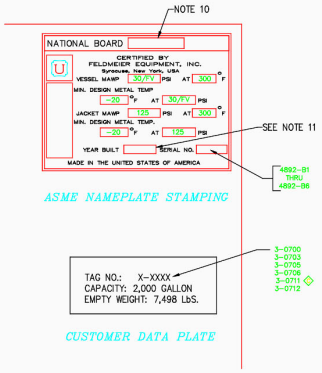
NOZZLE	SIZE	QTY.	DESCRIPTION	SERVICE
A	18"	1	ASME MANWAY WITH 3/16" NOM. DIA. EPDM GASKET AND (7) KNOBS (21" OD x 3/16" THICK REINFORCEMENT PAD) □	MANWAY
B	1 1/2"	1	HEAVY WALL SANITARY CLAMP FERRULE	INLET N2
△ C	2"	1	HEAVY WALL SANITARY CLAMP FERRULE	INLET
△ D	2"	1	HEAVY WALL SANITARY CLAMP FERRULE	OUTLET
△ E1	1 1/2"	1	MNPT NIPPLE	DIMPLED JACKET INLET
△ E2	1 1/2"	1	MNPT NIPPLE	DIMPLED JACKET OUTLET
F □	1/2"	1	NPT THERMOWELL 0.260" BORE x "U"= 7 1/2" x 9 1/4" OVERALL LENGTH WITH RTD	THERMOMETER
G □	1/2"	1	NPT THERMOWELL 0.260" BORE x "U"= 7 1/2" x 9 1/4" OVERALL LENGTH WITH 5" DIA. DIAL	DIAL THERMOMETER
H □	3" x 2"	1	HEAVY WALL SANITARY CLAMP FERRULE FOR CIP ASSEMBLY WITH 2 1/2" DIA. BALL, H.D. CLAMP & GASKET	INLET CIP SPRAYBALL
△ I	2"	1	HEAVY WALL SANITARY CLAMP FERRULE	PSE (RUPTURE DISK)
△ J	1"	1	HEAVY WALL SANITARY CLAMP FERRULE WITH HEAVY DUTY CLAMP, GASKET, & BLIND CAP	SPARE
△ K	2"	1	HEAVY WALL SANITARY CLAMP FERRULE WITH HEAVY DUTY CLAMP, GASKET, & BLIND CAP	SPARE
△ L	1 1/2"	1	HEAVY WALL SANITARY CLAMP FERRULE	VENT
△ M	1 1/2"	1	HEAVY WALL SANITARY CLAMP FERRULE	PI

NOTES:

1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
2. ALL MATERIALS & CONSTRUCTION PER ASME SECTION VIII DIV 1, 1995 CODE EDITION 1996 ADDENDA.
3. ALL WELDERS AND WELDING PROCEDURES ARE CERTIFIED IN ACCORDANCE WITH ASME SECTION IX.
4. SEE NAMEPLATE DETAILS FOR CODE STAMPING REQUIREMENTS.
5. ALL NOZZLES ARE TO BE INSTALLED FLUSH WITH VESSEL I.D..
6. COVER ALL NOZZLES WITH PROTECTORS FOR SHIPMENT.
7. ALL SHELL, HEAD AND NOZZLE ATTACHMENT WELDS TO BE FULL PENETRATION.
8. VESSEL & JACKET ARE EXEMPT FROM IMPACT TESTING PER UHA-51(A).
9. ALL EXTERNAL PIPING TO BE SUPPORTED INDEPENDENT OF VESSEL.
10. TO BE ASSIGNED AT VESSEL COMPLETION.
11. YEAR IN WHICH COMPLIANCE WITH ALL CODE REQUIREMENTS HAS BEEN MET IS TO BE STAMPED IN THIS SPACE.
12. COAT INSULATED SURFACES WITH THURMALOX 70 PRIOR TO INSULATING.
13. TANK IS TO BE PASSIVATED AT COMPLETION.



ASME NAMEPLATE STAMPING

CUSTOMER DATA PLATE

INTERNAL FINISH SPECIFICATION:	
MATERIAL:	#4 FINISH NOT TO EXCEED 25 Ra. –
WELDS:	ALL WELDS ID ARE TO BE MECHANICALLY POLISHED TO A FINAL FINISH NOT TO EXCEED 25 Ra..
EXTERNAL FINISH SPECIFICATION:	
MATERIAL:	ALL OD IS TO HAVE MINIMUM 50 Ra FINISH. –
WELDS:	ALL WELDS OD ARE TO BE GROUND & POLISHED FLUSH AND SMOOTH TO A MAXIMUM 50 Ra FINISH EXCEPT AT LEG JUNCTURES WHICH ARE TO BE AS WELDED SMOOTH & CLEANED ONLY TO REMOVE WELD DISCOLORATION.

