

Annex B - British Columbia:

Compliance Declaration for Design Registration Applicants must fulfill their responsibilities to ensure that the design complies with applicable codes and standards.

Applicants responsibilities:

- 1) To ensure that the design complies with the relevant codes and standards.
- 2) To present a complete application package.
- 3) To assume responsibility for the integrity of their design(s).

To meet these responsibilities, the applicant must possess the necessary qualifications or retain the services of a qualified person to perform the work. A qualified person is one who has the knowledge and experience to assess the design from a perspective of code, standard and safe industry practice compliance.

For the purposes of most boiler, pressure vessel and fitting designs, a qualified person is generally a registered professional engineer. In limited circumstances, Technical Safety BC may consider other types of qualifications. An example may be where:

- the ASME code covers all details of design and construction, and
- the person and company are known to Technical Safety BC as having experience designing and manufacturing the type of vessel,
- an accredited ASME manufacturer's representative may be considered a qualified person.

Legislation will be established in British Columbia that reflects the role of Professional Reliance. It is the expectation of the applicant to ensure the submitted package is prepared and authenticated by a professional engineer as part the package submission.

[Weblink – please use to verify latest information](#)

<https://www.technicalafetybc.ca/alerts/information-bulletin-design-registration-changes-technical-safety-bc-application-process>

Please complete the highlighted sections of the BC application form and compliance declaration.

Please also complete the BC supplement form for the applicable design type:

- **Boiler CRN Supplement - Reciprocal**
- **Fitting CRN Supplement - Reciprocal**
- **Heat Exchanger CRN Supplement - Reciprocal Pressure**
- **Vessel CRN Supplement - Reciprocal**

Design Registration Application Form (CRN/PRN/BCLD)

Note: The information on this form is collected to administer the provisions of the BC Safety Standards Act and section 26 of the Freedom of Information and Protection of Privacy Act. If you have questions about the collection, use, or disclosure of this information, contact the Records, Information & Privacy Analyst at 1 866 566 7233.

If information about this design was submitted subsequent to this application, please provide **Journal Number:** _____

Reciprocals: Please submit, in addition to this form, verification of registration in another jurisdiction & **Supplemental CRN:** _____

Section A – Billing Client:

Date of Application: _____

Company: _____ Contact Name: _____
 Address: _____ City/Town: _____
 Province/State: _____ Postal/Zip code: _____ Email: _____
 Phone: _____

Section B – Submitted By:
 Same as Section A

 See below

Company: _____ Contact Name: _____
 Address: _____ City/Town: _____
 Province/State: _____ Postal/Zip code: _____ Email: _____
 Phone: _____

Section C – Register To:
 Same as Section A

 See below

Company: _____ Contact Name: _____
 Address: _____ City/Town: _____
 Province/State: _____ Postal/Zip code: _____ Email: _____
 Phone: _____

Section D – Additional Information

Drawing Number: _____ Revision Number: _____

Drawing Title: _____

Applicant's billing reference (job #, file # etc.) _____

Section E – Site / Installation Information required (for piping and used vessel submissions only)

Address: _____

Site/Building Name: _____

Registration Type: (please check ONE)

New CRN New Reciprocal Repair/Alteration Control System
 CRN Revision/Update Reciprocal Revision/Update Used Vessel

Design Category: (please check one and indicate corresponding volume or heat transfer/surface area)

Pressure Vessel (Volume) _____ m3 Heat Exchanger (Heat Transfer) _____ m2
 Boiler (Heating Surface) _____ m2 Fitting Piping System (note 2)

- For Fitting – Please provide original Statutory Declaration per CSA B51, and valid QMS Certificate.

