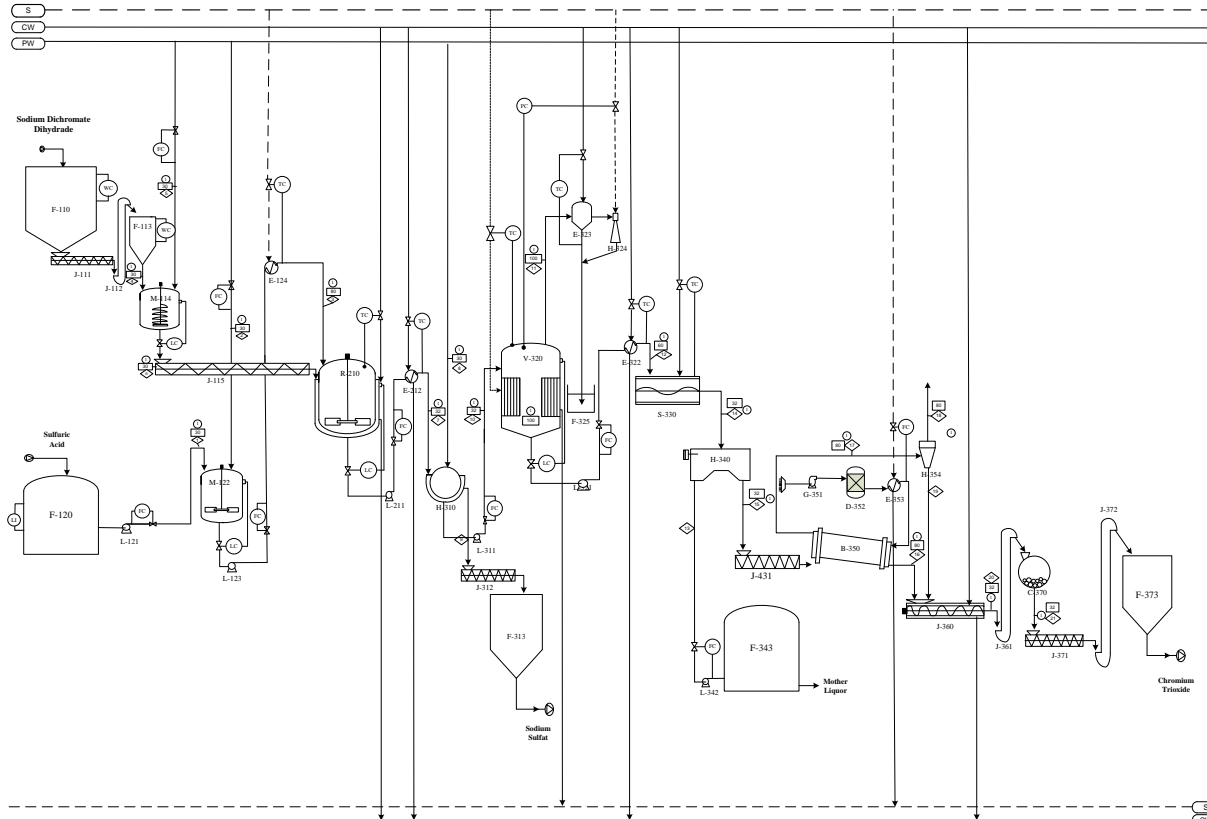




Pra Rencana Pabrik
Pabrik Chromium Trioxide Dari Sodium Dichromate Dihydrate Dan
Sulfuric Acid

PABRIK CHROMIUM TRIOXIDE DARI SODIUM DICHROMATE DIHYDRATE DAN SULFURIC ACID



KETERANGAN :

	Temperatur °C
	Aliran Massa kg/jam
	Tekanan atm
	Steam
	Cooling Water
	Process Water
	Steam Condensate
	Cooling Water Return
	Waste Treatment Plant

