

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 104301  
(Name and address of Purchaser)  
3. Type Vert. Kind Heat Exch. Vessel No. (2127-2) (Mfrs. Serial) (State & State No.)  
(Horiz. or Vert.) (Tank, Jacketed, Heat Exch.) (Mfrs. Serial) (State & State No.) Natl. Bd. No. 618 Yr. Built 1973

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 SA285GRC T.S. 55000 Nominal Thickness 3/8 In. Allowance 7/16 In. Diam. 2 Ft. In. Length 12 Ft. 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)

If riveted de-  
scribe seams  
fully on re-  
verse side of  
form.

Girth DBW H.T. No R.T. Spot Sectioned No No. of Courses 2  
6. HEADS (a) Material SA285GRC T.S. 55000 (b) Material SA285GRC T.S. 55000  
Location (Top, bottom, ends) Thickness 3/8 In. Crown Radius 0 In. Knuckle Radius 0 In. Elliptical Ratio 0 Conical Apex Angle 0 Hemispherical Radius 0 Flat Diameter 0 Side to Pressure (Convex or Concave)

(a) 0 (b) 0  
If removable, bolts used (Material, Spec. No., T.S., Size, Number) SA193 B-7 36 3/4" 10UNC Other fastening Hydrostatic (Describe or Attach Sketch)

7. STAYBOLTS: (Material) SA193 B-7 36 3/4" 10UNC If hollow (Size of Hole) 3/8 Attachment Welded Pitch X (Horiz.) (Vert.) Diam. 3/8 (Nominal)

8. JACKET CLOSURE: 0 (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> 175 psi at max. temp. 365 °F. less than -20° 0 °F. Hydrostatic Test Press 263 psi.  
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA240T316 T.S. 75000 Nominal Thickness 1/4 In. Allowance 0 In. Diam. 2 Ft. In. Length 12 Ft. In.  
(Kind & Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)  
Floating: Material SA240T316 T.S. 75000 Nominal Thickness 1/4 In. Allowance 0 In. Diam. 2 Ft. In. Length 12 Ft. In.  
(Kind & Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

11. TUBES: Material SA240T316 T.S. 75000 Nominal Thickness 1/4 In. Allowance 0 In. Diam. 2 Ft. In. Length 12 Ft. In.  
(Kind & Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)

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

12. SHELL Material SA240T316 T.S. 75000 Nominal Thickness 1/4 In. Allowance 0 In. Diam. 2 Ft. In. Length 12 Ft. In.  
(Kind & 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)

If riveted de-  
scribe seams  
fully on re-  
verse side of  
form.

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

14. HEADS (a) Material SA285GRC T.S. 55000 (b) Material SA285GRC T.S. 55000 (c) Material SA285GRC T.S. 55000  
Location (Top, bottom, ends) Thickness 3/8 In. Crown Radius 0 In. Knuckle Radius 0 In. Elliptical Ratio 0 Conical Apex Angle 0 Hemispherical Radius 0 Flat Diameter 0 Side to Pressure (Convex or Concave)

(a) 0 (b) 0 (c) 0

If removable, bolts used (a) SA193 B-7 36 3/4" 10UNC (b) SA193 B-7 36 3/4" 10UNC  
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

(c) 0 Other fastening Hydrostatic (Describe or Attach Sketch)

15. Constructed for max. allowable working press.<sup>2</sup> 75 psi at max. temp. 365 °F. less than -20° 0 °F. Hydrostatic Test Press 130 psi.  
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number 0 Size 0 Location In Piping

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
A	1	20"	Plt	SA240T316	1/4"	None	Welded
B	1	8"	Pipe	SA53GRB	SCH 40	"	"
C	1	10" x 8"	Reducer	SA234GRB	Std. Wt.	SA285GRC	"
D	1	6"	Pipe	SA312T316	SCH 40	None	"
E	1	4"	"	"	"	SA285GRC	"

P.O. 026-57020-FCD

EQU. No.



Williamston North Carolina

Heracles, Inc.

20. REMARKS: Vessel is an Oxidate Stripper Condenser constructed to Oat Dwg. 5240-2, 5241-1, 5209-5 and the 1971 ASME Code Section VIII.

Top channel is a cone section 31-3/4" x 20".

