

# FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

As required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured by Ryan Industries, Inc. 4800 Allmond Ave., Louisville, Ky. 40214  
(Name and address of Manufacturer)
2. Manufactured for ~~XXXX~~ Capitol Welding Supply, 233 East Rankin St., Jackson, Miss.  
(Name and address of Purchaser)
3. Type Vert. Kind Jacketed Tank Vessel No. (6148) (Mfrs. Serial) (State & State No.)  
(Horiz. or Vert.) (Tank, Jacketed, Heat Exch.) (Natl. Bd. No. 6148 Yr. Built 1974)

Items 4-9 incl. to be completed for single wall vessels (such as air tanks), jackets of jacketed vessels, or shells of heat exchangers.

4. SHFL: Material SB-209 5083-0 T.S. 40,000 Nominal Thickness 1.156 Corrosion Allowance 0 In. Diam. 6 Ft. 10 In. Length 9 Ft. 1/4 In.
5. SEAMS: Long Double Butt H.T. No R.T. Complete Sectioned No Efficiency 100 %  
(Welded, Dbl., Single, Lap, Butt) (Yes or No)<sup>1</sup> (Spot or Complete) (Yes or No)
- Girth Double Butt H.T. No R.T. Complete Sectioned No No. of Courses 1
6. HEADS (a) Material SB-209 5083-0 T.S. 40,000 (b) Material SB-209 4083-0 T.S. 40,000  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure (Convex or Concave)
- (a) Top 1.144   2:1    Concave  
(b) Bottom 1.144   2:1    Concave

If riveted describe seams fully on reverse side of form.

- If removable, bolts used \_\_\_\_\_ Other fastening \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)
7. STAYBOLTS: \_\_\_\_\_ If hollow \_\_\_\_\_ Attachment \_\_\_\_\_ Pitch \_\_\_\_\_ X \_\_\_\_\_ Diam. \_\_\_\_\_  
(Material) (Size of Hole) (Threaded, Welded) (Horiz.) (Vert.) (Nominal)
8. JACKET CLOSURE: \_\_\_\_\_  
(Describe as ogee & weld, bar, etc. If bar, give dimensions, if bolted, describe or sketch)
9. Constructed for max. allowable working press<sup>2</sup> 250 psi at max. temp. 100 °F. Min. Temp. (when less than -20°) -320 °F. Hydrostatic Pneumatic or Combination } Test Press 417 psi

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material \_\_\_\_\_ Diam. \_\_\_\_\_ In. Thickness \_\_\_\_\_ In. Attachment \_\_\_\_\_  
(Kind & Spec. No.) (Subject to Pressure) (Welded, Bolted)
- Floating. Material \_\_\_\_\_ Diam. \_\_\_\_\_ In. Thickness \_\_\_\_\_ In. Attachment \_\_\_\_\_  
(Kind & Spec. No.)
11. TUBES: Material \_\_\_\_\_ O.D. \_\_\_\_\_ In. Thickness \_\_\_\_\_ Inches or Gage Number \_\_\_\_\_ Type \_\_\_\_\_  
(Kind & Spec. No.) (Straight or U)

Items 12-15 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

12. SHELL Material \_\_\_\_\_ T.S. \_\_\_\_\_ Nominal Thickness \_\_\_\_\_ In. Corrosion Allowance \_\_\_\_\_ In. Diam. \_\_\_\_\_ Ft. \_\_\_\_\_ In. Length \_\_\_\_\_ Ft. \_\_\_\_\_ In.
13. SEAMS: Long \_\_\_\_\_ H.T. \_\_\_\_\_ R.T. \_\_\_\_\_ Sectioned \_\_\_\_\_ Efficiency \_\_\_\_\_ %  
(Welded, Dbl., Single, Lap, Butt) (Yes or No)<sup>1</sup> (Spot or Complete) (Yes or No)
- Girth \_\_\_\_\_ H.T. \_\_\_\_\_ R.T. \_\_\_\_\_ Sectioned \_\_\_\_\_ No. of courses \_\_\_\_\_
14. HEADS (a) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (b) Material \_\_\_\_\_ T.S. \_\_\_\_\_ (c) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure (Convex or Concave)
- (a) Top, bottom, ends \_\_\_\_\_  
(b) Channel \_\_\_\_\_  
(c) Floating \_\_\_\_\_
- If removable, bolts used (a) \_\_\_\_\_ (b) \_\_\_\_\_  
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)
- (c) \_\_\_\_\_ Other fastening \_\_\_\_\_
15. Constructed for max. allowable working press<sup>2</sup> \_\_\_\_\_ psi at max. temp. \_\_\_\_\_ °F. Min. temp. (when less than -20°) \_\_\_\_\_ °F. Hydrostatic Pneumatic or Combination } Test Press \_\_\_\_\_ psi

