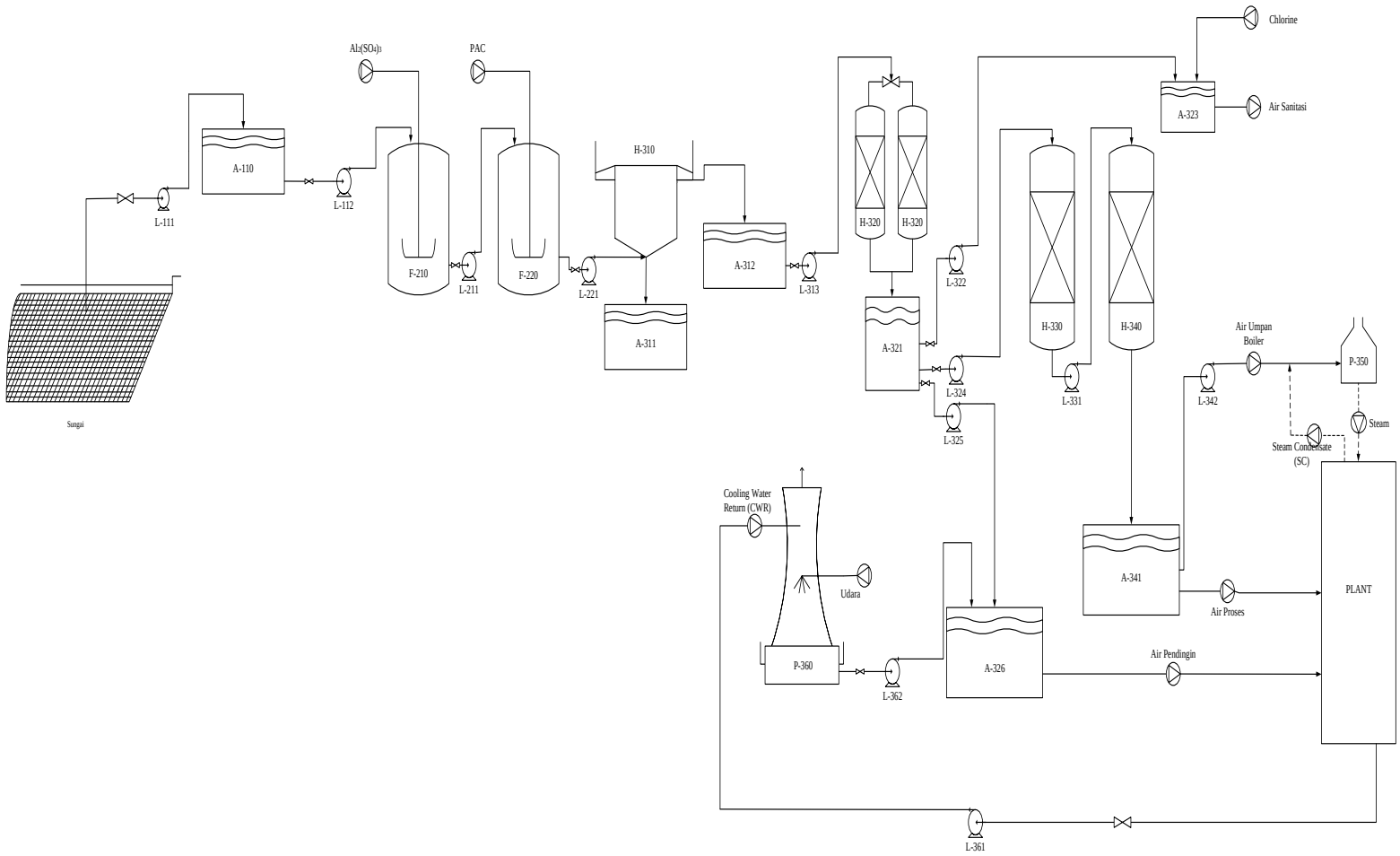
FLOWSHEET UNIT PENGOLAHAN AIR PABRIK AMMONIUM CHLORIDE DARI AMMONIUM SULFATE DAN SODIUM CHLORIDE MENGGUNAKAN SINGLE EFFECT EVAPORATOR DENGAN PROSES DOUBLE DECOMPOSITION



No	Kode Alat	Nama Alat
27	L - 362	Pompa - 12
26	L - 361	Pompa - 11
25	P - 360	Cooling Tower
24	P - 350	Boiler
23	L - 342	Pompa - 10
22	A - 341	Bak Air Demineralisasi
21	H - 340	Tangki Anion Exchanger
20	L - 331	Pompa - 9
19	H - 330	Tangki Kation Exchanger
18	A - 326	Bak Penampung Air Pendingin
17	L - 325	Pompa - 8
16	L - 324	Pompa - 7
15	A - 323	Bak Air Sanitasi
14	L - 322	Pompa - 6
13	A - 321	Bak Penampung Air Bersih
12	H - 320	Sand Filter
11	L - 313	Pompa - 5
10	A - 312	Bak Penampung Air Bersih
9	A - 311	Bak Penampung Flok
8	H - 310	Clarifier
7	L - 221	Pompa - 4
6	F - 220	Tangki Flokulasi
5	L - 211	Pompa - 3
4	F - 210	Tangki Koagulasi
3	L - 112	Pompa - 2
2	A - 110	Bak Penampung Air Sungai
1	L - 111	Pompa - 1

