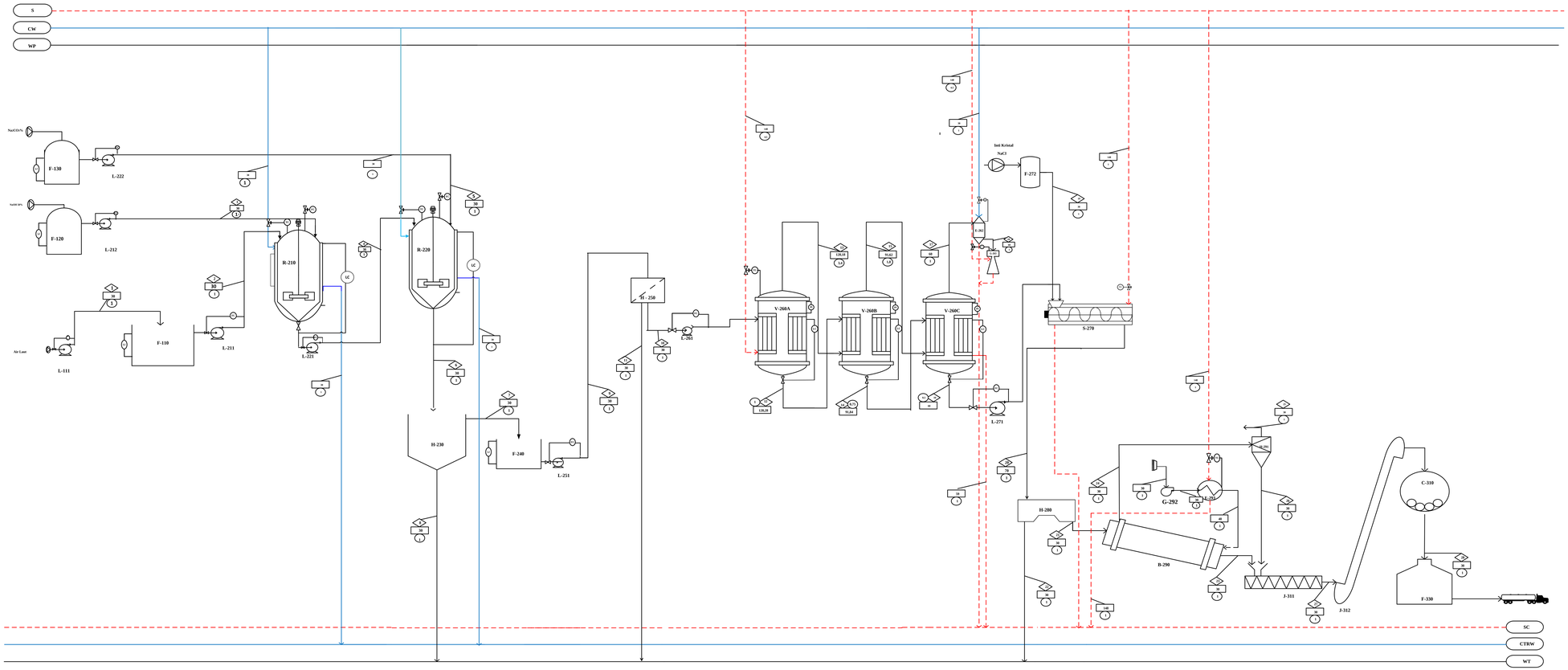
FLOWSHEET PABRIK GARAM INDUSTRI SODIUM CHLORIDE DARI AIR LAUT DENGAN PROSES PRESIPITASI DAN EVAPORASI

CW	Cooling Water	◇	Aliran Massa (Kg/Jam)
WP	Water Process	▭	Temperatur (°C)
S	Steam	○	Tekanan (atm)
CWR	Cooling Water Return		
SC	Steam Condensate		
WWT	Wash Water Treatment		



