



	Unit	CW2_i	CW2_o	2	4	5A	5	9R2	hps_o
Vapour Fraction		0	0,5572	1	1	1	1	1	1
Temperature	C	32,2222	88,2226	25,0000	92,5673	140,9819	139,6635	102,0000	283,7207
Pressure	bar	1,0000	0,6553	30,0000	51,3800	51,3800	50,6905	50,6905	0,8553
Molar Flow	kgmole/h	277,5449	277,5449	2373,0400	2373,0400	3169,7964	3284,0119	114,2155	5550,8988
Mass Flow	kg/h	5000,0000	5000,0000	4784,0487	4784,0487	39798,0780	43127,5759	3329,4979	100000,0000
Liquid Volume Flow	m3/h	5,0101	5,0101	68,4814	68,4814	110,9080	115,0250	4,1170	100,2018
Heat Flow	kJ/h	-78920594,6104	-71367220,2779	0,0000	4569913,4115	-300942038,0196	-304588618,8115	-3646580,7919	-1287631461,7637
Comp Mole Frac (CO <sub>2</sub> )		0	0	0	0	0,2504	0,2441	0,0692	0,0000
Comp Mole Frac (CO)		0	0	0	0	0	0	0	0
Comp Mole Frac (Methanol)		0	0	0	0	0	0,0009	0,0261	0
Comp Mole Frac (H <sub>2</sub> O)		1	1	0	0	0	0,0003	0,0074	1
Comp Mole Frac (Nitrogen)		0	0	0	0	0,0010	0,0322	0,8973	0
Comp Mole Frac (Hydrogen)		1	0	1	1	0,7486	0,7226	0	0

	Unit	6	hps_i	7b	8	CW4_i	CW4_o	9	10
Vapour Fraction		1	1	0,1004	0,0688	0	0,5995	1	0
Temperature	C	170,0000	300,0000	170,0000	86,0000	32,2222	88,2206	86,0000	86,0000
Pressure	bar	50,0010	1,2000	50,0000	49,3105	1,0000	0,6553	49,3105	49,3105
Molar Flow	kgmole/h	3284,0119	5550,8988	1701,9855	1701,9855	555,0899	555,0899	117,0550	1584,9304
Mass Flow	kg/h	43127,5759	100000,0000	43127,0395	43127,0395	10000,0000	10000,0000	3412,2612	39714,7783
Liquid Volume Flow	m3/h	115,0250	100,2018	50,4954	50,4954	10,0202	10,0202	4,2194	46,2760
Heat Flow	kJ/h	-301393576,3909	-1284436419,3431	-393934411,7744	-410007545,4927	-157841189,2208	-141768055,5026	-3794620,9630	-406212924,5297
Comp Mole Frac (CO <sub>2</sub> )		0,2441	0	0,0061	0,0061	0	0	0,0692	0,0015
Comp Mole Frac (CO)		0	0	0	0	0	0	0	0
Comp Mole Frac (Methanol)		0,0009	0	0,4665	0,4665	0	0	0,0261	0,4990
Comp Mole Frac (H <sub>2</sub> O)		0,0003	1	0,4653	0,4653	1	1	0,0074	0,4991
Comp Mole Frac (Nitrogen)		0,0322	0	0,0621	0,0621	0	0	0,8973	0,0004
Comp Mole Frac (Hydrogen)		0,7226	0	0	0	0	0	0	0





	Unit	CW6_o	lps_i	lps_o	9R3	HS_i	HS_o	CW3_i	CW3_o
Vapour Fraction		1	1	1	1	1	1	0	1
Temperature	<i>C</i>	2056,9431	2000,0000	113,5228	102,0000	300,0000	299,5776	32,2222	2579,9539
Pressure	<i>bar</i>	0,9000	1,0000	1,0000	50,6905	1,0000	0,6553	1,0000	1,0000
Molar Flow	<i>kgmole/h</i>	555,0899	832,6348	832,6348	116,0550	8326,3482	8326,3482	555,0899	555,0899
Mass Flow	<i>kg/h</i>	10000,0000	15000,0000	15000,0000	3383,1103	150000,0000	150000,0000	10000,0000	10000,0000
Liquid Volume Flow	<i>m3/h</i>	10,0202	15,0303	15,0303	4,1833	150,3027	150,3027	10,0202	10,0202
Heat Flow	<i>kJ/h</i>	-82873421,6883	-127016744,5935	-198209898,4630	-3704988,4703	-1926602730,1960	-1926640840,9279	-157841189,2208	-65300353,8373
Comp Mole Frac (CO <sub>2</sub> )		0	0	0	0,0692	0	0	0	0
Comp Mole Frac (CO)		0	0	0	0	0	0	0	0
Comp Mole Frac (Methanol)		0	0	0	0,0261	0	0	0	0
Comp Mole Frac (H <sub>2</sub> O)		1	1	1	0,0074	1	1	1	1
Comp Mole Frac (Nitrogen)		0	0	0	0,8973	0	0	0	0
Comp Mole Frac (Hydrogen)		0	0	0	0	0	0	0	0

Table S2. Energy stream

	Unit	E-K101A	E-K101B	E-K101C	E-K102	E-K103
Heat Flow	kcal/h	9617060,668	3777795,844	2320286,78	4569913,411	19104,35173
	Unit	Qc	Qr	Q reac		
Heat Flow	kcal/h	74967767,53	71193153,87	92540835,38		