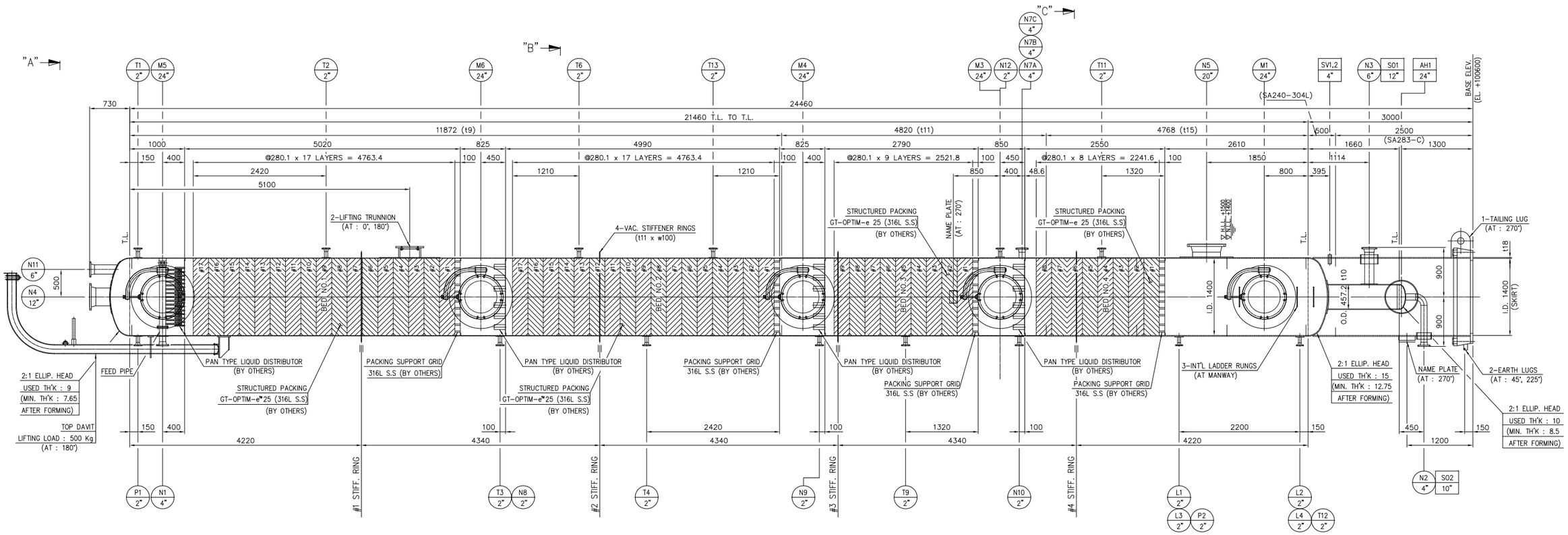
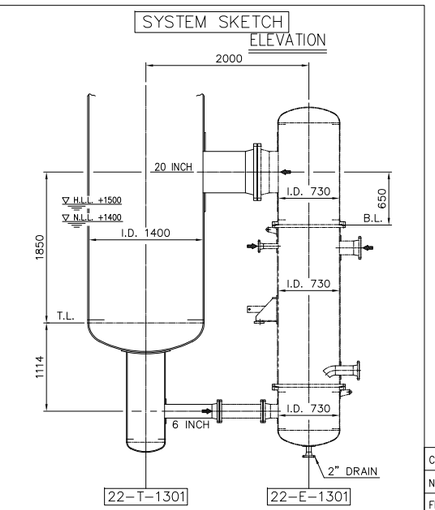
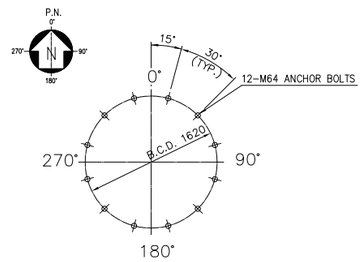
DWG NO. 22-T-1301-000







