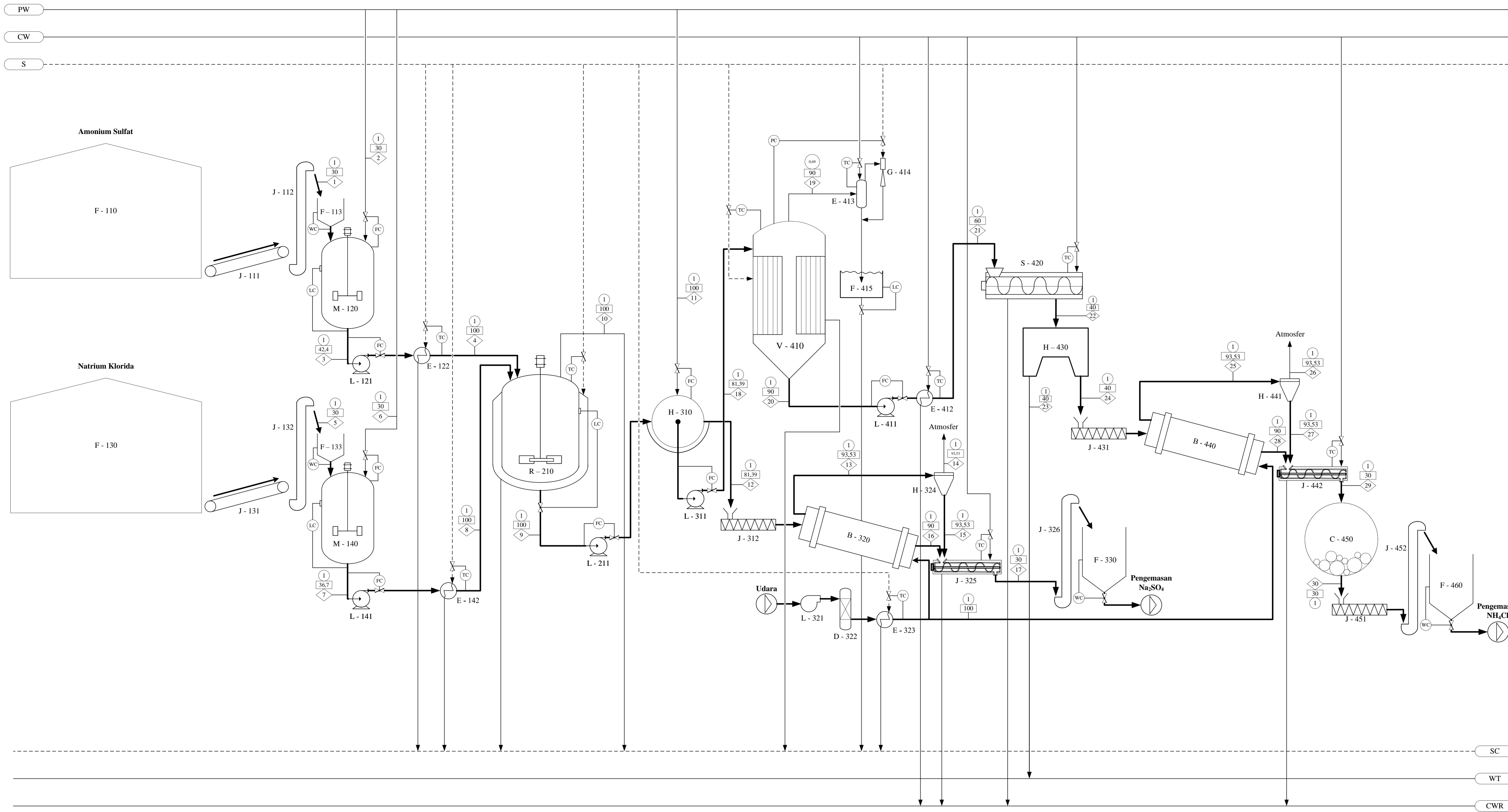


PABRIK AMONIUM KLORIDA DARI AMONIUM SULFAT DAN NATRIUM KLORIDA DENGAN PROSES DOUBLE DECOMPOSITION




PW	Process Water	□	Temperatur (°C)
CW	Cooling Water	◇	Aliran Massa (kg/jam)
S	Steam	○	Tekanan (atm)
SC	Steam Condensate		
WT	Waste Treatment		
CWR	Cooling Water Return		

