



ITEM NO.	NO. REQ'D	PART NO.	DESCRIPTION	DRAWING NO.
1	1	900	TANK ASSY 16,600 GAL MODEL "F" FERMENTER	FP13065 D
1	1	901	HEAD TOP 10GA 304 S/S ASME F&D 8"KR 1"SF (146)	
2	1	C02	HEAD BOT INNER 7GA 304 S/S 90° CONE 2"KR 1.5"SF (9827620)	
3	1	903/904	SHELL ASSY 10GA 304 S/S W/20GA 304 S/S INFLATED TEMP-PL UPPER BANDS AND 7GA 304 S/S W/18GA 304 S/S INFLATED TEMP-PL LOWER BAND	FP13087 D
4	2	9901259	LUG LIFTING ASSY SVW S/S .25 & .25"THK 304 MATL. 9000# CAPACITY	9000480 B
5	3	9824639	WELL ASSY THERM .75"NPT 316L S/S OAL 20.625"	
6	3	(REF)	CONN TP-PL INLET 1.5" 304 S/S SCH 40 PIPE 6"LG TOE(9801781)	FP13087 D
7	3	(REF)	CONN TP-PL OUTLET 1.5" 304 S/S SCH 40 PIPE 6"LG TOE(9801781)	FP13087 D
8	1	750P294433	MANWAY ASSY MC10 16"ID 304 S/S (REDHOOK STYLE)	
9	4	109W164563	LEG 12" 304 S/S SCH 10 PIPE	9000263 B
10	4	CUST FURN	TIE DOWN BOLT 1-8NC (CUSTOMER SUPPLIED/INSTALLED)	
11	4	CUST FURN	WASHER FLAT 1" (CUSTOMER SUPPLIED/INSTALLED)	
12	4	CUST FURN	NUT HEAVY HEX 1-8NC (CUSTOMER SUPPLIED/INSTALLED)	
13	1	9803210	TRYCOCK PERLICK .25" 316 S/S F-27805-SS	9900633 A
14	1	9802383	GASKET FIBER PERLICK F-1284-1	9900633 A
15	1	9802384	ADAPTER WELD IN .25" 304 S/S	DETAIL D
16	4	116W164563	BASE PLATE 1"THK 15.5"OD W/1.25"ID 304 S/S	
17	4	117W164563	LEG COLLAR 304 S/S .25"THK X 4"HIGH W/12.875"ID	
18	A/R	9902473	INSULATION 2" URETHANE 2' X 4' GROOVED	
19	1	C19	HEAD OUT BOT 12GA 304 S/S 90° CONE 2"KR 1"SF	
20	1	9827623	RING ENCLOSURE .1875"NOM 304 S/S 35.8125"OD X 26.8125"ID	
21	2	921	JACKET SECTIONS 12GA 304 S/S	
22	1	9827637	BREAST RING 14GA 304 S/S	9000582 C
23	2	9901490	VENT ASSY JACKET 1"IDA 304 S/S	9901490 A
24				
25	1	75P294433	TUBE 3"OD X .065"W 304 S/S POLISHED ID 6"LONG (OUTLET)	
26	4	126W164563	LUG LEVELING .25"THK 304 S/S 1"W X 2"LG	
27	1	3743	PLATE NAME PROCESS 2.175" X 9.5" 22GA 304 S/S	
28	1	9803082	PLATE DATA MUELLER FOL 3.75" X 5.25" X .003"THK W/PRESSURE	
29	6	9808631	LABEL CAUTION USE BACKUP WRENCH 3" X 2" LABEL BLUE W/WHITE LETTERING	
30	3	9901403	LABEL "IN" .5" X 1.5" SILVER W/BLUE LETTERING POLY-STIK-S .005"THK	
31	3	9901404	LABEL "OUT" .5" X 1.5" SILVER W/BLUE LETTERING POLY-STIK-S .005"THK	
32	1	9900380	ENVELOPE ASSY INSTRUCT SINGLE WALL TANK	
33	1	9900362	PLATE CAUTION PRESSURE "CAUTION: THIS VESSEL MUST BE PROPERLY	
34	1		PERMANENT STAMPED SERIAL NUMBER	
35	1	9827639	RECESS COLLAR 7GA 304 S/S W/3"ID	9900064 A
36				
37	1	137W164563	PIPE STUB 3"SCH 10 304 S/S BEVEL END	
38	1	010W164563	EXTENSION DN100 304 S/S 4.179"OD X 2"LG (TOP HEAD)	
39				
40	4	140W164563	CAP LEG SUPPORT 1"THK X 2" X 25"LG 304 S/S	DETAIL B
41				
42				
43	6	9824549	LABEL ATTENTION "CUSTOMER" 1.75"X3.5"X.005"THK MYLAR W/3M#468	
44	1	153W164563	LEG HOLDING JIG FOR REDHOOK 16,600 GAL TANKS	FP08723 C
45	1	005W164563	FITTING METRIC 304 S/S (CUSTOMER SUPPLIED DN100-TOP HEAD)	
46	A/R	9808680	INSULATION 2"THK ALUMINA SILICA 6# DENSITY THERMAL CERAMIC FIBER	

