FORM A-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

As Required by the Provisions of the ASME Code Rules, Section VIII, Division 2

1. Manufactured and certified by _____
(Name and address of manufacturer)

2. Manufactured for _____
(Name and address of purchaser)

3. Location of installation _____
(Name and address)

4. Type _____ Horiz. or vert. tank _____ Mfr.'s serial no. _____ CRN _____ Drawing no. _____ Nat'l. Bd. no. _____ Year built

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Code, Section VIII, Division 2.

_____ Year _____ Code case no.

Items 6 to 11 incl. to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers

6. Shell _____ Material (spec. no., grade) _____ Nom. thk. _____ Corr. allow. _____ Diameter _____ Length (overall)

7. Seams _____ Longitudinal _____ Heat treatment _____ Nondestructive examination

_____ Girth _____ Heat treatment _____ Nondestructive examination _____ No. of courses

8. Heads: (a) Matl. _____ Spec. no., grade (b) Matl. _____ Spec. no., grade

	Location (Top, Bottom, End)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)										
(b)										

9. If removable, bolts used (describe other fastenings): _____
Matl. spec. no., grade, size, number

10. Jacket closure _____ If bar, give dimensions _____. If bolted, describe or sketch.
Describe as ogee and weld, bar, etc.

11. MAWP _____ (Internal) _____ (External) at max. temp. _____ (Internal) _____ (External) Min. design metal temp. _____ at _____

Impact test _____ At test temperature of _____

Hydro., pneu., or comb test pressure _____

Items 12 and 13 to be completed for tube sections

12. Tubesheets _____ Stationary matl. (spec. no., grade) _____ Diam. (subject to pressure) _____ Nom. thk. _____ Corr. allow. _____ Attach. (wld., bolted)

_____ Floating matl. (spec. no., grade) _____ (Diam.) _____ Nom. thk. _____ Corr. allow. _____ Attach. (wld., bolted)

13. Tubes _____ Matl. (spec. no., grade) _____ O.D. _____ Nom. thk. _____ Number _____ Type (straight or "U")

Items 14 to 18 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers

14. Shell _____ Material (spec. no., grade) _____ Nom. thk. _____ Corr. allow. _____ Diameter _____ Length (overall)

15. Seams _____ Longitudinal _____ Heat treatment _____ Nondestructive examination

_____ Girth _____ Heat treatment _____ Nondestructive examination _____ No. of courses

16. Heads: (a) Matl. _____ Spec. no., grade (b) Matl. _____ Spec. no., grade

	Location (Top, Bottom, End)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)										
(b)										

17. If removable, bolts used (describe other fastenings): _____
Matl. spec. no., grade, size, number

18. MAWP _____ (Internal) _____ (External) at max. temp. _____ (Internal) _____ (External) Min. design metal temp. _____ at _____

Impact test _____ At test temperature of _____

Hydro., pneu., or comb test pressure _____

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Manufactured by _____

Manufacturer's Serial No. _____ CRN _____ National Board No. _____

Items below to be completed for all vessels where applicable.

19. Nozzles inspection and pressure relief device openings

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diam. or Size	Type	Material	Nom. Thk.	Reinforcement Material	How Attached	Location

20. Body Flanges

Body Flanges on Shells

No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material

Body Flanges on Heads

No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material

21. Support Skirt _____ (Yes or no) Lugs _____ (No.) Legs _____ (No.) Other _____ (Describe) Attached _____ (Where and how)

22. Service: Fatigue analysis required _____ (Yes or no) and _____ (Describe contents or service)

Remarks:

CERTIFICATION OF DESIGN

User's Design Specification on file at _____

Manufacturer's Design Report on file at _____

User's Design Specification certified by _____ PE State _____ Reg. No. _____

Manufacturer's Design Report certified by _____ PE State _____ Reg. No. _____

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 2.

"U2" Certificate of Authorization No. _____ expires _____

Date _____ Co. name _____ (Manufacturer) Signed _____ (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel made by _____ at _____

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by _____ of _____,

have inspected the pressure vessel described in this Manufacturer's Data Report on _____, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 2. By signing this certificate neither the Inspector nor the Inspector's employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's' Data Report. Furthermore, neither the Inspector nor the Inspector's employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____ Signed _____ (Authorized Inspector) Commissions _____ (National Board Authorized Inspector Commission number)

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Manufactured by _____

Manufacturer's Serial No. _____ CRN _____ National Board No. _____

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 2 of the ASME BOILER AND PRESSURE VESSEL CODE.

"U2" Certificate of Authorization No. _____ expires _____

Date _____ Co. name _____ Signed _____

Assembler that certified and constructed field assembly — Representative

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by _____ of _____

have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items _____

not included in the certificate of shop inspection, have been inspected by me and that, to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with the ASME Code, Section VIII, Division 2.

The described vessel was inspected and subjected to a hydrostatic test of _____ .

By signing this certificate neither the Inspector nor the Inspector's employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor the Inspector's employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date _____ Signed _____ Commissions _____

Authorized Inspector — National Board Authorized Inspector Commission number

(07/25)