

## LAMPIRAN

Lampiran 1. Data suhu penampang A-A 1 LPM

Waktu	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	40.4	68	68.7	68.5	68.7	67	68.2	68.1	68.9	68.2	68.4
0:00:05	35.5	68.1	68.7	68.5	68.8	67	68.2	68.3	68.9	68.2	68.3
0:00:10	35.5	68.3	68.8	68.6	68.7	67.1	68.2	68.4	68.9	68.2	68.3
0:00:15	33.5	68.3	68.8	69.1	68.7	67.1	68.2	68.3	68.9	68.2	68.3
0:00:20	40.1	68.4	68.8	69.1	68.7	67.1	68.3	68.6	68.8	68.2	68.3
0:00:25	34.6	68.4	68.8	69.1	68.7	66.8	68.2	68.6	68.9	68.2	68.3
0:00:30	34.1	68.3	68.8	69	68.7	66.9	68.2	68.6	68.8	68.2	68.3
0:00:35	60	68.2	68.8	69	68.7	67	68.2	68.6	68.8	68.2	68.3
0:00:40	39	68.2	68.8	69	68.7	67	68.3	68.6	68.8	68.2	68.4
0:00:45	31.1	68.1	68.8	68.9	68.7	67	68.3	68.6	68.8	68.2	68.4
0:00:50	31.4	68.1	68.8	68.9	68.6	66.9	68.3	68.5	68.8	68.2	68.4
0:00:55	31.1	68.2	68.8	68.9	68.6	66.9	68.2	68.5	68.8	68.2	68.3
0:01:00	31.4	68.2	68.8	68.9	68.6	66.9	68.2	68.5	68.8	68.2	68.3
0:01:05	33.1	68.2	68.8	68.9	68.7	66.8	68.3	68.6	68.8	68.2	68.2
0:01:10	30.5	68.2	68.8	69	68.7	66.7	68.2	68.5	68.8	68.1	68.2
0:01:15	30.5	68.2	68.8	69	68.7	66.7	68.2	68.5	68.8	68.1	68.2
0:01:20	30.6	68.1	68.7	68.9	68.7	66.7	68.2	68.5	68.8	68.1	68.3
0:01:25	30.2	68.1	68.7	68.8	68.7	66.7	68.2	68.5	68.8	68.1	68.2
0:01:30	30.1	68.1	68.7	68.8	68.6	66.6	68.2	68.5	68.8	68.1	68.2
0:01:35	29.2	68.1	68.7	68.8	68.6	66.4	68.2	68.5	68.8	68.1	68.2
0:01:40	32.1	68.1	68.8	68.9	68.6	66.4	68.2	68.5	68.8	68.1	68.2
0:01:45	30.2	68.1	68.8	68.9	68.6	65.6	68.2	68.5	68.8	68.1	68.2
0:01:50	29.6	68.1	68.8	68.9	68.6	65.5	68.2	68.5	68.8	68.1	68.2
0:01:55	30.5	68.1	68.7	68.9	68.6	65.7	68.2	68.5	68.8	68.1	68.2
0:02:00	30	68.1	68.7	68.8	68.6	64.7	68.2	68.5	68.8	68.1	68.2
0:02:05	29.8	68.1	68.7	68.9	68.6	64.2	68.2	68.5	68.8	68.1	68.2
0:02:10	29.6	68.1	68.7	68.9	68.6	64.6	68.2	68.5	68.8	68.1	68.2
0:02:15	30.4	68.1	68.7	68.9	68.6	62.6	68.2	68.5	68.8	68.1	68.2
0:02:20	29.9	68.1	68.7	68.9	68.6	61.7	68.2	68.5	68.8	68.1	68.2
0:02:25	30.3	68.1	68.7	68.9	68.6	61.3	68.2	68.5	68.8	68.1	68.2
0:02:30	29.9	68.1	68.7	68.9	68.6	61.5	68.2	68.5	68.8	68.1	68.2

## Lanjutan data penampang A-A 1 LPM

3:09:00	28.4	28.5	28.7	28.7	28.6	28.3	28.3	28.4	28.6	28.5	28.7
3:09:05	28.4	28.5	28.8	28.7	28.6	28.3	28.3	28.4	28.6	28.5	28.7
3:09:10	28.4	28.5	28.7	28.7	28.6	28.3	28.4	28.4	28.6	28.5	28.7
3:09:15	28.3	28.4	28.7	28.7	28.6	28.3	28.4	28.4	28.6	28.5	28.7
3:09:20	28.3	28.4	28.7	28.7	28.6	28.3	28.3	28.5	28.6	28.5	28.7
3:09:25	28.4	28.5	28.8	28.7	28.6	28.3	28.4	28.5	28.6	28.5	28.7
3:09:30	28.4	28.5	28.8	28.7	28.6	28.3	28.4	28.5	28.6	28.5	28.7
3:09:35	28.4	28.5	28.8	28.7	28.6	28.3	28.4	28.5	28.6	28.5	28.7
3:09:40	28.3	28.4	28.7	28.7	28.6	28.3	28.4	28.5	28.6	28.5	28.6
3:09:45	28.3	28.4	28.7	28.7	28.6	28.3	28.4	28.4	28.6	28.5	28.6
3:09:50	28.1	28.4	28.7	28.7	28.6	28.3	28.4	28.4	28.6	28.5	28.6
3:09:55	28	28.3	28.6	28.8	28.6	28.3	28.2	28.4	28.6	28.5	28.6
3:10:00	28	28.4	28.6	28.7	28.6	28.3	28.2	28.2	28.6	28.5	28.6
3:10:05	28	28.3	28.7	28.7	28.3	28.3	28.3	28.4	28.4	28.5	28.6
3:10:10	28.1	28.3	28.6	28.7	28.3	28.3	28.1	28.2	28.4	28.5	28.6
3:10:15	28.1	28.3	28.6	28.5	28.5	28.3	28.2	28.2	28.3	28.5	28.6
3:10:20	28	28.3	28.6	28.5	28.4	28.3	28.2	28.2	28.3	28.5	28.6
3:10:25	28	28.3	28.6	28.5	28.4	28.3	28.2	28.2	28.3	28.5	28.6
3:10:30	28.1	28.5	28.6	28.5	28.3	28.3	28.1	28.2	28.4	28.5	28.6
3:10:35	28.2	28.4	28.7	28.5	28.3	28.2	28.2	28.2	28.3	28.5	28.6
3:10:40	28.1	28.3	28.6	28.5	28.3	28.3	28.1	28.2	28.3	28.5	28.7
3:10:45	28.1	28.3	28.6	28.5	28.3	28.3	28.3	28.2	28.3	28.5	28.7
3:10:50	28.2	28.3	28.7	28.5	28.3	28.2	28.4	28.3	28.4	28.6	28.7
3:10:55	28.1	28.3	28.6	28.5	28.3	28.3	28.2	28.3	28.5	28.5	28.7
3:11:00	28.1	28.3	28.6	28.5	28.3	28.4	28.3	28.3	28.4	28.5	28.7
3:11:05	28.1	28.3	28.6	28.5	28.5	28.3	28.2	28.2	28.3	28.4	28.6
3:11:10	28.1	28.4	28.6	28.5	28.4	28.2	28.2	28.2	28.3	28.4	28.7
3:11:15	28.1	28.4	28.5	28.4	28.6	28.2	28.3	28.3	28.4	28.5	28.7
3:11:20	28.1	28.3	28.6	28.5	28.3	28.3	28.2	28.3	28.4	28.4	28.7
3:11:25	28.2	28.3	28.6	28.5	28.3	28.3	28.2	28.3	28.4	28.5	28.7

Lampiran 2. Data suhu penampang B-B dan T24, T28, T31 1 LPM

Waktu	T25	T26	T24	T28	T31
[Detik]	°C	°C	°C	°C	°C
0:00:00	66.8	66.8	69.4	28.2	28.8
0:00:05	66.8	66.8	69.4	28.2	28.6
0:00:10	66.8	66.8	69.5	28.2	28.5
0:00:15	66.9	66.9	69.4	28.3	29
0:00:20	66.9	66.9	69.4	28.4	29.5
0:00:25	66.9	66.9	69.4	28.6	29.1
0:00:30	66.9	66.9	69.4	28.7	28.8
0:00:35	66.9	66.9	69.5	28.8	28.6
0:00:40	66.8	66.9	69.5	30.1	28.5
0:00:45	66.8	66.8	69.4	29.7	28.7
0:00:50	66.8	66.8	69.4	29.3	28.8
0:00:55	66.8	66.8	69.4	29.3	29.1
0:01:00	66.8	66.8	69.4	32.8	28.7
0:01:05	66.8	66.8	69.4	31.6	28.7
0:01:10	66.8	66.8	69.4	30.6	28.6
0:01:15	66.8	66.8	69.4	30	28.6
0:01:20	66.7	66.8	69.4	51.2	28.8
0:01:25	66.7	66.8	69.4	53	28.9
0:01:30	66.7	66.8	69.4	53.7	28.8
0:01:35	66.7	66.8	69.4	54.3	28.8
0:01:40	66.7	66.8	69.4	55	28.8
0:01:45	66.7	66.8	69.4	54.9	28.9
0:01:50	66.7	66.8	69.3	55.5	29.2
0:01:55	66.8	66.8	69.3	55.3	29.2
0:02:00	66.8	66.8	69.4	55.6	29.5
0:02:05	66.8	66.8	69.3	55.1	29
0:02:10	66.8	66.8	69.3	55.4	28.8
0:02:15	66.8	66.8	69.3	55.4	28.9
0:02:20	66.8	66.8	69.4	55.1	29
0:02:25	66.8	66.8	69.4	54.9	29.2
0:02:30	66.8	66.8	69.3	54.7	28.8

## Lanjutan data suhu penampang B-B dan T24, T28, T31 1 LPM

3:09:00	27.6	27.6	29.1	35.4	27.5
3:09:05	27.6	27.6	29.1	35.4	27.4
3:09:10	27.6	27.6	29.1	35.5	27.4
3:09:15	27.6	27.6	29.1	35.5	27.4
3:09:20	27.6	27.6	29.1	35.5	27.4
3:09:25	27.6	27.6	29.1	35.5	27.2
3:09:30	27.6	27.6	29	35.5	27.2
3:09:35	27.6	27.6	29	35.4	27.2
3:09:40	27.6	27.6	29	35.4	27.3
3:09:45	27.6	27.6	29	35.4	27.3
3:09:50	27.6	27.6	29.1	35.4	27.4
3:09:55	27.6	27.6	29	35.4	27.2
3:10:00	27.6	27.6	29	35.5	27
3:10:05	27.6	27.6	29.2	35.5	27
3:10:10	27.6	27.6	29.3	35.5	27
3:10:15	27.6	27.6	29.2	35.5	27.1
3:10:20	27.6	27.6	29.2	35.5	27.2
3:10:25	27.4	27.6	29.1	35.4	27.2
3:10:30	27.5	27.6	29.1	35.4	27.3
3:10:35	27.5	27.5	29.1	35.2	27.4
3:10:40	27.4	27.4	29.1	35.2	27.4
3:10:45	27.5	27.4	29.1	35.3	27.2
3:10:50	27.4	27.4	29.2	35.3	27.2
3:10:55	27.4	27.5	29.2	35.3	27.1
3:11:00	27.4	27.5	29.2	35.3	27
3:11:05	27.5	27.5	29.2	35.3	26.9
3:11:10	27.4	27.5	29.2	35.2	27
3:11:15	27.4	27.5	29.2	35.2	26.9
3:11:20	27.4	27.5	29.2	35.2	26.9
3:11:25	27.4	27.5	29.2	35.2	27.1

Lampiran 3. Data suhu penampang C-C 1 LPM

Waktu	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	68.4	67.6	67.2	66.6	68.2	68.4	68.3	67.8	67.2	68.5	68.3	68.3
0:00:05	68.4	67.6	67.2	66.6	68.2	68.3	68.3	67.8	67.2	68.5	68.3	68.3
0:00:10	68.4	67.6	67.2	66.6	68.2	68.3	68.3	67.8	67.2	68.5	68.3	68.3
0:00:15	68.4	67.6	67.2	66.6	68.2	68.3	68.3	67.8	67.2	68.5	68.3	68.3
0:00:20	68.3	67.6	67.2	66.6	68.2	68.3	68.3	67.8	67.1	68.5	68.3	68.3
0:00:25	68.3	67.6	67.1	66.4	68.2	68.3	68.3	67.7	67	68.5	68.3	68.3
0:00:30	68.3	67.6	67.1	66.5	68.2	68.3	68.3	67.7	66.9	68.5	68.3	68.3
0:00:35	68.3	67.6	67.1	66.4	68.2	68.3	68.3	67.7	66.8	68.5	68.3	68.3
0:00:40	68.3	67.6	67.1	66.4	68.2	68.3	68.3	67.7	66.9	68.5	68.3	68.3
0:00:45	68.3	67.6	67.1	66.5	68.2	68.3	68.3	67.7	66.9	68.5	68.3	68.3
0:00:50	68.3	67.6	67.1	66.4	68.2	68.3	68.3	67.7	66.9	68.5	68.3	68.3
0:00:55	68.3	67.6	67.1	66.5	68.2	68.3	68.3	67.7	66.8	68.5	68.3	68.3
0:01:00	68.3	67.6	67.1	66.4	68.2	68.3	68.3	67.7	66.6	68.5	68.3	68.3
0:01:05	68.3	67.6	67.1	66.4	68.2	68.3	68.3	67.7	66.7	68.5	68.3	68.3
0:01:10	68.3	67.6	67.1	66.4	68.2	68.3	68.3	67.7	66.6	68.4	68.3	68.3
0:01:15	68.3	67.6	67.1	66.3	68.2	68.3	68.3	67.7	66.5	68.4	68.3	68.3
0:01:20	68.3	67.6	67	66.3	68.2	68.3	68.3	67.7	66.3	68.4	68.3	68.3
0:01:25	68.3	67.6	67	66.2	68.1	68.3	68.3	67.7	66.2	68.3	68.2	68.2
0:01:30	68.3	67.6	67	66.2	68.2	68.3	68.3	67.7	66.1	68.4	68.2	68.2
0:01:35	68.3	67.6	67	66.2	68.1	68.3	68.3	67.7	66	68.4	68.2	68.2
0:01:40	68.3	67.6	67	66.2	68.1	68.3	68.3	67.6	65.9	68.4	68.3	68.3
0:01:45	68.2	67.6	67	66.2	68.1	68.3	68.3	67.6	65.6	68.4	68.3	68.3
0:01:50	68.2	67.6	67	66.1	68.1	68.3	68.3	67.6	65.4	68.4	68.3	68.3
0:01:55	68.2	67.6	67	66	68.1	68.3	68.3	67.6	65.2	68.3	68.2	68.2
0:02:00	68.2	67.5	67	66	68.1	68.2	68.3	67.6	64.9	68.3	68.2	68.2
0:02:05	68.2	67.6	67	66	68.1	68.3	68.3	67.6	64.8	68.4	68.3	68.3
0:02:10	68.2	67.5	67	65.9	68.1	68.2	68.2	67.6	64.2	68.4	68.3	68.3
0:02:15	68.2	67.6	67	65.8	68.1	68.2	68.2	67.6	64	68.4	68.2	68.3
0:02:20	68.2	67.5	67	65.8	68.1	68.2	68.2	67.6	63.7	68.4	68.3	68.2
0:02:25	68.2	67.5	66.9	65.7	68.1	68.2	68.2	67.5	63.1	68.4	68.2	68.2
0:02:30	68.3	67.5	66.9	65.5	68.1	68.2	68.2	67.5	62	68.4	68.2	68.2

