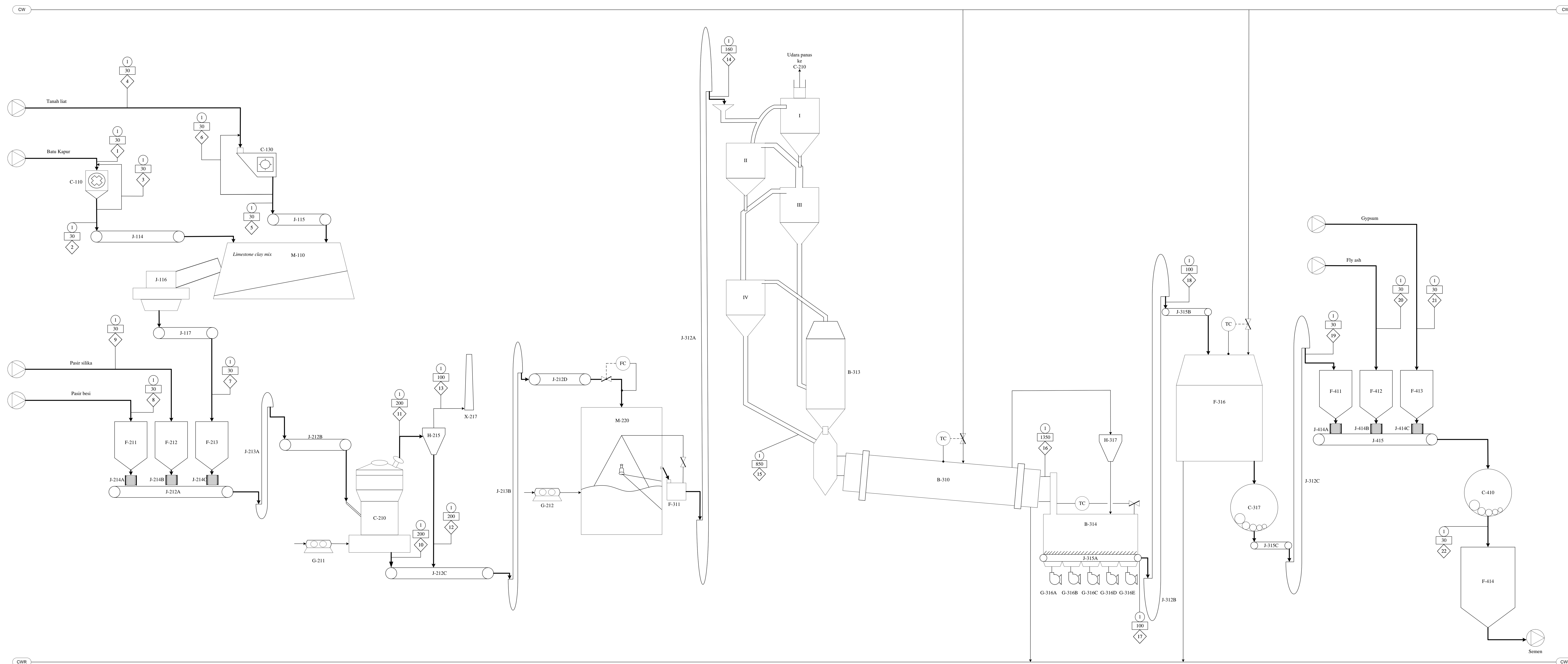


FLOWSHEET PABRIK SEMEN PORTLAND POZZOLAN MENGGUNAKAN PROSES KERING



	Temperatur : °C
	Aliran Massa : kg/jam
	Tekanan : atm
CW	Cooling Water
CWR	Cooling Water Return
TC	Temperatur Control
FC	Flow Control

38	F-414	Silo Semen	1
37	C-410	Ball Mill	1
36	J-415	Belt Conveyor	1
35	J-414	Weight Feeder	3
34	F-413	Gypsum Bin	1
33	F-412	Fly Ash Bin	1
32	F-411	Clinker Bin	1
31	C-317	Ball Mill	1
30	F-316	Clinker Storage	1
29	G-316	Blower	5
28	J-315	Belt Conveyor	3
27	B-314	Cooler	1
26	B-310	Kiln	1
25	B-313	Preheater	1
24	J-312	Bucket Elevator	3
23	F-311	Kiln Feed Bin	1
22	M-220	Blending Silo	1
21	G-212	Blower	1
20	X-217	Cerobong Asap	1
19	H-215	Cyclone	1
18	G-211	Blower	1
17	C-210	Raw Mill	1
16	J-214	Weight Feeder	3
15	J-213	Bucket Elevator	2
14	J-212	Belt Conveyor	4
13	F-213	Bin Limestone Clay Mix	1
12	F-212	Bin Pasir Silika	1
11	F-211	Bin Pasir Besi	1
10	J-117	Belt Conveyor	1
9	J-116	Reclaimer	1
8	M-110	Limestone Clay Mixer	1
7	J-115	Belt Conveyor	1
6	C-130	Roller Crusher	1
5	J-114	Belt Conveyor	1
4	J-113	Belt Conveyor	1
3	J-112	Bucket Elevator	1
2	J-111	Belt Conveyor	1
1	C-110	Jaw Crusher	1
No	Kode Alat	Nama Alat	Jumlah

