

GENERAL SPECIFICATION – VESSEL

ITEM NO.: TK-801A,B SERVICE: ETHANOL PRODUCT SHIFT TANKS  
 CODE: API 650 STAMP: NO WELDING: ASME  
 RADIOGRAPH: NO STRESS RELIEVING: NO  
 DESIGN PRESSURE-PSIG (kPa): (SEE NOTE #7) TEMP.-°F (°C): 122 (50)  
 EST. WT. EMPTY-LB (kg): BY FAB. FULL WATER: BY FAB. OPERATING: BY FAB.  
 WIND VEL.-MPH (km/HR): (SEE NOTE #6) EARTHQUAKE ZONE: BY OWNER

PROCESS DATA

FLUID: ETHANOL DESIGN DENSITY-LB/FT<sup>3</sup> (kg/m<sup>3</sup>): 48.7 (780)  
 OPERATING PRESS.-PSIG (kPa): ATMOSPHERIC TEMP.-°F (°C): 100 (38)  
 HOLD-UP TIME: 8 HOURS APPROX. CAPACITY-GAL (L): 20,000 (76,000)  
 INLET RATE-GPM (m<sup>3</sup>/HR):- FLASH: NONE  
 NON-CONDENSIBLES: -

MATERIAL & THICKNESS-IN (mm)

SHELL: A285 GR.C CARBON STEEL  
 TOP HEAD: A285 GR.C CARBON STEEL  
 BOT. HEAD: A285 GR.C CARBON STEEL  
 SUPPORTS: NONE  
 BOLTS: A193 B7 W/ A194 2H HEX NUTS GASKETS: 2mm NON-ASBESTOS  
 NOZZLES: IN (mm)  
 NECK: A106 GR. B CARBON STEEL PIPE  
 FLANGE: A105 FORGED STEEL 150# SLIP-ON  
 COUPLING: A105 FORGED STEEL 3000# THREADED FULL  
 CORROSION ALLOWANCE: 2mm

