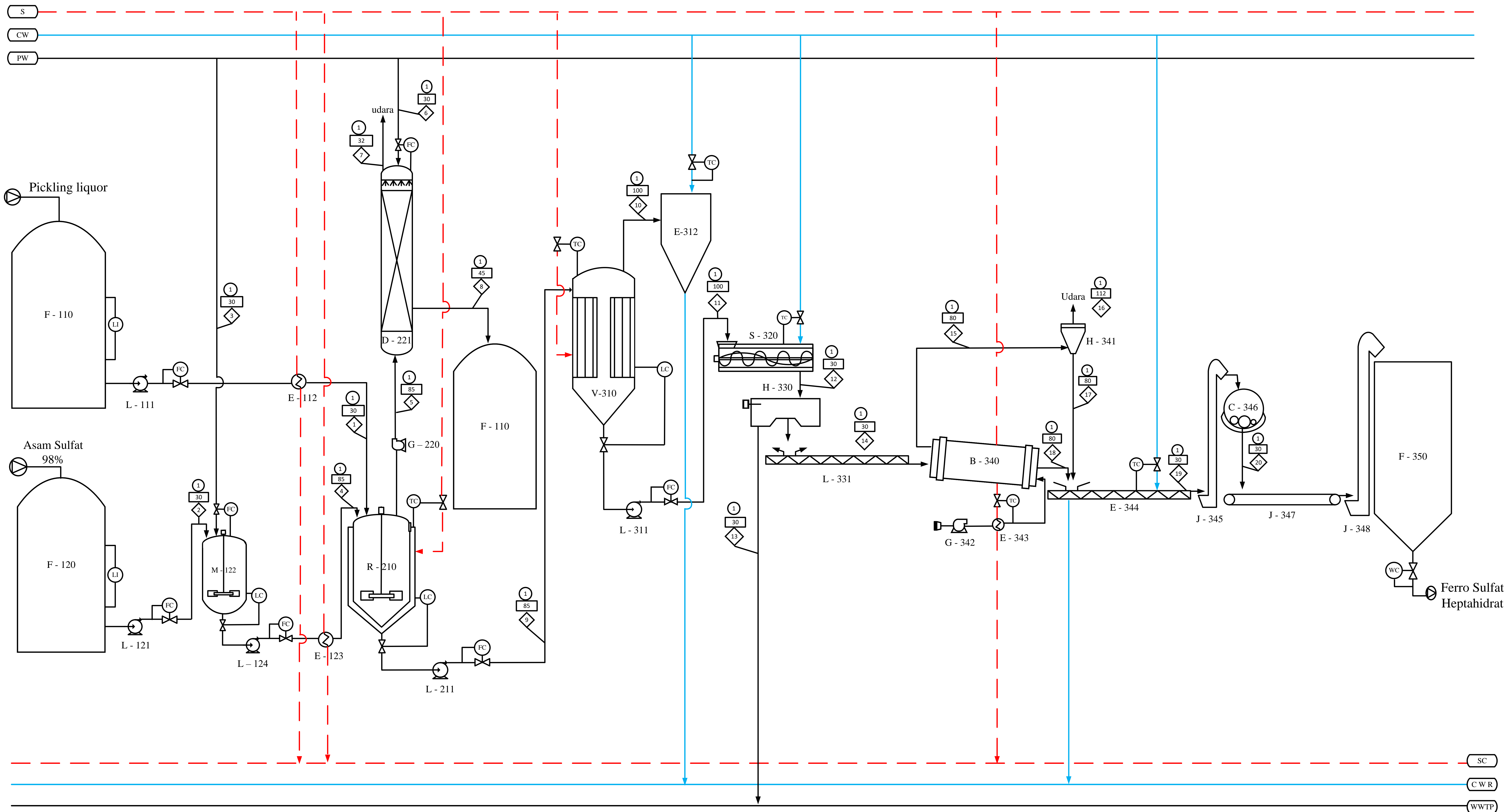


**FLWSHEET PABRIK FERRO SULFAT HEPTAHIDRAT DARI PICKLING LIQUOR DAN ASAM SULFAT  
SKALA 1 : 100**



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)	6152,6813	-	-	-	-	-	-	-	123,0536	-	123,0536	123,0536	120,5926	2,4611	0,0246	0,0002	0,0244	2,4365	2,4608	2,4608
H <sub>2</sub> O (l)	8921,3879	96,8926	10981,1635	11078,0561	-	5170,1945	-	5170,1945	19999,4439	18735,3790	1264,0650	1264,0650	1238,7837	25,2813	0,1610	0,0016	0,1594	25,1203	25,2797	25,2797
HCl (l)	307,6341	-	-	-	-	-	-	3448,5197	307,6341	-	307,6341	307,6341	301,4814	6,1527	0,0615	0,0006	0,0609	6,0912	6,1521	6,1521
HCl (g)	-	-	-	-	3465,8490	-	17,3292	-	-	-	-	-	-	-	-	-	-	-	-	-
H <sub>2</sub> SO <sub>4</sub> (l)	-	4747,7383	-	4747,7383	-	-	-	-	94,9548	-	94,9548	94,9548	93,0557	1,8991	0,0190	0,0002	0,0188	1,8801	1,8989	1,8989
FeSO <sub>4</sub> (s)	-	-	-	-	-	-	-	-	7216,5622	-	7216,5622	313,4881	307,2184	6,2698	0,0627	0,0006	0,0621	6,2071	6,2691	6,2691
