



Province of Alberta

SAFETY CODES ACT

PRESSURE WELDERS REGULATION

Alberta Regulation 169/2002

With amendments up to and including Alberta Regulation 35/2020

Current as of March 17, 2020

Office Consolidation

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(Consolidated up to 35/2020)

ALBERTA REGULATION 169/2002

Safety Codes Act

PRESSURE WELDERS REGULATION

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Definitions**1** In this Regulation,

- (a) “Act” means the *Safety Codes Act*;
- (b) “Administrator” means the Administrator with respect to the pressure equipment discipline appointed under the *Safety Codes Act*;
- (c) “machine welding operator” means a person who holds a Machine Welding Operator Certificate of Competency issued pursuant to this Regulation;
- (d) “performance qualification card” means a card that is part of a certificate of competency and is issued to a pressure welder, pressure tack welder or machine welding operator pursuant to this Regulation;
- (e) “performance qualification test” means a performance qualification test required by the Administrator and conducted by a safety codes officer or testing organization, as provided for in this Regulation;
- (e.1) “pressure tack welder” means a person who holds a Pressure Tack Welder Certificate of Competency issued pursuant to this Regulation;
- (f) “pressure welder” means a person who holds a Pressure Welder Certificate of Competency issued pursuant to this Regulation;
- (g) “pressure welding” means welding performed on a boiler, pressure vessel, pressure piping system or fitting;
- (h) “testing organization” means an organization authorized by the Administrator to test candidates for the performance qualification card portion of a certificate of competency, with respect to welding pressure vessels, boilers, pressure piping systems and fittings and welding methods;

- (i) “welding examiner” means a person who holds a Welding Examiner Certificate of Competency issued pursuant to this Regulation;
- (j) “welding examiner in training” means a person who holds a Welding Examiner in Training Certificate of Competency issued pursuant to this Regulation.

AR 169/2002 s1;103/2014

Prohibitions

2(1) No person shall weld a boiler, pressure vessel, pressure piping system or fitting by any method, unless the person holds a certificate of competency, including a performance qualification card, that specifically authorizes the person to weld the pressure vessel, boiler, pressure piping system or fitting and authorizes the method used by the person.

(2) No person shall direct a person to weld a pressure vessel, boiler, pressure piping system or fitting by any method, unless the person who welds holds a certificate of competency, including a performance qualification card, that specifically authorizes that person to weld the pressure vessel, boiler, pressure piping system or fitting and authorizes the method used by that person.

(3) No person shall conduct a performance qualification test unless authorized to do so by this Regulation.

(4) No person shall, pursuant to section 42 of the Act, issue a performance qualification card unless the person is authorized by the Administrator to do so on behalf of the Administrator.

Certificates of Competency**Types of certificates**

3(1) The following certificates of competency are established:

- (a) Grade B Pressure Welder Certificate of Competency;
- (b) Grade C Pressure Welder Certificate of Competency;
- (c) Machine Welding Operator Certificate of Competency;
- (c.1) Pressure Tack Welder Certificate of Competency;
- (d) Welding Examiner Certificate of Competency;
- (e) Welding Examiner in Training Certificate of Competency.

(2) A Grade B Pressure Welder Certificate of Competency permits the holder to engage in pressure welding subject to the limitations

prescribed in this Regulation and described on the performance qualification card held by the holder.

(3) A Grade C Pressure Welder Certificate of Competency permits the holder to engage in pressure welding subject to the limitations prescribed in this Regulation and described on the performance qualification card held by the holder.

(4) A Machine Welding Operator Certificate of Competency permits the holder to operate mechanized and automatic welding machines or mechanized and automatic welding equipment of a type described on the performance qualification card held by the holder.

(4.1) A Pressure Tack Welder Certificate of Competency permits the holder to engage in pressure tack welding subject to the limitations prescribed in this Regulation and described on the performance qualification card held by the holder.

(5) A Welding Examiner Certificate of Competency authorizes the holder to conduct performance qualification tests and issue performance qualification cards on behalf of a testing organization while employed by that testing organization.

(6) A Welding Examiner in Training Certificate of Competency authorizes the holder to conduct performance qualification tests on behalf of a testing organization while employed by that testing organization and while working under the direction of the holder of a Welding Examiner Certificate of Competency who is employed by the same testing organization.

(7) The holder of a Welding Examiner in Training Certificate of Competency may not sign performance qualification cards.