NOTE: CRN Application must include the following:

1. For more than one design, please complete a separate application and collate documents by design.
2. Only **1 set** of drawings, calculations & application form is required for each design submittal (piping is included and only requires **1 set** of drawings, calculations and an application form. Please provide documents in smallest, legible size.
3. For 'COMPLETE' registration requirements please visit <https://www.technicalsaftybc.ca/design-registration-equipment-and-systems/design-registration-boilers>
4. Only '**COMPLETE**' design registration packages will be accepted. Incomplete application packages will not be processed.
5. **For reciprocal registrations please ensure that the supplementary form** is also completed and accompanies this application.

Section E – Design Definition (continued from page 1)

Calculations Document #: _____ Revision: _____ Date: _____

Note: vessels with an overall length greater than 20ft require seismic calculations to be included in the calculations

(For reciprocal registration) CRN #: _____ Date of Initial Registration: _____

Other documents and revisions that define the design or are necessary to demonstrate compliance.
 Refer to Technical Safety BC registration circulars for guidance relating to the types of documentation expected for compliance demonstration.

Document #: _____ Revision: _____ Date: _____

Document #: _____ Revision: _____ Date: _____

Code or Standard of Design (check applicable)

- | | |
|--|--|
| <input type="checkbox"/> ASME Section I | <input type="checkbox"/> ASME B31.1 |
| <input type="checkbox"/> ASME Section IV | <input type="checkbox"/> ASME B31.3 |
| <input type="checkbox"/> ASME Section VIII, division 1 * (see below) | <input type="checkbox"/> ASME B31.5 |
| <input type="checkbox"/> ASME Section VIII, division 2 | <input type="checkbox"/> CSA B51 |
| <input type="checkbox"/> ASME Section VIII, division 3 | <input type="checkbox"/> CSA B52 |
| <input type="checkbox"/> ASME PVHO-1 | <input type="checkbox"/> Other (specify) _____ |

*If ASME Section VIII, Division 1: Does the design leverage rule U-1(d) or U-2(g) for compliance? Yes No

Compliance Declaration

(To be completed by a registered professional engineer or identify the qualifications of the declarer that establish their suitability for making the following declaration) [See IB-BP-2014-02](#)

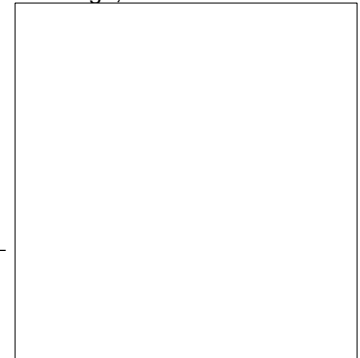
I declare that the above:

- Information is complete and correct, and
- Submitted design complies with the stated code or standard of design and, to the best of my knowledge, is safe for construction and use.

Professional Engineer:

Association Name _____ Registration No. _____

Name _____ Signature _____ Date _____



P.Eng. Stamp

Other Qualified Person:

Name _____ Signature _____ Date _____

Qualifications of person identified above:

Boiler CRN Supplement - Reciprocal

Note: The information on this form is collected to administer the provisions of the BC Safety Standards Act and section 26 of the Freedom of Information and Protection of Privacy Act. If you have questions about the collection, use, or disclosure of this information, contact the Records, Information & Privacy Analyst at 1-866-566-7233.

This supplement form is to be completed and signed for a Boiler reciprocal registration.

Drawing #: _____ Revision: _____ Title: _____

CRN #: _____ Date of Initial Registration _____

Boiler Class (check one)

- | | |
|---|--|
| <input type="checkbox"/> High Pressure Boiler | <input type="checkbox"/> Low Pressure Boiler |
| <input type="checkbox"/> Hot Water Boiler | <input type="checkbox"/> Thermal Fluid |

Boiler Type (check one)

