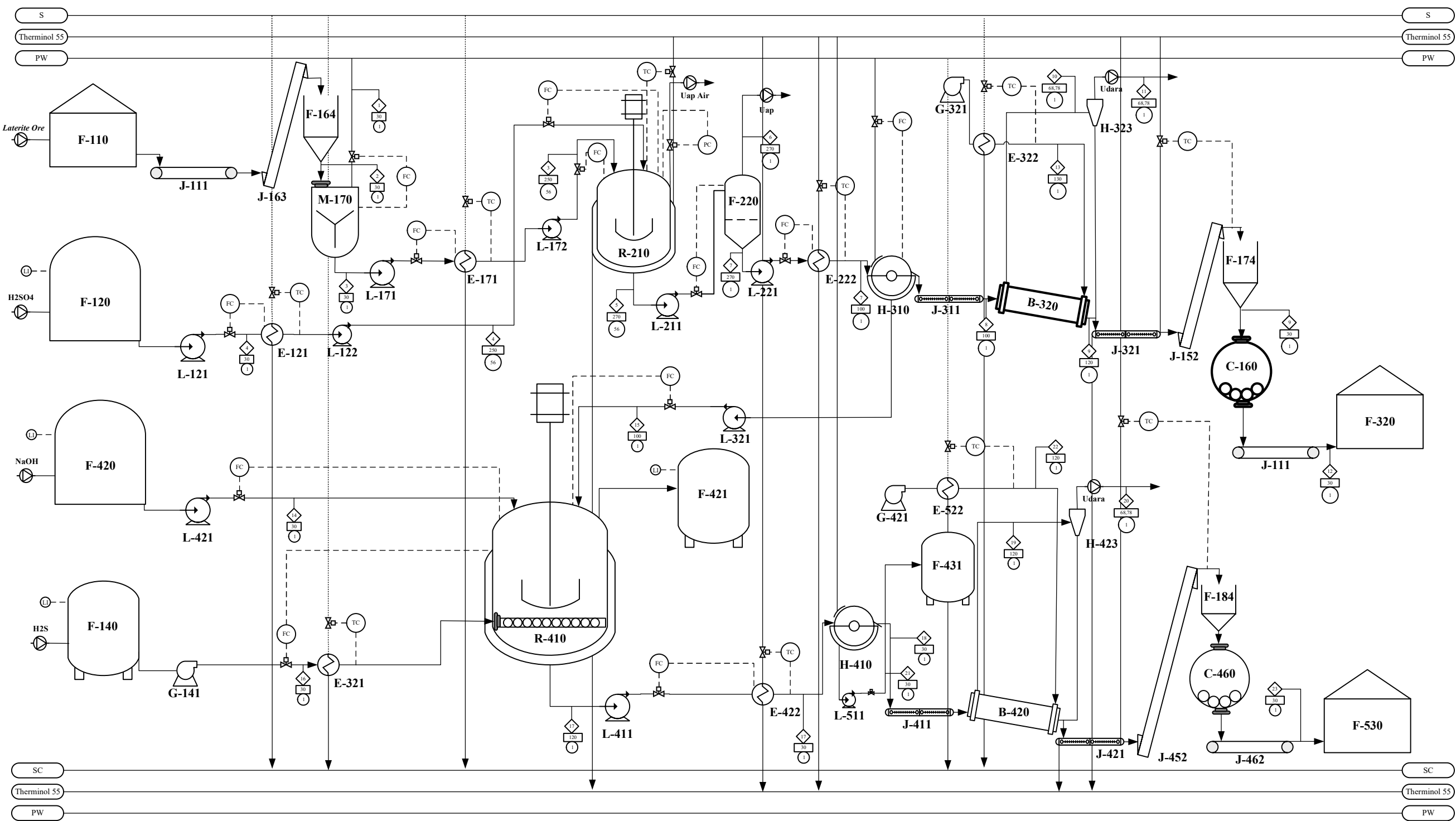


PABRIK NIKEL SULFIDA (NiS) DARI BIJIH NIKEL LATERIT DENGAN PROSES HYDROMETALLURGY



Keterangan :	
	Temperatur ; °C
	Tekanan ; atm
	Steam
	Cooling Water
	Process Water
	Aliran Massa ; kg/jam
	Steam Condensat
	Cooling Water Return

