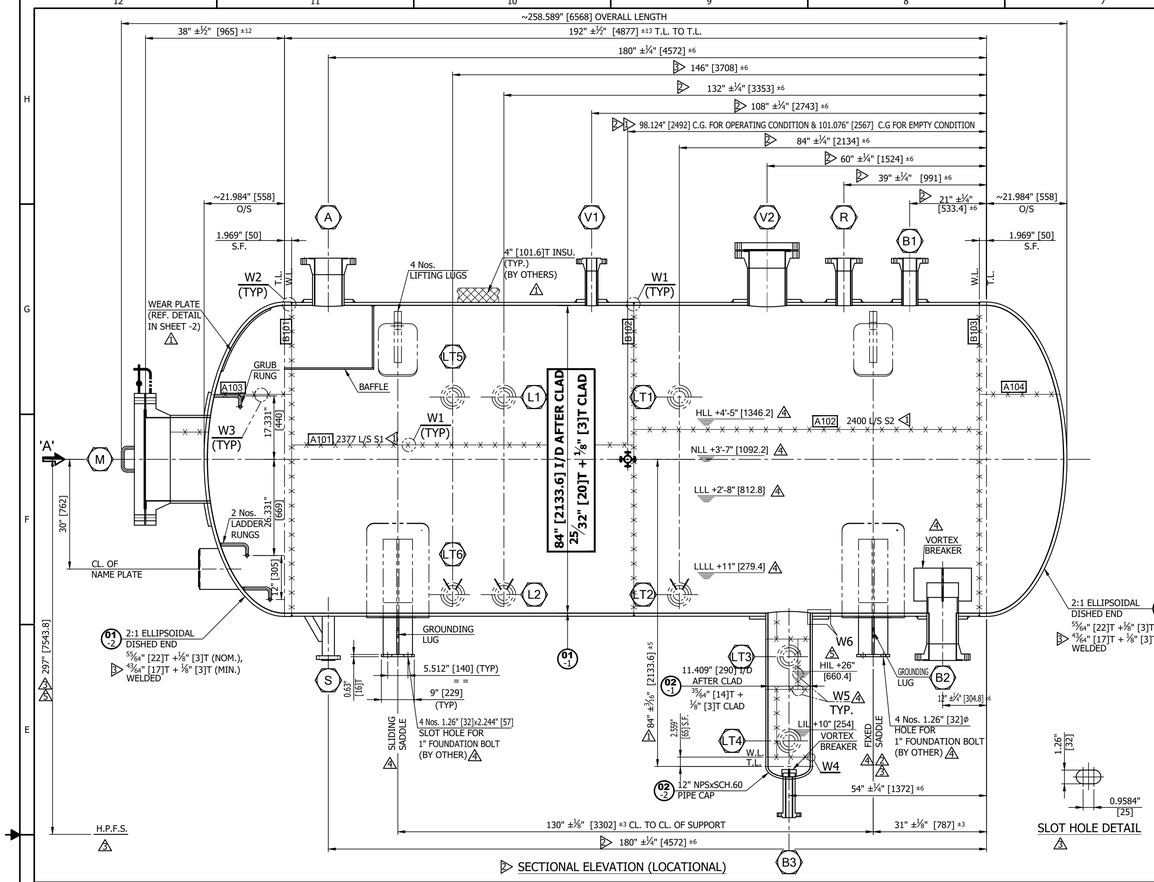
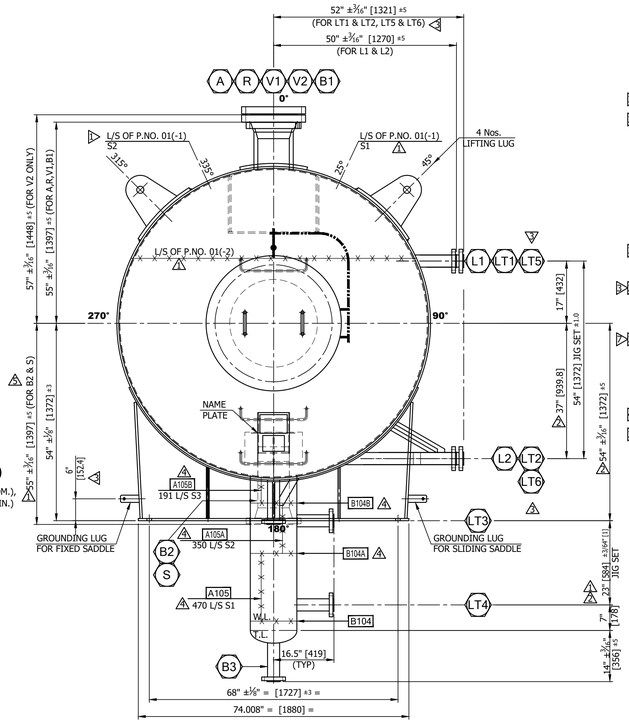
THIS DRAWING MUST NOT WITHOUT OUR CONSENT BE SHOWN TO ANY PERSON OUTSIDE THE RECIPIENT EMPLOY OR BE COPIED OR USED FOR THE PURPOSE OF MANUFACTURING ANY ARTICLE SHOWN IN THE DRAWING AND THE COPYRIGHT IN THE DRAWING SHALL BE AND REMAIN OUR SOLE PROPERTY. THIS DRAWING TOGETHER WITH ANY COPIES MADE BY THE RECIPIENT SHALL BE RETURNED ON DEMAND TO US.

