Manitoba

Labour and Immigration

Mechanical and Engineering

www.gov.mb.ca/labour/safety/mechanic
500 – 401 York Avenue
Winnipeg, MB R3C 0P8

MANUFACTURER'S SPECIFICATIONS
UNFIRED PRESSURE VESSEL

To Accompany Drawings No: _____

Date: _____

Manufacturer: _____

Address: _____

Type of Pressure Vessel: _____ Contents: _____
(Air, Ammonia, Propane, etc.)

Designs to A.S.M.E. Code year _____ Section _____ Paragraph _____

List registration numbers previously allotted by other provinces _____

Outside diameter _____ Overall length _____ Capacity _____ Heating surface _____

Outside surface _____ (Required on Propane and Ammonia vessels for checking safety valve)

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1. OUTER SHELL AND HEADS:

Note: This section also pertains to simple vessel with no inner shell, tube bank or coil. (Section 2)

Design pressure _____ Working pressure _____ Design temperature _____ Working temperature _____

Inside diameter of shell _____ Minimum thickness shell plate _____ Shell material spec. No. _____
(ASME)

Longitudinal joint _____ Longitudinal joint efficiency _____ Unit stress _____
(Single, double or lap welded, etc.)

Heads _____ Radius of dish _____ of knuckle _____
(Flat, dished, elliptical, 2, 1, etc.)

Inside diameter of head _____ Minimum thickness of head plates _____
(Concave Head) (Convex head) (Other Heads)

Head material specification No. _____ Circumferential Joints _____ Offset _____
(ASME) (Type) (Yes, No)

Note: If bolted or riveted construction, give detail sketches with all dimensions, etc., on design drawings.

Corrosion allowance thickness _____
(On shell) (On heads)

If lined or clad vessel _____ Lining specifications No. _____
(Thickness of shell lining) (Of Head lining) (ASME)

Safety valve outlets _____ Required safety valve capacity _____

Fusible plug _____ Drain connection _____ Manhole _____
(Yes or No) (Yes or No) (Size) (Yes or No) (Number)

Number, size and kind of inspection openings _____
(Free of piping and other attachments)

Nozzles _____
(Type, size, thickness and reinforcing)

Vessel to be stress relieved _____ To be Radiographed _____
(No, In Shop, In Field) (No, Spot, Partial, Complete)

2. INNER SHELL, COIL OR TUBE BANK (Also heads of same, if any)

Design pressure _____ Working pressure _____ Design temperature _____ Working temperature _____

Inside diameter of shell _____ Minimum thickness shell plate _____ Shell material spec. No. _____
(ASME)

Longitudinal joint _____ Longitudinal joint efficiency _____ Unit stress _____
(Single, double or lap welded, etc)

Heads _____ Radius of dish _____ Radius of knuckle _____
(Flat, dished, elliptical, 2, 1, etc.)

Inside diameter of head _____ Minimum thickness of head plates _____
(Concave head) (Convex head) (Other Heads)

Head material specification No. _____ Circumferential joints _____Offset _____
(ASME) (Type) (Yes, No)

Corrosion allowance thickness _____ Code year and paragraph this part _____
(On Shell) (On Heads)

If lined or clad vessel _____ Lining Specification No. _____
(Thickness of shell lining) (Of head lining) (ASME)

Number of tubes _____ Size _____ Thickness _____ Specification No. _____
(ASME)

Heating surface of coil or tube bank _____ How attached to heads _____

Tube sheet material _____Thickness _____ Ligament efficiency _____
(ASME)

Is separate safety valve from outer shell required _____ Required capacity _____
(Yes or No)

Safety valve outlet _____ Fusible plug _____
(Number and size) (Yes or No) (Size)

Number, size and kind of inspection openings _____

To be stress relieved _____ To be Radiographed _____
(No, In Shop, In Field) (No, Spot, Partial, Complete)

3. Is the welding procedure to be used registered? _____ Registration Number _____

Are welders qualified? _____ Code _____
(Yes, No)

Remarks, etc. _____

DEPARTMENT USE ONLY

4. I HEREBY CERTIFY THAT if the design to which the foregoing statements pertain is registered by the department, that every vessel manufactured under such registration will be constructed strictly in accordance with these specifications and related drawings, and that each vessel will be stamped in accordance with the CSA B51 Canadian regulations for the Construction and Inspection of Boilers and Pressure Vessels.

_____
(Signature for Manufacturer)

_____
(Title)

_____
(Date Submitted)

PROVINCE OF MANITOBA
Mechanical and Engineering Branch
Registration of Boiler or Pressure Vessel

Drawing No.(S) _____

Canadian Registration No. _____
Registered for a maximum working pressure of
_____ at _____

Subject to design, construction and inspection in accordance with the applicable A.S.M.E. Code (s) and Regulations made under The Steam and Pressure Plants Act.

_____ _____
Date Plan Examiner

_____
Director