43	F - 460	Silo Amonium Klorida
42	J - 452	Bucket Elevator - 4
41	J - 451	Screw Conveyor - 3
40	C - 450	Ball Mill
39	J - 442	Cooling Screw Conveyor - 2
38	H - 441	Cyclone - 2
37	B - 440	Rotary Dryer - 2
36	J - 431	Screw Conveyor - 2
35	H - 430	Centrifuge
34	S - 420	Crystallizer
33	F - 415	Hot Well
32	G - 414	Steam Jet Ejector
31	E - 413	Kondensor
30	E - 412	Cooler
29	L - 411	Pompa - 5
28	V - 410	Evaporator
27	F - 330	Silo Natrium Sulfat
26	J - 326	Bucket Elevator - 3
25	J - 325	Cooling Screw Conveyor - 1
24	H - 324	Cyclone - 1
23	E - 323	Heater - 3
22	D - 322	Molecular Sieve
21	L - 321	Blower
20	B - 320	Rotary Dryer - 1
19	J - 312	Screw Conveyor - 1
18	L - 311	Pompa - 4
17	H - 310	Rotary Drum Vacuum Filter
16	L - 211	Pompa - 3
15	R - 210	Reaktor
14	E - 142	Heater - 2
13	L - 141	Pompa - 2
12	M - 140	Tangki Pelarut Natrium Klorida
11	F - 133	Hopper Natrium Klorida
10	J - 132	Bucket Elevator - 2
9	J - 131	Belt Conveyor - 2
8	F - 130	Gudang Natrium Klorida
7	E - 122	Heater - 1
6	L - 121	Pompa - 1
5	M - 120	Tangki Pelarut Amonium Sulfat
4	F - 113	Hopper Amonium Sulfat
3	J - 112	Bucket Elevator - 1
2	J - 111	Belt Conveyor - 1
1	F - 110	Gudang Amonium Sulfat
No	Kode Alat	Nama Alat

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	30		
(NH ₄) ₂ SO ₄	15138,5501		15138,5501	15138,5501					756,9275	10		22,7078	0,2271	0,0023	0,2248	22,4807	22,7056	734,2197														
H ₂ SO ₄	15,3069		15,3069	15,3069					15,3069			15,3069	0,1531	0,0015	0,1515	15,1539	15,3054															
NaCl				13860,7843			13860,7843	13860,7843	1140,0030			34,2001	0,3420	0,0034	0,3386	33,8581	34,1967	1105,8029		1105,8029	1105,8029	1105,8029	1061,5708	44,2321	0,4423	0,0044	0,4379	43,7898	44,2277	44,2277		
CaSO ₄				14,2162			14,2162	14,2162	14,2162			14,2162	0,1422	0,0014	0,1407	14,0740	14,2148															
MgCl ₂				28,4324			28,4324	28,4324	28,4324			28,4324	0,2843	0,0028	0,2815	28,1481	28,4295															
MgSO ₄				28,4324			28,4324	28,4324	28,4324			28,4324	0,2843	0,0028	0,2815	28,1481	28,4295															
NH ₄ Cl _(s)									11643,3024			349,2991					349,2641	11294,0033		11294,0033	11294,0033	15,1226	14,5177									
NH ₄ Cl _(g)													3,4930	0,0349	3,4581	345,8061	349,2641					11278,8808										
Na ₂ SO ₄									15459,1015			15459,1015	154,5910	1,5459	153,0451	15304,5105	15457,5556															
H ₂ O _(l)	153,0693	19255,3282	19408,3975	19408,3975	284,3238	37899,655	38183,9788	38183,9788	18074,9843		2432,14131	2974,3908			2944,6469	2944,6469		29,7439	29,7439	17532,7348												
H ₂ O _(g)										39517,3919										14532,4702												
TOTAL	15306,9262	19255,3282	34562,2545	34562,2545	14216,1890	37899,6550	52115,8440	52115,8440	47160,7066	39517,3919	2432,1413	18926,0872	3104,1639	2946,2421	157,9218	15821,9233	15979,8451	30666,7607	14532,4702	16134,2905	16134,2905	16134,2905	4331,1642	11803,1263	551,8855	439,4899	112,3956	11251,2408	11363,6364	11363,6364		