FeSO <sub>4</sub> .7H <sub>2</sub> O (s)	-	-	-	-	-	-	-	-	-	-	-	6903,0741	-	6903,0741	69,0307	0,6903	68,3404	6834,0434	6902,3838	6902,3838
<b>TOTAL</b>	<b>15381,7032</b>	<b>4844,6309</b>	<b>10981,1635</b>	<b>15825,7944</b>	<b>3465,8490</b>	<b>5170,1945</b>	<b>17,3292</b>	<b>8618,7142</b>	<b>27741,6486</b>	<b>18735,3790</b>	<b>9006,2697</b>	<b>9006,2697</b>	<b>2061,1316</b>	<b>6945,1380</b>	<b>69,3596</b>	<b>0,6936</b>	<b>68,6660</b>	<b>6875,7784</b>	<b>6944,4444</b>	<b>6944,4444</b>

DIGAMBAR OLEH : SEKAR NIRA WULANDARI  
 NPM : 17031010007

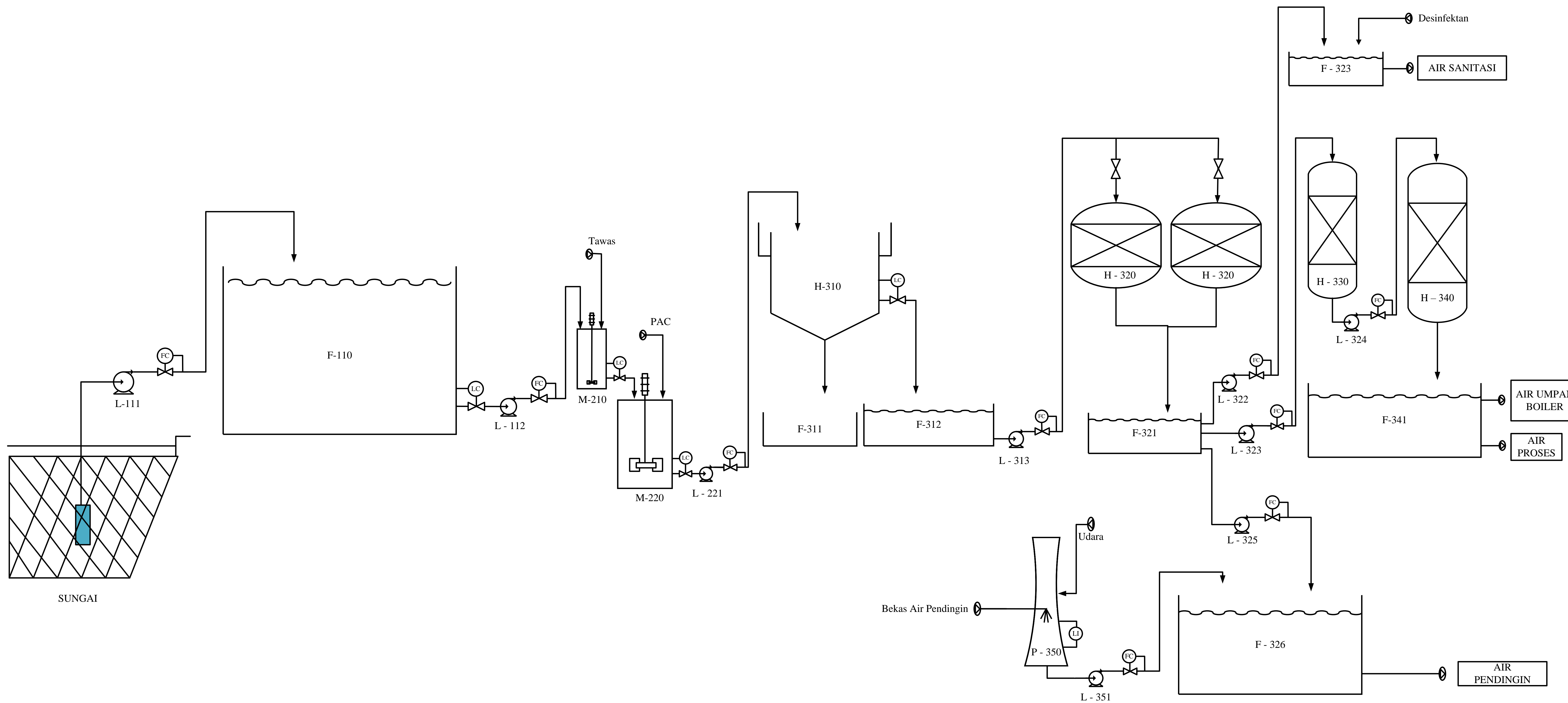
DOSEN PEMBIMBING :  
 Ir. TITI SUSILOWATI, MT

**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-323
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 P-350
23	POMPA COOLING TOWER	L-351

Digambar Oleh : Sekar Nira Wulandari  
 NPM : 17031010007

Dosen Pembimbing : Ir. Titi Susilowati, MT