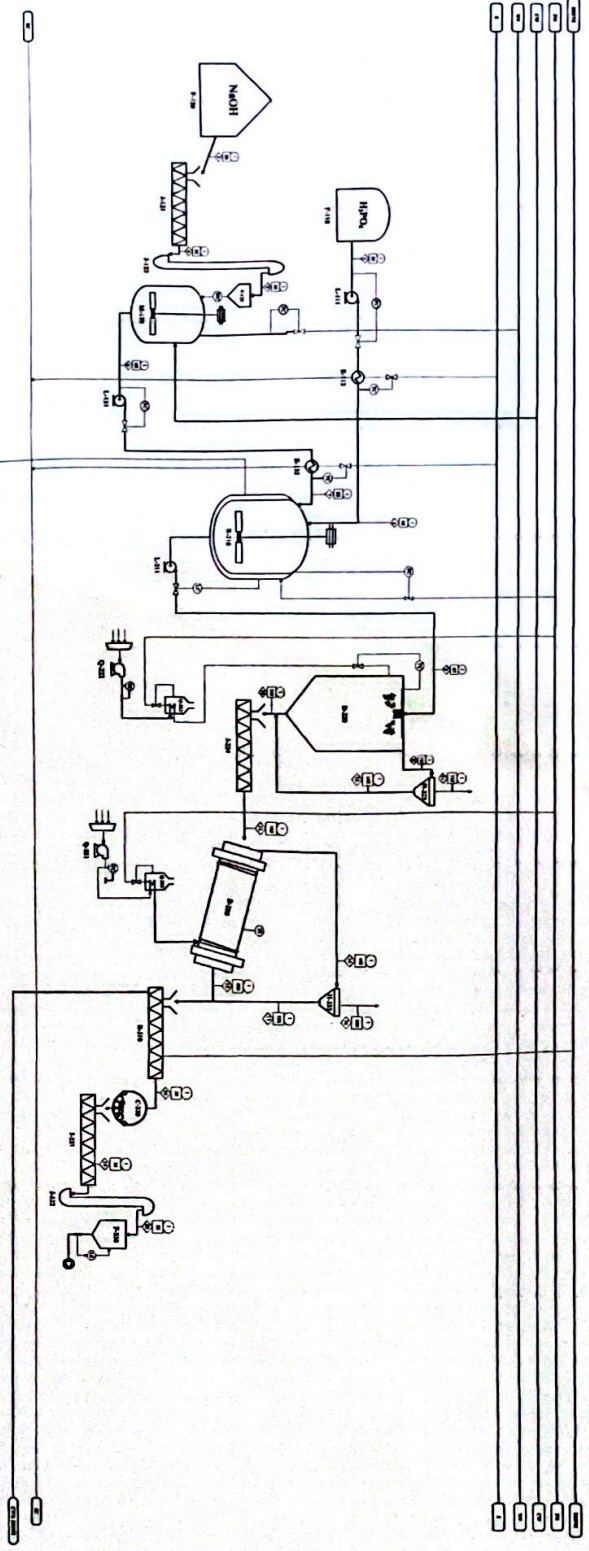


PRA RANCANGAN PABRIK TETRASODIUM PYROPHOSPHATE DARI NATRIUM HIDROKSIDA DAN ASAM FOSFAT DENGAN PROSES DOUBLE STAGE



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
H ₃ PO ₄	5387,35	5387,35																		
H ₂ O	1377,56	1377,56	4397,84	4397,84	4397,84	4397,84	4397,84	4397,84	4397,84											
NaOH			89,75	89,75	89,75	89,75	89,75	89,75	89,75											
H ₂ O										7.806,16	78,06	7.728,10	0,78	77,28	7.805,38	3,90	386,3663	0,039027	3.863,663	
Na ₂ HPO ₄										7.734,42	1.676,88	77,34	7.676,88	547,52	6875,688	0,692514	68.73688	6875,688	6944,444	
H ₂ O																				
Na ₂ P ₂ O ₇																				
Total	6.764,91	6.764,91	4.487,59	4.487,59	4.487,59	4.487,59	4.487,59	8.795,67	8.795,67	13.560,58	7.734,94	7.805,64	7.677,66	77,28	7.805,38	620,87	7262,054	348,2496	72.62054	7334,674

