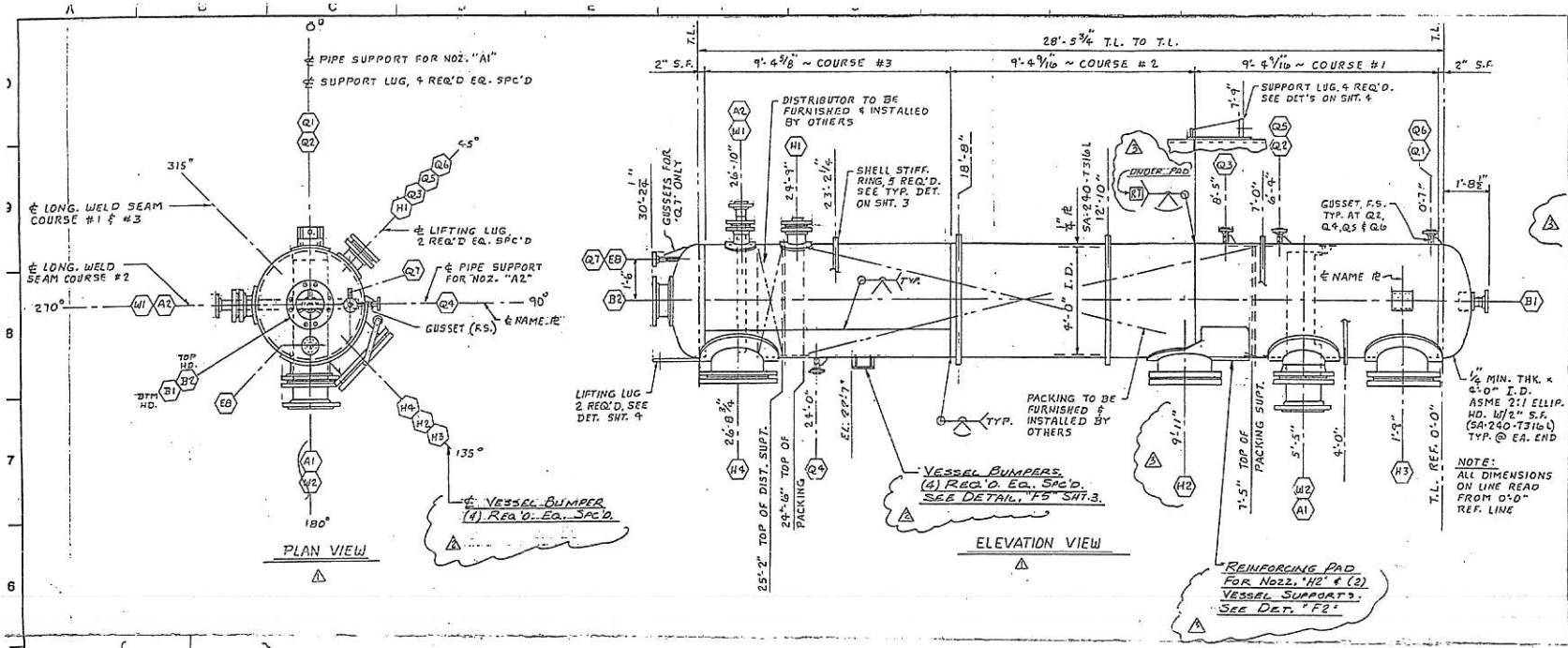

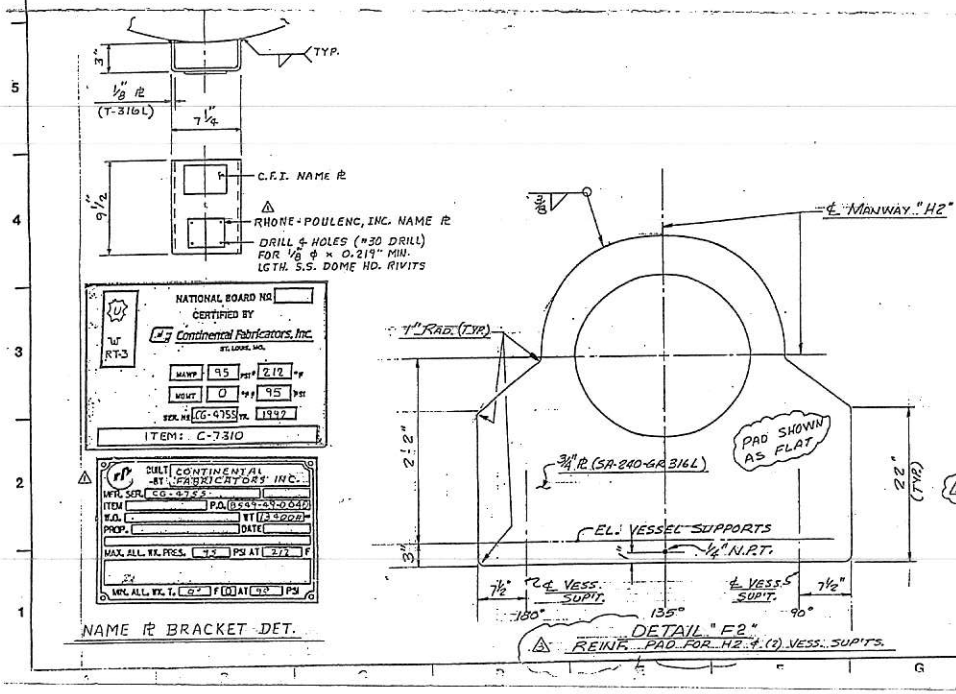

GENERAL NOTES

1. BOLT HOLES SHALL STRADDLE NATURAL CENTERLINES
2. TEST ALL REINFORCING PADS WITH DRY AIR OR NITROGEN AND SOAP AT 25 P.S.I. PLUG HOLES WITH SILICONE SEALER.
3. SUBSTANCES CONTAINING CHLORINE OR WHICH WILL DECOMPOSE TO HYDROGEN CHLORIDE SHALL NOT BE APPLIED TO ANY PART OF VESSEL.
4. ZINC-COATED (GALVANIZED) COMPONENTS SHALL NOT BE WELDED TO ALLOY PARTS OF THE VESSEL.
5. PAINT:
   STAINLESS STEEL: NO PAINT.
   CARBON STEEL: SANDBLAST TO NEAR WHITE METAL (SSPC-SP-10). APPLY FIRST COAT OF WISCONSIN PLASITE F100 AC TO A D.F.T. OF 3 TO 4 MIL. APPLY SECOND COAT OF WISCONSIN PLASITE F122 TO A D.F.T. OF 2.5 TO 4.0 MIL. APPLY THIRD COAT OF WISCONSIN PLASITE F122 TO A D.F.T. OF 2.5 TO 4 MIL. (PER UCC PAINT SPEC. PCM-213.)
6. AFTER PAINTING VESSEL, STENCIL ON EDGE OF MANWAY FLANGES IN A PROMINENT LOCATION IDENTIFYING THE PAINT SYSTEM USED.
7. 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.
8. 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.
9. ALL CARBON STEEL LAP JOINT BACK-UP FLANGES SHALL BE GALVANIZED.

EXEMPT FROM IMPACT TESTING PER UHA-51

GENERAL SPECIFICATIONS

DESIGN, CONSTRUCTION AND TEST IN ACCORDANCE WITH THE ASME CODE.
SECTION VIII DIV. 1 1992 EDITION 1992 ADD

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 @ 106 PSI IN HORIZONTAL POSITION FOR 1 HOUR MIN.	

MATERIAL SPECIFICATIONS:
HEADS SA-240-T316L
SHELL SA-240-T316L
REINFORCEMENT SA-240-T316L
SUPPORTS SA-516-70
FLANGES SA-105 & SA-182-F316L
NOZZLES: PIPE SA312-TP316L PLATE SA-240-T316L
INTERNALS AS NOTED IN DETAILS
FORGINGS SA-182-F316L
BOLTS/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
SO ITEM C-7310
NO. REQ'D ONE VP#490040-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. JD	APPR.	SCALE NONE	ESTIMATING NO. 8549-49-0040
