

SHE Job #

FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

Item #

as required by the provisions of the ASME Code rules, Section VIII, Division 1

91-201

203-259-01

1. Manufactured and certified by Southern Heat Exchanger Corp., 6100 Old Montgomery Hwy,
(name and address of manufacturer) Tuscaloosa, AL
2. Manufactured for SWENSON HARVEY, Inc.
(name and address of purchaser)
3. Location of installation E. I. duPont de Nemours & Co., Inc. LA PORTE, TX.
(name and address)
4. Type: Heat Exch. 91-201 None SP-2811-5 6394 1991
(horiz. or vert., tank) (mfr's. serial no.) (CRN) (drawing no.) (Nat'l. Bd. no.) (year built)
5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction and workmanship conform to ASME Code, Section VIII, Division 1: 1989
(year)
- A89 — —
(addenda (Date)) (Code Case no.) (special service per UG-120(d))

Items 6-11 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers.

6. Shell: SA-516-70 .500" .125" 2'-7" 10'-0"
(mat'l. (spec. no., grade)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))
7. Seams: SNGL. BUTT SPOT 85% — — SNGL. BUTT — 2
(long. (dbl., angl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (girth (dbl., angl.)) (RT (spot, partial, or full)) (no. of courses)
8. Heads: (a) SA-516-70 (b) —
(mat'l. (spec. no., grade)) (mat'l. (spec. no., grade))

	Location (top, bottom, ends)	Non-Uniform Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	TOP	.500"	.125"	(2) 42" O.D. FLANGED & FLUED HEADS						FLAT
(b)										

If removable, bolts used (describe other fastenings): LINE 7.

(mat'l., spec. no., gr., size, no.)

9. Type of jacket: None Proof test: —
10. Jacket closure: None If bar, give dimensions: — If bolted, describe or sketch: —
(describe as ogee & weld, bar, etc.)
11. MAWP: 150/FL at max. temp. 650 Min design metal temp.: -20 at 150/FL Hydro. test pressure 225
(psi) (°F) (°F) (psi)

Items 12 and 13 to be completed for tube sections.

12. Tubesheets: SB-424-825 32" 1.750" .04" WELDED
(stationary mat'l. (spec. no., gr.)) (dia. (in.) (subject to pressure)) (nom. thickness (in.)) (corr. allow. (in.)) (attachment (welded, bolted))
- — — — —
(floating mat'l. (spec. no., gr.)) (dia. (in.)) (nom. thickness (in.)) (corr. allow. (in.)) (attachment)
13. Tubes: SB-163-825 2" 14 120 STRAIGHT
(mat'l. (spec. no., gr.)) (OD (in.)) (nom. thickness (in.)) (no.) (type (straight or U))

Items 14-17 inclusive to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell: SB-424-825 .250" .04" 2'-7.50" 1'-3.125"
(mat'l. (spec. no., gr.)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))
15. Seams: SNGL. BUTT SPOT 85% — — SNGL. BUTT — 4
(long. (dbl., angl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (girth (dbl., angl.)) (RT (spot, partial, or full)) (no. of courses)
16. Heads: (a) SB-424-825 (b) SB-424-825
(mat'l. (spec. no., grade)) (mat'l. (spec. no., grade))

	Location (top, bottom, ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (convex or concave)
(a)	TOP	.1875"	.04"			2:1				CONCAVE
(b)	BOTTOM	.250"	.04"	32" O.D. x 14" O.D. CONIC. RAD.			60°			CONCAVE

If removable, bolts used (describe other fastenings): SA-193-B7 (36) EA. 3/4"-10.

(mat'l., spec. no., gr., size, no.)

17. MAWP: 150/FL at max. temp. 500 Min design metal temp.: -20 at 150/FL Hydro. test pressure 225
(psi) (°F) (°F) (psi)

3500 SCMP.

FORM U-1 (back)

18. Nozzles, inspection and safety valve openings:

Purpose (inlet, outlet, drain, etc.)	Number	Dia. or Size	Type	Mat'l.	Nom. Thickness	Reinforcement Material	How Attached	Location
IN	1	3"-300"	RFSO	SA-106 B	.300"	INHERENT	WELDED	SHELL
OUT *	1	1 1/2" - "	"	"	.100"	"	"	"
IN	1	4"-150"	L.J.	SA-424-B25	.237"	"	"	Bonnet
OUT	1	4" - "	"	"	.237"	"	"	"
OUT	1	8" - "	"	SA-424-B25	.375"	"	"	"
HANDHOLE	1	10" - "	"	"	.375"	"	"	"
* With 90° L.R. Elbow SA-234 CWPRB.								

19. Supports: Skirt YES (yes or no) Lugs 4 (no.) Legs _____ (no.) Other _____ (describe) Attached SKIRT, WELDED. (where and how)

20. Remarks: Manufacturers' Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: _____ (name of part, item number, mfr's. name and identifying stamp)

"UG-46(a)" "UCS-66(a)"

CERTIFICATE OF SHOP COMPLIANCE

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.

"U" Certificate of Authorization no. 7037 expires Feb. 28, 19 94.

Date 11-11-91 Name Southern Heat Exchanger Corporation (manufacturer)

Signed Daniel H. Noland (representative)
D. H. Noland

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Southern Heat Exchanger Corporation at Tuscaloosa, AL

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of LA and employed by Commercial Union Insurance Company

of Boston, MA have inspected the pressure vessel described in this Manufacturers' Data Report on 11-11, 19 91, and state that, to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in the Manufacturers' 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 11-11-91 Signed Paul Crisler (Authorized Inspector)

Commissions NB. 6499 LA. 720 (Nat'l. Bd. (incl. endorsements) state, prov. and no.)

CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the field assembly construction of all parts of this vessel conforms with the requirements of Section VIII, Division 1 of the ASME BOILER AND PRESSURE VESSEL CODE.

"U" Certificate of Authorization no. _____ expires _____, 19 _____.

Date _____ Name _____ (assembler that certified and constructed field assembly)

Signed _____ (representative)

CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the state or province of _____ and employed by _____ of _____ have compared the statements in this Manufacturers' 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 ASME Code, Section VIII, Division 1. 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 the Manufacturers' 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 _____ Signed _____ (Authorized Inspector)

Commissions _____ (Nat'l. Bd. (incl. endorsements) state, prov. and no.)