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> Cast Aluminum Core Boiler | <input type="checkbox"/> Horiz. Return Tube F. Box | <input type="checkbox"/> Recovery Boiler | <input type="checkbox"/> Vertical Firetube |
| <input type="checkbox"/> Cast Iron Sectional | <input type="checkbox"/> Horizontal Return Tube | <input type="checkbox"/> Scotch Dryback | <input type="checkbox"/> Vertical Tubeless |
| <input type="checkbox"/> Coil Tube | <input type="checkbox"/> Locomotive | <input type="checkbox"/> Scotch Wetback | <input type="checkbox"/> Vertical Watertube |
| <input type="checkbox"/> Condensing Boiler | <input type="checkbox"/> Miniature Boiler | <input type="checkbox"/> Thermal Liquid | <input type="checkbox"/> Watertube |
| <input type="checkbox"/> Electric | <input type="checkbox"/> Port. Boiler (Trac. Boiler) | <input type="checkbox"/> Traction Boiler | |
| <input type="checkbox"/> Fired Heater | <input type="checkbox"/> Pulse Boiler | <input type="checkbox"/> Unfired Steam Gen | |

Design Conditions and Configuration (complete and check applicable units)

MAWP: _____ kPa psig bar

MAWT: _____ deg C deg F

Primary material of construction: Cast Iron Steel

Overall Vessel Length	_____	<input type="checkbox"/> feet	<input type="checkbox"/> meters		
Maximum Boiler Output	_____	<input type="checkbox"/> lbs/hr	<input type="checkbox"/> Mbtu/hr	<input type="checkbox"/> kg/hr	<input type="checkbox"/> kW
Maximum Heating Surface Area	_____	m ²			
Minimum Safety Relief Valve Capacity	_____	<input type="checkbox"/> lbs/hr	<input type="checkbox"/> Mbtu/hr	<input type="checkbox"/> kg/hr	<input type="checkbox"/> kW

Note: vessels with an overall length greater than 20ft (6.1 meters) must have detailed seismic and loading calculations submitted (see boiler and pressure vessel registration guide).

Code of Standard of Design (check one)

- | | |
|--|--|
| <input type="checkbox"/> ASME Section I | <input type="checkbox"/> ASME B31.1 |
| <input type="checkbox"/> ASME Section IV | <input type="checkbox"/> ASME B31.3 |
| <input type="checkbox"/> ASME Section VIII, Division 1 | <input type="checkbox"/> ASME B31.5 |
| <input type="checkbox"/> ASME Section VIII, Division 2 | <input type="checkbox"/> CSA B51 |
| <input type="checkbox"/> ASME Section VIII, Division 3 | <input type="checkbox"/> CSA B52 |
| <input type="checkbox"/> ASME PVHO-1 | <input type="checkbox"/> Other (specify) _____ |

Boiler Reciprocal Compliance Declaration

I declare that the submitted design in this application conforms to the design that has been previously registered by another Province and that documentation of previous registration is provided.

Name _____ Signature _____ Date _____

Fitting CRN Supplement - Reciprocal

Note: The information on this form is collected to administer the provisions of the BC Safety Standards Act and section 26 of the Freedom of Information and Protection of Privacy Act. If you have questions about the collection, use, or disclosure of this information, contact the Records, Information & Privacy Analyst at 1-866-566-7233.

This supplement form is to be completed and signed for all applications for a reciprocal registration.

Drawing #: _____ Revision: _____ Title: _____

CRN #: _____ Date of Initial Registration _____

Fitting Category (check one)

- | | |
|---|---|
| <input type="checkbox"/> A – Pipe Fittings | <input type="checkbox"/> E – Strainers / Filters / Separators / Steam Traps |
| <input type="checkbox"/> B - Flanges | <input type="checkbox"/> F – Measuring Devices |
| <input type="checkbox"/> C - Valves | <input type="checkbox"/> G – Pressure Relief Devices |
| <input type="checkbox"/> D – Expansion Joints / Flexible Connections/ Hose Assemblies | <input type="checkbox"/> H - Other |

Note: Certain A, B, C, and G category fittings are exempt from registration – see Directive D-B6 070402 3

Design Conditions and Configuration (complete and check applicable units)

