

TABLE 1

	Measurements	Base	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6
1	A Feed, kscmh	0.251	0.267	0.309	0.194	0.503	0.325	0.219
2	D Feed, kg/h	3664	3657	734	5179	5811	761	5811
3	E Feed, kg/h	4509	4440	8038	700	7244	8354	788
4	A+C Feed, kscmh	9.35	9.24	8.55	7.83	14.73	8.87	8.79
5	Recycle flow, kscmh	26.90	32.18	31.69	19.67	29.22	31.27	20.08
6	Reactor feed, kscmh	42.34	47.36	46.08	32.09	53.76	46.24	34.02
7	Reactor pressure, kPa	2705	2800	2800	2800	2800	2800	2800
8	Reactor level, %	75	65.0	65.0	65.0	65.0	65.0	65.0
9	Reactor temperature, °C	120.4	122.9	124.2	121.9	128.2	124.6	123.0
10	Purge rate, kscmh	0.337	0.211	0.361	0.087	0.462	0.384	0.099
11	Sep temperature, °C	80.1	91.7	90.3	83.4	74.1	88.9	80.9
12	Sep level, %	50	50.0	50.0	50.0	50.0	50.0	50.0
13	Sep pressure, kPa	2634	2706	2705	2765	2699	2705	2761
14	Sep underflow, m³/h	25.16	25.28	26.31	17.55	40.06	27.45	19.60
15	Stripper level, %	50	50.0	50.0	50.0	50.0	50.0	50.0
16	Stripper pressure, kPa	3102	3326	3327	2996	3365	3330	3015
17	Stripper underflow, m³/h	22.95	22.89	22.73	18.04	36.04	23.55	20.20
18	Stripper temperature, °C	65.73	66.5	65.4	62.3	51.5	63.9	60.5
19	Steam flow, kg/h	230	4.74	4.90	5.34	6.87	5.11	5.59
20	Compressor work, Kw	341	278.9	274.7	272.6	263.2	271.7	293.2
21	React. cool temperature, °C	94.6	102.4	108.6	101.9	96.6	108.5	100.6
22	Cond. cool temperature, °C	77.3	92.0	91.6	45.0	73.5	89.8	45.7
23	Feed % A, mol %	32.19	32.21	34.82	29.46	36.40	34.78	29.99
24	% B, mol %	8.89	14.93	8.18	27.74	8.78	7.85	26.34
25	% C, mol %	26.38	18.75	19.43	17.97	22.36	19.54	18.80
26	% D, mol %	6.88	6.03	1.20	12.68	7.95	1.24	13.23
27	% E, mol %	18.78	16.71	25.47	3.86	17.01	26.03	3.91
28	% F, mol %	1.66	4.04	5.60	1.29	3.88	5.60	1.33
29	Purge % A, mol %	32.96	32.73	36.63	27.86	40.94	36.71	28.61
30	% B, mol %	13.82	21.83	11.77	45.07	15.90	11.47	44.41
31	% C, mol %	23.98	13.11	14.63	9.22	15.68	14.57	9.76
32	% D, mol %	1.26	0.90	0.13	2.18	0.68	0.13	2.09
33	% E, mol %	18.58	16.19	22.37	3.94	15.41	22.92	4.00
34	% F, mol %	2.26	5.39	7.37	1.8	5.72	7.44	1.91
35	% G, mol %	4.84	6.62	1.32	9.40	3.85	1.26	8.76
36	% H, mol %	2.30	3.23	5.79	0.50	1.82	5.51	0.46
37	Product % D, mol %	0.02	0.01	0.00	0.03	0.02	0.00	0.03
38	% E, mol %	0.84	0.58	0.92	0.16	1.21	1.01	0.18
39	% F, mol %	0.10	0.19	0.29	0.07	0.04	0.32	0.08
40	% G, mol %	53.72	53.83	11.66	90.09	53.35	11.65	90.07
41	% H, mol %	43.83	43.91	85.64	8.17	43.52	85.53	8.16

TABLE 2

	Man. vars. (u <sub>i</sub> )	Base	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5	Mode 6
1	D Feed, %	63.053	62.935	12.637	89.130	100.00	13.098	100.000
2	E Feed, %	53.980	53.147	96.216	8.381	86.715	100.000	9.438
3	A Feed, %	24.644	26.248	30.412	19.114	49.477	32.009	21.543
4	A+C Feed, %	61.302	60.566	56.092	51.368	96.595	58.155	57.640
5	Recycle value, %	22.210	1.000	1.000	77.621	1.000	1.000	71.166
6	Purge value, %	40.064	25.770	44.347	9.501	48.742	47.095	10.654
7	Separator value, %	38.100	37.266	35.799	29.146	60.960	37.422	32.685
8	Stripper value, %	46.534	46.444	42.865	39.425	74.522	44.491	44.251
9	Steam value, %	47.446	1.000	1.000	1.0000	1.000	1.000	1.000
10	Reactor coolant, %	41.106	35.992	25.257	35.550	60.794	26.070	40.538
11	Condenser coolant, %	18.113	12.431	12.907	99.000	35.534	14.115	99.000
12	Agitator speed, %	50.000	100.000	100.000	100.000	100.000	100.000	100.000