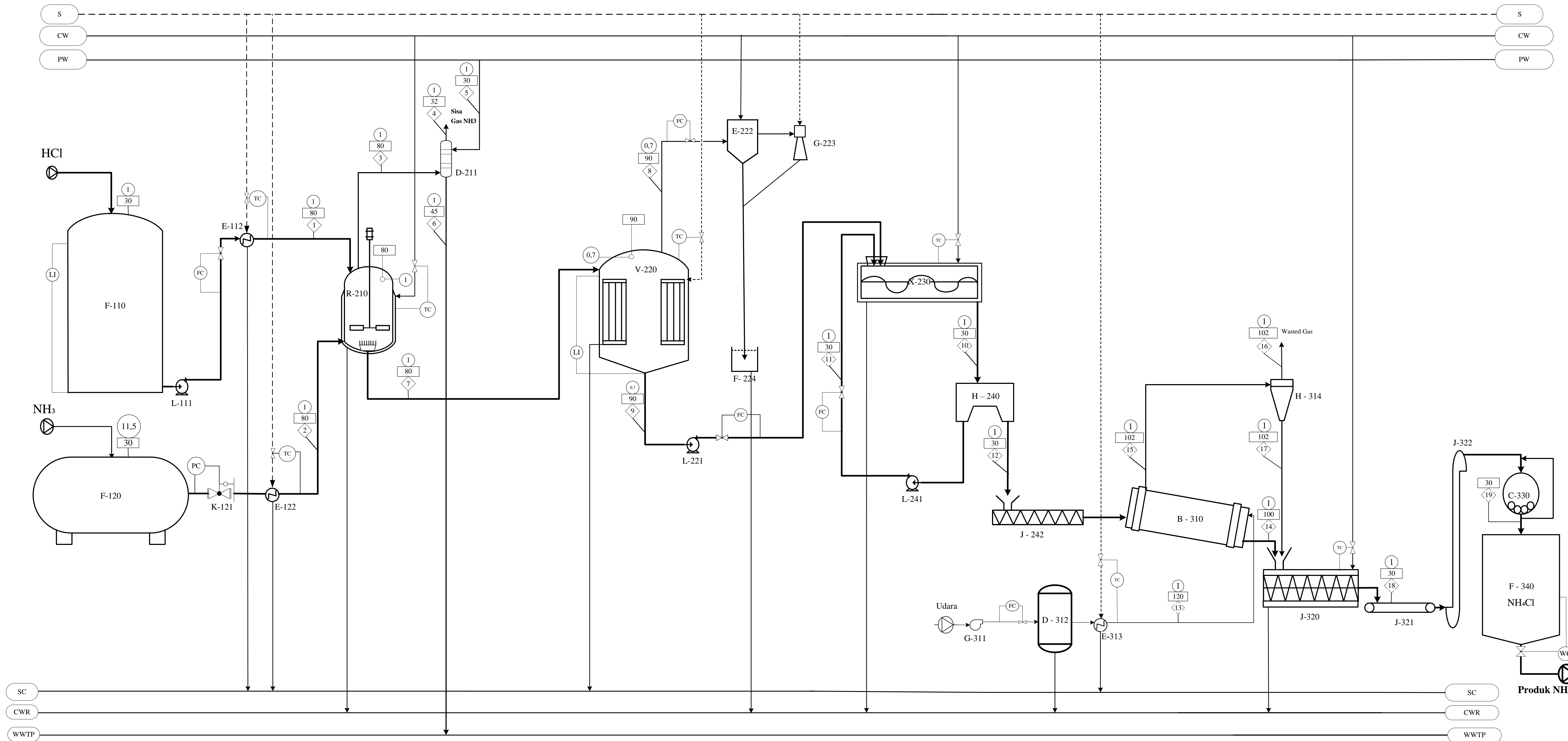


FLOWSHEET PABRIK SAL AMONIAK DARI AMMONIA DAN ASAM KLOORIDA DENGAN PROSES NETRALISASI



KETERANGAN :

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

NO	KODE	NAMA ALAT
1	F-110	Tangki Penampung HCl
2	L-111	Pompa-1
3	E-112	Heater Asam Klorida
4	F-120	Tangki Penampung NH ₃
5	K-121	Pressure Reducing Valve
6	E-122	Heater Amonia
7	R-210	Reaktor Bubble Berpengaduk
8	D-211	Scrubber
9	V-220	Evaporator
10	L-221	Pompa-2
11	E-222	Barometric condensor
12	G-223	Steam Jet Ejector
13	F-224	Hotwell
14	X-230	Crystallizer
15	H-240	Centrifuge
16	L-241	Pompa-3
17	J-242	Screw Conveylor
18	B-310	Rotary Dyer
19	G-311	Blower
20	D-312	Molecular Sieve - 1
21	E-313	Heater Udara
22	H-314	Cyclone
23	J-320	Cooling Conveylor
24	J-321	Belt Conveylor
25	J-322	Bucket Elevator
26	C-330	Ball Mill
27	F-340	Silo NH ₄ Cl

Disusun Oleh : Muhammad Nabil C
(19031010169)

Dosen Pembimbing : Dr. Ir. Shinta Soraya Santi, MT

FLOWSHEET PRARENCANA PABRIK
SAL AMONIAK DARI AMMONIA DAN ASAM KLOORIDA
DENGAN PROSES NETRALISASI

PROGRAM STUDI TEKNIK KIMIA
FAKULTAS TEKNIK
UNIVERSITAS PEMBANGUNAN NASIONAL
"VETERAN"
JAWA TIMUR
2023

KOMPONEN	Aliran (Kg / Jam)																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
H ₂ O (l)	5263,4982	12,3509			121,6630	6726,0215	4540,1461		574,6407	1137,7885	563,1478	551,6550	2909,5516	7,4987	3,9941			7,4987	7,4987
HCl (aq)	11184,9337																		
NH ₃ (g)		2457,8386		0,4916															
Kristal NH ₄ Cl										7563,8834		7563,8834		7488,2445	75,6388	0,7564	74,8824	7563,1270	7563,1270
NH ₄ Cl (aq)							7566,9101		7566,9101	151,3382	148,3114	3,0268		2,9965	0,0303	0,0003	0,0300	3,0265	3,0265
NH ₃ Sisa			49,1568																
Sisa HCl (aq)							105,2700		105,2700	208,4345	103,1646	2,1054		2,1054				2,1054	2,1054
H ₂ O (g)			6657,1386					3965,5054								3,9941			
NH ₄ OH(aq)						101,4454													
Udara													181846,9754	181846,9754					
Total	16448,4320	2470,1896	6706,2954	0,4916	121,6630	6827,4668	12212,3262	3965,5054	8246,8207	9061,4446	814,6238	8120,6706	184756,5271	189347,8206	79,6632	4,7508	74,9124	7575,7576	7575,7576