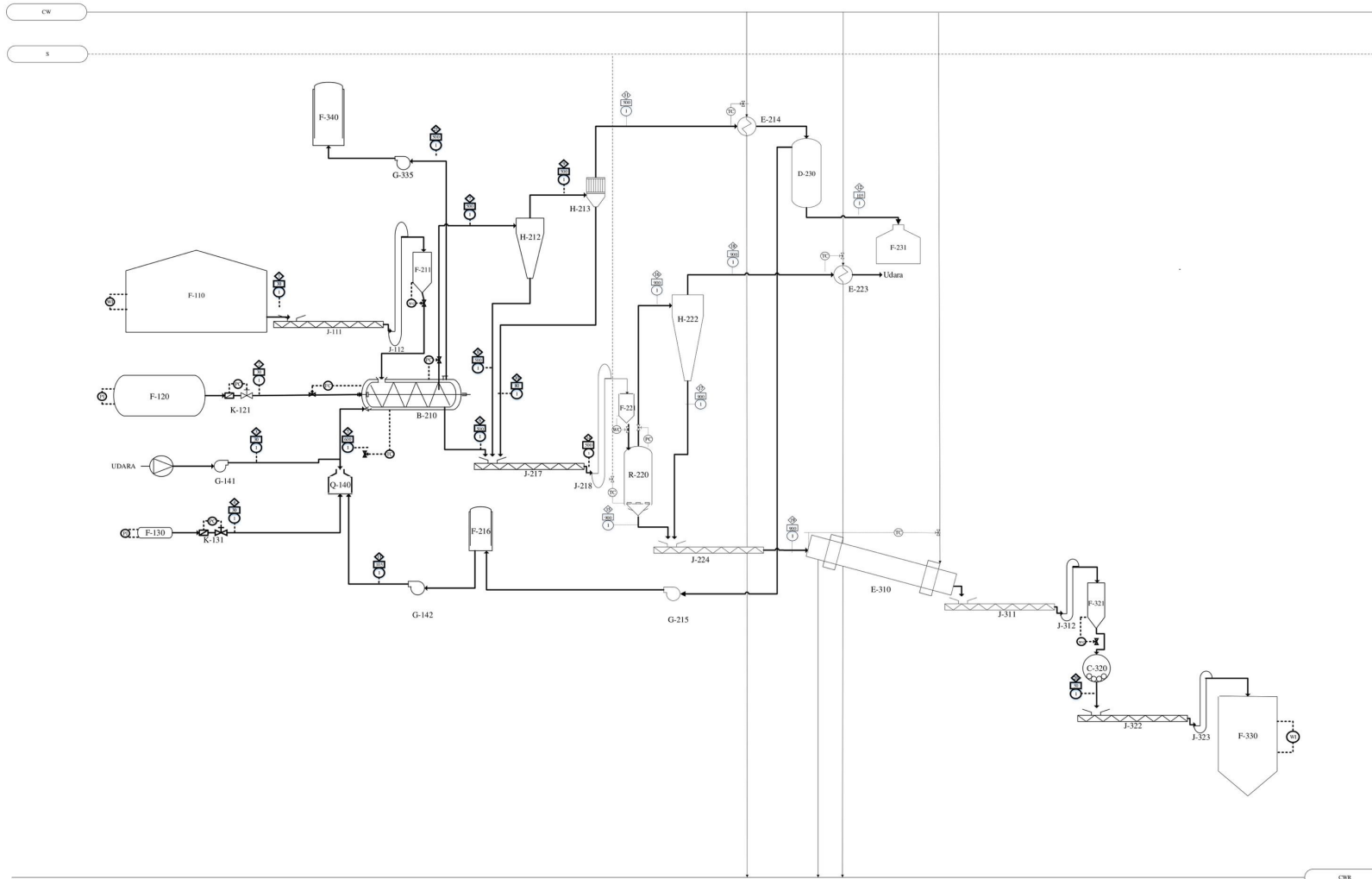


PABRIK KARBON AKTIF DARI PALM KERNEL SHELL DENGAN METODE THERMAL ACTIVATION

SKALA 1:200



NO.	KODE ALAT	NAMA ALAT
1	F-110	GUDANG PALM KERNEL SHELL
2	J-111	SCREW CONVEYOR-1
3	J-112	BUCKET ELEVATOR-1
4	F-120	TANGKI N2
5	K-121	EXPANDER VALVE-1
6	F-130	TANGKI GAS ALAM
7	K-131	EXPANDER VALVE-2
8	Q-140	BURNER
9	G-141	BLOWER-1
10	G-142	BLOWER-2
11	B-210	REAKTOR PIROLISIS
12	F-211	HOPPER-1
13	H-212	CYCLONE-1
14	H-213	BAG FILTER
15	E-214	HEAT EXCHANGER-1
18	G-215	BLOWER-3
19	F-216	GAS HOLDER-1
20	J-217	SCREW CONVEYOR-2
21	H-218	BUCKET ELEVATOR-2
22	R-220	REAKTOR AKTIVASI
23	F-221	HOPPER-2
24	H-222	CYCLONE-2
25	E-223	HEAT EXCHANGER-2
26	J-224	SCREW CONVEYOR-3
16	D-230	SCRUBBER
17	F-231	TANGKI PENAMPUNG TAR
27	E-310	ROTARY COOLER-1
28	J-311	SCREW CONVEYOR-4
29	J-312	BUCKET ELEVATOR-3
30	C-320	BALL MILL
31	F-321	HOPPER-3
32	J-322	SCREW CONVEYOR-5
33	J-323	BUCKET ELEVATOR-4
34	F-330	SILO KARBON AKTIF
35	G-341	BLOWER-4
36	F-340	GAS HOLDER-2

Digambar Oleh :

Niken Nabilla Saraswati 18031010090

Dosen Pembimbing : Ir. Nurul Widji Triana, MT

FLOWSHEET PABRIK KARBON AKTIF DARI PALM KERNEL SHELL
 DENGAN PROSES THERMAL ACTIVATION KAPASITAS 30.000 TON/TAHUN

PROGRAM STUDI TEKNIK KIMIA
 FAKULTAS TEKNIK
 UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN" JAWA TIMUR
 2022

Komponen	Aliran (kg/jam)																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
