



Recognized Test Administrator

(For the administration of pressure welder performance qualification tests)

Requirements for Test Administrator Recognition

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(For the administration of pressure welder performance qualifications)

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www.technicalsaftybc.ca

Toll free: 1.866.566.7233

Safety Notice

Disclaimer:

Please note that references to the legislation, codes, directives, safety orders, and web pages throughout this document may not reflect the most recent versions available.

Also, the references in this outline are by no means an exhaustive list of all the situations that may apply to a particular situation.

Therefore, the user should make sure that references are current and relevant to any situation that they are dealing with.

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Contents

1. Scope	4
2. Application for recognition as a Test Administrator	4
3. Quality control program	4
4. Quality control program manual guideline	4
5. Review and acceptance of the applicant's quality control program	4
6. Maintaining the quality control program	5
7. Renewal.....	5
8. Assessment of the quality control programs	5
Appendix A. Quality control program manual guideline	6
Appendix B. Quality control program manual elements	11

The submission of a documented quality control program alongside the applicable application form is a required part of the application process to become a Recognized Test Administrator. Quality control programs must detail the person or organization's processes, procedures, and controls for maintaining compliance with the requirements applicable to the scope of work.

1. Scope

This document, in conjunction with [Directive: Recognition to administer welder qualification tests \(D-BP 2012-01\)](#), establishes the minimum requirements for individuals or organizations seeking recognition as a performance qualification test administrator in British Columbia.

The information in this document has been developed to assist applicants in developing, maintaining, updating, and/or revising quality control programs for the purposes of seeking recognition as a Pressure Welder Test Administrator under the [Power Engineers, Boiler, Pressure Vessel, and Refrigeration Safety Regulation](#) (the “Regulation”).

2. Application for Recognition as a Test Administrator

An individual or organization wishing to obtain recognition as a test administrator may apply to Technical Safety BC by submitting a completed [application form \(FRM-1383\)](#) and the required [supporting documentation](#). Applications must include a comprehensive quality control program detailing how the requirements of the Regulation, CSA B51 and ASME Section IX, will be met. The quality program shall be suited to the type and complexity of the testing to be administered and must conform to the minimum requirements established in this guide.

In addition, applicants may be requested to provide evidence of relevant training, work experience, qualifications, and conformity assessment procedures to support the evaluation of their competency to administer testing in conformance with legislative and code requirements.

Please find the application form, the schedule of applicable fees, and other information on our [website](#).

5. Quality Control Program

Quality control programs must detail the person or organization’s processes, procedures, and controls for maintaining compliance with the requirements applicable to the scope of work described in their manual. Quality control programs must take into consideration all applicable regulatory requirements, including, but not limited to, the [Safety Standards Act](#), [Safety Standards General Regulation](#), [Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation](#) (collectively, the Act and regulations), adopted codes, directives, and safety orders.

The necessary scope and detail of the program will depend on the complexity of the performance qualification testing to be performed and on the size of the organization that will be responsible for the administration of testing. Regulated work may be performed in a fixed location, for example, in a shop, at a field location(s), or at both, provided the quality control program describes the controls associated with the activities.

A quality control program is documented in a manual that provides a comprehensive, detailed, and regularly updated overview of the processes, procedures, and controls for maintaining compliance with regulatory requirements.

4. Quality Control Program Manual Guideline

Appendices A and B detail the minimum information that must be included in a quality control program manual. The information in the appendices provides guidance for the planning, development, implementation, and maintenance of an effective quality control program.

Depending on the scope of the regulated work to be performed and the specific applicable code requirements, additional information beyond the contents of this guide may be required.

5. Review and Acceptance of the Applicant’s Quality Control Program

Technical Safety BC will review the applicant’s quality control program, training, work experience, and qualifications. After completion of the review, Technical Safety BC may make assessments of the

applicant's facility and test procedures to verify that the quality control program has been effectively implemented and operates as specified in the manual. In all cases, applicants will be required to demonstrate:

- They have adequate equipment and facilities to perform the scope of work specified in their quality control program,
- They have a thorough working knowledge of their quality control program.

On successful completion of the review and assessment, the applicant will be issued a Letter of Recognition verifying that the individual or organization is recognized to administer performance qualification tests.

6. Maintaining the Quality Control Program

Recognized test administrators are responsible for maintaining their quality control programs and ensuring that they remain current, up to date, and in compliance with the Act and regulations, adopted codes, directives, and safety orders as amended from time to time.

