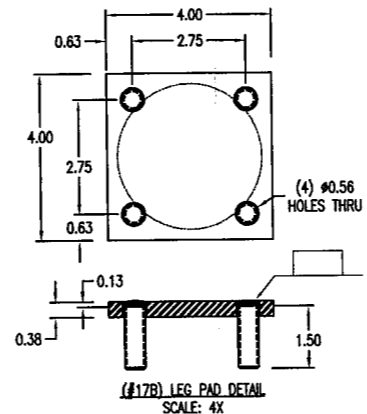
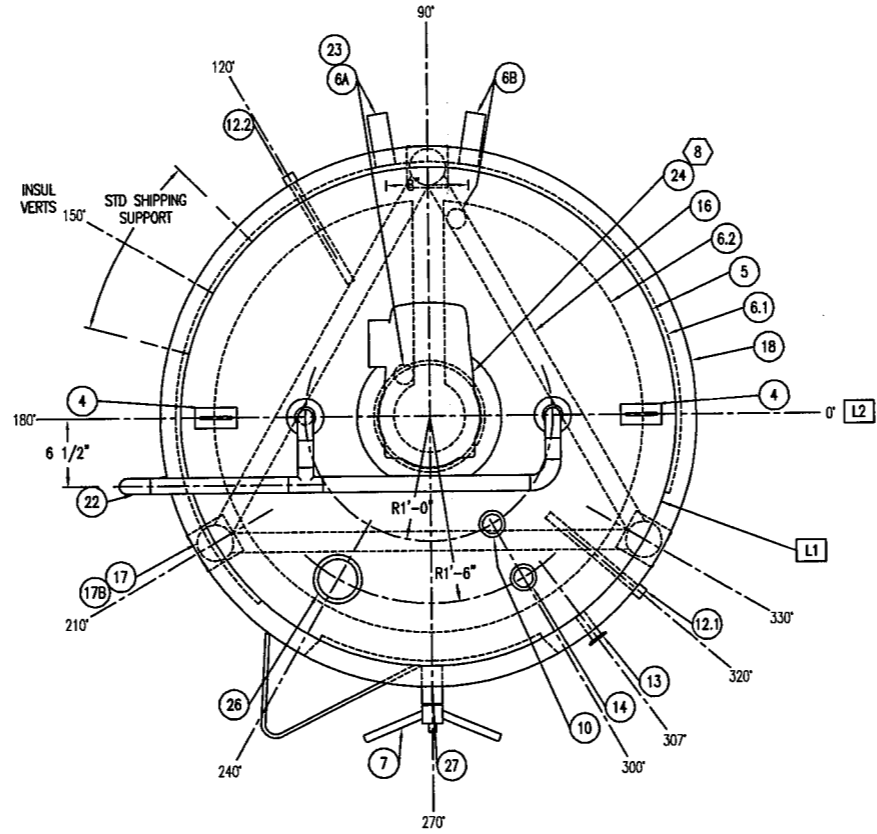