If riveted describe seams fully on reverse side of form.

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number one Size 1" Location Vent Line
17. NOZZLES
- | Purpose (Inlet, Outlet, Drain) | Number | Diam. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|--------------------------------|--------|---------------|------|----------|-----------|------------------------|--------------|
| Instrument                     | 3      | .750          | Bar  | SB-221   | .180      |                        | Welded       |
| Vent                           | 1      | 1.900         | Pipe | SB-241   | .145      |                        | Welded       |
| Top Fill                       | 1      | 1.900         | Pipe | SB-241   | .145      |                        | Welded       |
| Bottom Fill                    | 1      | 1.900         | Pipe | SB-241   | .145      |                        | Welded       |
| Liquid Draw                    | 1      | 1.900         | Pipe | SB-241   | .145      |                        | Welded       |
| Hydro                          | 1      | 2.375         | Pipe | SB-241   | .154      |                        | Welded       |
| Hydro                          | 1      | .750          | Bar  | SB-221   | .105      |                        | Welded       |
| Pump Suction                   | 1      | 1.315         | Pipe | SB-241   | .179      |                        | Welded       |

<sup>1</sup> If postweld heat-treated. <sup>2</sup> List under remarks other internal or external pressures with coincident temperature when applicable.

FORM U-1 (back)

18. INSPECTION Manholes, No. 1 Size 18 Location Top Head  
 Thru Manhole No. 233 East Bank Size 18 Location Top Head  
 Threaded, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_

19. SUPPORTS: Skirt \_\_\_\_\_ Lugs 0 Legs \_\_\_\_\_ Other Straps 3 Attached Pins  
 (Yes or No) (Number) (Number) (Describe) (Where & How)

20. REMARKS (List applicable special services in accordance with UC-120(d): Data for T-3400 Gal. gross vacuum jacketed cryogenic storage vessel @ 250 PSIG Aluminum non-corrosive service. Inner vessel only, outer vessel not code

\*2 plus full external vacuum and hydro head

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cooker, etc. State contents of each part.)

We certify that the statements made 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 1.

Date 12-6 19 74 Signed Ryan Industries, Inc. By William P. Smith  
 (Manufacturer) Quality Control

Certificate of Authorization No. 7109 Expires December 31, 1975

**CERTIFICATE OF SHOP INSPECTION**

VESSEL MADE BY Ryan Industries Inc. at 4800 Allmond Ave, Louisville, Ky.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province Kentucky and employed by Comm. Union Ins. Co. of Boston, Mass. have inspected the pressure vessel described in this manufacturer's date report on 12-6 1974, and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the applicable sections of the ASME Boiler and Pressure Vessel Code.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his 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 12-10 1974

W.P. Smith Inspector's Signature Commissions NB 5536  
 Nat'l Board, State, Province and No.

**CERTIFICATE OF FIELD ASSEMBLY INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province \_\_\_\_\_ 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 applicable sections of the ASME Boiler and Pressure Vessel Code. The described vessel was inspected and subjected to a hydrostatic test of \_\_\_\_\_ psi.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's data report. Furthermore, neither the Inspector nor his 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 \_\_\_\_\_ 19 \_\_\_\_\_

\_\_\_\_\_  
 Inspector's Signature Commissions \_\_\_\_\_  
 Nat'l Board, State, Province and No.