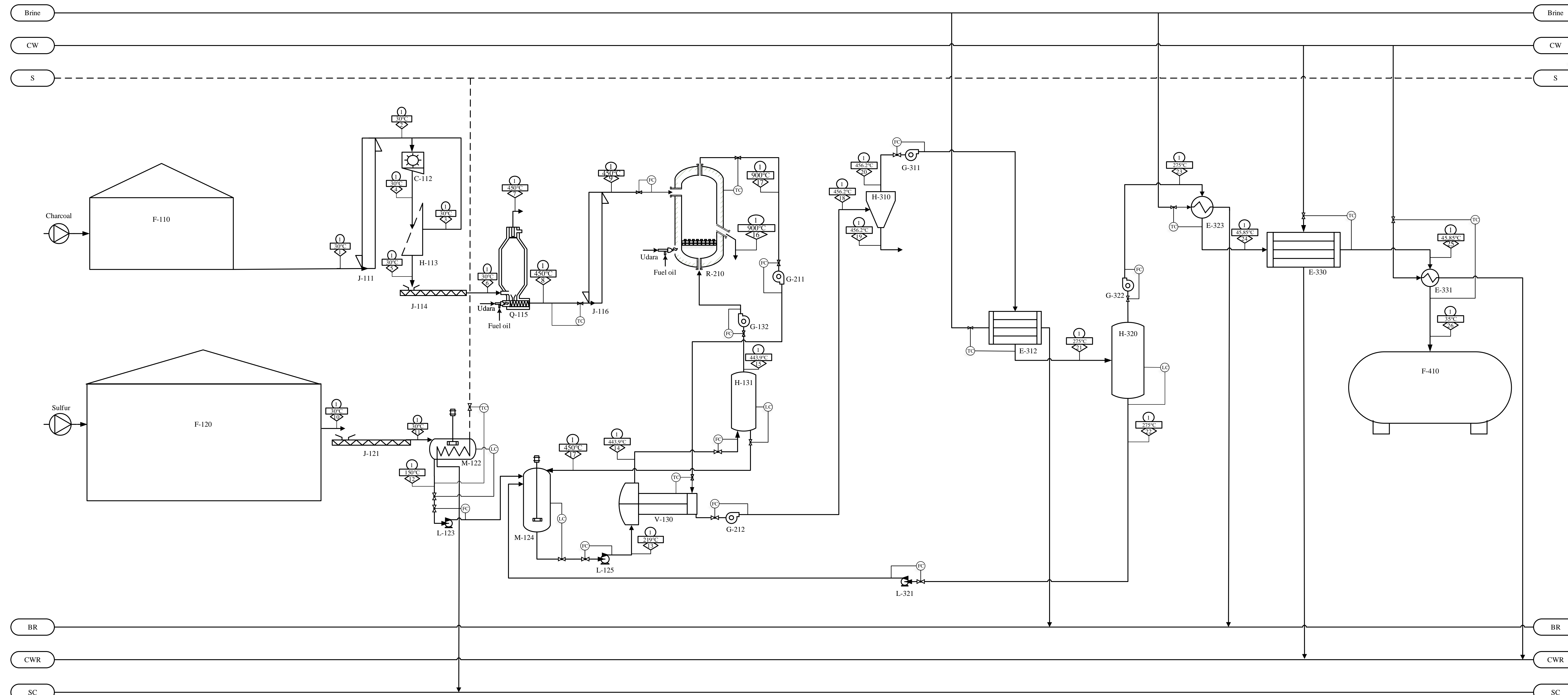


M-122

KETERANGAN :	
	Temperatur : °C
	Aliran Massa : kg/jam
	Tekanan : atm
	Steam
	Cooling Water
	Process Water

No	Kode	Nama Alat
1	F-110	Gudang Penyimpanan Charcoal
2	J-111	Bucket Elevator 1
3	C-112	Roller mill
4	H-113	Vibrating Screen
5	J-114	Screw Conveyor 1
6	F-115	Furnace Kalsinasi
7	J-116	Bucket Elevator 2
8	F-210	Reaktor Furnace
9	F-120	Gudang Penyimpanan Sulfur
10	J-121	Screw Conveyor 2
11	M-122	Melter
12	L-123	Pompa 1
13	M-124	Mixer
14	L-125	Pompa 2
15	V-130	Vaporizer
16	G-131	Blower 1
17	G-132	Blower 2
18	H-133	Separator 1
19	G-211	Blower 3
20	H-310	Cyclone
21	H-320	Separator 2
22	L-321	Pompa 3
23	G-322	Blower 4
24	E-330	Condensor total
25	E-331	Cooler
26	E-313	Condensor parsial
27	F-410	Tangki Penyimpanan CS ₂

