



DESIGN DATA									
DESIGN CODE		ASME SEC VIII DIV.1 ED.2019							
INSPECTION AGENCY		CDPS/CLIENT/TP1							
TYPE		ABSORPTION COLUMN							
SR.NO.		PARAMETER	UNITS	SHELL SIDE					
1	OPERATING PRESSURE	Kg/cm ² (g)	0.5						
2	DESIGN PRESSURE	Kg/cm ² (g)	1.0						
3	OPERATING TEMPERATURE	°C	60						
4	DESIGN TEMPERATURE	°C	120						
5	HYDRO TEST TEMPERATURE	°C	17-48						
6	HYDRO TEST POSITION		HORIZONTAL						
7	WORKING MEDIA		-						
8	MAWP	Kg/cm ² (g)	1.0						
9	HYDRO TEST PRESSURE (HOR/VER)	Kg/cm ² (g)	1.9(1.3)						
10	VISCOSITY OF FLUID	cP	-						
11	CAPACITY (WORKING/GROSS)	m ³	~6.3						
12	DENSITY OF FLUID	Kg/m ³	-						
13	CORROSION ALLOWANCE	MM	NA						
14	JOINT EFFICIENCY (SHELL/DISHEND)		0.85/1						
15	RADIOGRAPHY (SHELL/DISH END)	%	SPOT+ALL "T" JOINTS/FULL						
16	INSULATION	MM	NA						
17	WIND DESIGN CODE/BASIC WIND SPEED	m/sec	IS-875 /44/ (ZONE-IV)						
18	SEISMIC DESIGN CODE/ZONE		IS-1893 RSM (ZONE-IV)						
19	SURFACE FINISH/PANTING	SS PART	ACID PICKLING & PASSIVATION						
20	MS/CS PART	SAND BLASTING SA 2 1/2 GRADE & TWO COATS OF EPOXY ZINC							
21	FABRICATED WEIGHT	Kgs	~						
22	HYDRO TEST WEIGHT	Kgs	~						
23	OPERATING WEIGHT	Kgs	~						
NOZZLE SCHEDULE									
NOZZLE MARK	SERVICE	QTY.	SIZE	FLANGES	STD.	RATING	TYPE	RF PAD OD x THK.	PROJ. REMARK
N63	SOFT WATER IN	1	50 40s	ASME B16.5	150#	SORF	-	-	150
N59	LIQUID OUT TO INTERCOOLER	1	100 40s	ASME B16.5	150#	SORF	-	217x5	150
N60	LIQUID IN FROM INTERCOOLER	1	80 40s	ASME B16.5	150#	SORF	-	190x5	150
N64	HAND HOLE	1	100 40s	ASME B16.5	150#	SORF	-	217x5	150
N67/68	LEVEL TRANSMITTAL	2	25 40s	ASME B16.5	150#	SORF	-		150
N74	SPARE WITH B/F	1	25 40s	ASME B16.5	150#	SORF	-		150
N75	SPARE WITH B/F	1	25 40s	ASME B16.5	150#	SORF	-		150
N76	SPARE WITH B/F	1	25 40s	ASME B16.5	150#	SORF	-		150
N87	SPARE WITH B/F	1	50 40s	ASME B16.5	150#	SORF	-		REF DETAILS
N96	LIQUID OUTLET TO H-1103A	1	50 40s	ASME B16.5	150#	SORF	-		150
N93	VAPOR IN	1	200 5 THK	ASME B16.5	150#	SORF	-	320x5	150
N94	VAPOR OUT	1	200 5 THK	ASME B16.5	150#	SORF	-	320x5	150
N95	TEMPERATURE ELEMENTS	1	40 40s	ASME B16.5	150#	SORF	-		150
LIST OF RELATED DRAWINGS.									
SR.NO.	DESCRIPTION				DRAWING NOS.				