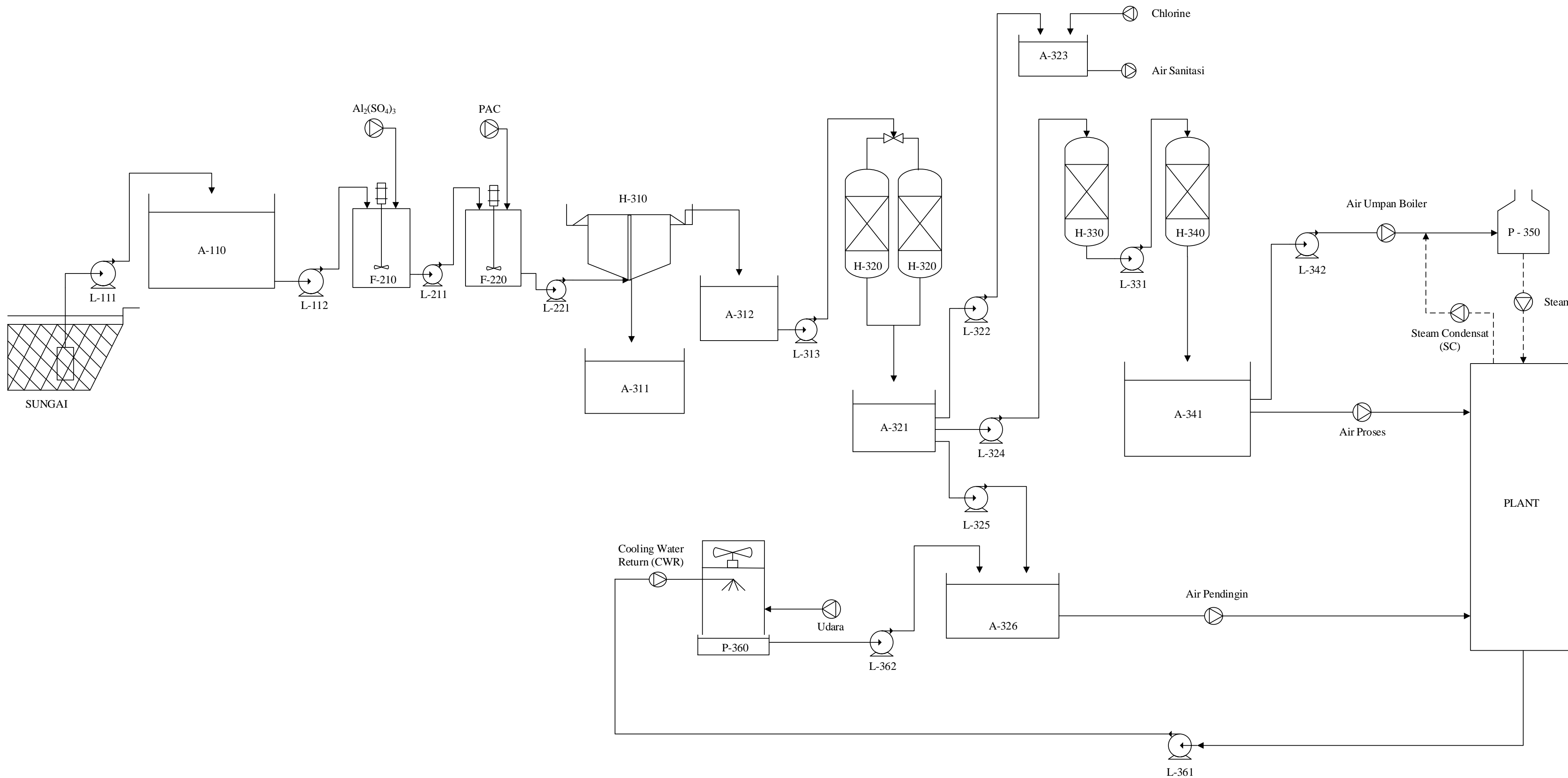
FLOWSHEET
PABRIK AMONIUM KLORIDA DARI AMONIUM SULFAT DAN NATRIUM KLORIDA
DENGAN PROSES DOUBLE DECOMPOSITION

Digambar oleh	Saktyo Anindyo Danarputro	Mengetahui
NPM	19031010085	
Dosen Pembimbing	Ir. Sani, MT	



PROGRAM STUDI TEKNIK KIMIA
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FLOWSHEET UNIT PENGOLAHAN AIR PABRIK AMONIUM KLORIDA DARI AMONIUM SULFAT DAN NATRIUM KLORIDA DENGAN PROSES DOUBLE DECOMPOSITION



27	L - 362	POMPA - 12
26	A - 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
NO	KODE ALAT	NAMA ALAT

FLOWSHEET UNIT PENGOLAHAN AIR
PABRIK AMONIUM KLORIDA DARI AMONIUM SULFAT DAN NATRIUM KLORIDA
DENGAN PROSES DOUBLE DECOMPOSITION

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