Nomor	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	
CaCO ₃	60285,9418	60261,8275	1229,8332				60261,8275			59659,2092	602,6183	596,5921	6,0262	60255,8013	21089,5304								
SiO ₂	155,5679	155,5057	3,1736	4616,6840	4614,8373	94,1804	4770,3430	65,8846	7425,1730	12138,7867	122,6140	121,3879	1,2261	12260,1745	12260,1745								
Al ₂ O ₃	615,5078	615,2616	12,5564	1427,1664	1426,5955	29,1142	2041,8571	3,4237	21,7945	2046,4045	20,6708	20,4640	0,2067	2066,8685	2066,8685								
MgCO ₃	1088,9753	1088,5397	22,2151				1088,5397			1077,6543	10,8854	10,7765	0,1089	1088,4308	380,9508								
Fe ₂ O ₃	1285,1261	1284,6121	26,2166	91,6874	91,6507	1,8704	1376,2627	720,1382	18,7884	2094,0375	21,1519	20,9404	0,2115	2114,9779	2114,9779								
CaO				63,1290	63,1037	1,2878	63,1037	6,7638	15,7823	84,7933	0,8565	0,8479	0,0086	85,6413	22028,6149								
MgO				68,3898	68,3624	1,3952	68,3624			67,6788	0,6836	0,6768	0,0068	68,3556	406,5295		588,6232		588,6232				588,6232
K ₂ O				241,2430	241,1465	4,9214	241,1465		0,2104	238,9433	2,4136	2,3894	0,0241	241,3328	241,3328				241,3328				241,3328
Na ₂ O				11,2730	11,2685	0,2300	11,2685			11,1558	0,1127	0,1116	0,0011	11,2674	11,2674				11,2674				11,2674
TiO ₂									11,2730	11,1603	0,1127	0,1116	0,0011	11,2719	11,2719				11,2719				11,2719
H ₂ O	4207,0970	4205,4142	85,8248	995,7848	995,3865	20,3140	5200,8007	38,8293	22,3356	52,6197	5209,3461	52,0935	5157,2526	104,7131		104,7131			9470,7878				
CO ₂																17592,6032							
C ₃ S																				27666,8774			27666,8774
C ₂ S																				14288,3235			14288,3235
C ₃ AL																				1899,4859			1899,4859
C ₂ AF																				6433,5490			6433,5490
Gypsum																					5114,0731		5114,0731
Fly Ash																						1534,2219	1534,2219
Total	67638,2159	67611,1606	1379,8196	7515,3573	7512,3512	153,3133	75123,5118	835,0397	7515,3573	77482,4433	5991,4655	826,3917	5165,0738	78308,8350	60611,5187	17697,3163	51140,7309	9470,7878	51140,7309	5114,0731	1534,2219	57789,0260	