1	NOZZLE DETAIL FOR COLUMN (C-1109A)				CDPS-SO-634-DR-C-1109A-002				
2	NAME PLATE & NAME PLATE BRACKET DETAIL				CDPS-SO-634-DR-C-1109A-003				
3	INTERNALS ATTACHMENT DRAWING.				CDPS-SO-634-DR-C-1109A-004				
COLUMN INTERNALS DETAIL									
ITEM	QTY.	DRAWING OR PART NO.	DESCRIPTION				MATERIAL	REMARKS	
A	1	977-202-001	CD 1 PASS BUBBLE CAP TRAYS #1 U/I #15				SS 316L	-	
GENERAL NOTES:-									
1. ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE SPECIFIED.									
2. ALL FLANGES TO BE DRILLED AS PER ASME B16.5 UNLESS OTHERWISE SPECIFIED.									
3. ALL NOZZLE PIPE UP TO 150 NB SHALL BE SEAMLESS & ABOVE CAN BE FABRICATED WITH 100% RADIOGRAPHY.									
4. ALL FLANGE BOLT HOLES SHALL BE STRADDLE TO VESSEL PRINCIPAL AXIS, UNLESS OTHERWISE SPECIFIED.									
5. ALL NOZZLE 50 NB AND BELOW TO BE PROVIDED WITH 2 NOS. STIFFENER @ 90° APART.									
6. ALL NOZZLE 65NB AND ABOVE TO BE PROVIDED WITH RF PAD.									
7. ALL RF PAD SHALL BE PROVIDED WITH 1/4" NPT TELL TALE HOLE.									
8. ALL RF PAD SHALL BE PNEUMATICALLY TESTED AT 1.5 kg/cm ² (g) WITH SOAP SOLUTION.									
9. MACHINED SURFACES SHALL BE PROTECTED BY RUST PREVENTIVE COMPOUND.									
10. ALL EXTERNAL ATTACHMENT WELDED TO PRESSURE PART SHALL BE SAME AS PRESSURE PART OR EQUIVALENT MOC.									
11. WHEREVER POSSIBLE BUTT WELDS, NOZZLE TO SHELL WELDS SHALL BE BACK CHIP TO SOUND METAL AND REWELD.									
12. ALL T/T HOLES TO BE BE SEALED WITH HARD GREASE BEFORE DISPATCH.									
13. EQUIPMENT SHALL BE WELL DRIED & THOROUGHLY CLEANED BOTH INSIDE & OUTSIDE AND ALL WATER, DIRT, SAND, WELD METAL, SPATTER, WELD ELECTRODES, STUB & FOREIGN MATERIAL SHALL BE REMOVED AFTER HYDROTEST.									
14. HYDROSTATIC TEST PRESSURE SHALL BE HELD FOR ATLEAST ONE HOUR DURING THE TEST. TEST MEDIUM SHALL BE PORTABLE WATER CONTAINS NO MORE THAN 25 PPM OF CHLORIDE.									
