

Page \_\_\_\_ of \_\_\_\_

**FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS**  
**As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1**

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 \_\_\_\_\_  
(Horizontal, vertical, or sphere) (Tank, separator, jkt. vessel, heat exch., etc.) (Manufacturer's serial number)  
\_\_\_\_\_  
(CRN) (Drawing number) (National Board number) (Year built)

5. ASME Code, Section VIII, Div. 1 \_\_\_\_\_  
[Edition and Addenda, if applicable (date)] (Code Case number) [Special service per UG-120(d)]

*Items 6–11 incl. to be completed for single-wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multichamber vessels.*

6. Shell: (a) Number of courses \_\_\_\_\_ (b) Overall length \_\_\_\_\_

Course(s)			Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time

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

7. Heads: (a) \_\_\_\_\_ (b) \_\_\_\_\_  
(Material spec. number, grade or type) (H.T. — time and temp.) (Material spec. number, grade or type) (H.T. — time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemis. Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)														
(b)														

Body Flanges on Heads												
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, Thk)	Washer Material
(a)												
(b)												

8. Type of jacket \_\_\_\_\_ Jacket closure \_\_\_\_\_  
(Describe as ogee and weld, bar, etc.)

If bar, give dimensions. If bolted, describe or sketch. \_\_\_\_\_

9. MAWP \_\_\_\_\_ at max. temp. \_\_\_\_\_ Min. design metal temp. \_\_\_\_\_ at \_\_\_\_\_.  
(Internal) (External) (Internal) (External)

10. Impact test \_\_\_\_\_ at test temperature of \_\_\_\_\_.  
(Indicate yes or no and the component(s) impact tested)

11. Hydro., pneu., or comb. test pressure \_\_\_\_\_ Proof test \_\_\_\_\_

*Items 12 and 13 to be completed for tube sections.*

12. Tubesheet \_\_\_\_\_  
[Stationary (material spec. no.)] [Diameter (subject to pressure)] (Nominal thickness) (Corr. allow.) [Attachment (welded or bolted)]  
[Floating (material spec. no.)] (Diameter) (Nominal thickness) (Corr. allow.) (Attachment)

13. Tubes \_\_\_\_\_  
(Material spec. no., grade or type) (O.D.) (Nominal thickness) (Number) [Type (straight or U)]

Manufactured by \_\_\_\_\_

Manufacturer's Serial No. \_\_\_\_\_ CRN \_\_\_\_\_ National Board No. \_\_\_\_\_

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

14. Shell: (a) No. of courses \_\_\_\_\_ (b) Overall length \_\_\_\_\_

Course(s)			Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time

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

15. Heads: (a) \_\_\_\_\_ (b) \_\_\_\_\_  
(Material spec. number, grade or type) (H.T. — time and temp.) (Material spec. number, grade or type) (H.T. — time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemis. Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)														
(b)														

Body Flanges on Heads												
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, Thk)	Washer Material
(a)												
(b)												

16. MAWP \_\_\_\_\_ at max. temp. \_\_\_\_\_ Min. design metal temp. \_\_\_\_\_ at \_\_\_\_\_  
(Internal) (External) (Internal) (External)17. Impact test \_\_\_\_\_ at test temperature of \_\_\_\_\_  
[Indicate yes or no and the component(s) impact tested]

18. Hydro., pneu., or comb. test pressure \_\_\_\_\_ Proof test \_\_\_\_\_

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	

20. Supports: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Others \_\_\_\_\_ Attached \_\_\_\_\_  
(Yes or no) (Number) (Number) (Describe) (Where and how)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report (list the name of part, item number, Manufacturer's name, and identifying number):

22. Remarks

Manufactured by \_\_\_\_\_

Manufacturer's Serial No. \_\_\_\_\_ CRN \_\_\_\_\_ National Board 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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

U Certificate of Authorization number \_\_\_\_\_ Expires \_\_\_\_\_

Date \_\_\_\_\_ Name \_\_\_\_\_ (Manufacturer) Signed \_\_\_\_\_ (Representative)

**CERTIFICATE OF SHOP INSPECTION**

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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her 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)

**CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE**

We certify that the statements in this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. U Certificate of Authorization number \_\_\_\_\_ Expires \_\_\_\_\_.

Date \_\_\_\_\_ Name \_\_\_\_\_ (Assembler) Signed \_\_\_\_\_ (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 to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. The described vessel was inspected and subjected to a pressure test of \_\_\_\_\_. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her 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)