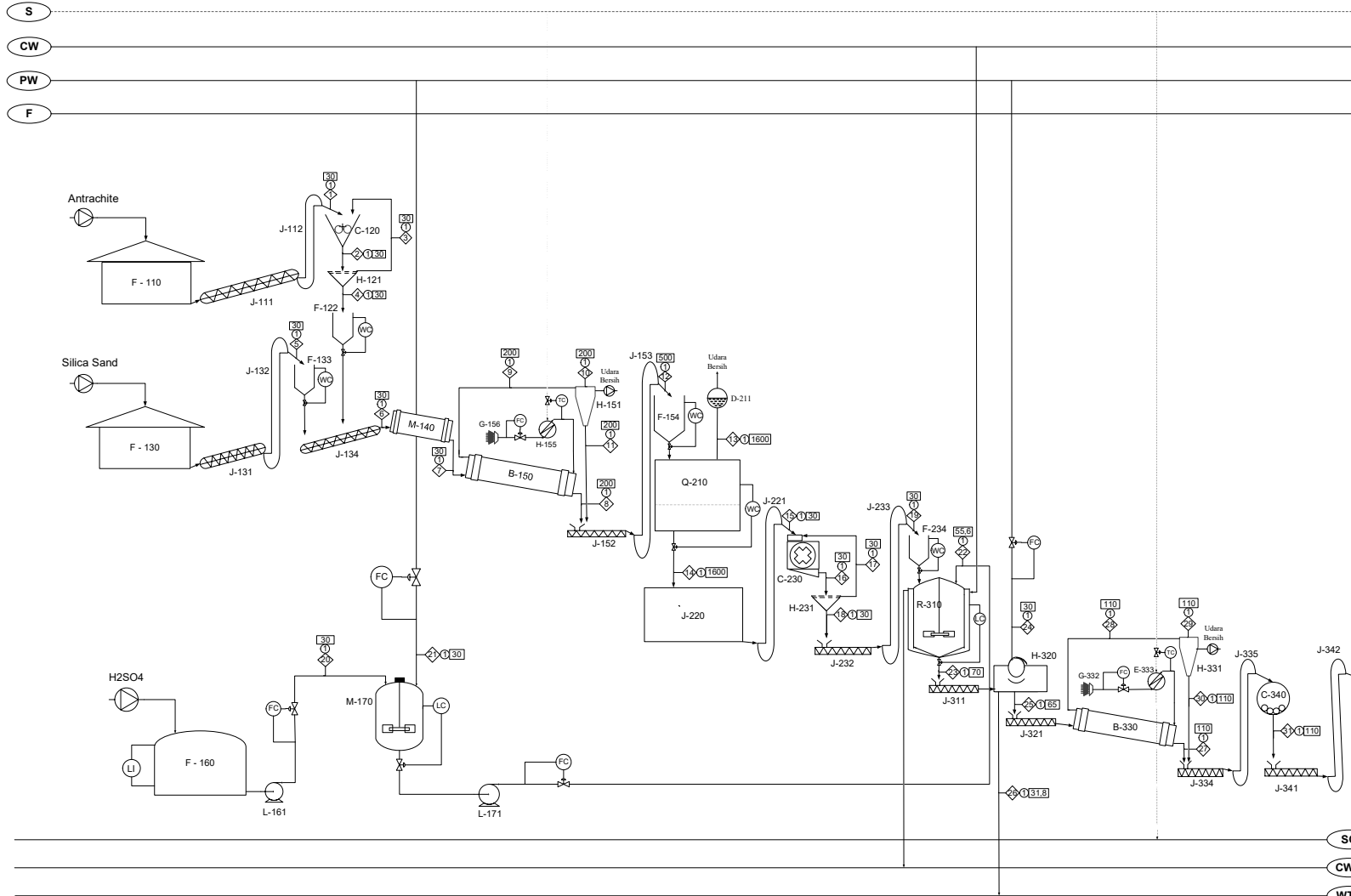


# FLOWSHEET PRA-RENCANA PABRIK SILICON CARBIDE DARI SILICA DIOXIDE DAN CARBON DENGAN MENGGUNAKAN ELECTRIC FURNANCE



**KETERANGAN :**

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

NO	KODE	NAMA ALAT
1	F - 110	Gudang Antrasit
2	J - 111	Belt Conveyor - 1 (Antrasit)
3	J - 112	Bucket Elevator - 1
4	C - 120	Roll Mill
5	H - 121	Screen Roll Mill
6	F - 122	Hopper - 1
7	F - 130	Gudang Pasir Kuarsa
8	J - 131	Belt Conveyor - 2 (Pasir Kuarsa)
9	J - 132	Bucket Elevator - 2
10	F - 133	Hopper - 2
11	J - 134	Belt Conveyor - 3
12	M - 140	Drum Mixer
13	B - 150	Rotary Driver - 1
14	H - 151	Cyclone - 1
15	J - 152	Screw Conveyor - 1
16	J - 153	Bucket Elevator - 3
17	F - 154	Hopper - 3
18	E - 155	Heater - 1
19	G - 156	Blower - 1
20	F - 160	Tangki Penampung H <sub>2</sub> SO <sub>4</sub>
21	L - 161	Pompa - 1
22	M - 170	Tangki Pengencer H <sub>2</sub> SO <sub>4</sub>
23	L - 171	Pompa - 2
24	Q - 210	Electric Furnace
25	D - 211	Molecular Sieve
26	J - 220	Cooling Conveyor
27	J - 221	Bucket Elevator - 4
28	C - 230	Hammer Mill
29	H - 231	Screen Hammer Mill
30	J - 232	Screw Conveyor - 2
31	J - 233	Bucket Elevator - 5
32	F - 234	Hopper - 4
33	R - 310	Reactor
34	J - 311	Screw Conveyor - 3
35	H - 320	Washer
36	J - 321	Screw Conveyor - 4
37	B - 330	Rotary Driver
38	H - 331	Cyclone - 2
39	G - 332	Blower - 2
40	E - 333	Heater - 2
41	J - 334	Screw Conveyor - 5
42	J - 335	Bucket Elevator - 6
43	M - 340	Ball Mill
44	J - 341	Screw Conveyor - 6
45	J - 342	Bucket Elevator - 7
46	F - 343	Silo Silicon Carbide

Aliran Komponen	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
C	3704,1415	3704,1415	185,2071	3889,3485		3889,3485	3889,3485	3850,4551	38,8935	0,38893	38,5046	3888,9596		435,6417	435,6417	435,6417	21,7821	457,4238	457,4238						457,4238							
H	39,6589	39,6589	1,9829	41,6418		41,6418	41,6418	41,2254	0,00416	0,4123	41,6377																					
O <sub>2</sub>	198,2945	198,2945	9,9147	208,2092		208,2092	208,2092	206,1271	2,0821	0,20282	2,0613	208,1884																				
N <sub>2</sub>	3,9659	3,9659	0,1983	4,1642		4,1642	4,1642	4,1225	0,00416	0,00412	4,1638		86,2501																			
