

		AIRIN	ANIN	ANOUT	CATIN	CATOUT	FUELIN	MIXIN	RECYCLE	RECYCLE 1	RECYCLE 2	RECYCLE 3	REFIN	REFOUT	SPLITOUT	
		Inlet fresh air	Reformed cooled fuel to anode	Anode outlet	Cathode inlet	Cathode outlet	Humidified fuel	Recompressed flue gas	Recycled cathode outlet	Recycled cathode and anode outlet to	CB outlet	Recycle	Preheated humidified fuel	Reformed fuel	Purged cathode outlet	
Pressure	bar	3.648	3.648	3.644	3.648	3.625	3.648	3.648	3.625	3.625	3.585	3.555	3.648	3.648	3.625	
	Atm	3.600	3.600	3.596	3.600	3.577	3.600	3.600	3.577	3.577	3.538	3.508	3.600	3.600	3.577	
Temperature	K	475.85	880.54	964.95	890.48	949.97	463.65	961.11	949.97	951.52	1023.26	955.42	649.00	1021.95	949.97	
	°C	202.7	607.4	691.8	617.3	676.8	190.5	688.0	676.8	678.4	750.1	682.3	375.9	748.8	676.8	
Mole weight	kg/kmol	28.9	12.4	27.0	27.3	26.9	17.6	27.0	26.9	26.9	27.0	27.0	17.6	12.4	26.9	
Mass flow	kg/h	2750	347	1092	15853	15108	347	13103	12011	13103	13103	13103	347	347	3097	
Mole flow	kmol/h	95	28	40	580	561	20	485	446	487	485	485	20	28	115	
	Nm3/h	2136.5	628.2	906.5	12998.6	12581.2	442.7	10862.2	10002.1	10908.6	10862.2	10862.2	442.7	628.2	2579.2	
Volume flow	m3/h	1033.9	562.5	890.5	11771.2	12231.4	208.7	10616.6	9724.0	10622.6	11501.8	10829.9	292.2	652.9	2507.4	
Enthalpy flow	kW	138.4	-758.2	-2809.8	-8493.3	-6939.3	-1091.0	-8631.7	-5516.8	-8326.6	-8326.6	-8659.4	-1051.6	-718.8	-1422.6	
Entropy flow	W/K	194.9	202.7	275.1	3891.4	3948.0	-237.0	3472.8	3138.7	3559.3	3799.9	3472.8	-165.6	244.3	809.3	
Components mass flows	H2O	kg/h	0	168	374	2121	2121	277	2121	1686	2060	2121	2121	277	168	435
	N2	kg/h	2109	0	0	10290	10290	0	8181	8181	8181	8181	8181	0	0	2109
	O2	kg/h	641	0	0	1954	1756	0	1314	1396	1396	1314	1314	0	0	360
	CH4	kg/h	0	4	4	0	0	70	0	0	4	0	0	70	4	0
	CO	kg/h	0	62	35	0	0	0	0	0	35	0	0	0	62	0
	CO2	kg/h	0	84	673	1488	941	0	1488	748	1421	1488	1488	0	84	193
	H2	kg/h	0	29	6	0	0	0	0	0	6	0	0	0	29	0
	Components mole flows	H2O	kmol/h	0	9	21	118	118	15	118	94	114	118	118	15	9
N2		kmol/h	75	0	0	367	367	0	292	292	292	292	292	0	0	75
O2		kmol/h	20	0	0	61	55	0	41	44	44	41	41	0	0	11
CH4		kmol/h	0	0	0	0	0	4	0	0	0	0	0	4	0	0
CO		kmol/h	0	2	1	0	0	0	0	0	1	0	0	0	2	0
CO2		kmol/h	0	2	15	34	21	0	34	17	32	34	34	0	2	4
H2		kmol/h	0	14	3	0	0	0	0	0	3	0	0	0	14	0
Components mass fractions		H2O	kg/kg	0.00%	48.35%	34.25%	13.38%	14.04%	79.74%	16.19%	14.04%	15.72%	16.19%	16.19%	79.74%	48.35%
	N2	kg/kg	76.71%	0.00%	0.00%	64.91%	68.11%	0.00%	62.43%	68.11%	62.43%	62.43%	62.43%	0.00%	0.00%	68.11%
	O2	kg/kg	23.29%	0.00%	0.00%	12.33%	11.62%	0.00%	10.03%	11.62%	10.65%	10.03%	10.03%	0.00%	0.00%	11.62%
	CH4	kg/kg	0.00%	1.14%	0.36%	0.00%	0.00%	20.26%	0.00%	0.00%	0.03%	0.00%	0.00%	20.26%	1.14%	0.00%
	CO	kg/kg	0.00%	17.97%	3.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.27%	0.00%	0.00%	0.00%	17.97%	0.00%
	CO2	kg/kg	0.00%	24.23%	61.62%	9.38%	6.23%	0.00%	11.35%	6.23%	10.85%	11.35%	11.35%	0.00%	24.23%	6.23%
	H2	kg/kg	0.00%	8.32%	0.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00%	8.32%	0.00%
	Components mole fractions	H2O	kmol/kmol	0.00%	33.24%	51.34%	20.30%	20.97%	77.80%	24.29%	20.97%	23.50%	24.29%	24.29%	77.80%	33.24%
N2		kmol/kmol	79.00%	0.00%	0.00%	63.34%	65.44%	0.00%	60.26%	65.44%	60.00%	60.26%	60.26%	0.00%	0.00%	65.44%
O2		kmol/kmol	21.00%	0.00%	0.00%	10.53%	9.77%	0.00%	8.47%	9.77%	8.96%	8.47%	8.47%	0.00%	0.00%	9.77%
CH4		kmol/kmol	0.00%	0.88%	0.61%	0.00%	0.00%	22.20%	0.00%	0.00%	0.05%	0.00%	0.00%	22.20%	0.88%	0.00%
CO		kmol/kmol	0.00%	7.94%	3.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.26%	0.00%	0.00%	0.00%	7.94%	0.00%
CO2		kmol/kmol	0.00%	6.82%	37.81%	5.83%	3.81%	0.00%	6.98%	3.81%	6.64%	6.98%	6.98%	0.00%	6.82%	3.81%
H2		kmol/kmol	0.00%	51.11%	7.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.59%	0.00%	0.00%	0.00%	51.11%	0.00%