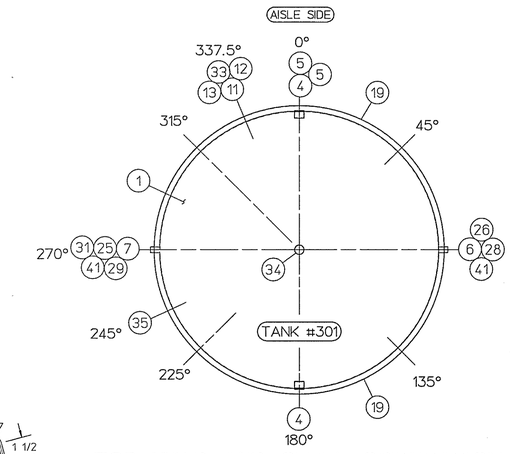
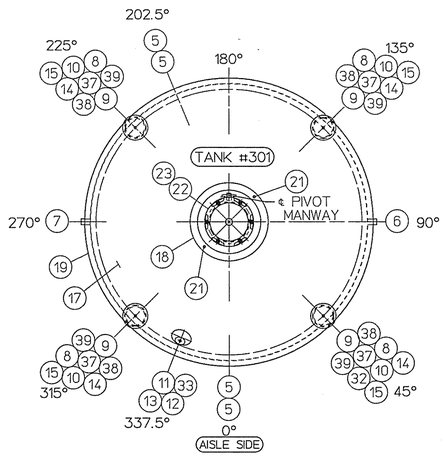
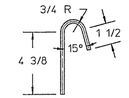


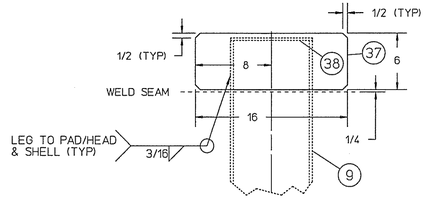
TOP HEAD AND SHELL ORIENTATION
TRUE ORIENTATION



