

LAMPIRAN



Lampiran 1 Tabel data pengujian pembentukan *ice slurry* dengan fraksi massa 7% dan kecepatan putar 100 rpm

Waktu (menit)	Tsol1 °C	Tsol2 °C	Twall1 °C	Twall2 °C	P_Suct psi	T_Suct °C	P_Disc psi	T_Disc °C	P_Cond_Out psi	T_Cond_Out °C	P_ISG_In psi
0	18.7	18.1	17.4	17.2							
5	17	17	13.9	13.7							
10	14.1	14.3	11.4	11.4	25	15.4	200	81.4	195	33.1	38
15	11.5	12.1	9.1	9.4							
20	9.4	9.9	7.6	7.8	24	14.7	200	85.7	195	32.7	35
25	7.9	8	5.9	5.9							
30	5.7	5.9	4.2	4.3	21	16.5	200	92	195	33	32
35	4.3	4.8	2.4	2.9							
40	2.6	2.7	1.1	1.9	20	16	200	94	195	34.7	30
45	1	1.7	0.1	0.3							
50	-0.1	0	-1	-0.8	20	15.3	195	95	193	33.9	28
55	-1.4	-1.1	-2.4	-2							
60	-2.3	-2	-3.8	-3.3	18	15.4	195	96.6	193	34.2	26
65	-2.4	-2.1	-5.2	-4.8							
75	-2.4	-2.2	-6.4	-6.4	17	15.6	195	98.7	193	34.1	25
80	-2.6	-2.3	-6.6	-6.6							
85	-2.6	-2.4	-6.9	-7	17	14.7	205	101.6	201	35.3	25
90	-2.7	-2.4	-7.4	-7.2							
95	-2.7	-2.5	-7.4	-7.5	17	14.8	205	103	200	35.2	25
100	-3	-2.7	-7.5	-7.5							
105	-3	-2.7	-7.6	-7.7	17	14.4	203	104	200	35	25
110	-3	-2.7	-7.8	-7.7							
115	-3	-2.8	-7.9	-7.8	17	14.5	203	105.3	200	34.8	25
120	-3	-2.8	-8	-7.8							

Lampiran 2. Tabel data pengujian pembentukan *ice slurry* dengan fraksi massa 7% dan kecepatan putar 150 rpm

Waktu (menit)	Tsol1 °C	Tsol2 °C	Twall1 °C	Twall2 °C	P_Suct psi	T_Suct °C	P_Disc psi	T_Disc °C	P_Cond_Out psi	T_Cond_Out °C	P_ISG_In psi
5	25.2	25.1	23.8	23							
10	21.7	21.5	20	19	30	20.7	200	78.8	195	34.7	46
15	18.1	18.3	16.7	16.5							
20	15.3	14.9	14.1	13.7	28	19.3	200	86.7	195	34.7	41
26	12.1	11.9	10.8	10.5							
30	9.8	10.2	9.2	9.1	25	18.5	200	91.9	198	34.6	38
35	7.8	7.8	7	7							
40	5.7	5.9	5.1	5.2	24	18.1	210	98.2	205	35.8	35
45	4	4	3.6	3.6							
50	2.3	2.5	1.7	2	23	16.8	208	101.4	205	35.7	33
55	0.7	0.8	0.5	0.4							
60	-0.4	-0.3	-0.9	-0.6	21	16.8	205	102	202	35.7	30
65	-1.8	-1.6	-1.8	-1.9							
70	-2.7	-2.4	-2.8	-2.6	20	15.1	205	103.7	200	35.5	29
75	-2.9	-2.6	-4	-3.8							
80	-2.9	-2.6	-4.9	-4.7	19	15.1	205	105.5	200	35.3	27
85	-3	-2.7	-5.1	-5.1							
90	-3	-2.7	-5.5	-5.6	19	14.3	205	107	200	35	27
95	-3.1	-2.9	-5.8	-5.9							
100	-3.1	-2.9	-6.1	-6.1	19	14.8	205	108	200	35.1	26.5
105	-3.2	-2.9	-6.2	-6.2							
110	-3.2	-3	-6.5	-6.2	19	14.7	205	108.8	200	35.1	26.5
115	-3.2	-3	-6.7	-6.5							
120	-3.2	-3	-6.7	-6.6	18	14.7	205	108.8	200	35.1	26

Lampiran 3. Tabel data pengujian pembentukan *ice slurry* dengan fraksi massa 7% dan kecepatan putar 200 rpm