No.	Kode Alat	Nama
1	F-110	Gudang Batuan Laterit
2	J-111	Belt Conveyor
3	J-163	Bucket Elevator
4	F-164	Hopper
5	M-170	Mixer
6	L-171	Pompa 1
7	E-171	Heater 1
8	L-172	Pompa 2
9	R-210	Reaktor 1
10	L-211	Pompa 3
11	F-220	Flash Drum
12	L-221	Pompa 4
13	E-221	Cooler 1
14	H-310	Rotary Vacuum Filter 1
15	J-311	Screw Conveyor
16	B-320	Rotary Dryer 1
17	H-323	Cyclone 1
18	J-321	Screw Conveyor
19	J-152	Bucket Elevator
20	C-160	Ball Mill 1
21	J-162	Belt Conveyor
22	F-320	Gudang Batuan Sisa Reaksi
23	F-120	Tangki H2SO4
24	L-121	Pompa 5
25	E-121	Heater 2
26	L-122	Pompa 6
27	L-321	Pompa 7
28	F-420	Tangki NaOH
29	L-331	Pompa 8
30	F-140	Tangki H2S
31	G-141	Blower 1
32	R-410	Reaktor 2
33	E-622	Heater 3
34	L-411	Pompa 9
35	E-422	Cooler 2
36	F-421	Tangki H2S
37	H-410	Rotary Vacuum Filter 2
38	J-411	Screw Conveyor
39	B-420	Rotary Dryer 2
40	G-421	Blower 2
41	G-321	Blower 3
42	J-421	Screw Conveyor
43	J-452	Bucket Elevator
44	C-460	Ball Mill 2
45	J-462	Belt Conveyor
46	F-530	Gudang NiS
47	F-431	Tangki Na2SO4
47	F-184	Hopper 2
47	F-184	Hopper 3
48	H-423	Cyclone 2

Komponen	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SiO2	-	8001,0840	8001,0840	-	8001,0840	-	8001,0840	8001,0840	7200,9756	800,1084	80,0108	7921,0731	-	-	-	-	-	-	-	-	-	-	-
NiO	-	5168,6589	5168,6589	-	258,4329	-	258,4329	258,4329	232,5897	25,8433	2,5843	255,8486	-	-	-	-	-	-	-	-	-	-	-
CoO	-	289,4449	289,4449	-	28,9445	-	28,9445	26,0500	2,8944	0,2894	0,2894	28,6550	-	-	-	-	-	-	-	-	-	-	-
FeO(OH)	-	95351,4192	95351,4192	-	94397,9050	-	94397,9050	94397,9050	84958,1145	9439,7905	943,9791	93453,9260	-	-	-	-	-	-	-	-	-	-	-
AlO(OH)	-	3928,1808	3928,1808	-	3888,8989	-	3888,8989	3888,8989	3500,0091	388,8899	38,8890	3850,0100	-	-	-	-	-	-	-	-	-	-	-
H2O	482408,1632	94007,5679	576415,7311	207,2838	577972,9158	520175,6243	57797,2916	12227,6605	1222,7660	11004,8944	9904,4050	2323,2555	-	7793,9650	110048,9445	-	113290,0349	11645,2451	10480,7206	9432,6485	104807,2059	-	2212,5966
H2SO4	-	-	-	10156,9056	3368,0047	-	3368,0047	336,8005	303,1204	33,6800	30,3120	306,4884	-	-	3031,2043	-	-	-	-	-	-	-	-
NiSO4	-	-	-	-	10174,1407	-	10174,1407	1017,4141	915,6727	101,7414	91,5673	925,8468	-	-	9156,7266	-	457,8363	45,7836	4,5784	0,4578	412,0527	-	45,3258
CoSO4	-	-	-	-	538,8705	-	538,8705	53,8870	48,4983	5,3887	4,8498	49,0372	-	-	484,9834	-	48,4983	4,8498	0,4850	0,0485	43,6485	-	4,8013
Fe2(SO4)3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Al2(SO4)4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fe2O3	-	-	-	-	856,8750	-	856,8750	856,8750	771,1875	85,6875	8,5687	848,3062	-	-	-	-	-	-	-	-	-	-	-
Al2O3	-	-	-	-	33,3820	-	33,3820	33,3820	30,0438	3,3382	0,3338	33,0482	-	-	-	-	-	-	-	-	-	-	-
H2S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2413,8839	402,3140	40,2314	36,2083	3,6208	362,0826	-	36,6106
NaOH	-	-	-	-	-	-	-	-	-	-	-	-	-	7194,4292	-	-	-	-	-	-	-	-	-
NiS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5101,5203	5101,5203	510,1520	51,0152	-	-	5050,5051
CoS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	169,1732	169,1732	16,9173	1,6917	-	-	167,4814
Na2SO4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12773,7091	1277,3709	127,7371	12,7737	11496,3382	-	1264,5972
Udara	-	-	-	-	-	-	-	-	-	-	-	-	857371,7656	-	-	-	-	-	-	-	-	3625855,6710	-
Total	482408,1632	206746,3557	689154,5189	10364,1894	699519,4541	520175,6243	179343,8298	121101,2844	99209,0276	21892,2568	11105,7894	109995,4951	857371,7656	14988,3942	122721,8588	2413,8839	132243,0861	18284,1743	11176,7986	9502,2563	117121,3278	3625855,6710	8781,9180

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