MAWP: _____ kPa psig bar

MAWT: _____ deg C deg F

MDMT: _____ deg C deg F

External Pressure _____ kPa psig bar

Single Fitting _____ Yes No

Expiry Date _____

Code of Standard of Design (check one)

- | | |
|--|--|
| <input type="checkbox"/> ASME Section I | <input type="checkbox"/> ASME B31.1 |
| <input type="checkbox"/> ASME Section IV | <input type="checkbox"/> ASME B31.3 |
| <input type="checkbox"/> ASME Section VIII, Division 1 | <input type="checkbox"/> ASME B31.5 |
| <input type="checkbox"/> ASME Section VIII, Division 2 | <input type="checkbox"/> CSA B51 |
| <input type="checkbox"/> ASME Section VIII, Division 3 | <input type="checkbox"/> CSA B52 |
| <input type="checkbox"/> ASME PVHO-1 | <input type="checkbox"/> Other (specify) _____ |

Fitting Reciprocal Compliance Declaration

I declare that the submitted design in this application conforms to the design that has been previously registered by another Province and that documentation of previous registration is provided.

Name _____ Signature _____ Date _____

Heat Exchanger CRN Supplement - Reciprocal

Note: Any personal information collected is handled in accordance with the British Columbia *Freedom and Protection of Privacy Act*. If you have questions about the collection, use, or disclosure of this information, contact the Records, Information and Privacy Analyst for Technical Safety BC at 1-866-566-7233

This supplement form is to be completed and signed for a heat exchanger reciprocal registration.

Drawing #: _____ Revision: _____ Title: _____

CRN #: _____ Date of Initial Registration: _____

HEAT EXCHANGER TYPE (Check One)

- | | | | |
|---|--|---|-----------------------------------|
| <input type="checkbox"/> IT Intercooler | <input type="checkbox"/> AF Aftercooler | <input type="checkbox"/> AE Aircooler | <input type="checkbox"/> PE Plate |
| <input type="checkbox"/> CT Coil Tube | <input type="checkbox"/> TE Shell & Tube | <input type="checkbox"/> HX Non-Specific Heat Exchanger | |

CODE OR STANDARD OF DESIGN (Check One)

- | | |
|--|--|
| <input type="checkbox"/> ASME Section I | <input type="checkbox"/> ASME B31.1 |
| <input type="checkbox"/> ASME Section IV | <input type="checkbox"/> ASME B31.3 |
| <input type="checkbox"/> ASME Section VIII, division 1 | <input type="checkbox"/> ASME B31.5 |
| <input type="checkbox"/> ASME Section VIII, division 2 | <input type="checkbox"/> CSA B51 |
| <input type="checkbox"/> ASME Section VIII, division 3 | <input type="checkbox"/> CSA B52 |
| <input type="checkbox"/> ASME PVHO-1 | <input type="checkbox"/> Other (specify) _____ |

DESIGN AND SECTION DETAILS (Complete and Check Applicable Units)

Heat Exchange Area: _____ m²

Overall Vessel Length _____ ft

Note: vessels with an overall length greater than 20ft (6.1 meters) must have detailed seismic and loading calculations submitted (see boiler and pressure vessel registration guide)

Section Name: _____	(eg. Shell, Tube, Path)					
MAWP _____	<input type="checkbox"/> kPa	<input type="checkbox"/> bar	<input type="checkbox"/> psig			
MAWT _____	<input type="checkbox"/> deg C	<input type="checkbox"/> deg F				
MDMT _____	<input type="checkbox"/> deg C	<input type="checkbox"/> deg F				
Diameter _____	<input type="checkbox"/> mm	<input type="checkbox"/> meters	<input type="checkbox"/> inches	<input type="checkbox"/> feet		
Length _____	<input type="checkbox"/> mm	<input type="checkbox"/> meters	<input type="checkbox"/> inches	<input type="checkbox"/> feet		
Width _____	<input type="checkbox"/> mm	<input type="checkbox"/> meters	<input type="checkbox"/> inches	<input type="checkbox"/> feet		

