

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

**FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT**  
**A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer**  
**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 \_\_\_\_\_  
[Description of vessel part (shell, two-piece head, tube bundle)] (Manufacturer's serial number) (CRN)  
\_\_\_\_\_  
(National Board number) (Drawing number) (Drawing prepared by) (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<br>(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<br>(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 press.)] (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. Identification of part(s)

| Name of Part | Quantity | Line No. | Mfr's. Identification No. | Mfr's. Drawing No. | CRN | National Board No. | Year Built |
|--------------|----------|----------|---------------------------|--------------------|-----|--------------------|------------|
|              |          |          |                           |                    |     |                    |            |
|              |          |          |                           |                    |     |                    |            |
|              |          |          |                           |                    |     |                    |            |

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

22. Remarks

**FORM U-2**

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

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

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

**CERTIFICATE OF SHOP/FIELD COMPLIANCE**

We certify that the statements in this report are correct and that all details of material, construction, and workmanship of this pressure vessel part conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

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

Date \_\_\_\_\_ Name \_\_\_\_\_  
(Manufacturer) Signed \_\_\_\_\_  
(Representative)**CERTIFICATE OF SHOP/FIELD 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 part 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 part 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 part 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)