RADIOGRAPHIC TESTING	
SHELL: NONE REQ'D	F&D HEADS: SMLS/SPOT
JOINT EFFICIENCY: 0.70	JOINT EFFICIENCY: 0.85

TESTING PRESSURES:	
VESSEL: 50 PSIG	JACKET: 205 PSIG

WEIGHTS:	
EMPTY VESSEL: 7,498 LBS.	FULL @NOM. CAPACITY: 24,170 LBS. USING PRODUCT S.G. = 1.0

OTHER DATA:	
CORROSION ALLOWANCE:	NONE

DESIGN DATA

VESSEL NOMINAL CAPACITY: 2,000 U.S. GALLONS

TANK DESIGN CONDITIONS: PRESSURE: 30 PSIG/FV; MAX. TEMP.: 300 °F; MIN. TEMP.: –20 °F

JACKET DESIGN CONDITIONS: PRESSURE: 125 PSIG; MAX. TEMP.: 300 °F; MIN. TEMP.: –20 °F

VESSEL MATERIAL:	SPEC.	GRADE	THICKNESS/CLASS	NOTES
SHELL:	SA-240	316L	5/16" THICK	114" ID x 32" SHELL LENGTH
TOP HEAD (ASME F&D):	SA-240	316L	7/16" THICK	7.25" IKR, 114" IDR, 1 1/2" SF
BOTTOM HEAD (ASME F&D):	SA-240	316L	7/16" THICK	7.25" IKR, 114" IDR, 1 1/2" SF
SANITARY CLAMP FERRULES:	SA-479	316L	–	–
VESSEL THERMOWELL:	SA-479	316L	–	–
PRODUCT CONTACT TUBING:	A 249/270	TP316LWLD	–	–
REINFORCEMENT PADS: □	SA-240	304	3/16" THICK	21" OD
MANWAY MATERIAL:				
TOP RIM:	SA-479	316L	.58" THK. X 2" WIDE	
TOP SPHERICAL DISH:	SA-240	316L	3/16"	
LOWER RIM:	SA-479	316L	.58" THK. X 6" WIDE	□
LOWER LUGS:	SA-479	304		
SWING LUGS:	SA-479	304	1" THK. X 2" X 2 1/4"	
BOLTS:	SA-193	B8S		UNS NO. S21800 "NITRONIC 60"
BOLT CLEVIS:	SA-240	304		
NUT HANDLE:				PHENOLIC
NUT HANDLE INSERT:	SA-479	304		
CLEVIS PINS:	SA-479	304	1/2" DIA.	
"O" RING:	EPDM			FDA ACCEPTED
HEAT TRANSFER JACKET:				
DIMPLED JACKET:	SA-240	304	14 GA (0.0751")	2" x 2" CENTERS (OPTION #1)
DIMPLED JACKET MANIFOLDS:	SA-240	304	10 GA (0.135")	–
DIMPLE JACKET INLET & OUTLET:	SA-312	TP304 WLD	SCH. 40	NIPPLE THREAD ONE END.
OTHER MATERIAL:				
PIPE LEGS:	SA-312	TP304 WLD	SCHED. 10	(3)– 8" PIPE
FOOT PADS:	SA-240	304	1/2" THICK	(3)– 6" SQUARE
LIFTING LUGS: 1 1/2" DIA. HOLE	SA-240	304	1/2" THICK	8" WIDE x 8 1/4" HEIGHT
ASME NAME PLATE:	SA-240	304	–	–
SHEATHING HEADS:	SA-240	304	□ 12 GA (0.105")	2" IKR, 118 7/8" IDR, 1" SF
SHEATHING:	SA-240	304	12 GA (0.105")	119" OD x 44 1/2" SHELL LENGTH
INSULATION:	TOP, SIDE & BTM. W/2" THICK CHLORIDE & ASBESTOS FREE FIBERGLASS INSULATION.			

ALL PRODUCT CONTACT WELDING IS TO BE DONE WITH ALLOY C-276 WELDING WIRE.

TAG NO: 3-0700, 3-0703, 3-0705 3-0706, 3-0711 & 3-0712 ◇

STORAGE TANKS

REV	DESCRIPTION	DATE
C	– REVISED TAG NO. – RELOCATED LIFTING LUGS FROM SIDE TO TOP HEAD.	12-29 97
B	– ADDED CIP SPRAY BALLL ASSEMBLY. – ADDED REINFORCEMENT PADS. – ADDED RTD & 5" DIAL THERMOMETER. – CHANGED BOTTOM HEAD FROM FLAT TO DISHED HEAD. – RELOCATED DIMPLED JACKET & ADDED IMPINGMENT PLATE. – RELOCATED FITTINGS & LEGS.	12-16 97
A	– CHANGED LEGS FROM (6)–3" TO (3)–8" SCH. 40 PIPE. – CHANGED FITTING "E1 & E2" FROM 2" TO 1 1/2". – CHANGED FITTING "D" FROM 1 1/2" TO 2". – CHANGED FITTING "C" FROM 1" TO 2". – ADDED HEAVY DUTY CLAMPS, GASKETS & BLIND CAPS FITTINGS "J & L". – ADDED FITTINGS "I, J, K & M".	5-22 97

FILE NAME: \DWGS\ BIP21 | P.O. No. P147197-00

FELDMEIER EQUIPMENT
Syracuse, New York

SCALE: NONE | ENGRG. Approved By: Al | REV C

DATE 11-14-96 | SHEET: 1 of 4

QTY (6)– 2,000 GALLON VERTICAL, ROUND, INSULATED SHEATHED STAINLESS STEEL STORAGE TANK.

ROXANE LABORATORIES, INC.
COLUMBUS, OHIO

DRAWING NO. 4892-B