

102271

FORM U-4 MANUFACTURERS' DATA REPORT SUPPLEMENTARY SHEET

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

1. Manufactured and certified by Continental Fabricators, Inc.; 5601 West Park Ave.; St. Louis, MO 63110
(name and address of manufacturer)

2. Manufactured for Rhone-Poulenc, Inc.; P.O. Box 2831; Charleston, W.V. 25330
(name and address of purchaser)

3. Location of Installation Rhone-Poulenc, Inc.; P.O. Box 400; Institute, W.V. 25112
(name and address)

4. Type: Vert. Vessel CG-4755 830-L, Rev. 3 2533 1992
(horiz., vert., tank, etc.) (mfr's. serial no.) (CRN) (drawing no.) (Nat'l. Bd. no.) (year built)

Data Report Item Number

* 19. Nozzle, inspection and safety valve openings:

Purpose (inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How Attached		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Vapor Outlet	1	14" CL 150	Lap Jnt	*	*	.375"	.063"	SA240-316L	*	Spot 85%	Top Hd
Vapor Inlet	1	16" CL 150	Lap Jnt	*	*	.375"	.063"	SA240-316L	*	Spot 85%	Red S.O. Flg
Manway	3	23.25" I.D.	Pl Lap Jnt	*	*	.375"	.063"	SA240-316L	*	Spot 85%	Shell
Supt.	1	18" CL 150	RF WNE	*	*	.562"	.063"	SA240-316L	*	Spot 85%	Shell

* 19.

Material	Nozzle	Flange	How Attached
SA312-316L	SA312-316L	SA-105	Nozzle
SA312-316L	SA312-316L	SA-105	Sketch (d)
SA312-316L	SA312-316L	SA-105	Sketch (d) & (a-1)
SA312-316L	SA312-316L	SA-105	Sketch (d) & (a-1)
SA312-316L	SA312-316L	SA-105	Sketch (1)
SA312-316L	SA312-316L	SA182-F316L	Sketch (d) & (a-1)
SA312-316L	SA312-316L	SA-105	Sketch (d) & (a-1)
SA312-316L	SA312-316L	SA-105	Sketch (d) & (a-1)
SA312-316L	SA312-316L	SA-105	Sketch (d) & (a-1)
SA240-316L	SA312-316L	SA516-70N	Sketch (1)
SA312-316L	SA312-316L	SA182F-316L	Sketch (d) & (a-1)
			Sketch (d) & (a-1)

22. Remarks Vessel has three manway blind flanges, bolting for each: (20) 3/4" dia. studs (SA193-B7) and (40) hex nuts (SA194-2H); 8" CL 150 blind opening, bolting: (8) 3/4" dia. studs (SA193-B7) and (16) hex nuts (SA194-2H); one dip pipe nozzle with 6" x 4" CL 150 reducing S.O. flange, bolting: (8) 3/4" dia. studs (SA193-B7) and (16) hex nuts (SA194-2H); one dip pipe nozzle with 18" x 16" CL 150 reducing S.O. flange, bolting: (16) 1-1/8" dia. studs (SA193-B7) and (32) hex nuts (SA192-2H) and 3" CL 150 spare with blind, bolting: (4) 5/8" dia. studs (SA193-B7) and (8) hex nuts (SA194-2H).

Date 12/19/92 Co. name Continental Fabricators, Inc. Signed J.S. Adams 12-19-92 Signed [Signature]
(Authorized Inspection) (representative)

Commissions 0013908/A 22-0213
(Nat'l. Bd. (incl. endorsements) state, prov. and no.)

102271

FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by Continental Fabricators, Inc.; 5601 West Park Ave.; St. Louis, MO 63110
(Name and address of Manufacturer)
2. Manufactured for Rhone-Poulenc, Inc.; P.O. Box 2831; Charleston, W.V. 25330
(Name and address of Purchaser)
3. Location of installation Rhone-Poulenc, Inc.; P.O. Box 400; Institute, W.V. 25112
(Name and address)
4. Type: Vertical Vessel CG-4755 830-L Rev. 3 2533 1992
(Horiz., vert., or sphere) (Tank, separator, jkt. vessel, heat exh., etc.) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l. Bd. No.) (Year built)
5. ASME Code, Section VIII, Div. 1 1992 Edition, 1992 Addenda --- --- ---
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.): 28'-1 3/4" O.A. W.S./W.S.