NO	KODE	NAMA ALAT
1	F-120	SILO ASAM SULFAT
2	L-121	POMPA-1
3	M-122	TANGKI PENGENCER
4	L-123	POMPA-2
5	E-124	HEATER ASAM SULFAT
6	F-110	SILO SODIUM DICHROMATE DIHYDRATE
7	J-111	SCREW CONVEYOR-1
8	J-112	BUCKET ELEVATOR-1
9	E-113	HOPPER
10	M-114	TANGKI PELARUTAN
11	L-115	SCREW CONVEYOR-2
12	R-210	REAKTOR
13	L-211	POMPA-4
14	E-212	COOLER-1
15	H-310	ROTARY DRUM VACUUM FILTER
16	L-311	POMPA-5
17	J-312	SCREW CONVEYOR-3
18	F-313	SILO SODIUM SULFAT
19	V-320	EVAPORATOR
20	L-321	POMPA-6
21	E-322	COOLER-2
22	E-323	BAROMETRIC CONDENSOR
23	F-324	STEAM JET EJECTOR
24	F-325	HOT WELL
25	S-330	CRYSTALLIZER
26	H-340	CENTRIFUGE
27	J-341	SCREW CONVEYOR-4
28	L-342	POMPA-7
29	L-343	TANGKI MOTHER LIQUOR
30	B-350	ROTARY DRYER
31	G-351	BLOWER
32	D-352	MOLECULAR SIEVE
33	E-353	HEATER ROTARY DRYER
34	H-354	CYCLONE
35	J-360	COOLING CONVEYOR
36	J-361	BUCKET ELEVATOR-2
37	C-370	BALL MILL
38	J-371	SCREW CONVEYOR-5
39	J-372	BUCKET ELEVATOR-3
40	F-373	SILO CHROMIUM TRIOXIDE

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	
Na ₂ Cr ₂ O ₇ ·2H ₂ O				9342,1515		9342,1515	1629,5471		0,9342	92,4873		92,4873	87,8629	92,4873	4,6244	4,5781	0,0462	0,0005	0,0458	4,6239	4,6239	
H ₂ SO ₄	4671,0757		4671,0757			93,4215		16,2955	1613,2516		1613,2516	1532,5890	1613,2516	80,6626	79,8560	0,8066	0,0081	0,7986	80,6545	80,6545		
Cr ₂ O ₃ (c)															6119,2134	6120,5092	6059,3041	61,2051	0,6121	60,5930	6119,8972	6119,8972
Cr ₂ O ₃ (l)							6207,2013		62,0720	6145,1293		6145,1293	24,6201	25,9159								
Na ₂ SO ₄				38,1312		38,1312	4445,2442		3555,1625	890,0816		890,0816	845,5776	890,0816	44,5041	44,0590	0,4450	0,0045	0,4406	44,4996	44,4996	
NaCl				19,0656		19,0656	19,0656		0,1907	18,8750		18,8750	17,9312	18,8750	0,9437	0,9343	0,0094	0,0093	0,9437	0,9437	0,9437	
H ₂ O	95,3281		351,5863	133,4593		3311,0619	5338,5926		53,3859	8831,3784		1482,0573	1407,9545	18,8750	74,1029	62,5124				62,5124	62,5124	
Air Proses						3177,603			3546,1718													
Uap			256,2583									7349,3211						11,5904	11,5904			
Total	4766,4038	256,2583	5022,6621	9532,8076	3177,603	12710,4102	17733,0723	3546,1718	3688,0408	17591,2033	7349,3211	10241,8822	3916,5353	8778,6998	6325,3469	6251,2440	74,1029	12,2156	61,8873	6313,1313	6313,1313	

DIGAMBAR OLEH : BRIGITA RIMBA ARTHA L.