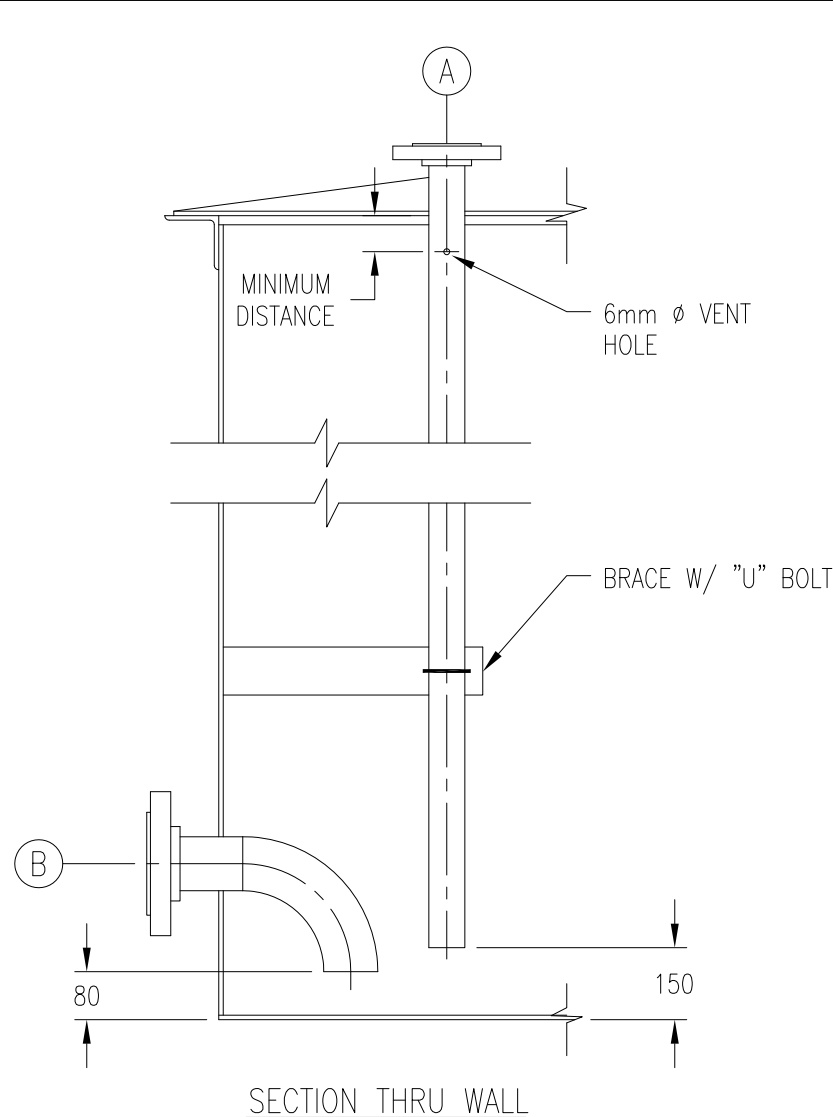
NOZZLES

MARK	SERVICE	IN (mm)	NOTE
A	INLET	3"	FLANGED W/ INTERNAL DIP PIPE
B	OUTLET	4"	FLANGED W/ INTERNAL 90° ELBOW
C	LEVEL GAGING	6"	FLANGED VAREC SERIES 42-MODEL 42-6-112
D	MANWAY	24"	FLANGED W/ BLIND COVER & DAVIT
E	DRAIN	1"	COUPLING
F1,F2	LEVEL CONN.	3"	FLANGED (2) REQ'D.
G	BREATHER VENT	6"	FLANGED
H	INLET	3"	FLANGED W/ BLIND ON TK-801B
J	EMERGENCY VENT	8"	FLANGED
K	OVERFLOW	3"	FLANGED
L	MANWAY	20"	FLANGED W/ HINGED COVER

MISCELLANEOUS

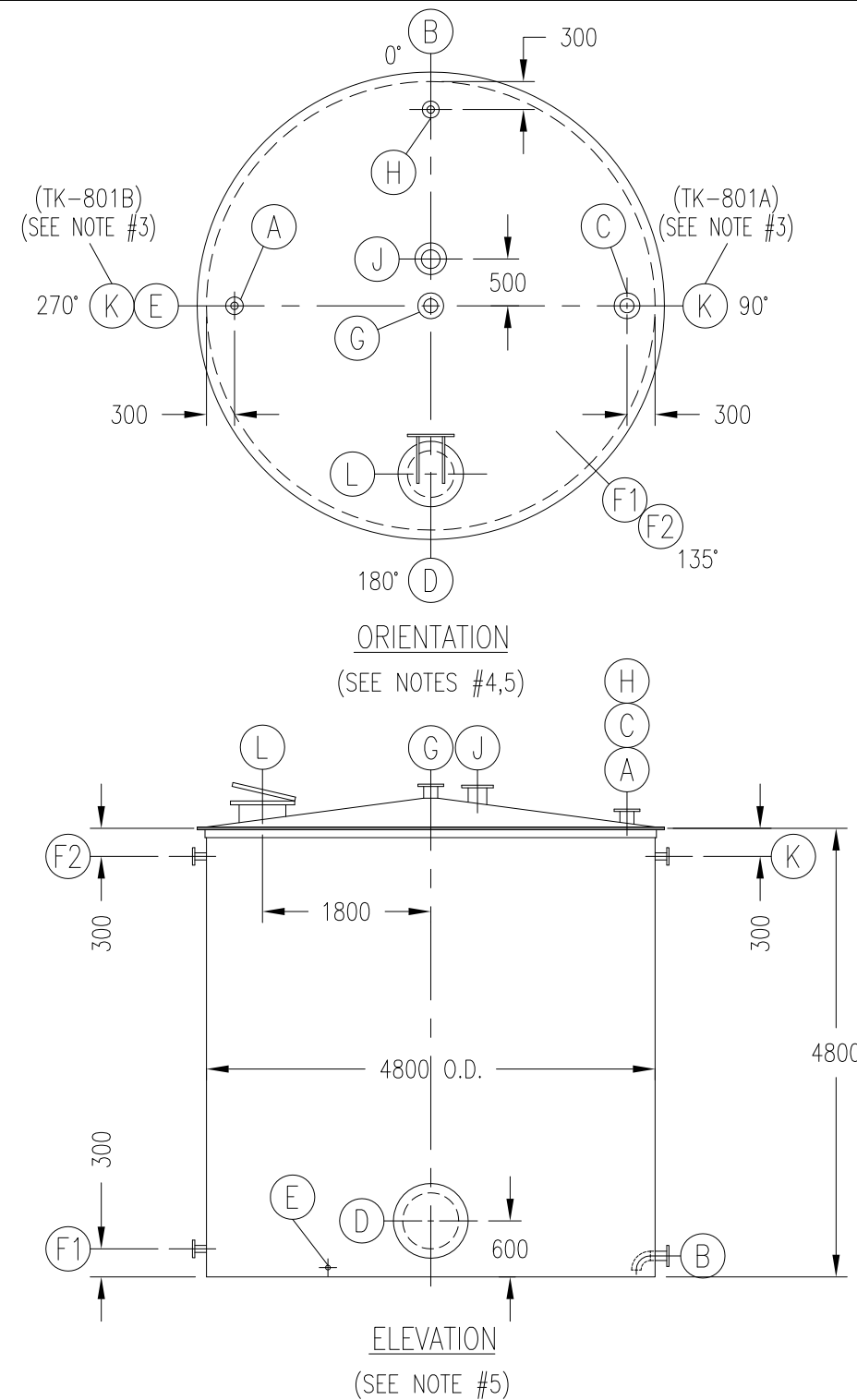
LADDER: \_\_\_\_\_  
 PAINT: ALL EXTERNAL CARBON STEEL SURFACES TO BE CLEANED AND OTHERWISE PROPERLY PREPARED PRIOR TO APPLICATION OF ONE COAT OF CORROSION PROTECTION PRIMER PER SHOP STANDARD. FINAL PAINTING PER OWNER'S REQUIREMENTS.