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
1	48.0" I.S.	9'-4 9/16"	SA240-316L		.250"	.063"	1	Spot	85%	1	Spot	85%	---	---
2	48.0" I.S.	9'-4 9/16"	SA240-316L		.250"	.063"	1	Spot	85%	1	Spot	85%	---	---
3	48.0" I.S.	9'-4 5/8"	SA240-316L		.250"	.063"	1	Spot	85%	1	Spot	85%	---	---

7. Heads: (a) SA-240 Gr. 316L (b) SA-240 Gr. 316L
(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 Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	Top Head	.250"	.063"	43.2" IS	8.16" IS	2:1	---	---	---	---	Yes	---	---	---
(b)	Btm Head	.250"	.063"	43.2" IS	8.16" IS	2:1	---	---	---	---	Yes	---	---	---

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

8. Type of jacket --- Jacket closure ---
(Mat'l Spec. No., Grade, size, No.) (Describe as ogee & weld, bar, etc.)

- If bar, give dimensions ---
9. MAWP 95 --- psi at max. temp. 212 --- °F Min. design metal temp. 0 --- °F at 95 psi
(internal) (external) (internal) (external)

10. Impact test No - Exempt from impact testing per UHA-51

11. Hydro., pneu., or comb. test press. 164 Horiz. Proof test ---
(Indicate yes or no and the component(s) impact tested)

Items 12 and 13 to be completed for tube sections.

12. Tubesheet: --- --- --- --- ---
Stationary (Mat'l Spec. No.) Dia., in. (subject to press.) Nom. thk., in. Corr. Allow., in. Attachment (welded or bolted)

- --- --- --- ---
Floating (Mat'l Spec. No.) Dia., in. Nom. thk., in. Corr. Allow., in. Attachment

13. Tubes: --- --- --- --- ---
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.): ---

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
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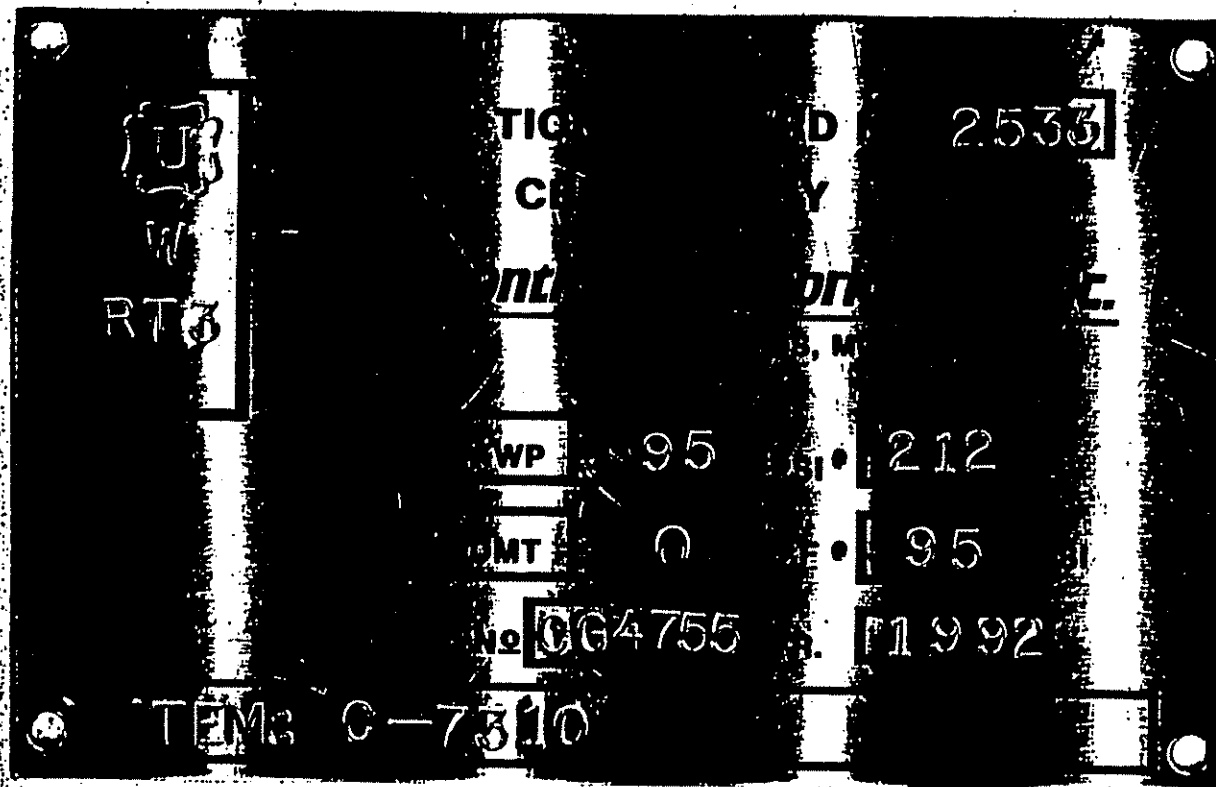
15. Heads: (a) --- (b) ---
(Mat'l Spec. No., Grade or Type) H.T. - Time & Temp (Mat'l Spec. No., Grade or Type) H.T. - Time & Temp