FLOWSHEET UNIT PENGOLAHAN AIR

PRA RENCANA PABRIK AMMONIUM CHLORIDE DARI AMMONIUM SULFATE DAN SODIUM CHLORIDE MENGGUNAKAN SINGLE EFFECT EVAPORATOR DENGAN PROSES DOUBLE DECOMPOSITION

DIGAMBAR OLEH	ELVINA DZAKIYYAH RAMADHANI	Mengetahui
NPM	20031010124	
DOSEN PEMBIMBING	Ir. Ely Kurniati, M.T	

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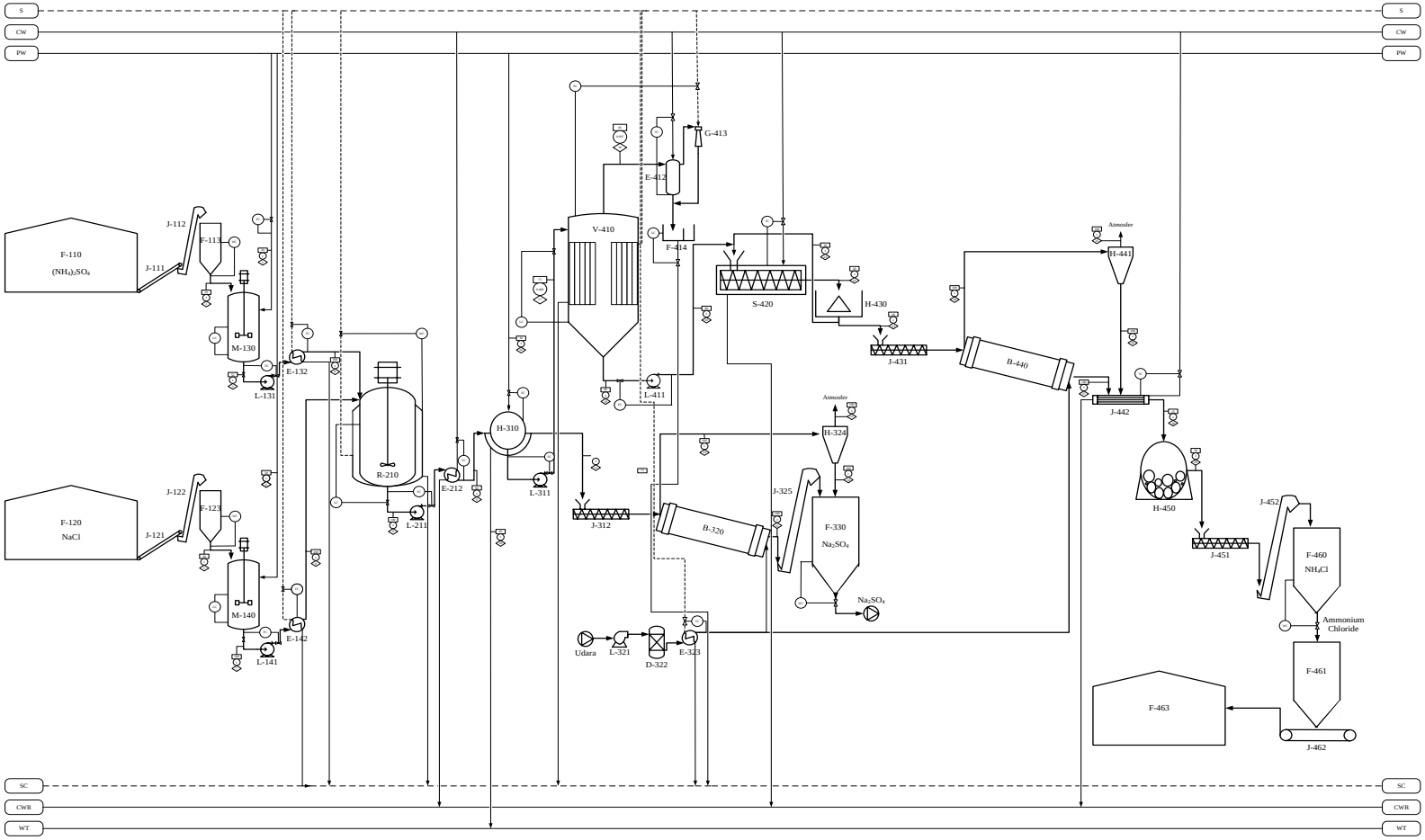

S	Steam
CW	Cooling Water
PW	Process Water
SC	Steam Condesate
CWR	Cooling Water Return
WT	Waste Treatment
	Temperatur (^{o}C)
	Aliran Massa (Kg / jam)
	Tekanan (atm)

