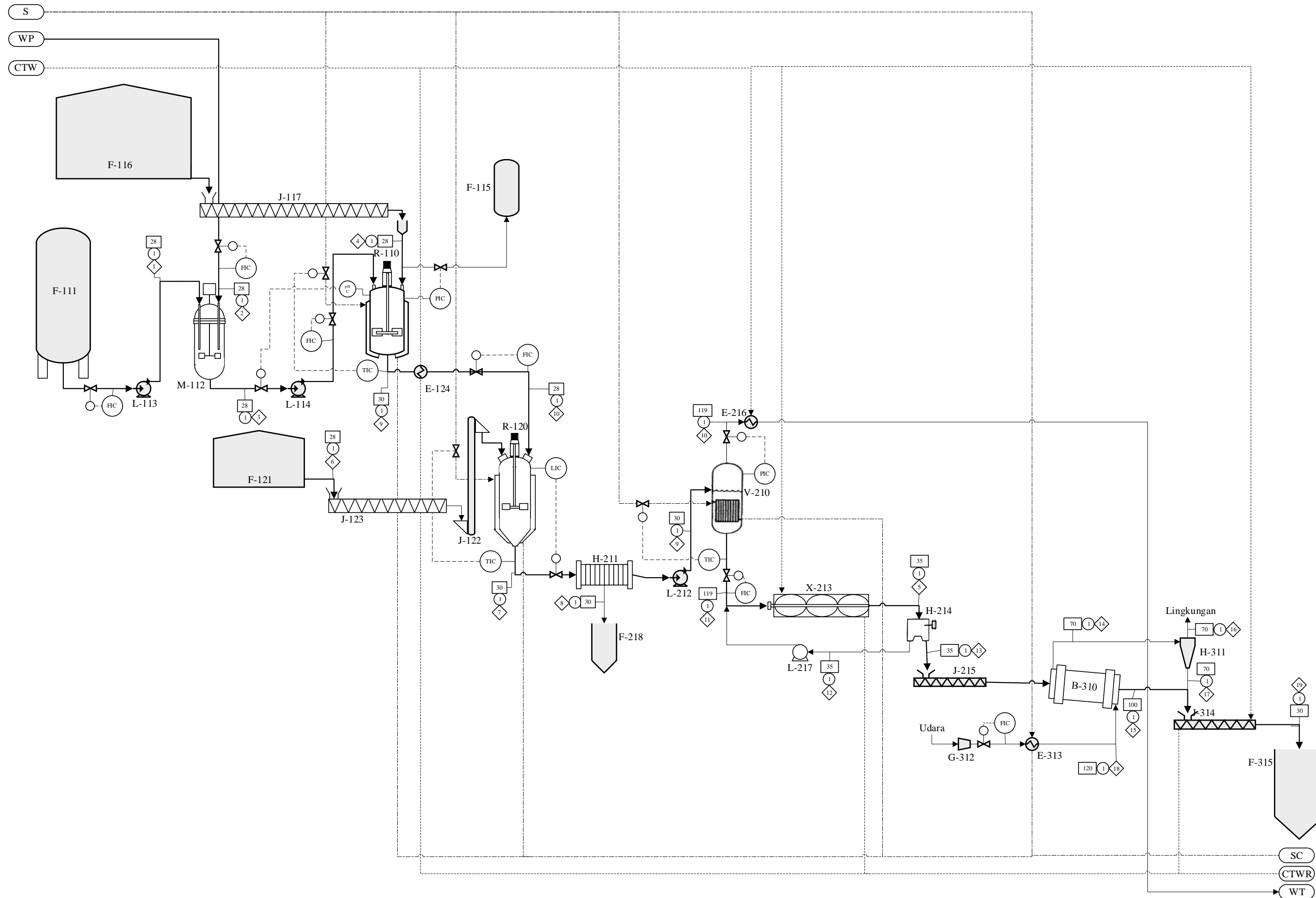


# PABRIK KALSIMUM KLORIDA DARI KAPUR TOHOR DAN ASAM KLORIDA DENGAN PROSES NETRALISASI

Skala 1 : 100



No	Simbol	Keterangan
1	LIC	Level indicator and controller
2	PIC	Pressure indicator and controller
3	TIC	Temperature indicator and controller
4	FIC	Flow indicator and controller
5	WIC	Weight indicator and controller
6	◇	Aliran massa (kg/jam)
7	○	Tekanan (atm)
8	□	Suhu (°C)
9	CTW	Cooling Water (Tower)
10	WP	Process Water
11	S	Steam
12	SC	Steam Condensate
13	CTWR	Cooling Water Return (Tower)

No	Kode	Nama Alat
1	R-110	Reaktor Netralisasi
2	F-111	Tangki Penampung HCl 32%
3	M-112	Mixer Pengencer HCl
4	L-113	Pompa Centrifugal
5	L-114	Pompa Centrifugal
6	F-115	Tangki penampung CO <sub>2</sub>
7	F-116	Tangki Penampung Kapur Tohor
8	R-120	Reaktor presipitasi
9	F-121	Gudang penampung Ca(OH) <sub>2</sub>
10	J-122	Bucket elevator
11	J-123	Screw conveyor
12	V-210	Evaporator
13	H-211	Filter Press
14	L-212	Pompa Centrifugal
15	X-213	Kristalizer
16	H-214	Centrifuge
17	J-215	Screw Conveyor
18	E-216	Barometric Condensor
19	L-217	Pompa Centrifugal
20	F-218	Tangki Penampung Cake
21	B-310	Rotary Dryer
22	H-311	Cyclone
23	G-312	Compressor
24	E-313	Heater Udara
25	J-314	Cooling Conveyor
26	F-315	Bin Penampung CaCl <sub>2</sub>

Material Balance (kg/jam)																			
No. Aliran	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Komponen																			
CaO				922,1541															
HCl	76,3039		76,3039																
H <sub>2</sub> O	158,6219	1080,6588	1239,2807		289,2007														25,6940
Ca(OH) <sub>2</sub>						82,3519													
CaCl <sub>2</sub>								1995,7106	23,3011	1972,4095			1972,4095	19,7241	1952,6854	19,5269	1933,1586	0,1953	19,3316
O <sub>2</sub>																366,8163			366,8163
N <sub>2</sub>																1379,9279			1379,9279
MgO				47,7350			1,9094	1,9094											
Fe <sub>2</sub> O <sub>3</sub>				1,8443			0,0736	0,0736											
CaCO <sub>3</sub>				113,1537			4,5261	4,5261											
MgCl <sub>2</sub>					5,3495		5,4127	0,0632	5,3495				5,3495	5,2960	0,0535	0,0005	0,0530	0,0000	0,0005
CO <sub>2</sub>																			0,0535
FeCl <sub>3</sub>					0,1777		0,1798	0,0021	0,1777				0,1777	0,1760	0,0018	0,0000	0,0018	0,0000	0,0000
Fe(OH) <sub>3</sub>							2,2510	2,2510											
Mg(OH) <sub>2</sub>							63,0023	63,0023											
Total	234,9258	1080,6588	1315,5846	1084,8871	2267,1374	82,3519	2435,0593	135,8109	2299,2484	32,1109	2267,1374	211,6209	2055,5165	1843,3534	1958,9073	77,2771	19,3321	1746,7441	1978,2394

FLOWSHEET PROSES  
PABRIK KALSIMUM KLORIDA DARI KAPUR TOHOR DAN ASAM  
KLORIDA DENGAN PROSES NETRALISASI

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JAWA TIMUR  
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