AR 169/2002 s3;103/2014

Issuance of certificate

4(1) Pursuant to section 42 of the Act, a certificate of competency may be issued to a person who

- (a) passes the applicable examination for that certificate of competency, or
- (b) qualifies to be issued a certificate of competency without examination pursuant to this Regulation.

(2) Pursuant to section 42 of the Act, a performance qualification card may be issued by a safety codes officer or a testing organization, if authorized to do so by the Administrator on behalf of the Administrator, to a person who passes a performance qualification test conducted by the safety codes officer or testing

organization and on and after October 1, 2003 a performance qualification test conducted by the safety codes officer or a welding examiner employed by the testing organization.

Duplicate certificate

5(1) If a certificate of competency, other than a performance qualification card, is lost or destroyed, a duplicate certificate of competency may be issued on providing evidence satisfactory to the Administrator of the loss or destruction of the original certificate of competency.

(2) If a performance qualification card is lost or destroyed, a duplicate performance qualification card may be issued on providing evidence satisfactory to the safety codes officer or testing organization that issued the original performance qualification card of the loss or destruction of the original performance qualification card.

Performance qualification cards

6 A performance qualification card must show all information required by the Administrator, including but not limited to

- (a) the name of the person to whom it is issued,
- (b) the welding process that the holder of the card is permitted to engage in,
- (c) the base material group and filler metal group the holder of the card is permitted to weld,
- (d) the thickness of the deposited weld metal the holder of the card is permitted to weld,
- (e) the positions and the minimum pipe diameter for which the holder of the card is qualified,
- (f) the date of the test,
- (g) the date that the card expires,
- (h) in the case of a performance qualification card issued by a testing organization authorized to do so by the Administrator on behalf of the Administrator, the name of the testing organization,
- (i) the signature and number of the testing organization's welding examiner responsible for the performance qualification test,

- (j) the progression of the weld,
- (k) the backing requirements for which the holder of the card is permitted to weld, and
- (l) the backing gas requirements for which the holder of the card is permitted to weld.

AR 169/2002 s4;103/2014

Making certificates available

7 A pressure welder, pressure tack welder or machine welding operator, when engaged in pressure welding, must have readily available the certificate of competency including the performance qualification card authorizing the welder or operator to perform the type of pressure welding in which the welder or operator is engaged.

AR 169/2002 s7;103/2014

Expiry dates

8(1) Subject to this section, a certificate of competency including a performance qualification card issued pursuant to this Regulation remains valid unless it is suspended or cancelled.

(2) A Grade C Pressure Welder Certificate of Competency expires on the date stated on the certificate, which date must be no later than 24 months after the date the certificate is issued.

(3), (3.1) Repealed AR 71/2010 s2.

(4) A Welding Examiner Certificate of Competency expires 36 months after the date it is issued.

(4.1) A Welding Examiner in Training Certificate of Competency expires 36 months after the date it is issued.

(5) A performance qualification card expires on the date stated on the card.

(6) The expiry date of a performance qualification card must be no later than 24 months following the date it is issued.

(7) Despite subsection (6), the expiry date of a performance qualification card issued to the holder of a Grade C Pressure Welder Certificate of Competency must be no later than the date on which the certificate of competency expires.

(8) The expiry date of a performance qualification card issued to an employee of an organization authorized under the Act to manufacture boilers, pressure vessels or pressure piping systems with respect to a Grade B Pressure Welder Certificate of

Competency, Pressure Tack Welder Certificate of Competency or Machine Welding Operator Certificate of Competency may be extended by 6-month periods while the employee is employed by the organization if

- (a) the organization is the testing organization that conducted the employee's performance qualification test,
- (b) the organization maintains performance qualification records in accordance with the current ASME Boiler and Pressure Vessel Code, Section IX Welding and Brazing Qualifications, declared in force under the Act,
- (c) the employee is continuously employed by the organization,
- (d) the organization's examiner makes qualification entries on the performance qualification card, and
- (e) the organization demonstrates to the satisfaction of a safety codes officer that this subsection is complied with, in accordance with the organization's quality management system.

AR 169/2002 s8;97/2009;71/2010;103/2014

Qualifications, Examinations and Equivalencies

Grade B certificate examination

9(1) A Grade B Pressure Welder Certificate of Competency examination consists of a performance qualification test conducted by a safety codes officer.