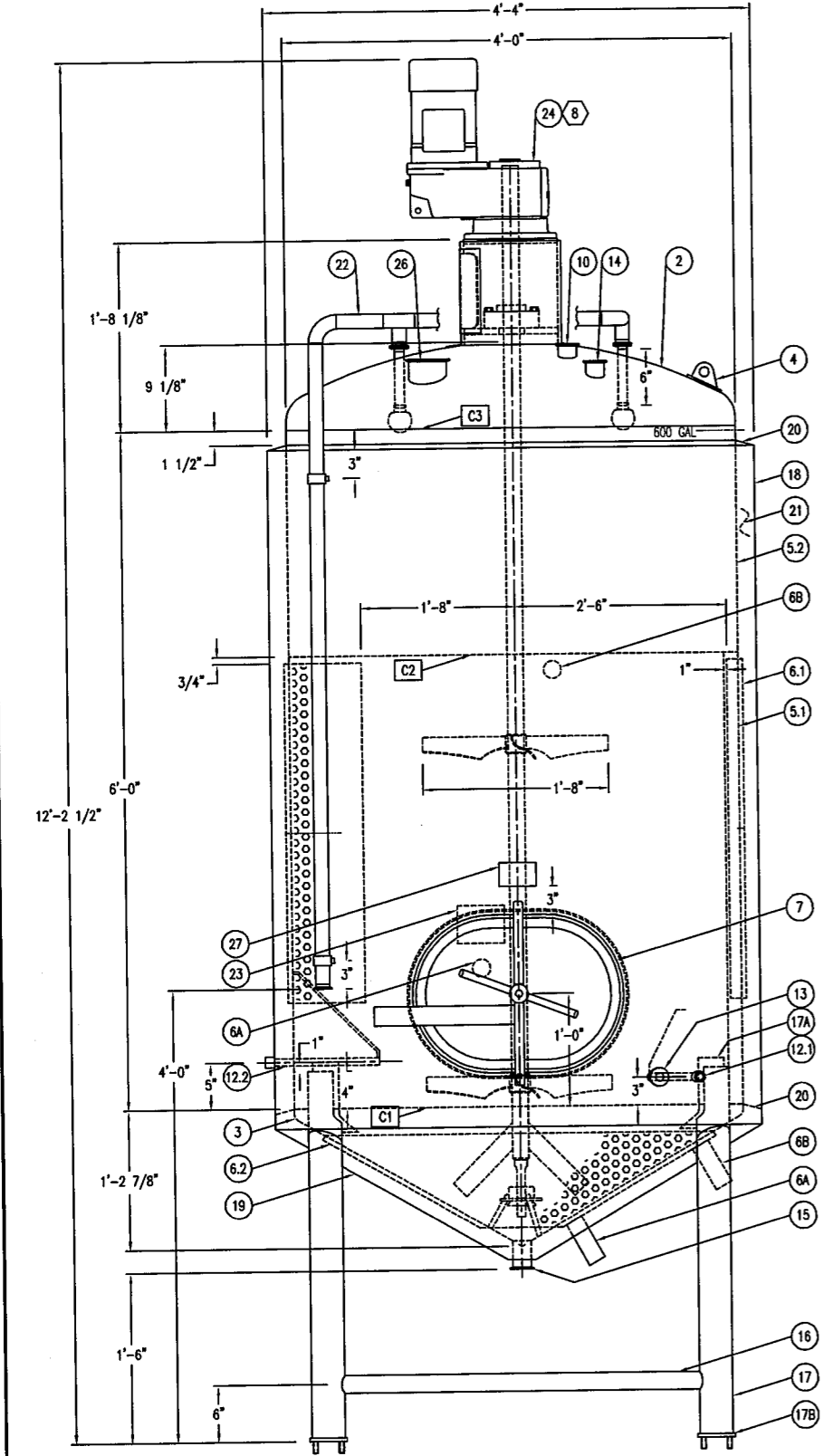


