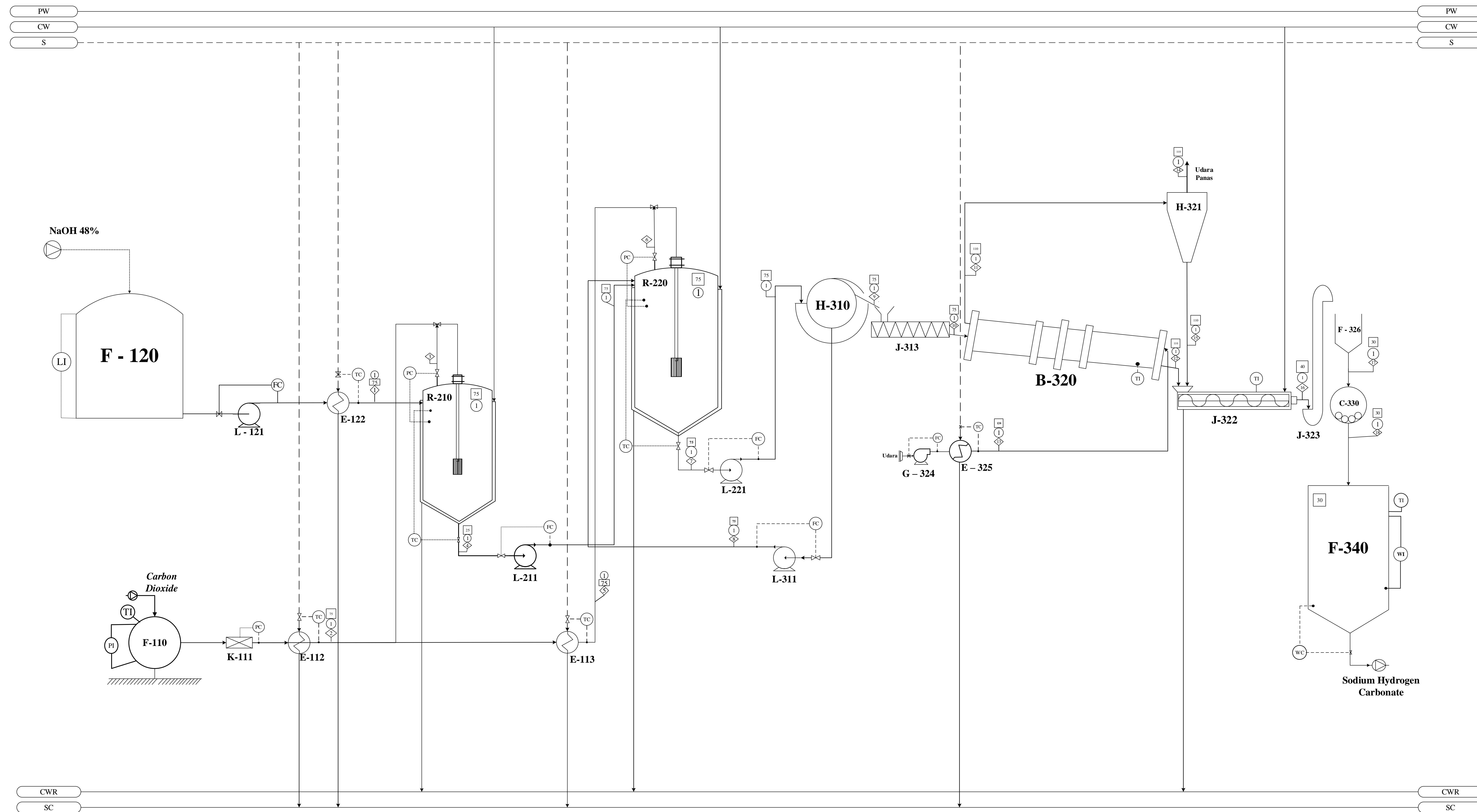


# Pra Rancangan Pabrik Sodium Hydrogen Carbonate dari Caustic Soda dan Carbon Dioxide dengan Proses Karbonasi



Keterangan	
	Aliran Massa; kg/jam
	Temperatur; °C
	Tekanan; atm
	Fuel Oil
	Process Water
	Cooling Water
	Steam
	Cooling Water Return
	Steam Condensate


No	Kode Alat	Nama Alat
1	F-110	Tangki Penyimpanan Gas CO <sub>2</sub>
2	K-111	Ekspansi Valve
3	E-112	Heater - 1
4	E-113	Heater - 2
5	F-120	Tangki Penyimpanan NaOH
6	L-121	Pompa - 1
7	E-122	Heater - 3
8	R-210	Reaktor - 1
9	L-211	Pompa - 2
10	R-220	Reaktor - 2
11	L-221	Pompa - 3
12	H-310	Rotary Drum Vacuum Filter
13	L-311	Pompa - 4
14	J-313	Screw Conveyor
15	B-320	Rotary Dryer
16	H-321	Cyclone
17	J-322	Cooling Screw Conveyor
18	J-323	Bucket Elevator
19	G-324	Blower Udara
20	E-325	Heater - 4
21	F-326	Hopper
22	C-330	Ball Mill
23	F-340	Silo Penyimpanan NaHCO <sub>3</sub>

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
NaOH (aq)	3963,1933			198,1597			9,9080		9,9080	9,9080	0,1713	8,3941		0,0017	0,1696	8,5637	8,5637	8,5637
H <sub>2</sub> O (l)	4293,4594			5146,8043			4390,5973	3951,5375	439,0597	439,0597	778,7618	7,5773		778,7618		7,5773	7,5773	7,5773
CO <sub>2</sub> (g)		2179,7563	108,9878		2070,7685	108,9878												
H <sub>2</sub> O (g)		6,5393	0,3270		6,2123	0,3270												
Na <sub>2</sub> CO <sub>3</sub> (aq)				4988,6696			498,8670	448,9803	49,8867	49,8867	0,9977	48,8890		0,0100	0,9878	49,8767	49,8767	49,8767
NaHCO <sub>3</sub>							7511,2421		7511,2421	7511,2421	150,2248	7361,0173		1,5022	148,7226	7509,7398	7509,7398	7509,7398
Udara Panas													394336,2078					
Total	8256,6527	2186,2956	109,3148	10333,6335	2076,9808	109,3148	12410,6143	4400,5178	8010,0965	8010,0965	930,1557	7425,8776	394336,2078	780,2757	149,8799	7575,7576	7575,7576	7575,7576

DIGAMBAR OLEH : M. Vurqon Alfarizi

NPM : 20031010035

DOSEN PEMBIMBING : Dr. T. Ir. Susilowati, MT.


**PRA RANCANGAN PABRIK SODIUM HYDROGEN CARBONATE DARI CAUSTIC SODA DAN CARBON DIOXIDE DENGAN PROSES KARBONASI**

PROGRAM STUDI TEKNIK KIMIA  
 FAKULTAS TEKNIK & SAINS  
 UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN" JAWA TIMUR  
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