Equipment No. E-6201-02

(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 12 19 73 Signed Joseph Oat & Sons, Inc. (Manufacturer) By James A. Harrison

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 3/2 1973

Inspectors Signature

## Commissions

Nat'l Board, State, or Province and No.

## CERTIFICATE OF FIELD ASSEMBLY INSPECTION

10. 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 3/11/52 19 350438A2 100 x 100 1

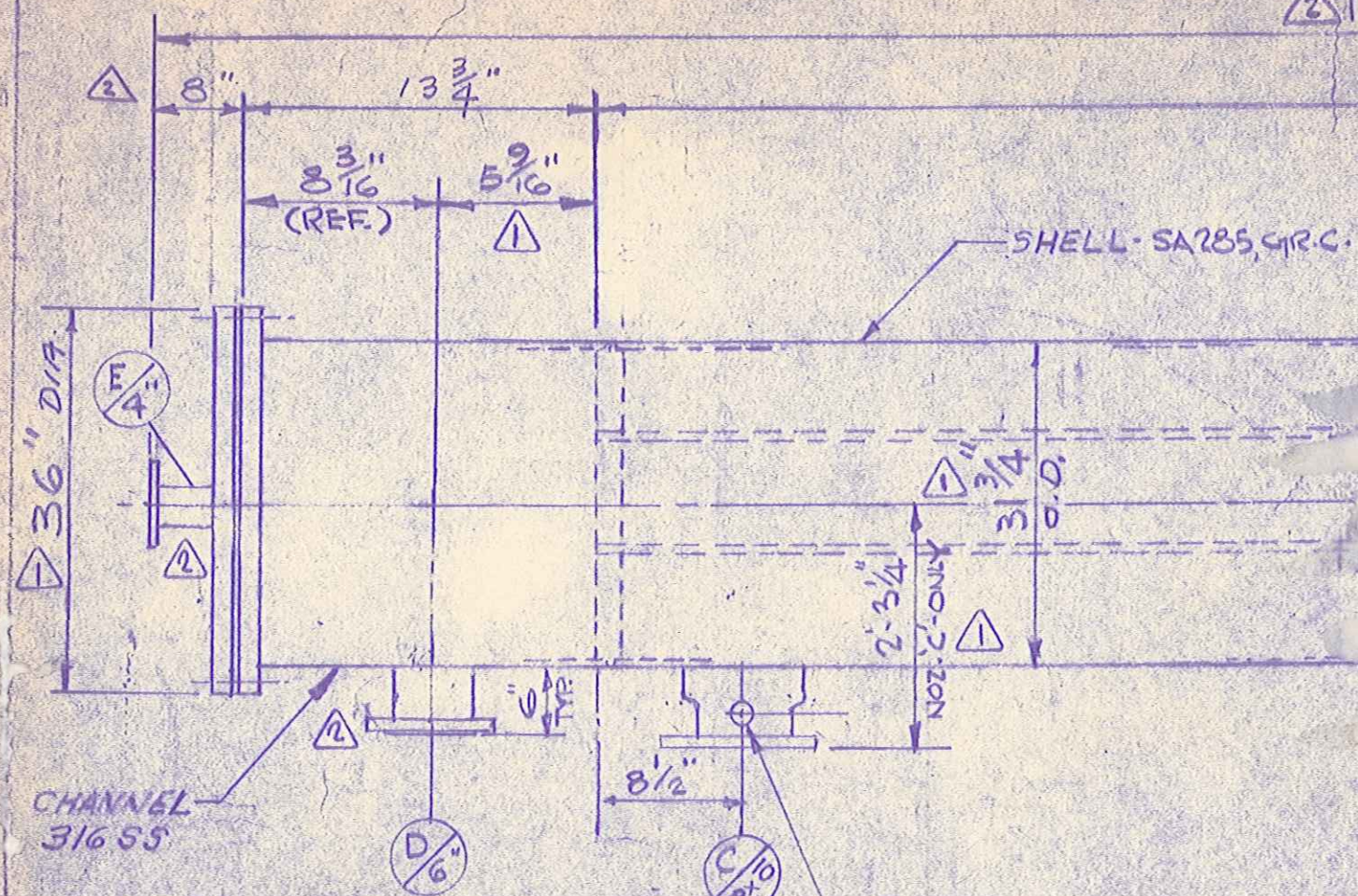
Inspector's Signature \_\_\_\_\_

## Commissions

Nat'l Board, State, or Province and No.