FLOWSHEET PABRIK KARBON DISULFIDA DARI CHARCOAL DAN SULFUR DENGAN "CHARCOAL-SULFUR PROCESS"



Brine	: Brine
CW	: Cooling Water
S	: Steam
BR	: Brine Return
CWR	: Cooling Water Return
SC	: Steam Condensate
	: Aliran Massa (kg/jam)
	: Temperatur (°C)
	: Tekanan (atm)

No	Kode	Nama Alat
1	F-110	Gudang Penyimpanan Charcoal
2	J-111	Bucket Elevator 1
3	C-112	Hammer mill
4	H-113	Vibrating Screen
5	J-114	Screw Conveyor 1
6	Q-115	Furnace Kalsinasi
7	J-116	Bucket Elevator 2
8	R-210	Reaktor
9	F-120	Gudang Penyimpanan Sulfur
10	J-121	Screw Conveyor 2
11	M-122	Melter
12	L-123	Pompa 1
13	M-124	Mixer
14	L-125	Pompa 2
15	V-130	Vaporizer
16	G-132	Blower 1
17	H-131	Disengaging drum
18	G-211	Blower 2
19	G-212	Blower 3
20	H-310	Cyclone
21	G-311	Blower 4
22	H-320	Separator 2 fase
23	L-321	Pompa 3
24	E-312	Partial Condensor
25	G-322	Blower 5
26	E-323	Cooler 1
27	E-330	Total Condensor
28	E-331	Cooler 2
29	F-410	Tangki Penyimpanan CS ₂

