

DO NOT SCALE THIS DRAWING

NOTES:

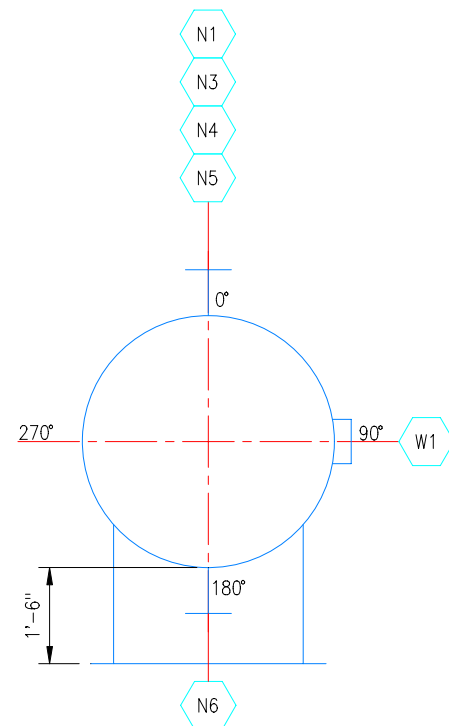
- 1.) THE FABRICATOR IS RESPONSIBLE FOR THE DESIGN & STRUCTURAL INTEGRITY OF THE TANK.
- 2.) WIND AND SEISMIC LOAD PER BOCA 1996 SNOW LOAD,  $P_g = 20$  PSF
- 3.) ALL NON CONTACT SURFACES TO BE CARBON STEEL
- 4.) FABRICATOR TO SUPPLY BRACKETS FOR VENDOR NAMEPLATE AND THERMAL KINETICS SYSTEMS NAMEPLATE
- 5.) ALL CARBON STEEL PARTS ATTACHED TO STAINLESS STEEL PARTS SHALL BE ATTACHED USING 304L STAINLESS STEEL. SCAB PLATES SHALL BE USED WITH ATTACHMENTS FOR VESSEL WALL THICKNESS OF 3/16" OR LESS. 304L STAINLESS STEEL PARTS MAY BE USED INSTEAD OF CARBON STEEL AT THE VENDORS OPTION.
- 6.) ALL NOZZLES SHALL BE SQUARE, PLUMB, AND ACCURATELY LOCATED TO THE FOLLOWING TOLERANCES:
  - A) OVERALL DIAMETER AND HEIGHT:  $\pm 1/2"$
  - B) FLATNESS:  $\pm 1/4"$
  - C) NOZZLE LOCATION:  $\pm 1/4"$  FROM CENTERLINES
  - D) PROJECTION:  $\pm 1/8"$  FROM OUTSIDE SHELL TO FACE OF NOZZLE
  - E) FLANGE FACES:  $1/2"$  IN ANY PLANE
- 7.) FABRICATOR TO PROVIDE VESSEL COMPLETE WITH LIFTING AND TRAILING LUGS FOR HANDLING AND ERECTION

SPECIFICATIONS:

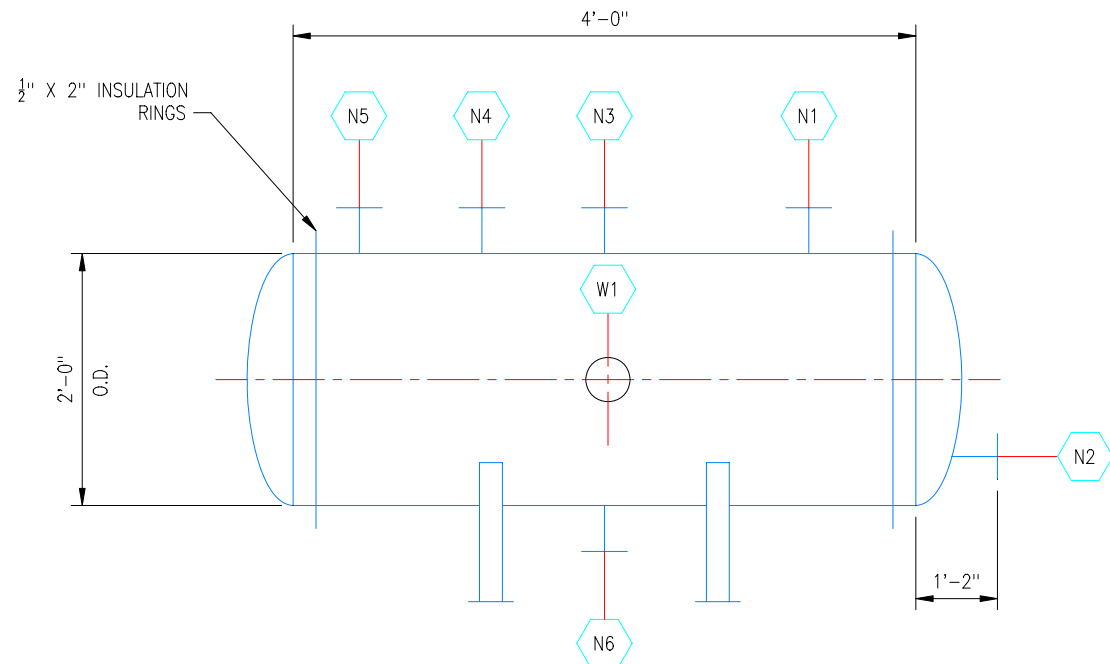
GF-1-73338: GENERAL FABRICATION STANDARDS FOR PRESSURE VESSELS & HEAT EXCHANGERS