Keterangan:	
<input type="checkbox"/> Tank (L)	0,00
<input type="checkbox"/> Temperature (°C)	25,00
<input type="checkbox"/> Aliran Massa (kg/jam)	0,00
<input type="checkbox"/> Suhu	25,00
<input type="checkbox"/> Water Pressure	0,00
<input type="checkbox"/> Air Leak	0,00

NO	KELOMPOK	PERALATAN	UNIT
1	1	REAKTOR	1-101
2	1	HEAT EXCHANGER	1-102
3	1	HEAT EXCHANGER	1-103
4	1	HEAT EXCHANGER	1-104
5	1	HEAT EXCHANGER	1-105
6	1	HEAT EXCHANGER	1-106
7	1	HEAT EXCHANGER	1-107
8	1	HEAT EXCHANGER	1-108
9	1	HEAT EXCHANGER	1-109
10	1	HEAT EXCHANGER	1-110
11	1	HEAT EXCHANGER	1-111
12	1	HEAT EXCHANGER	1-112
13	1	HEAT EXCHANGER	1-113
14	1	HEAT EXCHANGER	1-114
15	1	HEAT EXCHANGER	1-115
16	1	HEAT EXCHANGER	1-116
17	1	HEAT EXCHANGER	1-117
18	1	HEAT EXCHANGER	1-118
19	1	HEAT EXCHANGER	1-119
20	1	HEAT EXCHANGER	1-120
21	1	HEAT EXCHANGER	1-121
22	1	HEAT EXCHANGER	1-122
23	1	HEAT EXCHANGER	1-123
24	1	HEAT EXCHANGER	1-124
25	1	HEAT EXCHANGER	1-125
26	1	HEAT EXCHANGER	1-126
27	1	HEAT EXCHANGER	1-127
28	1	HEAT EXCHANGER	1-128
29	1	HEAT EXCHANGER	1-129
30	1	HEAT EXCHANGER	1-130
31	1	HEAT EXCHANGER	1-131
32	1	HEAT EXCHANGER	1-132
33	1	HEAT EXCHANGER	1-133
34	1	HEAT EXCHANGER	1-134
35	1	HEAT EXCHANGER	1-135
36	1	HEAT EXCHANGER	1-136
37	1	HEAT EXCHANGER	1-137
38	1	HEAT EXCHANGER	1-138
39	1	HEAT EXCHANGER	1-139
40	1	HEAT EXCHANGER	1-140
41	1	HEAT EXCHANGER	1-141
42	1	HEAT EXCHANGER	1-142
43	1	HEAT EXCHANGER	1-143
44	1	HEAT EXCHANGER	1-144
45	1	HEAT EXCHANGER	1-145
46	1	HEAT EXCHANGER	1-146
47	1	HEAT EXCHANGER	1-147
48	1	HEAT EXCHANGER	1-148
49	1	HEAT EXCHANGER	1-149
50	1	HEAT EXCHANGER	1-150