ANCHOR BOLT ORIENTATION

NOZZLE MARK	Q'TY /1 SET	SIZE (INCH)	FLANGE RATING	FLANGE TYPE	FLANGE SCH.	SERVICE	PROJECTION	REMARK
SO2	1	10	–	–	XS	SLEEVE OPENING	–	
SO1	1	12	–	–	XS	SLEEVE OPENING	–	
AH1	1	24	–	–	t15	ACCESS HOLE	–	
V1~2	2	4	–	–	40	VENT HOLE	–	
N12	1	2	ASME 150#	WN,RF	80S	EVENT, PROD, EXT, VENT	890	
M5,6	2	24	ASME 150#	WN,RF	t10	MANHOLE	990	W/BLIND, DAVIT
M3,4	2	24	ASME 150#	WN,RF	t10	MANHOLE	990	W/BLIND, DAVIT
M1	2	24	ASME 150#	WN,RF	t10	MANHOLE	990	W/BLIND, DAVIT
P2	1	2	ASME 150#	WN,RF	80S	BOTTOM PRESSURE	890	
P1	1	2	ASME 150#	WN,RF	80S	TOP PRESSURE	890	
L4	1	2	ASME 150#	WN,RF	80S	LEVEL FOR LT	890	
L3	1	2	ASME 150#	WN,RF	80S	LEVEL FOR LT	890	
L2	1	2	ASME 150#	WN,RF	80S	LEVEL FOR LG	890	
L1	1	2	ASME 150#	WN,RF	80S	LEVEL FOR LG	890	
T13	1	2	ASME 150#	WN,RF	80S	3RD BED TEMPERATURE	890	
T12	1	2	ASME 150#	WN,RF	80S	BOTTOM TEMPERATURE	890	
T11	1	2	ASME 150#	WN,RF	80S	BOTTOM BED TEMPERAURE	890	
T9	1	2	ASME 150#	WN,RF	80S	2ND BED TEMPERATURE	890	
T6	1	2	ASME 150#	WN,RF	80S	3RD BED TEMPERATURE	890	
T4	1	2	ASME 150#	WN,RF	80S	3RD BED TEMPERATURE	890	
T3	1	2	ASME 150#	WN,RF	80S	TEMPERATURE BTWEEN 4TH/3RD BEDS	890	
T2	1	2	ASME 150#	WN,RF	80S	TOP BED TEMPERATURE	890	
T1	1	2	ASME 150#	WN,RF	80S	TEMPERATURE MEASURE	890	
N11	1	6	ASME 150#	WN,RF	80S	PSV	SEE DWG.	
N10	1	2	ASME 150#	WN,RF	80S	SAMPLING POINT BETWEEN BEDS	890	
N9	1	2	ASME 150#	WN,RF	80S	SAMPLING POINT BETWEEN BEDS	890	
N8	1	2	ASME 150#	WN,RF	80S	SAMPLING POINT	890	
N7A/B/C	3	4	ASME 150#	WN,RF	80S	EVENTUAL PRODUCT EXTRACTION	890	
N5	1	20	ASME 150#	WN,RF	t10	RETURN FROM REBOILER	960	
N4	1	12	ASME 150#	WN,RF	40S	VAPOR TOP FLOW	SEE DWG.	
N3	1	6	ASME 150#	WN,RF	40S	LIQUID TO REBOILER	SEE DWG.	
N2	1	4	ASME 150#	WN,RF	40S	BOTTOMS	SEE DWG.	
N1	1	4	ASME 150#	WN,RF	80S	FEED + REFLUX INLET	890	

