



NTNU  
Calgary, Alberta  
CANADA

Case Name: M:\5kl\Projekt\Hysys\8\_22\14 3P HC SC cond20.hsc

Unit Set: SI

Date/Time: Mon Dec 01 11:17:13 2003

## Workbook: Case (Main)

### Material Streams

Name	Dry feed gas	PCR	LCR	SCR	1
Vapour Fraction	1.0000	0.0000 *	1.0000	1.0000	0.0000
Temperature (C)	20.00	20.00 *	20.00	20.00	-10.00
Pressure (kPa)	7000 *	2721	1640 *	5300 *	2721
Molar Flow (kgmole/h)	4.628e+004	7.266e+004 *	2.083e+004	2.515e+004	4.435e+004 *
Mass Flow (kg/h)	8.000e+005 *	2.480e+006	6.200e+005 *	5.500e+005 *	1.514e+006
Liquid Volume Flow (m3/h)	2588	6195	1711	1579	3781
Heat Flow (kJ/h)	-3.592e+009	-7.446e+009	-1.800e+009	-1.864e+009	-4.695e+009
Name	2	4	5	6	7
Vapour Fraction	0.0000	0.0207	1.0000	1.0000	1.0000
Temperature (C)	-10.00	-12.60 *	-10.00 *	-10.00	-10.00
Pressure (kPa)	2721	1269	7000	5300	1640
Molar Flow (kgmole/h)	7.266e+004	2.831e+004	4.628e+004	2.515e+004	2.083e+004
Mass Flow (kg/h)	2.480e+006	9.664e+005	8.000e+005	5.500e+005	6.200e+005
Liquid Volume Flow (m3/h)	6195	2414	2588	1579	1711
Heat Flow (kJ/h)	-7.693e+009	-2.997e+009	-3.663e+009	-1.908e+009	-1.838e+009
Name	8	9	11	12	13
Vapour Fraction	0.0000	0.0228	1.0000	1.0000	1.0000
Temperature (C)	-30.00	-33.00 *	-13.00	17.00	17.52
Pressure (kPa)	2721	709.5	709.5	1269	1269
Molar Flow (kgmole/h)	4.435e+004	2.972e+004	2.972e+004	2.831e+004	4.435e+004
Mass Flow (kg/h)	1.514e+006	1.015e+006	1.015e+006	9.664e+005	1.514e+006
Liquid Volume Flow (m3/h)	3781	2534	2534	2414	3781
Heat Flow (kJ/h)	-4.779e+009	-3.203e+009	-2.768e+009	-2.600e+009	-4.071e+009
Name	14	15	16	17	18
Vapour Fraction	1.0000	1.0000	1.0000	0.0458	0.8196
Temperature (C)	17.32	58.52	-30.00 *	-30.00	-30.00
Pressure (kPa)	1269	2721	7000	1640	5300
Molar Flow (kgmole/h)	7.266e+004	7.266e+004	4.628e+004	2.083e+004	2.515e+004
Mass Flow (kg/h)	2.480e+006	2.480e+006	8.000e+005	6.200e+005	5.500e+005
Liquid Volume Flow (m3/h)	6195	6195	2588	1711	1579
Heat Flow (kJ/h)	-6.671e+009	-6.555e+009	-3.718e+009	-2.079e+009	-1.963e+009
Name	19	3	10	20	21
Vapour Fraction	0.0000	0.0000	0.3986	1.0000	0.0000
Temperature (C)	-10.00	-50.00	-50.00	-50.00 *	-30.00
Pressure (kPa)	2721	1640	5300	7000	2721
Molar Flow (kgmole/h)	2.831e+004	2.083e+004	2.515e+004	4.628e+004	2.972e+004
Mass Flow (kg/h)	9.664e+005	6.200e+005	5.500e+005	8.000e+005	1.015e+006
Liquid Volume Flow (m3/h)	2414	1711	1579	2588	2534
Heat Flow (kJ/h)	-2.997e+009	-2.123e+009	-2.042e+009	-3.797e+009	-3.203e+009
Name	22	23	24	25	26
Vapour Fraction	0.0000	0.0000	0.0204	1.0000	1.0000
Temperature (C)	-30.00	-50.00	-52.70 *	-33.41	-10.18
Pressure (kPa)	2721	2721	365.2	365.2	709.5
Molar Flow (kgmole/h)	1.463e+004 *	1.463e+004	1.463e+004	1.463e+004	4.435e+004
Mass Flow (kg/h)	4.993e+005	4.993e+005	4.993e+005	4.993e+005	1.514e+006
Liquid Volume Flow (m3/h)	1247	1247	1247	1247	3781
Heat Flow (kJ/h)	-1.576e+009	-1.601e+009	-1.601e+009	-1.373e+009	-4.122e+009
Name	27				
Vapour Fraction	1.0000				
Temperature (C)	-4.479				
Pressure (kPa)	709.5				
Molar Flow (kgmole/h)	1.463e+004				
Mass Flow (kg/h)	4.993e+005				
Liquid Volume Flow (m3/h)	1247				
Heat Flow (kJ/h)	-1.355e+009				