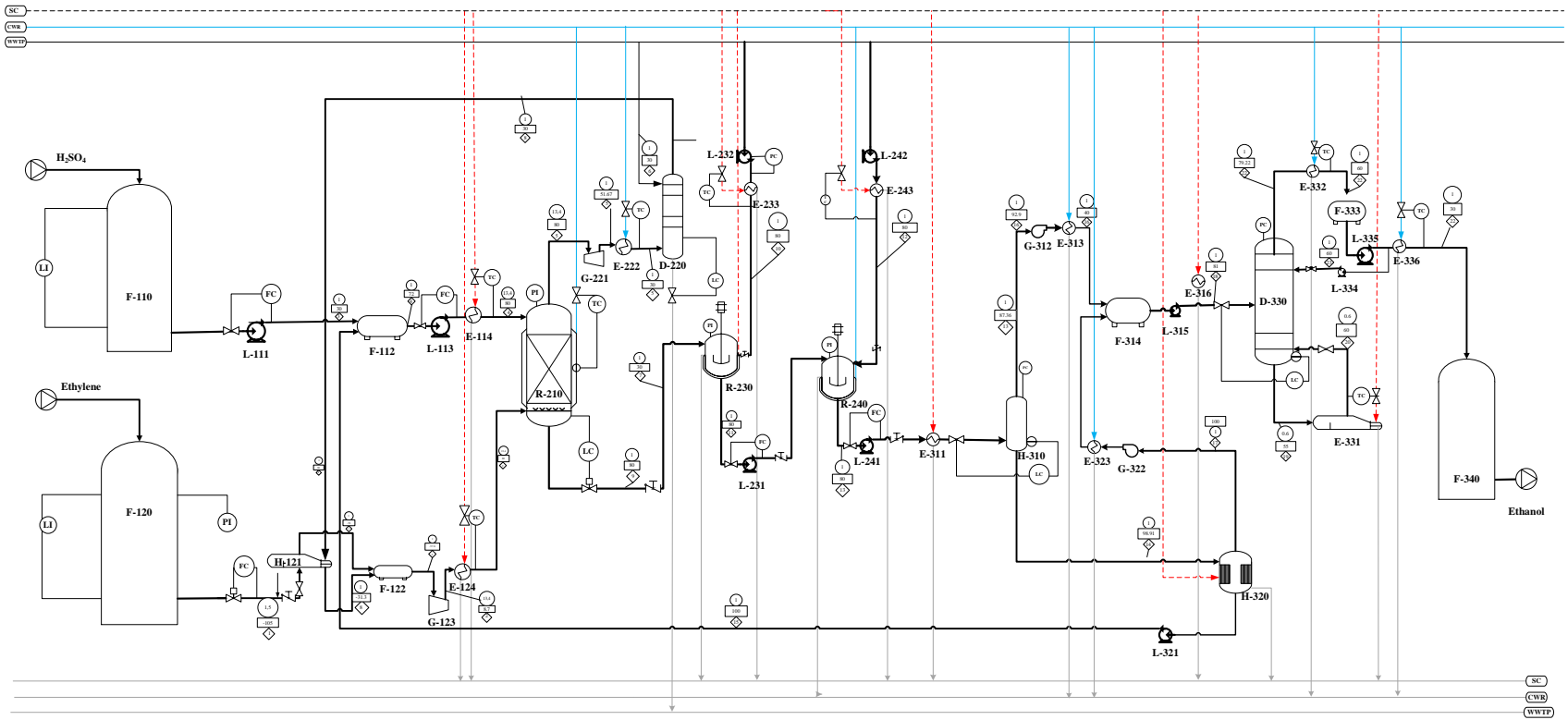


PABRIK ETHANOL DARI ETHYLENE DENGAN METODE INDIRECT HYDRATION AND DOUBLE STAGE HYDROLYZER



CW	Cooling Water	◇	Aliran Massa (kg/jam)
WP	Water Process	□	Temperatur (°C)
S	Steam (148°C ; 4,5 atm)	○	Tekanan (atm)
CWR	Cooling Water Return		
SC	Steam Condensate		
WWT	Waste Water Treatment		
KETERANGAN			