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	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) ---

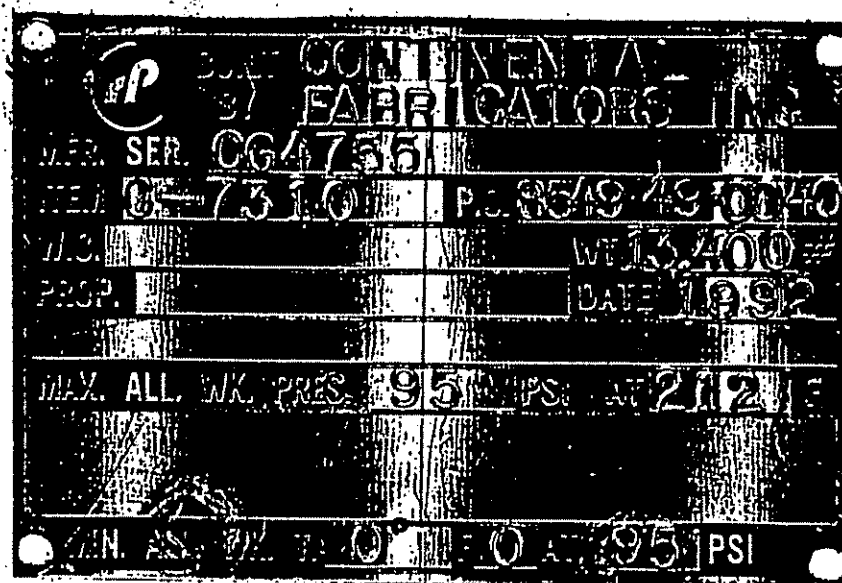
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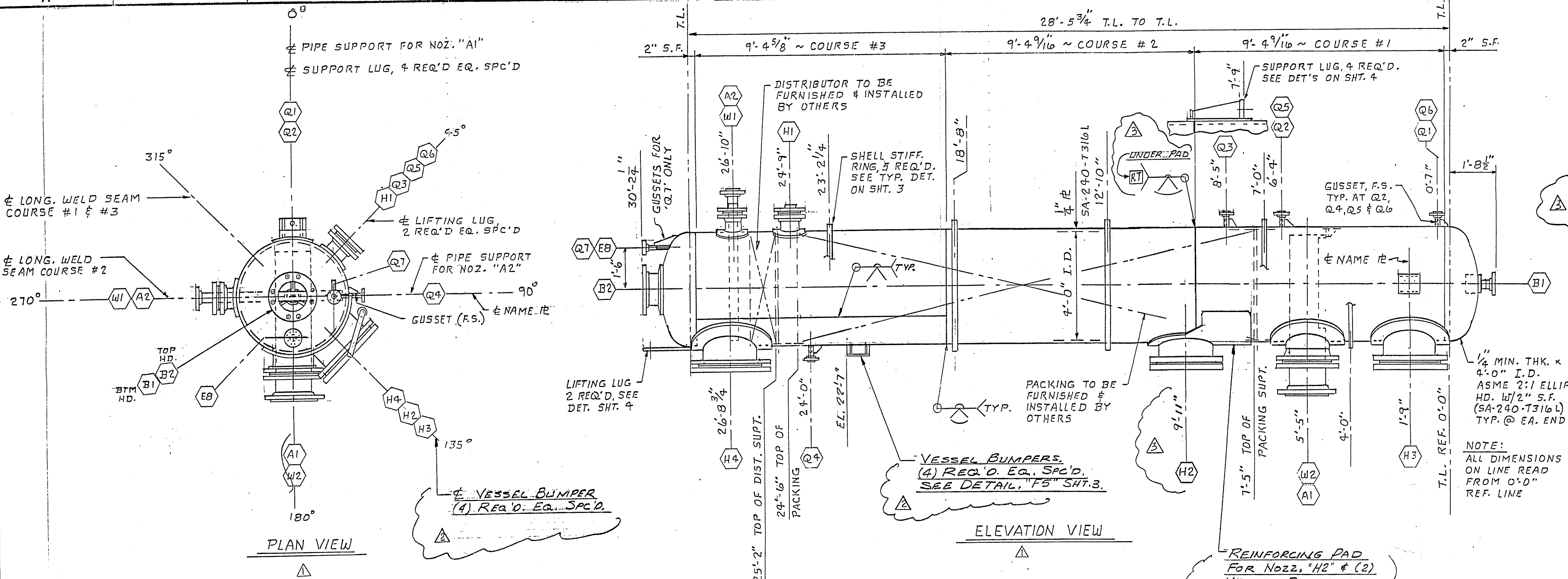
(Mat'l Spec. No., Grade, Size, No.)