HTS DESIGN & CONSTRUCTION DATA

DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH ASME CODE SECTION VIII DIVISION 1, 2013 Ed.
 DESIGN PRESSURE: 115 PSIG
 DESIGN TEMP.: 200° F
 TEST PRESSURE: 150 PSIG
 RADIOGRAPHY: NONE
 PWHT: NA
 CORR. ALLOW.: 0"
 CODE: YES
 MIN. DESIGN METAL TEMP.: 0° F @ 115 PSIG
 IMPACT TESTING: EXEMPT PER UHA-51(d)
 STAMPING: JM
 REFER TO PROOF TEST NUMBER 341068 FOR JACKET DESIGN.



8. ACCESS OPENING ORIENTED TOWARD 90°. UNLESS OTHERWISE SPECIFIED:

NOTES:

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6/5/2014

TOLERANCES FOR NOZZLES AND ATTACHMENTS:
 LOCATION (LINEAR DIMENSIONS), ±1/4"
 LOCATION (RADIAL DIMENSIONS), ±2"
 ANGULAR (OFF TANK CENTERLINE), ±2°
TOLERANCES FOR NOZZLE LENGTH:
 LENGTH UP TO 3", ±1/8"
 LENGTH UP TO 6", ±3/16"
 LENGTH UP TO 12", ±1/4"
TOLERANCES FOR TANK DIMENSIONS:
 OVERALL SHELL LENGTH, ±1/8" PER SHELL COURSE
 OVERALL SHELL ROUNDNESS (MAJOR AXIS LESS MINOR AXIS), ±1% OF Ø, ±2% IF MEASURED AT A NOZZLE
 OVERALL SHELL DIAMETER, ±1/8" PER FOOT OF DIAMETER
 OVERALL TANK HEIGHT AND DRAIN CLEARANCE, ±1"
 ANGLE OF CONICAL SECTIONS, ±3°
TOLERANCES FOR LEGS:
 ANGULAR (OFF TANK CENTERLINE), ±1/8" PER FOOT OFF LEVEL
 L1, L2, L3... DENOTES LONGITUDINAL WELD SEAMS.
 C1, C2, C3... DENOTES CIRCUMFERENTIAL WELD SEAMS.

Buff Weld Finish: Leg Supports Leg Bracing
 (Discoloration removed) Leg Pads Motor Supports
 weld ripples show. MH Hardware Lift Lugs
 Other:
 Sprayball (Each): Pressure: 25 PSIG Flowrate: 40 GPM
 Agitator Design: Viscosity: _____ cps S.G.: 1.0
 Seismic Coefficients: S_s: 1.878 S₁: .707
 Shell Seams: Vertical: Lap Circ: Lap
 Butt Butt
 Head Seams: Top: Lap Butt
 Butt Butt
 STD NOTES:
 1. ALL FERRULES TO HAVE A MIN. 1" CLEARANCE FROM TANK
 2. ALL DIMENSIONS ARE IN INCHES.
 3. SEE TOP VIEW FOR ORIENTATION.
 4. DO NOT RUN IMPELLERS AT PRODUCT LEVEL.
 5. ALL JACKET FITTINGS TO HAVE PIPE CASTLES.
 6. INSULATED TANKS REQUIRE VENT/DRAIN AT LOW POINT
 7. WRAP ALL INSUL. RINGS W/ FIBERGLASS CLOTH