(2) To qualify to take a Grade B Pressure Welder Certificate of Competency examination, a candidate must

- (a) hold a Journeyman Certificate of Proficiency with respect to welding issued under the *Apprenticeship and Industry Training Act*,
- (b) hold a Journeyman Welder's Red Seal Certificate of Competency from a jurisdiction outside Alberta,
- (c) hold an Alberta Journeyman equivalency document with respect to welding issued under the *Apprenticeship and Industry Training Act*, or
- (d) hold a trade certificate, as defined in section 1(o)(ii) of the *Apprenticeship and Industry Training Act*, in the trade of welder.

(3) To take a Grade B Pressure Welder Certificate of Competency examination, a candidate must apply to a safety codes officer at least 7 days before the examination on a form satisfactory to the Administrator.

AR 169/2002 s9;97/2009

Grade B equivalents

9.1 If the Administrator determines that a person holds a certificate from a jurisdiction outside Alberta that is equivalent to a Grade B Pressure Welder Certificate of Competency issued under this Regulation, the Administrator may, on application, issue an equivalent certificate of competency.

AR 97/2009 s4

Grade C certificate examination

10(1) A Grade C Pressure Welder Certificate of Competency examination consists of a performance qualification test conducted by a safety codes officer.

(2) To qualify to take a Grade C Pressure Welder Certificate of Competency examination, a candidate's employer or prospective employer or a testing organization must satisfy a safety codes officer that the candidate has

- (a) engaged in welding in Alberta for a period and of a type of welding acceptable to the Administrator, or
- (b) engaged in welding outside Alberta for a period of 36 months and holds a pressure welder qualification issued by a jurisdiction outside Alberta.

(3) To take a Grade C Pressure Welder Certificate of Competency examination, a candidate's employer or prospective employer or a testing organization must apply on the candidate's behalf to a safety codes officer at least 7 days before the examination on a form satisfactory to the Administrator.

AR 169/2002 s10;97/2009;103/2014

Grade C certificate issued to apprentice

11 Pursuant to section 42 of the Act, a Grade C Pressure Welder Certificate of Competency may be issued to a welder apprentice during the 2nd or any subsequent year of the welder apprentice's apprenticeship program under the *Apprenticeship and Industry Training Act* if

- (a) the employer of the welder apprentice applies to the Administrator on a form satisfactory to the Administrator, and

- (b) the welder apprentice passes a performance qualification test conducted by a safety codes officer.

AR 169/2002 s11;97/2009

Grade C equivalents

12(1) Pursuant to section 42 of the Act, a Grade C Pressure Welder Certificate of Competency may be issued to a person coming into Alberta

- (a) who has, in the opinion of the Administrator, experience and qualifications equivalent to the holder of a Grade B Pressure Welder Certificate of Competency if the person's employer
 - (i) applies to the Administrator on a form satisfactory to the Administrator, and
 - (ii) certifies in writing to the Administrator that the welding to be performed is of an urgent nature,

or

- (b) who has, notwithstanding section 10,
 - (i) a Journeyman Welder's Red Seal Certificate of Competency from a Canadian jurisdiction outside Alberta or a trade certificate, as defined in section 1(o)(ii) of the *Apprenticeship and Industry Training Act*, in the trade of welder,
 - (ii) a valid pressure welder certificate of competency from a Canadian jurisdiction outside Alberta that is acceptable to the Administrator, and
 - (iii) a valid performance qualification certification from a Canadian jurisdiction outside Alberta that is acceptable to the Administrator.

(2) Despite section 8, a Grade C Pressure Welder Certificate of Competency issued under subsection (1)(a) may not be issued for a term exceeding 30 working days.

AR 169/2002 s12;97/2009;103/2014

Examination required

13 A subsequent Grade C Pressure Welder Certificate of Competency may not be issued to a candidate who

- (a) is qualified to take a Grade B Pressure Welder Certificate of Competency examination,

- (b) is requested by the Administrator to take the examination, and
- (c) does not take the examination as requested.

Machine welding operator examination

14(1) A Machine Welding Operator Certificate of Competency examination consists of a performance qualification test conducted by a safety codes officer.

(2) To qualify to take a Machine Welding Operator Certificate of Competency examination, a candidate must be employed by a company having one or more welding procedures for automatic welding processes approved by a safety codes officer.

(3) To take a Machine Welding Operator Certificate of Competency examination, a candidate must apply to a safety codes officer at least 7 days before the examination on a form satisfactory to the Administrator.

