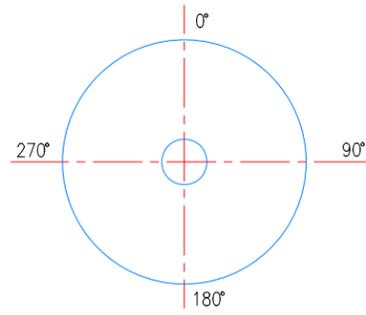
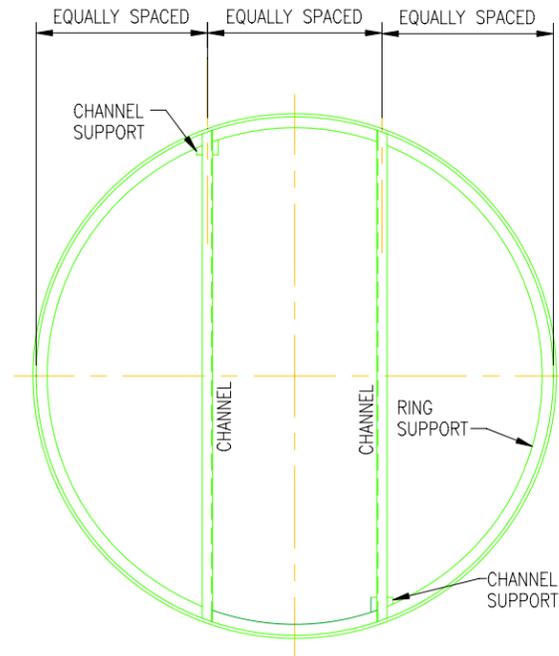


DO NOT SCALE THIS DRAWING

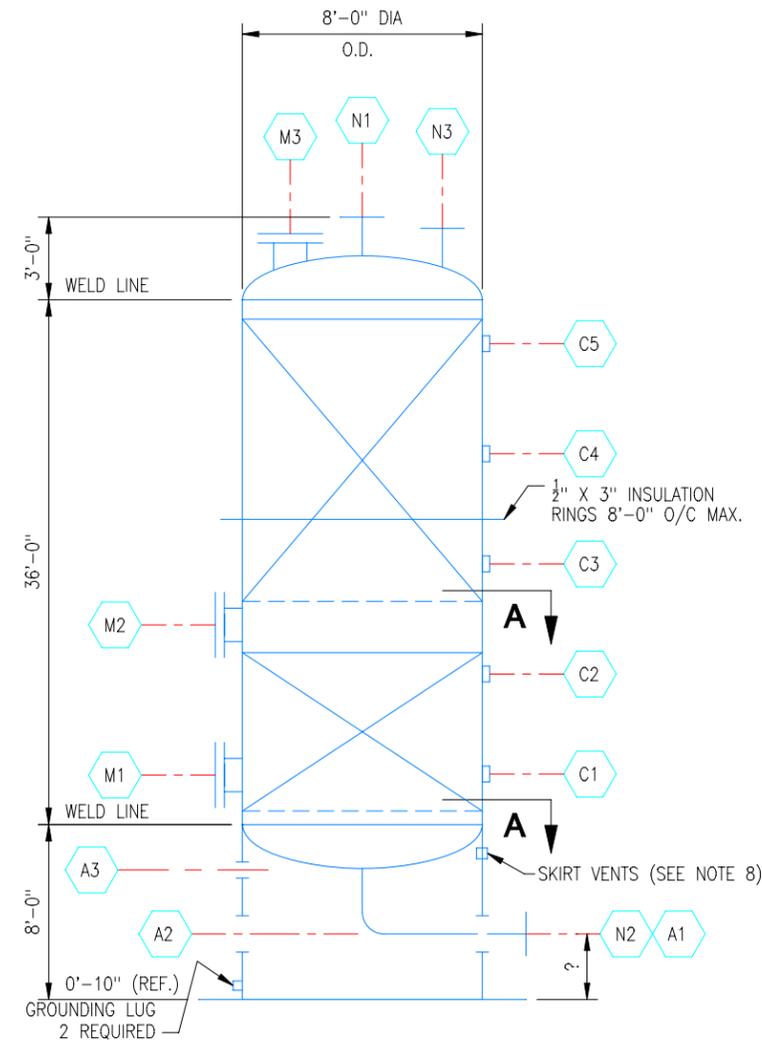


PLAN



SECTION 'A-A'