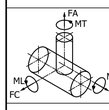




DESIGN DATA

1	CONSTRUCTION CODE		ASME SECTION VIII DIV.1, EDITION 2019
	ASME 'U' STAMP REQUIREMENT		YES
	NATIONAL BOARD REGISTRATION		YES
	SPECIAL SERVICE		NO
	CYCLIC SERVICE		NO
	SOUR SERVICE		NO
2	FLUID CIRCULATED / SERVICE		HC & H2O
3	MAWP	psi(g) (kg/cm²(g))	312 (22) GOVERNING BY SHELL
4	MAP (GOVERNING COMPONENT)	psi(g) (kg/cm²(g))	315 (22.14) GOVERNING BY SHELL
5	DESIGN PRESSURE (INT./EXT.)	psi(g) (kg/cm²(g))	295 (20.7406) / 15 (1.054)
6	DESIGN TEMPERATURE (INT./EXT.)	°F (°C)	500 (260) / 300 (148.89)
7	OPERATING PRESSURE	psi(g) (kg/cm²(g))	240 (16.8737)
8	OPERATING TEMPERATURE	°F (°C)	110 (43.33)
9	MDMT @ MAWP	°F (°C)	5 (-15)
10	LOWEST ALLOWABLE MDMT @ MAWP	°F (°C)	- 49 (-45.00)
11	SHOP HYDRO TEST PRESSURE BASED ON MAP CALCULATED UG-99(c) (HORIZONTAL)	psi(g) (kg/cm²(g))	405.82 (28.53)
12	SITE HYDRO TEST PRESSURE BASED ON UG-99(B)-NOTE-35 (HORIZONTAL)	psi(g) (kg/cm²(g))	405.470 (28.508)
13	CORROSION ALLOWANCE (VESSEL)	INCH (mm)	1/8" (3 mm) CLADDING
14	RADIOGRAPHY (SHELL / DISH)		85% SHELL / 100% DISH (RT-4)
15	WELD JOINT EFFICIENCY (SHELL/DISH)		0.85 / 1.0
16	POST WELD HEAT TREATMENT		NO
17	POST FORMING HEAT TREATMENT		NO
18	IMPACT TEST REQUIREMENT		EXEMPTED (REF. NOTE M8)
19	INSULATION (TYPE / THK.)	INCH (mm)	FP / 4" (101.6) (BY OTHERS)
20	FIRE PROOFING THK. (ON SADDLE)	mm	NA
21	WIND DESIGN AS PER		ASCE 7-16, EXPOSURE CATEGORY -C, RISK CATEGORY -III, Kzt = 1
22	BASIC WIND SPEED	mph	101
23	SEISMIC DESIGN AS PER		ASCE 7-16 IMPORTANCE FACTOR,I=1.5 SITE CLASS D, SS=1.616, S1=0.579
24	DELETED		
25	SPECIFIC GRAVITY		0.55 (HC) / 1 (H2O)
26	PAINTING / CLEANING		REF. NOTE- M4 & M5
27	INSPECTION BY		LRQA VERIFICATION LTD. / AIR PRODUCT
28	WEIGHT EMPTY WEIGHT ~lb(kg)		~ 25272 (11463)
	ERECTION WEIGHT ~lb(kg)		~ 40170 (18221)
	OPERATING WEIGHT ~lb(kg)		~ 65676 (29790)
	HYDRO TEST WEIGHT AT SHOP ~lb(kg)		~ 74191 (33652)
29	H_2 PARTIAL PRESSURE	psi(g) @ °F	89.6 @ 110
30	APPLICABLE UG-22 LOADING		UG-22, a, b, c, d (2), f, j

NOZZLE LOADING DATA



NOZZLE MARK	SIZE NPS(DN)	FA (lbf)	F_C (lbf)	F_L (lbf)	M_C (ft-lb)	M_L (ft-lb)	M_T (ft-lb)
A,B2	8"(200)	2500	1900	2500	3300	4300	5000
B1,R	4"(100)	1300	940	1300	830	1100	1200
S, LT1-LT4, L1,L2	2 (50)	630	470	630	210	270	310
B3	2 (50)	630	0	786	342	0	310
V1	3 (80)	940	710	940	460	600	700
V2	10"(250)	3100	2400	3100	5200	6700	7700

FOUNDATION LOAD (AT BASE)

CONDITION	WIND FORCE (lb)	WIND MOMENT (ft-lb)	SEISMIC FORCE (lb)	SEISMIC MOMENT (ft-lb)
EMPTY	3145.9	14156.55	23861	107373
OPERATING	3145.9	14156.55	35646	160404
HYDROTEST	2359.5	10617.75	NA	NA

MATERIAL OF CONSTRUCTION

SHELL / DISH END	SA 516 GR 70 + SA 240 GR 316L CLAD
FLANGES (EXTERNAL)	SA 105 + SS 316L WO
NOZZLE NECK	SA 516 GR 70 + SA 240 GR 316L CLAD / SA 106 GRB + SS316L WO
FITTINGS	SA 234 WPB + SS 316L WO
BOLTS (EXTERNAL)	SA 193 GR B7 / SA 194 GR 2H
EXTERNAL APPURTENANCES	SA 516 GR 70
INTERNALS (FIXED)	SS 316L
SADDLE	SA 516 GR 70
ANCHOR BOLT	ASTM F3125 GRADE A325, TYPE 1
SS 4.5T SS 316 SPWD GASKET WITH GRAPHITE FILLER AND 3.2T SS 316 INNER & OUTER RING. (DIMENSIONS AS PER ASME B 16.20)	

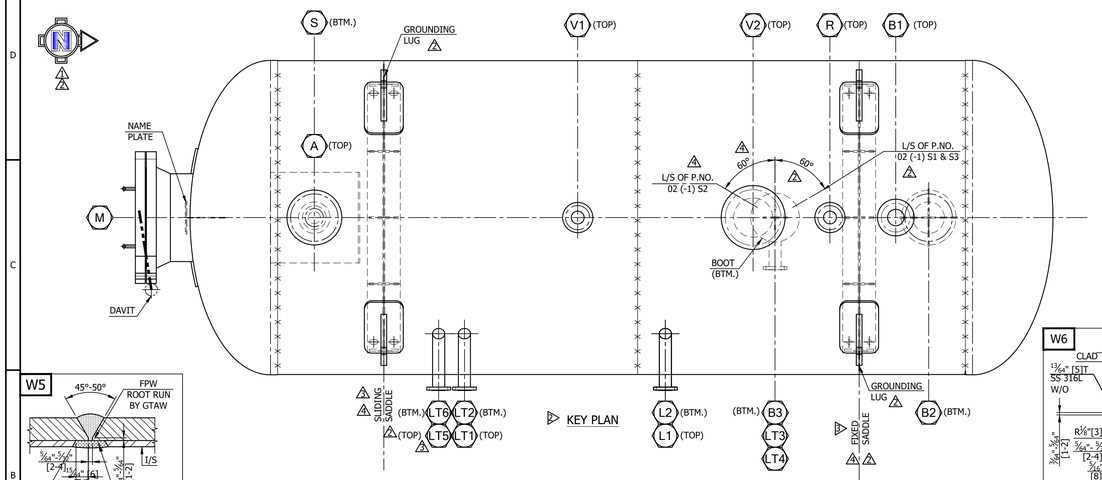
REV NO.	SR. NO.	DESCRIPTION	QTY./ ITEM	MATERIAL	SIZE	WT. (kg)	REMARK
4		WELD JOINT NO.: A101 TO A105, A105A, A105B, B101 TO B104, B104A, B104B, E101 TO E104			SUB TOTAL OF WEIGHT (Kg)	8421	
3	-2	LIFTING LUG	4	SA 516 GR 70	55T x 300W x 310 L	160	
	-1	PAD FOR LIFTING LUG	4	SA 516 GR 70	20T x 270W x 500 DEV.L	85	
3	**03**	**LIFTING LUG ASSLY**					
1	-3	PAD FOR BOOT	1	SA 516 GR 70	20T x 550 DEV.ø	26	
	-2	PIPE END CAP	1	SA 234 WPB + SS 316L WO	NPS 12 x SCH 60 x BW	22	
1	-1	BOOT SHELL	1	SA 516 GR 70 + SS 316L CLAD	(14+3)T x 1040W x 965 DEV LG	134	
	02	**BOOT SHELL ASSLY**					
	-2	DISHED END	2	SA 516 GR 70 + SS 316L CLAD	(22+3T) (NOM.) x 2640 B. DIA	2149	
	-1	MAIN SHELL	1	SA 516 GR 70 + SS 316L CLAD	(20+3T) x 4777 W x 6777 DEV. LG.	5845	
	01	**MAIN SHELL ASSLY**					

