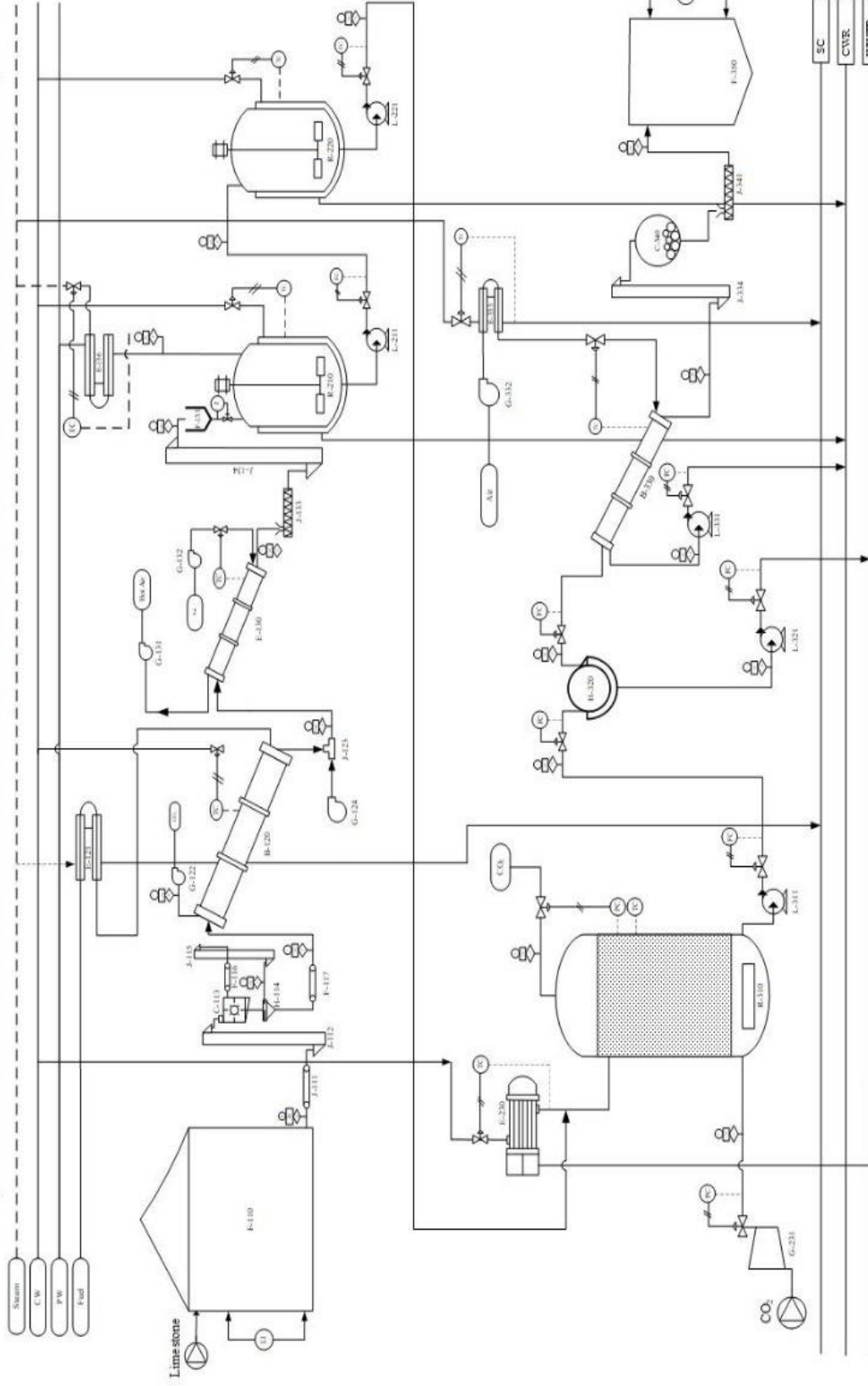


# Pra Rancangan Pabrik Precipitated Calcium Carbonate (PCC) dari Batu Kapur dan Gas Karbondioksida dengan Proses Karbonasi



**KETERANGAN**

S	Steam
SC	Steam Condensate
CW	Cooling Water
CWR	Cooling Water Return
PW	Process Water
WWTP	Waste Treatment Process

**LINE AND SYMBOL**

PC	Pressure Control
TC	Temperature Control
FC	Flow Control
MC	Material Flow
Temperature (°C)	Temperature (°C)
Pressure (atm)	Pressure (atm)
Speed (RPM)	Speed (RPM)

