

## LAMPIRAN

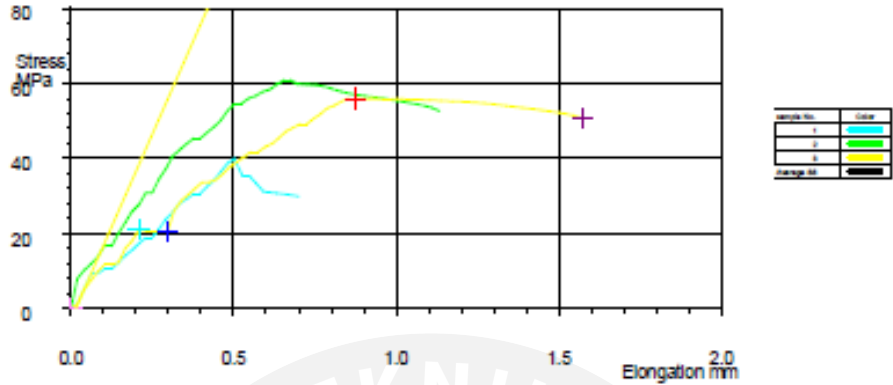
Lampiran 1. Hasil komposit serat bambu betung



Lampiran 2. Hasil pengujian kekuatan tarik (variasi orientasi lurus)

Sampel nama	KOMPOSIT KODE SAMPEL S1
Lot/No.	205-2050
Preparation	ROZZA DWIVANI
Operator	HARITS
User	ROZZA DWIVANI

Tension test/Result



Tension test/Result

Machine name	RTF	Test type	Tension
Strain input 1	50 mm 100 %RO	Test speed	5.0 mm/min
Strain input 2	Not used	Chart speed	OFF
Machine rigidity	0 mm/kgf		
Point data(Load)	0 0 0	Point data(Elong)	0 0 0
	N 0 0 0	mm	0 0 0
Elastic modulus anal.	Interval 1 100	Initial sample length	Gage leng 50 mm
Load	Pitch 5 N	Origin of elongation	Start
Elong adjust	No	Break point measurem	0.5 N
Save SS curve	Yes		

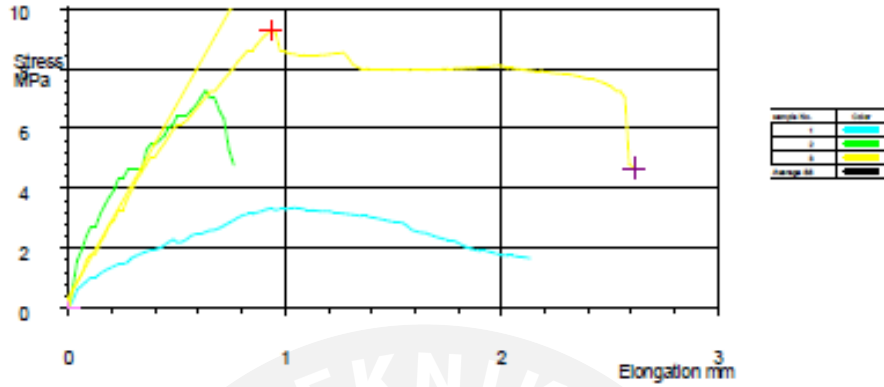
Test date	2022/06/14	Temperature	25 C
Humidity	60 %RH	Sample name	KOMPOSIT KODE SAMPEL S1
Lot No.	205-2050	Preparation	ROZZA DWIVANI
Operator	HARITS	User	ROZZA DWIVANI

TestID=1492	Width	Thickness	Sectional ar	Maximun poin Load	Maximun poin Stress	Break Elongation	Break Strain
Test No	mm	mm	mm2	kgf	N/mm2	mm	%GL
1	15.470	7.1500	110.61	448.69	39.781	0.7000	1.4000
2	15.940	6.7400	107.44	666.45	60.833	1.1325	2.2650
3	16.140	6.8000	109.75	625.65	55.904	1.5725	3.1450
Average	15.850	6.8967	109.27	580.26	52.173	1.1350	2.2700

Lampiran 3. Hasil pengujian kekuatan tarik (variasi orientasi lurus)