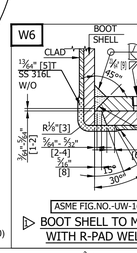
BILL OF MATERIAL

W/O 5T SS 316L WELD OVERLAY (FOR MIN. 1/8" [3] MM UNDILUTED CHEMISTRY)

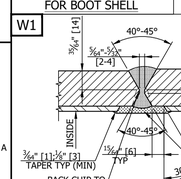
MARK	QTY.	SIZE NPS(DN)	THK.	SCH.	CLASS	TYPE	FACE	SERVICE	PROJ. FROM CL.	RF PAD T x W	REMARK
			PIPE		ASME B16.5 FLANGE						
LT5-LT6	2	(2" I/D) 50.8 I/D	1/2" [16.67] + (W/O)	-	300	LWN	RF	LEVEL TRANSMITTER	SEE DRG.	-	
BOOT	1	295.85 I/D	3/8" [10] + (W/O)	-	-	-	-	-	SEE DRG.	3/16" [20] x 6 3/16" [110]	-
S	1	(2" I/D) 50.8 I/D	1/2" [16.67] + (W/O)	-	600	LWN	RF	STEAM OUT	SEE DRG.	-	-
V2	1	10"(250)	3/16" [9.27] + (W/O)	80+ (W/O)	300	WN	RF	VENT (VENTILATION)	SEE DRG.	3/16" [20] x 3 15/16" [100]	WITH BLRF
V1	1	3"(80)	3/16" [7.62] + (W/O)	80+ (W/O)	600	WN	RF	VENT	SEE DRG.	3/16" [20] x 2 3/16" [60]	
R	1	4"(100)	3/16" [7.62] + (W/O)	80+ (W/O)	300	WN	RF	RELIEF VALVE	SEE DRG.	3/16" [20] x 2 3/16" [60]	
M	1	24"(600)	3/16" [14]+ 0.118" [3] CLAD	-	300	WN	RF	MANWAY	SEE DRG.	3/16" [22]x 6 3/16" [160]	WITH DAVIT & BLRF
LT3-LT4	2	(2" I/D) 50.8 I/D	1/2" [16.67] + (W/O)	-	600	LWN	RF	LEVEL TRANSMITTER (BOOT)	SEE DRG.	-	18-LT-D3 72C
L1-L2	2	(2" I/D) 50.8 I/D	1/2" [16.67] + (W/O)	-	600	LWN	RF	LEVEL GAUGE	SEE DRG.	-	
LT1-LT2	2	(2" I/D) 50.8 I/D	1/2" [16.67] + (W/O)	-	600	LWN	RF	LEVEL TRANSMITTER	SEE DRG.	-	18-LT-D3 72A
B3	1	(2" I/D) 50.8 I/D	1/2" [16.67] + (W/O)	-	600	LWN	RF	SOUR WATER OUTLET	SEE DRG.	-	W/VORTEX BREAKER
B2	1	8"(200)	1/2" [12.7] + (W/O)	80+ (W/O)	300	WN	RF	HYDROCARBON LIQUID OUTLET (STRIPPER FEED)	SEE DRG.	3/16" [20] x 2 3/16" [60]	W/VORTEX BREAKER
B1	1	4"(100)	1/2" [8.56] + (W/O)	80+ (W/O)	300	WN	RF	VAPOR OUTLET (ABSORBER FEED GAS)	SEE DRG.	3/16" [20] x 2 3/16" [60]	-
A	1	8"(200)	1/2" [12.7] + (W/O)	80+ (W/O)	300	WN	RF	VAPOR-LIQUID INLET (STRIPPER FEED)	SEE DRG.	3/16" [20] x 2 3/16" [60]	W/BAFFLE

NOZZLES AND CONNECTIONS

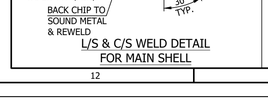




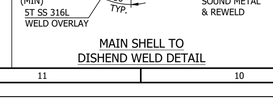
(SHACKLE SIZE 1 1/4", CAPACITY = 12 TON, MODEL NO. G2130/S2130)



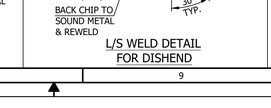
L/S & C/S WELD DETAIL FOR BOOT SHELL



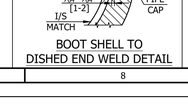
L/S & C/S WELD DETAIL FOR MAIN SHELL



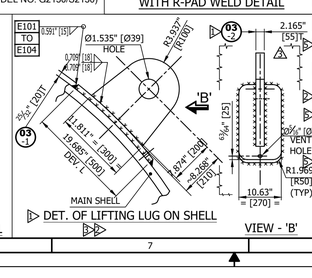
MAIN SHELL TO DISHEND WELD DETAIL



L/S WELD DETAIL FOR DISHEND



BOOT SHELL TO DISHED END WELD DETAIL



AS BUILT DRAWING

THE ANUP ENGG. LTD. — LRQA VERIFICATION LTD. / AIR PRODUCT

EN207120-ANUP-9V3-00025	V-1270-TRANS-2021	1 OF 1	TRANSPORTATION DRAWING	1
EN207120-ANUP-9V3-00035	V-1270-FAD-2021	4 OF 4	EXTERNAL CLEATS DRAWING	3
EN207120-ANUP-9V3-00028	V-1270-FAD-2021	3 OF 4	NAME PLATE AND GENERAL NOTES DETAILS DRAWING	4
EN207120-ANUP-9V3-00023	V-1270-FAD-2021	2 OF 4	SADDLE & NOZZLES DETAILS DRAWING	5

CLIENT DOC. NO.	DRG.NO.	SHT.No.	DESCRIPTION	REV.

REFERENCE DRAWING

7	01-02-2023	FOUNDATION LOADING DATA AND SEISMIC DATA UPDADATED AS MARKED AND RE-AS BUILT DRAWING	RKP	JAD	BMP
6	13-09-2022	AS BUILT DRAWING	GML	AAS	BMP
5	23-08-2022	REVISED AS PER CLIENTS COMMENS AS MARKED 5 & ISSUED FOR APPROVAL	SBP	AAS/JAD	BMP
4	26-07-2022	REVISED AS PER CLIENTS COMMENS AS MARKED 4 & ISSUED FOR APPROVAL	SBP	AAS/JAD	BMP
3	20-05-2022	REVISED AS PER CLIENTS COMMENS AS MARKED 3 & ISSUED FOR APPROVAL	SBL	KRK	BMP
2	19-01-2022	REVISED AS PER CLIENTS COMMENS AS MARKED 2 & ISSUED FOR APPROVAL	SBL	KRK	DKB
1	29-10-2021	REVISED AS PER CLIENTS COMMENS AS MARKED 1 & ISSUED FOR APPROVAL	SBL	KRK/DMP	DKB
0	17-08-2021	ISSUED FOR APPROVAL	SBL	AAS/DRG	BMP
REV. NO.	DATE	DESCRIPTION	BY	CHD.	APPD.

