

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

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

1. Manufactured by Fabricated Products, Inc Charlotte, N.C.
(Name and address of Manufacturer)

2. Manufactured for Hercules Inc. Wilmington, Delaware
(Name and address of Purchaser)

3. Type Vertical Kind Jacketed Vessel No. 72-215 (Mfrs. Serial) (State & State No.) Natl. Bd. No. NB10 Yr. Built 72
(Horiz. or Vert.) (Tank, Jacketed, Heat Exch.)

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. SHELL: Material SA 515 70 T.S. 70,000 Nominal Thickness 1/4 Corrosion Allowance 0 In. Diam. 3.6 Ft. In. Length 3.0 Ft. In.
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

5. SEAMS: Long Db1 Butt H.T. No R.T. Spot Sectioned No Efficiency 85 %
(Welded, Db1., Single, Lap, Butt) (Yes or No)¹ (Spot or Complete) (Yes or No)

If riveted describe seams fully on reverse side of form.

Girth Db1 Butt H.T. No R.T. Sectioned No. of Courses 1

6. HEADS (a) Material SA 515 70 T.S. 70,000 (b) Material T.S. Concave
(Top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter (Convex or Concave)
(a) Bottom 1/4 Min 42 2 5/8

If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or Attach Sketch)

7. STAYBOLTS: (Material) If hollow (Size of Hole) Attachment (Threaded, Welded) Pitch (Horiz.) (Vert.) X (Nominal) Diam. (Nominal)

8. JACKET CLOSURE: 1 x 2 Bar
(Describe as ogee & weld, bar, etc. If bar, give dimensions, if bolted, describe or sketch)

9. Constructed for max. allowable working press. 150 psi at max. temp. 600 °F. Min. Temp. (when less than -20°) °F. Test Press 225 psi.
Hydrostatic }
Pneumatic or }
Combinations }

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary, Material (Kind & Spec. No.) Diam. (Subject to Pressure) In. Thickness In. Attachment (Welded, Bolted)

Floating, Material (Kind & Spec. No.) Diam. In. Thickness In. Attachment

11. TUBES: Material (Kind & Spec. No.) O.D. In. Thickness or Gage Inches Number Type (Straight or U)

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

12. SHELL Material SA 240 T316 T.S. 75000 Nominal Thickness 1/4 Corrosion Allowance In. In. Diam. 3.1 Ft. In. Length 8 9 1/2 Ft. In.
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

13. SEAMS: Long Db1 Butt H.T. No R.T. Sectioned No Efficiency 70 %
(Welded, Db1., Single, Lap, Butt) (Yes or No)¹ (Spot or Complete) (Yes or No)

If riveted describe seams fully on reverse side of form.

Girth Db1 Butt H.T. No R.T. Sectioned No. of courses 3

14. HEADS (a) Material SA 240 T316 SS T.S. 75000 (c) Material T.S. Both
(a) Bottom xxxx 5/8 38 2 3/8
(b) Channel
(c) Floating

If removable, bolts used (a) (Material, Spec. No., T.S., Size, Number) (b)

(c) Other fastening (Describe or Attach Sketch)

15. Constructed for max. allowable working press. 15 & F.V. psi at max. temp. 600 °F. Min. temp. (when less than -20°) °F. Test Press 23 psi.
Hydrostatic }
Pneumatic or }
Combinations }

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number Size Location

17. NOZZLES

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Outlet	1	4	Pad	T316 SS	1 1/2	None	Welded
Spare	1	3	Flange	T316 SS	Sch 40	None	Welded
Press & Temp	2	1	Pad	T316 SS	1"	None	Welded
Jacket Inlet	1	1	Flange	T316 SS	Sch. 40		Welded
Jacket Outlet	1	1	Flange	T316 SS	Sch 40		Welded

¹ If postweld heat-treated.

² List under remarks other internal or external pressures with coincident temperature when applicable.

FORM U-1 (back)

18. INSPECTION Manholes, No. 1 Size 20" Location Side
 OPENINGS: Handholes, No. 1 Size 6" Location Side
 Threaded, No. _____ Size _____ Location _____
 19. SUPPORTS: Skirt _____ Lugs _____ Legs _____ Other _____ Attached _____
 (Yes or No) (Number) (Number) (Describe) (Where & How)

20. REMARKS: Falling Film Evaporator Tank.
Open Flanged Top Flange fabricated from 2 1/4" square SA-515-70

(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 December 11 19 72 Signed Fabricated Products, Inc By C. W. Brunsdofer
 (Manufacturer)

Certificate of Authorization No. 10264 Expires December 31, 1973

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Fabricated Products, Inc at Charlotte, N. C.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province N.C. and employed by Department of Labor of North Carolina have inspected the pressure vessel described in this manufacturer's data report on December 11 19 72, 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 December 11 19 72

J. F. Ward Inspectors Signature Commissions NB 6072 NC 722
 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.