- NOTES: 1. (2) TANKS REQUIRED.  
 2. ROOF AND FLOOR PLATES TO BE BUTT WELDED.  
 3. LAYOUT OF TK-801A,B REQUIRES NOZZLES 'K' TO FACE EACH OTHER.  
 4. FINAL ORIENTATION TO BE DETERMINED UPON FINAL PIPING DESIGN.  
 5. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.  
 6. 160 Km/h PER URUGUAYAN NORMATIVES: UNIT 50-84.  
 7. DESIGN PRESSURE: 1 PSIG (7 kPa) PLUS FULL STATIC HEAD OF LIQUID (S.G.=1.0)  
 DESIGN VACUUM: -0.5 PSIG (-3.5 kPa) WHEN TANK IS EMPTY.



NOZZLE SIZE	NOZZLE ** EXTENSION
1 1/4"-6"	150
8"-24"	200

\*\* - UNLESS OTHERWISE SPECIFIED



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		<b>ALUR</b> ALCOHOLES DEL URUGUAY		<b>BIOETANOL PAYSANDÚ</b>	
		<b>UTE ABENER</b> <b>TEYMA PAYSANDÚ</b>		<b>KATZEN INTERNATIONAL, INC.</b> TECHNOLOGY • ENGINEERING CINCINNATI, OHIO, U.S.A.	
		Scale: NONE		211,200 LITERS/DAY MOTOR FUEL GRADE ETHANOL PLANT EQUIPMENT SPECIFICATION	
		REV. 0 ISSUE		Nº Plano: 0003-PLN-KAT-08-62-0201	
		WLB JDC JDC		Sheets: 1 Sheet Nº: 1	
		REV. 0		Client Nº: 1132-01 Dwg Nº: 08-201	
		Description		ITEM: TK-801A,B ETHANOL PRODUCT SHIFT TANKS	
		Dwn By Ckd By Appd By			
		Origin: JDC			