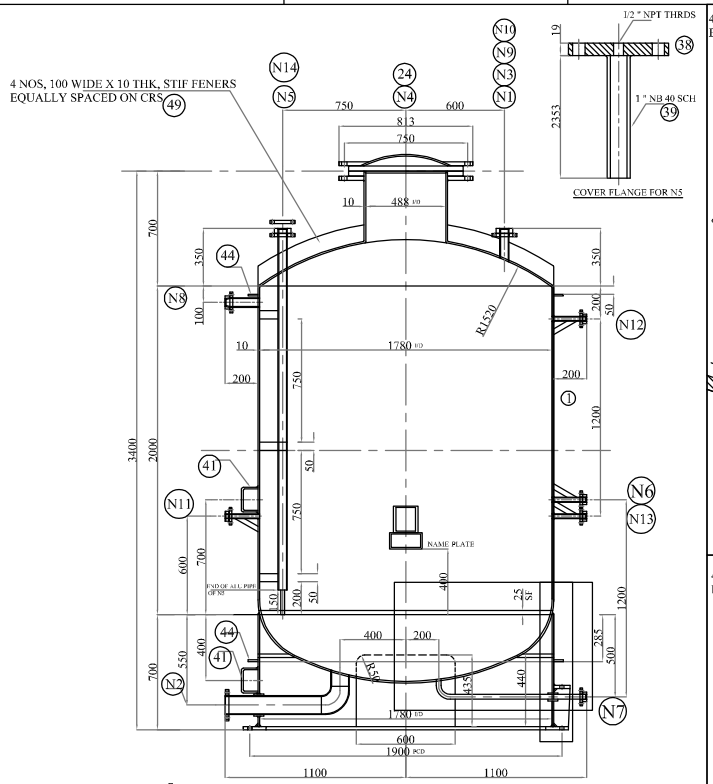

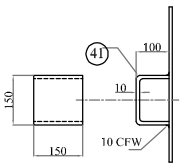

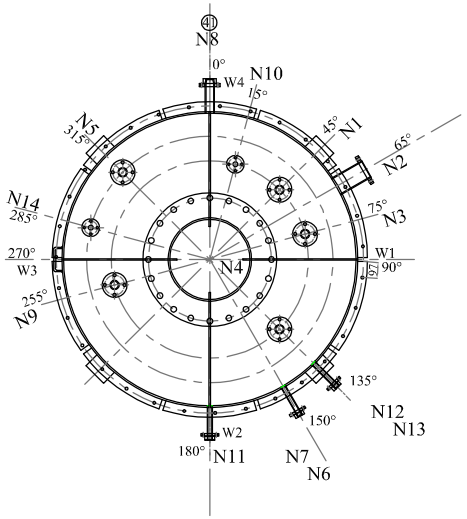

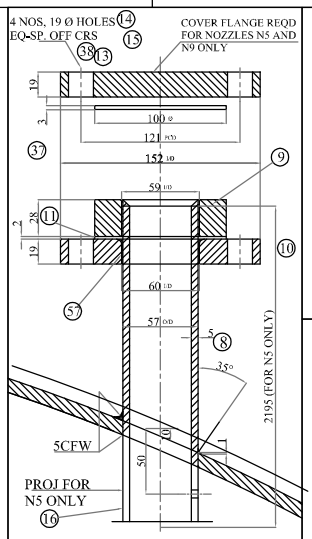

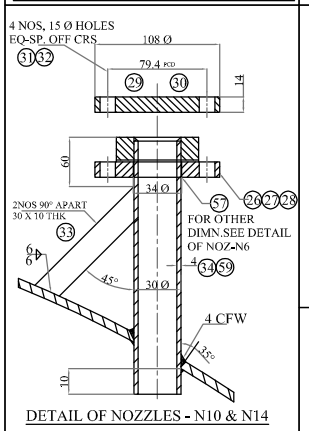

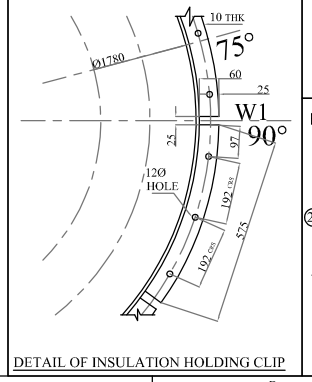

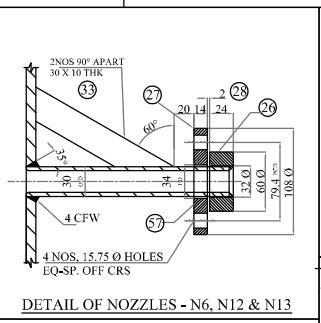

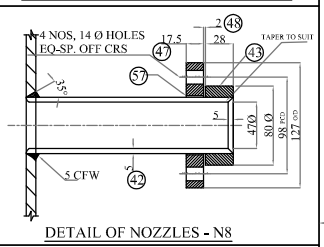

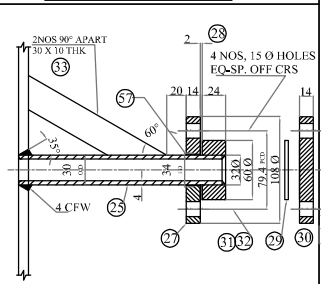

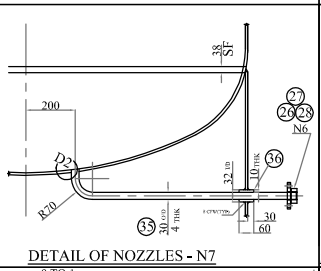

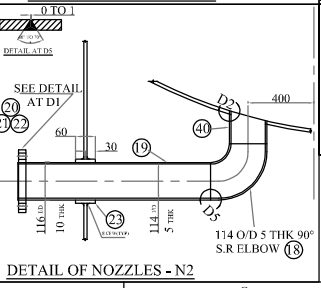

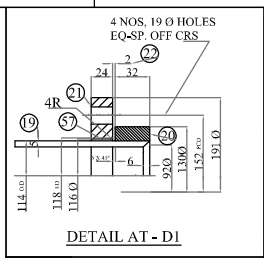

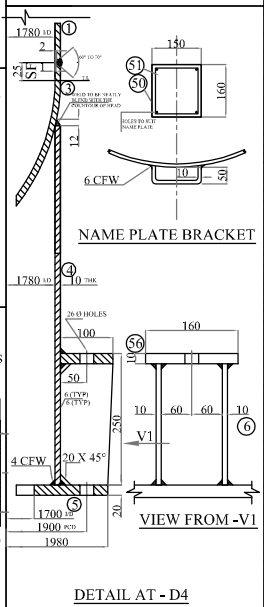

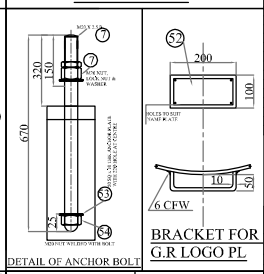

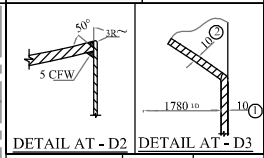

GENERAL NOTES		
1	DESIGN & CONST. CODE-----	ASME SECT-VIII.DIV-1, UN 2000-01
2	DESIGN PRESSURE----------	0.0 KG/CM²G
3	DESIGN TEMPERATURE-------	-10° C/ +35 °C
4	OPERATING PRESSURE	0.0 KG/CM²G
5	OPERATING TEMPERATURE	0°C
6	HYDRO TEST PRESSURE	FULL OF WATER
7	CORROSION ALLOWANCE	NIL
8	JOINT EFFICIENCY	0.8
9	RADIOGRAPHY	100%
10	WIND PRESSURE	150 KG/M²
11	SEISMIC FACTOR	0.04
12	STRESS RELIEVING	NIL
13	INSULATION	60 THK COLD INSULATION
14	INSPECTION	
15	NOMINAL VOLUME	5.0 M³
16	PROCESS FLUID	N2O4
17	DENSITY	1500 KG/M³
18	WEIGHT: EMPTY :- 600 KGS	FULL OF WATER : 6869 KGS.