## Lanjutan data suhu penampang C-C 1 LPM

3:09:00	28.8	28.5	28.3	28.3	28.7	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:09:05	28.8	28.5	28.3	28.3	28.7	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:09:10	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:09:15	28.8	28.5	28.3	28.3	28.7	28.7	28.9	28.9	28.3	28.3	28.3	28.3
3:09:20	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.3	28.3	28.3	28.3
3:09:25	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:09:30	28.8	28.5	28.4	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:09:35	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.3	28.4
3:09:40	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.3	28.3	28.3
3:09:45	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.3	28.3	28.3	28.3
3:09:50	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.3	28.3	28.3	28.3
3:09:55	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:00	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:05	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:10	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:15	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:20	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:25	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:30	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:35	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:40	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:45	28.8	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.4	28.4
3:10:50	28.8	28.5	28.3	28.3	28.6	28.6	28.9	28.9	28.4	28.4	28.4	28.4
3:10:55	28.7	28.5	28.3	28.3	28.6	28.6	28.9	28.9	28.4	28.4	28.3	28.4
3:11:00	28.7	28.5	28.3	28.3	28.6	28.6	28.9	28.9	28.4	28.4	28.3	28.4
3:11:05	28.7	28.5	28.3	28.3	28.6	28.6	28.9	28.9	28.4	28.4	28.3	28.4
3:11:10	28.7	28.5	28.3	28.3	28.6	28.6	28.9	28.9	28.4	28.4	28.3	28.4
3:11:15	28.7	28.5	28.3	28.3	28.6	28.6	28.9	28.9	28.4	28.4	28.3	28.4
3:11:20	28.7	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.3	28.4
3:11:25	28.7	28.5	28.3	28.3	28.6	28.7	28.9	28.9	28.4	28.4	28.3	28.4

Lampiran 4. Data suhu penampang A-A 1,5 LPM

Waktu	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	71.8	67.8	67.9	68.3	68.5	67.3	67.7	67.8	68.3	68.1	68.3
0:00:05	37.8	68	68.1	68.3	68.5	67.2	67.9	68.2	68.7	68.1	68.3
0:00:10	34.5	67.9	68.2	68.2	68.6	67.2	68.1	68	68.2	68.1	68.3
0:00:15	38.5	68	68.2	68.4	68.6	67	68.1	68.2	68.5	68.1	68.3
0:00:20	33.4	67.9	68.3	68.5	68.5	66.9	68.3	68.3	68.5	68.2	68.2
0:00:25	31.7	68.2	68.3	68.6	68.6	67	68.3	68.3	68.6	68.2	68.2
0:00:30	31.7	68.1	68.4	68.6	68.6	67	68.2	68.4	68.7	68.2	68.2
0:00:35	31.3	68.1	68.3	68.7	68.7	66.7	68.2	68.5	68.7	68.2	68.3
0:00:40	30.3	68	68.3	68.6	68.6	67	68.2	68.5	68.7	68.1	68.3
0:00:45	31.2	67.9	68.3	68.6	68.6	66.9	68.1	68.5	68.7	68	68.3
0:00:50	32.5	67.9	68.2	68.6	68.6	66.9	68.1	68.4	68.6	68	68.3
0:00:55	30.7	67.9	68.1	68.5	68.6	66.9	68	68.3	68.6	68	68.1
0:01:00	30.9	67.9	68.1	68.5	68.6	66.7	68	68.4	68.6	68	68.1
0:01:05	30.9	68	68.2	68.5	68.6	66.8	68	68.4	68.6	68	68.1
0:01:10	30.4	68	68.2	68.6	68.6	66.4	68.1	68.4	68.6	68	68.1
0:01:15	32.4	68	68.3	68.6	68.6	66.2	68.1	68.4	68.6	68	68.1
0:01:20	31	67.9	68.2	68.5	68.6	65.5	68.1	68.4	68.6	68	68.1
0:01:25	30.1	67.8	68.2	68.5	68.6	65.9	68.1	68.4	68.6	68	68.1
0:01:30	29.8	67.8	68.2	68.5	68.6	55.3	68.1	68.4	68.6	68	68.1
0:01:35	30.3	67.9	68.2	68.5	68.6	65.5	68	68.4	68.6	68	68.1
0:01:40	30.9	67.8	68.2	68.6	68.6	63.1	68	68.4	68.6	68	68.1
0:01:45	30.2	67.8	68.2	68.5	68.6	58.9	68	68.4	68.6	68	68.1
0:01:50	29.3	67.8	68.1	68.5	68.6	60.5	68	68.4	68.6	68	68.1
0:01:55	30	67.8	68.2	68.5	68.6	57.6	68	68.4	68.6	68	68.1
0:02:00	29.7	67.8	68.1	68.5	68.6	44.1	68.1	68.4	68.6	68	68.1
0:02:05	29.6	67.8	68.2	68.6	68.6	59.9	68	68.4	68.6	68	68
0:02:10	29.8	67.8	68.2	68.5	68.6	52.5	68	68.4	68.6	68	68
0:02:15	29.5	67.8	68.1	68.5	68.6	49	68	68.3	68.6	67.9	68
0:02:20	30	67.7	68.1	68.4	68.6	51.4	68	68.3	68.6	67.9	68
0:02:25	29.5	67.7	68.1	68.4	68.6	48.6	68	68.3	68.6	67.9	68
0:02:30	28.9	67.7	68.1	68.4	68.6	51.5	68	68.3	68.6	67.9	68

## Lanjutan data suhu penampang A-A 1,5 LPM

2:29:30	29.8	29.9	30	30	30	29.6	29.7	29.8	30	29.9	30.2
2:29:35	29.8	29.9	30	30	30	29.6	29.7	29.8	30	29.9	30.2
2:29:40	29.8	29.9	30	30	30	29.6	29.7	29.8	30.1	29.9	30.2
2:29:45	29.8	29.9	30	30	30.1	29.7	29.8	29.9	30.1	30	30.3
2:29:50	29.8	30	30.1	30	30.1	29.8	29.9	29.9	30.1	30.1	30.3
2:29:55	29.9	30	30	30	30.1	29.7	29.8	29.9	30.1	30.1	30.3
2:30:00	29.8	29.9	30	30	30	29.6	29.8	29.9	30.1	30	30.3
2:30:05	29.8	29.9	30	30	30	29.6	29.8	29.9	30	30	30.3
2:30:10	29.8	29.9	30	30	30	29.6	29.7	29.9	30	30	30.3
2:30:15	29.5	29.7	29.9	30	30	29.6	29.7	29.9	30.1	30	30.2
2:30:20	29.5	29.7	29.8	30	30	29.5	29.6	29.7	30	30	30.2
2:30:25	29.6	29.8	29.8	29.9	30.1	29.6	29.6	29.7	30.1	30	30.3
2:30:30	29.7	29.7	29.8	29.8	30	29.7	29.8	29.7	29.8	30	30.3
2:30:35	29.5	29.6	29.9	29.8	29.7	29.7	29.7	29.7	29.8	30	30.3
2:30:40	29.4	29.7	29.8	29.8	29.7	29.6	29.6	29.6	29.8	30	30.3
2:30:45	29.5	29.6	29.7	29.7	29.7	29.6	29.5	29.7	29.7	30	30.3
2:30:50	29.5	29.7	29.8	29.8	29.6	29.6	29.6	29.6	29.8	30	30.3
2:30:55	29.5	29.7	29.8	29.8	29.7	29.8	29.7	29.6	29.8	30.1	30.3
2:31:00	29.5	29.7	29.7	29.7	29.7	29.8	29.6	29.7	29.8	30.1	30.3
2:31:05	29.4	29.7	29.7	29.8	29.7	29.6	29.7	29.7	29.8	30.1	30.3
2:31:10	29.5	29.8	29.8	29.8	29.7	29.7	29.7	29.7	29.8	30	30.3
2:31:15	29.5	29.8	29.7	29.8	29.7	29.7	29.6	29.6	29.8	30	30.3
2:31:20	29.5	29.6	29.7	29.8	29.8	29.7	29.5	29.6	29.7	30	30.2
2:31:25	29.4	29.7	29.8	29.7	29.7	29.7	29.5	29.6	29.7	29.9	30.2
2:31:30	29.5	29.7	29.7	29.7	29.7	29.7	29.5	29.5	29.7	29.9	30.2
2:31:35	29.4	29.7	29.7	29.7	29.6	29.6	29.5	29.6	29.7	29.9	30.2
2:31:40	29.5	29.7	29.7	29.8	29.6	29.6	29.5	29.6	29.8	29.9	30.2
2:31:45	29.5	29.9	29.8	29.7	29.8	29.7	29.6	29.6	29.7	29.9	30.2
2:31:50	29.5	29.8	29.7	29.7	29.7	29.7	29.6	29.6	29.8	30	30.3
2:31:55	29.5	29.7	29.8	29.8	29.7	29.7	29.6	29.6	29.7	30	30.2
2:32:00	29.5	29.7	29.7	29.8	29.7	29.6	29.5	29.6	29.8	29.9	30.3



Lampiran 5. Data suhu penampang B-B dan T24, T28, T31 1,5 LPM

Waktu	T25	T26	T24	T28	T31
[Detik]	°C	°C	°C	°C	°C
0:00:00	67.2	67.1	69.1	28.1	29.4
0:00:05	67.1	67.1	69	28.1	29.5
0:00:10	67.2	67.1	69.2	28	29.5
0:00:15	67.2	67.1	69.4	27.9	29.6
0:00:20	67.1	67.2	69.4	29	29.6
0:00:25	67.1	67.1	69.4	32.1	29.6
0:00:30	67.1	67.1	69.5	29.8	29.5
0:00:35	67.1	67.1	69.4	29.8	29.5
0:00:40	67.2	67.1	69.5	30	29.5
0:00:45	67.2	67.1	69.4	31.5	29.5
0:00:50	67.2	67.1	69.5	30.7	29.6
0:00:55	67.1	67.1	69.4	31	29.5
0:01:00	67.1	67.1	69.4	44.4	29.5
0:01:05	67.1	67	69.4	31.1	29.5
0:01:10	67.2	67.1	69.4	31.1	29.7
0:01:15	67.1	67.1	69.4	33.5	29.6
0:01:20	67.1	67.1	69.4	36.1	29.7
0:01:25	67.1	67	69.4	36.2	29.8
0:01:30	67.1	67	69.4	36	29.7
0:01:35	67.1	67	69.4	37.5	29.6
0:01:40	67.1	67	69.4	40	29.6
0:01:45	67.1	67.1	69.4	37.7	29.6
0:01:50	67.1	67	69.4	36.8	29.7
0:01:55	67.1	67	69.4	34.8	30.1
0:02:00	67.1	67	69.4	34.7	30.2
0:02:05	67.1	67	69.4	34.4	30.2
0:02:10	67.1	67	69.4	34.9	30.3
0:02:15	67.1	67	69.4	36	30.2
0:02:20	67.1	67	69.4	37.5	30
0:02:25	67.1	67	69.4	39.5	29.9
0:02:30	67.1	67	69.4	40.4	29.9

## Lanjutan data suhu penampang B-B dan T24, T28, T31 1,5 LPM

2:29:30	29.6	29.6	30.9	35.5	28.9
2:29:35	29.7	29.6	30.9	35.5	28.9
2:29:40	29.6	29.6	30.9	35.5	29.1
2:29:45	29.7	29.6	31	35.5	29.1
2:29:50	29.7	29.6	30.9	35.5	29.1
2:29:55	29.6	29.6	30.9	35.5	29.2
2:30:00	29.6	29.6	30.8	35.5	29.1
2:30:05	29.6	29.6	30.8	35.5	29.1
2:30:10	29.6	29.6	30.8	35.5	29
2:30:15	29.6	29.6	30.9	35.6	29
2:30:20	29.6	29.6	31.1	35.6	29
2:30:25	29.6	29.6	31.2	35.6	29
2:30:30	29.6	29.5	31.2	35.5	29
2:30:35	29.5	29.6	31.2	35.5	29
2:30:40	29.4	29.4	30.8	35.5	29
2:30:45	29.5	29.5	30.8	35.5	29
2:30:50	29.5	29.5	30.8	35.5	29
2:30:55	29.5	29.4	30.9	35.5	29.1
2:31:00	29.4	29.5	30.9	35.5	29
2:31:05	29.4	29.4	30.9	35.5	29
2:31:10	29.6	29.5	30.9	35.7	29.1
2:31:15	29.5	29.5	30.9	35.7	29.1
2:31:20	29.5	29.4	30.9	35.5	29.1
2:31:25	29.5	29.4	30.9	35.5	29.1
2:31:30	29.5	29.5	30.8	35.5	29.1
2:31:35	29.5	29.5	30.9	35.4	29.1
2:31:40	29.5	29.4	30.9	35.3	29.1
2:31:45	29.5	29.5	30.8	35.3	29.1
2:31:50	29.4	29.4	31	35.3	29.1
2:31:55	29.4	29.4	30.9	35.2	29
2:32:00	29.5	29.4	30.8	35.2	29