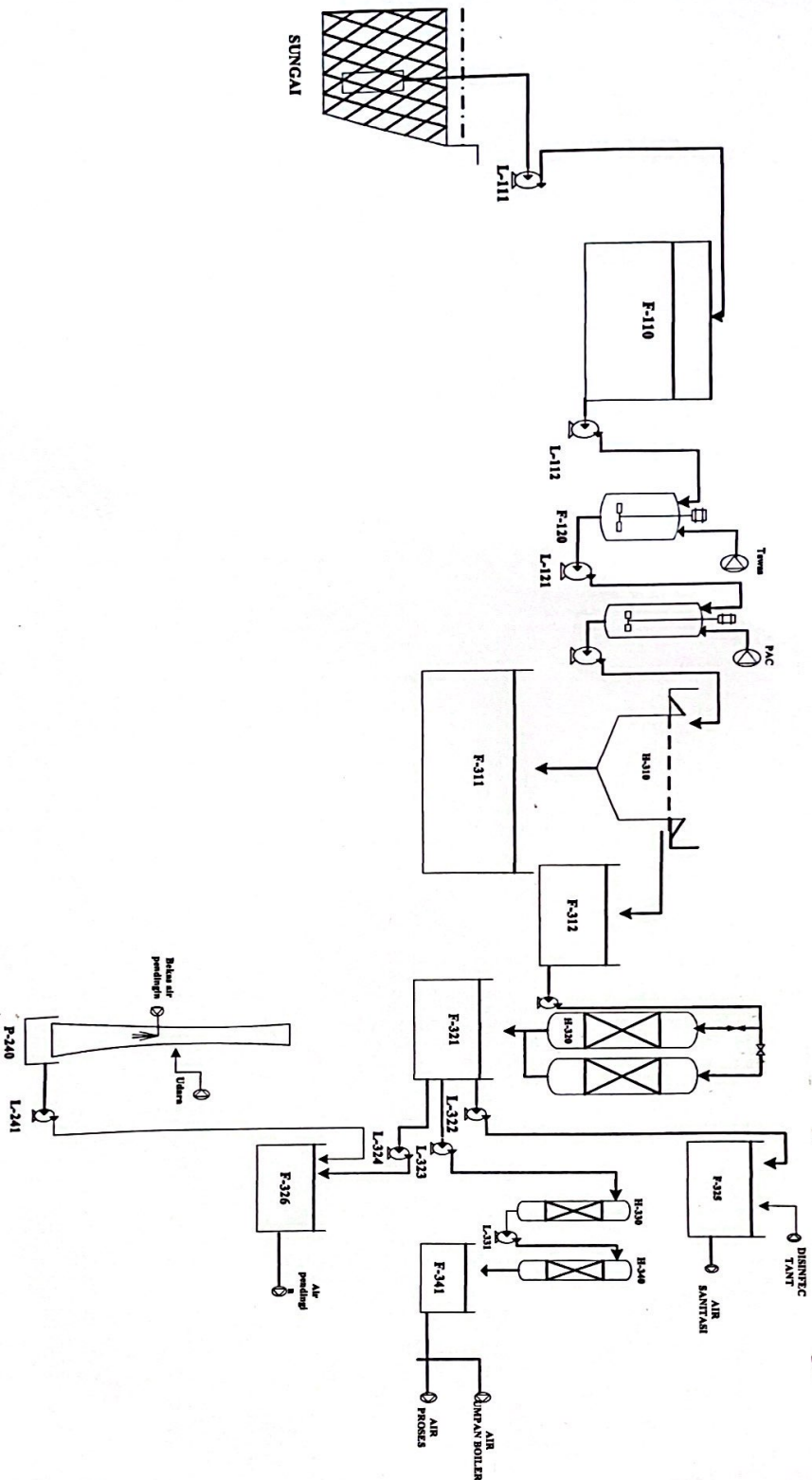


DOSEN PEMBIMBING: DR. RETNO DEWIATI, MT
 FAKULTAS TEKNIK INDUSTRI
 UNIVERSITAS NASIONAL
 JALAN TIMUR 204

[Signature]

FLOWSHEET UTILITAS PABRIK TERASODIUM PYROPHOSPHATE DARI NATRIUM HIDROKSIDA DAN ASAM FOSFAT DENGAN PROSES DOUBLE STAGE

Skala 1 : 200




NO	KODE	NAMA PERALATAN
24	L-241	POMPA - 10
23	P-240	COOLING TOWER
22	F-241	TANGKI AIR DEMINERALISASI
21	H-340	TANGKI ANION EXCHANGER
20	L-331	POMPA - 09
19	H-330	TANGKI KATION EXCHANGER
18	H-310	BAK AIR PENYENDIR
17	F-311	BAK AIR SANITASI
16	L-324	POMPA - 08
15	L-322	POMPA - 07
14	L-322	POMPA - 06
13	L-321	BAK PENAMPUNG AIR BERSIH
12	H-310	SAND FILTER
11	L-310	POMPA - 05
10	Q-214	BAK AIR SETENGAH BERSIH
9	F-311	BAK PENAMPUNG AIR BERSIH
8	H-310	ELUVER UDARA-03
7	L-311	POMPA - 04
6	F-310	TANGKI FLOKULASI
5	L-121	POMPA - 03
4	F-110	TANGKI KOAGULASI
3	L-112	POMPA - 02
2	F-110	BAK PENAMPUNG AIR SUNGAI
1	L-111	POMPA - 01

DIGAMBAR OLEH : DIAN AYU LAULATUL F.

REVISI : 18031010085

DOSEN PEMBIMBING : IR. RETNO DEWIATI, MT


 FLOW SHEET PRA RENCANA PABRIK PABRIK
 TERASODIUM PYROPHOSPHATE DARI NATRIUM HIDROKSIDA
 DAN ASAM FOSFAT DENGAN PROSES DOUBLE STAGE
 PROGRAM STUDI TEKNIK KIMIA
 FAKULTAS TEKNIK DAN SAINS
 UNIVERSITAS NASIONAL PEMBANGUNAN "VETERAN"
 JAWA TIMUR
 2025