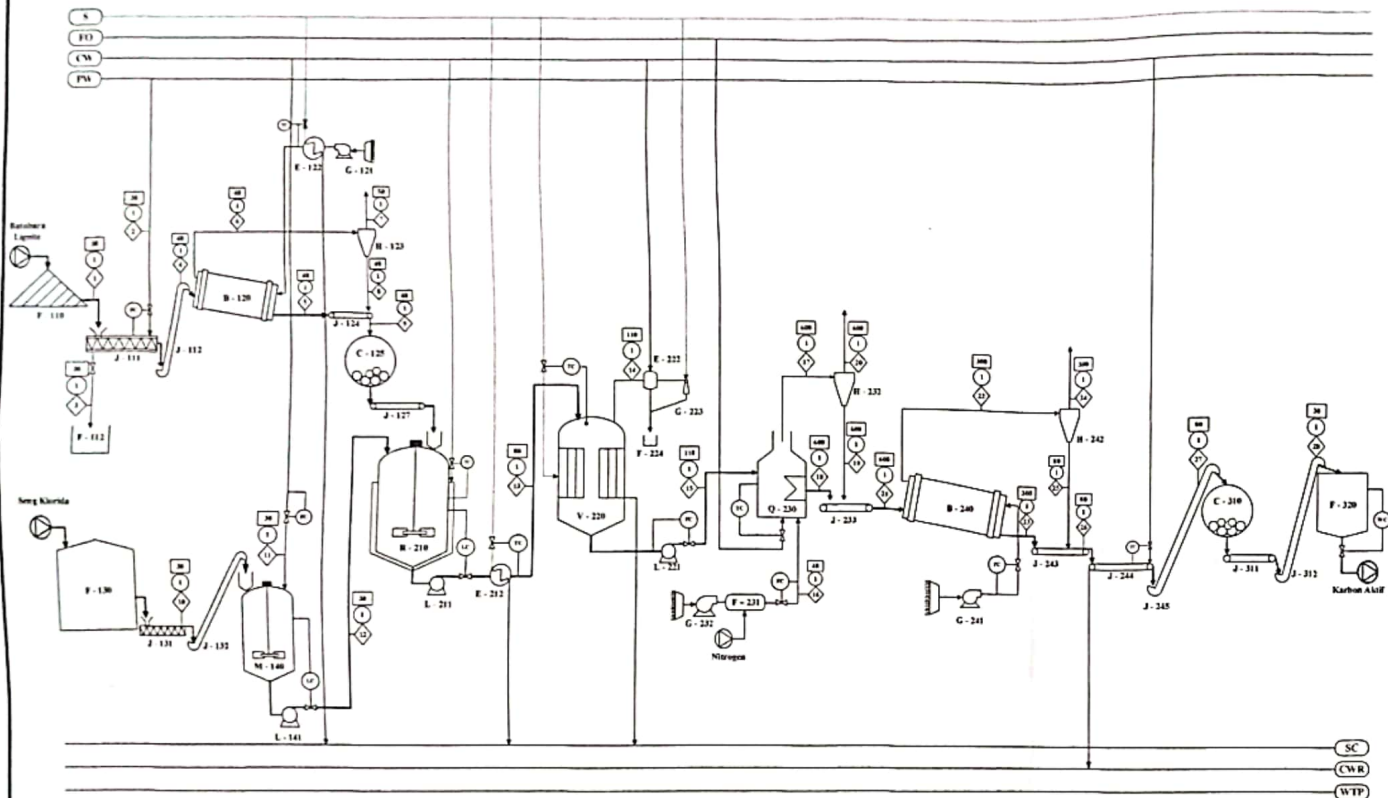


FLOWSHEET PABRIK KARBON AKTIF DARI BATUBARA LIGNITE DENGAN AKTIVASI KIMIA FISIKA



KETERANGAN :

	Temperatur °C
	Aliran Massa kg/jam
	Tekanan atm
	Steam 144 °C - 4.5 atm
	Steam Condensate
	Cooling Water
	Cooling Water Return
	Process Water
	Waste Treatment Process
	Fuel Oil

