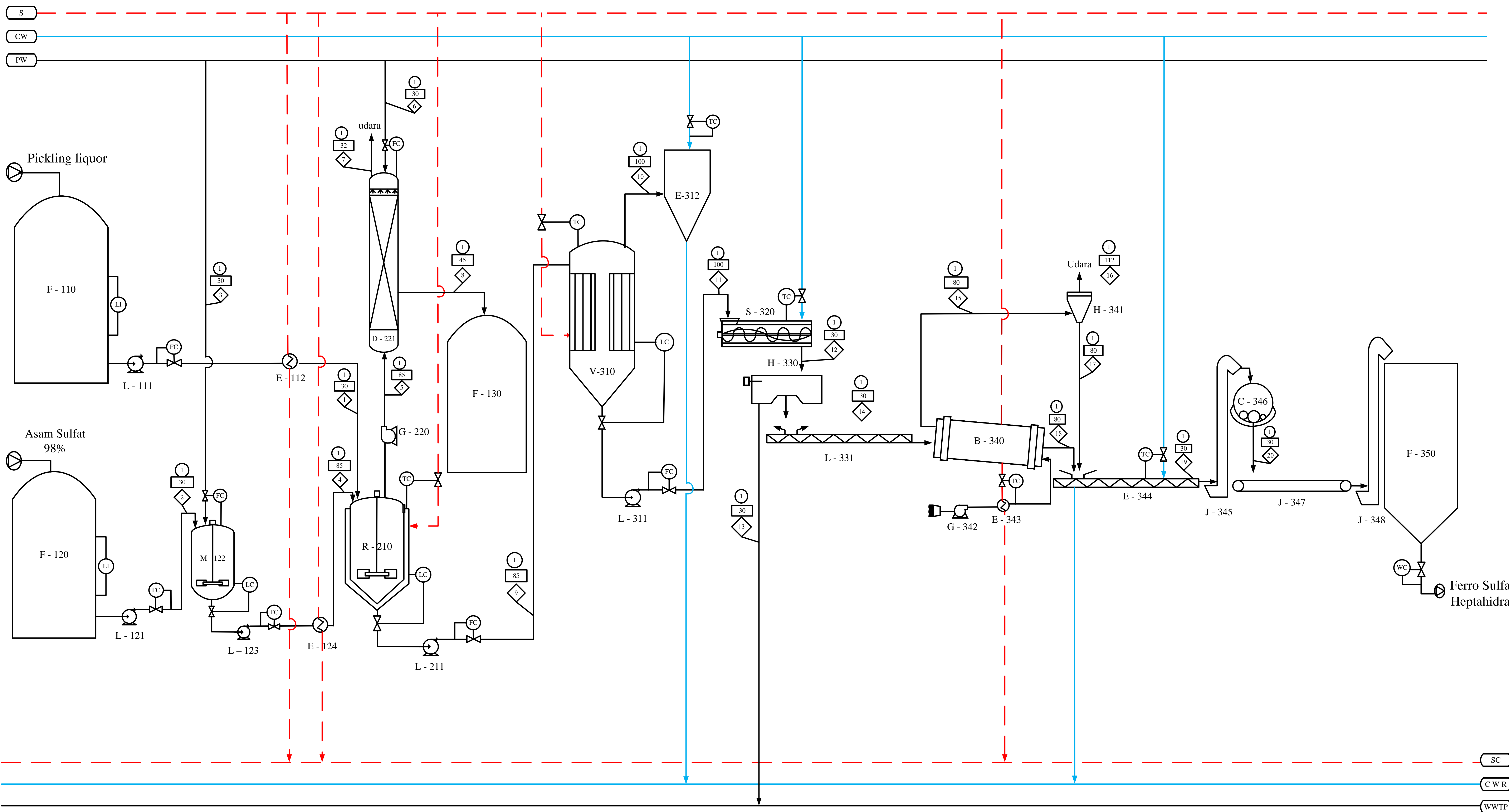


**FLWSHEET PABRIK FERRO SULFAT HEPTAHIDRAT DARI PICKLING LIQUOR DAN ASAM SULFAT  
SKALA 1 : 100**



KETERANGAN	
□	Temperatur (°C)
◇	Aliran Massa (Kg/jam)
○	Tekanan (atm)
S	Steam
CW	Cooling Water
PW	Process Water
SC	Steam Condensat
CWR	Cooling Water Return
WWTP	Waste Treatment

