

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS
As required by the Provisions of the ASME Code Rules, Section VIII, Division 1

104493

1/2 cell

1. Manufactured by JOSEPH OAT & SONS, INC. CAMDEN, NEW JERSEY
(Name and address of Manufacturer)

2. Manufactured for HERCULES, INC. WILMINGTON, N. C.
(Name and address of Purchaser)

3. Type Horiz. Kind Heat Exch. Vessel No. (2079-5) (Mfrs. Serial) (State & State No.) Natl. Bd. No. N.B. 579 Yr. Built 1972
(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 SA53GRB T.S. 60000 Nominal Thickness 3/8 In. Corrosion Allowance 1/16 In. Diam. 1 Ft. 30 In. Length 20 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)

If riveted describe seams fully on reverse side of form.

6. HEADS (a) Material SA285GRC T.S. 55000 (b) Material SA285GRC T.S. 55000
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) ends 5/16" 20" 1-3/8" - - - concave

(b) - - - - - - - -

If removable, bolts used SA193B7 48-3/4" 10 UNC Other fastening -
(Material, Spec. No., T.S., Size, Number) (Describe or Attach Sketch)

7. STAYBOLTS: (Material) - Attachment - Pitch - X - Diam. -
(Threaded, Welded) (Horiz.) (Vert.) (Nominal)

8. JACKET CLOSURE: -
(Describe as gage & weld, bar, etc. If bar, give dimensions, if bolted, describe or sketch)

9. Constructed for max. allowable working press. 50 psi at max. temp. 300 °F. less than -20° - °F. Hydrostatic Test Press 75 psi.
(When 50 °F. less than -20°) (Test Press)

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA240T304 Diam. 22 In. Thickness 1 In. Attachment Welded
(Kind & Spec. No.) (Subject to Pressure) (Welded, Bolted)

Floating. Material SA249 Diam. 22 In. Thickness 1 In. Attachment -
(Kind & Spec. No.)

11. TUBES: Material T304 Diam. 3/4 In. Thickness 1/16 In. Gage Number 380 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 3/16 In. Corrosion Allowance 0 In. Diam. 1 Ft. 10 In. Length 0 Ft. 8 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)

If riveted describe seams fully on reverse side of form.

14. HEADS (a) Material SA285GRC T.S. 55000 (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
(Top, bottom, ends) (Convex or Concave)

(a) ends 5/16" 20" 1-3/8" - - - 26-1/4" -

(b) Channel - - - - - - - -

(c) Floating - - - - - - - -

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

(c) - Other fastening -
(Describe or Attach Sketch)

15. Constructed for max. allowable working press. 120 psi at max. temp. 250 °F. less than -20° - °F. Hydrostatic Test Press 197 psi.
(When 250 °F. less than -20°) (Test Press)

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	1	6"	pipe	SA312T304	SCH40	none	welded
B	1	4"	"	"	"	"	"
C	1	12"	"	SA53GRB	STD	"	"
D	1	3"	"	"	SCH40	"	"

¹ If postweld heat-treated.

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

(Over)

18. INSPECTION Manholes, No. _____ Size _____ Location _____
 OPENINGS: Handholes, No. _____ Size _____ Location _____
 Threaded, No. 5, 4 & 2 Size 1"-3/4"-1/2" Location Nozzles & exp. joint
 19. SUPPORTS: Skirt No Lugs 2 Legs _____ Other _____ Attached Shell Welded
 (Yes or No) (Number) (Number) (Description) (Other) (Other)
 20. REMARKS: Vessel is a M/L Preheater constructed to Oat Dwg. 5260-0, 5211-2, & the
1971 ASME Code Section VIII.

Equipment No. EA504-2

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Packer, etc. State purpose 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 8/14 19 72 Signed Joseph Oat & Sons, Inc. B. Donald Chertman
 (Manufacturer)

Certificate of Authorization Expires

#184

December 31, 1978

BOSTON

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 New Jersey and employed by Royal Globe Insurance Company of New York, N. Y. have inspected the pressure vessel described in this manufacturer's data report on 1972, 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 8/16 19 72

Commissions

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

Commissions

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

FORM R-1 REPORT OF WELDED ☐ REPAIR OR ☒ ALTERATION
as required by the provisions of the National Board Inspection Code

E-6504-2

1. Work performed by HUNDY INDUSTRIAL CONTRACTORS INC. 1045-18-94
(name of repair or alteration organization) (P.O. no., job no., etc.)
11150 SOUTH WILCREST HOUSTON, TX 77099
(address)
2. Owner CAPE INDUSTRIES
(name)
P. O. BOX 327 WILMINGTON, NC 28402
(address)
3. Location of installation CAPE INDUSTRIES
(name)
HWY 421 NORTH WILMINGTON, NC 28401
(address)
4. Unit identification: PRESSURE VESSEL Name of original manufacturer JOSEPH OATS & SONS, INC.
(boiler, pressure vessel)
5. Identifying nos.: 2079-5 NB579 NC190233 1972
(NBS serial no.) (original National Board no.) (jurisdiction no.) (year built)
6. Description of work HEAT EXCHANGER RERATED FROM 120 TO 130 PSI AT 250°F.
(use back, separate sheet, or sketch if necessary)

NO PHYSICAL WORK DONE.

Pressure test, if applied 197 psi

7. Replacement Parts. Attached are Manufacturers' Partial Data Reports properly identified and signed by Inspectors for the following items of this report:

(name of part, item number, NBS name and identifying stamp)

8. Remarks:

• ALL WORK MEETS REQUIREMENTS OF 1992 EDITION OF NBIC.

(reverse side of form)

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We verify that the statements made in this report are correct and that this conforms to the National Board Inspection Code

ALTERATION

(repair or alteration)

R Certificate of Authorization no 698 expires MAY 27, 19 97
Jurisdictional Authorization no _____

Date 06-10 19 94 **HUNDY INDUSTRIAL CONTRACTORS INC.**

(repair organization)

Signed Stanley B. Harper
(representative)
(STANLEY B. HARPER)

CERTIFICATE OF SHOP/FIELD INSPECTION

I, the undersigned, holding a valid Commission issued by The National Board of Boiler and Pressure Vessel Inspectors and certificate of competency issued by the state or province of NORTH CAROLINA and employed by HARTFORD STEAM BOILER I & I COMPANY of HARTFORD, CT have

inspected the work described in this report on 6-10, 19 94 and state that to the best of my knowledge and belief, this work has been done in accordance with the National Board Inspection Code. By signing this certificate, neither the undersigned nor my employer makes any warranty, expressed or implied, concerning the work described in this report. Furthermore, neither the undersigned nor my employer shall be liable in any manner for any personal injury, property damage or loss of any kind arising from or connected with this inspection.

Date 6-10 19 94 Signed W. I. Williford Commissions NB 2730A NC 310
(Inspector) (National Board (incl. endorsements) state prov and no)
(W. I. WILLIFORD)