Section Name: _____	(eg. Shell, Tube, Path)					
MAWP _____	<input type="checkbox"/> kPa	<input type="checkbox"/> bar	<input type="checkbox"/> psig			
MAWT _____	<input type="checkbox"/> deg C	<input type="checkbox"/> deg F				
MDMT _____	<input type="checkbox"/> deg C	<input type="checkbox"/> deg F				
Diameter _____	<input type="checkbox"/> mm	<input type="checkbox"/> meters	<input type="checkbox"/> inches	<input type="checkbox"/> feet		
Length _____	<input type="checkbox"/> mm	<input type="checkbox"/> meters	<input type="checkbox"/> inches	<input type="checkbox"/> feet		
Width _____	<input type="checkbox"/> mm	<input type="checkbox"/> meters	<input type="checkbox"/> inches	<input type="checkbox"/> feet		

Heat Exchanger Reciprocal Compliance Declaration

I declare that the submitted design in this application conforms to the design that has been previously registered by another Province and that documentation of previous registration is provided.

Name _____ Signature _____ Date _____

Pressure Vessel CRN Supplement - Reciprocal

Note: Any personal information collected is handled in accordance with the British Columbia *Freedom and Protection of Privacy Act*. If you have questions about the collection, use, or disclosure of this information, contact the Records, Information and Privacy Analyst for Technical Safety BC at 1-866-566-7233

This supplement form is to be completed and signed for a pressure vessel reciprocal registration.

Drawing #: _____ Revision: _____ Title: _____

CRN #: _____ Date of Initial Registration: _____

Pressure Vessel Class (Check One)

- Part Unfired Vessel

Pressure Vessel Type (Check One)

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> Absorber | <input type="checkbox"/> Cryogenic Transported | <input type="checkbox"/> Hyperbaric | <input type="checkbox"/> Refrigerant Liquid Receiver |
| <input type="checkbox"/> Accumulator | <input type="checkbox"/> Cushion Exp. Tank | <input type="checkbox"/> Interstage Scrubber | <input type="checkbox"/> Retort |
| <input type="checkbox"/> Absorber | <input type="checkbox"/> Deaerator | <input type="checkbox"/> Line Heater | <input type="checkbox"/> Scrubber |
| <input type="checkbox"/> Air Receiver Mounted with Machine | <input type="checkbox"/> Dehydrator | <input type="checkbox"/> Liquid Petroleum Stationary | <input type="checkbox"/> Separator |
| <input type="checkbox"/> Air Receiver Part of System | <input type="checkbox"/> Digester | <input type="checkbox"/> Liquid Petroleum Transported | <input type="checkbox"/> Spherical Vessel |
| <input type="checkbox"/> Ammonia Stationary | <input type="checkbox"/> Discharge Bottle | <input type="checkbox"/> Liquid Receiver | <input type="checkbox"/> Steam Kettle |
| <input type="checkbox"/> Ammonia Transported | <input type="checkbox"/> Domestic Hot Water Storage | <input type="checkbox"/> Nitrogen Stationary | <input type="checkbox"/> Steam Processor |
| <input type="checkbox"/> Autoclave | <input type="checkbox"/> Drum | <input type="checkbox"/> Nitrogen Transported | <input type="checkbox"/> Steam Vessel |
| <input type="checkbox"/> Blow Down Tank | <input type="checkbox"/> Dryer | <input type="checkbox"/> Oxygen Stationary | <input type="checkbox"/> Sterilizer |
| <input type="checkbox"/> Carbon Dioxide Stationary | <input type="checkbox"/> Dryer Roll | <input type="checkbox"/> Oxygen Transported | <input type="checkbox"/> Suction Bottle |
| <input type="checkbox"/> Carbon Dioxide Transported | <input type="checkbox"/> Filter | <input type="checkbox"/> Pressure Vessel Non-Specific | <input type="checkbox"/> Sulphur Dioxide Stationary |
| <input type="checkbox"/> Chemical Storage Tank | <input type="checkbox"/> Generator | <input type="checkbox"/> Propane Container | <input type="checkbox"/> Sulphur Dioxide Transported |
| <input type="checkbox"/> Chlorine Stationary | <input type="checkbox"/> High Pressure Cylinder | <input type="checkbox"/> Propane Stationary | <input type="checkbox"/> Tank |
| <input type="checkbox"/> Chlorine Transported | <input type="checkbox"/> Hydraulic Tank | <input type="checkbox"/> Propane Transported | <input type="checkbox"/> Tower (Column, etc.) |
| <input type="checkbox"/> Converter | <input type="checkbox"/> Hydrogen Storage Tank | <input type="checkbox"/> Reactor | <input type="checkbox"/> Tube Boilers with Cast Headers |
| <input type="checkbox"/> Cryogenic Stationary | <input type="checkbox"/> Hydro-pneumatic Tank | <input type="checkbox"/> Receiver | |

