

## LAMPIRAN

### 1. Data perhitungan fraksi volume

Volume komposit :  $15 \text{ cm} \times 15 \text{ cm} \times 1 \text{ cm} = 225 \text{ cm}^3$

Fraksi volume serat 20% =  $225 \times 20\% = 45 \text{ cm}^3$

Fraksi volume serat 30% =  $225 \times 30\% = 67,5 \text{ cm}^3$

Fraksi volume serat 40% =  $225 \times 40\% = 90 \text{ cm}^3$

Fraksi volume serat 50% =  $225 \times 50\% = 112,5 \text{ cm}^3$

### 2. Data Uji tarik serat

No	D1(mm)	D2 (mm)	D3 (mm)	D Rata" (mm)	A (mm <sup>2</sup> )	P (Kg)	ΔL (mm)	L (mm)	σ (Kg/mm <sup>2</sup> )
1	0,1983	0,2068	0,1932	0,1994	0,031	0,210	0,272	25	6,728
2	0,1983	0,2136	0,2034	0,2051	0,033	0,222	0,250	25	6,729
3	0,1526	0,1509	0,1593	0,1543	0,019	0,180	0,247	25	9,631
Rata rata									7,696



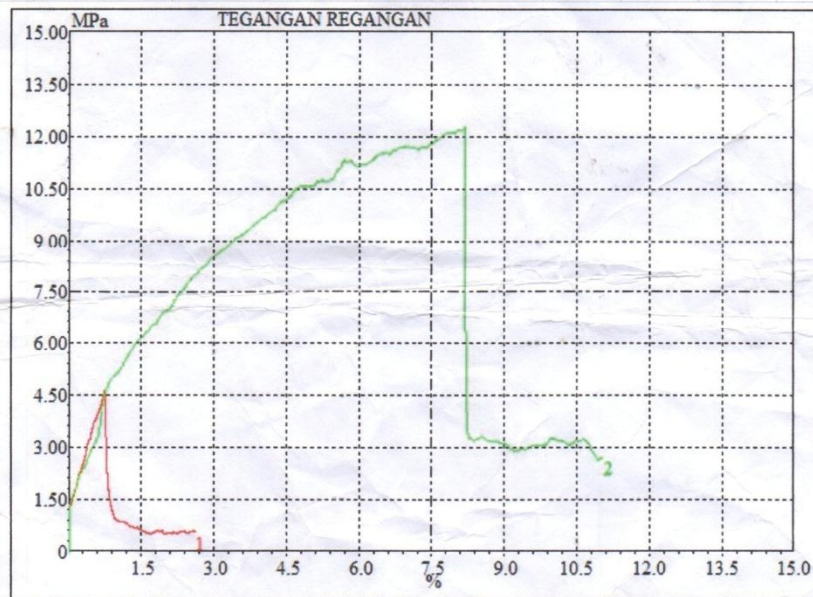
Laboratorium  
**Material Teknik**  
JURUSAN TEKNIK MESIN FAKULTAS TEKNIK  
UNIVERSITAS WAHID HASYIM

Nama : Anwar  
Instansi : unawahas

Bahan : Komposit  
Standard :

#### HASIL PENGUJIAN TARIK

No	Material	Area mm <sup>2</sup>	Yield Point N	Yield Stress MPa	Max. Load N	Max. Stress MPa	Break N	Break MPa	Extension mm	Elongation %
1	Kompo	38.440	171.100	4.451	177.829	4.626	21.318	0.555	0.887	2.610
2	Kompo	38.440	358.130	9.317	471.352	12.262	103.583	2.695	3.763	11.066
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Semarang, 25-10-2016  
Kepala Laboratorium

Helmy Purwanto, ST., MT  
NPP. 05.01.1.0060

Tested By: Nur Kholis, ST  
NPP. 02.14.0.0303

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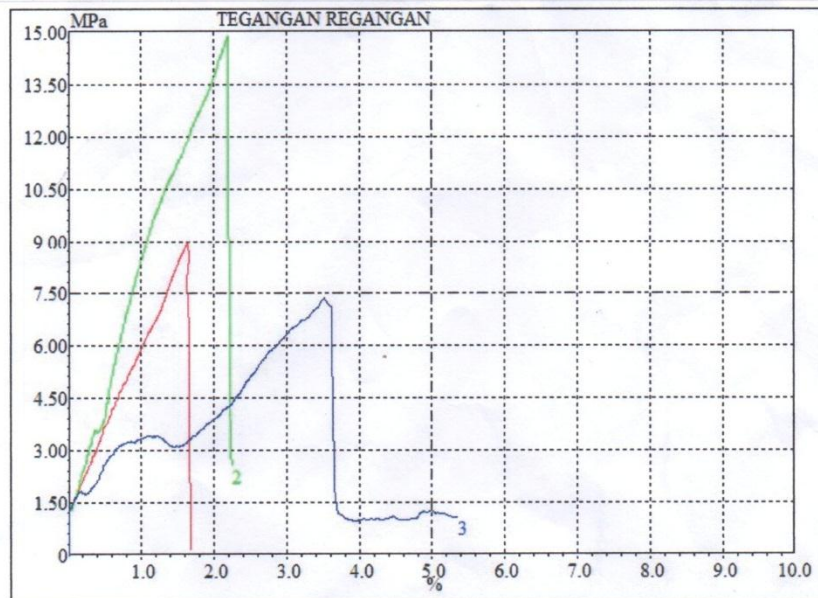
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### HASIL PENGUJIAN TARIK