Lampiran 6. Data suhu penampang C-C 1,5 LPM

Waktu	T1	T2	T3	T4	T6	T7	T8	T9	T10	T11	T12
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	68.5	67.7	67.2	66.7	68.1	67.6	67.4	67.3	68.5	68.2	68.2
0:00:05	68.5	67.7	67.3	66.7	68	67.6	67.4	67.3	68.5	68.2	68.1
0:00:10	68.5	67.8	67.3	66.7	68.1	67.7	67.4	67.2	68.4	68.1	68.1
0:00:15	68.5	67.8	67.3	66.6	68	67.7	67.4	67.1	68.4	68.1	68.1
0:00:20	68.5	67.8	67.2	66.6	68	67.7	67.4	67.1	68.4	68.1	68.1
0:00:25	68.4	67.8	67.2	66.6	68	67.7	67.4	67.2	68.5	68.2	68.1
0:00:30	68.4	67.7	67.2	66.6	68	67.7	67.4	67.1	68.5	68.2	68.1
0:00:35	68.4	67.7	67.2	66.4	68	67.6	67.3	66.7	68.4	68.2	68.1
0:00:40	68.4	67.7	67.2	66.3	68	67.6	67.3	66.5	68.4	68.2	68.1
0:00:45	68.4	67.7	67.2	66.5	68	67.6	67.4	66.8	68.4	68.4	68.1
0:00:50	68.3	67.6	67.2	66.4	67.9	67.6	67.3	66.8	68.4	68.2	68.1
0:00:55	68.3	67.7	67.1	66.4	67.9	67.6	67.3	66.6	68.4	68	68
0:01:00	68.3	67.7	67.1	66.4	67.9	67.6	67.3	66.3	68.3	68	68
0:01:05	68.4	67.7	67.2	66.3	67.9	67.6	67.3	66.2	68.4	68.1	68.1
0:01:10	68.4	67.7	67.2	66.2	67.9	67.6	67.3	65.7	68.4	68.1	68.1
0:01:15	68.3	67.6	67.1	66.2	67.9	67.5	67.2	65.7	68.4	68.1	68.1
0:01:20	68.3	67.6	67.1	66	67.9	67.5	67.2	65	68.3	68.1	68
0:01:25	68.3	67.6	67.1	65.9	67.9	67.5	67.2	64.8	68.3	68.1	68
0:01:30	68.4	67.7	67.1	65.9	68	67.6	67.2	64	68.3	68.1	68
0:01:35	68.3	67.7	67.1	65.9	68	67.6	67.2	63.4	68.4	68.1	68
0:01:40	68.4	67.7	67.1	65.8	68	67.6	67.2	62.4	68.4	68.1	68.1
0:01:45	68.4	67.7	67.1	65.5	68	67.6	67.2	61.7	68.4	68.1	68.1
0:01:50	68.3	67.7	67.1	65.3	68	67.6	67.2	60	68.3	68.1	68
0:01:55	68.3	67.7	67.1	65.1	67.9	67.6	67.2	59.9	68.3	68.1	68
0:02:00	68.3	67.7	67	64.7	67.9	67.6	67.2	57.8	68.3	68	68
0:02:05	68.3	67.7	67	64.2	67.9	67.6	67.2	56.5	68.3	68.1	68
0:02:10	68.3	67.6	67	63.7	67.9	67.5	67.1	55.7	68.3	68	68
0:02:15	68.2	67.6	67	63.5	67.9	67.5	67.1	54.5	68.3	68	67.9
0:02:20	68.3	67.6	67	62	67.9	67.5	67.1	54.1	68.2	68	68
0:02:25	68.3	67.6	67	61.6	67.9	67.5	67.1	52.1	68.3	68	68
0:02:30	68.2	67.6	66.9	60.5	67.9	67.5	67.1	50.9	68.2	68	68

## Lanjutan data suhu penampang C-C 1,5 LPM

2:29:30	30.5	30.1	29.9	29.9	30	29.9	30	29.8	29.8	29.7	29.7
2:29:35	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.7
2:29:40	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.8
2:29:45	30.5	30.1	29.9	29.9	30	29.9	30	29.8	29.8	29.7	29.8
2:29:50	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.7
2:29:55	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.8
2:30:00	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.8
2:30:05	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.7
2:30:10	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.7
2:30:15	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.8
2:30:20	30.4	30	29.8	29.8	29.9	29.8	29.9	29.8	29.8	29.7	29.7
2:30:25	30.4	30	29.8	29.8	29.9	29.8	30	29.8	29.8	29.7	29.7
2:30:30	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.7	29.8
2:30:35	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.8	29.8
2:30:40	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.8	29.8
2:30:45	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.9	29.8	29.7
2:30:50	30.4	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.8	29.8
2:30:55	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.8	29.8
2:31:00	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.8	29.8
2:31:05	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.9	29.8	29.8
2:31:10	30.5	30.1	29.9	29.9	30	29.9	30	29.8	29.9	29.7	29.7
2:31:15	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.9	29.7	29.8
2:31:20	30.5	30.1	29.9	29.8	30	29.9	30	29.8	29.8	29.8	29.8
2:31:25	30.5	30.1	29.9	29.9	30	29.9	30	29.8	29.8	29.8	29.8
2:31:30	30.5	30.1	29.9	29.9	30	29.9	30	29.8	29.9	29.8	29.8
2:31:35	30.5	30.1	29.9	29.9	30	29.9	30	29.8	29.8	29.8	29.8
2:31:40	30.5	30.1	29.9	29.9	30	29.9	30	29.9	29.9	29.8	29.8
2:31:45	30.4	30.1	29.9	29.9	30	29.9	30	29.9	29.9	29.8	29.8
2:31:50	30.5	30.1	29.9	29.9	30	29.9	30	29.9	29.8	29.7	29.8
2:31:55	30.5	30.1	29.9	29.8	30	29.9	30	29.9	29.8	29.7	29.8
2:32:00	30.5	30.1	29.9	29.9	30	29.9	30	29.8	29.8	29.7	29.8

Lampiran 7. Data suhu penampang A-A 2 LPM

Waktu	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	66.9	66.5	67.1	67.5	67.7	65.9	66.5	67.4	67.7	67	67.2
0:00:05	70.2	67.3	67	67.4	68.1	66.4	67	67.4	67.8	67.4	67.6
0:00:10	36.7	67.2	67.3	67.5	67.7	64.8	66.8	67.4	67.9	67.4	67.6
0:00:15	33.6	67.2	67.5	67.6	68.1	66.6	67.2	67.6	67.9	67.4	67.5
0:00:20	34.9	67.3	67.7	67.7	68	66.2	67.5	67.7	67.9	67.4	67.5
0:00:25	40.2	67.6	67.7	68	68	65.9	67.5	67.8	68	67.4	67.5
0:00:30	31.2	67.5	67.7	68	68.1	65.3	67.5	67.8	68.1	67.4	67.5
0:00:35	30.4	67.2	67.7	68	68.1	61.5	67.5	67.8	68.1	67.4	67.5
0:00:40	33.3	67.1	67.8	68	68.1	65	67.6	67.8	68.1	67.3	67.5
0:00:45	31.5	67	67.6	68	68	65.9	67.4	67.8	68.1	67.3	67.6
0:00:50	30.5	67.1	67.5	68	68.1	59.7	67.3	67.8	68.1	67.3	67.5
0:00:55	30.9	67.2	67.5	68	68.1	54.8	67.3	67.8	68.1	67.3	67.4
0:01:00	30.4	67.3	67.5	68	68	62.2	67.3	67.7	68.1	67.3	67.4
0:01:05	30.8	67.3	67.5	68	68	62.6	67.3	67.7	68.1	67.3	67.4
0:01:10	30.4	67.2	67.5	67.9	68.1	63.2	67.4	67.8	68	67.3	67.4
0:01:15	36.2	67.2	67.6	67.9	68.1	39.2	67.4	67.7	68	67.3	67.4
0:01:20	30.5	67.2	67.6	67.9	68	50.4	67.4	67.7	68	67.3	67.4
0:01:25	30	67.1	67.6	67.9	68	63.1	67.4	67.7	68	67.3	67.4
0:01:30	30.1	67	67.5	67.9	68	63.1	67.4	67.7	68	67.3	67.4
0:01:35	30.5	67	67.4	67.9	68	42.4	67.3	67.7	68	67.3	67.4
0:01:40	30.4	67	67.4	67.8	68	48.3	67.3	67.7	68	67.3	67.4
0:01:45	30.6	67.1	67.5	67.9	68	39.9	67.3	67.7	68	67.2	67.3
0:01:50	30.1	67.1	67.5	67.9	68	46.4	67.3	67.7	68	67.2	67.3
0:01:55	29.5	67.1	67.5	67.9	68	36.6	67.2	67.7	67.9	67.1	67.2
0:02:00	29.5	67.1	67.5	67.9	68	49.4	67.2	67.6	67.9	67.1	67.2
0:02:05	29.7	67.1	67.5	67.9	67.9	44	67.2	67.6	67.9	67.1	67.2
0:02:10	29.7	67	67.4	67.8	68	33.1	67.3	67.7	67.9	67.2	67.3
0:02:15	29.7	66.9	67.4	67.8	68	41.1	67.3	67.7	67.9	67.1	67.2
0:02:20	29.3	66.9	67.4	67.8	68	38	67.3	67.6	67.9	67.1	67.2
0:02:25	30.8	66.9	67.4	67.8	68	44.8	67.3	67.6	67.9	67.1	67.2
0:02:30	29.6	66.9	67.4	67.8	68	39.2	67.3	67.6	67.9	67.1	67.2

## Lanjutan data suhu penampang A-A 2 LPM

1:44:45	28.2	28.5	28.5	28.6	28.7	28.7	28.4	28.5	28.6	28.9	29.1
1:44:50	28.1	28.5	28.5	28.7	28.7	28.7	28.5	28.5	28.6	28.8	29.1
1:44:55	28.2	28.5	28.5	28.7	28.7	28.7	28.5	28.6	28.7	28.9	29.1
1:45:00	28.2	28.5	28.5	28.7	28.8	28.6	28.5	28.6	28.6	28.9	29.1
1:45:05	28.7	28.5	28.6	28.6	28.7	28.7	28.5	28.5	28.7	28.9	29.2
1:45:10	28.7	28.7	28.7	28.7	28.9	28.7	28.6	28.6	28.8	28.9	29.2
1:45:15	28.7	28.7	28.7	28.8	29.1	28.7	28.7	28.6	29	29	29.1
1:45:20	28.7	28.7	28.7	28.9	29.1	28.7	28.7	28.7	28.9	28.9	29
1:45:25	28.7	28.7	28.8	29	29.4	28.7	28.8	28.9	29.1	28.9	29.1
1:45:30	28.7	28.8	28.8	29	29.4	28.7	28.9	29	29.1	28.9	29.1
1:45:35	28.7	28.7	28.8	29	29.3	28.8	28.8	28.9	29.1	28.9	29.1
1:45:40	28.7	28.8	28.8	29	29.3	28.7	28.8	28.8	29.1	28.9	29
1:45:45	28.7	28.7	28.9	29	29.2	28.7	28.7	28.8	29	28.8	29
1:45:50	28.7	28.8	28.8	28.9	29.2	28.7	28.7	28.8	29	28.8	29
1:45:55	28.7	28.8	28.9	28.9	29.3	28.8	28.8	28.9	29.1	28.9	29.1
1:46:00	28.7	28.8	28.9	28.9	29.3	28.8	28.8	28.9	29.1	28.9	29.1
1:46:05	28.7	28.8	28.9	29	29.3	28.7	28.8	28.8	29.1	28.9	29.1
1:46:10	28.7	28.8	28.9	29	29.2	28.7	28.7	28.8	29	28.8	29
1:46:15	28.8	28.8	28.9	29	29.3	28.7	28.7	28.8	29	28.8	29
1:46:20	28.7	28.8	28.9	29	29.3	28.7	28.7	28.9	29.1	28.8	29
1:46:25	28.8	28.8	28.9	29	29.2	28.7	28.7	28.9	29.1	28.8	29
1:46:30	28.8	28.8	28.9	29	29.2	28.7	28.8	28.9	29.1	28.8	29
1:46:35	28.7	28.7	28.8	29	29.2	28.7	28.8	28.9	29.1	28.8	29
1:46:40	28.7	28.7	28.8	29	29.2	28.7	28.8	28.9	29.1	28.8	29
1:46:45	28.7	28.7	28.8	29	29.2	28.7	28.8	28.9	29.1	28.8	29
1:46:50	28.7	28.7	28.9	29	29.2	28.7	28.8	28.9	29.1	28.8	29
1:46:55	28.7	28.8	29	29	29.2	28.8	28.9	28.9	29.1	29	29
1:47:00	28.7	28.9	28.9	29	29.2	28.7	28.8	28.8	29.1	28.9	29
1:47:05	28.8	28.9	28.9	29	29.2	28.8	28.9	28.9	29.1	28.9	29

Lampiran 8. Data suhu penampang B-B dan T24, T28, T30, T31 2 LPM

Waktu	T25	T26	T24	T28	T30	T31
[Detik]	°C	°C	°C	°C	°C	°C
0:00:00	66.3	66.2	67.9	25.6	28.4	27.7
0:00:05	66.8	66.7	68	26.3	28.7	28.2
0:00:10	66.8	66.7	68.7	26.3	28.5	28.2
0:00:15	66.8	66.8	68.6	26.2	28.2	28.2
0:00:20	66.8	66.7	68.8	26.4	28.2	28.2
0:00:25	66.8	66.7	68.9	37.6	28.3	28.1
0:00:30	66.8	66.7	68.9	44.8	28.3	28.1
0:00:35	66.8	66.7	68.9	42	28.3	28.1
0:00:40	66.7	66.7	68.9	53.6	28.3	28.1
0:00:45	66.7	66.7	68.9	59.3	28.2	28.1
0:00:50	66.7	66.6	68.9	59.7	28.2	28.3
0:00:55	66.8	66.7	68.9	62.1	28.2	28.3
0:01:00	66.8	66.7	68.9	61.8	28.1	29
0:01:05	66.8	66.7	68.9	61.2	28	29
0:01:10	66.8	66.7	68.9	60.9	28	28.5
0:01:15	66.8	66.7	68.9	61.1	28	28.3
0:01:20	66.8	66.7	68.9	61	28	28.3
0:01:25	66.8	66.7	68.9	60.1	28	28.2
0:01:30	66.8	66.7	68.9	59.3	27.9	28.2
0:01:35	66.8	66.7	68.9	59.8	27.9	28.1
0:01:40	66.8	66.7	68.9	59.2	27.8	28.1
0:01:45	66.7	66.7	68.8	58.4	27.8	28.1
0:01:50	66.7	66.7	68.9	59.3	27.8	28.2
0:01:55	66.7	66.6	68.8	60	27.9	28.4
0:02:00	66.7	66.6	68.8	58.6	27.9	28.3
0:02:05	66.7	66.6	68.8	59.1	27.9	28.3
0:02:10	66.7	66.6	68.8	58.7	27.9	28.1
0:02:15	66.7	66.6	68.9	58.8	27.9	27.9
0:02:20	66.7	66.6	68.9	61.2	28	28
0:02:25	66.7	66.6	68.8	58.6	28	27.9
0:02:30	66.6	66.6	68.8	59.2	28	27.7