Skala 1:100

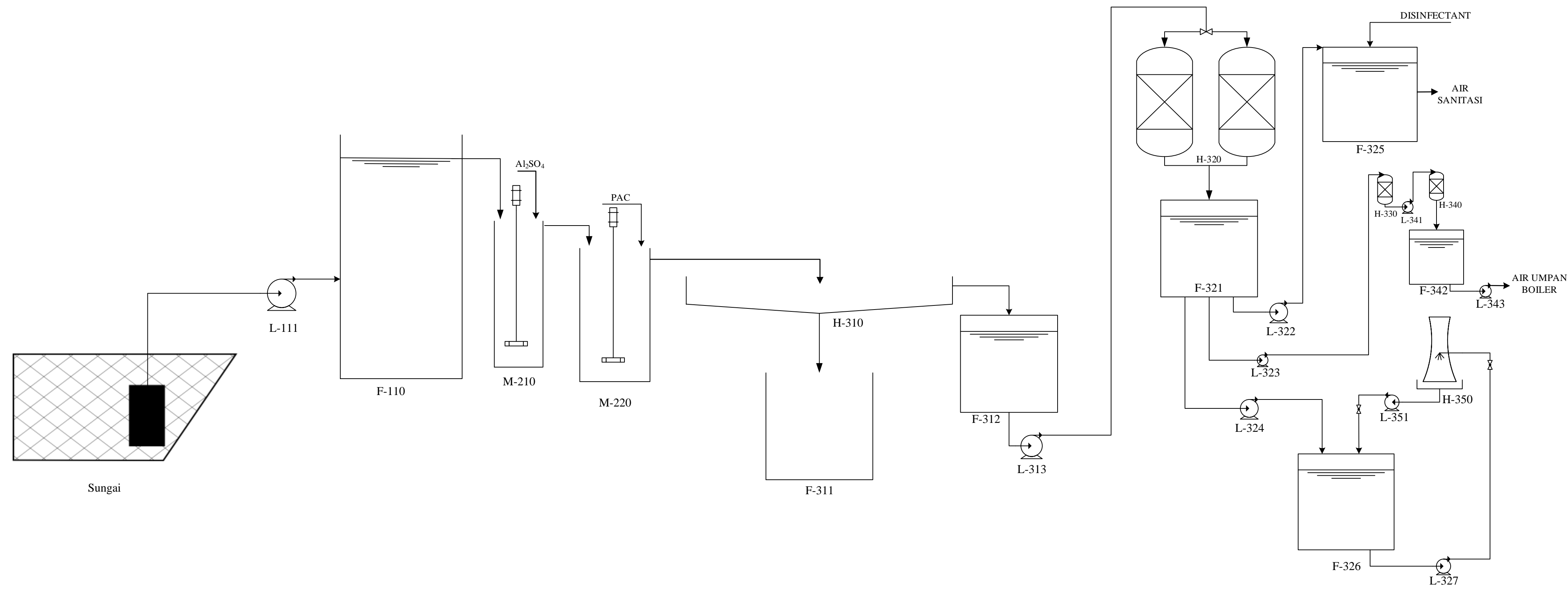
**FLOWSHEET PABRIK KARBON DISULFIDA DARI
CHARCOAL DAN SULFUR**

DESIGN OLEH : IVAN FAU GHOFANY
NPM : 1701010098

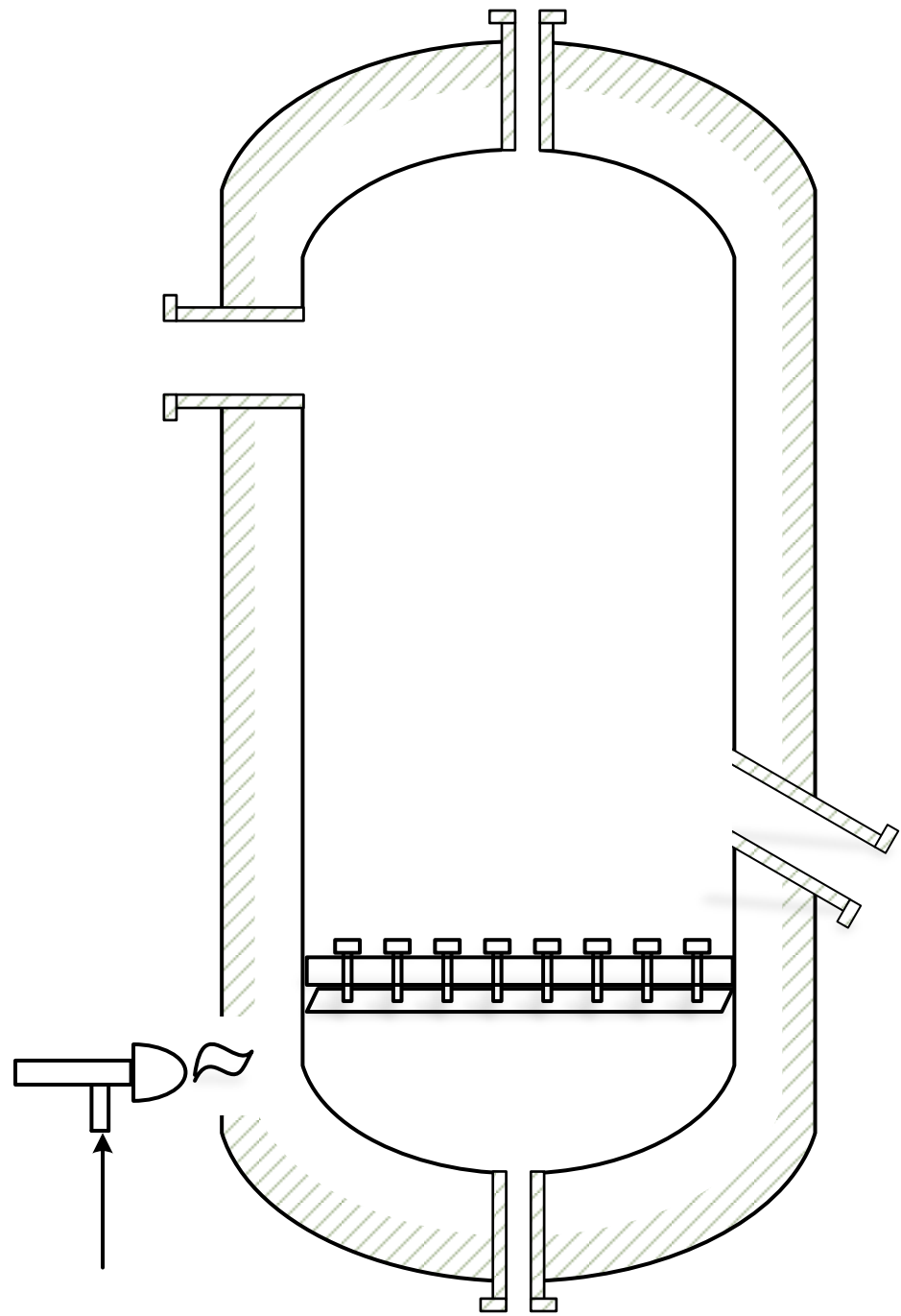
DOSEN PEMBIMBING :
Ir. Titi Susilowati, M.T.
NIP. 19600801 19870 2 008