No	Material	Area mm <sup>2</sup>	Yield Point N	Yield Stress MPa	Max. Load N	Max. Stress MPa	Break N	Break MPa	Extension mm	Elongation %
1	Kompo	38.440	322.725	8.396	345.739	8.994	110.564	-2.875	3.237	9.522
2	Kompo	38.440	522.714	13.598	572.335	14.889	97.910	2.547	0.762	2.243
3	Kompo	37.820	248.625	6.574	277.685	7.342	40.867	1.081	1.825	5.368



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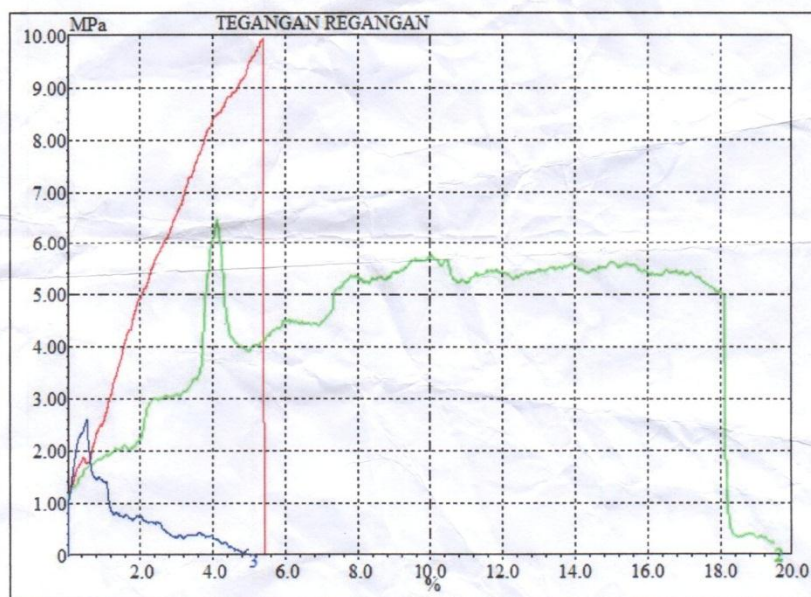
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#### HASIL PENGUJIAN TARIK

No	Material	Area mm <sup>2</sup>	Yield Point N	Yield Stress MPa	Max. Load N	Max. Stress MPa	Break N	Break MPa	Extension mm	Elongation %
1	Kompo	42.090	309.986	7.365	418.035	9.932	-31.639	-0.751	2.225	6.544
2	Kompo	42.880	255.730	5.964	276.294	6.443	9.007	0.210	6.625	19.485
3	Kompo	46.230	111.831	2.419	120.066	2.597	4.956	0.107	1.700	5.000



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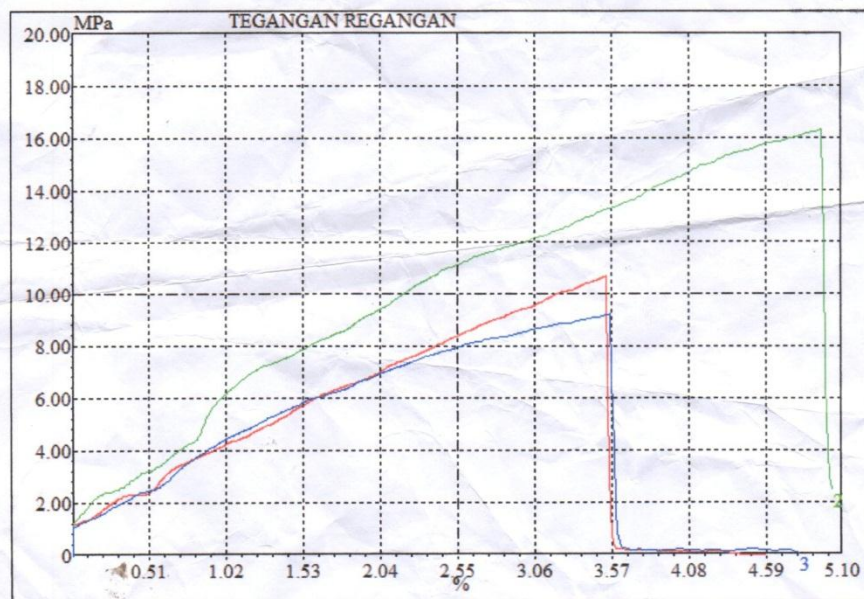
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1	Kompo	41.580	395.971	9.523	443.150	10.658	-8.274	-0.199	1.650	4.853
2	Kompo	40.320	596.541	14.795	657.525	16.308	98.613	2.446	1.712	5.037
3	Kompo	45.540	378.057	8.302	421.157	9.248	0.380	0.008	1.638	4.816



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