NPM : 1903101006

DISEN PEMBIMBING : DR. NURUL WEDDI TRIANA, MT

FLOW SHEET PABRIK CHROMIUM TRIOXIDE DARI SODIUM DICHROMATE DIHYDRATE DAN SULFURIC ACID

PROGRAM STUDI TEKNIK KIMIA

FAKULTAS TEKNIK

UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN" JAWA TIMUR

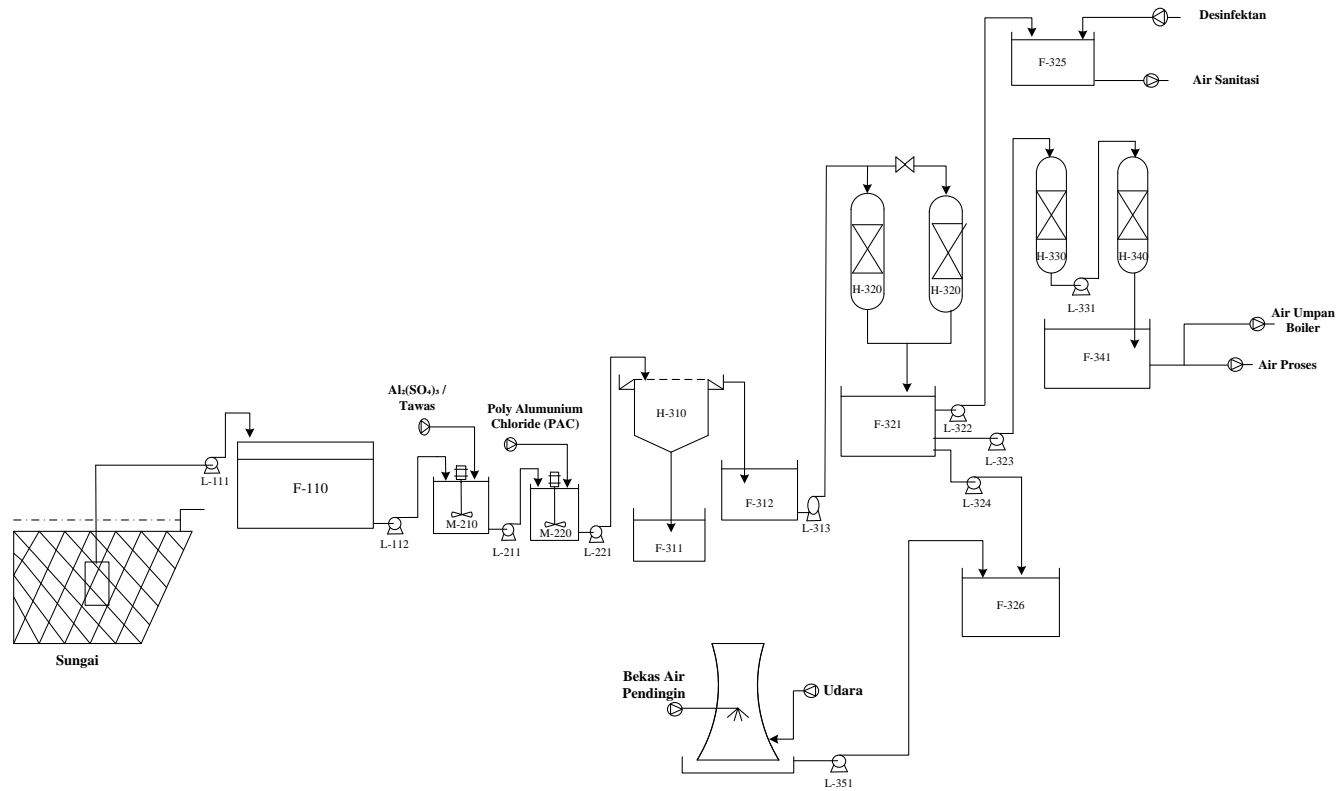
SURABAYA

2021



Pra Rencana Pabrik
 Pabrik Chromium Trioxide Dari Sodium Dichromate Dihydrate Dan
 Sulfuric Acid

UNIT PENGOLAHAN AIR



NO	KODE	NAMA ALAT
1	L-111	POMPA-1
2	F-110	BAK PENAMPUNG AIR SUNGAI
3	L-112	POMPA-2
4	M-210	TANGKI KOAGULASI
5	L-211	POMPA-3
6	M-220	TANGKI FLOKULASI
7	L-221	POMPA-4
8	H-310	CLARIFIER
9	F-311	BAK PENAMPUNG FLOK
10	A-312	BAK PENAMPUNG AIR SETENGAH BERSIH
11	L-313	POMPA-5
12	H-320	SAND FILTER
13	F-321	BAK PENAMPUNG AIR BERSIH
14	L-322	POMPA-6
15	L-323	POMPA-7
16	L-324	POMPA-8
17	F-325	BAK AIR SANITASI
18	F-326	BAK AIR PENDINGIN
19	H-330	TANGKI KATION EXCHANGER
20	L-331	POMPA-9
21	H-340	TANGKI ANION EXCHANGER
22	F-341	TANGKI AIR DEMINERALISASI
23	P-350	COOLING TOWER
24	L-351	POMPA-10