Pressure tack welder certificate examination

14.1(1) A Pressure Tack Welder Certificate of Competency examination consists of an examination conducted by a safety codes officer.

(2) To qualify to take a Pressure Tack Welder Certificate of Competency examination, a candidate must be

- (a) a welder apprentice, or
- (b) a journeyman boilermaker, a journeyman steamfitter-pipefitter, a journeyman structural steel and plate fitter or a journeyman welder who has a journeyman trade certificate issued under the *Apprenticeship and Industry Training Act*.

(3) To qualify to take a Pressure Tack Welder Certificate of Competency examination, a candidate's employer or prospective employer or a testing organization must apply on the candidate's behalf to a safety codes officer at least 7 days before the examination on a form satisfactory to the Administrator.

AR 103/2014 s9

Pressure tack welder certificate

14.2 Pursuant to section 42 of the Act, a Pressure Tack Welder Certificate of Competency may be issued to a welder apprentice, journeyman boilermaker, journeyman steamfitter-pipefitter,

journeyman structural steel and plate fitter or journeyman welder who deposits only tack welds, if

- (a) the employer of the welder apprentice, journeyman boilermaker, journeyman steamfitter-pipefitter, journeyman structural steel and plate fitter or journeyman welder has included in the employer's quality management system registered under the Act the processes for managing the supervision and development of individuals performing tack welding, and
- (b) the welder apprentice, journeyman boilermaker, journeyman steamfitter-pipefitter, journeyman structural steel and plate fitter or journeyman welder passes a Pressure Tack Welder Certificate of Competency examination.

AR 103/2014 s9

Welding examiner certificate examination

15(1) A Welding Examiner Certificate of Competency examination consists of a written examination conducted by the Administrator.

(2) To qualify to take a Welding Examiner Certificate of Competency examination, a candidate must meet the qualifications required by the Safety Codes Council in the Council's welding examiner syllabus, as amended from time to time.

(3) To take a Welding Examiner Certificate of Competency examination, a candidate must apply to the Administrator at least 21 days before the examination on a form satisfactory to the Administrator.

(4) To pass a Welding Examiner Certificate of Competency examination, a candidate must obtain at least 70% of the total marks allotted for each paper of the examination.

(5) With respect to a Welding Examiner Certificate of Competency examination, the Administrator may do any or all of the following:

- (a) set the time and place of an examination;
- (b) administer an examination;
- (c) mark an examination;
- (d) establish policies regarding activities a candidate cannot undertake during an examination;
- (e) declare a candidate to have failed if the candidate undertakes a prohibited activity during an examination;

- (f) disqualify a candidate who undertakes a prohibited activity during an examination from writing another examination for a period not exceeding 12 months after the date of the examination;
 - (g) disqualify a candidate who fails any paper of an examination from writing another examination for a period not exceeding 3 months after the date of the failed examination.
- (6) If a person has experience and qualifications satisfactory to the Administrator, the Administrator may grant credit to that person for one or more papers that form part or all of a Welding Examiner Certificate of Competency examination.

Welding examiner in training certification

15.1(1) Pursuant to section 42 of the Act, a Welding Examiner in Training Certificate of Competency may be issued to a person if

- (a) the person meets the qualifications required by the Safety Codes Council in the Council's welding examiner syllabus, as amended from time to time, and
- (b) the person applies to the Administrator on a form satisfactory to the Administrator.

AR 103/2014 s10

16 Repealed AR 71/2010 s3.

Welding examiner renewal

17(1) A Welding Examiner Certificate of Competency may be renewed by the Administrator if the holder of the certificate of competency applies to the Administrator on a form satisfactory to the Administrator and

- (a) meets the qualifications required by the Safety Codes Council in the Council's welding examiner syllabus, as amended from time to time, for the renewal of a Welding Examiner Certificate of Competency, or
 - (b) holds a Welding Examiner Certificate of Competency that was applied for before October 1, 2003, and issued without examination under this Regulation as it read immediately before May 30, 2010.
- (2) If a Welding Examiner Certificate of Competency is not renewed before it expires, the Administrator may require the holder

of the certificate of competency to pass a written examination before renewing the expired certificate of competency.