REVISIONS

ENGINEERING & PROJECT MANAGEMENT

CUSTOMER / CLIENT

WORLD ENERGY PARAMOUNT
PARAMOUNT, CA

THE ANUP ENGINEERING LTD.
AHMEDABAD

OWNER : AIR PRODUCT MANUFACTURING LLC	CLIENT'S DRAWING NO. : EN207120-ANUP-9V3-00024
P.O.NO. : 4505487163, DT. 9 JUL. 2021	PROJECT NAME : WORLD ENERGY RENEWABLES PROJECT
PROJECT LOCATION : WORLD ENERGY, PARAMOUNT, CA, USA	UNIT NAME : PROPANE RECOVERY

DRN.	SBL	STRIPPER FEED DRUM	ITEM NO. 18-D-372
CHD.	AAS/DRG		
APPD.	BMP	GENERAL ARRANGEMENT DRAWING	QTY ONE
DATE	17-08-2021		
SCALE	1 : 20		

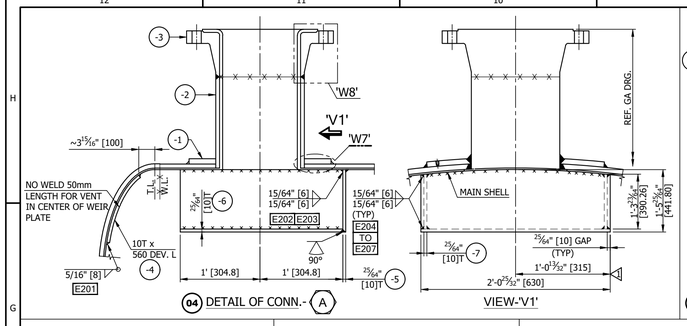
MFR'S SERIAL No.: V-1270 | MFR'S DRG. NO.: V-1270-FAD-2021 | SHEET NO. 1 OF 4 | REV. 0 1 2 3 4 5 6 7 | A1

MFR`S JOB NO: V-1270

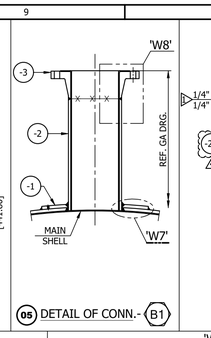
ORIGINAL FRAME SIZE 841 x 594 mm

THIS DRAWING MUST NOT WITHOUT OUR CONSENT BE SHOWN TO ANY PERSON OUTSIDE THE RECIPIENT EMPLOY OR BE COPIED OR USED FOR THE PURPOSE OF MANUFACTURING ANY ARTICLE SHOWN IN THE DRAWING AND THE COPYRIGHT IN THE DRAWING SHALL BE AND REMAIN OUR SOLE PROPERTY. THIS DRAWING TOGETHER WITH ANY COPIES MADE BY THE RECIPIENT SHALL BE RETURNED ON DEMAND TO US.

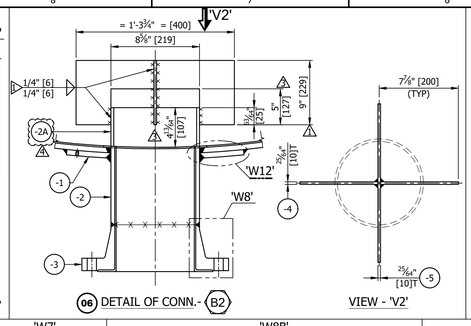
ORIGINAL FRAME SIZE 841 x 594 mm



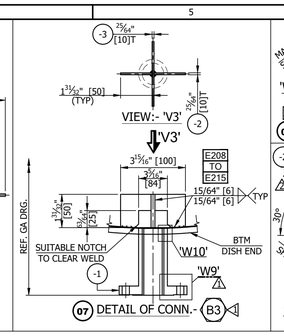
04 DETAIL OF CONN.- A



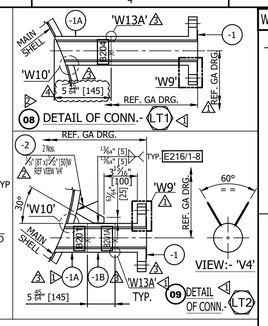
05 DETAIL OF CONN.- B1



06 DETAIL OF CONN.- B2

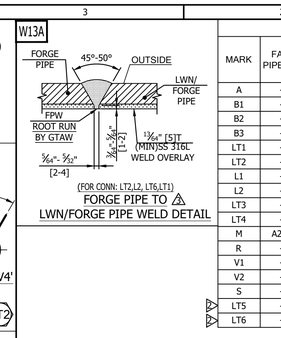


07 DETAIL OF CONN.- B3



08 DETAIL OF CONN.- LT1

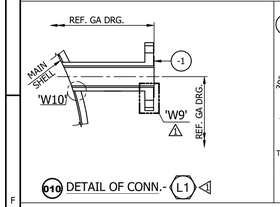
09 DETAIL OF CONN.- LT2



FORGE PIPE TO LWN/FORGE PIPE WELD DETAIL

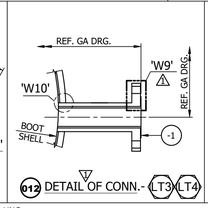
MARK	FAB. PIPE L/S	PIPE / TO FLANGE	NOZZLE PIPE / LWN TO SHELL/DISHEND	R-PAD TO SHELL / DISH END	REMARK
A	-	C201	D201	D201A	
B1	-	C202	D202	D202A	
B2	-	C203	D203	D203A	
B3	-	-	D204	-	
LT1	-	-	D205	-	
LT2	-	-	D206	-	
L1	-	-	D207	-	
L2	-	-	D208	-	
L3	-	-	D209	-	
LT4	-	-	D210	-	
M	A201	C204	D211	D204A	
R	-	C205	D212	D205A	
V1	-	C206	D213	D206A	
V2	-	C207	D214	D207A	
S	-	-	D215		
LT5	-	-	D216	-	
LT6	-	-	D217	-	

NOZZLES WELD JOINT NUMBER

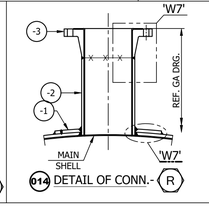


010 DETAIL OF CONN.- L1

011 DETAIL OF CONN.- L2

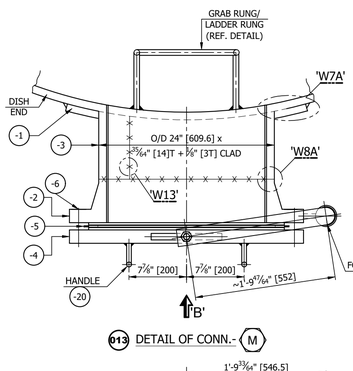


012 DETAIL OF CONN.- LT3,LT4

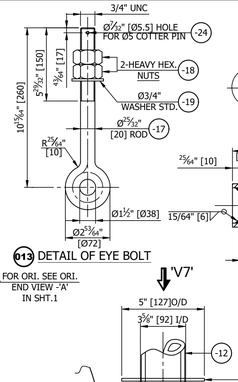


014 DETAIL OF CONN.- R

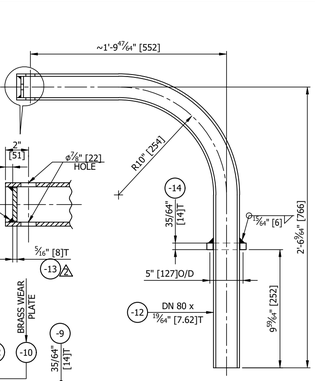
015 DETAIL OF CONN.- V1



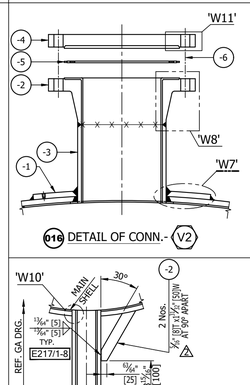
013 DETAIL OF CONN.- M



013 DETAIL OF EYE BOLT



V7'