39	F-320	STORAGE KARBON AKTIF
38	J-312	BUCKET ELEVATOR - 4
37	J-311	BELT CONVEYOR - 3
36	C-310	BALL MILL - 2
35	J-245	BUCKET ELEVATOR - 3
34	J-244	COOLING CONVEYOR - 2
33	J-243	COOLING CONVEYOR - 1
32	H-242	CYCLONE - 3
31	G-241	BLOWER - 3
30	B-240	ROTARY DRYER
29	J-233	BELT CONVEYOR - 2
28	H-232	CYCLONE - 2
27	G-232	BLOWER - 2
26	F-231	TANGKI GAS NITROGEN
25	Q-230	FURNACE
24	F-224	HEATWELL
23	G-223	STEAM EJECTOR
22	E-222	ADSORBEN
21	L-221	POMPA - 3
20	V-220	EVAPORATOR
19	E-212	HEATER - 2
18	L-210	POMPA - 2
17	R-210	REAKTOR
16	L-141	POMPA - 1
15	M-140	TANGKI PELARUTAN - 1
14	J-132	BUCKET ELEVATOR - 2
13	J-131	SCREW CONVEYOR
12	F-130	STORAGE SFENG ALORIDA
11	J-120	BELT CONVEYOR
10	C-125	BALL MILL - 1
09	J-124	BELT CONVEYOR - 1
08	H-123	CYCLONE - 1
07	E-122	HEATER - 1
06	J-112	BUCKET ELEVATOR - 1
05	G-121	BLOWER - 1
04	B-120	ROTARY DRYER
03	F-112	TANGKI PENAMPUNGAN
02	J-111	CONVEYOR BATU BARA
01	F-110	STORAGE BATU BARA

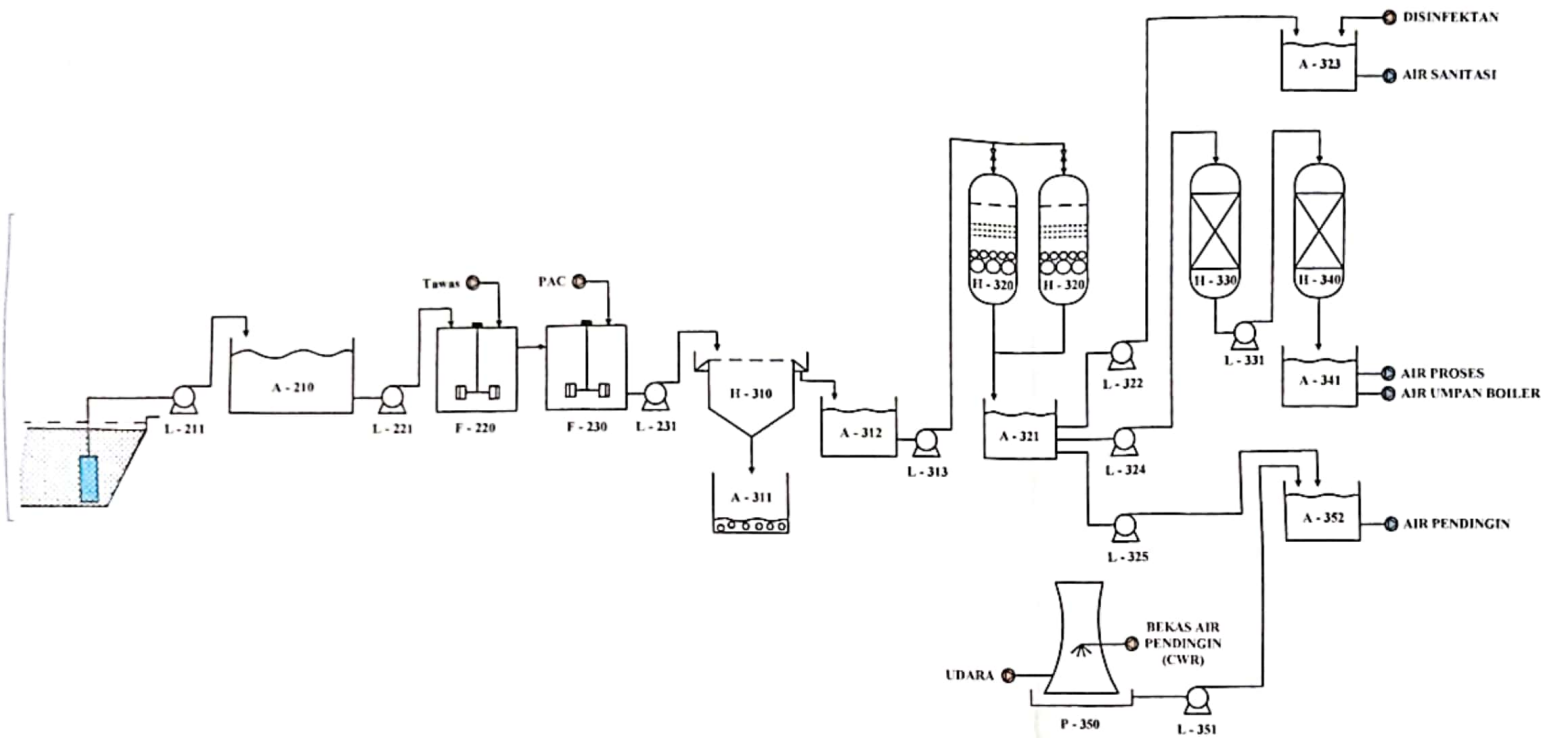
No/ Komponen	Aliran massa (kg/jam)																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
CsH-Os	6691,01			6691,01	6630,726	60,27933	0,60279	59,6765	6690,4				1404,98		1404,98		2,95047	292,096	2,92096	0,0295	295,017	2,95017	292,067	0,0295	2,92067	294,988
Nz	70,4316			70,4316												898,946										
Clay	232,424		232,4244	49,3021																						
FeS	49,3021			3366,63	48,85798	0,444163	0,00444	0,43972	49,2977				49,2977		49,2977											
H2O		7043,16	3676,531		6,674584	3359,952	3359,95		6,67958	37,2877	543,08	580,372	587,052	11,7421		11,7421					11,7421					
ZnCl2												1827,1	383,691		383,691		0,80575	79,7693	0,79769	0,00806	80,567	0,80567	79,7613	0,00806	0,79761	80,5589
C												3566,07	3566,07		3566,07		43,1494	4271,79	42,7179	0,43149	4314,51	43,1451	4271,36	0,43145	42,7136	4314,08
Zn												689,864	689,864		689,864		8,34735	826,388	8,26388	0,08347	834,652	8,34652	826,305	0,08347	826,305	834,568
Fe												0,31371	31,0576	0,31058		0,00314	31,3681	0,31368		31,0544	0,00314	31,0544	0,00314	31,0544	31,365	
HCl												774,77	774,77		774,77						937,472					
O2												1698,13	1698,13		1698,13											
H2O(g)													575,31								17,9264					
S																					2953,68					
N2(g)																					17,9264					
Total	7043,16	7043,16	3908,956	10177,4	6686,263	3491,108	3360,56	60,1163	6746,38	1864,39	543,085	2407,47	9153,85	575,31	8578,54	898,946	3976,39	5501,1	55,011	3921,37	5556,11	55,5611	5500,55	0,55561	55,0055	5555,56