SUPPORT RING AND BEAMS FOR JOHNSON GRID
TYPICAL 2 PLACES



ELEVATION

NOZZLE SCHEDULE							DESIGN DATA	
MK	SIZE	RATING	FACING	PROJ.	SERVICE	REMARKS	CODE: ASME VIII DIV 1 STAMPED AND REGISTERED	
N1	14"	150 LB	RFSO	9"	VAPOR FEED	FR TP-4301	SPECIFIC GRAVITY/CONTENTS: 0.77 AS LIQ., 0.284 #/FT ³ AS VAPOR	
N2	14"	150 LB	RFSO	9"	VAPOR OUTLET	TO TP-4302	DESIGN PRESS.: 75/FV (psig)	DESIGN TEMP.: 450 (°F)
N3	3"	150 LB	RFSO	6"	RELIEF VENT	PSV 4301-006	OPERATING PRESS.: 49 (psia)	OPERATING TEMP.: 310 (°F)
C1	1"	3000 LB	FNPT	N/A	TEMP. TRANSMITTER	TE-013	MDMT: -20F	
C2	1"	3000 LB	FNPT	N/A	TEMP. TRANSMITTER	TE-012	CORROSION ALLOWANCE: 1/16"	
C3	1"	3000 LB	FNPT	N/A	TEMP. TRANSMITTER	TE-011	No. & TYPE OF TRAYS: JOHNSON SUPPORT GRID, GRACE 562Et BEADS	
C4	1"	3000 LB	FNPT	N/A	TEMP. TRANSMITTER	TE-010	STRESS RELIEF:	
C5	1"	3000 LB	FNPT	N/A	TEMP. TRANSMITTER	TE-009	TESTS:	
M1	24"			6"	MANWAY W/DAVIT OR HINGE		WIND: BASIC WIND SPEED: 80 MPH	SEISMIC: A _y = 0.05
M2	24"			6"	MANWAY W/DAVIT OR HINGE		WIND IMPORTANCE FACTOR: 1.0	A _o = 0.05
M3	24"			6"	MANWAY W/DAVIT OR HINGE			
A1	26"	ATMO.	PLAIN	3"	SKIRT PENETRATION FOR N2		WEIGHT EMPTY: (lbs)	WEIGHT FLOODED: (lbs)
A2	24"	ATMO.	PLAIN	3"	SKIRT ACCESS		VOLUME: (gal)	
A3	3"	ATMO.	PLAIN	3"	FIRE PROTECTION		WEIGHT INSULATION:	

NOTES:

- THE FABRICATOR IS RESPONSIBLE FOR THE DESIGN & STRUCTURAL INTEGRITY OF THE TANK.
- WIND AND SEISMIC LOAD PER BOCA 1996
SNOW LOAD, P_g = 20 PSF
- ALL NON CONTACT SURFACES TO BE CARBON STEEL
- FABRICATOR TO SUPPLY BRACKETS FOR VENDOR NAMEPLATE AND THERMAL KINETICS SYSTEMS NAMEPLATE
- 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.
- ALL NOZZLES SHALL BE SQUARE, PLUMB, AND ACCURATELY LOCATED TO THE FOLLOWING TOLERANCES:
 - A) OVERALL DIAMETER AND HEIGHT: ± 1/2"
 - B) FLATNESS: ± 1/4"
 - C) NOZZLE LOCATION: ± 1/4" FROM CENTERLINES
 - D) PROJECTION: ± 1/8" FROM OUTSIDE SHELL
 - E) FLANGE FACES: 1/2" IN ANY PLANE
- FABRICATOR TO PROVIDE VESSEL COMPLETE WITH LIFTING AND TRAILING LUGS FOR HANDLING AND ERECTION
- FABRICATOR SHALL PROVIDE AND ORIENT (6) EA. 2" SCH. 40 SKIRT VENTS APPROX. EQUAL SPACING AND TO CLEAR ALL SKIRT OPENINGS, SEAMS, SUPPORT CLIPS, ETC.

SPECIFICATIONS:

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

REF. DWG'S:

- 6018-MD-4001

INTERNALS: GRACE 562Et 44#/FT³
NORPRO D-57 CERAMIC BALLS 86#/FT³

NOZZLE LOADS

MK	F _R (lbs)	M _R (ft/lbs)	MK	F _R (lbs)	M _R (ft/lbs)
N1	4400	6332			
N2	4400	6332			

MATERIALS OF CONSTRUCTION

ITEM	MATERIAL	COMMENTS
SHELL	CS	
HEADS	CS	2:1 ELIPTICAL
JACKET	NONE	
CLADING/LINER	NONE	
INTERNAL SUPPORTS	CS	SUPPORTS
GASKETS	IFG5500	
BOLTING	SEE SPEC GF-1-73338	
LADDER	CS	
PLATFORMS	CS	
VESSEL SUPPORTS	CS	SKIRT
PAINT:	SEE SPEC GF-1-73338 CL-1	
SURFACE PREP:	SEE SPEC GF-1-73338 CL-1	
INSULATION:	3" FG-TOP HEAD Ca Si	PURCHASER TO PROVIDE

CONFIDENTIAL

MOLE SIEVE No. 1



Evaporation/Distillation/Chemical Reactor/Process Design & Energy Conservation
667 Tiftt Street Buffalo, NY 14220

EQUIPMENT No.:	TW-4301
PROJECT No.:	73338
PROJECT NAME:	CENTRAL ILLINOIS
SHEET No.:	1 of 1
DRAWING No.:	6018-MQ-4303

REV	REVISION	DATE ISSUED	DATE	ISSUED BY	CHK BY	CLIENT APPR
B	ISSUED FOR REVIEW & COMMENT	7-14-06		KAR	JL	-
A	ISSUED FOR BID	6-23-06		RJS	-	-

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

B-SIZE (11x17)