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- GENERAL NOTES**
- BOLT HOLES SHALL STRADDLE NATURAL CENTERLINES
 - TEST ALL REINFORCING PADS WITH DRY AIR OR NITROGEN AND SOAP AT 25 P.S.I. PLUG HOLES WITH SILICONE SEALER.
 - SUBSTANCES CONTAINING CHLORINE OR WHICH WILL DECOMPOSE TO HYDROGEN CHLORIDE SHALL NOT BE APPLIED TO ANY PART OF VESSEL.
 - ZINC-COATED (GALVANIZED) COMPONENTS SHALL NOT BE WELDED TO ALLOY PARTS OF THE VESSEL.
 - PAINT:
STAINLESS STEEL: NO PAINT.
CARBON STEEL: SANDBLAST TO NEAR WHITE METAL (SSPC-SP-10), APPLY FIRST COAT OF WISCONSIN PLASITE 7100 AC TO A D.F.T. OF 3 TO 4 MIL. APPLY SECOND COAT OF WISCONSIN PLASITE 7122 TO A D.F.T. OF 2.5 TO 4.0 MIL. APPLY THIRD COAT OF WISCONSIN PLASITE 7122 TO A D.F.T. OF 2.5 TO 4 MIL. (PER UCC PAINT SPEC. PCN-213.)
 - AFTER PAINTING VESSEL, STENCIL ON EDGE OF MAINWAY FLANGES IN A PROMINENT LOCATION IDENTIFYING THE PAINT SYSTEM USED.
 - HOLD HYDRO. TEST FOR (1) HOUR, MIN. WATER SHALL HAVE A CHLORIDE ION CONTENT OF NOT MORE THAN 50 PPM. TEST LIQUID SHALL NOT BE IN CONTACT WITH STAINLESS STEEL FOR MORE THAN 72 HOURS.
 - ALL EXPOSED MACHINE SURFACES SHALL BE CLEANED WITH SOLVENT AND COATED WITH A RUST PREVENTATIVE. ALL OPENINGS SHALL BE COVERED WITH WOOD COVERS FOR SHIPMENT.
 - ALL CARBON STEEL LAP JOINT BACK-UP FLANGES SHALL BE GALVANIZED.
- EXEMPT FROM IMPACT TESTING PER UHA-51

NATIONAL BOARD NO. 1
CERTIFIED BY
Continental Fabricators, Inc.
ST. LOUIS, MO.