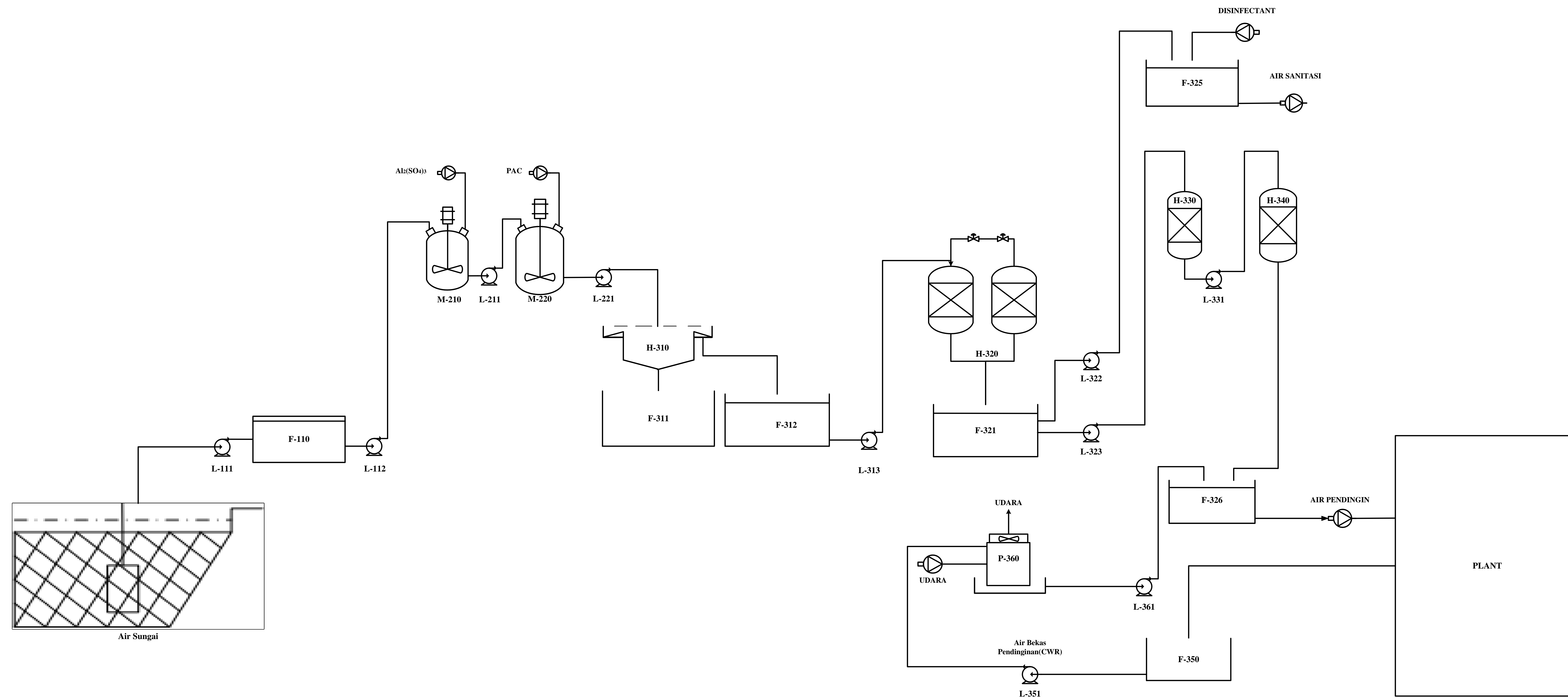
Keterangan

FLOWSHEET PABRIK SEMEN PORTLAND POZZOLAN MENGGUNAKAN PROSES KERING

Nama: Zoelva Ananta Dhiwastra
 Dosen Pembimbing: Prof. Dr. Ir. Ni Ketut Sari, MT

Program Studi Teknik Kimia
 Fakultas Teknik
 Universitas Pembangunan Nasional "Veteran" Jawa Timur
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**FLWSHEET UNIT PENGOLAHAN AIR PABRIK SEMEN *PORTLAND POZZOLAN* MENGGUNAKAN
PROSES KERING**



25	L-361	Pompa 11	1
24	P-360	Cooling Tower	1
23	L-351	Pompa 10	1
22	F-350	Tangki Bekas Air Pendingin	1
21	F-326	Bak Penampung Air Pendingin	1
20	L-324	Pompa 9	1
19	H-340	Tangki Anion Exchanger	1
18	L-331	Pompa 8	1
17	H-330	Tangki Kation Exchanger	1
16	L-323	Pompa 7	1
15	F-325	Bak Penampung Air Sanitasi	1
14	L-322	Pompa 6	1
13	F-321	Bak Penampung Air Bersih	1
12	H-320	Sand Filter	2
11	L-313	Pompa 5	1
10	H-312	Bak Penampung Air Jernih	1
9	H-311	Bak Penampung Flok	1
8	H-310	Tangki Clarifier	1
7	L-221	Pompa 4	1
6	M-220	Tangki Flokulasi	1
5	L-211	Pompa 3	1
4	M-210	Tangki Koagulasi	1
3	L-112	Pompa 2	1
2	F-110	Bak Penampung Air Sungai	1
1	L-111	Pompa 1	1
No	Kode Alat	Nama Alat	Jumlah

Keterangan

FLWSHEET UNIT PENGOLAHAN AIR PABRIK SEMEN *PORTLAND POZZOLAN* MENGGUNAKAN PROSES KERING

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