No	Kode Alat	Nama Alat
45	F - 463	Gudang Ammonium Chloride
44	J - 462	Belt Conveyor - 3
43	F - 461	Packing Machine Ammonium Chloride
42	J - 460	Silo Ammonium Chloride
41	J - 452	Bucket Elevator - 4
40	J - 451	Screw Conveyor - 3
39	H - 450	Ball Mill
38	J - 442	Cooling Screw Conveyor
37	H - 441	Cyclone - 2
36	B - 440	Rotary Dryer - 2
35	J - 431	Screw Conveyor - 2
34	H - 430	Centrifuge
33	S - 420	Crystallizer
32	F - 414	Hot Well
31	G - 413	Steam Jet Ejector
30	E - 412	Kondensor
29	L - 411	Pompa - 5
28	V - 410	Evaporator
27	F - 330	Silo Sodium Sulfate
26	J - 325	Bucket Elevator - 3
25	H - 324	Cyclone - 1
24	E - 323	Heater - 3
23	D - 322	Molecular Sieve
22	L - 321	Blower
21	B - 320	Rotary Dryer - 1
20	J - 312	Screw Conveyor - 1
19	L - 311	Pompa - 4
18	H - 310	Rotary Drum Vacuum Filter
17	E - 212	Cooler
16	L - 211	Pompa - 3
15	R - 210	Reaktor
14	E - 142	Heater - 2
13	L - 141	Pompa - 2
12	M - 140	Tangki Pelarut Sodium Chloride
11	F - 123	Hopper Sodium Chloride
10	J - 122	Bucket Elevator - 2
9	J - 121	Belt Conveyor - 2
8	F - 120	Storage Sodium Chloride
7	E - 132	Heater - 1
6	L - 131	Pompa - 1
5	M - 130	Tangki Pelarut Ammonium Chloride
4	F - 113	Hopper Ammonium Sulfate
3	J - 112	Bucket Elevator - 1
2	J - 111	Belt Conveyor - 1
1	F - 110	Storage Ammonium Chloride

FLOWSHEET

PRA RENCANA PABRIK AMMONIUM CHLORIDE DARI AMMONIUM SULFATE DAN SODIUM CHLORIDE MENGGUNAKAN SINGLE EFFECT EVAPORATOR DENGAN PROSES DOUBLE DECOMPOSITION

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KOMPONEN	ALIRAN MASSA (Kg / jam)																											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
$(NH_4)_2SO_4$	10348,4471		10348,4471	10348,4471					517,4224							51,7422	465,6801		465,6801	465,6801	908,0762	442,3961	23,2840	0,2328	0,0023	0,2305	23,0512	23,2817	23,2817
NaCl					10025,5423		10025,5423	10025,5423	10025,5423		772,8152	7,6509	0,0773	7,6509	765,0871	132,9840	424,0404		424,0404	424,0404	829,4395	405,3992	18,6412	0,1864	0,0019	0,1845	18,4548	18,6393	18,6393
$CaSO_4$					64,3242		64,3242	64,3242	64,3242		64,3242	0,6432	0,0064	0,6432	64,3242														
$MgCl_2$					143,8369		143,8369	143,8369	143,8369		143,8369	1,4384	0,0144	1,4384	143,8369														
$MgSO_4$					60,3303		60,3303	60,3303	60,3303		60,3303	0,6033	0,0060	0,6033	60,3303														
Fe_2O_3					15,4504		15,4504	15,4504	15,4504		15,4504	0,1545	0,0015	0,1545	15,4504														
NH_4Cl (l)									7959,1571							795,9157	7163,2414		7163,2414	7163,2414	950,5847	903,0555	47,5292	47,0539	0,0048	0,6213	47,0539	47,5245	47,5245
NH_4Cl (s)																					7115,7122		6212,6567		0,6213	61,5053	6150,5302	6212,0355	6212,0355
Na_2SO_4 (l)																													
Na_2SO_4 (s)									10567,5704		8454,0563	83,6952	0,8454	0,8454	8369,5157	2113,5141													
H_2O (l)	52,0022	13281,9071	13333,9094	13333,9094	315,3149	28807,7016	29123,0165	29123,0165	42456,9258	6454,8780	1056,7570	1040,0180	1040,0180		16,7390	10700,5706	2180,2401		2180,2401	2180,2401	4251,4682	2071,2281	109,0120	96,4929	96,4929		12,5191	12,5191	12,5191
H_2O (g)																		34974,2361											
TOTAL	10400,4493	13281,9071	23682,3564	23682,3564	10624,7990	28807,7016	39432,5006	39432,5006	71810,5598	6454,8780	10567,5704	1134,2035	1040,9691	11,3357	9435,2836	13794,7265	10233,2020	34974,2361	10233,2020	10233,2020	14055,2809	3822,07885	6411,1232	143,9661	97,1231	62,5416	6251,6091	6314	6314