NOTES:

- ALL MATERIALS OR COMPONENT PARTS CALLED OUT ON THIS DRAWING SHALL BE AS SPECIFIED OR APPROVED EQUAL DIMENSIONS UNLESS OTHERWISE INDICATED. ARE NORMAL 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.
- 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.
- ALL FLANGES WILL HAVE BOLT HOLES STRADDLE THE 0°-180° & 90°-270° CENTER LINES UNLESS SPECIFIED OTHERWISE.
- VESSEL TO BE VENTED FOR SHIPMENT.
- ALL DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE.
- ALL WELD SIZES ARE MINIMUM AFTER GRINDING.
- SUITABLE PRESSURE RELIEF VALVE MUST BE INSTALLED BY CUSTOMER FOR TEMP-PLATE OPERATION.
- SUITABLE PRESSURE AND/OR VACUUM RELIEF VALVE MUST BE INSTALLED BY CUSTOMER FOR VESSEL OPERATION.
- PRODUCT SPECIFIC GRAVITY: 1.035-1.0560
- REMOVE HEAT TINT FROM VESSEL INTERIOR WITH SHEET POLISHER.
- VESSEL DESIGNED FOR SEISMIC ZONE #2A
- ENTIRE CONE ITEM #19, LEGS ITEM #9, FOOT ASSY ITEM #17, FOOT PADS ITEM #18, AND MANWAY ASSY ITEM #24 ARE TO BE CLASS B BEAD BLASTED (B8)
- NO ESCUTCHEON PLATES ARE TO BE USED ON THESE TANKS.
- THESE TANKS ARE TO BE INSTALLED IN A NEW PLANT AND WILL BE THE "SHOW PLACE". PLEASE USE EXTRA CARE DURING PRODUCTION FOR TOP QUALITY RESULTS.
- ITEM #2 TO BE ASSY FITTING FOR #36 & 38. CUSTOMER SUPPLIED METRIC SIZE 304 S/S AND MAILED TO SALES FOR INSTALLATION BY PMCO.
- STAMP TANK NUMBER AT HINGE POINT ON MANWAY.
- ITEMS #16 & #17 SHALL BE SHIPPED LOOSE.
- URETHANE INSULATION TO BE PLACED ON JACKET. INSULATION TO BE PLACED ON BOTTOM CONE.
- BOTTOM HEAD AND LEGS TO BE INSTALLED TO BOTTOM HALF OF TANK PRIOR TO SHELL TO SHELL WELDING.

MATERIAL FINISHES			
INTERIOR	2B/NOTE #11	EXTERIOR	2B/NOTE #13

WELD FINISHES			
INTERIOR	#4		
EXTERIOR	BF/NOTE #13		

SPECIFICATIONS VESSEL			
CODE	NONE		
RADIOGRAPHY			
Top Head	Top Head To Shell	Shell	Bottom Head To Shell
HEAT TRANSFER			
CODE	NONE		
RADIOGRAPHY			
Top Head	Top Head To Shell	Shell	Bottom Head To Shell

SIZE (GALLONS) - MODEL	SERIAL NUMBER
16600 GAL F	294433-3 & -4

VESSEL INFORMATION		HEAT TRANSFER INFORMATION	
DESIGN PRESSURE	15 PSI	DESIGN TEMP.	100 °F
HYDRO TEST PRESSURE	0 PSI	VACUUM	4"WATER IN HG.
DESIGN PRESSURE	100 PSI	DESIGN TEMP.	100 °F
TEST PRESSURE	130 PSI	VOLUME	155 cu. FT.
MEDIUM	NONE / GLYCOL		

EST. EMPTY WEIGHT =	13,200	LBS
SCALE	1/32"=1"	(DO NOT SCALE THIS DRAWING)
DRAWN BY	S. MACKAY	DATE 11/18/02
REVIEWED BY	R. ZILER	DATE 11/20/02
APPROVED BY		DATE
SOLD TO	REDHOOK ALE BREWERY	
CUSTOMER	PORTSMOUTH, NH	
ADDRESS	AL TRIPLETT	

TITLE
**16,600 GAL MODEL "F"
CONE BOTTOM FERMENTER**

QUANTITY TWO

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PAUL MUELLER COMPANY
P. O. BOX 828 / SPRINGFIELD, MISSOURI 65801-0828, U.S.A.
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SALES ORDER & SERIAL NO. 294433-3 & -4
DRAWING NO. FP13065 D

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

SYMBOL	CHANGE	BY	DATE
B	ADD NOTE #20 & TANK #309 IN TOP & BTM VIEWS. S/N WAS -9 & -10	SWM	01/09/03
A	DELETED ITEMS #24, 36, 39, 41, 42. ADD PART NOS & NOTES #18 & 19. SHOW AISLE SIDE. TANK # WAS 105. M/W PIVOT WAS AT 0°. DELETE M/W PIVOT ORIENTATION. NOTE: ADD ITEM #46	SWM	12/05/02