Balloon	Item No.	Qty	UoM	Item Description	Comments	Dwg #
2	50204102	18.9	SF	Sheet 304 10Ga 2B SA240 MIR REQD FOR ASME	top - F&D 100.6 (blank dia=52-1/8") (tr=3")	
3	50204121	20.8	SF	Sheet 304 12Ga POL SA240 MIR REQD FOR ASME	blm - 30 deg cone w/ 3/4" knuckle (cr=28, 1/8")	
4	61704002	2	EA	LIFT LUG - LOW PROFILE W/ 2IN X 4IN BUCKLER PADS 304		25100158
5.1	50204121	50.3	SF	Sheet 304 12Ga POL SA240 MIR REQD FOR ASME	sidewall (48" wd x 150-3/4" lg)	
5.2	50204121	25.1	SF	Sheet 304 12Ga POL SA240 MIR REQD FOR ASME	sidewall (24" wd x 150-3/4" lg)	
6.1	702041421	25.2	SF	MANUAL DIMPLES-304 14Ga 2IN SQUARE PITCH SA240 MIR REQD FOR ASME	side jkt (36" wd x 100-3/4" lg) (Vol=.55 CF)	
6.2	702041421	16	SF	MANUAL DIMPLES-304 14Ga 2IN SQUARE PITCH SA240 MIR REQD FOR ASME	blm jkt (ICR=4, OCR=24") (Vol=.21 CF) (SA=9.7 SF)	
6A	652041155040	2	EA	NIPPLE-1.5IN SCH 40 X 5IN TOE 304	jkt inlet	
6B	652041155040	2	EA	NIPPLE-1.5IN SCH 40 X 5IN TOE 304	jkt outlet	
6C	653040003	4	EA	PIPE CASTLE-1.5IN X SCH40 304	jkt nozzle attachment	
7A	308040762P	1	EA	MANWAY, 16X22 IN-OUTSWING FLUSHMOUNT, 304		20100065
7B	731150009	1	EA	GASKET-18IN MANWAY (RIBBED) BLACK SILICONE		
7C	50204121	8	SF	Sheet 304 12Ga POL SA240 MIR REQD FOR ASME	manway alcove (ICR=42, OCR=44-1/4")	
7D	614040016	1	EA	Door Plate Assy, For 16"X22" Flush Mount Manway 304		25100304
7E	613040065P	1	EA	COLLAR ASSY, 16X22 IN/OUTSWING FLUSHMOUNT MW, 304		25100800
10	740041220	1	EA	FERRULE-2IN X 3IN(LG) TC (14WLMP) 304	vent	
12	619040001	2	EA	TEMP WELL-.5IN HALF COUPLING X GUSSEID STEM 304		25100400
13	740041410	1	EA	FERRULE-1IN X 4.5IN(LG) TC (TYGON HOSE ADPTR-14MPHT) 304	sample port	
14	740041220	1	EA	FERRULE-2IN X 3IN(LG) TC (14WLMP) 304	light port	
15	740041220	1	EA	FERRULE-2IN X 3IN(LG) TC (14WLMP) 304	drain	
16	5160401540	9.7	FT	Pipe 304 1.5IN SCHED 40 SA312 MIR REQD FOR ASME	leg bracing (3@38-5/8")	
17	5160403040	9.7	FT	Pipe 304 3IN SCHED 40 SA312 MIR REQD FOR ASME	legs (3@38-7/8")	
17A	50204121	1.1	SF	Sheet 304 12Ga POL SA240 MIR REQD FOR ASME	leg doubler (3@5-1/2" x 10" w/ 1/8" weep hole)	
17B.1	503040381	0.3	SF	PLATE 304 3/8IN HRAP SA240 MIR REQD FOR ASME	leg pad (3@4"x4" see drill pattern this page)	
17B.2	5220405013	1.5	FT	ALLTHREAD-304 1/2IN-13 UNC	leg pad mounting studs (12@1-1/2" lg)	
18.1	50204121	54.5	SF	Sheet 304 12Ga POL SA240 MIR REQD FOR ASME	side insul skin (48" wd x 163-3/8" lg)	
18.2	50204141	27.2	SF	Sheet 304 14Ga POL SA240 MIR REQD FOR ASME	side insul skin (24" wd x 163-3/8" lg)	
19	50204141	23.9	SF	Sheet 304 14Ga POL SA240 MIR REQD FOR ASME	blm insul skin (cr=30")	
20	50404019200	26.2	FT	Bar FLAT 304 3/16IN X 2IN SA479 MIR REQD FOR ASME	insul support (2@15")	
21	5240001	11	EA	INSULATION CELOTEX TUFF R (4 X 8 SHEETS)		
22		1	EA	CIP ASSY W/ DUAL SPRAYBALL AND 1-1/2" EXTENSION	see detail pg.2	
23	710040001	1	EA	DATA PLATE ASME JACKET ONLY		
24	3200423064	1	EA	MIXER ASSEMBLY 304 2 HP X 52 RPM W/ DUAL 20" SANIFOILS	see detail pg.2	
25	6120401015	2	EA	STANDARD SHIPPING SUPPORTS - 6" AND UNDER		
26	740041240	1	EA	FERRULE-4IN X 4IN(LG) TC (14WLMP) 304	view port	
27	710040008	1	EA	LOGO NAME PLATE - 3" X 4 1/2"		

Tank Number: **2306** Quantity of Tanks: **TWO (2)**

APPROVED BY: _____
 Project Mgr. _____ Drafting Mgr. _____ Prod'n Mgr. _____ ASME/QC Mgr. _____ Principal _____

