



Registration of Vessels without ASME Certification

1. This circular details the requirements for the registration of designs for boilers and pressure vessels, for use in British Columbia, which are manufactured in countries other than Canada or the USA, and which are not constructed with full ASME Boiler and Pressure Vessel Code compliance. Non-ASME boilers and pressure vessels shall be registered in accordance with CSA B51 "Boiler, Pressure Vessel and Pressure Piping Code" clause 4.12 which requires that manufacturers who do not have the appropriate ASME Certificate of

Authorization shall submit documentation and evidence that the quality control system of the manufacturing facilities and procedures are equivalent to that of ASME Section I for Power Boilers, Section IV for Heating Boilers, or Section VIII for Pressure Vessels. Additionally, registration documentation must demonstrate that the design, materials, and construction are equivalent to the applicable ASME Code. Registration submissions must be sent to the attention of Design Survey, Engineering and Research, Operations.

2. Prior to construction of the boiler or pressure vessel, the manufacturer, owner, user, or his authorized agent shall register the design. As a minimum the following information and documentation shall be submitted:

- a. A completed British Columbia CRN application form.
- b. Detailed shop drawings showing material specifications, design conditions, construction and welding details.
- c. Calculations, as required by the applicable ASME code section, which show the design is equivalent to the requirements of the Code.
- d. Specifications for all material to be used in construction. Materials must be shown to be equivalent to ASME standards utilizing the procedures specified in PG-10 of Section I, UG-10 of Section VIII Division 1, or HF-206 of Section IV. If reference is made to another standard or specification, a copy of the specification and an explanation of the equivalency shall be attached. It shall be demonstrated that all ASME material requirements, including but not limited to, melting method, melting practice, deoxidation, quality, chemical composition, strength, and heat treatment have been met.
- e. Copies of all weld procedures used, welding qualification test reports for all procedures to be used and performance test reports for each welding operator or welder. These procedures and tests shall be in accordance with or equivalent to the requirements of ASME Boiler and Pressure Vessel Code, Section IX. All essential and non-essential requirements for weld procedures and tests in Section IX must be addressed.
- f. The manufacturer of the vessel is to identify the inspection agency whose personnel will assume the duties of the authorized inspection agency and whose personnel will carry out the duties of authorized inspector detailed in the applicable ASME Section. The qualifications and experience of the agency shall be submitted. A letter or certificate

from the inspection agency verifying that the manufacturer's quality control system has been audited and meets the requirements of the applicable ASME Section must be submitted. The qualifications and experience of the inspectors, assigned to make the shop inspections and sign the manufacturer's data reports for the vessels shall be submitted.

- g. A copy of the Manufacturer's Data Report (MDR) which will be completed for the finished vessel. ASME data reports are not to be used as the vessel will not be stamped with a ASME Code stamp. The MDR shall list all the information required for MDR's in the ASME Codes as well as the signature of the manufacturer's representative and the inspector. (h) A facsimile of the nameplate or stamping to be put on the vessel. The nameplate or stamping shall list all the information required by the ASME Codes and allocate space for the stamping of a BC Limited Design Number (BCLD #).

3. All registration documentation shall be in English. Upon satisfactory review of the registration submission, the vessel design shall be assigned a BCLD #. A design registration letter indicating the BCLD #, date of registration, manufacturer's name, drawing/revision numbers, registration fee and any other pertinent information will be sent to the applicant and a separate invoice for the registration fee will be forwarded on a separate cover. No other documents will be stamped or returned to the applicant.

4. After the final shop inspection of the boiler or pressure vessel, it shall be stamped with the assigned BCLD #. The stamping shall be witnessed by the inspection agency's shop inspector. A completed MDR, signed by the manufacturer and countersigned by the inspection agency's shop inspector, shall be forwarded to the attention of Provincial Boiler Safety Manager, Engineering and Research, Operations. Upon arrival in British Columbia and before installation, the vessel will be inspected by a Safety Officer from the Technical Safety BC. After ensuring that all design requirements have been complied with and that the vessel is properly stamped, the Safety Officer will then assign a BC Identification Number, which is placed on the vessel adjacent to the nameplate.