Table S1. Operating Conditions of the Unmodified Process for VCM Production

Material Streams										
		1	Pump 1 Out	Vaporizer 1 Out	Steam 1 In	Steam 1 Out	HE 1 Out	Steam 2 In	Steam 2 Out	Reaktor Out
Vapour Fraction		0,0000	0,0000	0,0000	1,0000	0,0000	1,0000	1,0000	0,0000	1,0000
Temperature	C	30,00	87,54	196,3	300,0	300,0	216,0	300,0	300,0	500,0
Pressure	kPa	101,3	1824	1824	8698	8698	1824	8698	8698	1824
Molar Flow	kgmole/h	505,1	505,1	505,1	308,7	308,7	505,1	508,9	508,9	944,9
Mass Flow	kg/h	4,998e+004	4,998e+004	4,998e+004	5561	5561	4,998e+004	9167	9167	4,998e+004
Liquid Volume Flow	m3/h	39,99	39,99	39,99	5,573	5,573	39,99	9,186	9,186	53,50
Heat Flow	kJ/h	-8,323e+007	-7,953e+007	-7,151e+007	-7,297e+007	-8,099e+007	-5,829e+007	-1,203e+008	-1,335e+008	-8,478e+006
		Quench Out	CW 1 In	CW 1 Out	HE 4 Out	MD1 Feed	2	HCl	Bottom Prod 1	3
Vapour Fraction		1,0000	0,0000	0,0000	1,0000	1,0000	1,0000	0,0000	0,0000	0,0000
Temperature	C	150,0	25,00	45,00	134,0	134,0	122,6	-32,24	116,9	76,07
Pressure	kPa	1216	101,3	101,3	506,6	506,6	506,6	506,6	506,6	506,6
Molar Flow	kgmole/h	944,9	1,290e+004	1,290e+004	944,9	944,9	1283	870,9	73,99	302,5
Mass Flow	kg/h	4,998e+004	2,325e+005	2,325e+005	4,998e+004	4,998e+004	8,789e+004	4,294e+004	7038	2,627e+004
Liquid Volume Flow	m3/h	53,50	232,9	232,9	53,50	53,50	82,44	47,73	5,770	22,82
Heat Flow	kJ/h	-2,854e+007	-3,694e+009	-3,673e+009	-2,897e+007	-2,897e+007	-7,970e+007	-4,300e+007	-9,978e+006	-3,007e+007
		Top1	Bot1	Bottom Prod 2	Top Prod 2	4	BottomProd	TopProd		
Vapour Fraction		0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000		
Temperature	C	33,04	147,9	147,9	67,13	86,62	64,47	-84,34		
Pressure	kPa	496,5	506,6	506,6	496,5	101,3	506,6	101,3		
Molar Flow	kgmole/h	100,6	201,9	54,75	19,24	505,1	888,0	395,1		
Mass Flow	kg/h	6287	1,998e+004	5418	1620	4,998e+004	7,348e+004	1,440e+004		
Liquid Volume Flow	m3/h	6,839	15,98	4,335	1,436	39,99	65,89	16,56		
Heat Flow	kJ/h	1,617e+006	-3,011e+007	-8,165e+006	-1,687e+006	-7,964e+007	-7,166e+007	-4,428e+007		

Table 5. Operating Conditions of the Modified Process for VCM Production

Material Streams													
		EDC	Mixer Out	Pump 1 Out	Vaporizer 1 Out	Steam 1 In	Steam 1 Out	HE 1 Out	Steam 2 In	Steam 2 Out	Reaktor Out	Quench Out	CW 1 In
Vapour Fraction		0,0000	0,0000	0,0000	0,0000	1,0000	0,0000	1,0000	1,0000	0,0000	1,0000	1,0000	0,0000
Temperature	C	30,00	51,05	85,38	196,3	300,0	300,0	216,0	300,0	300,0	500,0	150,0	25,00
Pressure	kPa	101,3	94,70	1824	1824	8698	8698	1824	8698	8698	1824	1216	101,3
Molar Flow	kgmole/h	505,1	605,2	605,2	605,2	376,5	376,5	605,2	609,7	609,7	1111	1111	1,548e+004
Mass Flow	kg/h	4,998e+004	5,989e+004	5,989e+004	5,989e+004	6782	6782	5,989e+004	1,098e+004	1,098e+004	5,989e+004	5,989e+004	2,788e+005
Liquid Volume Flow	m3/h	39,99	47,91	47,91	47,91	6,796	6,796	47,91	11,01	11,01	63,44	63,44	279,4
Heat Flow	kJ/h	-8,323e+007	-9,817e+007	-9,547e+007	-8,569e+007	-8,899e+007	-9,877e+007	-6,985e+007	-1,441e+008	-1,600e+008	-1,172e+007	-3,578e+007	-4,430e+009
		CW 1 Out	HE 4 Out	CW 2 In	CW 2 Out	MD1 Feed	2	TopProduvv	BottomProduv	HCl	Bottom Prod 1	3	Top1
Vapour Fraction		0,0000	1,0000	0,0000	0,0000	1,0000	1,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000
Temperature	C	45,00	134,0	25,00	45,00	120,3	121,7	-84,34	52,90	-79,25	43,93	76,07	33,04
Pressure	kPa	101,3	658,6	101,3	101,3	506,6	506,6	101,3	506,6	101,3	506,6	506,6	496,5
Molar Flow	kgmole/h	1,548e+004	1111	387,4	387,4	1111	808,5	303,7	504,9	683,8	427,0	302,5	100,6
Mass Flow	kg/h	2,788e+005	5,989e+004	6980	6980	5,989e+004	4,998e+004	1,107e+004	3,891e+004	2,954e+004	3,035e+004	2,627e+004	6287
Liquid Volume Flow	m3/h	279,4	63,44	6,994	6,994	63,44	49,31	12,73	36,58	33,29	30,15	22,82	6,839
Heat Flow	kJ/h	-4,406e+009	-3,638e+007	-1,109e+008	-1,103e+008	-3,708e+007	-3,958e+007	-3,400e+007	-2,726e+007	-5,498e+007	-1,081e+007	-3,007e+007	1,617e+006
		Bot1	Bottom Prod 2	Top Prod 2	Top Prod 3	Bottom Prod 3	4	Top 3	Bot 3	bottom rec	Recycle	ColOut1	
Vapour Fraction		0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,0000	0,2658	0,2658	0,0000	
Temperature	C	147,9	147,9	33,08	33,09	147,3	147,9	33,09	147,3	84,47	84,47	84,47	
Pressure	kPa	506,6	506,6	496,5	496,0	500,0	506,6	496,0	500,0	94,70	94,70	94,70	
Molar Flow	kgmole/h	201,9	100,5	326,5	4,643e-003	100,5	198,5	2,049e-005	198,5	100,5	100,1	605,2	
Mass Flow	kg/h	1,998e+004	9950	2,040e+004	0,2902	9949	1,965e+004	1,281e-003	1,965e+004	9949	9908	5,989e+004	
Liquid Volume Flow	m3/h	15,98	7,960	22,19	3,157e-004	7,960	15,72	1,393e-006	15,72	7,960	7,926	47,91	
Heat Flow	kJ/h	-3,011e+007	-1,499e+007	5,259e+006	74,73	-1,500e+007	-2,961e+007	0,3301	-2,962e+007	-1,500e+007	-1,494e+007	-9,559e+007	