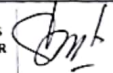
Disetujui Oleh : _____
 Alirza Rahawati 20031010009

Dosen Pembimbing : Dr. Ir. Saria Saesya Saati, M.T.

PROGRAM STUDI TEKNIK KIMIA
 FAKULTAS TEKNIK
 UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN"
 JAWA TIMUR
 2024

FLWSHEET UTILITAS UNIT PENGOLAHAN AIR



23	A - 352	BAK PENAMPUNG AIR PENDINGIN
22	L - 351	POMPA - 9
21	P - 350	COOLING TOWER
20	A - 341	BAK PENAMPUNG AIR DEMINERALISASI
19	H - 340	ANION EXCHANGER
18	L - 331	POMPA - 8
17	H - 330	KATION EXCHANGER
16	L - 325	POMPA - 7
15	L - 324	POMPA - 6
14	A - 323	BAK PENAMPUNG AIR SANITASI
13	L - 322	POMPA - 5
12	A - 321	BAK PENAMPUNG AIR BERSIH
11	H - 320	SAND FILTER
10	L - 313	POMPA - 4
09	A - 312	BAK PENAMPUNG AIR JERNIH
08	A - 311	BAK PENAMPUNG FLOK
07	H - 310	CLARIFIER
06	L - 231	POMPA - 3
05	F - 230	TANGKI FLOKULASI
04	F - 220	TANGKI KOAGULASI
03	L - 221	POMPA - 2
02	A - 210	BAK PENAMPUNG AIR SUNGAI
01	L - 211	POMPA - 1
NO	KODE	NAMA ALAT
DIGAMBAR OLEH		: Alrista Rahmawati
NPM		: 20031010009
DOSEN PEMBIMBING		: Dr. Ir. Sintha Soraya Santi, MT
FLOWSHEET UTILITAS UNIT PENGOLAHAN AIR 		
PROGRAM STUDI TEKNIK KIMIA FAKULTAS TEKNIK UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN" JAWA TIMUR 2024		