

73384

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 Artisan Industries Inc., Waltham, MA
(Name and address of Manufacturer)

2. Manufactured for Monsanto Company, Chocolate Bayou (Alvin) Texas
(Name and address of Purchaser)

3. Type Horiz. Kind Condenser Vessel No. 55654B (Mfrs. Serial) (State & State No.) Natl. Bd. No. 1458 Yr. Built 1976
(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 SA312 TP 304 S. 75,000 Nominal Thickness .289 Corrosion Allowance 1/16 Diam. 0 Ft. 6-5/8 Length 0 Ft. 9 In.
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

5. SEAMS: Long Dbt. Butt Weld H.T. Yes R.T. No Sectioned No Efficiency 70 %
(Welded, Dbt., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

Girth Dbt. Butt Weld H.T. No R.T. No Sectioned No No. of Courses 1

If riveted describe seams fully on reverse side of form.

6. HEADS (a) Material T.S. (b) Material Conical Hemispherical Flat T.S. Side to Pressure
(Top, bottom, ends) Thickness Crown Radius Knuckle Radius Elliptical Ratio Apex Angle Radius Diameter (Convex or Concave)

(a) (b)

If removable, bolts used Other fastening (Describe or Attach Sketch)

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

8. JACKET CLOSURE: F.V. & (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. 400 °F. Min. Temp. (when less than -20°) °F. Test Press 261 psi.
(Material) (Size of Hole) (Threaded, Welded) (Horiz.) (Vert.) (Nominal)

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA240TP304 Diam. 6 In. Thickness 3/4 In. Attachment Welded
(Kind & Spec. No.) (Subject to Pressure) (Welded, Bolted)

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

11. TUBES: Material SA249TP304 Diam. 3/4 In. Thickness 16 X Gage Number 26 Type Straight
(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 SA53GrB T.S. 60,000 Nominal Thickness 280 Corrosion Allowance 1/16 Diam. 0 Ft. 6-5/8 Length 0 Ft. 9 In.
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

13. SEAMS: Long Seamless H.T. No R.T. No Sectioned No Efficiency 100 %
(Welded, Dbt., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

Girth None H.T. R.T. Sectioned No. of courses 1

If riveted describe seams fully on reverse side of form.

14. HEADS (a) Material SA515 T.S. 60,000 (b) Material Conical (c) Material Hemispherical T.S. Side to Pressure
(Top, bottom, ends) Thickness 7/8 Crown Radius Knuckle Radius Elliptical Ratio Apex Angle Radius Diameter 6 Flat
(a) Top, bottom, ends (b) Channel (c) Floating

If removable, bolts used (a) Alloy, SA193-B7, 125,000 5/8 (12)
(Material, Spec. No., T.S., Size, Number)

(c) Other fastening (Describe or Attach Sketch)

15. Constructed for max. allowable working press. 150 psi at max. temp. 400 °F. Min. temp. (when less than -20°) °F. Test Press 287 psi.
(Material, Spec. No., T.S., Size, Number)

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number Size Location Elsewhere in system

17. NOZZLES

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
Inlet	1	1-3/8th	Flanged	SA240TP304	1-3/8	None	Welded
Outlet	1	2" - 150#	Flanged	SA312TP304	.154	None	Welded
Drain	1	1 1/2" - 150#	Flanged	SA312TP304	.145	None	Welded

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

(Over)

FORM U-1 (back)

18. INSPECTION Manholes, No. _____ Size _____ Location _____
 OPENINGS: Handholes, No. _____ Size _____ Location _____
 Threaded, No. _____ Size _____ Location _____ Shell
 19. SUPPORTS: Skirt NO Lugs _____ Legs _____ Other 2 angles Attached Welded
 (Yes or No) (Number) (Number) (Describe) (Where & How)

20. REMARKS:

Aftercondenser for 2 stage vacuum system

(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 March 17 19 76 Signed Artisan Industries Inc. By AA Poirer
 (Manufacturer)

Certificate of Authorization No. 827 Expires February 28, 1977

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Artisan Industries Inc. at Waltham, Mass.

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province MA and employed by * Factory Mutual Systems of Norwood, MA

have inspected the pressure vessel described in this manufacturer's data report on March 17 19 76, 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 March 17 19 76

[Signature]
 Inspector's Signature

Commissions N.B. No. 7325
 Nat'l Board, State, Province and No.

* ARKWRIGHT-BOSTON FACTORY MUTUAL INSURANCE
 MUTUAL BOILER AND MACHINERY DIVISION

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.