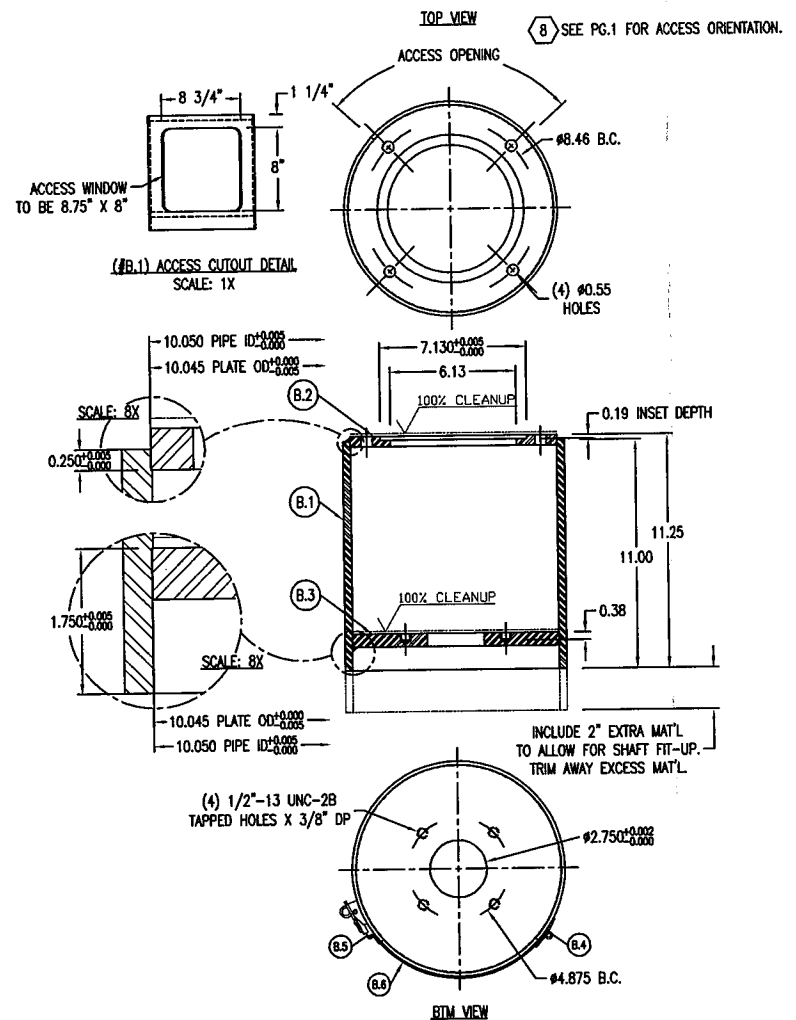
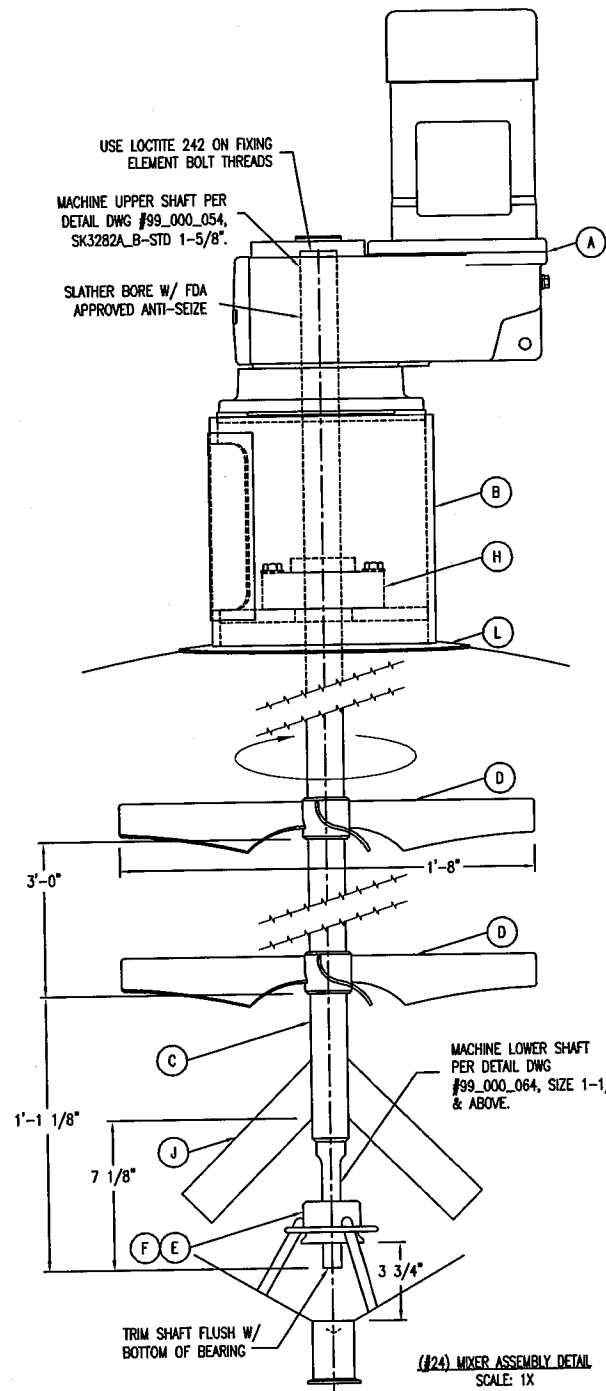
Number: 1 Date: 6/2/14 Revision: Add det for #6.1, Mv #4, Chg #18.1, test pressure. MPS
 2 Date: 7/7/14 Revision: Chg #17B. MPS

