

SHE JGB NO.

## FORM U-1 MANUFACTURERS' DATA REPORT FOR PRESSURE VESSELS

ITEM NO.

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

89-022

5116-7305-2

1. Manufactured and certified by SOUTHERN HEAT EXCHANGER CORPORATION 400 65TH ST E. TUSCALOOSA, ALABAMA  
(name and address of manufacturer)
2. Manufactured for E. I. duPont de Nemours & Co. Inc. Wilmington, De.  
(name and address of purchaser)
3. Location of installation E. I. duPont de Nemours & Co. Inc. Beaumont, Tx.  
(name and address)
4. Type: H. EXCH. 89-022 — SP-2084-1 5726 1986  
(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: 1986  
(year)
- A87 — —  
(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 .375" .125" 2'-1.250" 5'-11.875"  
(mat'l. spec. no., grade) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))
7. Seams: SINGL. BUTT SPOT 85% — — SINGL. BUTT 100% ON EXP. ST 2  
(long (dbl., singl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (girth (dbl., singl.)) (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) | Minimum Thickness | Corrosion Allowance | Crown Radius                                  | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure (convex or concave) |
|-----|------------------------------|-------------------|---------------------|---|----------------|------------------|--------------------|----------------------|---------------|--------------------------------------|
| (a) | <u>BOTTOM</u>                | <u>.3125"</u>     | <u>.125"</u>        | <u>(2) 38" O.D. FLANGED &amp; FUSED HEADS</u> |                |                  |                    |                      |               | <u>FLAT</u>                          |
| (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: 75/FV at max. temp. 350 Min design metal temp.: 15 at 75/FV Hydro. pressure or comb. test pressure 115  
(psi) (°F) (°F) (psi) (psi)

Items 12 and 13 to be completed for tube sections.

12. Tubesheets: SA-240-316 L 30.125" 1.8125" — 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: SA-240-316 L 1" 16 281 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: SA-240-316 L .250" — 2'-1.50" 3'-4.625"  
(mat'l. spec. no., gr.) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))
15. Seams: SINGL. BUTT SPOT 85% — — SINGL. BUTT — 1  
(long (dbl., singl.)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (girth (dbl., singl.)) (RT (spot, partial, or full)) (no. of courses)
16. Heads: (a) SA-240-316 L (b) —  
(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)	<u>TOP/BOTTOM</u>	<u>.1875"</u>	<u>0</u>			<u>2:1</u>				<u>CONCAVE</u>
(b)										

If removable, bolts used (describe other fastenings):

SA-193-B7 (36) EA. 5/8"-11.

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

17. MAWP: 75/FV at max. temp. 350 Min design metal temp.: 15 at 75/FV Hydro. pressure or comb. test pressure 115  
(psi) (°F) (°F) (psi) (psi)