## Lanjutan data suhu penampang B-B dan T24, T28, T30, T31 2 LPM

1:44:45	28.2	28.1	29.6	35.6	27.5	26.5
1:44:50	28	28.1	29.5	35.6	27.5	26.5
1:44:55	28.2	28	29.5	35.4	27.5	26.4
1:45:00	28.1	28	29.5	35.4	27.5	26.5
1:45:05	28.1	28.1	29.6	35.5	27.5	26.8
1:45:10	28.2	28.1	29.6	35.4	27.5	27
1:45:15	28.2	28.1	29.5	35.5	27.5	26.9
1:45:20	28.4	28.1	29.6	35.4	27.5	26.8
1:45:25	28.3	28.1	29.8	35.4	27.5	27
1:45:30	28.4	28.2	29.7	35.4	27.5	26.9
1:45:35	28.2	28.2	29.7	35.4	27.5	26.8
1:45:40	28.3	28.4	29.7	35.5	27.5	26.8
1:45:45	28.3	28.4	29.6	35.5	27.5	26.8
1:45:50	28.3	28.2	29.7	35.4	27.5	26.9
1:45:55	28.5	28.3	29.7	35.5	27.5	26.9
1:46:00	28.5	28.3	29.7	35.5	27.5	26.8
1:46:05	28.5	28.3	29.7	35.4	27.5	26.9
1:46:10	28.5	28.4	29.7	35.4	27.5	26.7
1:46:15	28.5	28.4	29.6	35.4	27.5	26.7
1:46:20	28.5	28.4	29.6	35.4	27.5	26.7
1:46:25	28.5	28.4	29.6	35.4	27.5	26.7
1:46:30	28.5	28.4	29.6	35.4	27.5	26.8
1:46:35	28.5	28.4	29.6	35.4	27.5	26.8
1:46:40	28.5	28.4	29.7	35.4	27.5	27
1:46:45	28.5	28.4	29.7	35.4	27.5	27
1:46:50	28.5	28.4	29.6	35.3	27.5	26.9
1:46:55	28.5	28.4	29.6	35.2	27.5	26.7
1:47:00	28.5	28.3	29.5	35.2	27.5	26.6
1:47:05	28.5	28.3	29.5	35.2	27.5	26.6



Lampiran 9. Data suhu penampang C-C 2 LPM

Waktu	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	67.5	66.5	66.1	65.4	67	67	66.4	66.8	66	67.4	67	66.9
0:00:05	67.9	67	66.6	65.9	67.5	67.4	66.9	67.3	66.5	67.9	67.5	67.4
0:00:10	68	67.1	66.6	65.9	67.5	67.4	66.9	67.2	66.5	67.9	67.5	67.4
0:00:15	67.9	67.1	66.5	65.8	67.5	67.4	66.9	67.2	66.4	67.9	67.6	67.4
0:00:20	67.9	67.1	66.4	65.8	67.5	67.4	66.9	67.6	66.2	67.9	67.5	67.4
0:00:25	67.9	67.1	66.4	65.7	67.5	67.4	66.9	67.5	66.3	67.9	67.5	67.4
0:00:30	67.8	67.1	66.4	65.7	67.5	67.3	66.9	67.3	66.4	67.9	67.5	67.4
0:00:35	67.8	67.1	66.4	65.6	67.5	67.3	66.9	67.5	66.2	67.9	67.5	67.4
0:00:40	67.8	67	66.4	65.3	67.5	67.3	66.9	67.3	65.2	67.8	67.5	67.4
0:00:45	67.8	67	66.4	65.1	67.5	67.3	66.8	67.4	65.2	67.8	67.5	67.4
0:00:50	67.8	67	66.4	65.4	67.5	67.3	66.9	67.1	64.4	67.8	67.5	67.4
0:00:55	67.8	67	66.4	65.4	67.5	67.3	66.8	67	65	67.8	67.5	67.4
0:01:00	67.8	67	66.4	65.2	67.5	67.3	66.8	67	64.2	67.8	67.5	67.4
0:01:05	67.8	67	66.4	65	67.5	67.3	66.8	67	63.2	67.8	67.5	67.4
0:01:10	67.8	67	66.4	64.7	67.5	67.3	66.8	66.9	62.7	67.8	67.5	67.4
0:01:15	67.8	67	66.4	64.5	67.4	67.3	66.8	66.9	60.8	67.8	67.5	67.4
0:01:20	67.8	67	66.3	64.3	67.4	67.3	66.8	66.9	60.6	67.7	67.4	67.3
0:01:25	67.8	67	66.3	64	67.4	67.3	66.8	66.9	59	67.7	67.4	67.3
0:01:30	67.8	67	66.3	63.2	67.4	67.3	66.8	66.8	57.1	67.7	67.4	67.3
0:01:35	67.8	67	66.3	62.3	67.4	67.3	66.8	66.8	55	67.7	67.4	67.3
0:01:40	67.8	67	66.3	60.8	67.4	67.3	66.8	66.9	53.8	67.7	67.4	67.3
0:01:45	67.8	67	66.3	60.1	67.4	67.3	66.8	66.9	52.8	67.8	67.4	67.3
0:01:50	67.8	67	66.3	58.7	67.4	67.3	66.8	66.9	51.5	67.8	67.4	67.3
0:01:55	67.8	67	66.2	57.9	67.4	67.3	66.8	66.9	50.1	67.7	67.4	67.3
0:02:00	67.8	66.9	66.3	56.9	67.4	67.3	66.8	66.8	49.4	67.7	67.4	67.3
0:02:05	67.8	66.9	66.2	54.8	67.4	67.3	66.8	66.7	49.2	67.7	67.4	67.3
0:02:10	67.8	66.9	66.2	53.3	67.4	67.3	66.8	66.6	47.8	67.6	67.3	67.2
0:02:15	67.8	66.9	66.2	52.2	67.4	67.3	66.8	66.7	46.7	67.6	67.3	67.2
0:02:20	67.8	66.9	66.2	50.7	67.4	67.3	66.7	66.6	45.9	67.6	67.3	67.2
0:02:25	67.8	66.9	66.1	49.7	67.4	67.3	66.7	66.5	45.4	67.6	67.3	67.2
0:02:30	67.8	66.9	66.1	48.6	67.4	67.3	66.7	66.6	44.8	67.6	67.3	67.2

## Lanjutan data suhu penampang C-C 2 LPM

1:44:45	29.5	29	28.8	28.7	29.2	29	28.8	29.4	28.9	28.9	28.8	28.8
1:44:50	29.5	29	28.8	28.7	29.2	29	28.8	29.5	28.9	28.9	28.8	28.8
1:44:55	29.5	29	28.8	28.8	29.2	29	28.8	29.5	28.9	29	28.8	28.8
1:45:00	29.5	29	28.8	28.7	29.2	29	28.8	29.5	28.9	29	28.8	28.8
1:45:05	29.5	29	28.8	28.7	29.2	29	28.8	29.5	28.9	29	28.8	28.8
1:45:10	29.5	29	28.8	28.7	29.2	29	28.8	29.6	28.9	29	28.8	28.8
1:45:15	29.5	29	28.8	28.7	29.2	29	28.8	29.6	28.9	29	28.8	28.8
1:45:20	29.5	29	28.8	28.7	29.2	29	28.8	29.6	28.9	29	28.8	28.8
1:45:25	29.5	29	28.8	28.7	29.2	29	28.8	29.4	28.9	28.9	28.7	28.7
1:45:30	29.5	29	28.8	28.7	29.2	29	28.8	29.5	28.9	28.9	28.7	28.7
1:45:35	29.5	29	28.8	28.7	29.2	28.9	28.8	29.4	28.8	28.9	28.7	28.7
1:45:40	29.5	29	28.8	28.7	29.2	28.9	28.8	29.4	28.9	28.9	28.8	28.8
1:45:45	29.5	29	28.8	28.7	29.2	28.9	28.8	29.3	28.9	28.9	28.8	28.8
1:45:50	29.5	29	28.8	28.7	29.2	28.9	28.8	29.5	28.9	28.9	28.8	28.7
1:45:55	29.4	29	28.8	28.7	29.2	28.9	28.8	29.5	28.9	28.9	28.8	28.8
1:46:00	29.5	29	28.8	28.7	29.2	28.9	28.8	29.5	28.8	28.9	28.8	28.7
1:46:05	29.5	29	28.8	28.7	29.2	28.9	28.8	29.5	28.8	28.9	28.8	28.8
1:46:10	29.5	29	28.8	28.7	29.2	29	28.8	29.4	28.8	28.9	28.8	28.8
1:46:15	29.5	29	28.8	28.7	29.2	29	28.8	29.5	28.8	28.9	28.8	28.8
1:46:20	29.5	29	28.8	28.7	29.2	29	28.8	29.6	28.9	28.9	28.8	28.8
1:46:25	29.5	29	28.8	28.7	29.2	29	28.8	29.3	28.9	28.9	28.8	28.8
1:46:30	29.5	29	28.8	28.7	29.2	29	28.9	29.4	28.9	28.9	28.8	28.8
1:46:35	29.5	29	28.8	28.7	29.2	29	28.9	29.6	28.8	28.9	28.7	28.7
1:46:40	29.5	29	28.8	28.7	29.2	29	28.9	29.5	28.8	28.9	28.7	28.7
1:46:45	29.5	29	28.8	28.7	29.2	29	28.9	29.4	28.8	28.9	28.7	28.7
1:46:50	29.4	29	28.8	28.7	29.2	29	28.8	29.5	28.8	28.9	28.7	28.7
1:46:55	29.4	29	28.8	28.7	29.2	29	28.9	29.4	28.8	28.9	28.7	28.7
1:47:00	29.5	29	28.8	28.7	29.2	29	28.9	29.5	28.8	28.8	28.7	28.7
1:47:05	29.5	29	28.8	28.7	29.2	29	28.9	29.5	28.8	28.8	28.7	28.7

Lampiran 10. Data suhu penampang A-A 2,5 LPM

Waktu	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	30.4	67.1	67.3	67.7	68	58.5	67.4	68	68.3	68	68.4
0:00:05	29.6	67.1	67.3	67.8	68	56.6	67.4	68	68.2	68	68.2
0:00:10	30.1	67	67.4	67.7	68	56.2	67.5	67.9	68.2	67.9	68
0:00:15	30.7	67.5	68.1	68.2	68	62	67.8	68	68.2	68.1	67.7
0:00:20	30.2	67.8	68.1	68.3	68	63.8	67.8	68	68.2	67.6	67.5
0:00:25	32.7	67.5	68	68.3	68	55.4	67.7	68	68.2	67.6	67.6
0:00:30	31.1	67.4	68	68.3	67.9	55	67.6	67.9	68.2	67.4	67.6
0:00:35	30.7	67.2	68.1	68.3	67.9	52.6	67.6	67.9	68.2	67.4	67.6
0:00:40	34.2	67.2	68	68.2	67.9	60.5	67.6	68	68.2	67.5	67.6
0:00:45	29.7	67.3	68.1	68.2	68	41.7	67.7	68	68.3	67.5	67.7
0:00:50	29.8	67.4	68	68.2	68	57.3	67.6	68	68.3	67.6	67.7
0:00:55	29.9	67.3	68	68.3	68	54	67.6	68	68.3	67.6	67.7
0:01:00	30.1	67.3	67.9	68.2	68	47.1	67.6	68	68.3	67.6	67.7
0:01:05	30.9	64.9	67.2	66.8	68	45.8	65.1	66.2	65	67.6	67.6
0:01:10	29.4	64.8	67.3	68	67.8	43	67.4	67.6	68	67.5	67.6
0:01:15	30.7	67.2	67.7	67.9	67.6	47.4	67.4	67.6	68	67.3	67.9
0:01:20	32.7	62.7	67.8	67.9	67.6	38.1	67.4	67.6	68	67.4	67.9
0:01:25	29.4	67.2	67.7	67.9	67.6	41.8	67.2	67.5	68	67.8	68.2
0:01:30	30.8	67.4	67.8	67.9	67.6	37.8	67.5	67.7	68	67.7	67.9
0:01:35	29.8	67.6	67.9	68.1	67.7	36.7	67.5	67.8	68.1	67.8	67.9
0:01:40	29.8	67.5	67.9	68	67.9	38.1	67.5	67.8	68.1	67.7	67.7
0:01:45	30.4	66.7	67.9	68.1	67.9	42.1	67.5	67.8	68.2	67.7	67.5
0:01:50	29.6	66.8	67.9	68	67.9	33.6	67.5	67.8	68.2	67.4	67.2
0:01:55	30.1	67	67.9	68	67.9	39	67.5	67.8	68.2	67.1	67.1
0:02:00	29.3	66.9	67.8	68	67.8	38.7	67.5	67.8	68.1	67.1	67
0:02:05	29.3	66.9	67.7	68	67.9	37.9	67.4	67.8	68.1	67.2	67.1
0:02:10	29.8	67	67.7	68	67.9	36.4	67.4	67.8	68.1	67.2	67.1
0:02:15	30.4	66.9	67.8	68.1	67.9	42.1	67.4	67.8	68.1	67.2	67.2
0:02:20	31.2	66.5	67.7	68	67.9	43.3	67.4	67.8	68.1	67.2	67.2
0:02:25	30.2	66.6	67.7	68	67.9	33.4	67.3	67.8	68.1	67.2	67.2
0:02:30	31.8	66.6	67.7	68	67.9	43.3	67.3	67.8	68.1	67.2	67.2

