

LAMPIRAN

Lampiran 1 Data pengujian nomor benang

- Panjang benang = 120 yard
= 109,73 meter
- Berat benang

No	Berat (gram)
1	9,0410
2	9,0489
3	8,9612
4	9,0844
5	9,1585
Σ	45,2940
\bar{x}	9,0588

- Nomor benang

$$\begin{aligned} Ne &= \frac{P \text{ (hank)}}{B \text{ (lbs)}} = \frac{\frac{109,73 \text{ m}}{768 \text{ m/hank}}}{\frac{9,0588 \text{ g}}{453,6 \text{ g/lbs}}} = \frac{109,73 \text{ m}}{768 \text{ m/hank}} \times \frac{9,0588 \text{ g}}{453,6 \text{ g/lbs}} \\ &= 0,1429 \text{ hank} \times 0,0200 \text{ lbs} \\ &= 7,1543 \approx 7 \end{aligned}$$

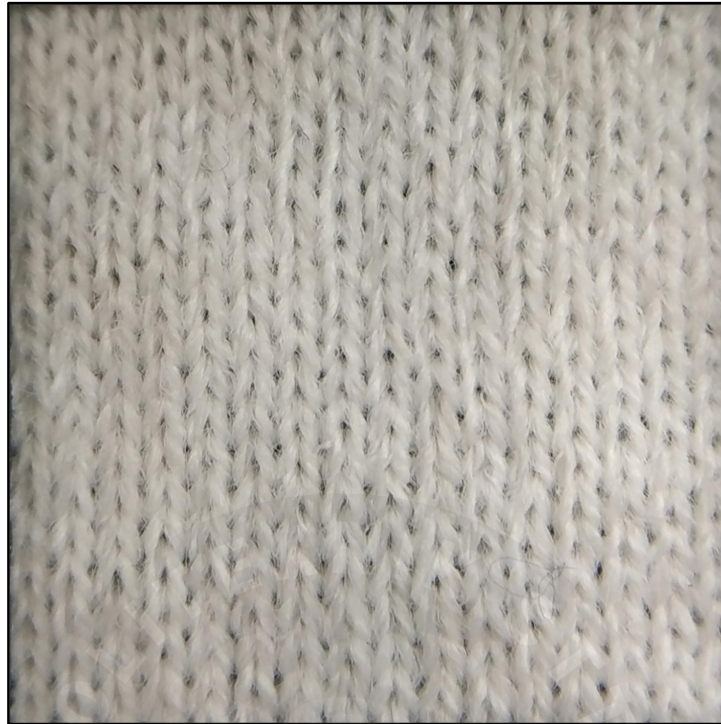
Karena benang gintir, maka

$$\begin{aligned} \text{Nomor benang} \times 2 &= 7 \times 2 \\ &= 14 \end{aligned}$$

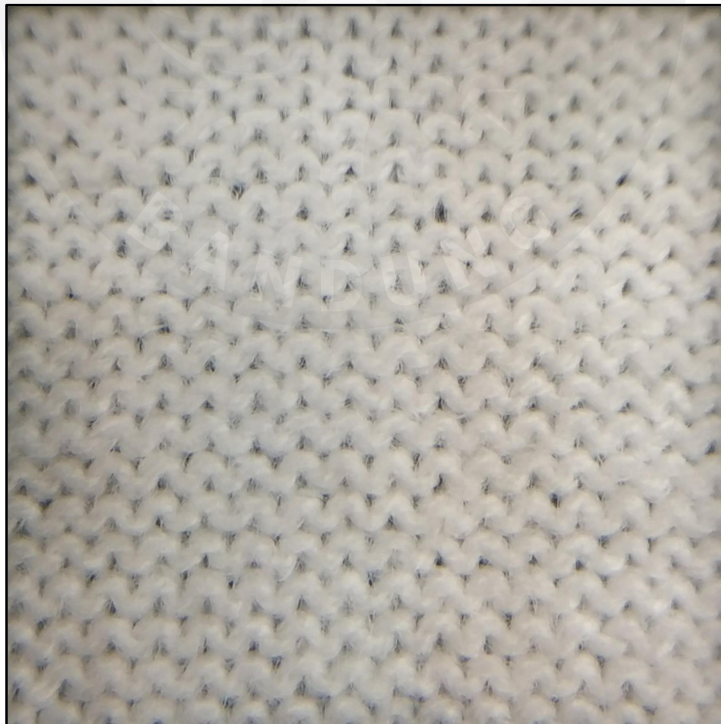
Lalu dibagi 2 tapi tidak diselesaikan.

