are Codes / standards to be complied with referenced?				
4.2	What is the scope of work / products manufactured?				
4.3	Which person(s) is responsible for the QC Program?				
4.4	Does he / she have the freedom to identify QC problems and to initiate and provide solutions?				
4.5	Does he / she have the full support of Management?				
4.6	Is the responsible person able to stop production if necessary?				
4.7	If conflict arises, is it stated that resolution does not contravene program or Code / standard requirements?				
4.8	Is there a signature and date by Senior Management official?				

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ITEM No.	SECTION	MANUAL REFERENCE / COMMENTS	YES	NO	N/A
5.0	QC RESPONSIBILITIES				
5.1	Who has responsibility for Manual preparation, approval, distribution and implementation?				
5.2	Is there a description of the revision control and distribution?				
5.3	Is there provision for acceptance of revision by the Company QC and the jurisdiction?				
5.4	Who has responsibility for performing required inspections, examinations, tests, non-conformance resolution, documentation, etc.?				
6.0	ORGANIZATION				
6.1	Are the titles of key positions in Engineering, Quality Control, and Inspection, Manufacturing and Purchasing given?				
6.2	Is there access by Quality Control to top Management?				
6.3	Are job titles on the organization chart consistent with Manual text?				
7.0	DRAWINGS & SPECIFICATION CONTROL				
7.1	Who has responsibility for review and approval of Company or customer's design drawings, calculations, specifications, proof test reports?				
7.2	Who is responsible for revision approval and control?				
7.3	Who completes the Company certification and submittal to jurisdiction of "Fitting Statutory Declaration Form"?				
7.4	Is there a system for issuing and controlling of job / contract numbers and responsibility?				
7.5	Who is responsible for specifying materials to be used, special processes, NDE, heat treatment, etc.?				
7.6	Who is responsible for approval and distribution of shop fabrication drawings and any written procedures?				
7.7	Who has responsibility for maintaining current editions of applicable ANSI / ASME or other standards to which fittings are manufactured?				
7.8	Who is responsible for computer aided design calculations and drawings? How is this verified to ensure that the correct output has been obtained?				
7.9	Computer program revisions must be made within six (6) months of Code addenda changes. How is this verified to ensure that the revised program is giving the correct output?				
8.0	MATERIAL CONTROL				
8.1	How is purchasing informed of materials to procure (requisitions, bills of materials, etc)?				
8.2	Who has responsibility for ordering materials?				

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ITEM No.	SECTION	MANUAL REFERENCE / COMMENTS	YES	NO	N/A
8.3	Is there necessary information on P.O. to ensure only designated and approved material is ordered?				
8.4	Who approves the P.O. prior to issue and its distribution?				
8.5	Who has responsibility for material receipt and how it is inspected (dimensional, identification markings and documentation checks)?				
8.6	What is the system for acceptance marking / tagging and subsequent identification and traceability?				
8.7	Who has responsibility for release of accepted material manufacture?				
9.0	WELDING CONTROL				
9.1	Is there a statement that welding or brazing will be carried out in accordance with ASME Section IX and applicable Code / Standard of construction?				
9.2	Who has responsibility for documenting, updating and issuing of Welding or Brazing Procedure Specification, also completion of Procedure Qualification Records?				
9.3	Who has responsibility for completing and certifying welder or brazer performance qualifications?				
9.4	Is there a description of how welder or brazer identification numbers are assigned and where information, as to which WPS is to be utilized on each weldment, is derived?				
9.5	Who has responsibility for handling and storing welding consumables (e.g. heated ovens, dry areas, etc.)?				
9.6	Is there a description of system for issuance and return of welding consumables?				
10.0	NON-DESTRUCTIVE EXAMINATION				
10.1	Who has responsibility for all non-destructive examinations and procedures to be made in accordance with ASME Section V and the requirements of the applicable Code or standard to which the work is being performed?				
10.2	Are the non-destructive examinations performed by the Certificate Holder or are they performed by a sub-contractor employed as a qualified CGSB, Level III or SNT-TC-1A Examiner?				
10.3	Who has responsibility for reviewing the written procedures and qualification records of the sub-contractor?				
10.4	Who has responsibility for accepting the sub-contractor's NDE results for the Certificate Holder?				
10.5	For radiography, who has the responsibility for maintaining a calibrated density strip and/or calibrated densitometer for use by the Certificate Holder or sub-contractor?				
10.6	Who has the responsibility for reviewing and accepting the Level III written NDE procedures (including ultrasonic testing, liquid penetrant and magnetic particle examination) and any radiograph				

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ITEM No.	SECTION	MANUAL REFERENCE / COMMENTS	YES	NO	N/A
11.0	shooting sketches for compliance with all the requirements of the ASME Codes?				
11.1	HEAT TREATMENT				
11.2	Does a statement exist whether heat treatment is “in-house” or “sub-contracted”?				
11.3	Who is responsible for approving and accepting of heat treatment procedures in accordance with material specification and/or referenced standards?				
12.0	Is there identification and traceability of parts being heat-treated and acceptance time/temperature charts by Company representatives?				
12.1	CALIBRATION				
12.2	Who is responsible for control of measuring and test equipment and record keeping?				
12.3	Is there a description of how items are identified and frequency of calibration is recorded (e.g. stickers, cards, logs, etc.)?				
13.0	Is there assurance that, where necessary, verification of calibration is done with equipment traceable to National standards?				
13.1	EXAMINATION AND INSPECTION				
13.2	Who is responsible for ensuring that items are examined, inspected and tested (i.e., checklists, travellers, sampling checks).				
13.3	How are the requirements of 13.1 documented and accepted by Quality Control?				
13.4	If Proof Testing is involved, who is responsible for writing and approving procedures and ensuring “third party” witnessing of same?				
13.5	Who is responsible for final inspections and witnessing of hydrostatic/pneumatic tests?				
13.6	Are written procedures available for pneumatic testing (if used)?				
14.0	Who is responsible for making of items to the applicable Codes / Standards requirements (i.e., ANSI, MSSP, CSA, etc.)				
14.1	NON-CONFORMITIES				
14.2	Who is responsible for disposition and resolution of non-conformities?				
14.3	Who is responsible for corrective action initiation and documentation?				
14.4	Who is responsible for segregation, identification and sign-off upon completion?				
	Who is responsible for record retention of non-conformance reports?				

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ITEM No.	SECTION	MANUAL REFERENCE / COMMENTS	YES	NO	N/A
15.0 15.1 15.2	<p align="center">DOCUMENT COMPLETION</p> <p>Are all Manual references provided and complete?</p> <p>When this Checklist is completed by a surveyor of the company program, has a written comment been provided against each check-mark to provide objective evidence of review (form is not acceptable without completion of 15.1 and 15.2)?</p>				

REVIEWER _____

REVIEWER'S TITLE _____ **NAT.BD. COMM#** _____

SIGNATURE _____ **DATE** _____

REVIEW AGENCY _____

RECOMMENDATION:

Based on a TSSA Surveyor's findings, recommendation will be made whether or not a TSSA Certificate of Authorization for the Fitting Manufacturer will be issued or withheld. A Certificate of Authorization will only be issued by TSSA for surveys performed by TSSA staff. Any other agency performing the Fitting Manufacturer survey using this checklist shall issue a letter confirming the acceptability of the program to the applicant in lieu of a TSSA Certificate of Authorization. A copy of the letter shall be forwarded to the attention of the Chief Inspector at TSSA.

0 **ISSUE:** _____

0 **DO NOT ISSUE:** _____

0 **ISSUE WITH FOLLOW-UP:** _____

0 **EXPIRY DATE:** _____