**Daftar Peralatan**

No	Nama Alat	Kode
1	Ball Mill	B-101
2	Ball Mill	B-102
3	Ball Mill	B-103
4	Ball Mill	B-104
5	Ball Mill	B-105
6	Ball Mill	B-106
7	Ball Mill	B-107
8	Ball Mill	B-108
9	Ball Mill	B-109
10	Ball Mill	B-110
11	Ball Mill	B-111
12	Ball Mill	B-112
13	Ball Mill	B-113
14	Ball Mill	B-114
15	Ball Mill	B-115
16	Ball Mill	B-116
17	Ball Mill	B-117
18	Ball Mill	B-118
19	Ball Mill	B-119
20	Ball Mill	B-120
21	Ball Mill	B-121
22	Ball Mill	B-122
23	Ball Mill	B-123
24	Ball Mill	B-124
25	Ball Mill	B-125
26	Ball Mill	B-126
27	Ball Mill	B-127
28	Ball Mill	B-128
29	Ball Mill	B-129
30	Ball Mill	B-130
31	Ball Mill	B-131
32	Ball Mill	B-132
33	Ball Mill	B-133
34	Ball Mill	B-134
35	Ball Mill	B-135
36	Ball Mill	B-136
37	Ball Mill	B-137
38	Ball Mill	B-138
39	Ball Mill	B-139
40	Ball Mill	B-140

**REVISI**

No	Revisi	Tgl
1	Revisi	10/10/2023
2	Revisi	10/10/2023
3	Revisi	10/10/2023
4	Revisi	10/10/2023
5	Revisi	10/10/2023
6	Revisi	10/10/2023
7	Revisi	10/10/2023
8	Revisi	10/10/2023
9	Revisi	10/10/2023
10	Revisi	10/10/2023
11	Revisi	10/10/2023
12	Revisi	10/10/2023
13	Revisi	10/10/2023
14	Revisi	10/10/2023
15	Revisi	10/10/2023
16	Revisi	10/10/2023
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25	Revisi	10/10/2023
26	Revisi	10/10/2023
27	Revisi	10/10/2023
28	Revisi	10/10/2023
29	Revisi	10/10/2023
30	Revisi	10/10/2023
31	Revisi	10/10/2023
32	Revisi	10/10/2023
33	Revisi	10/10/2023
34	Revisi	10/10/2023
35	Revisi	10/10/2023
36	Revisi	10/10/2023
37	Revisi	10/10/2023
38	Revisi	10/10/2023
39	Revisi	10/10/2023
40	Revisi	10/10/2023

**PROGRAM STUDI** DESAIN KIMIA  
**FAKULTAS** TEKNIK  
**UNIVERSITAS** PRABANDHARJANA NASIONAL  
**WILAYAH** SURABAYA UTARA  
 2023

Komponen	Aliran Massa ( Kg/Jam )																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
CaCO <sub>3</sub>	7051.798	352.5899	6699.208	6699.208	6699.208	6699.208	334.960	334.960	334.960	6347.14	6347.14	6347.138	6347.138	64975	6347.138	6029.781	317.357	
MgCO <sub>3</sub>	143.9896	7.1995	136.790	136.790	136.790	136.790	6.840	6.840	6.840	6.84	6.84	6.840	6.840	46.6489	0.342	0.325	0.017	
Fe <sub>2</sub> O <sub>3</sub>	51.68857	2.5844	49.104	49.104	49.104	49.104	49.104	49.104	49.104	49.10	49.10	49.104	49.104	39.9848	2.455	2.332	0.123	
Al <sub>2</sub> O <sub>3</sub>	44.30449	2.2152	42.089	42.089	42.089	42.089	42.089	42.089	42.089	42.09	42.09	42.089	42.089	33.3207	2.104	1.999	0.105	
SiO <sub>2</sub>	36.92041	1.8460	35.074	35.074	35.074	35.074	35.074	35.074	35.074	35.07	35.07	35.074	35.074	553.2990	1.754	1.666	0.088	
H <sub>2</sub> O	55.38061	2.7690	52.612	52.612	52.612	52.612	52.612	2474.419	1702.225	1387.88	2470.07	2470.074	2470.074	18.9604	1916.775	1629.258	273.140	14.376
CaO		369.2041	7014.878	7014.878	7014.878	7014.878	3563.979		997.914	19.96	19.96	19.958	19.958	58.7872	0.998	0.948	0.050	
MgO									61.881	61.88	61.88	61.881	61.881	234.1585	3.094	2.939	0.155	
Ca(OH) <sub>2</sub>									3390.871	4683.17	234.16	234.158						
CO <sub>2</sub>				2868.338								222.9802						
<b>TOTAL</b>	<b>7384.082</b>	<b>738.4082</b>	<b>14029.755</b>	<b>2868.338</b>	<b>14029.76</b>	<b>14029.76</b>	<b>4084.66</b>	<b>4084.66</b>	<b>6620.959</b>	<b>6620.96</b>	<b>9266.32</b>	<b>222.9802</b>	<b>9266.317</b>	<b>991.6569</b>	<b>8274.66</b>	<b>1629.258</b>	<b>6313.131</b>	<b>332.2701</b>