19	QTY. REQD	ONE
20	WELDING	TIG WELDING,
21	FILLER WIRE	AWS-SFA 5-10 TRADE NAME-ON A 40T
22	ALL LONGITUDINAL AND CIRCUM FERENTIAL WELDS OF VESSEL SHALL TO BE PRENED.	
23	ALL DIMENSIONS ARE IN MM, UNLESS OTHERWISE STATED.	
24	PARTS LIST INDICATES FINISHED SIZES, NECESSARY ALLOWANCES FOR CUTTING GRINDING AND MACHINING TO BE ADDED BY SHOP	
25		
26	MAX LIQUID LEVEL------- 1.8(CYL)m	
27	SPARE PARTS ----- BOLT & NUTS% GASKETS :2NOS	
28	TOLERANCES ACC TO UN 2000-02	
29	ALL WELDING SURFACES TO BE THOROUGHLY CLEANED OFF SCALE ALL OR FOREIGN BODIES BEFORE WELDING.	
30	ALL EXTERNAL WELDS TO BE LEFT UNGROUNDED BUT IN DESCALED CONMON.	
31	ALL WELD ACCESSIBLE FROM SECOND SIDE SHALL BE CHIPPED GROUND BACK TO GROUND METAL BEFORE WELDING FROM SECOND SIDE.	
32	FLANGE OPENING TO BE PROTECTED WITH WOODEN BLANKS FASTNEDED WITH FOUR BOLTS.	
33	ALL BOLT HOLES SHOULD STRADDLE TO NORMAL VESSEL.	
34	ALL INTERNAL WELDS TO BE GROUND PLUSH	
35	TRANSPORTATION ----- FULL	
36	BOLTS FOR OUTSIDE FLANGE CONN-TO BE PROTECTED BY RUBBER SLEEVES	
37	YEAR BOLT ----1979	
38	TEST CERTIFICATES TO BE PROVIDED FOR ALL PARTS	
39	DIRECT CONTACT BETWEEN ALL PIPES & S.S FLANGES SHALL WINDING P.V.C. TAPE ON ALU. PIPE	