Waktu (menit)	Tsol1 °C	Tsol2 °C	Twall1 °C	Twall2 °C	P_Suct psi	T_Suct °C	P_Disc psi	T_Disc °C	P_Cond_Out psi	T_Cond_Out °C	P_ISG_In psi
0	25.4	25.5	24.8	24.7							
5	21.7	22.1	20.3	20.2							
10	17.4	17.8	16.0	16.2							
15	14.4	14.8	13.5	13.6							
20	11.3	12.0	11.1	11.0							
25	8.6	9.4	8.6	8.5							
30	6.2	6.8	6.2	6.3							
35	3.9	4.5	4.3	4.2							
40	2.4	2.4	2.2	2.1							
45	0.4	0.5	0.2	0.2							
50	-1.2	-1.1	-1.5	-1.2							
55	-2.5	-2.5	-2.6	-2.6							
60	-2.8	-2.7	-3.0	-2.9							
65	-3	-2.8	-3.9	-3.8							
70	-3.1	-2.9	-4.8	-4.7							
75	-3.2	-3	-5.6	-5.4							
80	-3.2	-3	-5.9	-5.8							
85	-3.2	-3.1	-6.1	-6	19	16.5	200	104.3	198	33.7	27
90	-3.3	-3.2	-6.6	-6.4							
95	-3.4	-3.2	-6.7	-6.5							
100	-3.5	-3.2	-6.9	-6.9							

Lampiran 4. Tabel data pengujian pembentukan *ice slurry* dengan fraksi massa 7% dan kecepatan putar 250 rpm

Waktu (menit)	Tsol1 °C	Tsol2 °C	Twall1 °C	Twall2 °C	P_Suct psi	T_Suct °C	P_Disc psi	T_Disc °C	P_Cond_Out psi	T_Cond_Out °C	P_ISG_In psi
0	24.2	24.3	24.1	24.2							
5	20.8	21	19.3	19.2							
10	17.2	17.3	15.8	15.7	30	20.4	200	78	198	34.6	46
15	14	13.7	12.9	12.8							
20	10.7	10.5	9.8	9.9	27	19.8	203	87.6	200	34.5	41
25	7.7	8	7.3	7.5							
30	5.7	5.8	5.3	5.4	25	18.8	212	94.3	208	36.2	38
35	3.4	3.4	3.3	3.2							
40	1.9	1.7	1.8	1.6	24	17.7	210	99.1	205	36.3	35
45	-0.2	-0.2	-0.2	-0.25							
50	-1.8	-1.6	-1.7	-1.8	22	17.4	210	100.6	205	35.8	32
55	-2.7	-2.8	-2.9	-2.8							
65	-3.5	-3.2	-3.9	-4							
70	-3.5	-3.3	-4.4	-4.6	20	16.4	205	105.7	203	35.6	29
76	-3.6	-3.4	-5	-5.2							
80	-3.7	-3.4	-5.1	-5.2	20	16.4	207	106.6	203	35.2	29
85	-3.7	-3.5	-5.4	-5.5							
90	-3.7	-3.5	-5.6	-5.6	20	16.7	205	106.9	202	35.2	28
95	-3.8	-3.5	-5.8	-5.8							
105	-3.9	-3.7	-6.1	-6.2	20	16.2	205	107.7	202	34.9	27

Lampiran 5. Tabel data pengujian pembentukan *ice slurry* dengan fraksi massa 10% dan kecepatan putar 200 rpm

Waktu (menit)	Tsol1 °C	Tsol2 °C	Twall1 °C	Twall2 °C	P_Suct psi	T_Suct °C	P_Disc psi	T_Disc °C	P_Cond_Out psi	T_Cond_Ou t °C	P_ISG_In psi
0	28.7	28.8	27.8	28.0							
5	25.8	26.0	23.2	23.4							
10	22.0	21.1	19.5	19.6	34.0	22.0	200.0	76.4	195.0	34.7	52.0
15	18.0	17.1	16.2	16.0							
20	14.6	14.2	13.2	13.0	30.0	21.2	200.0	86.5	195.0	34.1	44.0
25	11.1	11	10.7	10.7							
30	8.4	8.1	8.1	8	27	20.4	200	91.7	195	34.5	40
35	6.6	6.5	6.4	6.3							
40	4.8	4.5	4.0	4	25	20	208	97.2	205	36.3	36
45	2.4	2.3	2.2	2.1							
55	-1.1	-1.1	-1.3	-1.2							
60	-1.9	-2.3	-2.4	-2.6	22	18.5	205	102.8	200	35.5	32
65	-3.4	-3.5	-3.6	-3.7							
70	-3.8	-3.9	-3.8	-4.1	20	16.7	205	13	200	34.1	30
75	-3.9	-4	-4.6	-4.7							
80	-4.1	-4.2	-5	-5.4	20	16.5	203	104.3	200	35.2	30
85	-4.2	-4.3	-5.5	-5.8							
90	-4.3	-4.4	-5.9	-6	20	16.8	200	105.6	198	35.1	28
95	-4.4	-4.4	-6.1	-6.4							
100	-4.4	-4.5	-6.3	-6.5							
105	-4.4	-4.6	-6.9	-6.9							
110	-4.5	-4.6	-7.1	-7.2	20	16.6	200	108.5	200	35	28

