

#95301

FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT
A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by OHMSTEDE LTD., LAKE CHARLES PLANT, 1750 SWISCO ROAD, SULPHUR, LOUISIANA 70664
(Name and address of Manufacturer)
2. Manufactured for Lyondell, P.O. Box 3411, Lake Charles, LA 70602
(Name and address of Purchaser)
3. Location of installation Lyondell, I-10 West, Lake Charles, LA 70601
(Name and address)
4. Type: Exchanger Less Heads 348548 ---
(Description of vessel part (shell, two-piece head, tube bundle)) (Mfg's serial No.) (CRN)
2879 348548 R-2 Ohmstede, Ltd. 2003
(Nat'l. Bd. No.) (Drawing No.) (Drawing prepared by) (Year built)
5. ASME Code, Section VIII, Div. 1 2001/2002 -- --
Edition and Addenda (date) Code Case No. Special Service per UG-120(d)

Items 6 - 11 Incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multi-chamber vessels.

6. Shell (a) No. of course(s): 3 (b) Overall length ft & in.: 19'-7 1/4"

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter, in.	Length ft & in.	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
2	31 ID	5'-10 1/8"	SA-516-70N	1/2	1/8	1	A-Spot	85	1	B-Spot	85	--	--
1	31 ID	7'-11"	SA-516-70N	1/2	1/8	1	A-Spot	85	1	B-Spot	85	--	--
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7. Heads: (a) --- (b) ---

(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp (Mat'l Spec. No., Grade or Type) H.T. - Time & Temp

Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
	Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	--	--	--	--	--	--	--	--	--	--	--	--	--
(b)	--	--	--	--	--	--	--	--	--	--	--	--	--

If removable, bolts used (describe other fastening) ---

8. Type of jacket --- Jacket closure ---
(Describe as ogee & weld, bar, etc.)
- If bar, give dimensions --- If bolted, describe or sketch.

9. MAWP 257 -- psi at max. temp. 250 -- °F Min. design metal temp. -20 °F at 257 psi.
(internal) (external) (internal) (external)

10. Impact test No, UCS-66 at test temperature of -- °F
(Indicate yes or no and the component(s) impact tested)

11. Hydro. ~~pressure~~ test press. -- Proof test ---

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: SA240TP316L 31 ID 2 3/8 1/8 Welded
Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Nom. thk., in. Corr. Allow., in. Attachment (welded or bolted)
SA240TP316L 31 ID 2 3/8 1/8 Welded
Floating (Mat'l Spec. No.) Dia., in. Nom. thk., in. Corr. Allow., in. Attachment

13. Tubes: SA249TP316L 3/4 18 BWG (AW) 625 St., 20' lg.
Mat'l Spec. No., Grade or Type O.D., in. Nom. thk., in. or gauge Number Type (Straight or U)

Items 14 - 18 Incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell (a) No. of course(s): -- (b) Overall length (ft & in.): --														
No.	Course(s)		Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
	Diameter, in.	Length ft & in.	Spec./Grade or Type	Radius	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
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[illegible]

(Mat'l Spec. No., Grade, Size, No.)

18. Hydro., ~~proof, standard~~ test press. --- Proof test ---

19. Nozzles, inspection, and safety valve openings:

[illegible]

21. Remarks: No.19-Pressure Relief Devices Per UG-125(a), Forming Per UCS-79(d)

Item No.:E-07-01

U Certificate of Authorization No. 17,397 Expires 06/04/2006
Date 10-16-03 Name OHMSTEDE LTD., LAKE CHARLES PLANT Signed Krishna Rao V Kolluru
(Manufacturer) (Representative)

Date 10-20-03 Signed [Signature] (Authorized Inspector) Commissions 1011372 (A) 101184
(Nat'l Board incl. endorsement, State, Province and No.)