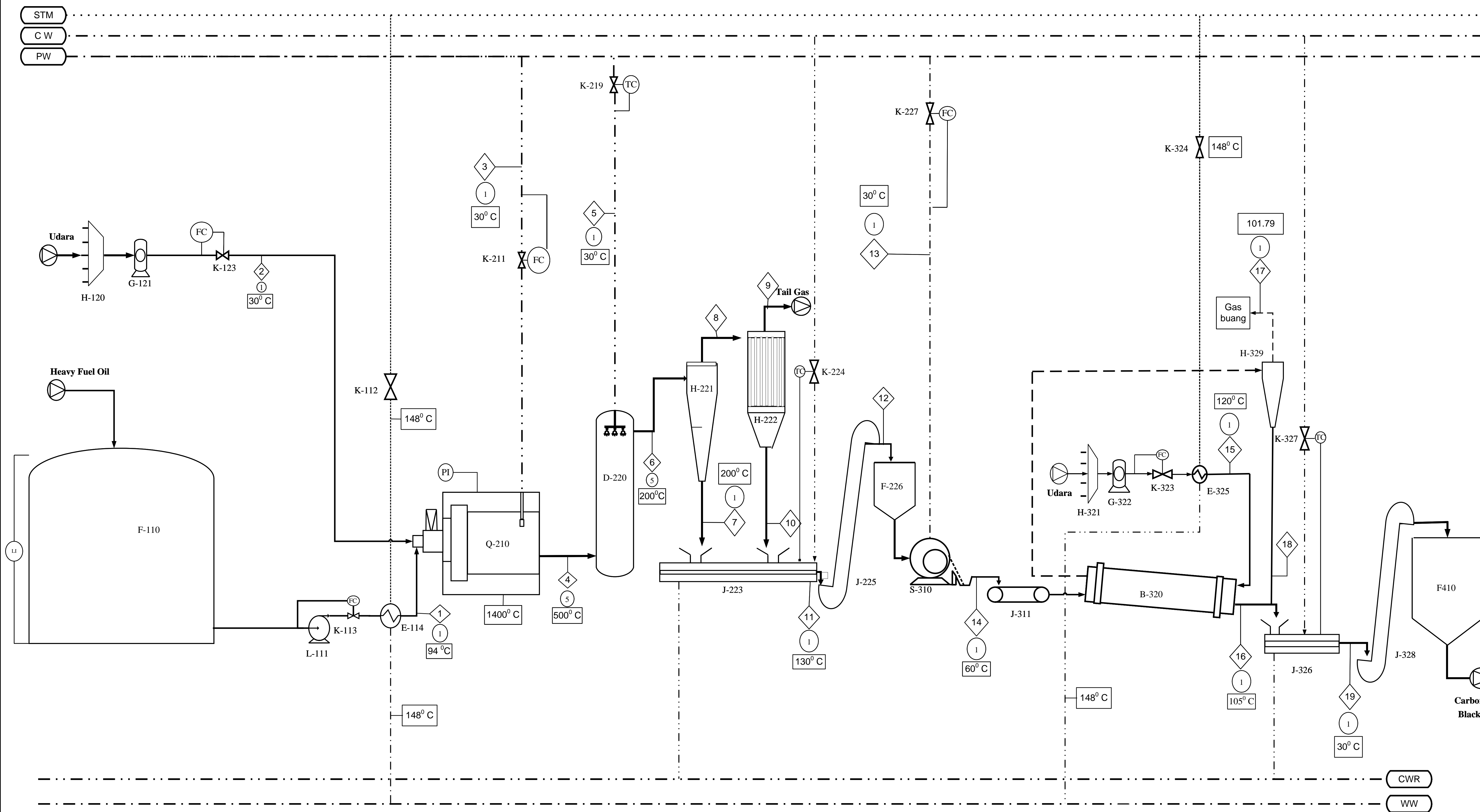


FLWSHEET PRA RENCANA PABRIK CARBON BLACK DARI HEAVY FUEL OIL DAN UDARA DENGAN PROSES OIL FURNACE

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FLWSHEET PRA RENCANA PABRIK CARBON BLACK DARI HEAVY FUEL OIL DAN UDARA DENGAN PROSES OIL FURNACE		
PROGRAM STUDI TEKNIK KIMIA		
FAKULTAS TEKNIK		
UNIVERSITAS PEMBANGUNAN NASIONAL "VETERAN" JAWA TIMUR		
2022		



KETERANGAN :

	Temperatur ; °C
	Aliran Massa ; kg/jam
	Tekanan ; atm
	STM Steam (148 °C ; 4,5 atm)
	CW Cooling Water
	C W R Cooling Water Return
	PW Process Water
	WW Waste Water

No	Kode	Nama Alat
1	F-110	Storage Tank
2	L-111	Pompa -1
3	K-112	Valve-1
4	K-113	Valve-2
5	E-114	Heater -1
6	H-120	Filter Udara -1
7	G-121	Turbo Blower -1
8	K-123	Valve -3
9	Q-210	Reaktor Furnace
10	K-219	Valve-4
11	D-220	Quenching Tower
12	H-221	Cyclone -1
13	H-222	Electrostatic Presipitator
14	J-223	Cooling Conveyor -1
15	K-224	Valve-5
16	J-225	Bucket Elevator -1
17	F-226	Bin
18	K-227	Valve-6
19	S-310	Peletizer
20	J-311	Belt Conveyor
21	B-320	Rotary Dryer
22	H-321	Filter Udara -2
23	G-322	Turbo Blower -2
24	K-323	Valve-7
25	K-324	Valve-8
26	E-325	Heater-2
27	J-326	Cooling Conveyor -2
28	K-327	Valve-9
29	J-328	Bucket Elevator -2
30	H-329	Cyclone-2
31	F-410	Silo

Komponen	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
O ₂	17,5644	31637,3967		10103,9873		10103,9873		10103,9873	10103,9873											
N ₂	54,0442	104139,7641		104193,8083		104193,8083		104193,8083	104193,8083											
H ₂ O			50435,3569	58667,5367	68584,6399	127252,1765		127252,1765	127252,1765				2705,3571	2705,3571		18,8045	2686,5526		18,8045	
C	11453,3235			6313,1313		6313,1313	6250,0000	63,1313	0,6313	62,5000	6312,5000	6312,5000		6312,5000		6249,3750	0,6313	62,4938	6311,8688	
SO ₂				918,7519		918,7519		918,7519	918,7519											
CO ₂				18408,4094		18408,4094		18408,4094	18408,4094											
H ₂	1526,7495			1117,9503		1117,9503		1117,9503	1117,9503											
S	459,3760																			
Udara															138738,9920		138738,9920			
Total	13511,0575	135777,1608	50435,3569	199723,5753	68584,6399	268308,2151	6250,0000	262058,2151	261995,7151	62,5000	6312,5000	6312,5000	2705,3571	9017,8571	138738,9920	6268,1795	141426,1759	62,4938	6330,6733	