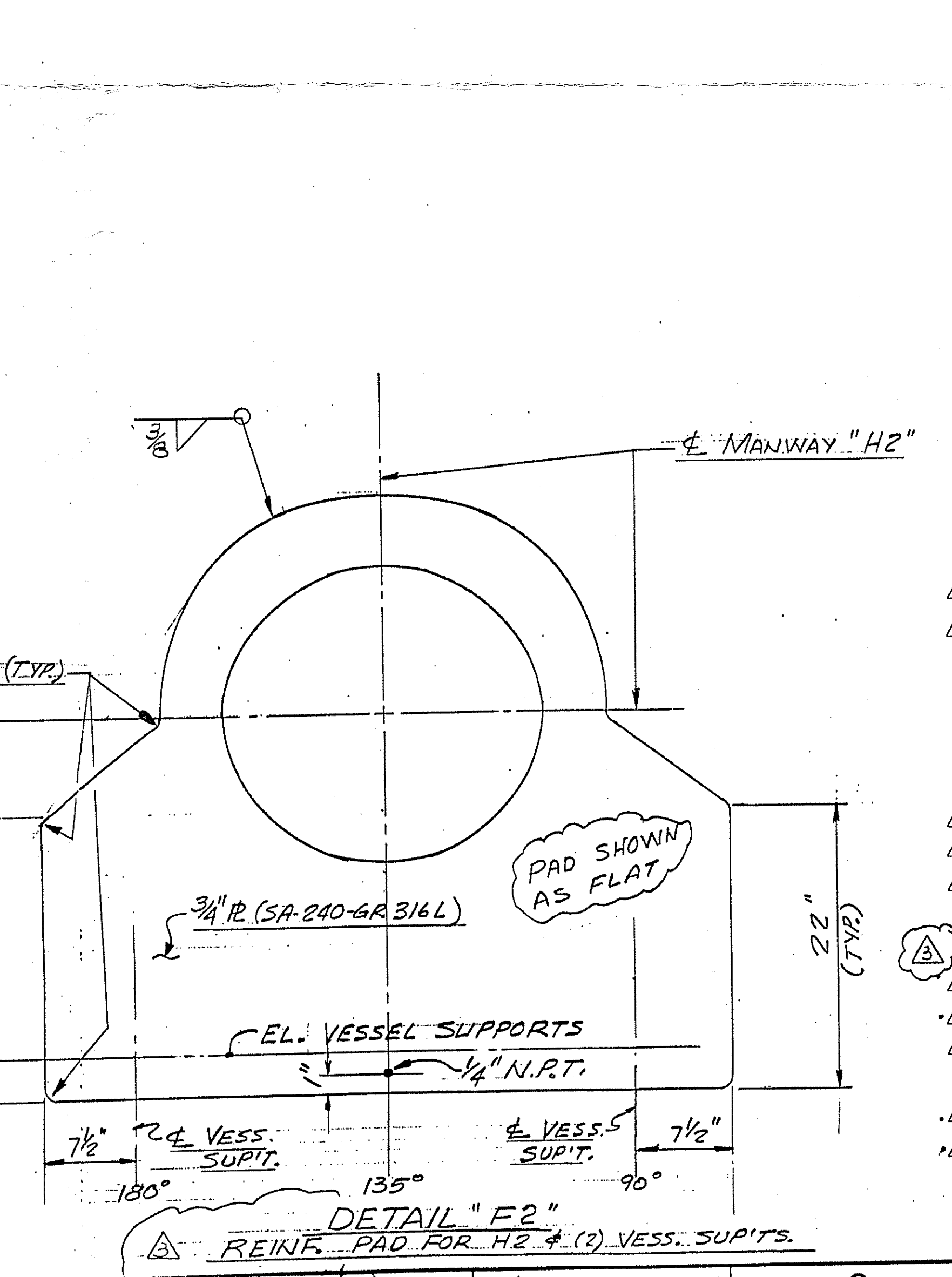
MAWP 95 PSI @ 212 °F
MDMT 0 °F @ 95 PSI
SER. NO. CG-4755 YR. 1992

ITEM: C-7310

BUILT BY CONTINENTAL FABRICATORS, INC.
MFR. SER. NO. CG-4755
ITEM NO. P.O. 8549-49-0040
I.D. 4'-0" W.T. 1/3400#
DATE 8-12-92

MAX. ALL. WK. PRES. 95 PSI AT 272 °F
MFR. ALL. WK. T. 0 °F @ 100 PSI

NAME PL BRACKET DET.