A recognition holder may change, update, or revise their quality control program at any time, however, any changes must be submitted to Technical Safety BC, along with a copy of [Recognized Test Administrator Application Form \(FRM-1383\)](#), for review and acceptance prior to implementation.

The recognition holder must regularly review their quality control program for any changes that may affect the program and must submit any required revisions to Technical Safety BC for review and acceptance prior to implementation. At a minimum, quality control programs must be reviewed annually prior to submitting an application for recognition renewal.

Failure to maintain compliance with the Act and regulations, adopted codes, directives, and safety orders, or conformance with quality program requirements may result in the suspension or withdrawal of recognition.

7. Renewal

Letters of Recognition must be renewed annually prior to the expiry date noted on the recognition letter to remain valid. As a part of the renewal process, recognized test administrators must provide confirmation that a quality program review has been performed and that the program remains current and up to date or has been revised for the scope of work to be performed. Confirmation of completion of a program manual review is provided through submission of the [Recognized Test Administrator Application Form \(FRM-1383\)](#).

On successful completion of the renewal process a new Letter of Recognition will be issued verifying that the individual or organization is recognized to administer performance qualification tests.

8. Assessment of the Quality Control Programs

Quality control programs may be subject to inspection, including investigation, monitoring, or audit, by Technical Safety BC at any time. Technical Safety BC inspects recognition holders' quality control programs and associated regulated activities to confirm that compliance is being maintained with the terms and conditions included in the letter of recognition, and that conformance is being maintained with all aspects of their quality control program.

Appendix A. Quality Control Program Manual Guideline

This appendix provides guidance for developing an effective quality control program manual.

Depending on the complexity of the welder performance qualification testing to be performed, and the specific applicable code requirements, additional information beyond the contents of this appendix may be required.

1. Cover Page

The following information must be included on the quality control program manual's cover page:

- the organization's name, logo (if applicable), and physical address;
- the recognition "TP" number (to be issued by Technical Safety BC);
- a summary or preview of the quality control program's scope;
- the manual issue date;
- the manual edition;
- the manual revision level; and
- whether the manual document is a controlled or uncontrolled copy, etc.

2. Scope

Provide a detailed scope description (see Table 1 and Table 2) that identifies the applicable performance qualification testing that may be administered under the program.

During the review of the quality control program, Technical Safety BC will use the scope of recognition provided to determine the complexity of the test administration or regulated work to be performed.

To support the described scope of recognition:

- List all applicable adopted code sections and standards under the Power Engineers, Boiler, Pressure Vessel, and Refrigeration Safety Regulation (the "Regulation") that will be required to be retained, kept up-to-date, and used to administer the applicable scope of recognition.
- Describe the controls that are put in place to ensure that test administration or regulated work outside the scope of the letter of recognition will not be performed.
- Specify where the performance qualification testing will be administered and include provisions for implementing the quality control program in the shop, at a field location(s), or both, as is applicable.
- List the activities that will be performed solely by the recognition holder and those that will be subcontracted to competent third parties. Examples of activities to consider are material procurement and preparation, destructive testing, non-destructive examination, and heat treatment.

Table 1. This table includes the scope applicable to organizations seeking recognition to administer performance qualification tests for registered procedures, Class IT & R certification tests, and/or Class A renewal tests.

Scope of Recognition (performance qualification tests)

Registered Procedures	Performance qualification testing using welding procedure specifications registered with Technical Safety BC in accordance with CSA B51, ASME Section IX and, if applicable, the associated construction code. i.e.: SMAW, GTAW, GMAW, FCAW, etc.
Class IT Certification Test	Performance qualification testing in accordance with the Class IT Pressure Welder Certificate of Qualification Examination Reference Syllabus
Class R Certification Test	Performance qualification testing in accordance with the Class R Pressure Welder Certificate of Qualification Examination Reference Syllabus
Class A Certification Renewal Test	Performance qualification testing in accordance with the Class A Pressure Welder Certificate of Qualification Renewal Performance Qualification Test Reference Syllabus

Table 2. This table includes whom organizations seeking recognition may administer performance qualification tests to.

Scope of Recognition (individuals)

Employees Only	Performance qualification testing will be administered only to those employed by the recognition holder.
Any Individual	Performance qualification testing may be administered for any individual holding a valid or renewable pressure welder certificate of qualification.