1	F-110	STORAGE PICKLING LIQUOR
2	E-111	POMPA 1
3	L-112	HEATER PICKLING LIQUOR
4	F-120	STORAGE H <sub>2</sub> SO <sub>4</sub> 98%
5	E-121	POMPA 2
6	M-122	TANGKI PENGECERAN H <sub>2</sub> SO <sub>4</sub>
7	L-123	POMPA 3
8	E-124	HEATER H <sub>2</sub> SO <sub>4</sub>
9	R-210	REAKTOR
10	L-211	POMPA 4
11	G-220	BLOWER 1
12	D-221	SCRUBBER
13	F-130	TANGKI PENAMPUNG HCl
14	V-310	EVAPORATOR
15	L-311	POMPA 5
16	E-312	KONDENSOR
17	S-320	CRYSTALLIZER
18	H-330	CENTRIFUGE
19	L-331	SCREW CONVEYOR
20	B-340	ROTARY DRYER
21	H-341	CYCLONE
22	G-342	BLOWER 2
23	E-343	HEATER UDARA
24	E-344	COOLING SCREW CONVEYOR
25	J-345	BUCKET ELEVATOR 1
26	C-346	BALL MILL
27	J-347	BELT CONVEYOR
28	J-348	BUCKET ELEVATOR 2
29	F-350	SILO PENAMPUNG FERRO SULFAT HEPTAHIDRAT

KOMPONEN	Aliran ( Kg / Jam )																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
FeCl <sub>2</sub> (l)	5034,0120	-	-	-	-	-	-	-	100,6802	-	100,6802	100,6802	98,6666	2,0136	0,0201	0,0002	0,0199	1,9935	2,0134	2,0134
H <sub>2</sub> O (l)	7299,3173	79,2758	8984,5883	9063,8641	-	4230,1591	-	4230,1591	16363,1814	15328,9464	1034,2350	1034,2350	1013,5503	20,6847	0,1318	0,0013	0,1304	20,5529	20,6834	20,6834
HCl (l)	251,7006	-	-	-	-	-	-	2821,5161	251,7006	-	251,7006	251,7006	246,6666	5,0340	0,0503	0,0005	0,0498	4,9837	5,0335	5,0335
HCl (g)	-	-	-	-	2835,6946	-	14,1785	-	-	-	-	-	-	-	-	-	-	-	-	-
H <sub>2</sub> SO <sub>4</sub> (l)	-	3884,5132	-	3884,5132	-	-	-	-	77,6903	-	77,6903	77,6903	76,1365	1,5538	0,0155	0,0002	0,0154	1,5383	1,5536	1,5536
FeSO <sub>4</sub> (s)	-	-	-	-	-	-	-	-	5904,4600	-	5904,4600	256,4903	251,3605	5,1298	0,0513	0,0005	0,0508	5,0785	5,1293	5,1293
FeSO <sub>4</sub> ·7H <sub>2</sub> O (s)	-	-	-	-	-	-	-	-	-	-	-	5647,9697	-	5647,9697	56,4797	0,5648	55,9149	5591,4900	5647,4049	5647,4049
<b>TOTAL</b>	<b>12585,0299</b>	<b>3963,7889</b>	<b>8984,5883</b>	<b>12948,3772</b>	<b>2835,6946</b>	<b>4230,1591</b>	<b>14,1785</b>	<b>7051,6753</b>	<b>22697,7125</b>	<b>15328,9464</b>	<b>7368,7661</b>	<b>7368,7661</b>	<b>1686,3804</b>	<b>5682,3857</b>	<b>56,7488</b>	<b>0,5675</b>	<b>56,1813</b>	<b>5625,6369</b>	<b>5681,8182</b>	<b>5681,8182</b>