CK. JD	APPR. REF. CON'S NO.	DATE 8-12-92	

DRAWN NO.	SHEET NO.	TOTAL	DRAWING NO.	REV.
CG-4755	1	4	830-L	3

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	1/4" x 6" WIDE	1	2	SUPPORT FOR A1
W1	1	6"		R.F.W.N.FLG.	SCH. 40S	1/4 x 2 9/16" 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 - BOTT.
Q2	1	.3"			SCH. 40S	1/4" x 2" WIDE	9	3	LEVEL INDICATOR UPPER
Q1	1	.3"	CL.150	LAP JT. STUB END	SCH. 40S	1/4" x 2" WIDE	9	3	LEVEL INDICATOR LOWER
H4	1	24"	R RING FLG.	R LAP JT. STUB END	3/8" PL.	3/4" x 4 3/4" WIDE	8	4	MANWAY.
H3	1	24"	R RING FLG.	R LAP JT. STUB END	3/8" PL	3/4" x 4 3/4" WIDE	8	4	MANWAY
H2	1	24"	R RING FLG.	R LAP JT. STUB END	3/8" PL	3/4" x 4 3/4" WIDE	8	4	MANWAY
H1	1	.8"	CL.150	LAP JT. STUB END	SCH. 40S	1/4 x 2 9/16" WIDE	7	3	INSPECTION OPENING
E8	1	3"		LAP JT. STUB END	SCH. 40S	1/4" x 2" WIDE	6	3	SPARE W/BLD.
B2	1	16"		R LAP JT. STUB END	STD. WT.	1/4" x 4" WIDE	4	3	VAPOR OUTLET
B1	1	6"		LAP JT. STUB END	SCH. 40S	1/4" x 2 9/16" 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
276	FCAW
300	SMAW

AS BUILT

REF. RHONE-POULENC, INC. SPEC. SHT. COLUMN PAGES 1, 2 & 3 REV. 1
SK-101 SPEC. 25004 SHT'S 1-13
VP #490040-C7310-1E

REVISIONS

NO.	BY	CK.	DATE	DESCRIPTION
3	JD			ADDED CAT F2 & REL. EL. OF H2
2	JD			ADD ADDED BUMPERS REV. VII.
1	JD			ADDED NOZ'S A2 & B2, ADDED INSPECTION'S NOZ'S A1 AND B1, ADDED SHT. 3 NOTE

APPROVED
APPROVED AS NOTED
RETURNED FOR CORRECTION
LIFE SCIENCES, INC.
DATE 11/5/93
SIGNATURE
ALL DETAILS AND DIMENSIONS ARE THE RESPONSIBILITY OF THE VENDOR. PROCEED WITH FABRICATION. THIS APPROVAL DOES NOT RELIEVE VENDOR OF THE OBLIGATION TO MEET SPECIFICATIONS AND ALL OTHER TERMS AND CONDITIONS OF THE SUBCONTRACT OR PURCHASE ORDER.

CERTIFIED FOR FABRICATION CONTINENTAL FABRICATORS INC. ST. LOUIS, MO.
DATE 11-6-92
BY

10227