3. Statement of Authority and Responsibility

Describe the authority and responsibilities of the person(s) in charge of the quality control program. In addition, provide documentation that those in charge have the freedom to identify non-compliances and to take corrective actions, including stopping work and/or testing if needed, with the full support of management.

The highest authority noted on the organizational chart must sign the Statement of Authority and Responsibility: include a copy of that signed statement in the quality control program manual.

4. Tables of Contents, Revision History, and Defined Terms

In this section of the manual, include the following three tables:

- a table of contents, listing the manual’s sections and exhibits, its revision level, and room for the recognition holder to approve the manual and for Technical Safety BC to accept it by signing and dating or other means;
- a table that tracks the manual’s revision history; and
- a table of definitions (glossary) for all abbreviated titles of personnel, control documents, organizations, cited codes, standards, laws, and regulations, and any technical terms used frequently within the manual.

5. Manual Control

In the quality control program manual, stipulate provisions for how it will be prepared, revised, distributed, and implemented. The provisions should specify the person(s) responsible for the

manual's control, including for submitting manual revisions to Technical Safety BC, and should describe how the recognition holder will review and update the manual to ensure that knowledge of the [Safety Standards Act](#) and Regulations, directives, safety orders, adopted codes, and standards is maintained and kept current.

6. Organizational Chart

Include an organizational chart that shows the reporting relationships and lines of communication between management, examiners, purchasing, testing personnel, non-destructive examination, quality control, and subcontractors, as applicable and as reflects the actual organization. Brief explanations of the duties and responsibilities of key personnel whose performance affect the quality control program are also required. Specific duties may be delegated, however, the overall responsibility remains with the designated persons mentioned in the organization chart.

7. Personnel Qualifications

In the manual, include the provisions that will be used to identify the minimum qualification, educational, and experience requirements for personnel from the organizational chart whose duties and responsibilities include procedure interpretation, examination, testing, and test certification:

- Describe the qualification, knowledge, and experience requirements of the person responsible for the quality control program.
- Describe the qualification, knowledge, and experience requirements of the personnel administering the performance qualification testing, including procedure review and record preparation.
- Describe the qualification, knowledge, and experience of the personnel responsible for performing destructive and non-destructive examinations.
- Describe the controls that will be used to ensure that personnel qualifications, education, and experience are recorded and controlled.

8. Material Control

Specify and describe the system that will be used for ordering, receiving, and controlling material. This quality control program element helps to ensure that the correct material (including welding consumables) is procured, inspected after receipt, properly stored, and released for testing:

- Define the controls that will be used for maintaining material traceability until test completion, including heat numbers and colour code applications.
- Include provisions to ensure that the received materials have the required material certifications, material test reports, or certificates of conformity to meet the applicable code requirements.
- Specify and describe the material control system that will be used to ensure that only the intended material is used when administering the performance qualification test, either in shop or in field location(s), under the scope of recognition, and that the material is used according to the specifications of the applicable registered welding procedure specification, syllabi, codes and standards.
- Include provisions for how materials not in compliance with the applicable code will be handled.
- Specify the personnel responsible for the release of material to the test candidate(s).

9. Document Control

Designate and identify the person(s) responsible for:

- review and approval of welding or brazing procedures, test forms, and test reports.
- documentation, revision approval and control.
- completion, certification, and distribution of performance qualification records and

- maintenance of current editions of the code, standards, and regulatory notices.

Include provisions for record management, what records will be retained and for how long.

10. Performance Qualification Testing Control

The manual must include provisions detailing how performance qualification testing will be administered in compliance to the requirements of the Act and Regulations, adopted codes, directives, and safety orders:

- Describe the process that will be used to ensure individuals, who complete performance qualification testing in accordance with the scope described in the manual, hold a pressure welder Certificate of Qualification and that the extent of that testing is limited to the pressure welder certificate class that they hold.
- Describe the measures that will be used to review and accept welding procedure specifications and brazing procedure specifications and ensure they are registered with Technical Safety BC.
- Define the measures that will be used to control the issuance of testing procedures, coupons, and consumables.
- Define the measures for verifying the calibration of welding machines, electrode holding ovens, and other equipment utilized during examination and testing.
- Describe the measures and steps for the administration of performance qualification testing.