AR 169/2002 s17;71/2010

Performance Qualification Tests

Conducting tests

18(1) A performance qualification test may be conducted

- (a) by a safety codes officer if the performance qualification test is an examination for a certificate of competency, or
- (b) by a testing organization if the performance qualification test is for the holder of a Pressure Tack Welder Certificate of Competency, a Pressure Welder Certificate of Competency or a Machine Welding Operator Certificate of Competency.

(2) If a safety codes officer is not able to witness the performance of a performance qualification test that is an examination for a Grade C Pressure Welder Certificate of Competency, the safety codes officer may authorize a person to supervise the test on behalf of the safety codes officer.

(3) If a safety codes officer is not able to conduct a performance qualification test that is an examination for a Grade C Pressure Welder Certificate of Competency, the safety codes officer may authorize a testing organization to conduct the test.

(4) A safety codes officer may conduct tests on the weld test coupon that the safety codes officer considers necessary.

(5) A performance qualification test must be conducted in accordance with a welding procedure approved by the Administrator.

AR 169/2002 s18;103/2014

Applying to take test

19 To take a performance qualification test conducted by a testing organization, a pressure tack welder, pressure welder or machine welding operator must apply to a testing organization to do so.

AR 169/2002 s19;103/2014

Failed test

20(1) A candidate who fails a performance qualification test that is an examination for a Grade B Pressure Welder Certificate of Competency, a Grade C Pressure Welder Certificate of Competency, a Machine Welding Operator Certificate of

Competency or a Pressure Tack Welder Certificate of Competency is not permitted to take a re-test for a period of one month from the date of examination, unless permitted to do so by a safety codes officer.

(2) A candidate who fails to pass 2 consecutive performance qualification tests that are examinations for a Grade B Pressure Welder Certificate of Competency, a Grade C Pressure Welder Certificate of Competency, a Machine Welding Operator Certificate of Competency or a Pressure Tack Welder Certificate of Competency is not permitted to take a further re-test for a period of 3 months from the date of the last test taken, unless the candidate provides proof of having successfully completed an upgrading course in pressure welding satisfactory to the Administrator.

AR 169/2002 s20;103/2014

Testing organization

21(1) The Administrator may authorize an organization to act as a testing organization in accordance with this Regulation if

- (a) the test records, facilities and procedures and the qualifications of the testing personnel are detailed in a quality management system that is satisfactory to the Administrator,
- (b) the welding procedure in respect of which a performance qualification test is to be conducted has been accepted and registered in accordance with section 27 of the *Pressure Equipment Safety Regulation* (AR 49/2006),
- (c) the tests, records and procedures in respect of the test comply with the current ASME Boiler and Pressure Vessel Code, Section IX Welding and Brazing Qualifications, declared in force under the Act, and
- (d) the testing organization employs one or more welding examiners to conduct performance qualification tests.

(2) If the Administrator determines that a testing organization does not comply with this Regulation, the Administrator must give notice in writing to the testing organization that from the date specified on the notice the Administrator's authorization is withdrawn.

(3) If a testing organization conducts a performance qualification test, the testing organization must retain the test records for at least 2 years.

AR 169/2002 s21;97/2009;103/2014

Performance review of testing organization

22 In accordance with sections 34 and 35 of the Act, a safety codes officer may

- (a) review a testing organization's quality management system, test records, procedures, personnel responsibilities and personnel qualifications, and
- (b) on giving notice to the owner or persons in charge of the testing organization, witness any performance qualification test.

AR 169/2002 s22;103/2014

Miscellaneous**Identification of weldments**

23(1) The employer of a pressure welder or machine welding operator must assign to the employee a symbol for the purpose of identifying the weldments of the employee.

(2) A record of all pressure welders and machine welding operators and their identification symbols must be maintained by the employer of the pressure welder or machine welding operator.

(3) A pressure welder or machine welding operator must identify the weldments that the welder or operator makes by the symbol assigned by the employer.

(4) For greater certainty, this section does not apply in respect of pressure tack welders.

AR 169/2002 s23;103/2014

Repeals, Expiry and Coming into Force**Repeal**

24 The *Pressure Welders' Regulations* (AR 229/75) are repealed.

Expiry

25 For the purpose of ensuring that this Regulation is reviewed for ongoing relevancy and necessity, with the option that it may be repassed in its present or an amended form following a review, this Regulation expires on May 31, 2022.

AR 169/2002 s25;97/2009;71/2010;103/2014;35/2020

Coming into force

26 This Regulation comes into force on October 1, 2002.



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