

#104502 N.B.

70-91A

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

ITEM No.

As required by the Provisions of the ASME Code Rules, Section VIII, Division I

A 02 E 208 20

1. Manufactured by SOUTHERN HEAT EXCHANGER CORPORATION, TUSCALOOSA, ALABAMA
(Name and address of Manufacturer)2. Manufactured for HERAULTS INC., WILMINGTON, DEL. DEST: WILMINGTON, NORTH CAROLINA
(Name and address of Purchaser)3. Type HORIZ. Kind HEAT EXCH. Vessel No. (1302) (Mfrs. Serial) (State & State No.) Natl. Bd. No. 1302 Yr. Built 1970
(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 SA-515 GR 70 T.S. 70000 Nominal Thickness 1/2 In. Allowance 1/4 In. Diam. 3 Ft. 24 Length 15 Ft. 1170
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)5. SEAMS: Long DOUBLE BUTT 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 DOUBLE BUTT H.T. NO R.T. NO Sectioned NO No. of Courses 26. HEADS (a) Material SA-515 GR 70 T.S. 70000 (b) Material SA-515 GR 70 T.S. 70000
(Location) (Top, bottom, ends) Thickness 1/2 In. Crown Radius 2 In. Knuckle Radius 2 In. Elliptical Ratio 1:1 Conical Apex Angle 0 Hemispherical Radius 0 Flat Diameter 0 Side to Pressure (Convex or Concave)(a) FLANGE 2 32" O.D. FLANGED & TUBED

(b)

If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or Attach Sketch)7. STAYBOLTS: NONE If hollow (Material) Attachment (Threaded, Welded) Pitch (Horiz.) X (Vert.) Diam. (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. 300 psi at max. temp. 600 °F. less than -20° (Min. temp. when) (Hydrostatic) Test Press 450 psi.
(F. Combination)

Items 10 and 11 to be completed for tube sections.

10. TUBE SHEETS: Stationary. Material SA-515 GR 70 / 316 (L. CAP) Diam. 3/8 In. Thickness 1/4 In. Attachment WELDED
(Kind & Spec. No.) (SA-240) (Subject to Pressure) (Welded, Bolted)Floating. Material (Kind & Spec. No.) Diam. (In.) Thickness (In.) Attachment (In.)11. TUBES: Material SA-240 TP 316 O.D. 1 1/2 In. Thickness 1/8 In. Inches or Gage Number 34A 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 SA-240 TP 316 T.S. 75000 Nominal Thickness 1/8 In. Allowance 0 In. Diam. 3 Ft. 24 Length 1 Ft. 54 In.
(Kind and Spec. No.) (Fig. or F.B. & Spec. Min. T.S.)13. SEAMS: Long DOUBLE BUTT 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 DOUBLE BUTT H.T. NO R.T. NO Sectioned NO No. of courses 214. HEADS (a) Material SA-515 GR 70 T.S. 70000 (b) Material SA-515 GR 70 T.S. 70000
(Location) (Top, bottom, ends) Thickness 1/2 In. Crown Radius 2 In. Knuckle Radius 2 In. Elliptical Ratio 1:1 Conical Apex Angle 0 Hemispherical Radius 0 Flat Diameter 0 Side to Pressure (Convex or Concave)

(b) Channel

(c) Floating

If removable, bolts used (a) (24) 1/2" A-193-B7/SA-193-2H (b) (Material, Spec. No., T.S., Size, Number)(c) (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or Attach Sketch)15. Constructed for max. allowable working press. 600 psi at max. temp. 600 °F. less than -20° (Min. temp. when) (Hydrostatic) Test Press 900 psi.
(F. Combination)

Items below to be completed for all vessels where applicable.

16. SAFETY VALVE OUTLETS: Number NONE Size (In.) Location (In.)

17. NOZZLES

Purpose (Inlet, Outlet, Drain)	Number	Diam. or Size	Type	Material	Thickness	Reinforcement Material	How Attached
IN/OUT	2	3"	FLANGED	SA-515 GR 70	5/16" 16A		WELDED
IN/OUT	2	4"	"	SA-515 GR 70	5/16" 16A		"

* If postweld heat-treated.

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

(Over)

FORM U-1 (back)

18. INSPECTION Manholes, No. NONE Size _____ Location _____
 OPENINGS: Handholes, No. 4 Size _____ Location _____
 Threaded, No. 4 Size _____ Location _____
 19. SUPPORTS: Skirt YES Lugs _____ Legs 2 Other _____ Attached YES
 (Yes or No) (Number) (Number) (Describe) (Check if Yes)

20. REMARKS: HEAT EXCHANGER. CONTAINS CONFIDENTIAL. NOT LETHAL

LINE 14. (1) LINKED WITH 316 SS.

(Brief description of purpose of the vessel, as Air Tank, After Cooler, Jacketed Cokes, 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 Nov. 16 19 70 Signed SOUTHERN HEAT EXCHANGER CORP. by [Signature]
 (Manufacturer)

Certificate of Authorization Expires DECEMBER 31, 1972

CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY SOUTHERN HEAT EXCHANGER CORP. at TUSCALOOSA, ALABAMA

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province LA. and employed by HARTFORD STEAM BOILER INSP. AND INS. CO. of HARTFORD, CONN.

have inspected the pressure vessel described in this manufacturer's data report on Dec. 23 19 70 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 Dec. 23 19 70

[Signature]
 Inspector's Signature

Commission N.B. 6795

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

JAMES DENNIS WILKINS

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

Commission _____

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

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FORM R-1, REPORT OF WELDED ☐ REPAIR OR ☒ ALTERATION
As Required by the Provisions of The National Board Inspection Code

1. Work done by MUNDY CONSTRUCTION COMPANY, HOUSTON, TEXAS JOB 1045-11
(Name and address of repair or alteration organization) (Serial No.)

2. Owner HERCOFINA
(Name and address of owner)

3. Location of Installation HERCOFINA HIGHWAY 421 NORTH WILMINGTON, NORTH CAROLINA
(Name and address)

4. Unit Identification E-203-20 P.V. Name of Manufacturer SOUTHERN HEAT EXCHANGER CORP.
(Boiler Pressure Vessel)

5. Identifying No. 1302 1302 1970
(Boiler Serial No.) (National Board No.) (Jurisdiction) (Other) (Year Built)

6. Description of Work INSTALL 36" WELD CAP TO EACH HEAD TO ACT AS A STEAM JACKET. EACH CAP TO
(Use back, separate sheet or sketch if necessary)
HAVE (2) TWO 1" COUPLINGS WELDED 180° APART.

Pressure Test, if Applied 250 psi

7. Remarks: Attached are Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors for the following items of this report:

(Name of part, item number, mfg. name, and identifying stamp)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that all (design) _____ material, construction, and workmanship on this ALTERATION conform to The National Board Inspection Code. (repair alteration)

Date 8-21-81 Signed MUNDY CONSTRUCTION CO. by J. A. Mueller Jr.
(Repair Alteration Organization) (Authorized Representative)

Our Certificate of Authorization No. 14,897 to use the U Symbol expires NOV. 30 19 81

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors or the State or Province of North Carolina and employed by The Hartford Steam Boiler Inspection and Insurance Company of Hartford Conn. have inspected the work described in this Data Report on 8/21 19 81 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 Inspector nor his employer makes any warranty, expressed or implied, concerning the work described in this 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, except such liability as may be provided in a policy of insurance which the Inspector's insurance company may issue upon said object and then only in accordance with the terms of said policy.

Date 8/21/81 Malcolm S. Roberts Commissions NB8866 NC966
Inspector (National Board State Province and No.)