11. Non-destructive Examination

Specify and describe the controls and measures that will be used to ensure performed or subcontracted non-destructive examination occurs according to the applicable code requirements. The described controls and measures must address the requirement that personnel qualified in accordance with the organization's written practice must complete the non-destructive examinations and that the written practice must contain non-destructive examination procedures that previously have been demonstrated to be effective, in accordance with code requirements.

12. Heat Treatment

Include provisions in the manual for the control of the heat treatments performed or subcontracted by the organization, specify measures to ensure that the heat treatments comply with the applicable codes and standards, and require that records such as heat treatment charts and thermocouple attachment schematics are kept on file and can be made available upon request.

13. Calibration

Include provisions in the manual for the calibration of measuring and test equipment. This includes specifying the calibration methods used, the frequency of calibration, and how calibration records will be kept, as well as any other requirements stipulated by applicable codes.

14. Correction of Non-compliances

Specify and describe the system that will be used for identifying and correcting non-compliances. Non-compliances include any condition that does not comply with the requirements of the Act and Regulations, syllabi, specifications, quality control program and applicable codes, and stipulate that non-compliances must be corrected or eliminated for the completed component to be considered compliant.

Specify how all non-compliances and their disposition will be documented, and that the person(s) responsible will inform Technical Safety BC of the non-compliant conditions for review and acceptance.

15. Review and Resolution of Grievances

Specify and describe the system that will be used in the event the candidate wishes to submit a grievance. Identify the personnel responsible for receiving, reviewing, and replying to requests for review. Include provisions for the appeal of the review results to senior management as described on the organization chart.

16. Record Retention

Describe the measures that will be enacted as part of the quality control program to ensure that records related to the test administration are maintained as required by the Act and Regulations and the applicable codes.

17. Exhibits

Include samples of all forms referenced within the manual, with the company name and logo noted therein. The manual's text should also cite the referenced forms' titles in a way that is consistent with how they appear in the exhibit samples.

Note: You do not need to include in the exhibits any Technical Safety BC forms that are referenced within the manual.

Appendix B. Quality Control Program Manual Elements

The following table and information expand on the information provided in Appendix A and are meant to be used by applicants and recognition holders to develop and review their quality control program manual, as needed.

The information included in the table may or may not be applicable, as determined by the recognition holder's scope of recognition. Depending on the complexity of the regulated performance qualification testing to be performed and the specific code requirements, additional information beyond the contents of this table may be required.

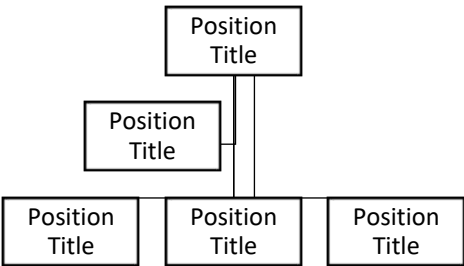
This table may be used and submitted with the quality control program manual to Technical Safety BC to support our review of the manual.

Organization name: _____

Date: _____

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
1. Cover page	1.1	Organization name's, logo (if applicable), and physical address		
	1.2	Recognition "TP" number issued by Technical Safety BC		
	1.3	Date of manual, its edition number, revision number, and whether the copy in question is a controlled or uncontrolled copy		
	1.4	Summary or preview of the contractor license scope including location(s) work is to be performed		
2. Scope	2.1	Detailed scope of recognition, including the performance qualification tests to be administered and to which category of individuals		
	2.2	Applicable code sections and standards used for the regulated performance qualification testing either referenced or listed Per Section 4 of the Power Engineers, Boiler, Pressure Vessel, and Refrigeration Safety Regulation , the adopted codes and standards are listed under the schedule .		
	2.3	Provisions to ensure regulated performance qualification testing outside the scope of recognition or capability of recognition holder will not be performed, and how the organization will comply with any terms or conditions		
	2.4	Identification of any activities that will or may be subcontracted such as destructive testing, non-destructive examination, and heat treatment		
	2.5	Identification of where regulated work is to take place and how the quality control program will be implemented in a shop or at a field location(s)		