Ne 14/2

Lampiran 2 Gambar kain rajut dengan variasi struktur 100% *knit*

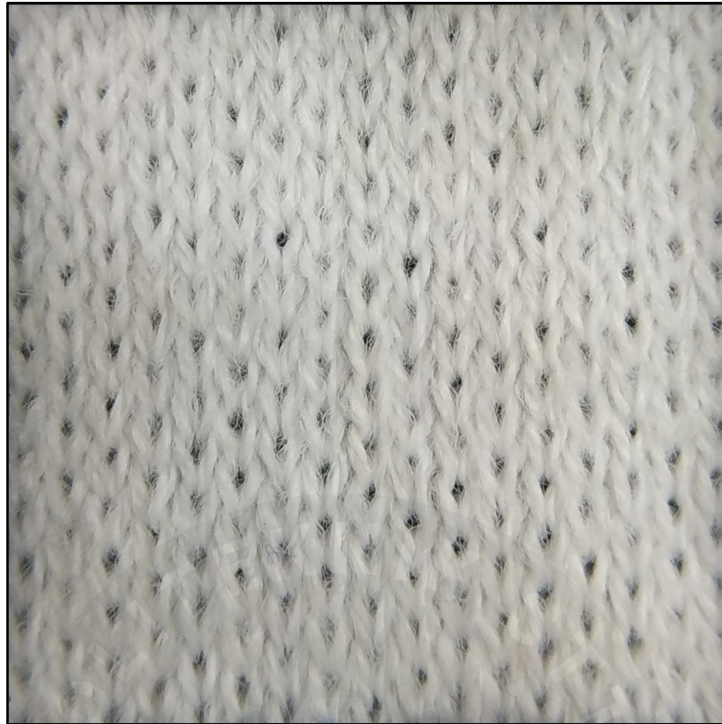


Kain tampak depan



Kain tampak belakang

Lampiran 3 Gambar kain rajut dengan variasi struktur 50% *knit* : 50% *tuck*

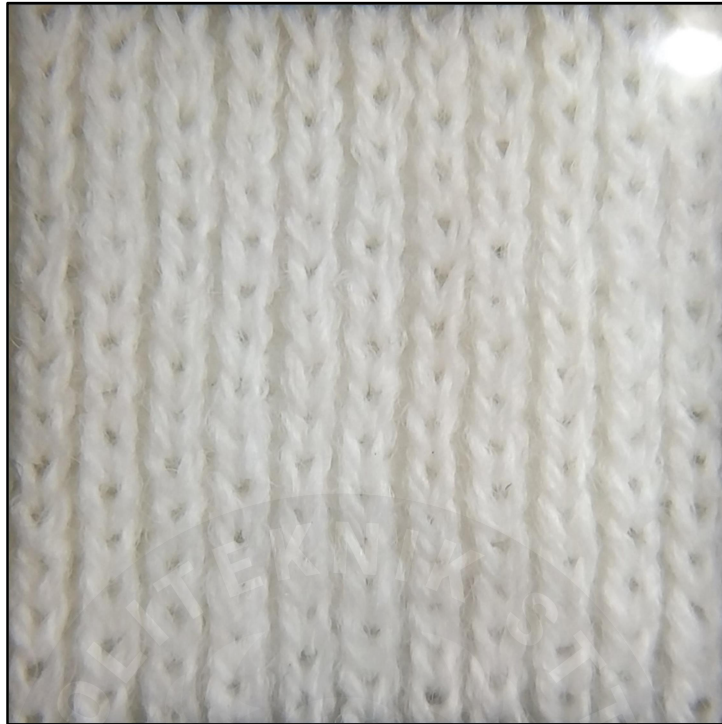


Kain tampak depan



Kain tampak belakang

Lampiran 4 Gambar kain rajut dengan variasi struktur 50% *knit* : 50% *welt/miss*

