

NOTE:
A BLACK PIGMENTED MAT AND VEIL EXTERNAL
CORROSION BARRIER SHALL BE APPLIED
W/OV INHIBITOR

MATERIALS OF CONSTRUCTION			
RESIN SYSTEM	CURE SYSTEM		
ATLAC 382	CO-AP/MEKP		
ATLAC 382	CO-AP/MEKP		
EXTERIOR COAT BLACK W/OV INHIBITOR			
THK/LAYER	SYMBOL	REMARKS	
.010	V	TYPE C GLASS VEIL	
.043	M	TYPE E GLASS	
.022	N	ALA	
.033	R	TYPE E GLASS	
.085	F	15 Y	
.010	V	TYPE C GLASS VEIL	

BILL OF MATERIALS & ACCESSORY ITEMS			
ITEM	QTY	SIZE	DESCRIPTION
1	20	5/8" W x 2' L	H.S. HJL 2FW
2	2	32" OD x 24" ID	GASKET
3	4	5/8" W x 14" L	H.S. HJL 2FW
4	1	5/8" W x 14" L	GASKET
5	1	32" OD x 24" ID	MAINWAY COVER W/2 FRP HANDLES
6	2	5/8" W x 14" L	SUPPORT SADDLE
7	2	5/8" W x 14" L	BLIND FLANGE

NOZZLE SPECIFICATIONS														
MARK	ID	OD	BC	HOLE SIZE	HOLE TH	Tw	Te	Ts	Wt	IGUST	IGUST	To	F AGG	L
A	3"	7 1/2"	6"	4"	3/4"	1/2"	3/16"	3/16"	3/16"	3"	1"	1"	2"	6"
B	3"	7 1/2"	6"	4"	3/4"	1/2"	3/16"	3/16"	3/16"	3"	1"	1"	2"	6"
C	3"	7 1/2"	6"	4"	3/4"	1/2"	3/16"	3/16"	3/16"	3"	1"	1"	2"	6"
D	3"	7 1/2"	6"	4"	3/4"	1/2"	3/16"	3/16"	3/16"	3"	1"	1"	2"	6"
E	3"	7 1/2"	6"	4"	3/4"	1/2"	3/16"	3/16"	3/16"	3"	1"	1"	2"	6"
F	3"	7 1/2"	6"	4"	3/4"	1/2"	3/16"	3/16"	3/16"	3"	1"	1"	2"	6"
G	3"	7 1/2"	6"	4"	3/4"	1/2"	3/16"	3/16"	3/16"	3"	1"	1"	2"	6"
H	3"	7 1/2"	6"	4"	3/4"	1/2"	3/16"	3/16"	3/16"	3"	1"	1"	2"	6"

MATERIALS OF CONSTRUCTION		
	VESSEL OR SHELL SIDE	JACKET OR TUBE SIDE
SHELL	ATLAC 382	
HEADS	ATLAC 382	
FLANGES	ATLAC 382	
NOZZLE NECKS	ATLAC 382	
VESEL SUPPORTS	ATLAC 382	
EXT. BOLTS NUTS	A 307	
INT. BOLTS NUTS		
GASKETS	NEOPRENE	

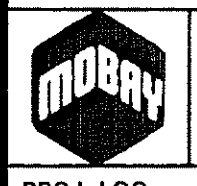
DESIGN CONDITIONS			
DESIGN PRESS.	ATM	PSIG - 10 WC	VAC
DESIGN TEMP.	40	F	C
OPERATING PRESS.	ATM	PSIG - 10 WC	VAC
OPERATING TEMP.	40	F	C
CORR. ALLOW.	ALA		
CODE	ALA		
CODE STAMP	ALA		
STRESS RELIEF			
RADIOGRAPH	ALA		
JOINT EFF.			
HYDRO TEST	FULL H ₂ O FOR 12 HOURS		
SP. GR. CONTENTS	10		