DIGAMBAR OLEH : NUR ISMI NILASARI

NPM : 17031010004

DOSEN PEMBIMBING :  
Ir. TITI SUSILOWATI, MT

**FLWSHEET PABRIK FERRO SULFAT HEPTAHIDRAT  
PICKLING LIQUOR DAN ASAM SULFAT**

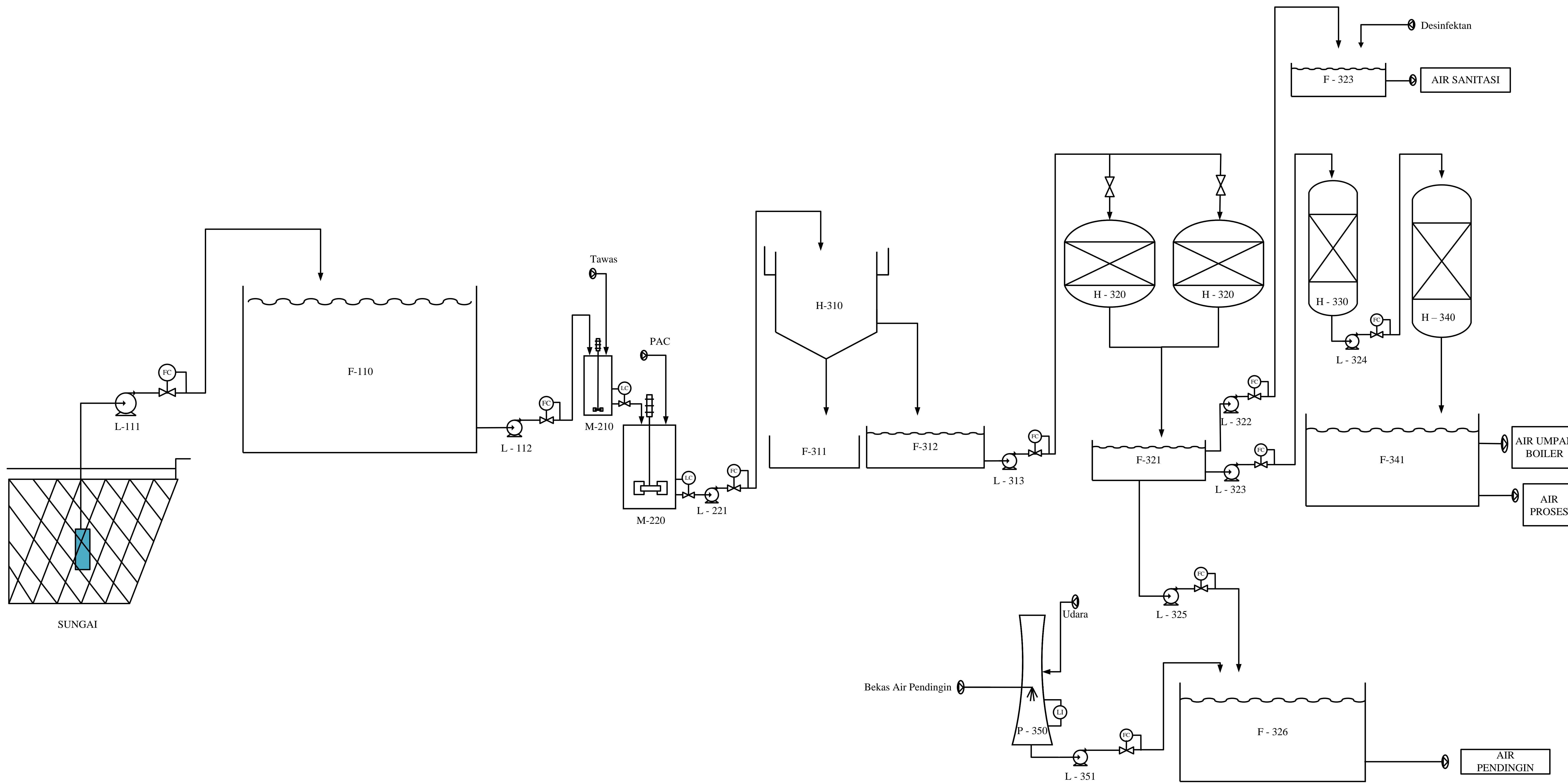
**PROGRAM STUDI TEKNIK KIMIA**

**FAKULTAS TEKNIK**

**UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN"  
JAWA TIMUR**

2022

**FLWSHEET UTILITAS PABRIK FERRO SULFAT HEPTAHIDRAT DARI PICKLING LIQUOR DAN ASAM SULFAT  
SKALA 1 : 100**



Nomor	Nama Alat	Kode
1	POMPA AIR SUNGAI	L-111
2	BAK PENAMPUNG AIR SUNGAI	F-110
3	POMPA KOAGULASI	L-112
4	TANGKI KOAGULASI	M-210
5	TANGKI FLOKULASI	M-220
6	POMPA CLARIFIER	L-221
7	CLARIFIER	H-310
8	BAK PENAMPUNG FLOK	F-311
9	BAK PENAMPUNG CLARIFIER	F-312
10	POMPA SAND FILTER	L-313
11	SAND FILTER	H-320
12	BAK PENAMPUNG SAND FILTER	F-321
13	POMPA BAK AIR SANITASI	L-322
14	BAK PENAMPUNG SANITASI	F-323
15	POMPA KATION EXCHANGER	L-324
16	TANGKI KATION EXCHANGER	H-330
17	POMPA ANION EXCHANGER	L-331
18	TANGKI ANION EXCHANGER	H-340
19	BAK PENAMPUNG AIR DEMINERALISASI	F-341
20	BAK PENAMPUNG AIR PENDINGIN	F-342
21	POMPA BAK PENAMPUNG AIR PENDINGIN	L-343
22	POMPA AIR PENDINGIN COOLING TOWER	L-345
23	POMPA COOLING TOWER	L-351
Digambar Oleh : Nur Ismi Nilasari		
NPM : 17031010004		
Dosen Pembimbing : Ir. Titi Susilowati, MT		