NOZZLE SCHEDULE

SHELL, HEADS / REINFORCING PADS	SA240-304L / SA240-304L
SKIRT	SA240-304L / SA283-C
FLANGES & COVERS	SA182-F304L
FORGED NOZZLES FLANGES & COVERS	–
NOZZLE NECK PLATE	SA240-304L
PIPE NOZZLE NECKS & WELDING FITTINGS	SA312-TP304L/SA403-WP304L
INTERNAL SUPPORTS WELDED TO SHELL	SA240-304L
EXTERNAL LUGS / SIGHT GLASS	–
INTERNAL PACKING	316L S.S
SCREENS WIRE MESH DEMISTERS	–
INTERNAL PIPE & WELDING FITTINGS	SA312-TP304L / SA403-WP304L
EXTERNAL BOLTS/NUTS	SA193-B8 / SA194-8
GASKETS	SEE NOTE "8"
INSULATION SUPPORT	SA240-304L
NAME PLATE W/BRACKET & EARTH LUG	304 S.S
ANCHOR BOLT/NUT	SA307-B / SA563-A(H.D.G)
STIFFENER RING	SA240-304L

MATERIAL SPECIFICATION

CODE	ASME SEC. VIII DIV.1 , 2010 ED.	CODE STAMP	ASME "U" + NATIONAL BOARD REGISTRATION
NATION REGULATION	KSA	CAPACITY (M^3)	33.8
FLUID	ORGANIC	ERECTION WEIGHT (kg)	35300
DENSITY (KG/M^3)	2.86/830.3	EMPTY WEIGHT (kg)	35300
DESIGN PRESS. (bar G)	4.0 / F.V	OPER. WEIGHT (kg)	39200
DESIGN TEMP. (℃)	105	FULL OF WATER WEIGHT (kg)	69500
OPER. PRESS. (TOP/BTM.) (bar G)	0.2/0.35	FIRE PROOF. (mm)	50 (BOTH SIDE)
OPER. TEMP. (TOP/BTM.) (℃)	75/85	INSULATION (mm)	76.2 (H.C)
M.D.M.T. (℃)	-5 @12.39barG	CORR. ALLOW. (mm)	0.1
P.W.H.T.	NO	JOINT EFF. (S/H) (%)	100 / 100
STRESS RELIEF	NO	RADIOGRAPH (S/H)	FULL / FULL
PNEUM.TEST PRESS. (bar G)	–	SEISMIC FACTOR	1.25 (SITE CLASS "D")
HYDRO.TEST PRESS. (bar G)	16.11	WIND	42.7 m/s (ASCE 7-05)
M.A.W.P. (CORR. & HOT) (bar G)	12.39 @105℃	PAINT (C/S PART)	SEE NOTE 10
M.A.P. (NEW & COLD) (bar G)	12.55 @17℃	IMPACT TEST	NO
M.A.E.W.P. (bar G)	1.04 @105℃	SPECIAL SERVICE	–

DESIGN DATA

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS EXCEPT AS NOTED.
2. ALL WELDS ARE CONTINUOUS EXCEPT AS NOTED.
3. ALL FLANGE BOLT HOLES SHALL FLANGE STRADDLE NATURAL CENTER LINE OF EQUIPMENT.
4. VENDOR SHALL CHECK AND GUARANTEE THICKNESS OF EACH PART BY STRENGTH CALCULATION.
5. ALL RECTANGULAR PADS WELDED TO BODY SHALL HAVE 25MM MINIMUM CORNER RADIUS.
6. NOZZLE REINFORCEMENT PAD SHALL BE PROVIDED WITH AT LEAST 1(ONE)-1/4" NPT THREADED TELLTALE HOLES WITH S.S PLUGS. THE TELLTALE HOLE SHALL NOT BE LOCATED ON THE LONGITUDINAL CENTERLINE OF THE EQUIPMENT.
7. HEAD THICKNESS MEANS AFTER FORMING OF HEAD.
8. GASKET MATERIAL ; TEALON 1590 OR EQ.
9. ASME "U" STAMP WITH NATIONAL BOARD REGISTRATION SHALL BE REQUIRED.

REV.	DESCRIPTION	DATE	PRE'D	CH'D	CH'D	APP'D (ATEC)	APP'D (SIPC)