ITEM	OBJECT	QTY	MATERIAL	DIMENSIONS
59	PIPE N14	1	AL 99.5 F7	30 O/D X 4 THK X 280 L,
58	TOP DISH	1	AL-99.5 FS	1920.7 10 THK
57	PACKING	-	PYC	TO SUIT
56	TOP PL(SUPPORTS)	4	SB-209-1060	120 X 160 X 10 ~
55	ANCHOR	4	IS 226	10 THK X 80 X 80
54	NUT	4	IS 1369	M-20 STD
53	LOGO BRACKET	1	SB-209-1060	10THK X100 X 320
52	GR LOGO PL	1	S-S	STD
51	UHDE NAME PL	1	S.S	144 X 120
50	NAME LI . BRACKET	1	SB-209-1060	10THK X 160 X 270
49	STIFENER	4	SB-209-1060	100 X 10 X 700LG ~
48	PACKING N8	1	CAF	80 O/D X 60 I/D
47	LOOSE FLANGE N8	1	SA-240-304	127 O/D X 59 I/D X 17.5
46	SPACER STRIP	20	SB-209-1060	10THK X 15 X 25 LG
45	ROD	1	SA-221-1060	10 X 546 TLG
44	ISOULATION CLIP PLATES	10	SB-209-1060	10THK X 60 X TO SUIT
43	LINER N8	1	SB-221-1060	BO O/D X 47 I/D X 28 THK
42	PPIPE N8	1	AL99-5 FY	37 O/D X 5 THK X 210 LG
41	PIPE SUPPORT	2	SB-209-1060	375 X 150 X 10THK ~
40	PIPE N2	1	B241-1060	114 O/D X 5 TH X 100 LG ~
39	PIPE N5	1	SA 312 TP 304L	1 NG SCH 40S X 2353 LG
38	COVER FLG N5	1	SA 240-304	152 O/D X 19 TH
37	GASKET N5	3	TEFLON	100 O/D X 37 I/D X 3 TH
36	SLEEVE N7	1	SB-209-1060	132 X 60 X 10 TH
35	PIPE N7	1	AL 99.5 F7	30 O/D X 4 TH X 1050 LG ~.
34	PIPE N10	1	AL 99.5 F7	30 O/D X 4 TH X 210 LG
33	GUSSET	12	SB-209-1060	30 X 10 X 250 LG
32	HEX.NUT.N10, N11.N14	27	SA194 GR 8	M12 STD
31	FULL THRD STUD N11,N14.	15	SA 193 GR B8	M12 X 78 LG
30	COVER FLANGE N11,N14	3	SA 240-304	108 X 14 THK
29	GASKET N11,N14	9	TEFLON	60 X 3TH
28	PACKING N6,N7	7	CAF	60 O/D 34 I/D X 2MM THK
27	LOOSE FLANGE N10,N12,N13,N14	7	SA 240.304	108 O/D 32 I/D X 14 THK
26	LINER	7	SB-221-1060	60 O/D 32 I/D X 24 TN
25	PIPE N13,N11,N6	4	AL99.5CF7	30 O/D 4TN X 210 LG
24	MANHOLE	1	AL99.5/SS	SEE DRG.NO.SB-C-16
23	SLEEVE N2	1	SB-20D-1060	396 X 60 X 10 TKH
22	PACKING N2	1	CAF	130 X 110 I/D X 2MM THK
21	LOOSE FLANGE N2	1	SA 240-304	191 O/D X 116 I/D X 24 THK
20	LINER N2	1	SB-209-1060	130 O/D X 92 I/D X 32 THK
19	PIPE N2	1	B241-1060	144 O/D STHK 590 LG
18	90'S.R.ELBOW N2	1	B241-1060	114 O/D 5 THK
17	GUSSET N5	6	SB-209-1060	50 X 10 X 250 LG
16	PIPE N5	1	AL99.5F7	57 O/D X 5TH X 2195 LG
15	HEX. NUT N5.N9	19	SA 194 GR 8	M 16 STD
14	FULL THRD.STUD N5,N9	10	SA 193 GR B8	M16 X 102 LG
13	COVER FLANGE N9	1	SA 240 - 904	152 O/D X 19 TH
12	GASKET N9	3	TEFLON	100 X 3TH
11	PACKING	4	CAF	102 O/D X 50 I/D 2 THK
10	LOOSE FLANGE	4	SA 240.304	152 O/D X 59 I/D X 19 TH
9	LINER N1,N2,N3,N5	4	SB-22,-1060	100 O/D X 59O1/D X 28 TH
8	PIPE N1,N3,N9	3	AL99.5 F7	57 O/D X 5TH X 210 LG
7	STUD WITH NUT LOCK NUT AND	4	SS 304	M20 X 670 LG
6	GUSSET	8	SB-209-1060	240 X 100 X 10 TH
5	BOTTOM RING	1	SB-209-3009	1980 O/D X 1700 I/D X 20 THK
4	SKIPT	1	SB-209-3009	5623 X 600 X 10 THK
3	BOTTOM DISHED END	1	AL 99.5 F8	1780 I/D X 10 THK (MM)
2	SHELL	1	SB-209-1060	10THK X DEVELOPMENT
1	SHELL	1	AL99.5-F8	5623 X 1975 X 10TH