## Lanjutan data suhu penampang A-A 2,5 LPM

1:50:05	29.3	29.6	29.7	29.8	29.5	29.6	29.5	29.6	29.8	30.2	30.4
1:50:10	29.1	29.5	29.7	29.7	29.5	29.6	29.4	29.5	29.8	30.2	30.4
1:50:15	29.1	29.6	29.6	29.8	29.4	29.3	29.4	29.5	29.7	30.2	30.5
1:50:20	29	29.5	29.6	29.8	29.5	29.4	29.4	29.5	29.7	30.2	30.5
1:50:25	29	29.4	29.7	29.8	29.4	29.6	29.2	29.5	29.8	30.2	30.5
1:50:30	29.1	29.4	29.7	29.8	29.4	29.5	29.4	29.6	29.8	30.2	30.5
1:50:35	28.9	29.5	29.6	29.9	29.4	29.6	29.4	29.7	29.9	30.2	30.5
1:50:40	29	29.4	29.5	29.7	29.5	29.6	29.4	29.5	29.7	30.3	30.5
1:50:45	29.1	29.6	29.7	29.7	29.4	29.7	29.5	29.6	29.7	30.3	30.5
1:50:50	29	29.5	29.6	29.7	29.4	29.2	29.4	29.7	29.9	30.3	30.5
1:50:55	29.2	29.6	29.6	29.8	29.5	29.7	29.4	29.4	29.8	30.3	30.5
1:51:00	29	29.4	29.7	29.8	29.4	29.3	29.4	29.5	29.7	30.1	30.5
1:51:05	29	29.7	29.7	29.7	29.4	29.5	29.3	29.5	29.7	30.2	30.5
1:51:10	29.1	29.4	29.6	29.9	29.4	29.6	29.4	29.6	29.8	30.2	30.5
1:51:15	29	29.6	29.5	29.6	29.4	29.4	29.2	29.6	29.7	30.2	30.4
1:51:20	29.1	29.6	29.7	29.8	29.4	29.5	29.4	29.5	29.7	30.2	30.4
1:51:25	29.2	29.6	29.7	29.7	29.5	29.3	29.5	29.4	29.8	30.1	30.3
1:51:30	29.1	29.7	29.7	29.9	29.4	29.4	29.3	29.4	29.7	30.1	30.4
1:51:35	29	29.5	29.5	29.8	29.4	29.5	29.4	29.4	29.7	30.2	30.3
1:51:40	29	29.5	29.5	29.6	29.3	29.4	29.2	29.4	29.7	30.2	30.3
1:51:45	29	29.4	29.5	29.7	29.3	29.4	29.3	29.4	29.6	30.1	30.4
1:51:50	29	29.5	29.6	29.7	29.3	29.4	29.6	29.5	29.7	30.1	30.3
1:51:55	29	29.4	29.5	29.7	29.3	29.2	29.2	29.3	29.6	30.1	30.4
1:52:00	29.3	29.5	29.7	29.6	29.3	29.4	29.3	29.5	29.6	30.1	30.4
1:52:05	29	29.6	29.5	29.7	29.3	29.4	29.2	29.5	29.6	30	30.3
1:52:10	29	29.3	29.5	29.8	29.3	29.2	29.5	29.5	29.6	29.9	30.4
1:52:15	29	29.7	29.6	29.7	29.4	29.3	29.3	29.4	29.7	30.1	30.3
1:52:20	29.1	29.6	29.6	29.8	29.7	29.2	29.3	29.3	29.6	30.1	30.3
1:52:25	29	29.4	29.6	29.8	29.3	29.2	29.3	29.5	29.7	30.1	30.4
1:52:30	29.1	29.7	29.6	29.6	29.3	29.3	29.3	29.5	29.6	30.1	30.4
1:52:35	29.1	29.4	29.5	29.7	29.4	29.2	29.4	29.5	29.6	30.1	30.4

Lampiran 11. Data suhu penampang B-B dan T24, T28, T30, T31 2,5 LPM

Waktu	T25	T26	T24	T28	T30	T31
[Detik]	°C	°C	°C	°C	°C	°C
0:00:00	66.7	66.6	69	30.4	27.9	29.4
0:00:05	66.6	66.6	69	30.4	27.8	29.4
0:00:10	66.7	66.6	69.1	29.9	27.8	29.3
0:00:15	66.6	66.5	69.1	28.6	27.8	29.3
0:00:20	66.6	66.5	69.1	26.8	27.8	29.2
0:00:25	66.6	66.6	69.1	38.7	27.8	29.2
0:00:30	66.6	66.6	69	35	27.9	29.2
0:00:35	66.6	66.6	69	34.3	27.8	29.3
0:00:40	66.6	66.7	69	34.1	27.7	29.3
0:00:45	66.6	66.6	69.1	41.1	27.7	29.3
0:00:50	66.6	66.6	69.1	38.4	27.7	29.3
0:00:55	66.6	66.6	69.1	39.8	27.7	29.2
0:01:00	66.6	66.6	69.1	47.4	27.7	29.1
0:01:05	66.6	66.6	69.1	42.8	27.7	29.1
0:01:10	66.6	66.6	68.1	45.2	27.7	29.2
0:01:15	66.5	66.5	68.7	39.2	27.7	29.1
0:01:20	66.3	66.4	68.7	39.9	27.7	29.2
0:01:25	66.3	66.4	68.6	39.4	27.7	29.2
0:01:30	66.4	66.4	68.8	40.2	27.7	29.1
0:01:35	66.4	66.4	68.9	40.6	27.8	29.2
0:01:40	66.5	66.5	69	41.5	27.9	29.3
0:01:45	66.4	66.5	69	48.8	28	29.2
0:01:50	66.4	66.5	69	49.9	28.1	29.2
0:01:55	66.4	66.5	69	49.1	28.3	29.2
0:02:00	66.4	66.5	69	49.5	28.5	29.3
0:02:05	66.4	66.5	69	50	28.7	29.4
0:02:10	66.4	66.5	69	51	28.9	29.5
0:02:15	66.4	66.5	69	52.2	29.1	29.4
0:02:20	66.4	66.5	69	52.1	29.3	29.4
0:02:25	66.4	66.5	69	52.2	29.6	29.4
0:02:30	66.4	66.5	69	51.9	29.8	29.4

Lanjutan data suhu penampang B-B dan T24, T28, T30, T31 2,5 LPM

1:50:05	29	29.1	31.1	35.9	28.8	29.2
1:50:10	28.8	29	30.8	35.9	28.8	29.2
1:50:15	28.9	29.1	30.8	35.8	28.8	29.2
1:50:20	28.7	29	30.7	35.8	28.8	29.2
1:50:25	28.7	29.2	30.7	35.9	28.8	29.2
1:50:30	28.8	29	30.7	35.9	28.8	29.2
1:50:35	28.8	28.9	30.7	35.7	28.8	29.2
1:50:40	28.8	28.9	30.7	35.7	28.8	29.2
1:50:45	28.7	28.9	30.7	35.6	28.8	29.2
1:50:50	28.7	28.8	30.7	35.7	28.8	29.2
1:50:55	28.9	28.8	30.8	35.6	28.8	29.1
1:51:00	28.7	28.8	30.8	35.7	28.8	29.1
1:51:05	28.7	28.8	30.8	35.6	28.8	29.1
1:51:10	28.8	28.8	30.7	35.6	28.7	29
1:51:15	28.9	28.9	30.8	35.6	28.8	29.1
1:51:20	28.7	28.8	30.7	35.5	28.8	29.1
1:51:25	28.8	29	30.7	35.5	28.8	29.5
1:51:30	28.8	28.9	30.6	35.5	28.8	29.5
1:51:35	28.7	28.7	30.7	35.5	28.8	29.2
1:51:40	28.7	28.8	30.7	35.5	28.8	29.2
1:51:45	28.7	28.9	30.7	35.4	28.8	29.2
1:51:50	28.7	28.8	30.6	35.4	28.8	29.2
1:51:55	28.8	28.8	30.6	35.4	28.8	29.3
1:52:00	28.9	28.9	30.6	35.4	28.8	29.3
1:52:05	28.9	28.9	30.6	35.5	28.8	29.3
1:52:10	28.6	28.8	30.6	35.4	28.8	29.1
1:52:15	28.7	28.8	30.6	35.3	28.8	29.1
1:52:20	28.7	28.8	30.6	35.3	28.8	29.3
1:52:25	28.7	28.8	30.7	35.3	28.9	29.2
1:52:30	28.7	28.8	30.7	35.3	28.9	29.1
1:52:35	28.7	28.8	30.7	35.2	28.9	29.1

Lampiran 12. Data suhu penampang C-C 2,5 LPM

Waktu	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	67.8	67.4	66.7	65.9	67.7	67.6	67.3	66.9	65.8	67.5	67.4	67.4
0:00:05	67.9	67.4	66.7	65.8	67.6	67.5	67.4	67	65.5	67.6	67.4	67.4
0:00:10	67.8	67.4	66.4	65.2	67.7	67.5	67.3	66.7	64.3	67.5	67.3	67.4
0:00:15	67.8	67.4	66.4	64.5	67.6	67.5	67.3	66.6	64.3	68	67.9	67.8
0:00:20	67.8	67.4	66.4	65.3	67.7	67.5	67.4	66.7	63.5	67.9	67.9	67.8
0:00:25	67.8	67.3	66.5	65.3	67.6	67.5	67.4	66.7	63.1	67.9	67.8	67.7
0:00:30	67.8	67.3	66.6	64.3	67.6	67.5	67.3	66.8	60	68	67.7	67.7
0:00:35	67.8	67.3	66.6	63.7	67.6	67.6	67.3	66.8	57.8	68	67.6	67.7
0:00:40	67.8	67.2	66.6	61.8	67.7	67.6	67.3	66.9	56.5	68	67.7	67.7
0:00:45	67.8	67.2	66.5	62	67.7	67.6	67.2	66.7	55.4	68	67.7	67.7
0:00:50	67.8	67.1	66.5	60.2	67.6	67.5	67.2	66.8	53.4	68	67.7	67.7
0:00:55	67.8	67.1	66.4	58.4	67.7	67.6	67.2	66.6	51.9	68	67.7	67.7
0:01:00	67.8	67.2	66.4	56.1	67.6	67.6	67.2	66.7	50.9	67.9	67.7	67.7
0:01:05	67.7	67.2	66.3	55.7	67.7	67.5	67.2	66.6	50.1	67.9	67.7	67.7
0:01:10	67.8	67.2	66.3	54.7	67.3	67.6	67.3	66.6	49.5	68	67.7	67.7
0:01:15	67.5	67.2	66.2	50.9	67.6	67.5	67.2	66.7	48.3	68	67.7	67.7
0:01:20	67.7	67.2	66.2	51.4	67.6	67.5	67.1	66.5	48.4	67.9	67.7	67.6
0:01:25	67.7	67.1	66.2	50	67.6	67.5	67.1	66.4	47.9	67.8	67.6	67.5
0:01:30	67.7	67.1	66.2	49.2	67.6	67.5	67.1	66.5	47.3	67.7	67.6	67.5
0:01:35	67.7	67.1	66.2	47.9	67.6	67.5	67.1	66.4	46.6	67.7	67.6	67.5
0:01:40	67.6	67.1	66.3	47.4	67.6	67.4	67	66.3	46.5	67.8	67.6	67.6
0:01:45	67.6	67.1	66.2	47.4	67.6	67.4	67	66.3	46.2	67.8	67.6	67.6
0:01:50	67.7	67.1	66.1	46.6	67.6	67.4	67	66.5	45.9	67.8	67.6	67.6
0:01:55	67.7	67.1	66	46.7	67.6	67.4	67.1	66.3	45.4	67.7	67.6	67.6
0:02:00	67.6	67.1	66	46.1	67.6	67.4	67.1	65.9	44.9	67.8	67.6	67.6
0:02:05	67.6	67.1	65.9	45.6	67.6	67.4	67.1	65.3	44.5	67.8	67.6	67.5
0:02:10	67.6	67.1	65.7	45	67.6	67.4	67.1	65.1	44.2	67.8	67.6	67.5
0:02:15	67.6	67.1	65.6	44.4	67.6	67.4	67.1	64.7	43.8	67.8	67.6	67.4
0:02:20	67.6	67	65.4	44.1	67.6	67.4	67.1	64.4	43.3	67.8	67.6	67.4
0:02:25	67.6	67	65.4	43.8	67.6	67.4	67.1	64.5	43.3	67.8	67.5	67.4
0:02:30	67.6	67	65.3	43.4	67.6	67.4	67.1	64.3	42.6	67.8	67.5	67.4

## Lanjutan data suhu penampang C-C 2,5 LPM

1:50:05	30.4	30.1	30	30	30.5	30.3	30.2	30.3	29.8	29.9	29.9	29.9
1:50:10	30.4	30.1	30	30	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:50:15	30.4	30.1	30	30	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:50:20	30.4	30.1	30	29.9	30.5	30.4	30.2	30.5	29.8	29.9	29.9	29.9
1:50:25	30.4	30.1	30	30	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:50:30	30.4	30.1	30.1	30	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:50:35	30.4	30.1	30	30	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:50:40	30.4	30.1	30	30	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:50:45	30.4	30.1	30	30	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:50:50	30.4	30.1	30	30	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:50:55	30.3	30.1	30	29.9	30.4	30.2	30.1	30.3	29.8	29.9	29.9	29.9
1:51:00	30.3	30.1	30	29.9	30.4	30.3	30.1	30.3	29.8	29.9	29.9	29.9
1:51:05	30.4	30.1	30	29.9	30.5	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:51:10	30.4	30.1	30	30	30.4	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:51:15	30.3	30.1	30	29.9	30.4	30.3	30.2	30.4	29.8	29.9	29.9	29.9
1:51:20	30.4	30.1	30	29.9	30.4	30.3	30.2	30.4	29.8	30	29.9	29.9
1:51:25	30.4	30.1	30	29.9	30.5	30.3	30.1	30.3	29.8	30	29.9	29.9
1:51:30	30.3	30	29.9	29.9	30.4	30.2	30.1	30.3	29.8	30	29.9	29.9
1:51:35	30.3	30	29.9	29.9	30.4	30.2	30.1	30.3	29.8	29.9	29.8	29.8
1:51:40	30.3	30	29.9	29.9	30.4	30.2	30.1	30.2	29.8	29.9	29.8	29.8
1:51:45	30.4	30.1	30	29.9	30.5	30.3	30.1	30.4	29.8	29.9	29.8	29.8
1:51:50	30.4	30.1	30	30	30.4	30.3	30.1	30.3	29.8	29.9	29.8	29.8
1:51:55	30.3	30.1	30	29.9	30.4	30.3	30.1	30.3	29.7	29.9	29.8	29.8
1:52:00	30.3	30.1	30	29.9	30.4	30.3	30.1	30.4	29.8	29.9	29.8	29.8
1:52:05	30.3	30.1	30	29.9	30.4	30.3	30.1	30.3	29.8	29.9	29.8	29.8
1:52:10	30.3	30.1	30	29.9	30.4	30.3	30.1	30.3	29.7	29.9	29.8	29.8
1:52:15	30.3	30.1	30	30	30.4	30.2	30.1	30.4	29.7	29.9	29.8	29.8
1:52:20	30.3	30	30	30	30.4	30.2	30.1	30.3	29.7	29.9	29.8	29.8
1:52:25	30.2	30	29.9	29.9	30.4	30.2	30	30.3	29.8	29.9	29.8	29.8
1:52:30	30.2	30	29.9	29.9	30.3	30.2	30	30.3	29.7	29.9	29.8	29.8
1:52:35	30.2	30	29.9	29.9	30.4	30.2	30	30.3	29.7	29.9	29.8	29.8