SiO <sub>2</sub>				6235,9284	6235,9284	6175,5091	623,3993	0,62359	61,7387	6235,3048				623,5305	623,5305	623,5305	31,1765	654,7070	654,7070						654,7070							
Al <sub>2</sub> O <sub>3</sub>				9,5014	9,5014	9,4064	0,0950	0,00095	0,0941	9,5005				9,5005	9,5005	9,5005	0,4750	9,9755	9,9755						9,9755							
Fe <sub>2</sub> O <sub>3</sub>				0,7626	0,7626	0,7550	0,0076	0,00076	0,0075	0,7625				0,7625	0,7625	0,7625	0,0381	0,8007	0,8007						0,8007							
TiO <sub>2</sub>				0,4688	0,4688	0,4688	0,4641	0,0047	0,00005	0,0046	0,4688			0,4688	0,7625	0,4688	0,0234	0,4922	0,4922						0,4922							
CaO				1,5627	1,5627	1,5471	0,0156	0,00016	0,0155	1,5626				1,5626	0,4688	1,5626	0,0781	1,6407	1,6407						1,6407							
MgO				0,1313	0,1313	0,1313	0,1300	0,0013	0,00001	0,0013	0,1313			0,1313	1,5626	0,1313	0,0066	0,1378	0,1378						0,1378							
H <sub>2</sub> O	19,8295	19,8295	0,9915	20,8209	2,5754	23,3963	23,3963						316,2622							0,7698	87,2387	88,0085	94,2435	11231,054	1029,5725	10295,725	10,2957	1019,2768	1019,2768	0,0000	10,2957	
CO <sub>2</sub>													5237,6560																			
CO																																
SiC																																
Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>																																
Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>																																
Ti <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>																																
CaSO <sub>4</sub>																																
MgSO <sub>4</sub>																																
H <sub>2</sub> SO <sub>4</sub>																																
Total (kg)	3965,8902	3965,8902	198,2945	4164,1847	6250,9366	10415,115	10415,115	10287,802	103,9172	1,0392	102,8780	10390,680	5681,8060	4812,7807	5248,2911	4812,7807	240,6390	5053,4197	5053,4197	38,4877	87,2387	125,7264	5179,1461	11231,054	6074,2307	10335,970	5004,5073	1069,7234	1019,7813	49,9421	5050,5051	

**FLOWSHEET PABRIK SILICON CARBIDE DARI SILICON DIOXIDE DAN CARBON MENGGUNAKAN ELECTRIC FURNACE**  
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