41	F-340	TANGKI PRODUCT ETHANOL
40	E-336	COOLER PRODUCT ETHANOL
39	L-335	POMPA PRODUK ETHANOL
38	L-334	POMPA REFLUX MENARA DISTILASI
37	F-333	AKUMULATOR MENARA DISTILASI
36	E-332	CONDENSOR MENARA DISTILASI
35	E-331	REBOILER MENARA DISTILASI
34	D-330	MENARA DISTILASI
32	E-322	CONDENSOR TOP PRODUCT EVAPORATOR
31	G-321	BLOWER - 2
30	H-320	EVAPORATOR ASAM SULFAT
29	E-316	HEATER FEED MENARA DISTILASI
28	L-315	POMPA FEED MENARA DISTILASI
27	F-314	AKUMULATOR FEED MENARA DISTILASI
26	E-313	KONDENSOR TOP PRODUCT SEPARATOR
25	G-312	BLOWER - 1
24	E-311	HEATER MENUJU SEPARATOR
23	H-310	FLASH DRUM SEPARATOR
22	E-243	HEATER AIR PROSES H-II
21	L-242	POMPA AIR PROSES H-II
20	L-241	POMPA FLASH DRUM SEPARATOR
19	R-240	HYDROLIZER II
18	E-233	HEATER AIR PROSES H-I
17	L-232	POMPA AIR PROSES H-I
16	L-231	POMPA HYDROLIZER I
15	R-230	HYDROLIZER I
14	E-222	COOLER SCRUBBER
13	G-221	EXPANDER SCRUBBER
12	D-220	SCRUBBER
11	R-210	REAKTOR
10	E-124	HEATER ETHYLENE
9	G-123	COMPRESSOR ETHYLENE
8	F-122	AKUMULATOR ETHYLENE
7	H-121	VAPORIZER ETHYLENE
6	F-120	TANGKI ETHYLENE
5	E-114	HEATER ASAM SULFAT
4	L-113	POMPA ASAM SULFAT 2
3	F-112	AKUMULATOR ASAM SULFAT
2	L-111	POMPA ASAM SULFAT 1
1	F-110	TANGKI ASAM SULFAT
NO	KODE ALAT	NAMA ALAT

Komponen	Nomor	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	22	23	
C ₂ H ₄	4724.6352	7992.8039			3268.1687			3268.1687																	
C ₂ H ₆	1.2688	2.3069			2.3069		1.2688	1.0381																	
CH ₄	0.6429	1.1690			1.1690		0.6429	0.5260																	
H ₂ SO ₄			4838.6861	12096.7150					576.0340		11520.6809		7258.0290	7258.0288	7258.0288										
H ₂ O			98.7487	246.8717		359.4312	359.4312		246.8717	2768.4168	131.8294	20.928	4839.6826	3242.6977	148.1230	1596.9849	3094.5747	4691.5595	4410.0660	281.4936	4321.8646	281.4936	281.4936		
C ₂ H ₅ SO ₄										8386.1277		419.3064													
(C ₂ H ₅) ₂ SO ₄										7859.1884		392.9594													
C ₂ H ₅ OH											7371.8626		7759.8553	7759.8553		3634.1104	4125.7450	7759.8553	465.5913	7294.2640	9.3118	7294.2640	7294.2640		
TOTAL	4726.5469	7996.2798	4937.4348	12343.5867	3271.6446	359.4312	361.3429	3269.7328	17068.2219	2768.4168	19836.6387	20.928	19857.5669	18260.5819	7406.1518	5231.0952	7220.3196	12451.4149	4875.6573	7575.7576	4331.1765	7575.7576	7575.7576		

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**FLWSHEET PABRIK ETANOL DARI ETHYLENE DENGAN METODE
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