15'-3 7/8" O.A.L. (MAINTAIN THIS DIMENSION)



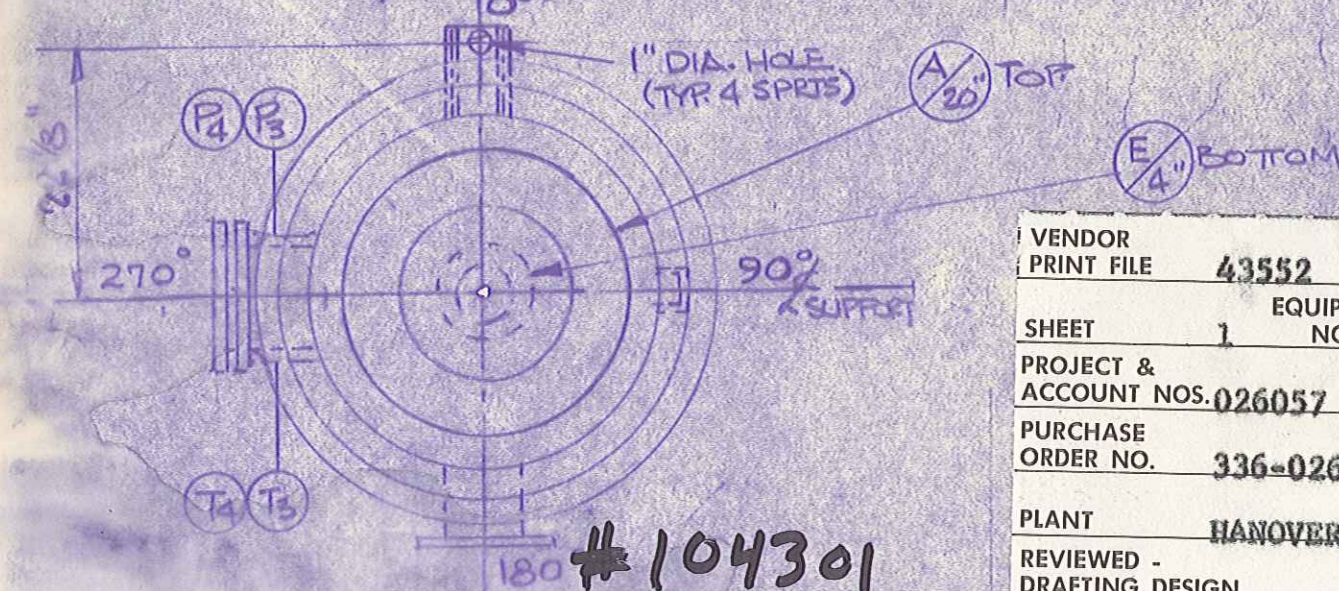
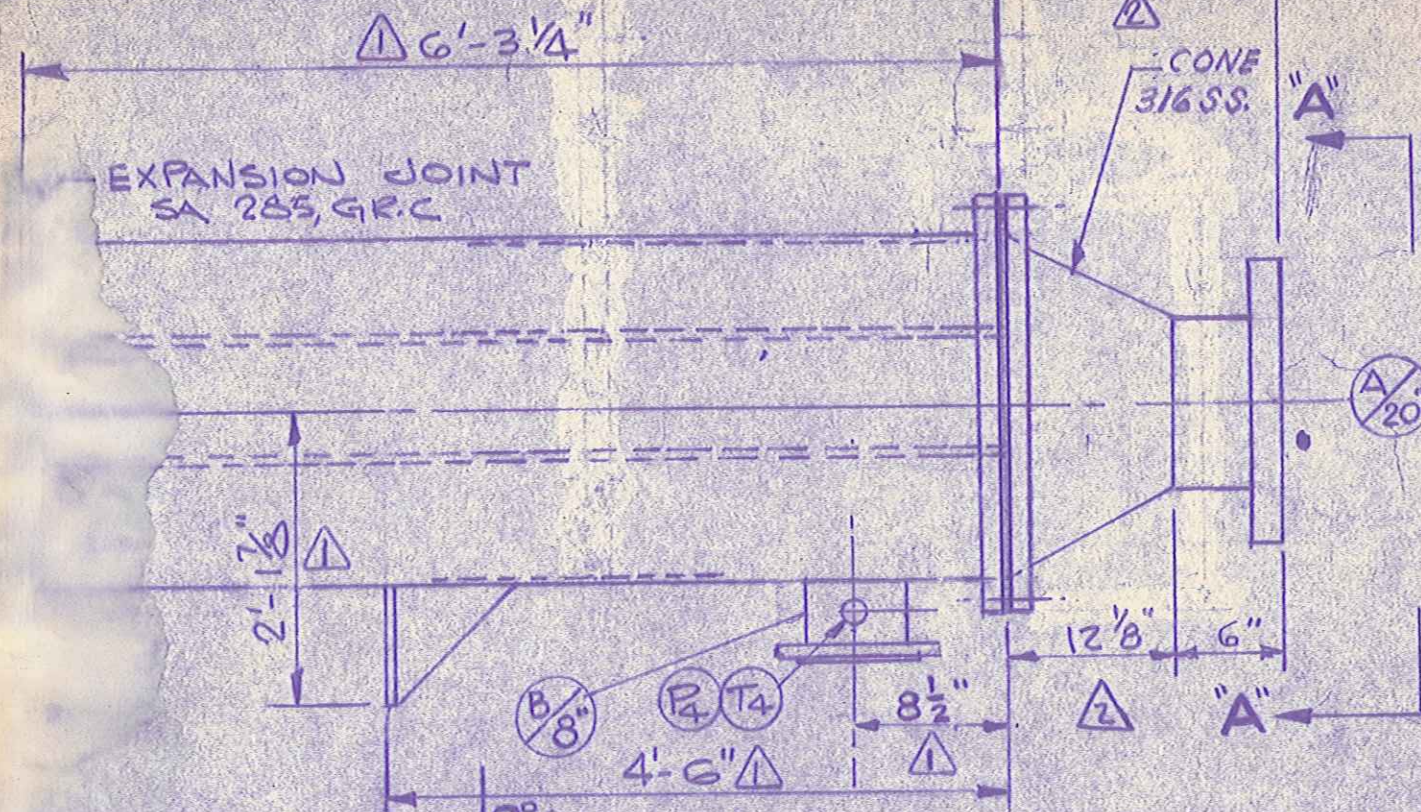
OAT JOB No.	PROJ. No.	ITEM No.	P.O. No.
J-2079-2	026035	E-4201-2	026-35066
J-2127-2	026057	E-6201-02	026-57020