Sample name	KOMPOSIT KODE SAMPEL S2
Lot No.	205-2050
Preparation	ROZZA DWIVANI
Operator	HARITS
User	ROZZA DWIVANI

Tension test/Result



Machine name	RTF	Test type	Tension
Strain input 1	50 mm 100 %RO	Test speed	5.0 mm/min
Strain input 2	Not used	Chart speed	OFF
Machine rigidity	0 mm/kgf		
Point data/Load	0 0 0	Point data/Elong	0 0 0
	N 0 0 0	mm	0 0 0
Elastic modulus anal.	Interval 1 100	Initial sample length	Gage leng 50 mm
Load	Pitch 5 N	Origin of elongation	Start
Elong adjust	No	Break point measurem	0.5 N
Save SS curve	Yes		

Test date	2022/05/14	Temperature	25 C
Humidity	60 %RH	Sample name	KOMPOSIT KODE SAMPEL S2
Lot No.	205-2050	Preparation	ROZZA DWIVANI
Operator	HARITS	User	ROZZA DWIVANI

TestID=1493	Width	Thickness	Sectional ar	Maximum poin Load	Maximum poin Stress	Break Elongation	Break Strain
Test No	mm	mm	mm2	kgf	N/mm2	mm	%GL
1	16.060	7.9500	127.68	43.451	3.3374	2.1325	4.2650
2	15.290	7.8000	119.26	88.160	7.2492	0.7625	1.5260
3	15.980	6.8000	108.66	102.60	9.2597	2.6125	5.2250
Average	15.777	7.5167	118.53	78.071	6.6154	1.8358	3.6717

Lampiran 4. Tabel hasil pengujian denistas (Variasi orientasi lurus)

No	Berat (g)	Diameter (cm)	Jari-jari	Tinggi	Volume	Densitas
1	3,07	4,7	2,35	0,15	2,601098	1,180271
2	2,1	4,7	2,35	0,11	1,907472	1,100934
3	3,05	4,7	2,35	0,14	2,427691	1,256338
4	3,04	4,7	2,35	0,16	2,774504	1,095691
5	3	4,7	2,35	0,16	2,774504	1,081274
6	2,7	4,7	2,35	0,12	2,080878	1,297529
7	2,78	4,7	2,35	0,14	2,427691	1,145121
8	2,96	4,7	2,35	0,15	2,601098	1,137981
9	3,12	4,7	2,35	0,17	2,947911	1,058377
10	3,07	4,7	2,35	0,14	2,427691	1,264576
X						1,161809
SD						0,084568
CV						7,278964
E						0,026743
E %						6,380293

Lampiran 5. Tabel hasil pengujian denistas (Variasi orientasi acak)

No	Berat (g)	Diameter (cm)	Jari-jari	Tinggi	Volume	Densitas
1	3,2	4,7	2,35	0,24	4,161756	0,768906
2	2,91	4,7	2,35	0,21	3,641537	0,799113
3	3,4	4,7	2,35	0,29	5,028789	0,676107
4	2,72	4,7	2,35	0,19	3,294724	0,825562
5	3,3	4,7	2,35	0,23	3,98835	0,82741
6	3,22	4,7	2,35	0,24	4,161756	0,773712
7	3,15	4,7	2,35	0,24	4,161756	0,756892
8	3,17	4,7	2,35	0,25	4,335163	0,73123
9	3,27	4,7	2,35	0,28	4,855382	0,673479
10	2,77	4,7	2,35	0,19	3,294724	0,840738
X						0,767315
SD						0,059614
CV						7,76917
E						0,018852
E %						6,809978

Lampiran 6. Tabel hasil pengujian kadar air (Variasi orientasi lurus)

No	Sebelum	Sesudah	Hasil	Nilai MC
1	3,3519	3,2734	0,0785	2,3981
2	3,1309	3,0535	0,0774	2,5348
3	3,3315	3,2513	0,0802	2,4667
4	3,3468	3,2673	0,0795	2,4332
5	3,5556	3,4725	0,0831	2,3931
6	3,4913	3,4113	0,08	2,3451
7	3,3797	3,3029	0,0768	2,3252
8	3,2446	3,1676	0,077	2,4309
9	3,3424	3,266	0,0764	2,3393
10	3,4418	3,3653	0,0765	2,2732
x				2,3940
sd				0,0726
s				0,0765
cv				3,1967
e				0,0242
e%				2,8021