Lampiran 6. Tabel data pengujian pembentukan *ice slurry* dengan fraksi massa 12% dan kecepatan putar 200 rpm

Waktu (menit)	Tsol1 °C	Tsol2 °C	Twall1 °C	Twall2 °C	P_Suct psi	T_Suct °C	P_Disc psi	T_Disc °C	P_Cond_Out psi	T_Cond_Ou t °C	P_ISG_In psi
0	29.1	29.2	27.7	27.8							
5	24.7	25.2	21.6	21.8							
10	20.3	20.6	18.4	18.3	34	20.9	200	76.5	195	32.4	51
15	17.1	17.4	15.4	15.6							
20	13.8	14.1	12.6	12.5	30	19.3	200	85.8	195	32.6	45
25	11.3	11.6	10.4	10.6							
30	8.7	9	8.3	8.5	27	18.1	210	92.9	205	33.6	40
35	6.6	6.8	6.4	6.2							
40	4.8	5.1	4.3	4.2	25	17.5	205	96.6	202	33.9	36
45	3.1	3.3	3	2.9							
50	1.4	1.7	1.6	1.4	23	16.6	205	98.7	200	33.3	34
55	0	0.3	0	-0.3							
60	-1.5	-1.2	-1.1	-2	21	15.8	200	100.2	198	32.9	30
65	-2.6	-2.4	-2.2	-3							
70	-3.7	-3.5	-3.2	-4.1	20	15.4	202	102.7	200	32.8	29
75	-4.2	-4	-4	-6.1							
82	-4.3	-4.1	-5.3	-7.4	19	15.1	202	103.2	200	32.9	28
85	-4.4	-4.3	-6	-7.9							
90	-4.6	-4.4	-6.5	-8.4	19	15	202	104	200	32.7	27
95	-4.6	-4.4	-6.5	-8.6							
100	-4.7	-4.5	-6.9	-8.8	19	14.8	202	105	200	32.7	27
105	-4.8	-4.6	-7.1	-8.9							
110	-4.9	-4.7	-7.1	-8.9	19	15	202	107.7	195	32.7	27

Lampiran 7. Tabel data pengujian ISG untuk *auger* tanpa *scraper* dengan fraksi massa 15% dan kecepatan putar 200 rpm

Waktu (menit)	Tsol1 °C	Tsol2 °C	P_Suct psi	T_Suct °C	P_Disc psi	T_Disc °C	P_Cond_Out psi	T_Cond_Out °C	P_ISG_In psi
0	29.2	29.1							
5	26.2	26.3							
10	22	27.7							
15	18.3	18.6							
20	15	15.6							
25	12.3	12.6							
30	9.5	10							
35	7.4	7.7							
40	5.2	5.7							
45	3.4	3.6							
50	1.6	2							
55	0.1	0.3							
60	-1.3	-1							
65	-2.6	-2.3							
70	-3.8	-3.5							
75	-4.9	-4.5							
80	-5.5	-5.3							
85	-5.5	-5.3							
96	-5.7	-5.5	15	16	195	103.2	192	33.8	22
108	-5.9	-5.6							
120	-5.9	-5.7	15	15.6	195	102.4	190	33.1	21
155	-6.3	-6							
186	-6.6	-6.5							
190	-6.6	-6.5							
200	-6.7	-6.6	14	14.8	195	106.3	190	33.7	19

Lampiran 8. Tabel data pengujian ISG untuk *auger* dengan *scraper* dengan fraksi massa 15% dan kecepatan putar 200 rpm

Waktu (menit)	Tsol1 °C	Tsol2 °C	P_Suct psi	T_Suct °C	P_Disc psi	T_Disc °C	P_Cond_Out psi	T_Cond_Out °C	P_ISG_In psi
0	28	27.9							
5	25	25.7							
10	20.4	21.6							
20	14.1	14.5							
25	11.5	11.9							
30	8.7	9.3							
35	6.5	6.9							
40	4.7	4.8							
45	2.4	2.7							
50	0.6	0.9							
55	-1	-0.7							
60	-2.1	-2.4							
65	-3.8	-3.5							
70	-5	-4.7							
75	-5.8	-5.5							
80	-6	-5.6							
92	-6.1	-5.8							
105	-6.4	-6.1							
120	-6.9	-6.5							
150	-7.8	-7.5							
160	-8.1	-7.7							
170	-8.3	-8	19	16.2	205	112.4	200	35.5	27
180	-8.5	-8.1							
190	-8.8	-8.6							
200	-9.1	-8.7	18	16	205	112.1	200	35.4	26