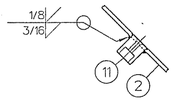
BOTTOM VIEW OF
BOTTOM HEAD ORIENTATION
TRUE ORIENTATION



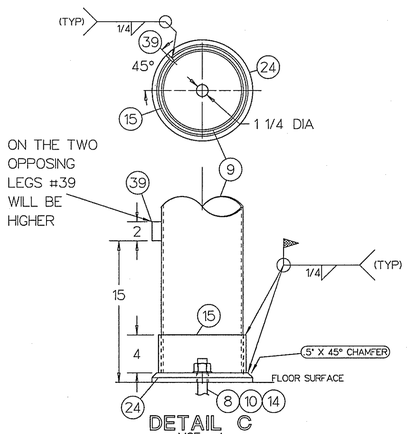
DETAIL D
MGF = 6



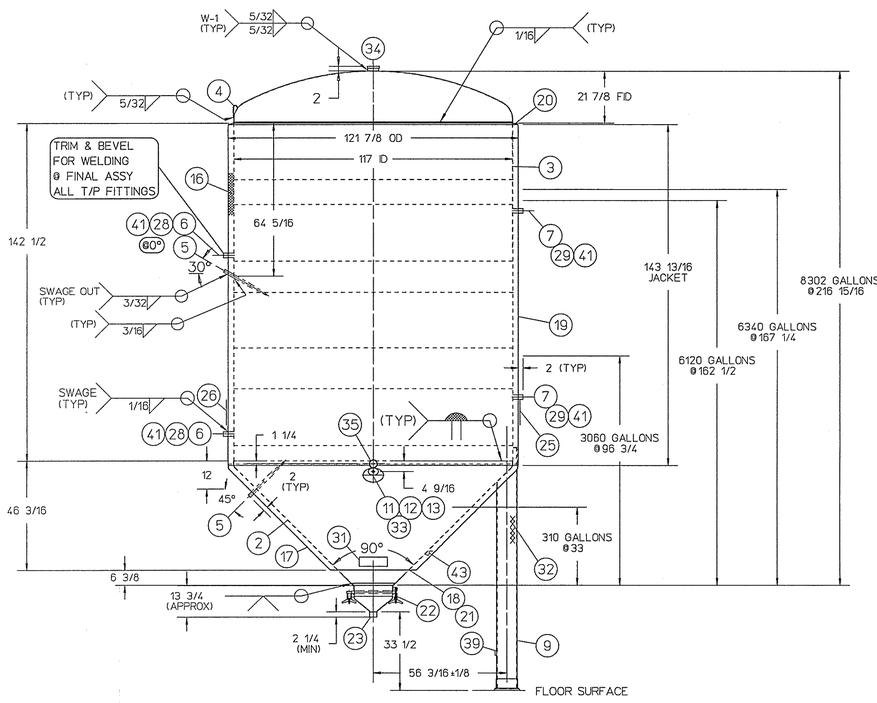
DETAIL B
MGF = 4



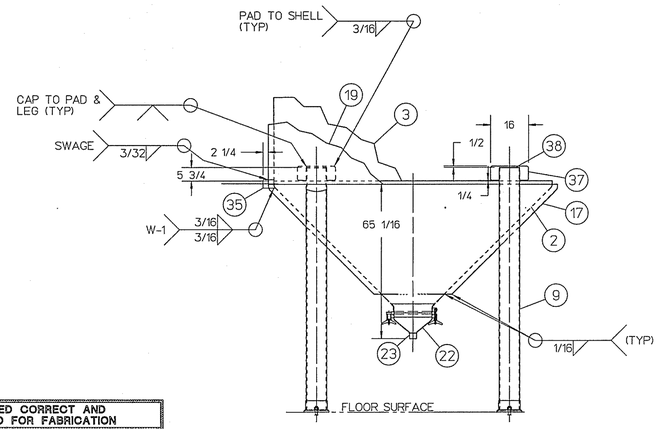
DETAIL E
MGF = 8



DETAIL C
MGF = 4



ELEVATION VIEW
SEE TOP & BOTTOM HEAD VIEWS FOR TRUE ORIENTATION



DETAIL A

CUST NO.	ITEM NO.	NO. REQ'D	PART NO.	DESCRIPTION	DRAWING NO.
	1	1	200	8,300 GAL MODEL "F" CONE BOTTOM FERMENTER	FP13114 D
1	1	1	H07	HEAD TOP ASME F&D 10GA 304S/S 8" KR 1.5" SF 117" ID	
2	1	1	C20	HEAD BOTTOM CONE 117" ID 7GA 304 S/S 2"IKR 1.5"SF 90DEG INCL	
3	1	1	103	SHELL ASSY 10GA 304 S/S W/20GA 304 S/S INFLATED TEMP-PL UPPER BAND	FP13088 D
				AND 7GA 304 S/S W/18GA 304 S/S INFLATEDTEMP-PL LOWER BAND	
4	2	2	9824533	LUG LIFTING SGL WALL .375"THK 304 S/S 2B FINISH	9000476 B
5	2	2	9824639	WELL ASSY THERM .75"NPT 316L S/S OAL 20 5/8"	
6	2	2	(REF)	CONN TP-PL (INLET) 304 S/S 1.5" SCH 40 BEVELED FOR WELDING	FP13088 D
7	2	2	(REF)	CONN TP-PL (OUTLET) 304 S/S 1.5" SCH 40 BEVELED FOR WELDING	FP13088 D
8	4	4	CUST FURN	TIE DOWN BOLT 1-8NC (CUSTOMER FURNISH / INSTALL)	
9	4	4	709	LEG ASSY PIPE 8" SCH 40 304 S/S GLASSBEAD BLAST	
10	4	4	CUST FURN	WASHER FLAT 1" (CUSTOMER SUPPLY / INSTALL)	
11	1	1	9803210	TRYCOCK PERLICK .25" 316 S/S F-27805-SS, GOOD FOR 30 PSI	9900633 B
12	1	1	9802383	GASKET FIBER PERLICK F-11284-1	9900633 B
13	1	1	9802384	ADAPTER WELD IN .25" 304 S/S FOR PERLICK PETCOCK 1.25"LG	
14	4	4	CUST FURN	NUT HEAVY HEX 1-8NC (CUSTOMER FURNISH / INSTALL)	
15	4	4	324W167598	LEG COLLAR 304 S/S .25" THICK X 4"TALL X 8.75"ID	
16	A/R	A/R	9902473	INSULATION 2"URETHANE GRVD 24"X48"	
17	1	1	C17	HEAD BOTTOM OUTER CONE 12 GA 121.7813" OD 304 S/S 90DEG 2B/2B	
18	1	1	9827623	RING ENCLOSURE .1874" 304 S/S 2B/2S	
19	1	1	119	JACKET ASSY 12 GA 304 S/S 121.9375" OD x 145" LONG	
20	1	1	9827637	RING BREAST 2" 117.3"ID 14GA 304 S/S 2B/2S	
21	2	2	9901490	VENT ASSY JACKET 1" DIA. 304 S/S	9901490 A
22	1	1	750P294433	MANWAY ASSY MC10 16"ID 304S/S MATERIAL 2B/2S WELDS #4 I.D./ BUFF O.D.	9500542 D
23	1	1	751P294433	TUBE OUTLET 3" OD X .065" WALL 304 S/S	
24	4	4	315W167598	BASE PLATE 1" THICK X 10.625"OD X 1.125"ID 304 S/S	
25	1	1	3743	PLATE NAME "MUELLER" 304 S/S 9.5"X2.175"X22GA THK W/3M#468 ADHESIVE	
26	1	1	9803082	PLATE DATA "MUELLER" 5.25"X3.75"X.003"THK FOIL W/3M#468 ADH	
27					
28	2	2	9901403	LABEL "IN" 1.5"X.5"X.005"THK MYLAR W/3M#468 ADH	
29	2	2	9901404	LABEL "OUT" 1.5"X.5"X.005"THK MYLAR W/3M#468 ADH	
30	1	1	9900380	ENVELOPE ASSY INSTRUCTION SINGLE WALL TANK	
31	1	1	9900362	PLATE WARNING "PRESSURE" 316 /316L S/S 3.5"X2"X 16GA THK	
32	1			PERMANENT STAMPED SERIAL NUMBER	
33	1	1	9827639	RECESS COLLAR 7 GA 304L S/S	
34	1	1	010W164563	FITTING DN100 MALE 304 S/S 2.125"LG FOR 4" TUBE (CUST FURN)	
35	1	1	9827640	STUB PIPE 3" SCH 10 304 S/S 6.5"LG	
36	1				
37	4	4	9827641	DOUBLER PLATE 7 GA 304	
38	4	4	9827642	LEG CAP .25" 304 S/S ASSY TO MAKE PATTERN	
39	4	4	739	LUG LEVELING .25" X 1" X 2" LONG 304 S/S	9000000 C
40					
41	4	4	9824549	LABEL ATTENTION "CUSTOMER" 3.5"X1.75"X.005"THK MYLAR W/3M#468 ADH	
42	1	1	9827643	LEG HOLDING JIG NON-RETURN- ABLE FOR REDHOOK 8300GAL TANKS	FP07936 C
43	48	SF	9808680	INSULATION 2"THK ALUMINA SILICA 6# DENSITY THERMAL CERAMIC FIBER	