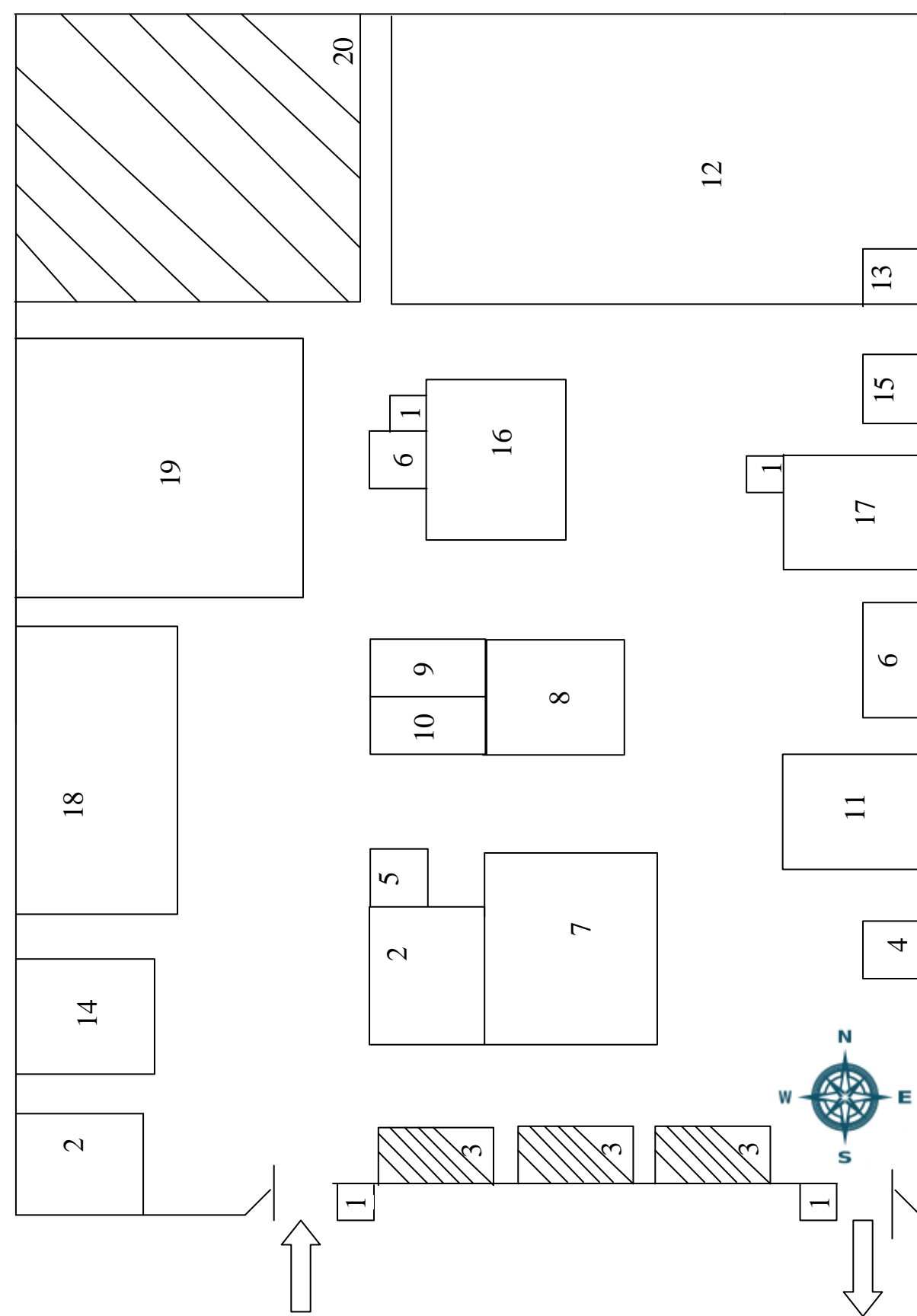
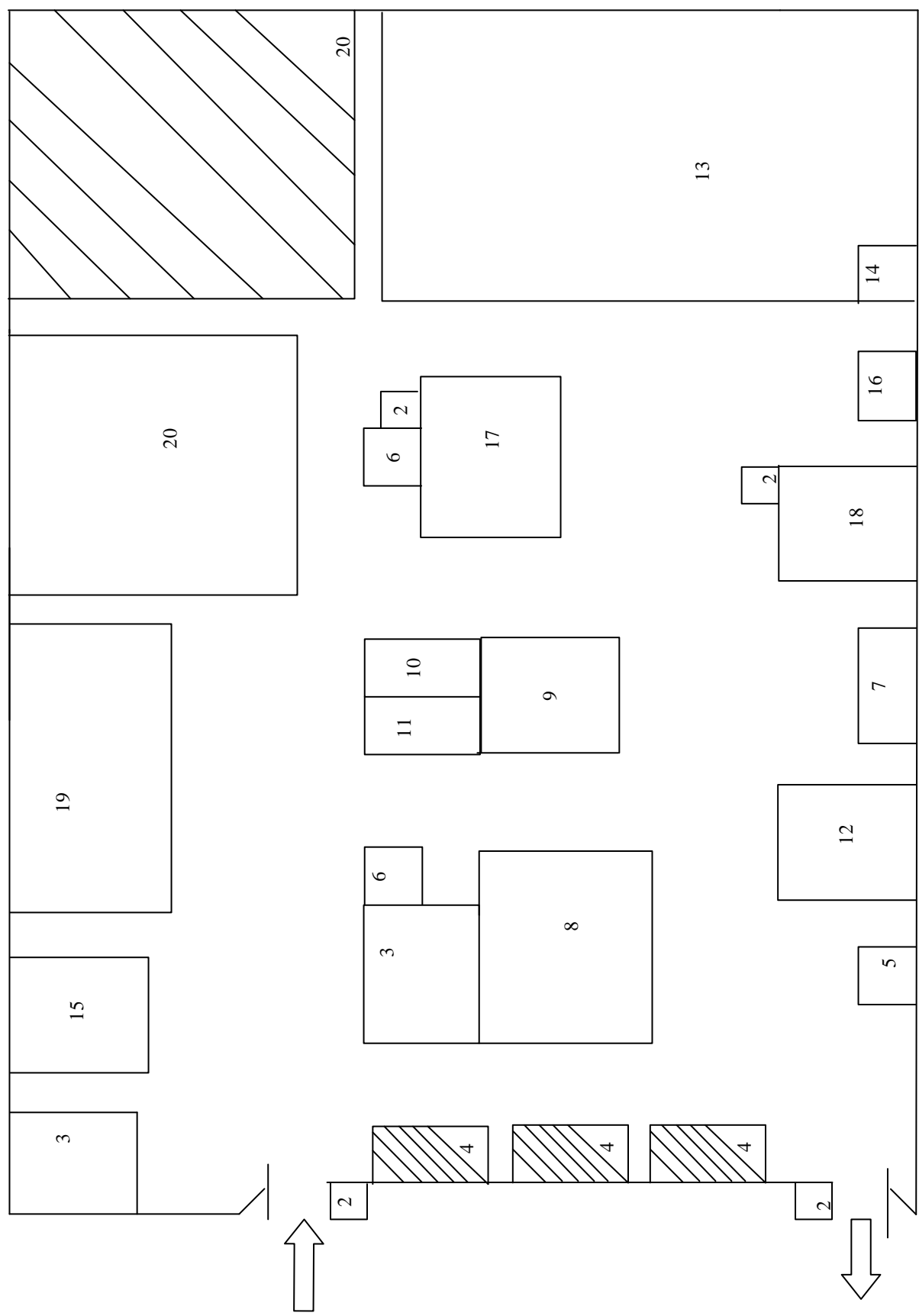
PROGRAM STUDI TEKNIK KIMIA
FAKULTAS TEKNIK
UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN" JAWA TIMUR
SURABAYA
2021