No	Kode	Nama alat	Jumlah
30	F-330	Storage Tank	1
29	C-310	Ball Mill	1
28	J-312	Bucket Elevator	1
27	J-311	Screw Conveyor	1
26	E-293	Heater	1
25	G-292	Fan Udara	1
24	H-291	Cyclone	1
23	B-290	Rotary Dryer	1
22	H-280	Centrifuge	1
21	F-272	Hooper Inti Crystal	1
20	S-270	Crystallizer	1
19	G-263	Jet Ejector	1
18	E-262	Barometric Condenser	1
17	L-271	Pompa Cristallizer	1
16	V-260	Evaporator	1
15	L-261	Pompa Evaporator 1	1
14	H-250	Filter	3
13	L-251	Pompa Filter	1
12	F-240	Tangki Penampung Sementara	1
11	H-230	Clarifier	1
10	R-220	Reaktor 2	1
9	L-221	Pompa Reaktor 2 -1	1
8	R-210	Reaktor 1	1
7	L-222	Pompa Reaktor 2 -2	1
6	L-212	Pompa Reaktor 1 -2	1
5	L-211	Pompa Reaktor 1 -1	1
4	F-130	Tangki Penyimpanan Na_2CO_3	1
3	F-120	Tangki Penyimpanan Na_2SO_4	1
2	L-111	Pompa Tangki air laut	1
1	F-110	Settling Lagoon / Tangki Penampung Air Laut	1

Aliran Massa (Kg/Jam) / Komponen	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
MgSo4	39,7733	39,7733	-	39,7733	-	39,7733	38,9779	0,79547	38,9779	38,9779	-	38,9779	-	38,9779		38,9779	-	-		38,977867	1,948893	37,0289733	1,94694444	0,001948893	0,000019	0,00193	1,949	1,949
MgCl2	24,8583	24,8583	-	2,48583	-	0,49717	0,00994	0,00994	0,48722	0,48722	-	0,48722	-	0,48722		0,48722	-	-		0,4872233	0,024361	0,46286217	0,02433681	0,000024361	000,0000	0,00002	0,024	0,024
CaSO4.2H20	7,95467	7,95467	-	4,37507	-	0,87501	0,85751	0,0175	0,85751	0,85751	-	0,85751	-	0,85751		0,85751	-	-		0,8575131	0,042876	0,81463741	0,042832778	0,000042876	0,000000	0,00004	0,043	0,043
NaCl	14228,9	14228,9	-	14256,4	-	14228,9	13973,5	285,173	13973,5	13973,5	-	13973,5	-	13973,5		13973,5	-	-		279,82745	13,99137	265,83608	13,9773813	0,013991373	0,000140	0,01385	13,991	13,991
H20	482794	482794	-	482794	-	486612	476878	9732,21	476878	476878	-	320907		164935		8963,66	-	-		60,68	60,68022		22,9033387	37,776884652	0,377769	37,3991	60,302	60,302
impuritis	71,592	71,592	-	71,592	-	71,592	21,4776	50,1144	21,4776	-	21,4776		-	-		-	-	-		-	-							
Mg(OH)2	-	-	-	13,7017	-	13,7017	4,11052	9,5912	4,11052	-	4,11052		-	-		-	-	-		-	-							
Ca(OH)2 +	-	-	-	1,54047	-	1,54047	1,50966	1,07833	1,50966	1,50966	0,46214	1,50966	-	-		1,50966	-	-		1,5096621	0,075483	1,43417899	0,07540762	0,000075483	0,000001	0,00007	0,075	0,075
Na2SO4	-	-	-	2,95368	-	5,84172	1,75252	4,08921	1,75252	-	1,75252		-	-		-	-	-		-	-							
NaOH	-	-	24,5779	4,86955	-	4,86955	4,77216	0,09739	4,77216	4,77216	-	4,77216	-	-		4,77216	-	-		4,772159	0,238608	4,53355105	0,23836934	0,000238608	0,000002	0,00024	0,239	0,239
MgCO3↓	-	-	-	-	-	548,767	164,63	384,137	164,63	-	164,63		-	-		-	-	-		-	-							
CaCO3	-	-	-	-	-	2,03509	0,61053	1,42456	0,61053	-	0,61053		-	-		-	-	-		-	-							
Na2CO3(s)	-	-	-	-	5461	1092,2	327,66	764,54	327,66	-	327,66		-	-		-	-	-		-	-							
NaCl.2H2O	-	-	-	-	-	-	-	-	-	-	-		-	-			-		17,8955	22614,524	22614,52		22591,9091	22,614523656	0,226145	22,39	22614,29751	22614,2975
UAP H2O									-		-		155971		155971		467914	2836,26										
TOTAL	497167	497167	24,5779	497191	5461	502622,5	491418	11233,3	491418	490898	520,703	334927	155971	178955	155971	22983,7	467914	2.836	17,8955	23001,636	22691,53	310,110283	22631,1177	60,407729902	0,604077	59,8037	22690,921	22690,921

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