ITEM	OBJECT	QTY	MATERIAL	DIMENSIONS

NOZZLE NO	PIPE SIZE NB	PIPE O/D	PIPE THK	FLANGE RATING	FLANGE TYPE	FLANGE FACE	SERVICE	REMARK
N14	25	30	4	150 #	LOOSE	R.F	LEVEL CONTROLLER	WITH COVER
N13	25	30	4	150 #	LOOSE	R.F	LEVEL GAUGE	
N12	25	30	4	150 #	LOOSE	R.F	LEVEL GAUGE	
N11	25	30	4	150 #	LOOSE	R.F	ANALYSIS POINT	WITH COVER
N10	25	30	4	150 #	LOOSE	R.F	PUMP BYPASS	WITH COVER
N9	50	57	5	150 #	LOOSE	R.F	SPARE	WITH COVER
N8	40	57	5	150 #	LOOSE	R.F	OVER FLOW	
N7	25	30	4	150 #	LOOSE	R.F	LEVEL GAUGE	
N6	25	30	4	150 #	LOOSE	R.F	LEVEL GAUGE	
N5	50	57	5	150 #	LOOSE	R.F	LEVEL CONTROLLER	WITH COVER
N4	500	508	10	-	LOOSE	R.F	MANHOLE	WITH COVER
N3	30	57	5	150 #	LOOSE	R.F	VENT	
N2	80	114	5	150 #	LOOSE	R.F	N2O4 LIQUID OUTLET	
N1	50	57	5	150 #	LOOSE	R.F	N2O4 LIQUID INLET	

	Sign	Date
Drawn By		
Checked By		
Approved By		

PROPELLANT COMPLEX RASAYANI
(PCR) Raigad District Maharashtra
Pincode : 410207

Title : Crude Acid Tank-D4104A

DRAWING NO. : CNA/M/T/450

Scale 1:30 | SHEET : 1 of 1 | REV : R0, NOV-2024

All Dimensions are in "MM" | SHEET SIZE : A3