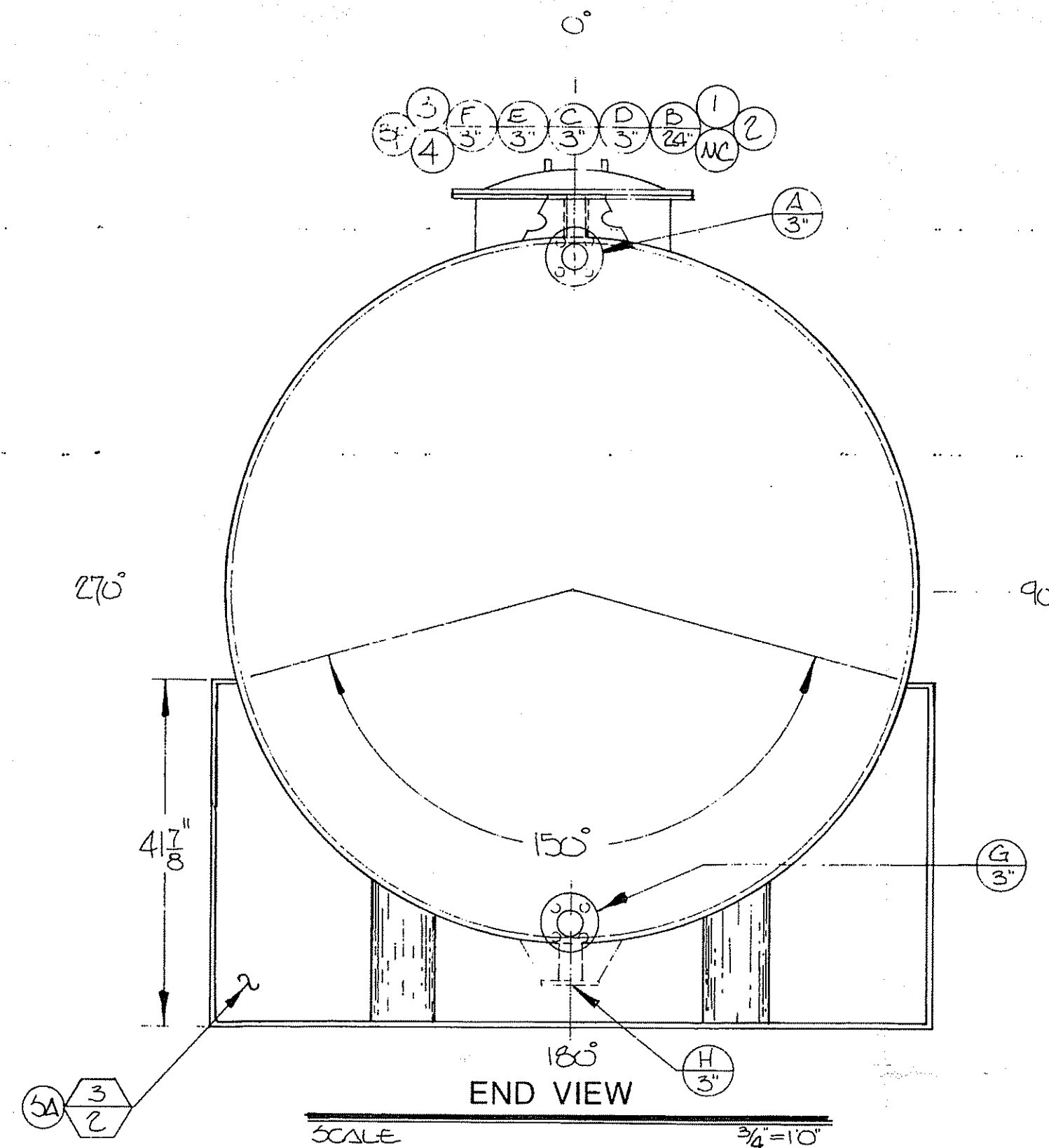
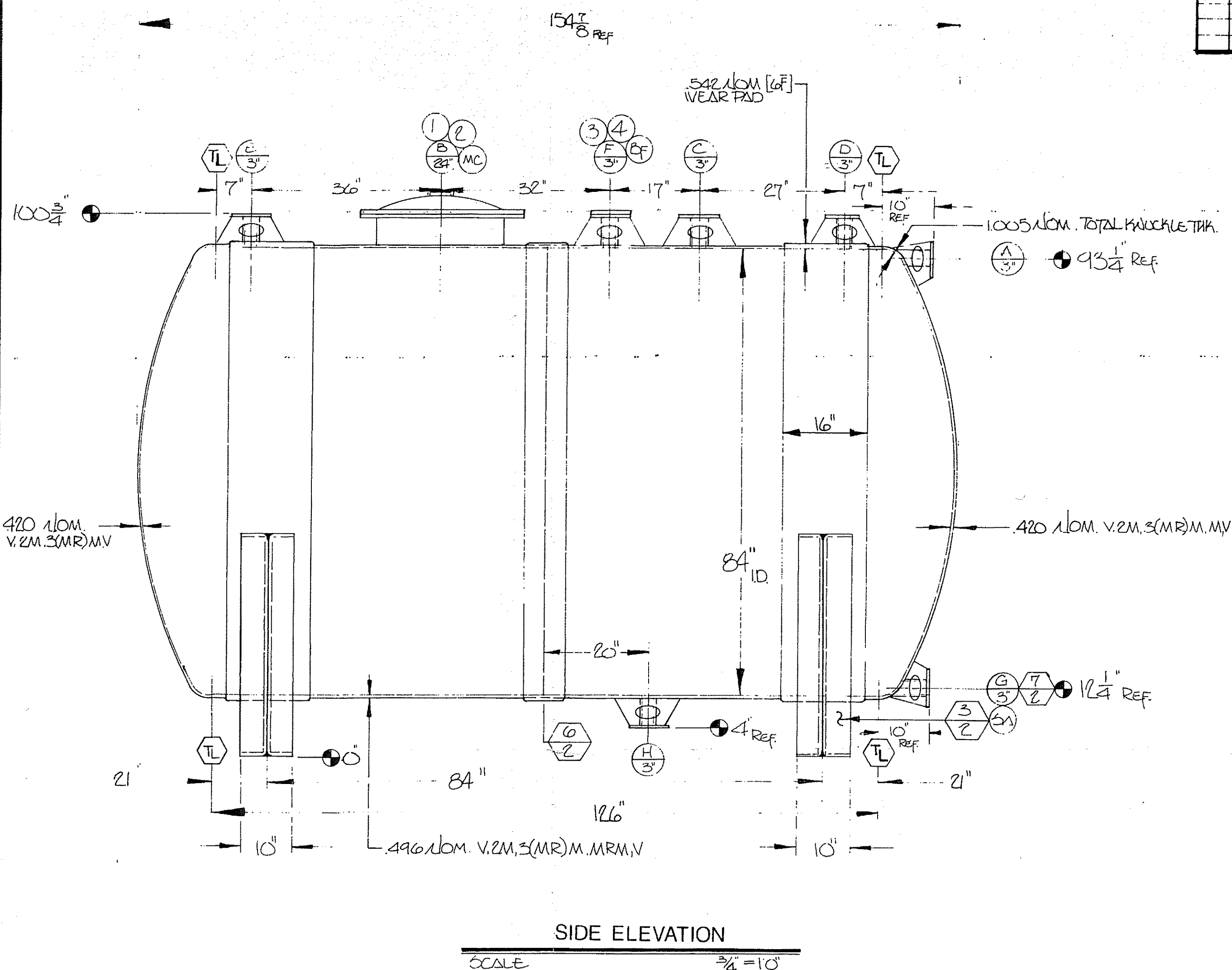
CAPACITIES AND WEIGHTS			
OPERATING CAP.	3,000	GAL.	40.11 CU. FT.
FULL CAPACITY	3,428	GAL.	45.3 CU. FT.
EMPTY WEIGHT	2,426	LBS.	30.235 LBS.
OPERATING WT.	26,128	LBS.	FULL PROD. LBS.