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	23	24	25	26	
C	885.8170	885.8170	46.6220	932.4390	885.8170	885.8170	0	885.8170	885.8170							88.5817	0	0	0	0							
Ash	45.1797	45.1797	2.3779	47.5576	45.1797	45.1797	0	45.1797	45.1797	0.8508	0.8508	0.8508	1.0871	1.0871	0.8697	0	46.0494	46.0494	46.0494	0							
O ₂	3.9287	3.9287	0.2068	4.1355	3.9287	3.9287	3.9287	0	0																		
N ₂	3.5358	3.5358	0.1861	3.7219	3.5358	3.5358	3.5358	0	0																		
H ₂	25.5364	25.5364	1.3440	26.8804	25.5364	25.5364	25.5364	0	0																		
H ₂ O	18.1701	18.1701	0.9563	19.1264	18.1701	18.1701	0	0	1.2762	1.2762	1.2762	1.6307	1.6307	1.3046	0	1.3126	1.3126	0	1.3126	1.3126	0	1.3126	1.3126	1.3126	1.3126	1.3126	
S									4251.9217	4251.9217	4251.9217	5905.4468	5905.4468	4724.3575	0	472.4357	472.4357	0	472.4357	472.4357	472.4357	0					
H ₂ SO ₄									0.0425	0.0425	0.0425	0.0548	0.0548	0.0434	0	0	0	0	0	0	0	0	0	0	0	0	0
SO ₂																	0.0355	0.0355	0	0.0355	0.0355	0	0.0355	0.0355	0.0355	0.0355	0.0355
CS ₂																	5049.1570	5049.1570	0	5049.1570	5049.1570	0	5049.1570	5049.1570	5049.1570	5049.1570	5049.1570
Total	982.1677	982.1677	51.6931	1033.8608	982.1677	982.1677	51.1710	930.9967	930.9967	4254.0912	4254.0912	4254.0912	5908.2889	5908.2889	4726.5752	88.5817	5568.9902	5568.9902	46.0494	5522.9408	5522.9408	472.4357	5050.5051	5050.5051	5050.5051	5050.5051	



