

LAMPIRAN

Lampiran 1 Data hasil pengujian kehalusan serat

No.	Berat (mg)	Kehalusan (tex)	$(x - \bar{x})^2$ (tex)
1	32,87	7,30	0,0196
2	33,69	7,48	0,0016
3	34,03	7,56	0,0144
Σ	100,59	22,34	0,112
\bar{x}	33,53	7,44	0,037

- Standar Deviasi Kehalusan Serat

$$SD = \sqrt{\frac{\sum(X_i - \bar{X})^2}{n-1}} = \sqrt{\frac{0,112}{2}}$$

$$= \sqrt{0,056} = 0,236$$

- Koefisien Variasi Kehalusan Serat

$$CV = \frac{SD}{\bar{X}} \times 100 \%$$

$$= \frac{0,236}{7,44} \times 100 \% = 3,17 \%$$

Lampiran 2 Data hasil pengujian kekuatan tarik dan mulu serat

No	Kek (kg)	Kek (N)	berat (mg)	panjang (cm)	Kehalusan (Tex)	Tenacity (g/tex)	$(x - \bar{x})^2$ Tex
1	35,953	352,334	22,55	5	4510	10,121	0,725
2	32,703	320,489	23,17	5	4634	9,207	0,00384
3	42,355	415,079	25,86	5	5172	10,339	1,144
4	29,602	290,099	27,46	5	5572	7,462	3,265
5	34,477	337,874	24,37	5	4874	9,217	0,0030
Σ						46,351	5,140
\bar{x}						9,270	1,028

Tenacity dalam Gr/denier = $\frac{\text{gr/tex}}{9} = \frac{9,27}{9} = 1,03$

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- Standar Deviasi kekuatan

$$S = \sqrt{\frac{\sum(X_i - \bar{X})^2}{n-1}} = \sqrt{\frac{5,140}{4}} \\ = \sqrt{1,285} = 1,133$$

- Koefisien Variasi kekuatan

$$CV = \frac{SD}{\bar{X}} \times 100 \% \\ = \frac{1,133}{9,27} \times 100 \% = 12 \%$$

Data pengujian mulur serat

No.	Mulur(%)	$(x - \bar{x})^2$
1	6,40	0,0036
2	7,20	0,5476
3	6,60	0,0196
4	6,00	0,2116
5	6,10	0,1296
\sum	32,3	0,912
\bar{x}	6,46	0,1824

- Standar Deviasi Mulur Serat

$$S = \sqrt{\frac{\sum(X_i - \bar{X})^2}{n-1}} = \sqrt{\frac{0,912}{4}} \\ = \sqrt{0,228} = 0,477$$

- Koefisien Variasi Mulur Serat

$$CV = \frac{SD}{\bar{X}} \times 100 \% \\ = \frac{0,477}{6,46} \times 100 \% = 7,38 \%$$

Lampiran 3 Data hasil pengujian panjang berkas serat

No	Panjang serat (cm)	Panjang serat (cm) x 80%	$(x - \bar{x})^2$
1	51,6	41,28	0,5625
2	48,7	38,96	2,4649
3	55,3	44,23	13,69
4	43,4	34,72	33,75
5	51,1	40,88	0,1225
6	53,1	42,48	3,8025
7	51,5	41,20	0,4489
Σ	354,7	283,75	54,8413
\bar{x}	50,67	40,53	7,834

- Standar Deviasi Panjang Serat

$$S = \sqrt{\frac{\sum(X_i - \bar{X})^2}{n-1}} = \sqrt{\frac{54,8413}{6}}$$

$$= \sqrt{9,140} = 3,023$$

- Koefisien Variasi Panjang Serat

$$CV = \frac{SD}{\bar{X}} \times 100 \%$$

$$= \frac{3,023}{40,53} \times 100 \% = 7,458\%$$

Lampiran 4 Data hasil pengujian kadar lembab (MC dan MR)

Data pengujian MC

No	Keterangan	Nilai
1	Berat Basah	3,029
2	Berat Kering	2,720
3	MC	10,20%

Data Pengujian MR

No	Keterangan	Nilai
1	Berat Basah	3,029
2	Berat Kering	2,720
3	MR	11,36%

Lampiran 5 Data hasil pengujian Koefisien Friksi

Data Pengujian Koefisien Friksi

No	Koefisien Friksi	$(x - \bar{x})^2$
1	0,45	0,0006
2	0,31	0,0129
3	0,42	0,0002
4	0,45	0,0006
5	0,49	0,0043
Σ	2,12	0,0186
\bar{x}	0,424	0,0037

- Standar Deviasi Friksi

$$S = \sqrt{\frac{\sum(X_i - \bar{X})^2}{n-1}} = \sqrt{\frac{0,0063}{4}} \\ = \sqrt{0,00157} = 0,068$$

- Koefisien Variasi Friksi

$$CV = \frac{SD}{\bar{X}} \times 100 \% \\ = \frac{0,068}{0,424} \times 100 \% = 16,03\%$$