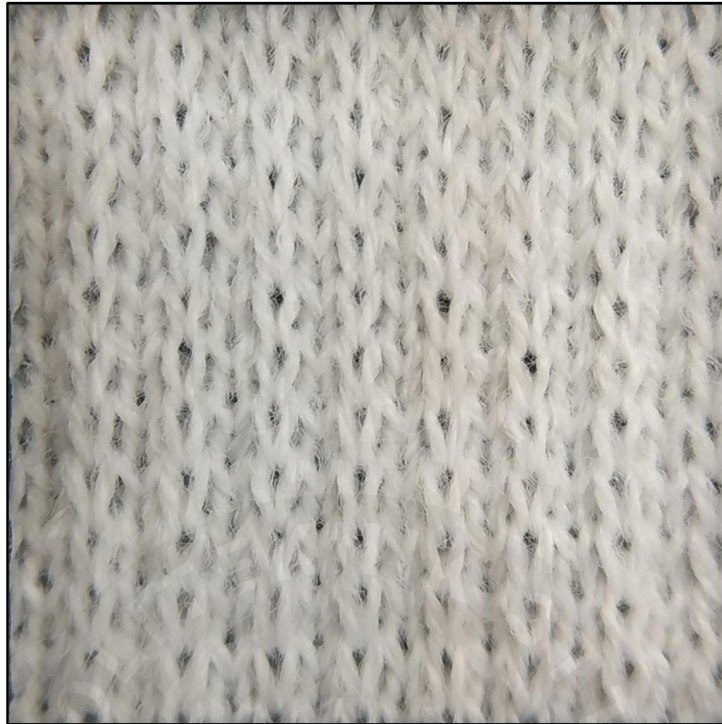


Kain tampak depan

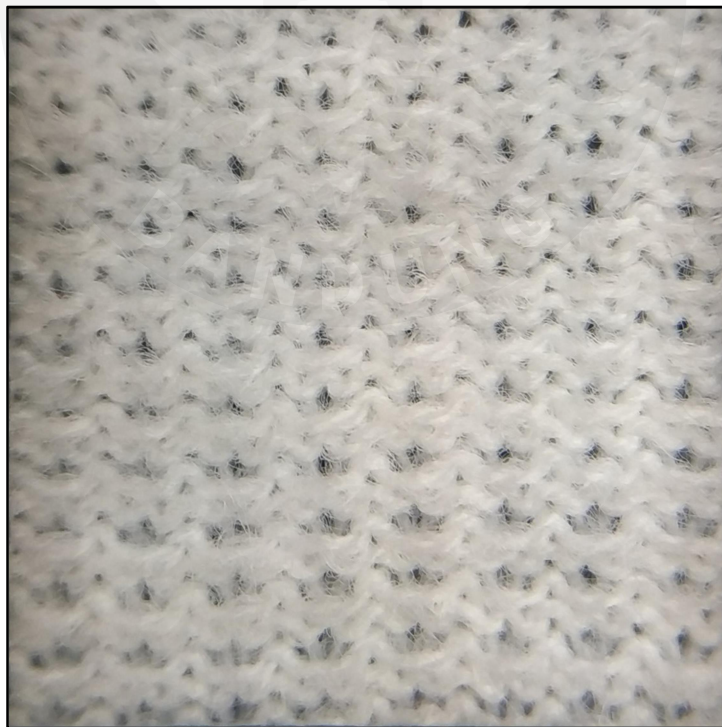


Kain tampak belakang

Lampiran 5 Gambar kain rajut dengan variasi struktur 75% *knit* : 25% *tuck*

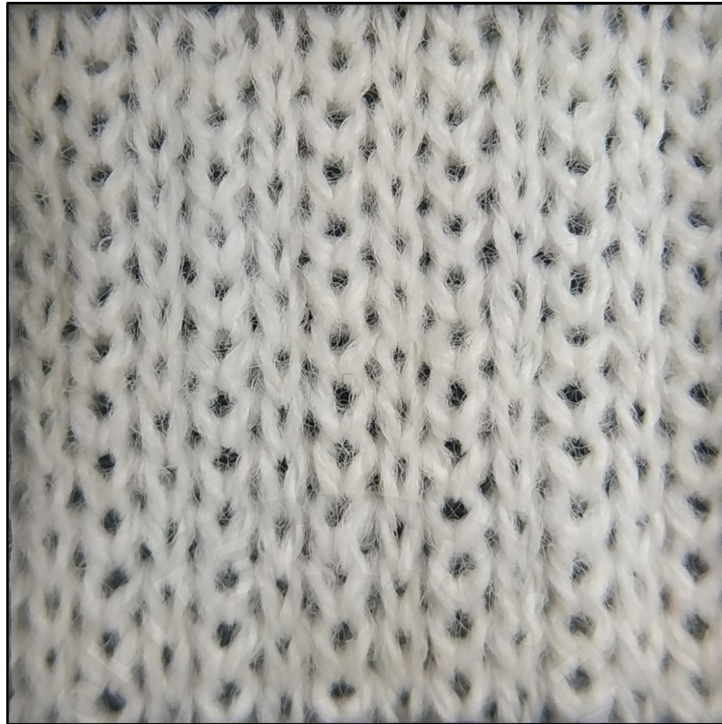


Kain tampak depan



Kain tampak belakang

Lampiran 6 Gambar kain rajut dengan variasi struktur 75% *knit* : 25% *welt/miss*



Kain tampak depan



Kain tampak belakang

Lampiran 7 Gambar kain rajut dengan variasi struktur 50% *knit* : 25% *tuck* : 25% *welt/miss*



Kain tampak depan



Kain tampak belakang

Lampiran 8 Data hasil pengujian CPI

No	Course per inch (CPI)					
	Variasi 1	Variasi 2	Variasi 3	Variasi 4	Variasi 5	Variasi 6
1	19	15	16	14	12	13
2	19	15	16	14	12	14
3	19	15	16	14	12	14
4	19	15	16	14	13	14
5	19	15	16	15	12	14
6	19	15	15	14	12	14
7	19	15	16	14	12	14
8	20	15	15	14	12	14
9	19	15	15	14	12	14