No	Kode	Nama Alat
1	L-111	Pompa Air Sungai
2	F-110	Bak Penampung Air Sungai
3	M-210	Tangki Koagulasi
4	M-220	Tangki Flokulasi
5	H-330	Clarifier
6	F-311	Bak Penampung Flok
7	F-312	Bak penampung air dari clarifier
8	L-313	Pompa sand filter
9	H-320	Sand filter
10	F-321	Bak penampung air bersih
11	L-322	Pompa bak air sanitasi
12	L-323	Pompa Kation Exchanger
13	L-324	Pompa bak penampung air dingin
14	F-325	Bak air sanitasi
15	H-330	Kation Exchanger
16	L-341	Pompa Anion Exchanger
17	H-340	Anion Exchanger
18	F-342	Bak air demineralisasi
19	L-343	Pompa air umpan boiler
20	F-326	Bak penampung air dingin
21	L-351	Pompa <i>Recycle</i> Cooling Tower
22	H-350	Cooling Tower
23	L-327	Pompa Cooling Tower





No	Bangunan	Ukuran	Luas	jumlah	LUAS TOTAL
		(m)	m ²		(m ²)
1	Jalan Aspal		3000		3000
2	Pos Keamanan	5x5	25	4	100
3	Parkir	25x20	500	2	1000
4	Taman	20x10	200	3	600
5	Timbangan truk	10x10	100	1	100
6	Pemadam kebakaran	10x10	100	2	200
7	Bengkel	20x10	200	1	200
8	Kantor	33,3x30	1000	1	1000
9	Perpustakaan	20x25	500	1	500
10	Kantin	20x10	200	1	200
11	Poliklinik	20x10	200	1	200
12	Mushollah	20x25	500	1	500
13	Ruang proses	92,2x50	4610	1	4610
14	Ruang kontrol	10x10	100	1	100
15	Laboratorium	25x20	500	1	500
16	Storage produksi	12x10	120	1	120
17	Storage bahan baku	40x23	920	1	920
18	Gudang	25x20	500	1	500
19	Utilitas	28x50	1400	1	1400
20	Pengolahan Air	45x50	2250	1	2250
21	Daerah perluasan	60x50	3000	1	3000
TOTAL			19925		21000