NOZZLE SCHEDULE

Mark	Quan.	Size	Rating	Type-Face	Neck	Pad	Det.	Sht.	Service
W2	1	18"	CL.150	R.F.W.N. FLG.	SCH. 40S	1" x 6" WIDE	1	2	SUPPORT FOR A1
W1	1	6"		R.F.W.N. FLG.	SCH. 40S	1" x 2 3/8" WIDE	2	2	SUPPORT FOR A2
Q7	1	1 1/2"		LAP JT. STUB END	SCH. 80S		5	3	PRESSURE INDICATOR
Q6	1	1 1/2"			SCH. 80S		5	3	LEVEL GAGE LOWER
Q5	1	1 1/2"			SCH. 80S		5	3	LEVEL GAGE UPPER
Q4	1	1 1/2"			SCH. 80S		5	3	TEMPERATURE INDICATOR - TOP
Q3	1	1 1/2"			SCH. 80S		5	3	TEMPERATURE INDICATOR - BOT.
Q2	1	3"			SCH. 40S	1" x 2" WIDE	9	3	LEVEL INDICATOR UPPER
Q1	1	3"	CL.150	LAP JT. STUB END	SCH. 40S	1" x 2" WIDE	9	3	LEVEL INDICATOR LOWER
H4	1	24"		R. RING FLG.	3/8" R.	3" x 4 3/4" WIDE	8	4	MANWAY
H3	1	24"		R. RING FLG.	3/8" R.	3" x 4 3/4" WIDE	8	4	MANWAY
H2	1	24"		R. RING FLG.	3/8" R.	3" x 4 3/4" WIDE	8	4	MANWAY
H1	1	8"	CL.150	LAP JT. STUB END	SCH. 40S	1" x 2 3/8" WIDE	7	3	INSPECTION OPENING
E8	1	3"		LAP JT. STUB END	SCH. 40S	1" x 2" WIDE	6	3	SPARE W/BLD.
32	1	14"		R. LAP JT. STUB END	STD. WT.	1" x 4" WIDE	4	3	VAPOR OUTLET
31	1	6"		LAP JT. STUB END	SCH. 40S	1" x 2 3/8" WIDE	3	3	LIQUID OUTLET
A2	1	4"		LAP JT. STUB END	SCH. 40S		2	2	LIQUID INLET
A1	1	16"	CL.150	R. LAP JT. STUB END	STD. WT.		1	2	VAPOR INLET DISTRIBUTOR

WELD PROCEDURES

100	SMAW
111	GTAW
126	FCAW
130	FCAW
139	SMAW
141	SAW
216	FCAW
300	SMAW

NO BUILT

REF. RHONE-POULENC, INC. SPEC. SHT. COLUMN PAGES 1, 2 & 3 REV. 1
SK-101 SPEC. 25004 SHT'S 1-13
VP # 4900 40-C7310-1E

GENERAL SPECIFICATIONS

DESIGN, CONSTRUCTION AND TEST IN ACCORDANCE WITH THE ASME CODE. SECTION VIII DIV. I 1992 EDITION 1992

INSPECTION: INS. CO. YES CUSTOMER YES
ASME STAMPING YES N.B. YES
INTERNAL DESIGN PRESS. 39 PSI @ 212 °F
EXTERNAL DESIGN PRESS. 14.7 PSI @ 212 °F
EFFICIENCY: HEAD 85% SHELL 85%
MDMT = 0 °F @ 95 PSI
CORROSION ALLOWANCE 1/16"
MAWP 95 PSI @ 212 °F LIMITED BY SHELL

RADIOGRAPH SPOT X-RAY PER ASME CODE

HEAT TREATING NONE

SHOP TEST PRESSURE HYDROTEST @ 164 PSI IN HORIZONTAL POSITION FOR 1 HOUR MIN.

MATERIAL SPECIFICATIONS:
HEADS SA-240-T316L
SHELL SA-240-T316L
REINFORCEMENT SA-240-T316L
SUPPORTS SA-510-70
FLANGES SA-105 & SA-182-F316L
NOZZLES: PIPE SA312-T316L PLATE SA-240-T316L
INTERNAL AS NOTED IN DETAILS
FORGINGS SA-182-F316L
STUDS SA-193-B7 NUTS SA-194-2H
GASKETS SPIRAL WOUND TYPE 316 S.S.
W/ GRAFOIL FILLER & C.S. OUTER COMPRESSION RING UNLESS NOTED

ESTIMATED SHIPPING WEIGHT 13,400 #
WEIGHT FULL OF WATER 48,120
TAG ITEM C-7310
NO. REQ'D ONE VPE490040-C7310-1E

Continental Fabricators, Inc.
5601 West Park Ave., St. Louis, Missouri 63110

4'-0" I.D. x 28'-5 3/4" T.L. TO T.L.
GAS COOLER COLUMN

FOR RHONE-POULENC, INC.
LOCATION CHARLESTON, WEST VIRGINIA

DR. ID APPD. SCALE NONE CUSTOMERS NO. 8549-49-0040
CHK. MFR. PAINT SEE GEN'L. DATE 8-12-92
NO. DR. CK. DATE DESCRIPTION

CG-4755 1 4 830-L 3

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