

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 Joseph Oat & Sons, Inc. Camden, New Jersey  
(Name and address of Manufacturer)  
2. Manufactured for Hercules, Inc. Wilmington, North Carolina **#104328**  
(Name and address of Purchaser)

3. Type Horiz. Kind Heat Exch. Vessel No. (2127-3B) ( ) Natl. Bd. No. 613 Yr. Built 1973  
(Horiz. or Vert.) (Tank, Jacketed, Heat Exch.) (Mfrs. Serial) (State & State No.)

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 SA285GR6 T.S. 55000 Nominal Thickness 5/16 Corrosion 1/8 In. Allowance 2 In. Diam. 2 Ft. In. Length 12 Ft. 0 In.  
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

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

Girth DBW H.T. No R.T. Spot Sectioned No No. of Courses 2

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

(a) \_\_\_\_\_

(b) \_\_\_\_\_

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

7. STAYBOLTS: \_\_\_\_\_ If hollow \_\_\_\_\_ Attachment \_\_\_\_\_ Pitch \_\_\_\_\_ 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. 175 psi at max. temp. 375 °F. Min. temp. (when less than -20°) \_\_\_\_\_  
Hydrostatic or Pneumatic Test Press 262.5 psi

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA240T304 Diam. 28 In. Thickness 1-7/8 In. Attachment Welded  
(Kind & Spec. No.) (Subject to Pressure) (Welded, Bolted)

Floating. Material SA240T304 Diam. \_\_\_\_\_ In. Thickness \_\_\_\_\_ In. Attachment \_\_\_\_\_  
(Kind & Spec. No.)

11. TUBES: Material T304 O.D. 3/4 In. Thickness 16 Inches or Gage Number 667 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 SA240T304 T.S. 75000 Nominal Thickness 1/2 In. Allowance 0 In. Diam. 4-5/8 Ft. In. Length 1 Ft. 2 In.  
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

13. SEAMS: Long DBW H.T. No R.T. Spot Sectioned No Efficiency 85 %  
(Welded, Dbl., Single, Lap, Butt) (Yes or No) (Spot or Complete) (Yes or No)

Girth DBW H.T. No R.T. Spot Sectioned No No. of courses 2

14. HEADS (a) Material SA240T304 T.S. 75000 (b) Material Same T.S. \_\_\_\_\_ (c) Material \_\_\_\_\_ T.S. \_\_\_\_\_  
Location Thickness Crown Radius Knuckle Radius Elliptical Ratio Conical Apex Angle Hemispherical Radius Flat Diameter Side to Pressure  
(a) Top, bottom, ends (Convex or Concave)

(b) Channel \_\_\_\_\_

(c) Floating \_\_\_\_\_

If removable, bolts used (a) SA193 B7 32 3/4" 10UNC (b) SA193 B7 32 3/4" 10UNC  
(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. 375 °F. Min. temp. (when less than -20°) \_\_\_\_\_  
Hydrostatic or Pneumatic Test Press 261 psi

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number \_\_\_\_\_ Size \_\_\_\_\_ Location In Piping

17. NOZZLES

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
A-C	3	3"	Pipe	SA312T304	SCH 40	None	Welded
B	1	3"	"	SA53GRB	"	"	"
E	1	1-1/2"	"	"	SCH 80	"	"

**B.P.F. - 43556**



# FORM U-1 (back)

18. INSPECTION Manholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 OPENINGS: Handholes, No. \_\_\_\_\_ Size \_\_\_\_\_ Location \_\_\_\_\_  
 Threaded, No. \_\_\_\_\_ Size 3/4" Location Exp. JE. & Nozzles A-C Shell  
 19. SUPPORTS: Skirt \_\_\_\_\_ Lugs \_\_\_\_\_ Legs \_\_\_\_\_ Other \_\_\_\_\_ Attached Welded  
 (Yes or No) (Number) (Number) (Describe) (Where & How)  
 20. REMARKS: Vessel is a Pure Melter Heater constructed to Dat Dwg. 5258-5259, 5210  
and the 1971 ASME Code Section VIII. Channels have steam jkts. Hydrostatic  
tested at 247.5 psig.

Equipment No. E-6513-65

(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 I.

Date 2/16 19 73 Signed Joseph Oat & Sons, Inc. By [Signature]  
 (Manufacturer)

Certificate of Authorization Expires #184 12/31/73

## CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY Joseph Oat & Sons, Inc. at Camden, New Jersey  
 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. J. and employed by Royal Indemnity Company of New York, New York have inspected the pressure vessel described in this manufacturer's data report on 1973, 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 2/16 19 73  
[Signature] Commissions N.B. 6900  
 Inspectors Signature Nat'l Board, State, or 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 \_\_\_\_\_  
 \_\_\_\_\_ Commissions \_\_\_\_\_  
 Inspector's Signature Nat'l Board, State, or Province and No.