REF. DWG'S:

- 
- 
- 



SIDE ELEVATION



ELEVATION

NOZZLE SCHEDULE							DESIGN DATA	
MK	SIZE	RATING	FACING	PROJ.	SERVICE	REMARKS	CODE: ASME VIII DIV1 STAMPED AND REGISTERED	
N1	3"	150 LB	RFSO	6"	LEVEL TRANSMITTER CONN.	LT-023	SPECIFIC GRAVITY/CONTENTS: 0.770	
N2	3"	150 LB	RFSO	6"	LEVEL TRANSMITTER CONN.	LT-023	DESIGN PRESS.: 75/FV (psig)	DESIGN TEMP.: 400 (°F)
N3	2"	150 LB	LJ FLG	6"	VENT	TO ET-4301	OPERATING PRESS.: 37.65 (psia)	OPERATING TEMP.: 221 (°F)
N4	2"	150 LB	LJ FLG	6"	FUSEL OIL INLET	FR PC-4109	MDMT: -20°F	
N5	6"	150 LB	LJ FLG	6"	LIQUID INLET	FR ET-4104	CORROSION ALLOWANCE: NONE	
N6	6"	150 LB	LJ FLG	6"	OUTLET	TO PC-4107	No. & TYPE OF TRAYS: NONE	
W1			WELD PAD	N/A	SIGHT GLASS W/6" VIEW		STRESS RELIEF:	

TESTS:	
WIND: BASIC WIND SPEED: 80 MPH WIND IMPORTANCE FACTOR: 1.0	SEISMIC: $A_y = 0.05$ $A_z = 0.05$
WEIGHT EMPTY: VENDOR TO PROVIDE (lbs)	WEIGHT FLOODED:
VOLUME: VENDOR TO PROVIDE (gal)	
WEIGHT INSULATION: VENDOR TO PROVIDE	

NOZZLE LOADS					
MK	FR (lbs)	MR (ft/lbs)	MK	FR (lbs)	MR (ft/lbs)
N5	1500	2394			
N6	1500	2394			

MATERIALS OF CONSTRUCTION		
ITEM	MATERIAL	COMMENTS
SHELL	304L SS	
HEADS	304L SS	2:1 ELLIPTICAL
JACKET	N/A	
CLADING/LINER	N/A	
INTERNAL SUPPORTS	N/A	
GASKETS	IFG5500	
BOLTING	SA-193-B7/S14-194-2H	
LADDER	N/A	
PLATFORMS	N/A	
VESSEL SUPPORTS	CS	SADDLES
PAINT: SEE SPEC GF-1-73338 CL-1		
SURFACE PREP: SEE SPEC GF-1-73338 CL-1		
INSULATION: 2" FIBERGLASS PURCHASER TO PROVIDE		

CONFIDENTIAL

**99.5 wt% ETHANOL RECEIVER**

<p>Evaporation/Distillation/Chemical Reaction/Process Design &amp; Energy Conservation 667 Tiftt Street Buffalo, NY 14220</p>	EQUIPMENT No.:	TP-4107
	PROJECT No.:	73338
	PROJECT NAME:	CENTRAL ILLINOIS
	SHEET No.:	1 of 1
THIS DRAWING IN DESIGN AND DETAIL IS THE PROPERTY OF THERMAL KINETICS AND MUST NOT BE USED FOR ANY PURPOSE OTHER THAN FOR WHICH IT IS SPECIFICALLY FURNISHED. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. COPYRIGHT 2006		DRAWING No.: <b>6018-MQ-4109</b>

B	ISSUED FOR REVIEW & COMMENT	7-14-06	KAR	JL	-
A	ISSUED FOR BID	06-26-06	RJS	-	-
REV	REVISION	DATE ISSUED	CHK BY	CHK BY	CLIENT APPD

SPEC. No.:	GF-1-73338	SCALE:	NONE	SIZE:	B
DRAWN BY:	JEM	DATE:	5-23-06	CHECKED BY:	

B-SIZE (11x17)