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
3. Statement of authority and responsibility	3.1	Statement indicating the authority and responsibility of those in charge of the quality control program to comply with the Safety Standards Act and Regulations.		
	3.2	Appointment and identification of a company representative or position within the company with sufficient and well-defined responsibility, authority, and freedom to identify non-compliances and to take corrective action, including stopping performance qualification testing or work if needed.		
	3.3	Appointment and identification of a company representative or position within the company responsible for the development, understanding, review, and acceptance of the quality control program.		
	3.4	Confirmation of management's full support of those responsible for implementing the quality control program.		
	3.5	Statement of Authority and Responsibility signed by the highest authority listed on the organization chart.		
4. Tables of contents, revision history, and defined terms	4.1	Table of contents listing the sections and exhibits of the manual, as well as the pages, numbers, and revision levels for each section and exhibit.		
	4.2	Revision history table or other means that explains any changes made to the quality control manual.		
	4.3	Space for organization's approver of quality control program manual: name, signature, and date.		
	4.4	Space for Technical Safety BC acceptance of the quality control program manual: and authorized officer's name, signature, and the date.		
	4.5	Glossary defining all abbreviations used in the manual, including titles of personnel, control documents, organizations, codes, standards, Act and Regulations, as well as any term needing definition.		
5. Manual control	5.1	Identification of the person(s) responsible for controlling the quality control program manual, including the submission of its revisions to Technical Safety BC using Recognized Test Administrator Application Form (FRM-1383) , as required.		
	5.2	Description of controls that will be used to prepare, revise, distribute, and implement the manual in the shop and at a field location(s).		

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
	5.3	Description of how the manual will be revised (by page, paragraph, or section, etc.), how revisions will be highlighted within the manual, and how controlled copies of the manual will be kept current.		
	5.4	Provision for the submission of manual revisions to Technical Safety BC for acceptance before implementation.		
	5.5	Provisions for when and how the manual will be reviewed and kept up to date to ensure the manual accurately reflects the requirements of the Act and Regulations, adopted codes, standards, safety orders, directives, and information bulletins. Note: Technical Safety BC Directive: Recognition to administer welder qualification tests (D-BP 2012-01) requires quality control programs must be reviewed and updated at least annually before recognition renewal.		
	5.6	A statement that uses of uncontrolled copies of the manual should be for informational purposes only.		
	5.7	<u>Exhibit:</u> A list of those who have been distributed a controlled copy of the manual.		
6. Organization chart	6.1	<p>A chart showing the reporting relationships and lines of communication between management, examiners, purchasing, testing personnel, non-destructive examination, quality control, and subcontractors, as applicable.</p> <p>The chart should also show the lines of communication with subcontractors, as applicable.</p> <p>Example of organization chart:</p> <div style="text-align: center;">  <pre> graph TD A[Position Title] --- B[Position Title] B --- C[Position Title] B --- D[Position Title] B --- E[Position Title] </pre> </div> <p>Note: Personnel names need not be included. If names are specified, changes in personnel may require revisions to the manual.</p>		

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
	6.2	Brief explanations of the duties and responsibilities of key personnel whose performance affects the quality control program.		
	6.3	A note, if applicable, that states personnel may hold more than one title.		
7. Personnel Qualifications	7.1	Provisions to identify the minimum qualifications necessary to administer performance qualification testing and examination: <ul style="list-style-type: none"> • <i>CSA W178.2 Welding Inspector Level 2 or 3 Certification or;</i> • <i>Alberta Boilers Safety Association Welder Examiner Certification of Competency</i> 		
	7.2	Identification of the person(s) responsible for preparing, reviewing, and approving the quality control program.		
	7.3	Identification of the person(s) responsible for the administration of performance qualification testing.		
	7.4	Identification of the person(s) responsible for destructive testing and non-destructive examination.		
	7.5	Description of the system for recording the education, training, qualifications, and experience of the personnel involved in the administration of performance qualification testing.		
8. Material control	8.1	Identification of the system that will be used for ordering, receiving, and controlling material to ensure that the correct material (including welding consumables) is procured, inspected after receipt, safely stored, and released for testing.		
	8.2	Identification of the system that will be used for controlling materials to ensure that only the intended materials are used when administering testing and the materials used meet the specifications of the applicable syllabi, welding procedure specifications, codes, and standards.		
	8.3	Provisions that all received materials will have the required material certifications, material test reports, or certificates of conformity that satisfy the applicable code requirements.		
	8.4	Provision for the verification and documentation of materials and their material certifications, material test reports, or certificates of conformity.		