Lampiran 7. Tabel hasil pengujian kadar air (Variasi orientasi acak)

No	Sebelum	Sesudah	Hasil	Nilai Mc
1	4,0793	3,9792	0,1001	2,5156
2	4,5125	4,3995	0,113	2,5685
3	4,2166	4,1167	0,0999	2,4267
4	4,1375	4,0331	0,1044	2,5886
5	5,6202	5,4806	0,1396	2,5472
6	4,7702	4,6498	0,1204	2,5894
7	5,3201	5,1831	0,137	2,6432
8	3,9457	3,8452	0,1005	2,6136
9	4,3605	4,2587	0,1018	2,3904
10	4,6843	4,5721	0,1122	2,4540
x				2,5337
sd				0,0803
s				0,0844
cv				3,1708
e				0,0267
e%				2,7794

Lampiran 8 Tabel hasil pengujian pengerapan air (Variasi orientasi lurus)

no	berat sebelum (g)	berat setelah (g)		
	1	1	hasil	water arbsorbtion
1	13,93414	14,25657	0,32243	2,3140
2	14,85606	15,13925	0,28319	1,9062
3	13,55644	13,78686	0,23042	1,6997
4	14,91186	15,2248	0,31294	2,0986
5	13,94893	14,26291	0,31398	2,2509
6	14,75129	15,02914	0,27785	1,8836
7	14,12971	14,48801	0,3583	2,5358
8	13,45907	13,69618	0,23711	1,7617
9	14,63847	14,92649	0,28802	1,9676
10	14,36771	14,58753	0,21982	1,5300
x	14,255368	14,539774	0,284406	1,9948
			s	0,3072
			cv	15,4001
			e	0,0971
			e%	13,4988

Lampiran 9. Tabel hasil pengujian pengerapan air (Variasi orientasi acak)

no	berat sebelum (g)	berat setelah (g)		
	1	1	hasil	water absorbtion
1	18,52263	18,83231	0,30968	1,6719
2	19,1787	19,44505	0,26635	1,3888
3	17,73922	18,05341	0,31419	1,7712
4	18,19828	18,4622	0,26392	1,4502
5	17,78183	18,1169	0,33507	1,8843
6	17,98582	18,25944	0,27362	1,5213
7	16,30583	16,5735	0,26767	1,6416
8	17,89838	18,18309	0,28471	1,5907
9				
10				
x	17,95133625	18,2407375	0,289401	1,6150
			s	0,1641
			cv	10,1626
			e	0,0580
			e%	8,9079

Lampiran 10. Tabel hasil pengujian pengembangan tebal (Variasi orientasi lurus)

no	thickness before (mm)	thickness after (mm)		
	x	x	hasil	Thickness Swelling
1	5,65	5,73	0,08	1,4159
2	6,09	6,16	0,07	1,1494
3	5,73	5,8	0,07	1,2216
4	6,08	6,17	0,09	1,4803
5	6,05	6,15	0,1	1,6529
6	6,14	6,25	0,11	1,7915
7	5,93	6,04	0,11	1,8550
8	5,57	5,66	0,09	1,6158
9	6,09	6,17	0,08	1,3136
10	5,91	6,02	0,11	1,8613
x	5,924	6,015	0,091	1,5357
			s	0,2599
			cv	16,9258
			e	0,0822
			e%	14,8361

Lampiran 11. Tabel hasil pengujian pengembangan tebal (Variasi orientasi acak )

no	thickness before (mm)	thickness after (mm)	hasil	thickness swelling
	x	x		
1	8,03	8,16	0,13	1,6189
2	7,42	7,56	0,14	1,8868
3	7,42	7,52	0,1	1,3477
4	7,57	7,66	0,09	1,1889
5	8,19	8,27	0,08	0,9768
6	7,17	7,3	0,13	1,8131
7	7,41	7,5	0,09	1,2146
8	7,52	7,63	0,11	1,4628
9				
10				
x	7,59125	7,7	0,10875	1,4387
			s	0,3181
			cv	22,1099
			e	0,1125
			e%	19,3802