10	19	14	15	14	12	14
Σ	191	149	156	141	121	139
\bar{x}	19,1	14,9	15,6	14,1	12,1	13,9
S	0,3162	0,3162	0,4944	0,3162	0,3162	0,3162
CV	1,6556	2,1223	3,1693	2,2428	2,6135	2,2750
e	0,1000	0,1000	0,1633	0,1000	0,1000	0,1000

Keterangan variasi:

1 = 100% knit

2 = 50% knit : 50% tuck

3 = 50% knit : 50% welt

4 = 75% knit : 25% tuck

5 = 75% knit : 25% welt

6 = 50% knit : 25% tuck : 25% welt

Lampiran 9 Data hasil pengujian WPI

No	Wale per inch (WPI)					
	Variasi 1	Variasi 2	Variasi 3	Variasi 4	Variasi 5	Variasi 6
1	16	11	17	12	15	16
2	16	11	17	12	15	15
3	16	11	17	12	15	16
4	16	11	17	12	16	16
5	16	12	17	12	16	16
6	16	11	17	12	16	15
7	16	11	17	12	16	16
8	16	11	17	12	15	16
9	16	12	17	12	16	16
10	16	11	17	12	15	16
Σ	160	112	170	120	155	158
\bar{x}	16	11,2	17	12	15,5	15,8
S	0	0,4216	0	0	0,5270	0,4216
CV	0	3,7646	0	0	3,400299	2,6686
e	0,0	0,1333	0,00	0,0	0,1667	0,1333