Lampiran 13. Data suhu terkalibrasi penampang A-A 1 LPM

<b>Waktu</b>	<b>T13</b>	<b>T14</b>	<b>T15</b>	<b>T16</b>	<b>T17</b>	<b>T18</b>	<b>T19</b>	<b>T20</b>	<b>T21</b>	<b>T22</b>	<b>T23</b>
<b>[Detik]</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>	<b>°C</b>
0:00:00	37.4	64.4	65.2	65.1	65.0	63.4	64.4	64.4	65.3	64.8	64.8
0:00:05	32.6	64.5	65.2	65.1	65.1	63.4	64.4	64.6	65.3	64.8	64.7
0:00:10	32.6	64.7	65.3	65.2	65.0	63.5	64.4	64.7	65.3	64.8	64.7
0:00:15	30.6	64.7	65.3	65.6	65.0	63.5	64.4	64.6	65.3	64.8	64.7
0:00:20	37.1	64.8	65.3	65.6	65.0	63.5	64.5	64.9	65.2	64.8	64.7
0:00:25	31.7	64.8	65.3	65.6	65.0	63.3	64.4	64.9	65.3	64.8	64.7
0:00:30	31.2	64.7	65.3	65.5	65.0	63.3	64.4	64.9	65.2	64.8	64.7
0:00:35	56.6	64.6	65.3	65.5	65.0	63.4	64.4	64.9	65.2	64.8	64.7
0:00:40	36.0	64.6	65.3	65.5	65.0	63.4	64.5	64.9	65.2	64.8	64.8
0:00:45	28.3	64.5	65.3	65.4	65.0	63.4	64.5	64.9	65.2	64.8	64.8
0:00:50	28.6	64.5	65.3	65.4	64.9	63.3	64.5	64.8	65.2	64.8	64.8
0:00:55	28.3	64.6	65.3	65.4	64.9	63.3	64.4	64.8	65.2	64.8	64.7
0:01:00	28.6	64.6	65.3	65.4	64.9	63.3	64.4	64.8	65.2	64.8	64.7
0:01:05	30.2	64.6	65.3	65.4	65.0	63.3	64.5	64.9	65.2	64.8	64.6
0:01:10	27.7	64.6	65.3	65.5	65.0	63.2	64.4	64.8	65.2	64.7	64.6
0:01:15	27.7	64.6	65.3	65.5	65.0	63.2	64.4	64.8	65.2	64.7	64.6

3:10:10	25.3	26.3	25.8	25.9	25.9	25.7	26.4	26.3	26.0	25.7	27.4
3:10:15	25.3	26.3	25.8	25.7	26.1	25.7	26.5	26.3	25.9	25.7	27.4
3:10:20	25.2	26.3	25.8	25.7	26.0	25.7	26.5	26.3	25.9	25.7	27.4
3:10:25	25.2	26.3	25.8	25.7	26.0	25.7	26.5	26.3	25.9	25.7	27.4
3:10:30	25.3	26.5	25.8	25.7	25.9	25.7	26.4	26.3	26.0	25.7	27.4
3:10:35	25.4	26.4	25.9	25.7	25.9	25.6	26.5	26.3	25.9	25.7	27.4
3:10:40	25.3	26.3	25.8	25.7	25.9	25.7	26.4	26.3	25.9	25.7	27.5
3:10:45	25.3	26.3	25.8	25.7	25.9	25.7	26.6	26.3	25.9	25.7	27.5
3:10:50	25.4	26.3	25.9	25.7	25.9	25.6	26.7	26.4	26.0	25.8	27.5
3:10:55	25.3	26.3	25.8	25.7	25.9	25.7	26.5	26.4	26.1	25.7	27.5
3:11:00	25.3	26.3	25.8	25.7	25.9	25.8	26.6	26.4	26.0	25.7	27.5
3:11:05	25.3	26.3	25.8	25.7	26.1	25.7	26.5	26.3	25.9	25.6	27.4
3:11:10	25.3	26.4	25.8	25.7	26.0	25.6	26.5	26.3	25.9	25.6	27.5
3:11:15	25.3	26.4	25.7	25.6	26.2	25.6	26.6	26.4	26.0	25.7	27.5
3:11:20	25.3	26.3	25.8	25.7	25.9	25.7	26.5	26.4	26.0	25.6	27.5
3:11:25	25.4	26.3	25.8	25.7	25.9	25.7	26.5	26.4	26.0	25.7	27.5

Lampiran 14. Data suhu terkalibrasi penampang B-B dan T24, T28, T30, T31 1  
LPM

Waktu	T25	T26	T24	T28	T30	T31
[Detik]	°C	°C	°C	°C	°C	°C
0:00:00	65.3	65.2	66.0	27.1	27.9	26.7
0:00:05	65.3	65.2	66.0	27.1	27.7	26.5
0:00:10	65.3	65.2	66.1	27.1	27.5	26.4
0:00:15	65.4	65.3	66.0	27.2	27.5	26.9
0:00:20	65.4	65.3	66.0	27.3	27.5	27.4
0:00:25	65.4	65.3	66.0	27.5	27.5	27.0
0:00:30	65.4	65.3	66.0	27.6	27.4	26.7
0:00:35	65.4	65.3	66.1	27.7	27.3	26.5
0:00:40	65.3	65.3	66.1	29.0	27.3	26.4
0:00:45	65.3	65.2	66.0	28.6	27.2	26.6
0:00:50	65.3	65.2	66.0	28.2	27.2	26.7
0:00:55	65.3	65.2	66.0	28.2	27.2	27.0
0:01:00	65.3	65.2	66.0	31.6	27.2	26.6
0:01:05	65.3	65.2	66.0	30.4	27.2	26.6
0:01:10	65.3	65.2	66.0	29.4	27.1	26.5
0:01:15	65.3	65.2	66.0	28.9	27.1	26.5

3:10:10	26.0	26.0	27.2	34.2	26.8	24.9
3:10:15	26.0	26.0	27.1	34.2	26.8	25.0
3:10:20	26.0	26.0	27.1	34.2	26.8	25.1
3:10:25	25.8	26.0	27.0	34.2	26.8	25.1
3:10:30	25.9	26.0	27.0	34.2	26.8	25.2
3:10:35	25.9	25.9	27.0	34.0	26.8	25.3
3:10:40	25.8	25.8	27.0	34.0	26.8	25.3
3:10:45	25.9	25.8	27.0	34.1	26.8	25.1
3:10:50	25.8	25.8	27.1	34.1	26.8	25.1
3:10:55	25.8	25.9	27.1	34.1	26.8	25.0
3:11:00	25.8	25.9	27.1	34.1	26.8	24.9
3:11:05	25.9	25.9	27.1	34.1	26.8	24.8
3:11:10	25.8	25.9	27.1	34.0	26.8	24.9
3:11:15	25.8	25.9	27.1	34.0	26.8	24.8
3:11:20	25.8	25.9	27.1	34.0	26.8	24.8
3:11:25	25.8	25.9	27.1	34.0	26.8	25.0

Lampiran 15. Data suhu terkalibrasi penampang C-C 1 LPM

Waktu	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	65.3	64.7	64.3	63.8	65.4	65.7	65.6	65.1	63.3	64.8	64.7	64.7
0:00:05	65.3	64.7	64.3	63.8	65.4	65.6	65.6	65.1	63.3	64.8	64.7	64.7
0:00:10	65.3	64.7	64.3	63.8	65.4	65.6	65.6	65.1	63.3	64.8	64.7	64.7
0:00:15	65.3	64.7	64.3	63.8	65.4	65.6	65.6	65.1	63.3	64.8	64.7	64.7
0:00:20	65.2	64.7	64.3	63.8	65.4	65.6	65.6	65.1	63.2	64.8	64.7	64.7
0:00:25	65.2	64.7	64.2	63.6	65.4	65.6	65.6	65.0	63.1	64.8	64.7	64.7
0:00:30	65.2	64.7	64.2	63.7	65.4	65.6	65.6	65.0	63.0	64.8	64.7	64.7
0:00:35	65.2	64.7	64.2	63.6	65.4	65.6	65.6	65.0	62.9	64.8	64.7	64.7
0:00:40	65.2	64.7	64.2	63.6	65.4	65.6	65.6	65.0	63.0	64.8	64.7	64.7
0:00:45	65.2	64.7	64.2	63.7	65.4	65.6	65.6	65.0	63.0	64.8	64.7	64.7
0:00:50	65.2	64.7	64.2	63.6	65.4	65.6	65.6	65.0	63.0	64.8	64.7	64.7
0:00:55	65.2	64.7	64.2	63.7	65.4	65.6	65.6	65.0	62.9	64.8	64.7	64.7
0:01:00	65.2	64.7	64.2	63.6	65.4	65.6	65.6	65.0	62.7	64.8	64.7	64.7
0:01:05	65.2	64.7	64.2	63.6	65.4	65.6	65.6	65.0	62.8	64.8	64.7	64.7
0:01:10	65.2	64.7	64.2	63.6	65.4	65.6	65.6	65.0	62.7	64.7	64.7	64.7
0:01:15	65.2	64.7	64.2	63.5	65.4	65.6	65.6	65.0	62.7	64.7	64.7	64.7

3:10:10	25.7	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.5	25.4
3:10:15	25.7	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.5	25.4
3:10:20	25.7	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.5	25.4
3:10:25	25.7	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.5	25.4
3:10:30	25.7	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.5	25.4
3:10:35	25.7	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.5	25.4
3:10:40	25.7	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.5	25.4
3:10:45	25.7	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.5	25.4
3:10:50	25.7	25.6	25.4	26.3	25.9	26.0	26.5	27.5	26.3	25.3	25.5	25.4
3:10:55	25.6	25.6	25.4	26.3	25.9	26.0	26.5	27.5	26.3	25.3	25.4	25.4
3:11:00	25.6	25.6	25.4	26.3	25.9	26.0	26.5	27.5	26.3	25.3	25.4	25.4
3:11:05	25.6	25.6	25.4	26.3	25.9	26.0	26.5	27.5	26.3	25.3	25.4	25.4
3:11:10	25.6	25.6	25.4	26.3	25.9	26.0	26.5	27.5	26.3	25.3	25.4	25.4
3:11:15	25.6	25.6	25.4	26.3	25.9	26.0	26.5	27.5	26.3	25.3	25.4	25.4
3:11:20	25.6	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.4	25.4
3:11:25	25.6	25.6	25.4	26.3	25.9	26.1	26.5	27.5	26.3	25.3	25.4	25.4

Lampiran 16. Data suhu terkalibrasi penampang A-A 1,5 LPM

Waktu	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	68.1	64.2	64.4	64.9	64.8	63.7	63.9	64.1	64.7	64.7	64.7
0:00:05	34.8	64.4	64.6	64.9	64.8	63.6	64.1	64.5	65.1	64.7	64.7
0:00:10	31.6	64.3	64.7	64.8	64.9	63.6	64.3	64.3	64.6	64.7	64.7
0:00:15	35.5	64.4	64.7	65.0	64.9	63.4	64.3	64.5	64.9	64.7	64.7
0:00:20	30.5	64.3	64.8	65.1	64.8	63.3	64.5	64.6	64.9	64.8	64.6
0:00:25	28.9	64.6	64.8	65.2	64.9	63.4	64.5	64.6	65.0	64.8	64.6
0:00:30	28.9	64.5	64.9	65.2	64.9	63.4	64.4	64.7	65.1	64.8	64.6
0:00:35	28.5	64.5	64.8	65.2	65.0	63.2	64.4	64.8	65.1	64.8	64.7
0:00:40	27.5	64.4	64.8	65.2	64.9	63.4	64.4	64.8	65.1	64.7	64.7
0:00:45	28.4	64.3	64.8	65.2	64.9	63.3	64.3	64.8	65.1	64.6	64.7
0:00:50	29.6	64.3	64.7	65.2	64.9	63.3	64.3	64.7	65.0	64.6	64.7
0:00:55	27.9	64.3	64.6	65.1	64.9	63.3	64.2	64.6	65.0	64.6	64.5
0:01:00	28.1	64.3	64.6	65.1	64.9	63.2	64.2	64.7	65.0	64.6	64.5
0:01:05	28.1	64.4	64.7	65.1	64.9	63.3	64.2	64.7	65.0	64.6	64.5
0:01:10	27.6	64.4	64.7	65.2	64.9	62.9	64.3	64.7	65.0	64.6	64.5
0:01:15	29.5	64.4	64.8	65.2	64.9	62.7	64.3	64.7	65.0	64.6	64.5

2:30:45	26.7	27.5	26.9	26.8	27.2	26.9	27.7	27.8	27.3	27.2	29.0
2:30:50	26.7	27.6	27.0	26.9	27.1	26.9	27.8	27.7	27.4	27.2	29.0
2:30:55	26.7	27.6	27.0	26.9	27.2	27.1	27.9	27.7	27.4	27.3	29.0
2:31:00	26.7	27.6	26.9	26.8	27.2	27.1	27.8	27.8	27.4	27.3	29.0
2:31:05	26.6	27.6	26.9	26.9	27.2	26.9	27.9	27.8	27.4	27.3	29.0
2:31:10	26.7	27.7	27.0	26.9	27.2	27.0	27.9	27.8	27.4	27.2	29.0
2:31:15	26.7	27.7	26.9	26.9	27.2	27.0	27.8	27.7	27.4	27.2	29.0
2:31:20	26.7	27.5	26.9	26.9	27.3	27.0	27.7	27.7	27.3	27.2	28.9
2:31:25	26.6	27.6	27.0	26.8	27.2	27.0	27.7	27.7	27.3	27.1	28.9
2:31:30	26.7	27.6	26.9	26.8	27.2	27.0	27.7	27.6	27.3	27.1	28.9
2:31:35	26.6	27.6	26.9	26.8	27.1	26.9	27.7	27.7	27.3	27.1	28.9
2:31:40	26.7	27.6	26.9	26.9	27.1	26.9	27.7	27.7	27.4	27.1	28.9
2:31:45	26.7	27.8	27.0	26.8	27.3	27.0	27.8	27.7	27.3	27.1	28.9
2:31:50	26.7	27.7	26.9	26.8	27.2	27.0	27.8	27.7	27.4	27.2	29.0
2:31:55	26.7	27.6	27.0	26.9	27.2	27.0	27.8	27.7	27.3	27.2	28.9
2:32:00	26.7	27.6	26.9	26.9	27.2	26.9	27.7	27.7	27.4	27.1	29.0

Lampiran 17. Data suhu terkalibrasi penampang B-B dan T24, T28, T30, T31 1,5 LPM

Waktu	T25	T26	T24	T28	T30	T31
[Detik]	°C	°C	°C	°C	°C	°C
0:00:00	65.7	65.5	65.7	27.0	28.9	27.3
0:00:05	65.6	65.5	65.6	27.0	28.7	27.4
0:00:10	65.7	65.5	65.8	26.9	28.1	27.4
0:00:15	65.7	65.5	66.0	26.8	27.8	27.5
0:00:20	65.6	65.6	66.0	27.9	27.7	27.5
0:00:25	65.6	65.5	66.0	30.9	27.7	27.5
0:00:30	65.6	65.5	66.1	28.7	27.7	27.4
0:00:35	65.6	65.5	66.0	28.7	27.7	27.4
0:00:40	65.7	65.5	66.1	28.9	27.6	27.4
0:00:45	65.7	65.5	66.0	30.3	27.7	27.4
0:00:50	65.7	65.5	66.1	29.5	27.7	27.5
0:00:55	65.6	65.5	66.0	29.8	27.6	27.4
0:01:00	65.6	65.5	66.0	43.0	27.6	27.4
0:01:05	65.6	65.4	66.0	29.9	27.6	27.4
0:01:10	65.7	65.5	66.0	29.9	27.6	27.6
0:01:15	65.6	65.5	66.0	32.3	27.6	27.5

