

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS Page ____ of ____
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) _____ (Material spec. number, grade or type) (H.T. — time and temp.) (b) _____ (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 ogree and weld, bar, etc.)

If bar, give dimensions. If bolted, describe or sketch. _____

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

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) _____ (Material spec. number, grade or type) (H.T. — time and temp.) (b) _____ (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 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)

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 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)