



NTNU  
Calgary, Alberta  
CANADA

Case Name: M:\5kl\Projekt\Hysys\8\_22\12 3P CO2 IC EXP.HSC

Unit Set: SI

Date/Time: Mon Dec 01 11:15:12 2003

## Workbook: Case (Main)

### Material Streams

Name	Dry feed gas	PCR	LCR	SCR	4
Vapour Fraction	1.0000	0.0000	0.0000	1.0000	0.1705
Temperature (C)	8.000	8.000 *	8.000	8.000	-11.00
Pressure (kPa)	7000 *	4830	1.640e+004 *	5300 *	2530 *
Molar Flow (kgmole/h)	4.628e+004	4.037e+004	2.083e+004	2.515e+004	9614
Mass Flow (kg/h)	8.000e+005 *	1.777e+006	6.200e+005 *	5.500e+005 *	4.231e+005
Liquid Volume Flow (m3/h)	2588	2153	1711	1579	512.6
Heat Flow (kJ/h)	-3.619e+009	-1.640e+010	-2.021e+009	-1.881e+009	-3.908e+009
Name	5	6	7	8	9
Vapour Fraction	1.0000	1.0000	0.0000	0.0000	0.2698
Temperature (C)	-10.00 *	-10.00	-10.00	8.000	-30.98
Pressure (kPa)	7000	5300	1.640e+004	4830	1343 *
Molar Flow (kgmole/h)	4.628e+004	2.515e+004	2.083e+004	3.075e+004	1.327e+004
Mass Flow (kg/h)	8.000e+005	5.500e+005	6.200e+005	1.353e+006	5.840e+005
Liquid Volume Flow (m3/h)	2588	1579	1711	1640	707.5
Heat Flow (kJ/h)	-3.663e+009	-1.908e+009	-2.052e+009	-1.250e+010	-5.398e+009
Name	11	13	14	16	17
Vapour Fraction	1.0000	1.0000	1.0000	1.0000	0.0000
Temperature (C)	-13.08	8.000	7.247	-30.00 *	-30.00
Pressure (kPa)	1343	2530	2530	7000	1.640e+004
Molar Flow (kgmole/h)	1.327e+004	3.075e+004	4.037e+004	4.628e+004	2.083e+004
Mass Flow (kg/h)	5.840e+005	1.353e+006	1.777e+006	8.000e+005	6.200e+005
Liquid Volume Flow (m3/h)	707.5	1640	2153	2588	1711
Heat Flow (kJ/h)	-5.254e+009	-1.217e+010	-1.598e+010	-3.718e+009	-2.086e+009
Name	18	19	3	10	20
Vapour Fraction	0.8196	0.0000	0.0000	0.3986	1.0000
Temperature (C)	-30.00	8.000	-50.00	-50.00	-50.00 *
Pressure (kPa)	5300	4830	1.640e+004	5300	7000
Molar Flow (kgmole/h)	2.515e+004	9614 *	2.083e+004	2.515e+004	4.628e+004
Mass Flow (kg/h)	5.500e+005	4.231e+005	6.200e+005	5.500e+005	8.000e+005
Liquid Volume Flow (m3/h)	1579	512.6	1711	1579	2588
Heat Flow (kJ/h)	-1.963e+009	-3.907e+009	-2.117e+009	-2.042e+009	-3.797e+009
Name	21	24	25	26	27
Vapour Fraction	0.0000	0.3324	1.0000	1.0000	1.0000
Temperature (C)	8.000	-51.01	-33.05	-1.132	8.000
Pressure (kPa)	4830	632.0 *	632.0	1343	1343
Molar Flow (kgmole/h)	1.327e+004 *	1.748e+004	1.748e+004	3.075e+004	1.748e+004
Mass Flow (kg/h)	5.840e+005	7.695e+005	7.695e+005	1.353e+006	7.695e+005
Liquid Volume Flow (m3/h)	707.5	932.3	932.3	1640	932.3
Heat Flow (kJ/h)	-5.392e+009	-7.120e+009	-6.930e+009	-1.216e+010	-6.908e+009
Name	30	12	15a	1	2
Vapour Fraction	0.0000	1.0000	1.0000	1.0000	1.0000
Temperature (C)	8.000	4.850	57.25	43.74	14.42
Pressure (kPa)	4830	2530	4830	2530	1343
Molar Flow (kgmole/h)	1.748e+004 *	9614	4.037e+004	3.075e+004	1.748e+004
Mass Flow (kg/h)	7.695e+005	4.231e+005	1.777e+006	1.353e+006	7.695e+005
Liquid Volume Flow (m3/h)	932.3	512.6	2153	1640	932.3
Heat Flow (kJ/h)	-7.105e+009	-3.806e+009	-1.592e+010	-1.212e+010	-6.903e+009
Name	15				
Vapour Fraction	0.0000 *				
Temperature (C)	13.00				
Pressure (kPa)	4830				
Molar Flow (kgmole/h)	4.037e+004				
Mass Flow (kg/h)	1.777e+006				
Liquid Volume Flow (m3/h)	2153				
Heat Flow (kJ/h)	-1.637e+010				