

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

103533

1. Manufactured by Camden Alloy Fabricators, Inc. (Name and address of Manufacturer) Camden, N.J.
2. Manufactured for Hercules, Incorporated (Name and address of Purchaser) Wilmington, No. Car.
3. Type Horiz. Kind Heat Exch Vessel No. 71-5247A (Mfrs. Serial) (State & State No.)
Natl. Bd. No. 877 Yr. Built 1971

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 C/S SA513370 (Kind and Spec. No.) T.S. 70000 (Fig. or F.B. & Spec. Min. T.S.)
Nominal Thickness 3/16 In. Corrosion Allowance 1/16 In. Diam. 2 Ft. 3-3/4 In. Length 17 Ft. 0 1/2 In.
5. SEAMS: Long Db1. Butt H.T. No (Yes or No) R.T. Spot (Spot or Complete) Sectioned No (Yes or No) Efficiency 85 %
Girth 8 Db1. Butt H.T. No R.T. Spot Sectioned No No. of Courses Four

If riveted describe seams fully on reverse side of form.

6. HEADS (a) Material SA513370 (Kind & Spec. No.) T.S. 70000 (Fig. or F.B. & Spec. Min. T.S.)
Location Top, bottom, ends Thickness 3/16 In. Crown Radius None Knuckle Radius None Elliptical Ratio None Conical Apex Angle None Hemispherical Radius None Flat Diameter None Side to Pressure Convex or Concave
(a) SA513370 (b) SA513370
If removable, bolts used None (Material, Spec. No., T.S., Size, Number) Other fastening None (Describe or Attach Sketch)

7. STAYBOLTS: (Material) SA513370 If hollow None (Size of Hole) Attachment None Pitch None X None Diam. None (Nominal)
8. JACKET CLOSURE: None (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. 366 °F. less than -20°
Min. temp. (when None °F. less than -20°) Hydrostatic Test 225 psi
Pneumatic or Test Press 225 psi
Combination

Items 10 and 11 to be completed for tube sections.
10. TUBE SHEETS: Stationary. Material SA240 (Kind & Spec. No.) Diam. 7-1/4 In. Thickness 1-1/2 In. Attachment Welded (Welded, Bolted)

Floating. Material SA240 (Kind & Spec. No.) Diam. None In. Thickness None In. Attachment None
11. TUBES: Material SA240 (Kind & Spec. No.) O.D. 3/4 In. Thickness 16 avg. Inches of Gage Number 568 Type Straight (Straight or U)

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

12. SHELL Material SA240 (Kind and Spec. No.) T.S. 75000 (Fig. or F.B. & Spec. Min. T.S.)
Nominal Thickness 1/2 In. Corrosion Allowance 0 In. Diam. 2 Ft. 3-3/4 In. Length 1 Ft. 2 In.
13. SEAMS: Long Db1. Butt H.T. No (Yes or No) R.T. Spot (Spot or Complete) Sectioned No (Yes or No) Efficiency 85 %
Girth 8 Db1. Butt H.T. No R.T. None Sectioned No No. of courses None

If riveted describe seams fully on reverse side of form.

14. HEADS (a) Material SA240 (Kind & Spec. No.) T.S. 75000 (Fig. or F.B. & Spec. Min. T.S.)
Location Top, bottom, ends Thickness 1/2 In. Crown Radius None Knuckle Radius None Elliptical Ratio None Conical Apex Angle None Hemispherical Radius None Flat Diameter None Side to Pressure Convex or Concave
(a) SA240 (b) SA240
(c) SA240
If removable, bolts used (a) None (Material, Spec. No., T.S., Size, Number) Other fastening None (Describe or Attach Sketch)

15. Constructed for max. allowable working press. 120 psi at max. temp. 250 °F. less than -20°
Min. temp. (when None °F. less than -20°) Hydrostatic Test 180 psi
Pneumatic or Test Press 180 psi
Combination

Items below to be completed for all vessels where applicable.
SAFETY-VALVE OUTLETS: Number None Size None Location None

NOZZLES	Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
		2	6"	Lap 150%	304S/8SA240	Sch40	None	Welded
		1	4"	S.O. 150%	C/S SA53B	Sch80	None	Welded
		1	4"	S.O. 150%	C/S SA53B	Sch30	None	Welded
		2	1"	S.O. 150%	C/S SA53B	Sch80	None	Welded

2026 19395 FCD
PROJ No 026019
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. _____ Size _____ Location _____
 19. SUPPORTS: Skirt No Lugs No Legs No Other Saddles Attached Shell, welded
 (Yes or No) (Number) (Number) (Describe) (Where & How)

20. REMARKS: This vessel was fabricated for non-lethal service. Contents: Tube
Side - Methalol, Shell Side - Steam. Overall length - 14'-2-3/4"

Vessel has expansion joint as Code Case 1175-5 WFR
 (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 August 12 19 71 Signed Camden Alloy Fabricators, Inc. Edward W. Hays
 (Manufacturer)

Certificate of Authorization Expires 12/31/74

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE Camden Alloy Fabricators, Inc. 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 Pa. and employed by Hartford Steam Boiler Insp. & Ins. Co.
Hartford, Conn. have inspected the pressure vessel described in this manufacturer's data report on August 3 19 71, 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 August 12 19 71

Walter J. Comepp
 Inspectors Signature

Commissions N.B. 4438 Pa 1786
 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 _____

 Inspector's Signature

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

NAT'L BD

NO. 877

CAMDEN ALLOY FABRICATORS

SHELL

TUBE

DIV. D.P.

150 PSI

FULL VAC. & 120 PSI

W. DT

366°F

250°F

1971

SHELL T. $\frac{1}{16}$ $\frac{1}{4}$ $\frac{3}{16}$ HEAD T. $2\frac{1}{2}$

HEAD RAD. FLAT

P.O. - 026 - 19395 ACD

PROJ No - 026019

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