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
	8.5	Descriptions of the measures established for the proper identification, handling, and storage of materials.		
	8.6	Controls to maintain material traceability until test completion, including heat number, colour code application, and identification of the system that will be used to track the controls and materials.		
	8.7	Provisions for the transfer of material identifications when material is cut into two or more pieces.		
	8.8	Provision for material certifications to be made available to the Technical Safety BC Officer upon request.		
	8.9	Provisions for handling materials that are not in compliance during receiving inspection, with the registered welding procedure specifications, syllabi, or the applicable code.		
	8.10	Identification of the person(s) responsible for the release of materials for testing.		
	8.11	Description of field controls for testing that will be performed in the field, as applicable.		
	8.12	<u>Exhibit</u> : Material receiving report.		
9. Document Control	9.1	Identification of who is responsible for control, review, and revision of test documentation; procedures, forms, reports, etc.		
	9.2	Identification of the person(s) responsible for the review and acceptance of welding procedure specification or brazing procedure specifications for performance qualification testing; this person is also responsible for ensuring the procedure specification is registered with Technical Safety BC.		
	9.3	Identification of the person(s) responsible for the completion, certification, and distribution of performance qualification records.		
	9.4	Identification of the person(s) responsible for control and maintenance of current editions of codes and standards.		
	9.5	Description of the controls for maintaining all applicable documentation and records.		

Section	Quality control program manual elements, per section	Applicability (Yes, No, N/A)	Manual reference
10. Performance Qualification Testing Control	10.1	Provision to ensure welding and brazing performance qualification testing shall be administered and completed in accordance with the Act and Regulations, applicable procedures, or syllabi, and adopted codes and standards.	
	10.2	Provisions to ensure that only individuals who hold a pressure welder Certificate of Qualification are permitted to complete regulated performance qualification testing and individuals testing for Class IT or Class R meet eligibility requirements in accordance with the Regulation. See Technical Safety BC's requirements regarding pressure welder certification: https://www.technicalafetybc.ca/certification/pressure-welder Also see Section 5(3) of the Regulation.	
	10.3	Identification of the person(s) responsible for: <ul style="list-style-type: none"> • verification of candidate eligibility for testing • reviewing and verifying welding procedure specifications are registered with Technical Safety BC • issuing approved testing procedures, materials, and consumables • inspection of joint preparation, fit up, test positions, amperage, voltage, polarity, tack welds, root and fill passes • reviewing of test results, preparing, recording, certification, and distribution of test records 	
	10.4	Provision to ensure welding machines, electrode holding ovens, and other equipment utilized during testing are calibrated.	
	10.5	Describe the system and controls for the handling, storing, distribution, and return or filler metal consumables.	
	10.6	Provisions to ensure candidate is assigned a test ID and that test coupons and specimens are positively identified prior to mechanical test specimen removal or non-destructive testing (i.e.: marking and/or stamping).	
	10.7	Describe the controls in place to ensure conformance to the test essential variables and other requirements listed in ASME Section IX.	
	10.8	Describe the steps for the preparation of mechanical test specimens.	
	10.9	For mechanical testing, provision for verifying testing and/or guided bending equipment meets ASME Section IX requirements (i.e.: jig set up and individual part dimensions).	

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
	10.10	Provisions for the control, storage, and retention timeframe of passed/failed test coupons and specimens.		
	10.11	Describe the provisions and system for immediate retest in the event of a failed performance qualification due to visual or mechanical requirements not being met in accordance with ASME Section IX.		
	10.12	Description of field controls for testing that will be performed in the field, as applicable.		
	10.13	<u>Exhibit:</u> Log of test ID issuance.		
	10.14	<u>Exhibit:</u> Step-by-step testing process procedure (to be distributed to and referred to by candidate).		
	10.15	<u>Exhibit:</u> Welder/welding operator performance qualification test record or ASME suggested format, QW-484a / QW-484b Forms.		
	10.16	<u>Exhibit:</u> Technical Safety BC Class IT Pressure Welder Exam Record Form (FRM-1695). Note: This form is not available on the public website and may be provided upon request.		
11. Non-destructive examination (NDE)	11.1	Controls and measures to ensure performed or subcontracted non-destructive examination meets the requirements of the applicable codes and is completed by qualified personnel.		
	11.2	Indication of whether non-destructive examination will be performed in-house, subcontracted, or both. Note: If performed in-house, all requirements should be covered within the quality control program.		
	11.3	If work will be subcontracted, identification of the subcontractor items to be verified (i.e.: qualifications, written procedures, equipment calibrations).		
	11.4	Provision to ensure or verify that the personnel who will be performing non-destructive examinations are qualified in accordance with Canadian General Standards Board CAN/CGSB-48.9712/ISO 9712 and the applicable code.		
	11.5	Provision to ensure non-destructive examinations performed are in accordance with written procedures certified by a CGSB Level III Examiner.		
	11.6	Provision to ensure equipment used for non-destructive examinations has been calibrated.		