016 DETAIL OF CONN.- V2

017 DETAIL OF CONN.- S

VIEW-'B'

013 DETAIL-'V6'

013 DETAIL OF HOOK

013 DETAIL OF HANDLE

013 DETAIL OF GRAB & LADDER RUNG

L/S WELD DETAIL FOR FAB. PIPE

LWN FLG TO SHELL/DISH END WELD DETAIL

WN FLG. TO NOZZ. PIPE WELD DETAIL

NOZZ. PIPE TO SHELL / DISH END WITH R-PAD WELD DETAIL

FAB. PIPE TO DISH END WITH R-PAD WELD DETAIL

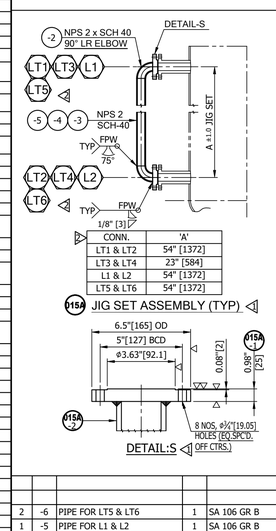
WN FLG. TO NOZZ. PIPE WELD DETAIL

WN FLG. TO FAB. PIPE WELD DETAIL

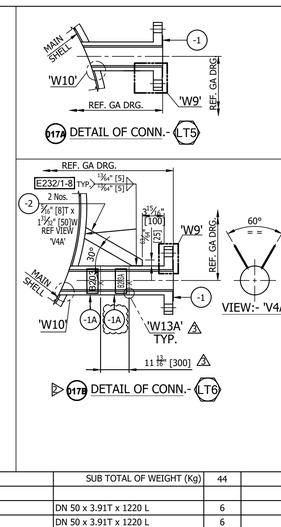
WELD OVERLAY DETAIL FOR LWN FLANGE

CONN.	RF.DIA
V2	323.8
M	692.2

WELD OVERLAY DETAIL FOR BLIND FLANGE



015A JIG SET ASSEMBLY (TYP)



017a DETAIL OF CONN.- LT5

017b DETAIL OF CONN.- LT6

				SUB TOTAL OF WEIGHT (Kg)	44	
2	-6	PIPE FOR LT5 & LT6	1	SA 106 GR B	DN 50 x 3.91T x 1220 L	6
1	-5	PIPE FOR L1 & L2	1	SA 106 GR B	DN 50 x 3.91T x 1220 L	6
1	-4	PIPE FOR LT3 & LT4	1	SA 106 GR B	DN 50 x 3.91T x 432 L	2
2	-3	PIPE FOR LT1 & LT2	1	SA 106 GR B	DN 50 x 3.91T x 1220 L	6
2	-2	ELBOW (SEAMLESS)	8	SA 234 GR WPB	DN 50 x 3.91T x 90°, LR, BW	3.3
2	-1	FLANGE	8	IS 2062 GR E 250 QUALITY B	25T x 165 O/D (FINISH SIZE)	21
	015A	**JIG SET ASSEMBLY**				