Design Conditions and Configuration (Complete and check applicable units)

MAWP:	_____	<input type="checkbox"/>	kPa	<input type="checkbox"/>	bar	<input type="checkbox"/>	psig		
MAWT:	_____	<input type="checkbox"/>	deg C	<input type="checkbox"/>	deg F				
MDMT:	_____	<input type="checkbox"/>	deg C	<input type="checkbox"/>	deg F				
External Pressure	_____	<input type="checkbox"/>	kPa	<input type="checkbox"/>	bar	<input type="checkbox"/>	psig		
Shape	_____	<input type="checkbox"/>	Cylinder	<input type="checkbox"/>	Square/ Rectangle	<input type="checkbox"/>	Irregular		
Diameter	_____	<input type="checkbox"/>	mm	<input type="checkbox"/>	meters	<input type="checkbox"/>	inches	<input type="checkbox"/>	feet
Overall Length	_____	<input type="checkbox"/>	mm	<input type="checkbox"/>	meters	<input type="checkbox"/>	inches	<input type="checkbox"/>	feet
Width	_____	<input type="checkbox"/>	mm	<input type="checkbox"/>	meters	<input type="checkbox"/>	inches	<input type="checkbox"/>	feet
Max Volume	_____	<input type="checkbox"/>	meter ³						
Corrosion Allowance	_____	<input type="checkbox"/>	inches	<input type="checkbox"/>	mm				

Shell Material: _____

Shell Thickness: _____ inches mm

Impact test required? yes no

Head Material _____

Head Thickness _____ inches mm

Impact test required? yes no

Underground (buried) Vessel? yes no

Note: vessels with an overall length greater than 20ft must have detailed seismic and loading calculations submitted (see boiler and pressure vessel registration guide).

Type of Service (Check Applicable)

Lethal Non-Lethal Non-corrosive

Code or Standard of Design (Check One)

<input type="checkbox"/> ASME Section I	<input type="checkbox"/> ASME B31.1
<input type="checkbox"/> ASME Section IV	<input type="checkbox"/> ASME B31.3
<input type="checkbox"/> ASME Section VIII, Division 1	<input type="checkbox"/> ASME B31.5
<input type="checkbox"/> ASME Section VIII, Division 2	<input type="checkbox"/> CSA B51
<input type="checkbox"/> ASME Section VIII, Division 3	<input type="checkbox"/> CSA B52
<input type="checkbox"/> ASME PVHO-1	<input type="checkbox"/> Other (specify) _____

Pressure Vessel Reciprocal Compliance Declaration

I declare that the submitted design in this application conforms to the design that has been previously registered by another Province and that documentation of previous registration is provided.

Name _____ Signature _____ Date _____