- GENERAL NOTES**
- BOLT HOLES TO STRADDLE SHOWN CENTERLINES.
 - FABRICATOR TO PROVIDE PROTECTIVE SHIELDS FOR ALL FLANGES AND OPENINGS.
 - FABRICATOR SHALL PROVIDE GASKETS, BOLTS AND HEX NUTS FOR ALL MATING PARTS INCLUDING BLIND FLANGES WHERE NOTED.
 - SPARE SET OF GASKETS IS (NOT) REQUIRED.
 - INDICATE MACHINE FINISHED SURFACES IN MICROINCHES WITH ANSI SYMBOL, e.g., 125/ 63/ ETC.
 - INSULATION SUPPORTS ARE (NOT) REQUIRED.
 - SURFACE PREPARATION
 - PAINTING
 - LIST OF APPLICABLE MOBAY STANDARDS AND SPECS. B.14-15.110 9380-104-M176

MARK	No.	SIZE	RATING	FACING	REMARKS
Z					
Y					
X					
W					
V					
U					
T					
S					
R					
P					
N					
M					
L					
K					
J					
I					
H					
G					
F					
E					
D					
C					
B					
A					

FITTING SCHEDULE			
MOBAY REFERENCE DATA			
PURCH. ORDER NO.	SC 4734 GPZ	PURCH. ORDER DATE	9-22-87
ITEM NUMBER	EQUIP. NUMBER	ITEM NUMBER	EQUIP. NUMBER
22-1032	704-18-22 0778		

MANUFACTURER DATA			
MFR. NAME	RL INDUSTRIES		
STREET / P.O. BOX	9355 Le SAINT DR.		
CITY	FAIRFIELD	STATE	OHIO
TELEPHONE A.C.	5131 874-2800	TELEX	
ENGINEERING CONTACT	ROBERT BOSSE		
S.O. No.	MFR. DWG. NO.	D87-199-01	REV 1
 MOBAY CHEMICAL CORPORATION ENGINEERING DEPARTMENT			
PROJ. LOC.	BUSHY PARK S.C.	PROJ. No.	9388
PHORWITES CHILLED WATER TANK			
SCALE	NOTED	D83-0704-M0776-1	REV 1



NOZZLE SCHEDULE									
MARK	SIZE	QTY	ELEV	OR	RAD	PSI	SERVICE	ACC	BOLTS/GSKT
A	3"	1	43 1/2"	0"	48"	25	OVERFLOW / VEAL		
B	2 1/2"	1	43 1/2"	0"	48"	25	MAINWAY	MC	1 2
C	3"	1	100"	0"	48"	25	MAKE-UP WATER		
D	3"	1	100"	0"	48"	25	RETURN WATER		
E	3"	1	100"	0"	48"	25	LEVEL INDICATOR		
F	3"	1	100"	0"	48"	25	SPARE	8F	3 4
G	3"	1	124"	180"	48"	25	PUMP ACTION		
H	3"	1	4"	180"	48"	25	DRAW		

TYPICAL SYMBOL DESIGNATIONS			
ELEVATION MARK	CONTACT MOLDED FRP		
NOZZLE MARK/ SIZE	SECONDARY BOND FRP		
ITEM NO.	BALSA CORE		
DETAIL NO./ PAGE	FOAM CORE		
TANGENT LINE	THERMOPLASTICS		
REVISION MARK	STEEL & ALLOYS		

DRAWING ISSUE LIST			
CUSTOMER			
ENGINEERING			
PURCHASING			
PRODUCTION PLANNING			
QUALITY ASSURANCE			

102631 210582

IN ADDITION TO TOLERANCES SPECIFIED HERE THE FABRICATOR MUST COMPLY WITH ADDITIONAL TOLERANCES INCLUDED IN MOBAY ENGINEERING STANDARDS OR SPECIFICATIONS MADE A PART OF THIS ORDER. FAILURE TO COMPLY WITH ALL TOLERANCE SPECIFICATIONS WILL BE CAUSE FOR REJECTION. EQUIPMENT GENERALLY IS JOINED-UP WITH PREFABRICATED PIPING, REQUIRING ACCURATE NOZZLE LOCATIONS AND FACE ALIGNMENTS WITHIN THE SPECIFIED TOLERANCES.