NOTES:

1. ALL MATERIALS OR COMPONENT PARTS CALLED OUT ON THIS DRAWING SHALL BE AS SPECIFIED "OR APPROVED EQUAL."
2. DIMENSIONS, UNLESS OTHERWISE INDICATED, ARE NOMINAL AND STANDARD SHOP TOLERANCES ARE TO BE EXPECTED. (ENPE 222) MEASUREMENTS FOR ANY FIELD ATTACHMENTS SHOULD BE VERIFIED ON SITE BY OTHERS BEFORE FABRICATION OF THE ATTACHMENTS.
3. CORROSION DISCLAIMER
   PAUL MUELLER COMPANY IS NOT RESPONSIBLE FOR CORROSION OR SUITABILITY FOR USE OF ANY MATERIAL IN ANY PARTICULAR APPLICATION ! THE CORROSION RESISTANCE AND SUITABILITY FOR USE OF A MATERIAL IS DEPENDENT ON OPERATING ENVIRONMENT AND CONDITIONS, CLEANING PRACTICES, AND MANY OTHER FACTORS BEYOND THE CONTROL OF THE EQUIPMENT FABRICATOR. THE USER OF THE EQUIPMENT BEARS TOTAL RESPONSIBILITY FOR CORROSION OR SUITABILITY FOR USE OF ALL MATERIALS IN THEIR PARTICULAR APPLICATION !
4. ALL FLANGES WILL HAVE BOLT HOLES STRADDLE THE 0°-180° & 90°-270° CENTER LINES, UNLESS SPECIFIED OTHERWISE.
5. VESSEL TO BE VENTED FOR SHIPMENT.
6. ALL DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE.
7. ALL WELD SIZES ARE MINIMUM AFTER GRINDING.
8. SUITABLE PRESSURE RELIEF VALVE MUST BE INSTALLED BY CUSTOMER FOR TEMP-PLATE OPERATION.
9. SUITABLE PRESSURE AND/OR VACUUM RELIEF VALVE MUST BE INSTALLED BY CUSTOMER FOR VESSEL OPERATION.
10. PRODUCT SPECIFIC GRAVITY: 1.0135-1.0560.
11. REMOVE HEAT TINT FROM VESSEL INTERIOR WITH SHEET POLISHER.
12. VESSEL DESIGNED FOR SEISMIC ZONE: 2A.
13. ENTIRE CONE (ITEM #17), LEGS (ITEM #9), FOOT ASSY (ITEM #10), BRACES (ITEMS #14 & #15), FOOT PADS (ITEM #8), AND MANWAY ASSY (ITEM #22) ARE TO BE GLASS BEAD BLASTED (GB).
14. CUSTOMER TO PROVIDE SUFFICIENT PIPE SUPPORT & PIPING EXPANSION JOINT TO PREVENT EXTERNAL NOZZLE LOADS.
15. NO ESCUTCHEON PLATES ARE TO BE USED ON THESE TANKS.
16. THIS TANK IS TO BE INSTALLED IN A "SHOW PLACE" FACILITY. PLEASE USE EXTRA CARE DURING PRODUCTION FOR TOP QUALITY RESULTS.
17. MANWAY HINGE (PIVOT) POINT IS TO BE LOCATED ON THE 0°-180° AXIS AS SHOWN.
18.
19. INSULATION (ITEM #16) IN BOTTOM CONE TO BE INSTALLED USING "PIN" METHOD.
20. CUSTOMER TANK NUMBER TO BE STAMPED ON SWIVEL SUPPORT OF THE MANWAY.