REV. NO.	SR. NO.	DESCRIPTION	QTY./ ITEM	MATERIAL	SIZE	WT. (kg)	REMARK
2		WELD JOINT NO.: E201 TO E215, E216/1-8, E217/1-8, E218 TO E231, E232/1-8, B201, B202, B203, B204					
		$$ 4.5T SS 316 SPWD GASKET WITH GRAPHITE FILLER AND 3.2T SS 316 INNER & OUTER RING. (DIMENSIONS AS PER ASME B 16.20)					
4					SUB TOTAL OF WEIGHT (Kg)	1535	
2	-2	STIFFENER	2	SA 516 GR 70	8T x 50W x ~410 L (CUT TO SUIT)	2	
3	-1A	FORGED PIPE	2	SA 105 + SS 316L W.O.	84.14 O/D x 50.8 I/D x 300 LG	16	
3	-1	LWN FLANGE	1	SA 105 + SS 316L W.O.	50.8 I/D X 16.67T X ASME 300 CL LWN FF x 330 LG . (FINISH L)	13	
2	017B	**CONN - LT6 ASSLY**					
2	-1	LWN FLANGE	1	SA 105 + SS 316L W.O.	50.8 I/D x 16.67T x ASME 300 CL LWN FF x 390 LG.	15	
2	017A	**CONN - LT5 ASSLY**					
2	-2	STIFFENER	2	SA 516 GR 70	8T x 50W x ~250 L (CUT TO SUIT)	1	
2	-1	LWN FLANGE	1	SA 105 + SS 316L W.O.	50.8 I/D x 16.67T x ASME 600 CL LWN FF x 350 LG.	14	
	017	**CONN - S ASSLY**					
	-6	STUD WITH 2HVY HEX NUTS	16+2	SA 193 GR B7/ SA 194 GR 2H	1" UNC x 185 L (FULL THRD.)	18	
	-5	GASKET	1+2	$$	DN 250 x ASME 300 CL B16.20	-	
	-4	BLIND FLANGE	1	SA 105 + SS 316L W.O.	DN 250 x ASME 300 CL BL FF	58	
1	-3	NOZZ. PIPE	1	SA 106 GR B + SS 316L W.O.	DN 250 x 9.27T x 295 LG.	28	
1	-2	FLANGE	1	SA 105 + SS 316L W.O.	DN 250 x ASME 300 CL WN FF (BORE ø 254.51)	41	
1	-1	RF PAD	1	SA 516 GR 70	20T x 470 ø DEV.	18	
	016	**CONN - V2 ASSLY**					
1	-3	FLANGE	1	SA 105 + SS 316L W.O.	DN 80 x ASME 600 CL WN FF (BORE ø 73.66)	7	
	-2	NOZZ. PIPE	1	SA 106 GR B + SS 316L W.O.	DN 80 x 7.62T x 275 LG.	4	
	-1	RF PAD	1	SA 516 GR 70	20T x 210 ø DEV.	2.8	
	015	**CONN - V1 ASSLY**					
2	-3	FLANGE	1	SA 105 + SS 316L W.O.	DN 100 x ASME 300 CL WN FF (BORE ø 97.18)	11	
2	-2	NOZZ. PIPE	1	SA 106 GR B + SS 316L W.O.	DN 100 x 8.56T x 270 LG.	6	
2	-1	RF PAD	1	SA 516 GR 70	20T x 240 ø DEV.	6	
	014	**CONN - R ASSLY**					
	-24	COTTER PIN	1	SS	5Ø x 45 L	-	
4	-23	LADDER RUNGS	2	SA 240 TYPE 316L	SQ 20 x 980 DEV. L	4	
4	-22	GRAB RUNG	1	SA 240 TYPE 316L	SQ 20 x 980 DEV. L	2	
	-21	JACK SCREW	3	SS 304	5/8" UNC x 150 L (REF. DET.)	0.7	
	-20	HANDLE	2	SA 516 GR 70	SQ 20 x 310 DEV. L	0.76	
	-19	WASHER	1	SS 304	FOR Ø¾" STD.	-	
	-18	HEX. NUT	2	IS 1367 CL 4	¾" UNC x STD.	0.1	
	-17	EYE BOLT	1	SA 105	¾" UNC x AS PER DRG.	1	
	-16	ROD FOR HOOK	1	SA 516 GR 70	SQ 20 x 340 DEV. L	0.76	
	-15	DAVIT SUPP. PLATE	1	SA 516 GR 70	20T x 49W x 203 LG	1.5	
	-14	COLLAR PLATE	1	SA 516 GR 70	14T x 127 O/D x 92 I/D	0.66	
2	-13	END PLATE	1	SA 516 GR 70	8T x ø71	0.19	
	-12	DAVIT PIPE	1	SA 106 GR B	DN 80 x 7.62T x 1290 LG.	19	
	-11	GREASE NIPPLE	2	BRASS	¼" BSP (STD)	-	
3	-10	WEAR PLATE	1	BRASS	5.5T x 127 O/D x 92 I/D	1.3	
	-9	COLLAR PLATE	1	SA 516 GR 70	14T x 127 O/D x 92 I/D	0.6	
2	-8	END PLATE	1	SA 516 GR 70	8T x ø87	0.28	
	-7	PIPE SLEEVE FOR DAVIT	1	SA 106 GR B	DN 90 x 5.74T x 254 LG.	4	
	-6	STUD WITH 2HVY HEX NUTS	24+3	SA 193 GR B7/ SA 194 GR 2H	1-1/2" BUN x 300 L (FULL THRD.)	83	
	-5	GASKET	1+2	$$	DN 600 x ASME 300 CL B16.20	-	
	-4	BLIND FLANGE	1	SA 105 + SS 316L W.O.	DN 600 x ASME 300 CL BL FF	342	
	-3	FAB. PIPE	1	SA 516 GR 70 + SS 316L CLAD	14+3T x 310 W x 1862 DEV. LG.	112	
	-2	FLANGE	1	SA 105 + SS 316L W.O.	DN 600 x ASME 300 CL WN FF (BORE ø 581.6)	247	
	-1	RF PAD	1	SA 516 GR 70	22T x 940 ø DEV.	72	
	013	**CONN. M ASSLY**					
1	-1	LWN FLANGE	2	SA 105 + SS 316L W.O.	50.8 I/D x 16.67T x ASME 600 CL LWN FF x 305 LG.	12	
1	012	**CONN - LT3 & LT4 ASSLY**					
2	-2	STIFFENER	2	SA 516 GR 70	8T x 50W x ~400 L (CUT TO SUIT)	2	
1	-1A	FORGED PIPE	1	SA 105 + SS 316L W.O.	84.14 O/D x 50.8 I/D x 580 LG	16	
1	-1	LWN FLANGE	1	SA 105 + SS 316L W.O.	50.8 I/D x 16.67T x ASME 600 CL LWN FF x 300 LG. (FINISH L)	12	
1	011	**CONN - L2 ASSLY**					
1	-1	LWN FLANGE	1	SA 105 + SS 316L W.O.	50.8 I/D x 16.67T x ASME 600 CL LWN FF x 340 LG.	14	
1	010	**CONN - L1 ASSLY**					
2	-2	STIFFENER	2	SA 516 GR 70	8T x 50W x ~410 L (CUT TO SUIT)	1.3	
3	-1B	FORGED PIPE	1	SA 105 + SS 316L W.O.	84.14 O/D x 50.8 I/D x 145 LG	4	
2	-1A	FORGED PIPE	1	SA 105 + SS 316L W.O.	84.14 O/D x 50.8 I/D x 485 LG	13	
1	-1	LWN FLANGE	1	SA 105 + SS 316L W.O.	50.8 I/D X 16.67T x ASME 600 CL LWN FF x 300 LG . (FINISH L)	12	
1	09	**CONN - LT2 ASSLY**					
4	-1A	FORGED PIPE	1	SA 105 + SS 316L W.O.	84.14 O/D x 50.8 I/D x 145 LG	0.8	
4	-1	LWN FLANGE	1	SA 105 + SS 316L W.O.	50.8 I/D x 16.67T x ASME 600 CL LWN FF x 235 LG.	20	
1	08	**CONN - LT1 ASSLY**					
	-3	VORTEX BREAKER PLATE	1	SA 240 TYPE 316L	10T x 50W x 100 LG. (REF. DETAIL)	0.39	
	-2	VORTEX BREAKER PLATE	2	SA 240 TYPE 316L	10T x 45W x 46 LG. (REF. DETAIL)	0.32	
1	-1	LWN FLANGE	1	SA 105 + SS 316L W.O.	50.8 I/D X 16.67T x ASME 600 CL LWN FF x 310 LG.	13	
1	07	**CONN - B3 ASSLY**					
3	-5	VORTEX BREAKER PLATE	1	SA 240 TYPE 316L	10T x 229W x 400 LG. (REF. DETAIL)	7	
3	-4	VORTEX BREAKER PLATE	2	SA 240 TYPE 316L	10T x 195W x 229 LG. (REF. DETAIL)	7	
	-3	FLANGE	1	SA 105 + SS 316L W.O.	DN 200 x ASME 300 CL WN FF (BORE ø 193.68)	30	
4	-2A	INTERNAL. PIPE	1	SA 312 TP 316L	DN 200 x 8.18T x 107 LG. (FINISH LG.)	4.6	
4	-2	NOZZ. PIPE	1	SA 106 GR B + SS 316L W.O.	DN 200 x 12.7T x 230 LG.	14	
	-1	RF PAD	1	SA 516 GR 70	20T x 345 ø DEV.	10.5	
	06	**CONN - B2 ASSLY**					
	-3	FLANGE	1	SA 105 + SS 316L W.O.	DN 100 x ASME 300 CL WN FF (BORE ø 97.18)	11	
	-2	NOZZ. PIPE	1	SA 106 GR B + SS 316L W.O.	DN 100 x 8.56T x 270 LG.	6	
	-1	RF PAD	1	SA 516 GR 70	20T x 240 ø DEV.	6	
	05	**CONN - B1 ASSLY**					
	-7	PLATE	2	SA 240 TYPE 316L	10T x 391W x 610 LG	37	
	-6	PLATE	1	SA 240 TYPE 316L	10T x 610W x 630 LG	30	
	-5	PLATE	1	SA 240 TYPE 316L	10T x 442W x 630 LG	22	
	-4	WEAR PLATE	1	SA 240 TYPE 316L	10T x 560 DEV.ø	19	
	-3	FLANGE	1	SA 105 + SS 316L W.O.	DN 200 x ASME 300 CL WN FF (BORE ø 193.68)	30	
	-2	NOZZ. PIPE	1	SA 106 GR B + SS 316L W.O.	DN 200 x 12.7T x 245 LG.	16	
	-1	RF PAD	1	SA 516 GR 70	20T x 345 ø DEV.	10.5	
	04	**CONN - A ASSLY**					