Keterangan variasi:

1 = 100% *knit*

2 = 50% *knit* : 50% *tuck*

3 = 50% *knit* : 50% *welt*

4 = 75% *knit* : 25% *tuck*

5 = 75% *knit* : 25% *welt*

6 = 50% *knit* : 25% *tuck* : 25% *welt*

Lampiran 10 Data hasil perhitungan kerapatan kain

No	Kerapatan (<i>loops/inch²</i>)			
	Variasi	\bar{x} CPI	\bar{x} WPI	\bar{x} CPI \times \bar{x} WPI
1	100% <i>knit</i>	19,1	16	305,6
2	50% <i>knit</i> : 50% <i>tuck</i>	14,9	11,2	166,88
3	50% <i>knit</i> : 50% <i>welt</i>	15,6	17	265,2
4	75% <i>knit</i> : 25% <i>tuck</i>	14,1	12	169,2
5	75% <i>knit</i> : 25% <i>welt</i>	12,1	15,5	187,55
6	50% <i>knit</i> : 25% <i>tuck</i> : 25% <i>welt</i>	13,9	15,8	219,62



Lampiran 11 Data hasil pengujian *gramasi*

No	Gramasi (g/m ²)					
	Variasi 1	Variasi 2	Variasi 3	Variasi 4	Variasi 5	Variasi 6
1	2,3867	2,6701	2,6431	2,6249	2,4294	2,9247
2	2,4091	2,6263	2,5816	2,6230	2,4147	2,9295
3	2,3778	2,587	2,6174	2,5122	2,3923	2,8793
4	2,4080	2,5860	2,6420	2,5837	2,3603	2,9053
5	2,3868	2,5662	2,5799	2,5579	2,3309	2,9182
∑	11,9684	13,0356	13,0639	12,90163	11,92756	14,5570
\bar{x}	2,3937	2,6071	2,6128	2,5803	2,3855	2,9114
S	0,0141	0,0414	0,0310	0,0473	0,0401	0,0201
CV	0,5873	1,5895	1,1873	1,8348	1,6827	0,6908
e	0,0063	0,0185	0,0139	0,0212	0,0180	0,0090

Keterangan variasi:

1 = 100% *knit*

2 = 50% *knit* : 50% *tuck*

3 = 50% *knit* : 50% *welt*

4 = 75% *knit* : 25% *tuck*

5 = 75% *knit* : 25% *welt*

6 = 50% *knit* : 25% *tuck* : 25% *welt*

Lampiran 12 Data hasil pengujian ketebalan kain

No	Ketebalan kain (mm)					
	Variasi 1	Variasi 2	Variasi 3	Variasi 4	Variasi 5	Variasi 6
1	1,19	1,44	1,45	1,41	1,09	1,56
2	1,1	1,41	1,4	1,4	1,12	1,52
3	1,15	1,4	1,46	1,45	1,15	1,53
4	1,11	1,43	1,43	1,41	1,13	1,54
5	1,17	1,43	1,47	1,41	1,15	1,5
6	1,14	1,44	1,44	1,44	1,12	1,51
7	1,17	1,43	1,44	1,43	1,13	1,55
8	1,17	1,43	1,45	1,44	1,15	1,53
9	1,15	1,45	1,47	1,42	1,12	1,5
10	1,19	1,46	1,43	1,39	1,14	1,54
Σ	11,54	14,32	14,44	14,2	11,3	15,28
\bar{x}	1,154	1,432	1,444	1,42	1,13	1,528
S	0,0306	0,0175	0,0243	0,0194	0,0189	0,0204
CV	2,6537	1,222898	1,6805	1,3688	1,6687	1,3377
e	0,0097	0,0055	0,0067	0,0061	0,0060	0,0065

