

MECHANICAL DATASHEET

FOR

CONDENSATE STRIPPER COLUMN

T70-C-0101 / 0201

NOZZLE & MANWAY SCHEDULE											
MARK	SIZE	SERVICE	ASME CLASS	MARK	SIZE	SERVICE	ASME CLASS				
N1	12"	Feed (Note P2)	300# RFWN	K1 A/B	2"	LIT	300# RFLWN				
N2	14"	Bottom Product	300# RFWN	K2 A/B	2"	LG & LIT	300# RFLWN				
N3	3"	Reflux Return (Note P2)	300# RFLWN	K3 A/B	3"	PDIT	300# RFLWN				
N4	12"	Overhead Vapor	300# RFWN	K4	2"	TIT	300# RFLWN				
N5A/B	16"	Reboiler Draw	300# RFWN	K5	2"	TIT	300# RFLWN				
N6A/B	18"	Reboiler Return (Note P2)	300# RFWN	K6	2"	TIT	300# RFLWN				
N7	10"	Btms Pump Min Flow	300# RFWN	K7	2"	TIT	300# RFLWN				
N8	3"	Drain	300# RFLWN								
N9	3"	Steamout	300# RFLWN	M1	24" I.D.	Manway	300# RFWN				
N10	2"	Utility	300# RFLWN	M2	24" I.D.	Manway	300# RFWN				
N11	4"	Vent	300# RFWN	M3	24" I.D.	Manway	300# RFWN				
N12	2"	Spare (Note 45)	300# RFLWN	M4	24" I.D.	Manway	300# RFWN				
N13	2"	(Note P17)	300# RFLWN	M5	24" I.D.	Manway	300# RFWN				
N14	2"	(Note P17)	300# RFLWN	M6	24" I.D.	Manway	300# RFWN				
N15	2"	(Note P17)	300# RFLWN								
N16	2"	(Note P17)	300# RFLWN	SV1-6	4"	Skirt Vent	N/A				
N17	2"	(Note P17)	300# RFLWN	SA1-2	600 I.D.	Skirt Access	N/A				
N18	16"	PSV	300# RFWN	SO1	20"	Skirt Opening for N2	N/A				
HOLDS:-											
1 DELETED											