BILL OF MATERIAL

REV. NO.	DATE	DESCRIPTION	BY	CHD.	APPD.
4	17-08-2022	REVISED AS MARKED 4 & ISSUED FOR APPROVAL	SBP	JAD	DKB
3	26-07-2022	REVISED AS MARKED 3 & ISSUED FOR APPROVAL	SBP	AAS/JAD	DKB
2	20-05-2022	REVISED AS MARKED 2 & ISSUED FOR APPROVAL	SBL	KRK	DKB
1	19-01-2022	REVISED AS PER CLIENTS COMMENS AS MARKED 1 & ISSUED FOR APPROVAL	SBL	KRK	DKB
0	29-10-2021	ISSUED FOR APPROVAL	SBL	KRK	DKB

REVISIONS

ENGINEERING & PROJECT MANAGEMENT

CUSTOMER / CLIENT

WORLD ENERGY PARAMOUNT
PARAMOUNT, CA

THE ANUP ENGINEERING LTD.
AHMEDABAD

OWNER : AIR PRODUCT MANUFACTURING LLC	CLIENT'S DRAWING NO. : EN207120-ANUP-9V3-00023
P.O.NO. : 4505487163, DT. 9 JUL. 2021	PROJECT NAME : WORLD ENERGY RENEWABLES PROJECT
PROJECT LOCATION : WORLD ENERGY, PARAMOUNT, CA, USA	UNIT NAME : PROPANE RECOVERY

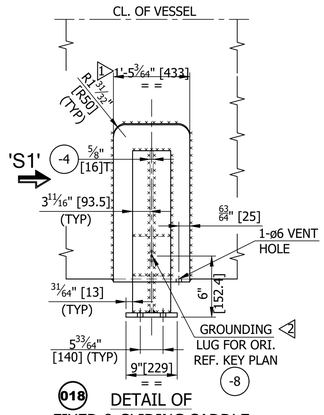
DRN.	SBL	STRIPPER FEED DRUM	ITEM NO. 18-D-372
CHD.	KRK		
APPD.	DKB		
DATE	29-10-2021	SADDLE & NOZZLES DETAILS DRAWING	QTY ONE
SCALE	1 : 20		

MFR'S SERIAL No.: V-1270 | MFR'S DRG. NO.: V-1270-FAD-2021 | SHEET NO. 2/1 OF 2 | REV. 4 | A1

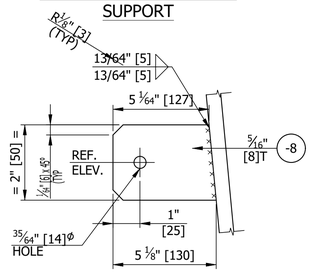
MFR`S JOB NO: V-1270

THIS DRAWING MUST NOT WITHOUT OUR CONSENT BE SHOWN TO ANY PERSON OUTSIDE THE RECIPIENT EMPLOY OR BE COPIED OR USED FOR THE PURPOSE OF MANUFACTURING ANY ARTICLE SHOWN IN THE DRAWING AND THE COPYRIGHT IN THE DRAWING SHALL BE AND REMAIN OUR SOLE PROPERTY. THIS DRAWING TOGETHER WITH ANY COPIES MADE BY THE RECIPIENT SHALL BE RETURNED ON DEMAND TO US.

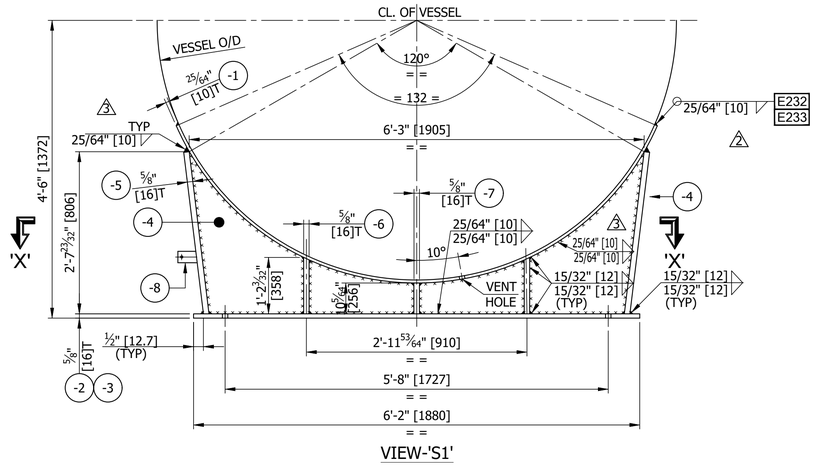
ORIGINAL FRAME SIZE 594 x 420 mm



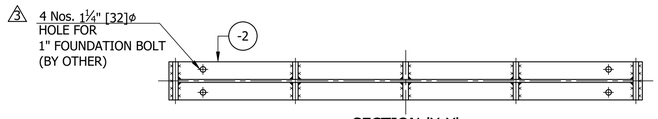
018 DETAIL OF FIXED & SLIDING SADDLE SUPPORT



1 018 DETAIL OF GROUNDING LUG



VIEW-'S1'



SECTION-'X-X'

DETAIL OF BASE PLATE (FIXED SADDLE)



SECTION-'X-X'

DETAIL OF BASE PLATE (SLIDING SADDLE)

	WELD JOINT NO.: E232,E233						
					SUB TOTAL OF WEIGHT (Kg)	599	
1	-8	GROUNDING LUG	2	SS 304	8T x 50 W x 130 L	0.9	
	-7	RIB PLATE	4	SA 516 GR 70	16T x 94 W x 256 L	12	
	-6	RIB PLATE	8	SA 516 GR 70	16T x 94 W x 358 L	34	
	-5	END PLATE	4	SA 516 GR 70	16T x 203 W x 806 L (REF. DETAIL)	82	
	-4	WEB PLATE	2	SA 516 GR 70	16T x 806 W x 1905 L (REF. DETAIL)	191	
	-3	BASE PLATE	1	SA 516 GR 70	16T x 229 W x 1880 L (REF. DETAIL)	54	
	-2	BASE PLATE	1	SA 516 GR 70	16T x 229 W x 1880 L (REF. DETAIL)	54	
1	-1	PAD PLATE	2	SA 516 GR 70	10T x 433 W x 2525 DEV.L	171	
	018	**FIXED & SLIDING SADDLE SUPPORT ASSLY**					