P3 T3

NOTE: ALL COUPLINGS ARE - HALF COUPLINGS - 3000# TH'D.

MARK	SIZE	SCH	FLANGE	PURPOSE	REMARKS
T3,4	3/4"	3000#	CPLG.	THERMOMETER	NPT W/PLUG
P3,4	1/2"	3000#	CPLG.	PRESS. GAUGE	NPT W/PLUG
E	4"	40	L.J.	LIQUID	150#
D	6"	40	L.J.	VENT	150#
C	10"x8"	40	SORF	SHELL CON.	150#
B	8"	40	SORF	SHELL CON	150#
A	20"	1/4"	L.J.	CHANNEL IN	150#

VIEW



VENDOR	PRINT FILE	43552	DATE	10-27-
SHEET	1	EQUIPMENT NOS.	E-6201-2	
PROJECT & ACCOUNT NOS.	026057			
PURCHASE ORDER NO.	336-026-57020			
PLANT	HANOVER			
REVIEWED - DRAFTING DESIGN				
APPROVED ENGINEER	H. G. Schober			

HERCULES RO - SEE TABLE	PROJ. NO. SEE TABLE		
OUTLINE DRAWING	OXIDATE STRIPPER CONDENSER		
HERCULES INCORPORATED	HANOVER PLANT		
WILMINGTON, N.C.			
JOS. OAT & SONS, INC. CAMDEN, N.J.			
DRAWN-RO	DATE-2-15-72	DWG-5209	REV. 3
SCALE-NONE			

DATE	REVISIONS
10-27-72	1. ADDED PROJ. J-2127-2
6-12-72	2. 14'-9 1/8" WAS 14'-11 7/8" ADDED B-13" AND 12 1/8" DIMENSIONS. DELETED NOS. P-2, T-2, E-F.
5-20-72	3. REVISED PER HERCULES MARKED PRINT DATED 3-6-72 & TO SUIT FAB. DWG.
2-15-72	4. ISSUED FOR APPROVAL