OPERATING CONDITIONS				MATERIALS OF CONSTRUCTION				INSULATION FIREPROOFING & PAINTING				
INTERNAL PRESSURE:		NORMAL:	TOP 190 / BTM 197 psig	COMPONENT		ASME NO:	INSULATION THICKNESS:	HC (Note 24)				
		MAXIMUM:	TOP 190 / BTM 197 psig	SHELL:			FIREPROOFING THICKNESS:	(Note 23)				
EXTERNAL PRESSURE:		NORMAL:	N/A psig	- BASE MATERIAL	SA-516 Gr.70N (HIC)	SHOP PRIME & PAINT	SAES-H-001 & 101V					
		MAXIMUM:	N/A psig	- CLADDING OR OVERLAY	N/A	(SAPCS NO):	(Note 11)					
SERVICE		OTHER	BOOT:	HEADS:		FIELD PRIME & PAINT	-					
If other (Specify)		SOUR GAS / SOUR CONDENSATE / LETHAL (Note P19)			- BASE MATERIAL	N/A	(SAPCS NO):	-				
		NORMAL:	TOP 113 / BTM 228 Deg. F	- CLADDING OR OVERLAY	N/A	ESTIMATED VESSEL WEIGHTS:	(Note 27)					
TEMPERATURE:		MAXIMUM:	TOP 117 / BTM 244 Deg. F	HEADS:	2:1 Ellipsoidal	SHIPPING:	353842 lbs					
SPECIFIC GRAVITY OF LIQUID:		0.635 MAX. @ 60°F, 32.68 MAX.LB/FT3 (ACTUAL)			- BASE MATERIAL	EMPTY:	437743 lbs					
VESSELS TO BE MANUFACTURED IN ACCORDANCE WITH 32-SAMSS-004 AND APPLICABLE ADDENDUM.					- CLADDING OR OVERLAY	OPERATING:	841447 lbs					
DESIGN CONDITIONS					N/A	TEST:	994529 lbs					
ASME DESIGN CODE & EDITION:		ASME Section VIII Div. 1, Ed.2019 (U-Stamp)			STD. FLANGES (NOTE 50):	ERCTION (NOTE 52):	428925 lbs					
INTERNAL PRESSURE:		265 (TOP) psig			PIPE:	CAPACITY	8888,01 ft3					
EXTERNAL PRESSURE:		Half Vacuum @ 300°F (Steamout) psig			HEADS:	SA-516 Gr.70N (HIC)	NOTES:					
TEMPERATURE:		320 Deg. F			EXT.L ATTACHMENT CLIPS:	SA-516 Gr.70N	See sheet 002 of 004 for Process notes and sheet					
M.D.M.T		-8 Deg. F			STUD BOLTS:	SA-320 L7M	003 of 004 for Mechanical notes.					
REINFORCEMENT		Integrally Reinforced (NOTE 49)			NUTS:	SA-194 Gr.7M						
WIND SPEED (50 year, 3-sec gust)		Exp. Cat : C, Importance Factor 1.15 90 mph			INTERNAL:	SS 316L (Note 22)						
EARTHQUAKE:		ZONE:	See Note 38			- SKIRT:	SA-516 Gr.70 (Note 46)					
		SOIL COEFF:	See Note 38			- SADDLES:	N/A					
		Av:	See Note 38			- LUGS:	N/A					
CORROSION ALLOWANCE:		0.125 (3.2mm) in			ANCHOR BOLTS (BY OTHERS)	ASTM F1554 Gr.36						
RADIOGRAPHY		HEADS: Full, SHELL: Full			GASKETS:	(Note 9)						
IMPACT TESTING (IT):		<input checked="" type="checkbox"/> YES C/N0 <input type="checkbox"/> CODE			REINFORCEMENT RINGS	N/A						
PWHT:		<input checked="" type="checkbox"/> YES C/N0 <input type="checkbox"/> CODE			SPEC. FORGINGS (NOTE 50):	SA-350 LF2						
I. T. TEMPERATURE		As per code / specification			NAMEPLATE / BRACKET	304 SS / SA-516 Gr.70N						
I. T. ENERGY AVE./MIN:		As per code / specification			TAILING LUG / TRUNNIONS	SA-516 Gr.70N						
It is the responsibility of the contractor to ensure filling of this data sheet in compliance to the detailed company standard and material specifications												

PROCESS DESIGN DATA SHEET - TRAYS

VESSEL ITEM NO.: T70-C-0101 / 0201

SERVICE: CONDENSATE STRIPPER COLUMN

SECTION	TOP [NORMAL]	BOTTOM [NORMAL]	CHIMNEY
* TRAY NO(S)	32~28	2~27	1
* COLUMN ID, (ft)	10'-6"	10'-6"	10'-6"
* TOTAL TRAYS PER SECTION	5	26	1
* TRAY SPACING, (inch)	24	24	60
* TRAY TYPE	Valve	Valve	Chimney
* TRAY EFFICIENCY	85%	65%	-
* NO. OF PASSES PER TRAY	2	2	
* MAX. ALLOW ΔP PER TRAY (psia)	0.125	0.125	0.125

VAPOR TO TRAY NO.:

See attachment 1 & 2

LIQUID FROM TRAY NO.:

See attachment 1 & 2

FOAMING TENDENCY:

NONE

Moderate

X

HIGH

SEVERE

GENERAL:

TRAYS NUMBERED TOP TO BOTTOM

BOTTOM TO TOP

X

PERCENT OF FLOOD NOT TO EXCEED

85

% AT MAXIMUM DESIGN VAPOR AND LIQUID RATES

VESSEL MANWAY ID

-- TRAY DECK GAUGE / MATERIAL

**** DOWNCOMER GAUGE / MATERIAL**

OTES:

* THESE ARE PRELIMINARY DATA TO BE SUPPLIED BY DESIGN ENGINEER AND NOT FOR QUOTING