REV. NO.	SR. NO.	DESCRIPTION	QTY./ ITEM	MATERIAL	SIZE	WT. (kg)	REMARK

BILL OF MATERIAL

REV. NO.	DATE	DESCRIPTION	BY	CHD.	APPD.
4	17-08-2022	NO CHANGED & ISSUED FOR APPROVAL	SBP	JAD	DKB
3	26-07-2022	REVISED AS MARKED 3 & ISSUED FOR APPROVAL	SBP	AAS/JAD	DKB
2	20-05-2022	REVISED AS MARKED 2 & ISSUED FOR APPROVAL	SBL	KRK	DKB
1	19-01-2022	REVISED AS PER CLIENTS COMMENS AS MARKED 1 & ISSUED FOR APPROVAL	SBL	KRK	DKB
0	29-10-2021	ISSUED FOR APPROVAL	SBL	KRK	DKB

REVISIONS

ENGINEERING & PROJECT MANAGEMENT

CUSTOMER / CLIENT

WORLD ENERGY PARAMOUNT
PARAMOUNT, CA

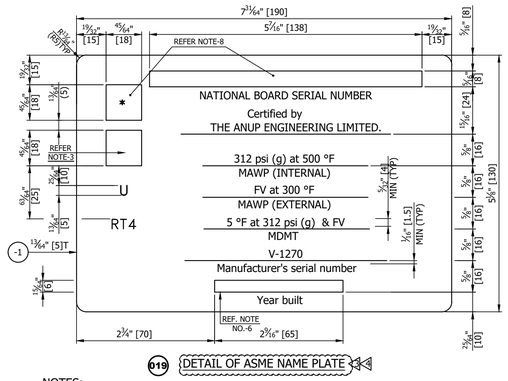
THE ANUP ENGINEERING LTD.
AHMEDABAD

OWNER : AIR PRODUCT MANUFACTURING LLC	CLIENT'S DRAWING NO. : EN207120-ANUP-9V3-00023
P.O.NO. : 4505487163, DT. 9 JUL. 2021	PROJECT NAME : WORLD ENERGY RENEWABLES PROJECT
PROJECT LOCATION : WORLD ENERGY, PARAMOUNT, CA, USA	UNIT NAME : PROPANE RECOVERY

DRN.	SBL	STRIPPER FEED DRUM	ITEM NO. 18-D-372
CHD.	KRK		
APPD.	DKB		
DATE	29-10-2021	SADDLE & NOZZLES DETAILS DRAWING	QTY ONE
SCALE	1 : 20		

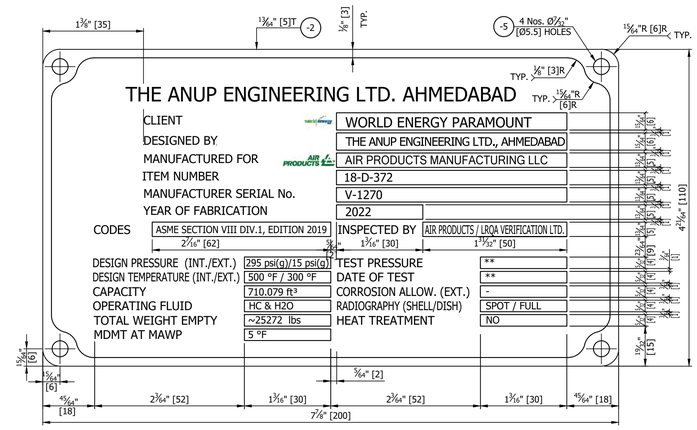
MFR'S SERIAL No.: V-1270 | MFR'S DRG. NO.: V-1270-FAD-2021 | SHEET NO. 2/2 0F 2 | REV. 4 (0 1 2 3) | A2

MFR`S JOB NO: V-1270



NOTES:-

1) ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SHOWN.
2) HEIGHT OF CHARACTERS SHALL BE AT LEAST 4 mm & SHALL BE ENGRAVED IN A BLACK ENAMELED BACKGROUND. CHARACTERS SHALL BE EITHER INDENTED OR RAISED AT LEAST 0.1 mm & SHALL BE LEGIBLE & READABLE.
3) CERTIFICATION MARK TO BE HARD STAMPED IN PRESENCE OF AI AFTER OBTAINING HIS AUTHORIZATION.
4) NAME PLATE SHALL BE RIVETED TO BRACKET AS PER DRAWING.
5) BRACKET WITH NAME PLATE TO BE LOCATED AS MARKED IN DRG.
6) YEAR BUILT SHALL CORRESPOND TO DATE OF HYDROSTATIC TESTING & SHALL BE HARD PUNCHED AFTER SUCCESSFUL COMPLETION OF HYDRO TEST.
7) ALL HARD STAMPED FACE (BLOCK) SHALL BE RAISED FACE.
8) NATIONAL BOARD SYMBOL AND NATIONAL BOARD SERIAL NUMBER AS ADVISED BY HEAD-QUALITY SHALL BE HARD STAMPED IN PRESENCE OF AI AFTER OBTAINING HIS AUTHORIZATION.


1⅜" [35]
¹³/₆₄" [5]T
-2
⅛" [3] TYP.
-5
4 Nos. Ø²¹/₆₄" [Ø5.5] HOLES
¹⁵/₆₄"R [6]R TYP.
TYP. ⅛" [3]R
TYP. ¹⁵/₆₄"R [6]R
THE ANUP ENGINEERING LTD. AHMEDABAD
CLIENT
WORLD ENERGY PARAMOUNT
DESIGNED BY
THE ANUP ENGINEERING LTD., AHMEDABAD
MANUFACTURED FOR
AIR PRODUCTS MANUFACTURING LLC
ITEM NUMBER
18-D-372
MANUFACTURER SERIAL No.
V-1270
YEAR OF FABRICATION
2022
CODES
ASME SECTION VIII DIV.1, EDITION 2019
INSPECTED BY
AIR PRODUCTS / LRQA VERIFICATION LTD.
DESIGN PRESSURE (INT./EXT.)
295 psi(g)/15 psi(g)
TEST PRESSURE
**
DESIGN TEMPERATURE (INT./EXT.)
500 °F / 300 °F
DATE OF TEST
**
CAPACITY
710.079 ft³
CORROSION ALLOW. (EXT.)
-
OPERATING FLUID
HC & H2O
RADIOGRAPHY (SHELL/DISH)
SPOT / FULL
TOTAL WEIGHT EMPTY
~25272 lbs
HEAT TREATMENT
NO
MDMT AT MAWP
5 °F
2²¹/₆₄" [62]
¾" [19]
1³/₁₆" [30]
1³⁹/₆₄" [50]
4³³/₆₄" [110]
¾" [2]
2³/₆₄" [52]
1³/₁₆" [30]
2³/₆₄" [52]
1³/₁₆" [30]
⅜" [10]
⅝" [16]
⅜" [10]
⅝" [16]
⅝" [16]
⅝" [16