C ₁₀₀ H ₁₂₀ O ₄₀	8272,1475																				
H ₂ O	733,2400				2858,9826	586,5920	1448,4477		1448,4477		1448,4477		1448,4477	586,5920	305,1231	5681,4689		5681,4689	305,1231	305,1231	2858,9826
Abu	91,8824					258,8702	2,6149	2,5887	0,0261	0,0261				261,4851	346,1331	3,4963		0,0350	349,5944	349,5944	
N ₂		827,2147	8366,1138	0,1904	9193,5190		827,2147		827,2147		827,2147		827,2147								9193,5190
C						3190,2260	32,2245	31,9023	0,3222	0,3222				3222,4505	3102,9632	31,3431	31,0296	0,3134	3133,9928	3133,9928	
C ₃ H ₈ O							1570,7795		1570,7795		1570,7795	1555,0717	15,7078								
H ₂							82,1644		82,1644		82,1644		82,1644								
C O							455,2045		455,2045		455,2045		455,2045								
C O ₂				1,1660	2742,0848		1189,2309		1189,2309		1189,2309		1189,2309								2742,0848
CH ₄				5,6928			280,8478		280,8478		280,8478		280,8478								
O ₂			2541,6042		423,6007																423,6007
C ₂ H ₆					1,3860																
C ₃ H ₈					1,9184																
n-C ₄ H ₁₀					0,5220																
i-C ₄ H ₁₀					0,3836																
n-C ₅ H ₁₂					0,1152																
i-C ₅ H ₁₂					0,1435																
C ₆ H ₁₄					0,1333																
Total	9097,2699	827,2147	10907,7181	11,6512	15218,1871	4035,6882	5888,7289	34,491	5854,3378	0,3483	5853,8895	1555,0717	4298,8178	4070,5276	3754,2194	34,8394	34,4909	5681,8173	3788,7103	3788,7103	15218,1871