HORIZONTAL EQUIPMENT SUPPORT TOLERANCES			
TOLERANCE	DESCRIPTION OF TOLERANCE		
+ 0 - 1/8"	HORIZONTAL EQUIPMENT, CENTERLINE TO BOTTOM OF SUPPORT.		
1/4"	HORIZONTAL EQUIPMENT, BASELINE TO CENTERLINE OF SUPPORT.		
1/4"	CENTERLINE TO CENTERLINE OF HORIZONTAL EQUIPMENT SUPPORTS.		

VERTICAL EQUIPMENT SUPPORT TOLERANCES				
EQUIPMENT DIAMETER	SUPPORT LOCATION BELOW BASELINE	SUPPORT LOCATION ABOVE BASELINE	SUPPORT OUT OF LEVEL ACROSS DIAMETER	
7'-0" AND UNDER	+ 0	- 1/4"	- 0	+ 1/4"
OVER 7'-0" TO 10'-0"	+ 0	- 5/16"	- 0	+ 5/16"
OVER 10'-0" TO 13'-0"	+ 0	- 3/8"	- 0	+ 3/8"
OVER 13'-0" TO 16'-0"	+ 0	- 7/16"	- 0	+ 7/16"
OVER 16'-0"	+ 0	- 1/2"	- 0	+ 1/2"

GENERAL FABRICATION TOLERANCES			
METAL EQUIPMENT	FRP OR NON METAL EQUIPMENT	DESCRIPTION OF TOLERANCE	
SHOP FABRICATED	FIELD ERCTED		
1/8"	1/8"	1/4"	FACE OF NOZZLE TO CENTERLINE OF EQUIPMENT.
1/4"	1/2"	1/4"	CENTERLINE OF NOZZLE TO BASELINE OR DATUM REFERENCE.
1/2"	1/2"	1/2"	NOZZLE FLANGE FACE ALIGNMENT, CENTERLINE TO EDGE, IN DEGREES RISE.
1/8"	1/8"	1/4"	PLAN LOCATION OF NOZZLES OR SUPPORT LUGS FROM EQUIP. CENTERLINE OR DATUM REFERENCE.
1/4" OR 1/64" /FT.	1/4" OR 1/64" /FT.	1/4" UP TO 60"	HEIGHT OF NOZZLE, FROM BASELINE TO FACE OF TOP NOZZLE.
3/4" MAXIMUM	3/4" MAXIMUM	3/8" OVER 60"	(SET NOZZLE LAST TO HOLD TOLERANCE AND ALIGNMENT TO A MINIMUM.
1/4"	1/4"	1/4"	FACE OF BOTTOM NOZZLE TO BASELINE OR DATUM REFERENCE.

DRAWING AND REVISIONS			
No.	DATE	DESCRIPTION	BY
0		ORIGINAL DRAWING	
1	10-7-87	FOR CUSTOMER APPROVAL	R. BOSSE
2	10-23-87	APPROVED FOR CONSTRUCTION	R. BOSSE

REFERENCE DRAWINGS OR SPECIFICATIONS	
DOCUMENT No.	TITLE

VESSEL			
MFR. OF EQUIP.	RL INDUSTRIES	YEAR BUILT	1987
MOBAY EQUIP. NO.	704-18-22-0776	MOBAY ORDER NO.	SC 4734 GPZ
DATE OF ORDER	9 22 87		
CODE STAMP	DESIGN DATA (PSI & F)	TEMP	40°F
MATERIALS OF CONSTR.	ATLAC 382		
CORROSION ALLOWANCE	.096 NOM		
S. R.	X. R.	SPECIAL NOTES	
WORKING VOLUME	3,000	SHELL THK.	496 NOM
MFR. S. N.		TOP HEAD THK.	480 NOM
INS. CO.		BOTTOM HEAD THK.	480 NOM

VESSEL FORM

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