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GOLDEN ROAD BRWG CO
 DATE: 5/13/14 TANK #S: 23064 - 23065 DRAWN BY: MPS
 SCALE: 1 1/2"=1'-0" CAD #: B-23064 SIZE: 4'-0" X 6'-0"

600 GAL AGITATED YEAST BRINK
 JVNW, Inc. 300 SOUTH NEWCOMB CIRCLE, ST. LOUIS, MO 63105-2800 DRAWING NUMBER: 1 OF 2

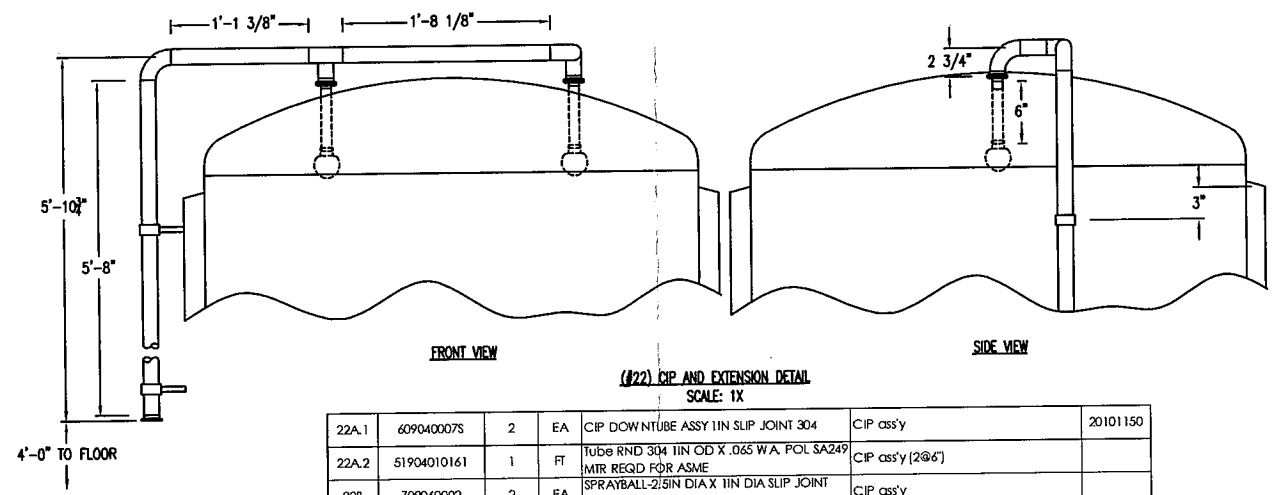
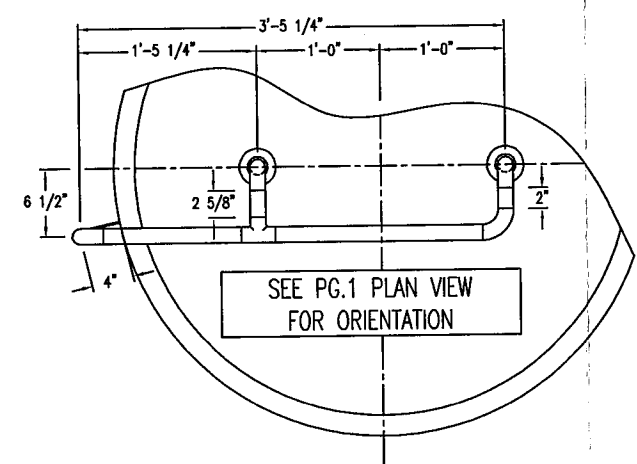
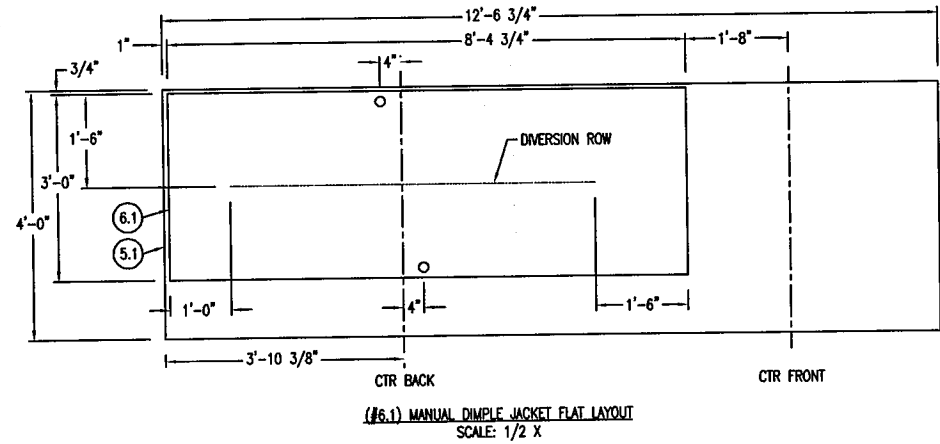
Total: 650.5 gallons
 Top: 45.9 gallons
 Bottom: 43.0 gallons
 Sidewall: 561.6 gallons
 GAL PER INCH: 7.8 gal/inch
 WEIGHT: 1,600 pounds



(#24B) MOTOR MOUNT AND SEAL MOUNT DETAIL
SCALE: 2X

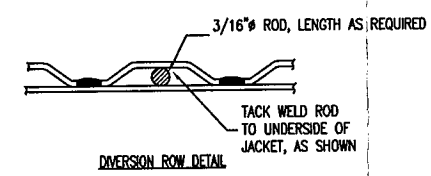
Item No.	Qty	UoM	Description	Comments
B.1	1.1	FT	Pipe 304 10N SCHED 40 SA312 MTR REQD FOR ASME	shroud - 13' lg (11' + 2' for fit-up), ends machined to detail dims
B.2	0.7	SF	Plate 304 5/8N HRAP SA240 MTR REQD FOR ASME	upper mounting plate (motor) - machined to 10.045' OD, see detail
B.3	0.7	SF	Plate 304 3/4N HRAP SA240 MTR REQD FOR ASME	lower mounting plate (seal) - machined to 10.045' OD, see detail
B.4	2	EA	LIFT OFF HINGE, LH 2' McMASTER #1519SA31	door
B.5	1	EA	DRAW LATCH PADLOCKABLE SS	door
B.6	0.6	SF	SHEET 304 14G POL SA240 MTR REQD FOR ASME	door - 9' x 9-3/4', rolled to 5-3/16' R
B.7	4	EA	SCREW-CAP HH 1/2N-13 X 2-1/4N LG 18-8 SS	seal mounting hardware
B.8	4	EA	WASHER-FLAT 1/2N 18-8 SS	seal mounting hardware