2:30:45	27.9	27.9	28.6	34.2	28.3	26.9
2:30:50	27.9	27.9	28.6	34.2	28.3	26.9
2:30:55	27.9	27.8	28.7	34.2	28.3	27.0
2:31:00	27.8	27.9	28.7	34.2	28.3	26.9
2:31:05	27.8	27.8	28.7	34.2	28.3	26.9
2:31:10	28.0	27.9	28.7	34.4	28.3	27.0
2:31:15	27.9	27.9	28.7	34.4	28.3	27.0
2:31:20	27.9	27.8	28.7	34.2	28.3	27.0
2:31:25	27.9	27.8	28.7	34.2	28.3	27.0
2:31:30	27.9	27.9	28.6	34.2	28.3	27.0
2:31:35	27.9	27.9	28.7	34.2	28.3	27.0
2:31:40	27.9	27.8	28.7	34.1	28.4	27.0
2:31:45	27.9	27.9	28.6	34.1	28.4	27.0
2:31:50	27.8	27.8	28.8	34.1	28.3	27.0
2:31:55	27.8	27.8	28.7	34.0	28.3	26.9
2:32:00	27.9	27.8	28.6	34.0	28.3	26.9

Lampiran 18. Data suhu terkalibrasi penampang C-C 1,5 LPM

Waktu	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	65.4	64.8	64.3	63.9	99917.3	65.4	64.9	64.7	63.4	64.8	64.6	64.6
0:00:05	65.4	64.8	64.4	63.9	99917.3	65.3	64.9	64.7	63.4	64.8	64.6	64.5
0:00:10	65.4	64.9	64.4	63.9	99917.3	65.4	65.0	64.7	63.3	64.7	64.5	64.5
0:00:15	65.4	64.9	64.4	63.8	99917.3	65.3	65.0	64.7	63.2	64.7	64.5	64.5
0:00:20	65.4	64.9	64.3	63.8	99917.3	65.3	65.0	64.7	63.2	64.7	64.5	64.5
0:00:25	65.3	64.9	64.3	63.8	99917.3	65.3	65.0	64.7	63.3	64.8	64.6	64.5
0:00:30	65.3	64.8	64.3	63.8	99917.3	65.3	65.0	64.7	63.2	64.8	64.6	64.5
0:00:35	65.3	64.8	64.3	63.6	99917.3	65.3	64.9	64.6	62.8	64.7	64.6	64.5
0:00:40	65.3	64.8	64.3	63.5	99917.3	65.3	64.9	64.6	62.7	64.7	64.6	64.5
0:00:45	65.3	64.8	64.3	63.7	99917.3	65.3	64.9	64.7	62.9	64.7	64.8	64.5
0:00:50	65.2	64.7	64.3	63.6	99917.3	65.2	64.9	64.6	62.9	64.7	64.6	64.5
0:00:55	65.2	64.8	64.2	63.6	99917.3	65.2	64.9	64.6	62.7	64.7	64.4	64.4
0:01:00	65.2	64.8	64.2	63.6	99917.3	65.2	64.9	64.6	62.5	64.6	64.4	64.4
0:01:05	65.3	64.8	64.3	63.5	99917.3	65.2	64.9	64.6	62.4	64.7	64.5	64.5
0:01:10	65.3	64.8	64.3	63.4	99917.3	65.2	64.9	64.6	61.9	64.7	64.5	64.5
0:01:15	65.2	64.7	64.2	63.4	99917.3	65.2	64.8	64.5	61.9	64.7	64.5	64.5

2:30:45	27.3	27.2	27.0	27.8	27.4	27.4	27.5	28.6	27.6	26.8	26.8	26.7
2:30:50	27.3	27.2	27.0	27.8	27.4	27.4	27.5	28.6	27.6	26.7	26.8	26.8
2:30:55	27.4	27.2	27.0	27.8	27.4	27.4	27.5	28.6	27.6	26.7	26.8	26.8
2:31:00	27.4	27.2	27.0	27.8	27.4	27.4	27.5	28.6	27.6	26.7	26.8	26.8
2:31:05	27.4	27.2	27.0	27.8	27.4	27.4	27.5	28.6	27.6	26.8	26.8	26.8
2:31:10	27.4	27.2	27.0	27.9	27.4	27.4	27.5	28.6	27.6	26.8	26.7	26.7
2:31:15	27.4	27.2	27.0	27.8	27.4	27.4	27.5	28.6	27.6	26.8	26.7	26.8
2:31:20	27.4	27.2	27.0	27.8	27.4	27.4	27.5	28.6	27.6	26.7	26.8	26.8
2:31:25	27.4	27.2	27.0	27.9	27.4	27.4	27.5	28.6	27.6	26.7	26.8	26.8
2:31:30	27.4	27.2	27.0	27.9	27.4	27.4	27.5	28.6	27.6	26.8	26.8	26.8
2:31:35	27.4	27.2	27.0	27.9	27.4	27.4	27.5	28.6	27.6	26.7	26.8	26.8
2:31:40	27.4	27.2	27.0	27.9	27.4	27.4	27.5	28.6	27.7	26.8	26.8	26.8
2:31:45	27.3	27.2	27.0	27.9	27.4	27.4	27.5	28.6	27.7	26.8	26.8	26.8
2:31:50	27.4	27.2	27.0	27.9	27.4	27.4	27.5	28.6	27.7	26.7	26.7	26.8
2:31:55	27.4	27.2	27.0	27.8	27.4	27.4	27.5	28.6	27.7	26.7	26.7	26.8
2:32:00	27.4	27.2	27.0	27.9	27.4	27.4	27.5	28.6	27.6	26.7	26.7	26.8

Lampiran 19. Data suhu terkalibrasi penampang A-A 2 LPM

Waktu	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	63.3	63.0	63.7	64.1	64.1	62.4	62.8	63.7	64.2	63.6	63.7
0:00:05	66.6	63.7	63.6	64.0	64.4	62.9	63.3	63.7	64.2	64.0	64.1
0:00:10	33.8	63.6	63.9	64.1	64.1	61.3	63.1	63.7	64.3	64.0	64.1
0:00:15	30.7	63.6	64.0	64.2	64.4	63.1	63.5	63.9	64.3	64.0	64.0
0:00:20	32.0	63.7	64.2	64.3	64.3	62.7	63.8	64.0	64.3	64.0	64.0
0:00:25	37.2	64.0	64.2	64.6	64.3	62.4	63.8	64.1	64.4	64.0	64.0
0:00:30	28.4	63.9	64.2	64.6	64.4	61.8	63.8	64.1	64.5	64.0	64.0
0:00:35	27.6	63.6	64.2	64.6	64.4	58.1	63.8	64.1	64.5	64.0	64.0
0:00:40	30.4	63.5	64.3	64.6	64.4	61.5	63.9	64.1	64.5	63.9	64.0
0:00:45	28.7	63.4	64.1	64.6	64.3	62.4	63.7	64.1	64.5	63.9	64.1
0:00:50	27.7	63.5	64.0	64.6	64.4	56.3	63.6	64.1	64.5	63.9	64.0
0:00:55	28.1	63.6	64.0	64.6	64.4	51.5	63.6	64.1	64.5	63.9	63.9
0:01:00	27.6	63.7	64.0	64.6	64.3	58.8	63.6	64.0	64.5	63.9	63.9
0:01:05	28.0	63.7	64.0	64.6	64.3	59.2	63.6	64.0	64.5	63.9	63.9
0:01:10	27.6	63.6	64.0	64.5	64.4	59.7	63.7	64.1	64.4	63.9	63.9
0:01:15	33.3	63.6	64.1	64.5	64.4	36.3	63.7	64.0	64.4	63.9	63.9

1:45:50	25.9	26.7	26.0	26.1	26.8	26.0	27.0	26.9	26.6	26.0	27.8
1:45:55	25.9	26.7	26.1	26.1	26.9	26.1	27.1	27.0	26.7	26.1	27.9
1:46:00	25.9	26.7	26.1	26.1	26.9	26.1	27.1	27.0	26.7	26.1	27.9
1:46:05	25.9	26.7	26.1	26.2	26.9	26.0	27.1	26.9	26.7	26.1	27.9
1:46:10	25.9	26.7	26.1	26.2	26.8	26.0	27.0	26.9	26.6	26.0	27.8
1:46:15	26.0	26.7	26.1	26.2	26.9	26.0	27.0	26.9	26.6	26.0	27.8
1:46:20	25.9	26.7	26.1	26.2	26.9	26.0	27.0	27.0	26.7	26.0	27.8
1:46:25	26.0	26.7	26.1	26.2	26.8	26.0	27.0	27.0	26.7	26.0	27.8
1:46:30	26.0	26.7	26.1	26.2	26.8	26.0	27.1	27.0	26.7	26.0	27.8
1:46:35	25.9	26.6	26.0	26.2	26.8	26.0	27.1	27.0	26.7	26.0	27.8
1:46:40	25.9	26.6	26.0	26.2	26.8	26.0	27.1	27.0	26.7	26.0	27.8
1:46:45	25.9	26.6	26.0	26.2	26.8	26.0	27.1	27.0	26.7	26.0	27.8
1:46:50	25.9	26.6	26.1	26.2	26.8	26.0	27.1	27.0	26.7	26.0	27.8
1:46:55	25.9	26.7	26.2	26.2	26.8	26.1	27.2	27.0	26.7	26.2	27.8
1:47:00	25.9	26.8	26.1	26.2	26.8	26.0	27.1	26.9	26.7	26.1	27.8
1:47:05	26.0	26.8	26.1	26.2	26.8	26.1	27.2	27.0	26.7	26.1	27.8

Lampiran 20. Data suhu terkalibrasi penampang B-B dan T24, T28, T30, T31 2  
LPM

Waktu	T25	T26	T24	T28	T30	T31
[Detik]	°C	°C	°C	°C	°C	°C
0:00:00	64.8	64.6	64.5	24.5	27.7	25.6
0:00:05	65.3	65.1	64.6	25.2	28.0	26.1
0:00:10	65.3	65.1	65.3	25.2	27.8	26.1
0:00:15	65.3	65.2	65.2	25.1	27.5	26.1
0:00:20	65.3	65.1	65.4	25.3	27.5	26.1
0:00:25	65.3	65.1	65.5	36.3	27.6	26.0
0:00:30	65.3	65.1	65.5	43.4	27.6	26.0
0:00:35	65.3	65.1	65.5	40.6	27.6	26.0
0:00:40	65.2	65.1	65.5	52.0	27.6	26.0
0:00:45	65.2	65.1	65.5	57.6	27.5	26.0
0:00:50	65.2	65.0	65.5	58.0	27.5	26.2
0:00:55	65.3	65.1	65.5	60.3	27.5	26.2
0:01:00	65.3	65.1	65.5	60.0	27.4	26.9
0:01:05	65.3	65.1	65.5	59.4	27.3	26.9
0:01:10	65.3	65.1	65.5	59.2	27.3	26.4
0:01:15	65.3	65.1	65.5	59.3	27.3	26.2

1:45:50	26.7	26.6	27.6	34.2	26.8	24.8
1:45:55	26.9	26.7	27.6	34.2	26.8	24.8
1:46:00	26.9	26.7	27.6	34.2	26.8	24.7
1:46:05	26.9	26.7	27.6	34.2	26.8	24.8
1:46:10	26.9	26.8	27.6	34.2	26.8	24.6
1:46:15	26.9	26.8	27.5	34.2	26.8	24.6
1:46:20	26.9	26.8	27.5	34.2	26.8	24.6
1:46:25	26.9	26.8	27.5	34.2	26.8	24.6
1:46:30	26.9	26.8	27.5	34.2	26.8	24.7
1:46:35	26.9	26.8	27.5	34.2	26.8	24.7
1:46:40	26.9	26.8	27.6	34.2	26.8	24.9
1:46:45	26.9	26.8	27.6	34.2	26.8	24.9
1:46:50	26.9	26.8	27.5	34.1	26.8	24.8
1:46:55	26.9	26.8	27.5	34.0	26.8	24.6
1:47:00	26.9	26.7	27.4	34.0	26.8	24.5
1:47:05	26.9	26.7	27.4	34.0	26.8	24.5



Lampiran 21. Data suhu terkalibrasi penampang C-C 2 LPM

Waktu	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	64.4	63.6	63.2	62.6	64.2	64.3	63.8	64.2	62.2	63.7	63.4	63.3
0:00:05	64.8	64.1	63.7	63.1	64.7	64.7	64.3	64.6	62.7	64.2	63.9	63.8
0:00:10	64.9	64.2	63.7	63.1	64.7	64.7	64.3	64.5	62.7	64.2	63.9	63.8
0:00:15	64.8	64.2	63.6	63.0	64.7	64.7	64.3	64.5	62.6	64.2	64.0	63.8
0:00:20	64.8	64.2	63.5	63.0	64.7	64.7	64.3	64.9	62.4	64.2	63.9	63.8
0:00:25	64.8	64.2	63.5	62.9	64.7	64.7	64.3	64.8	62.5	64.2	63.9	63.8
0:00:30	64.7	64.2	63.5	62.9	64.7	64.6	64.3	64.6	62.6	64.2	63.9	63.8
0:00:35	64.7	64.2	63.5	62.8	64.7	64.6	64.3	64.8	62.4	64.2	63.9	63.8
0:00:40	64.7	64.1	63.5	62.5	64.7	64.6	64.3	64.6	61.4	64.1	63.9	63.8
0:00:45	64.7	64.1	63.5	62.3	64.7	64.6	64.2	64.7	61.4	64.1	63.9	63.8
0:00:50	64.7	64.1	63.5	62.6	64.7	64.6	64.3	64.4	60.6	64.1	63.9	63.8
0:00:55	64.7	64.1	63.5	62.6	64.7	64.6	64.2	64.3	61.2	64.1	63.9	63.8
0:01:00	64.7	64.1	63.5	62.4	64.7	64.6	64.2	64.3	60.5	64.1	63.9	63.8
0:01:05	64.7	64.1	63.5	62.2	64.7	64.6	64.2	64.3	59.5	64.1	63.9	63.8
0:01:10	64.7	64.1	63.5	61.9	64.7	64.6	64.2	64.2	59.0	64.1	63.9	63.8
0:01:15	64.7	64.1	63.5	61.7	64.6	64.6	64.2	64.2	57.2	64.1	63.9	63.8