15. ALL FLANGE GASKET SEATING FACE SHALL HAVE A FLANGE SURFACE FINISH OF 125-250 MICRO INCH ARAH.									
16. ALL MACHINED SURFACES SHALL BE CHECKED FOR SURFACE DEFECT BY DP/MP TEST AFTER MACHINING.									
17. HYDROTEST SHALL BE CARRIED OUT WITH SERVICE GASKET ONLY.									
18. VENDOR TO SUPPLY 2 NOS BODY FLANGE GASKET SETS ALONG WITH COLUMN.									
19. ALL NOZZLES NOS AS PER G.A DRAWING STENSILING TO BE DONE ON EVERY NOZZLE.									
HOLD LIST									
SR.NO.	DESCRIPTION								
1.	DELETED								
2.	DELETED								
3.	DELETED								
TOTAL WEIGHT IN KGS.= 2079.5									
22	GUSSET PLATE FOR TAILING LUG	1	IS2062 GR.E250 BR	16 THK. x 50 W x 95 Lg.	0.56				
21	TAILING LUG BUSH	1	MS/SA 36	110 O.D. x 54 I.D. x 65 Lg.	3.68				
20	TAILING LUG	1	IS2062 GR.E250 BR	16 THK. x 200 W x 250 Lg.	6.28				
19	LIFTING LUG	2	IS2062 GR E250BR	16 THK x 130 W x 164 LG	5.35				
18	PAD FOR LIFTING LUG(TOP DISHEND)	2	SA 240 GR 316	5 THK x 80 W x 180 LG	1.15				
17	LIFTING LUG	4	IS2062 GR.E250 BR	20 THK. x 140 W x 160 LG.	40.66				
16	PAD FOR LIFTING LUG	4	SA 240, GR 316	5 THK. x 100 W x 230 LG.	6.16				
15	STUD WITH NUT & WASHER	28	SA193 GR.B7/SA 194 GR.2H (BIDG)	M24 x 200 L.	0.00				
14	TOP BODY FLANGE	1	SA 105	60 THK x OD. 1365 x ID. 1212	170.0				
13	LINER PLATE	1	SA 240, GR. 316	3 THK x OD. 1260 x ID 1200	2.70				
12	GASKET	1x2	W 91E 10.3 W 11K	3 THK x OD. 1260 x ID 1200	0.0				
11	LINER PLATE	1	SA 240, GR. 316	3 THK x OD. 1260 x ID 1200	2.7				
10	BOTTOM BODY FLANGE	1	SA 105	60 THK x OD. 1365 x ID. 1212	170.0				
9	EARTHING BOSS	2	SS 304	φ30 X 45 LG.	0.06				
8	WASHER PLATE	12	IS2062 GR.E250 BR	8 THK. x O.D 60 x I.D 27	21.10				
7	GUSSET PLATE	16	IS2062 GR.E250 BR	12 THK. x 100 W x 134 LG.	59.79				
6	SKIRT BASE RING	1	IS2062 GR.E250 BR	16 THK x O.D 1416 x I.D 1016	263.30				
5	SKIRT SHELL	1	IS2062 GR.E250 BR	8 THK. x 750 W x 3795 LG.	352.08				
4	SKIRT SHELL	1	SA 240 Gr.316	8 THK. x 250 W x 3795 LG.	76.2				
3	BTM. DISHED (10% TORR.)	1	SA 240 Gr.316	5 THK. x φ1420 (BLANK DIA)	63.3				
2	TOP DISHED (10% TORR.)	1	SA 240 Gr.316	5 THK. x φ1500 (BLANK DIA)	70.7				
1	SHELL PLATE	1	SA 240 Gr.316	5 THK. x 5071 W x 3786 LG.	768.0				
SR.NO.	DESCRIPTION	QTY.	MATERIAL	DIMENSION	SIZE	WEIGHT			
BILL OF MATERIAL									
1	DRG. REVISED AS PER CLIENT COMMENTS	LSP	SBJ	RHB	17/06/2022				
0	DRG. ISSUED FOR CLIENT APPROVAL	LSP	SBJ	RHB	07/06/2022				
REV	DESCRIPTION				DRAWN	CHECKED	APPROVED	DATE	
DRAWING RELEASE PARTICULARS									
CHEMIST PROCESS SOLUTIONS PVT. LTD.									
PLOT NO.174/1 MIDC BHOSARI, PUNE - 411 028, MAHARASTRA, INDIA.									
CONSULTANT: IPS-MEHTALIA PVT. LTD									
CLIENT: YELLOW STONE CHEMICAL LTD. MAHAD									
PURCHASE ORDER NO.: 8100001294									
MANUFACTURER SERIAL NO. CDPS-634-C1879-2022									
DRN :	LSP	TITLE :				PROJECT: -			
CHD. :	SBJ					DOC NO.: C-00001-P001-MDS-C-1109-RO			
APPD. :	RHB	GA DRAWING FOR				REF.DRG.NO.: -			
SCALE :	07/06/2022	ABSORPTION COLUMN				SIZE: A1			
SCALE :	1:22	TAG NO. C-1109-A				SHEET : 1 OF 4			
MAT. :	SS316+MS					REV. : 1			
QTY :	1 No.					DRG.NO.: CDPS-SO-634-DR-C-1109A-001			