Balloon	Item No.	Qty	UoM	Item Description	Comments	Dwg #
A.1		1	EA	MOTOR-GEAR NORD SK3282AFBH-90L/4 2 HP X 52 RPM, 31.93:1 RATIO	see Nord spec sheet for details	
A.2	775260813201	4	EA	SCREW-CAP HH 1/2"-13 X 2-1/2" LG 18-8 SS	motor mounting hardware	
A.3	7762608131	4	EA	NUT-HEX 1/2N-13 18-8 SS	motor mounting hardware	
A.4	77726081	4	EA	WASHER-FLAT 1/2IN 18-8 SS	motor mounting hardware	
A.5	77726082	4	EA	WASHER-LOCK 1/2IN 18-8 SS	motor mounting hardware	
B		1	EA	MOTOR & SEAL MOUNT - SEE DETAIL		
C	505041751	9.3	FT	Bar RND 304 1-3/4IN DIA SA479 MTR REQD FOR ASME	shaft (11'-1/2' lg) extra mat'l included for trimming	
D	332040120175	2	EA	IMPELLER-20 SANIFOIL 304, 4-BLADE, WELDED 1-3/4 BORE	see dimension spreadsheet for use with detail dwg #99000124	99000124
E	723100001	1	EA	BEARING-STEADY 1-1/2IN TWIST LOCK UHMW		40990011
F	623040001	1	EA	BEARING TRIPOD 304 SS TWIST LOCK		
H	727250070	1	EA	SEAL-VERMONT IND 1 3/4" TOP ENTRY SEAL AS1410 CARB/SIL CARB, V DEB WEL/GLAND INCLUDED, 31.6, VIION		
J	50404019200	1.5	FT	BAR-FLAT 304 3/16" X 2" SA479 MTR REQD FOR ASME	kicker blades, (2 @ 9' lg)	
K	710300001C	1	EA	MIXER ROTATION ARROW CW - SMALL		
L	50204121	1.4	SF	SHEET-304 12G POL SA240 MTR REQD FOR ASME	motor mount doubler (14" OD)	



(#22) CIP AND EXTENSION DETAIL
SCALE: 1X

Item No.	Qty	UoM	Description	Comments
22A.1	2	EA	CIP DOWN TUBE ASSY 1IN SLIP JOINT 304	CIP ass'y
22A.2	1	FT	Tube RND 304 1IN OD X .065 W.A. POL SA249 MTR REQD FOR ASME	CIP ass'y (2@6')
22B	2	EA	SPRAYBALL-2.5IN DIA X 1IN DIA SLIP JOINT 360x31.6L	CIP ass'y
22D	3	EA	FERRULE-1.5IN X .5IN(LG) TC (14WMP) 304	CIP ass'y
22E	1	EA	TEE-1.5IN BW (7W) 304	CIP ass'y
22F	4	EA	ELBOW-1.5IN BW 90° (SHORT) 2W CL 304	CIP ass'y
22G	8.8	FT	Tube RND 304 1-1/2IN OD X .065 W.A. POL SA249 MTR REQD FOR ASME	CIP ass'y (106-1/8')
22H	2	EA	TUBE HANGER: 1-1/2IN OD TUBING SIZE MODEL K24FCF or 26CB	CIP ass'y
22J	2	EA	CLAMP-1.5IN TC (13MHMM) 304	CIP ass'y
22K	2	EA	GASKET-1.5IN TC (40MP) BLACK BUNA	CIP ass'y



RELEASED FOR FABRICATION
6/5/2014

2306

APPROVED BY: _____
Project Mgr. _____ Drafting Mgr. _____ Prod'n Mgr. _____ ASME/QC Mgr. _____ Principal _____

GOLDEN ROAD BRWG CO

DATE: 5/13/14 TANK #S: 23064 - 23065 DRAWN BY: MPS
SCALE: 1 1/2"=1'-0" CAD #: B-23064 SIZE: 4'-0" X 6'-0"

600 GAL AGITATED YEAST BRINK

JVNW, Inc. 300 SOUTH REDWOOD CANYON, OR 97013 (503)863-2650 DRAWING NUMBER: 2 OF 2