1:45:50	26.4	26.1	25.9	26.7	26.5	26.3	26.4	28.1	26.8	25.8	25.9	25.7
1:45:55	26.3	26.1	25.9	26.7	26.5	26.3	26.4	28.1	26.8	25.8	25.9	25.8
1:46:00	26.4	26.1	25.9	26.7	26.5	26.3	26.4	28.1	26.7	25.8	25.9	25.7
1:46:05	26.4	26.1	25.9	26.7	26.5	26.3	26.4	28.1	26.7	25.8	25.9	25.8
1:46:10	26.4	26.1	25.9	26.7	26.5	26.4	26.4	28.0	26.7	25.8	25.9	25.8
1:46:15	26.4	26.1	25.9	26.7	26.5	26.4	26.4	28.1	26.7	25.8	25.9	25.8
1:46:20	26.4	26.1	25.9	26.7	26.5	26.4	26.4	28.2	26.8	25.8	25.9	25.8
1:46:25	26.4	26.1	25.9	26.7	26.5	26.4	26.4	27.9	26.8	25.8	25.9	25.8
1:46:30	26.4	26.1	25.9	26.7	26.5	26.4	26.5	28.0	26.8	25.8	25.9	25.8
1:46:35	26.4	26.1	25.9	26.7	26.5	26.4	26.5	28.2	26.7	25.8	25.8	25.7
1:46:40	26.4	26.1	25.9	26.7	26.5	26.4	26.5	28.1	26.7	25.8	25.8	25.7
1:46:45	26.4	26.1	25.9	26.7	26.5	26.4	26.5	28.0	26.7	25.8	25.8	25.7
1:46:50	26.3	26.1	25.9	26.7	26.5	26.4	26.4	28.1	26.7	25.8	25.8	25.7
1:46:55	26.3	26.1	25.9	26.7	26.5	26.4	26.5	28.0	26.7	25.8	25.8	25.7
1:47:00	26.4	26.1	25.9	26.7	26.5	26.4	26.5	28.1	26.7	25.7	25.8	25.7
1:47:05	26.4	26.1	25.9	26.7	26.5	26.4	26.5	28.1	26.7	25.7	25.8	25.7

Lampiran 22. Data suhu terkalibrasi penampang A-A 2,5 LPM

Waktu	T13	T14	T15	T16	T17	T18	T19	T20	T21	T22	T23
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	27.6	63.5	63.9	64.3	64.3	55.1	63.7	64.3	64.7	64.6	64.8
0:00:05	26.8	63.5	63.9	64.4	64.3	53.3	63.7	64.3	64.6	64.6	64.6
0:00:10	27.3	63.4	63.9	64.3	64.3	52.9	63.8	64.2	64.6	64.5	64.4
0:00:15	27.9	63.9	64.6	64.8	64.3	58.6	64.0	64.3	64.6	64.7	64.2
0:00:20	27.4	64.2	64.6	64.9	64.3	60.3	64.0	64.3	64.6	64.2	64.0
0:00:25	29.8	63.9	64.5	64.9	64.3	52.1	63.9	64.3	64.6	64.2	64.1
0:00:30	28.3	63.8	64.5	64.9	64.2	51.7	63.9	64.2	64.6	64.0	64.1
0:00:35	27.9	63.6	64.6	64.9	64.2	49.4	63.9	64.2	64.6	64.0	64.1
0:00:40	31.3	63.6	64.5	64.8	64.2	57.1	63.9	64.3	64.6	64.1	64.1
0:00:45	26.9	63.7	64.6	64.8	64.3	38.7	63.9	64.3	64.7	64.1	64.2
0:00:50	27.0	63.8	64.5	64.8	64.3	54.0	63.9	64.3	64.7	64.2	64.2
0:00:55	27.1	63.7	64.5	64.9	64.3	50.8	63.9	64.3	64.7	64.2	64.2
0:01:00	27.3	63.7	64.4	64.8	64.3	44.0	63.9	64.3	64.7	64.2	64.2
0:01:05	28.1	61.4	63.8	63.4	64.3	42.7	61.5	62.6	61.5	64.2	64.1
0:01:10	26.6	61.3	63.9	64.6	64.2	40.0	63.7	63.9	64.4	64.1	64.1
0:01:15	27.9	63.6	64.2	64.5	64.0	44.3	63.7	63.9	64.4	63.9	64.3

1:51:20	26.3	27.5	26.9	26.9	27.0	26.8	27.6	27.6	27.3	27.4	29.1
1:51:25	26.4	27.5	26.9	26.8	27.1	26.6	27.7	27.5	27.4	27.3	29.0
1:51:30	26.3	27.6	26.9	27.0	27.0	26.7	27.5	27.5	27.3	27.3	29.1
1:51:35	26.2	27.4	26.7	26.9	27.0	26.8	27.6	27.5	27.3	27.4	29.0
1:51:40	26.2	27.4	26.7	26.7	26.9	26.7	27.5	27.5	27.3	27.4	29.0
1:51:45	26.2	27.3	26.7	26.8	26.9	26.7	27.5	27.5	27.2	27.3	29.1
1:51:50	26.2	27.4	26.8	26.8	26.9	26.7	27.8	27.6	27.3	27.3	29.0
1:51:55	26.2	27.3	26.7	26.8	26.9	26.5	27.5	27.4	27.2	27.3	29.1
1:52:00	26.5	27.4	26.9	26.7	26.9	26.7	27.5	27.6	27.2	27.3	29.1
1:52:05	26.2	27.5	26.7	26.8	26.9	26.7	27.5	27.6	27.2	27.2	29.0
1:52:10	26.2	27.2	26.7	26.9	26.9	26.5	27.7	27.6	27.2	27.1	29.1
1:52:15	26.2	27.6	26.8	26.8	27.0	26.6	27.5	27.5	27.3	27.3	29.0
1:52:20	26.3	27.5	26.8	26.9	27.2	26.5	27.5	27.4	27.2	27.3	29.0
1:52:25	26.2	27.3	26.8	26.9	26.9	26.5	27.5	27.6	27.3	27.3	29.1
1:52:30	26.3	27.6	26.8	26.7	26.9	26.6	27.5	27.6	27.2	27.3	29.1
1:52:35	26.3	27.3	26.7	26.8	27.0	26.5	27.6	27.6	27.2	27.3	29.1

Lampiran 23. Data suhu terkalibrasi penampang B-B dan T24, T28, T30, T31 2,5  
LPM

Waktu	T25	T26	T24	T28	T30	T31
[Detik]	°C	°C	°C	°C	°C	°C
0:00:00	65.2	65.0	65.6	29.2	27.2	27.3
0:00:05	65.1	65.0	65.6	29.2	27.1	27.3
0:00:10	65.2	65.0	65.7	28.8	27.1	27.2
0:00:15	65.1	64.9	65.7	27.5	27.1	27.2
0:00:20	65.1	64.9	65.7	25.7	27.1	27.1
0:00:25	65.1	65.0	65.7	37.4	27.1	27.1
0:00:30	65.1	65.0	65.6	33.8	27.2	27.1
0:00:35	65.1	65.0	65.6	33.1	27.1	27.2
0:00:40	65.1	65.1	65.6	32.9	27.0	27.2
0:00:45	65.1	65.0	65.7	39.7	27.0	27.2
0:00:50	65.1	65.0	65.7	37.1	27.0	27.2
0:00:55	65.1	65.0	65.7	38.5	27.0	27.1
0:01:00	65.1	65.0	65.7	45.9	27.0	27.0
0:01:05	65.1	65.0	65.7	41.4	27.0	27.0
0:01:10	65.1	65.0	64.7	43.8	27.0	27.1
0:01:15	65.0	64.9	65.3	37.9	27.0	27.0

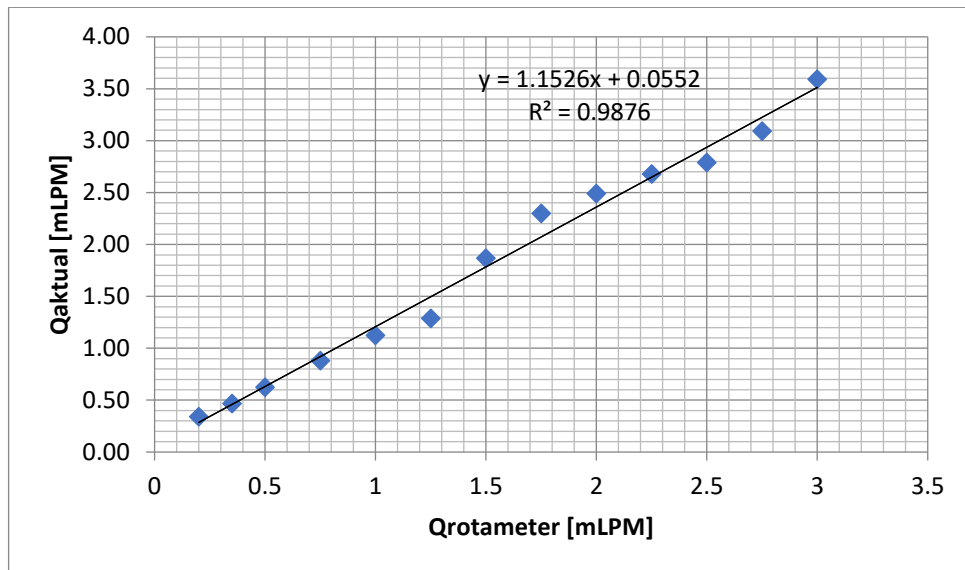
1:51:20	27.1	27.2	28.5	34.2	28.1	27.0
1:51:25	27.2	27.4	28.5	34.2	28.1	27.4
1:51:30	27.2	27.3	28.4	34.2	28.1	27.4
1:51:35	27.1	27.1	28.5	34.2	28.1	27.1
1:51:40	27.1	27.2	28.5	34.2	28.1	27.1
1:51:45	27.1	27.3	28.5	34.2	28.1	27.1
1:51:50	27.1	27.2	28.4	34.2	28.1	27.1
1:51:55	27.2	27.2	28.4	34.2	28.1	27.2
1:52:00	27.3	27.3	28.4	34.2	28.1	27.2
1:52:05	27.3	27.3	28.4	34.2	28.1	27.2
1:52:10	27.0	27.2	28.4	34.2	28.1	27.0
1:52:15	27.1	27.2	28.4	34.1	28.1	27.0
1:52:20	27.1	27.2	28.4	34.1	28.1	27.2
1:52:25	27.1	27.2	28.5	34.1	28.2	27.1
1:52:30	27.1	27.2	28.5	34.1	28.2	27.0
1:52:35	27.1	27.2	28.5	34.0	28.2	27.0

Lampiran 24. Data suhu terkalibrasi penampang C-C 2,5 LPM

Waktu	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
[Detik]	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C	°C
0:00:00	64.7	64.5	63.8	63.1	64.9	64.9	64.6	64.2	62.0	63.8	63.8	63.8
0:00:05	64.8	64.5	63.8	63.0	64.8	64.8	64.7	64.3	61.7	63.9	63.8	63.8
0:00:10	64.7	64.5	63.5	62.4	64.9	64.8	64.6	64.1	60.6	63.8	63.7	63.8
0:00:15	64.7	64.5	63.5	61.7	64.8	64.8	64.6	64.0	60.6	64.3	64.3	64.2
0:00:20	64.7	64.5	63.5	62.5	64.9	64.8	64.7	64.1	59.8	64.2	64.3	64.2
0:00:25	64.7	64.4	63.6	62.5	64.8	64.8	64.7	64.1	59.4	64.2	64.2	64.1
0:00:30	64.7	64.4	63.7	61.5	64.8	64.8	64.6	64.2	56.4	64.3	64.1	64.1
0:00:35	64.7	64.4	63.7	61.0	64.8	64.9	64.6	64.2	54.3	64.3	64.0	64.1
0:00:40	64.7	64.3	63.7	59.1	64.9	64.9	64.6	64.2	53.1	64.3	64.1	64.1
0:00:45	64.7	64.3	63.6	59.3	64.9	64.9	64.5	64.1	52.1	64.3	64.1	64.1
0:00:50	64.7	64.2	63.6	57.5	64.8	64.8	64.5	64.2	50.1	64.3	64.1	64.1
0:00:55	64.7	64.2	63.5	55.8	64.9	64.9	64.5	64.0	48.7	64.3	64.1	64.1
0:01:00	64.7	64.3	63.5	53.5	64.8	64.9	64.5	64.1	47.8	64.2	64.1	64.1
0:01:05	64.6	64.3	63.4	53.1	64.9	64.8	64.5	64.0	47.0	64.2	64.1	64.1
0:01:10	64.7	64.3	63.4	52.2	64.5	64.9	64.6	64.0	46.4	64.3	64.1	64.1
0:01:15	64.4	64.3	63.3	48.4	64.8	64.8	64.5	64.1	45.3	64.3	64.1	64.1

1:51:20	27.3	27.2	27.1	27.9	27.7	27.7	27.7	29.0	27.6	26.9	26.9	26.9
1:51:25	27.3	27.2	27.1	27.9	27.8	27.7	27.6	28.9	27.6	26.9	26.9	26.9
1:51:30	27.2	27.1	27.0	27.9	27.7	27.6	27.6	28.9	27.6	26.9	26.9	26.9
1:51:35	27.2	27.1	27.0	27.9	27.7	27.6	27.6	28.9	27.6	26.8	26.8	26.8
1:51:40	27.2	27.1	27.0	27.9	27.7	27.6	27.6	28.8	27.6	26.8	26.8	26.8
1:51:45	27.3	27.2	27.1	27.9	27.8	27.7	27.6	29.0	27.6	26.8	26.8	26.8
1:51:50	27.3	27.2	27.1	28.0	27.7	27.7	27.6	28.9	27.6	26.8	26.8	26.8
1:51:55	27.2	27.2	27.1	27.9	27.7	27.7	27.6	28.9	27.5	26.8	26.8	26.8
1:52:00	27.2	27.2	27.1	27.9	27.7	27.7	27.6	29.0	27.6	26.8	26.8	26.8
1:52:05	27.2	27.2	27.1	27.9	27.7	27.7	27.6	28.9	27.6	26.8	26.8	26.8
1:52:10	27.2	27.2	27.1	27.9	27.7	27.7	27.6	28.9	27.5	26.8	26.8	26.8
1:52:15	27.2	27.2	27.1	28.0	27.7	27.6	27.6	29.0	27.5	26.8	26.8	26.8
1:52:20	27.2	27.1	27.1	28.0	27.7	27.6	27.6	28.9	27.5	26.8	26.8	26.8
1:52:25	27.1	27.1	27.0	27.9	27.7	27.6	27.6	28.9	27.6	26.8	26.8	26.8
1:52:30	27.1	27.1	27.0	27.9	27.6	27.6	27.6	28.9	27.5	26.8	26.8	26.8
1:52:35	27.1	27.1	27.0	27.9	27.7	27.6	27.6	28.9	27.5	26.8	26.8	26.8

Lampiran 25. Grafik dan tabel terkalibrasi rotameter air



<b>Debit LPM</b>	<b>Hasil Kalibrasi LPM</b>
1	1.21
1.5	1.78
2	2.36
2.5	2.94