NOTES CONT:

21. ALL TEMP-PLATE INLET & OUTLET FITTINGS ARE TO BE CAPPED OFF PRIOR TO SHIPMENT.
22. FOR DYE TEST REQUIREMENTS SEE PROCEDURE ENG 103.
23. URETHANE INSULATION TO BE PLACED ON SIDEWALL. INSWOOL INSULATION TO BE PLACED ON BOTTOM CONE.

CERTIFIED CORRECT AND RELEASED FOR FABRICATION

FABRICATION WILL BE IN ACCORDANCE WITH THIS DRAWING. ANY FURTHER CHANGES WILL BE REVIEWED FOR COST AND DELIVERY ADJUSTMENTS.

PAUL MUELLER COMPANY

SYM.	CHANGE	BY	DATE

REVISIONS

MATERIAL FINISHES

INTERIOR	2B/(NOTE #11)	EXTERIOR	2B/(NOTE #13)

WELD FINISHES

INTERIOR	FINE GRIND #4
EXTERIOR	BUFF (BF)/ (NOTE #13)

SPECIFICATIONS
VESSEL

CODE: NONE

RADIOGRAPHY

Top Head	Top Head To Shell	Shell	Bottom Head	Bottom Head To Shell

HEAT TRANSFER

CODE: NONE

RADIOGRAPHY

Top Head	Top Head To Shell	Shell	Bottom Head	Bottom Head To Shell

SIZE (GALLONS) - MODEL	SERIAL NUMBER
8,300 GAL "F"	294433-2

VESSEL INFORMATION

DESIGN PRESSURE	14.9	PSI	DESIGN TEMP.	100	°F
HYDRO TEST PRESSURE	0	PSI	DESIGN VACUUM	4 WATER	IN HG.

HEAT TRANSFER INFORMATION

DESIGN PRESSURE	100	PSI	DESIGN TEMP.	100	°F
TEST PRESSURE	130	PSI	VOLUME	.736	CU. FT.

HEATING / COOLING

MEDIUM	NONE / GLYCOL	

EST. EMPTY WEIGHT =	8680 LBS
SCALE	1"=32" (DO NOT SCALE THIS DRAWING)

DRAWN BY	A. FOELL	DATE	01/21/03
REVIEWED BY	JIM FERGUSON	DATE	01/21/03
REVIEWED BY		DATE	
APPROVED BY		DATE	

SOLD TO	REDHOOK ALE BREWERY
ADDRESS	PORTSMOUTH, NH
CUSTOMER ORDER NO.	AL TRIPLETT

TITLE: 8,300 GAL MODEL "F" CONE BOTTOM FERMENTER

QUANTITY: ONE

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MUELLER
P. O. BOX 828 / SPRINGFIELD, MISSOURI 65801-0828, U.S.A.

SALES ORDER & SERIAL NO.	DRAWING NO.
294433-2	FP13114 D

SEPIA FROM DWG. NO. FP13064-D