

FORM U-2 MANUFACTURERS' 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 HEAT TRANSFER EQUIPMENT COMPANY 1515 N. 93RD E. AVE TULSA, OK 74115
(name and address of manufacturer)

2. Manufactured for AMOCO OIL COMPANY P.O. BOX 578 YORKTOWN, VA 23690
(name and address of purchaser)

3. Location of installation AMOCO OIL COMPANY YORKTOWN, VA
(name and address)

4. Type: 92-2455-E 92-2455-E-1 1507 1992
(horiz. or vert., tank) (mfr's. serial no. of part) (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)

1991
(addenda (date))

UHA-51
(Special service per UG 120(d))

6. (a) Drawing prepared by HEAT TRANSFER EQUIPMENT CO (b) Description of part inspected SHELL ONLY

7. Postweld heat treatment: Temperature - °F Time -

Items 8-13 inclusive to be completed for single wall vessels, jackets of jacketed vessels, or shells of heat exchangers

8. Shell: SA-240-316L 3/8" 0" 2'-0" 13'-8 3/8"
(mat'l (spec. no., grade)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

9. Seams: DBL. BUTT SPOT 85% - - DBL. BUTT SPOT 2
(long. (welded, dbl., angl. lap, butt)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (grth (welded, dbl., angl. lap, butt)) (RT (spot, partial or full)) (no. of courses)

10. Heads: (a) SA-240-316L (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)	END	5/16"				2:1				CONCAVE
(b)										

If removable, bolts used (describe other fastenings): _____
(mat'l, spec. no., gr., size, no.)

11. Type of jacket: _____ Proof test: _____

12. Jacket closure: _____ If bar, give dimensions _____ If bolted, describe or sketch _____
(describe as ogee & weld bar, etc.)

13. MAWP: 75 at max. temp. 650 Min design metal temp.: -20 at 75 Hydro., pneu. or comb. test pressure 115
(psi) (°F) (°F) (psi)

Items 14 and 15 to be completed for tube sections.

14. Tubesheets: _____
(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)

15. Tubes: _____
(mat'l (spec. no., gr.)) (OD (in.)) (nom. thickness (in. or gauge)) (no.) (type (straight or U))

Items 16-18 inclusive to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

16. Shell: _____
(mat'l (spec. no., gr.)) (nom. thickness (in.)) (corr. allow. (in.)) (dia. ID (ft. & in.)) (length (overall) (ft. & in.))

17. Seams: _____
(long. (welded, dbl., angl. lap, butt)) (RT (spot or full)) (eff. (%)) (HT temp. (°F)) (time) (grth (welded, dbl., angl. lap, butt)) (RT (spot, partial or full)) (no. of courses)

18. Heads: (a) _____ (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)										
(b)										

If removable, bolts used (describe other fastenings): _____
(mat'l, spec. no., gr., size, no.)

19. MAWP: _____ at max. temp. _____. Min design metal temp.: _____ at _____. Hydro., pneu. or comb. test pressure _____

20. Nozzles, inspection and safety valve openings:

[illegible]

21. Supports: Skirt NO Lugs - Legs - Other 2-SADDLES Attached WELDED TO SHELL
(yes or no) (no) (no) (describe) (where and how)

22. Remarks: P.O. NO: 9250594
ITEM NO: C-140
TEMA SIZE: 24" SHELL

We certify that the statements made in this report are correct and that all details of material, construction and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

"U" Certificate of Authorization no. 12,197 expires JULY 15, 19 95

Date 12-15-92 Name HEAT TRANSFER EQUIPMENT COMPANY
(manufacturer)

Signed Willie A. Walker
(representative)

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the state or province of Illinois and employed by Commercial Union Ins. Co.

Boston Ma. of _____ have inspected the pressure vessel described in this
Manufacturers' Partial Data Report on 12/15, 1992, and state that, to the best of my knowledge and belief, the manufac-
turer has constructed this part in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

By signing this certificate neither the inspector nor his employer makes any warranty, expressed or implied, concerning the part described in the Manufacturers' Partial 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 6-15-74 Signed [Signature] Commissions 2-00082100-01269
(Authorized Inspector) (Not to be used on contracts state, army and na.)