F 1.75

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

1. Manufactured by Camden Alloy Fabricators, Inc. Camden, New Jersey
(Name and address of Manufacturer)

2. Manufactured for Hercules, Incorporated Wilmington, No. Car.
(Name and address of Purchaser)

3. Type Horiz. (Horiz. or Vert.) Kind Heat. Exch (Tank, Jacketed, Heat Exch.) Vessel No. 71-5247B (Mfrs. Serial) ( ) (State & State No.) Natl. Bd. No. 878 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 SA515GR70 (Kind and Spec. No.) U.S. 70000 (Fig. or F.B. & Spec. Min. T.S.) Nominal Thickness 5/16 In. Corrosion Allowance 1/16 In. Diam. 2 Ft. 3-3/4 In. Length 12 Ft. 0-1/16 In. F toF

5. SEAMS: Long Dbl. Butt (Welded, Dbl., Single, Lap, Butt) H.T. No (Yes or No)[1] R.T. Spot (Spot or Complete) Sectioned No (Yes or No) Efficiency 85 %
UW-13.2(a) single W/Eck'g
Girth Dbl. 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 ____ T.S. ____ (b) Material ____ T.S. ____

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

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

7. STAYBOLTS: ____ (Material) If hollow ____ (Size of Hole) Attachment ____ (Threaded, Welded) Pitch ____ (Horiz.) X ____ (Vert.) Diam. ____ (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[2] 150 psi at max. temp. 366 °F. Min. temp. (when less than −20°) --- °F. Hydrostatic Test Press 225 psi.

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material 304S/S SA240 (Kind & Spec. No.) Diam. 27-1/4 In. (Subject to Pressure) Thickness 1-1/2 In. Attachment Welded (Welded, Bolted)
Floating. Material ____ (Kind & Spec. No.) Diam. ____ In. Thickness ____ In. Attachment ____

11. TUBES: Material SA249 304S/S (Kind & Spec. No.) O.D. 3/4 In. Thickness 16 avg 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 304S/S SA240 (Kind and Spec. No.) U.S. 75000 (Fig. or F.B. & Spec. Min. T.S.) Nominal Thickness 3/16 1/4 In. Corrosion Allowance 0 In. Diam. 2 Ft. 3-3/4 In. Length 1 Ft. 2 In.

13. SEAMS: Long Dbl. Butt (Welded, Dbl., Single, Lap, Butt) H.T. No (Yes or No) R.T. Spot (Spot or Complete) Sectioned No (Yes or No) Efficiency 85 %
UA-48(1a)
Girth UW-13.2(b) H.T. No R.T. NONE Sectioned No No. of courses (1)ea

If riveted describe seams fully on reverse side of form.

with 304S/S SA240 liner

14. HEADS (a) Material C/S SA515GR70 U.S. 70000 (b) Material ____ T.S. ____ (c) Material ____ T.S. ____

	Location	Thickness	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	Xxxxxxxx ends	C/S 2-1/2+3/8						32-5/8	Flat
(b)	Channel	304S/S liner							
(c)	Floating								

If removable, bolts used (a) Al.St.SA-193B7,125000,3/4"64 (b) ____ (Material, Spec. No., T.S., Size, Number)
(c) ____ Other fastening ____ (Describe or Attach Sketch)

15. Constructed for max. allowable working press[2] Full Vac. 120 psi at max. temp. 250 °F. Min. temp. (when less than −20°) ----°F. Hydrostatic Test Press 180 psi.

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
	2	6"	LAP 150#	304S/S SA240	Sch40	None	Welded
	1	10"	S.O.150#	C/S SA53GRB	Sch80	None	Welded
	1	4"	S.O.150#	C/S SA53GRB	Sch80	None	Welded
	2	1"	S.O.150#	C/S SA53GRB	Sch80	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 OPENINGS: Manholes, No. _____ Size _____ Location _____
Handholes, No. _____ Size _____ Location _____
Threaded, No. _____ Size _____ Location _____

19. SUPPORTS: Skirt NO (Yes or No) Lugs NO (Number) Legs NO (Number) Other Saddles (Describe) Attached Shell, welded (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 a expansion joint as Code Case 1175-5 W/K
(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. (Manufacturer) By Edward W Knight Jr

Certificate of Authorization Expires 12/32/74

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY 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. of Hartford, Conn. have inspected the pressure vessel described in this manufacturer's data report on August 3 1971, 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 Comyn
Inspector's Signature

Commissions NB 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.

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This Form is obtainable from the ASME, 345 E. 47th St., New York, N.Y. 10017