LAMPIRAN

1 . Tabel Perhitungan Kekuatan Tarik Komposit

No. Spes	Var	d (mm)	b (mm)	F (N)	ΔL (mm)	Δσ (MPa)	$\Delta\varepsilon$ $(\frac{mm}{mm})$	σ (MPa)	ε (%)	E (GPa)
1	K/S 1:2	3,49	13,03	1909,97	1,36	11,43	0,0104	42,00	2,720	1,100
2		3,48	13,02	1783,15	1,79	10,59	0,0134	39,35	3,580	0,791
3		3,34	13,01	1518,08	1,72	12,43	0,0158	34,94	3,440	0,787
4		3,44	13,03	1740,06	1,96	11,15	0,013	38,82	3,920	0,858
5		3,29	12,97	1657,22	2,07	11,72	0,0164	38,84	4,140	0,714
Min								34,94	2,720	0,714
Max								42,00	4,140	1,100
Rata-rata								38,79	3,560	0,850
Standar Deviasi								2,52	0,545	0,149

No. Spes	Var	d (mm)	b (mm)	F (N)	ΔL (mm)	Δσ (MPa)	$\Delta\varepsilon$ $(\frac{mm}{mm})$	σ (MPa)	ε (%)	E (GPa)
1	K/S 1:1	3,38	13,27	2154,16	1,91	14,27	0,0158	48,03	3,820	0,903
2		3,37	13,15	1991,94	2,04	14,89	0,0152	44,95	4,080	0,980
3		3,51	13,13	2335,29	2,48	13,89	0,0144	50,67	4,960	0,964
4		3,53	13,11	1992,64	2,04	14,26	0,0138	43,06	4,080	1,033
5		3,45	13,09	2367,09	1,92	15,06	0,013	52,42	3,840	1,158
Min								43,06	3,820	0,903
Max								52,42	4,960	1,158
Rata-rata								47,82	4,156	1,008
Standar Deviasi								3,88	0,467	0,096

No. Spes	Var	d (mm)	b (mm)	F (N)	ΔL (mm)	Δσ (MPa)	$\Delta\varepsilon$ $(\frac{mm}{mm})$	σ (MPa)	ε (%)	E (GPa)
1	K/S 2:1	3,61	13	2376,5	2,37	17,03	0,0124	50,64	4,740	1,374
2		3,65	13,01	2125,41	2,32	16,62	0,0192	44,76	4,640	0,865
3		3,46	13,01	2440,25	2,34	17,91	0,0116	54,21	4,680	1,544
4		3,59	13,07	2464,78	2,29	16,96	0,017	52,53	4,580	0,998
5		3,37	12,99	2330,58	2,33	18,25	0,0132	53,24	4,660	1,383
Min								44,76	4,580	0,865
Max								54,21	4,740	1,544
Rata-rata								51,08	4,660	1,233
Standar Deviasi								3,77	0,058	0,287

2. Grafik kekuatan tarik komposit

a. Grafik kekuatan tarik komposit hibrid perbandingan karbon/serat sisal 1:2

KUAT TARIK

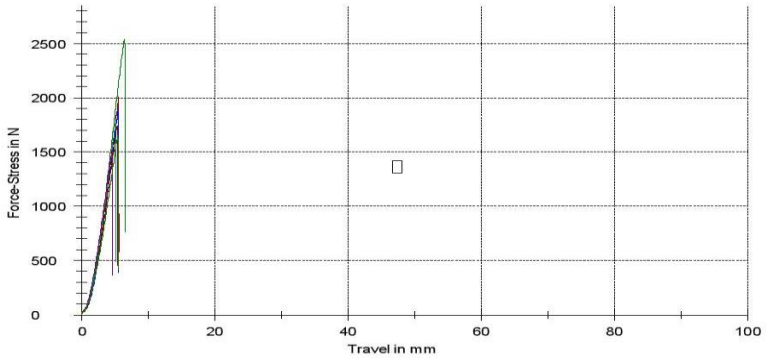
Parameter table:

Headline	: KUAT TARIK	Evaluat. method	: M (Automatic A, B or C)
Customer	: 984/VI/18	Specimen holders	:
Tester	: L TRIYONO	Extensometer	:
Material	: KOMPOSIT SERAT SISAL	Load cell	:
Test standard	: ASTM D 638		

Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
	1	204,699	5,60
	2	259,113	6,45
	3	194,696	5,59
	4	181,769	5,18
	5	154,748	4,56
	6	177,376	5,32
	7	168,932	5,46

Series graph:



Statistics:

Series n = 7	Fmax Lm kgf	Measurement travel end mm
$\bar{x}$	191,619	5,45
s	33,936	0,57
v	17,71	10,39

b. Grafik kekuatan tarik komposit hibrid perbandingan karbon/serat sisal 1:1

KUAT TARIK

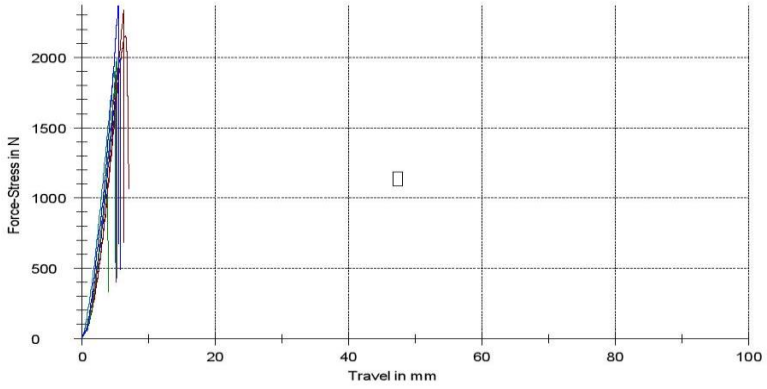
Parameter table:

Headline	: KUAT TARIK	Evaluat. method	: M (Automatic A, B or C)
Customer	: 986/V/I/18	Specimen holders	:
Tester	: L TRIYONO	Extensometer	:
Material	: KOMPOSIT SERAT SISAL	Load cell	:
Test standard	: ASTM D 638		

Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
	1	219,588	7,00
	2	116,232	3,94
	3	203,052	5,77
	4	193,872	4,93
	5	191,281	5,16
	6	238,458	6,28
	7	203,123	5,28
	9	241,294	5,46

Series graph:



Statistics:

Series n = 8	Fmax Lm kgf	Measurement travel end mm
x̄	200,862	5,48
s	39,118	0,91
v	19,48	16,69

c. Grafik kekuatan tarik komposit hibrid perbandingan karbon/serat sisal 2:1

KUAT TARIK

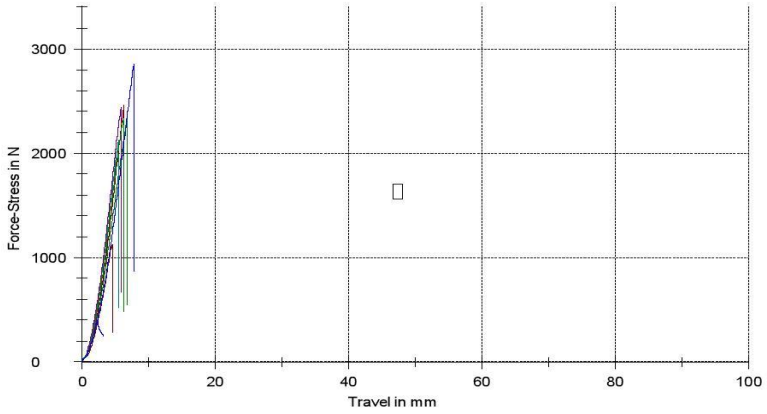
Parameter table:

Headline	: KUAT TARIK	Evaluat. method	: M (Automatic A, B or C)
Customer	: 984/VI/18	Specimen holders	:
Tester	: L TRIYONO	Extensometer	:
Material	: KOMPOSIT SERAT SISAL	Load cell	:
Test standard	: ASTM D 638		

Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
	1	114,355	4,57
	2	242,253	6,87
	4	49,958	3,20
	5	216,658	5,53
	6	248,751	5,91
	7	251,252	6,35
	8	237,572	6,30
	9	291,212	7,79

Series graph:



Statistics:

Series n = 8	Fmax Lm kgf	Measurement travel end mm
$\bar{x}$	206,501	5,82
s	81,334	1,41
v	39,39	24,32