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
	11.7	Provision for documentation and records of non-destructive examinations to be prepared and retained as specified by the applicable code.		
	11.8	For radiography, provisions for the maintenance of a calibrated density strip and/or densitometer, traceability to test coupons, and review, acceptance, and retention of reports and film.		
	11.9	<u>Exhibit</u> : NDE Organization CGSB Level III Examiner appointment letter.		
12. Heat treatment	12.1	Provisions for control of the heat treatments performed or subcontracted by the organization.		
	12.2	If work to be subcontracted, identification of the subcontractor items that will be verified and retained.		
	12.3	Written procedures and instructions specifying the heat treatment requirements specified by the applicable code(s).		
	12.4	Description of the measures in place to ensure that the heat treatment work, charts, and records comply with the applicable codes and standards.		
	12.5	Provision to ensure traceability to test coupons and records such as heat treatment chart and thermocouple attachment schematic are kept on file.		
	12.6	Provisions to identify whether the heat treatment equipment used requires calibration and, if it does, what controls are in place to assure compliance.		
	12.7	<u>Exhibit</u> : Heat treatment instruction form.		
13. Calibration	13.1	Provisions for the calibration of measuring and test equipment, including welding machines and electrode ovens.		
	13.2	Description of the method to be used for identifying equipment requiring calibration, as well as of the method for indicating the status or due date of calibration (e.g., with stickers, tags, etc.).		
	13.3	Description of the method to be used for maintaining and tracking calibration records.		
	13.4	Provision for identifying and handling non-conforming equipment.		
	13.5	Descriptions of any other applicable requirements stipulated by the applicable codes.		

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
	13.6	Provision for calibration records to be retained.		
	13.7	<u>Exhibit</u> : List of measuring and test equipment that requires calibration, with information such as identifier and calibration status, dates, frequency, etc.		
14. Correction of non-compliances	14.1	System specified for correcting non-compliances and any condition that does not comply with the requirements of the Act and Regulations, specifications, the accepted quality control program, and applicable codes.		
	14.2	Identification of the person(s) responsible for the resolution of non-compliances.		
	14.3	Provision for non-compliances to be corrected or eliminated before the completed component can be considered compliant.		
	14.4	Provisions for the documentation of non-compliances and their disposition.		
	14.5	<u>Exhibit</u> : An example of non-compliance record form to be used to document a non-compliance and its disposition.		
	14.6	<u>Exhibit</u> : A sample facsimile of non-compliance identification or “hold” tag and label.		
15. Review and resolution of grievances	15.1	Describe the system for receiving, reviewing, and responding to a grievance from a candidate.		
	15.2	Identification of the person(s) responsible for reviewing and responding to requests for review.		
	15.3	Provisions for the appeal of the review results to senior management as identified on the organizational chart.		
	15.4	Describe the method for recording the grievance and results of the review.		
16. Record retention	16.1	Measures to ensure that the records are maintained as required by the Act and Regulation, and applicable codes.		
	16.2	Identification of records that may be required to be maintained.		
	16.3	Provision to ensure that all required records are maintained for at least seven (7) years. Section 72(1)(a) of the Regulation notes this as a requirement.		
	16.4	Provision for all records related to performance qualification testing be made available to Technical Safety BC upon request.		

Section	Quality control program manual elements, per section		Applicability (Yes, No, N/A)	Manual reference
16. Exhibits	17.1	Samples of forms or facsimiles referenced within the manual contain the company name and logo, and the titles are consistent with those of the forms referenced in the text of the manual. Note: Technical Safety BC forms and forms controlled by other organizations referenced within the manual, need not be included as manual exhibits.		
	17.2	Sample forms in this section identified as “SAMPLE” or “EXHIBIT”.		
	17.3	Forms or facsimiles, when referenced throughout the manual, include the title and exhibit or sample number for each referenced in a table of contents.		
Additional notes				

Technical Safety BC is an independent, self-funded organization mandated to oversee the safe installation and operation of technical systems and equipment.

In addition to issuing permits, licences, and certificates, we work with industry to reduce safety risks through assessment, education and outreach, enforcement, and research.

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