Keterangan variasi:

1 = 100% *knit*

2 = 50% *knit* : 50% *tuck*

3 = 50% *knit* : 50% *welt*

4 = 75% *knit* : 25% *tuck*

5 = 75% *knit* : 25% *welt*

6 = 50% *knit* : 25% *tuck* : 25% *welt*

Lampiran 13 Data hasil pengujian daya tembus udara

No	Daya tembus udara (cm ³ /cm ² /detik)					
	Variasi 1	Variasi 2	Variasi 3	Variasi 4	Variasi 5	Variasi 6
1	110	138	102	121	123	96,5
2	116	137	103	123	120	94,5
3	114	131	103	123	124	92,7
4	112	135	102	125	121	92,8
5	111	136	99,3	128	122	97,6
6	112	137	106	125	120	90,8
7	114	138	105	124	125	98,4
8	118	139	100	128	124	100
9	109	135	99,2	124	123	93,5
10	109	137	99	128	122	95,7
Σ	1125	1363	1018,5	1249	1224	952,5
\bar{x}	112,5	136,3	101,85	124,9	122,4	95,25
S	2,9907	2,2632	2,3382	2,4244	1,7127	2,9003
CV	2,6584	1,6605	2,2957	1,9411	1,3993	3,0449
e	0,9458	0,7157	0,7811	0,7667	0,5416	0,9172

Keterangan variasi:

1 = 100% *knit*

2 = 50% *knit* : 50% *tuck*

3 = 50% *knit* : 50% *welt*

4 = 75% *knit* : 25% *tuck*

5 = 75% *knit* : 25% *welt*

6 = 50% *knit* : 25% *tuck* : 25% *welt*

Lampiran 14 Uji statistika *gramasi*

Tests of Normality							
Variasi	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Gramasi	100% knit	.288	5	.200 [*]	.851	5	.197
	50% knit 50% tuck	.286	5	.200 [*]	.905	5	.437
	50% knit 50% welt	.243	5	.200 [*]	.832	5	.144
	75% knit 25% tuck	.216	5	.200 [*]	.916	5	.505
	75% knit 25% welt	.167	5	.200 [*]	.959	5	.800
	50% knit 25% tuck 25% welt	.232	5	.200 [*]	.894	5	.380

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Test of Homogeneity of Variances					
Gramasi		Levene Statistic		df2	Sig.
		Statistic	df1		
Gramasi	Based on Mean	1.907	5	24	.131
	Based on Median	.996	5	24	.441
	Based on Median and with adjusted df	.996	5	15.396	.452
	Based on trimmed mean	1.803	5	24	.150

ANOVA					
Gramasi					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.921	5	.184	154.956	.000
Within Groups	.029	24	.001		
Total	.949	29			

Lampiran 15 Uji statistika *gramasi* (lanjutan)

Gramasi				
Student-Newman-Keuls ^a				
Variasi	N	Subset for alpha = 0.05		
		1	2	3
75% knit 25% welt	5	2.385520		
100% knit	5	2.393680		
75% knit 25% tuck	5		2.580340	
50% knit 50% tuck	5		2.607120	
50% knit 50% welt	5		2.612800	
50% knit 25% tuck 25% welt	5			2.911400
Sig.		.711	.314	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 5.000.

Lampiran 16 Uji statistika ketebalan kain

Tests of Normality							
Variasi	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Ketebalan Kain	100% knit	.199	10	.200 [*]	.910	10	.281
	50% knit 50% tuck	.255	10	.065	.941	10	.560
	50% knit 50% welt	.154	10	.200 [*]	.932	10	.473
	75% knit 25% tuck	.197	10	.200 [*]	.951	10	.683
	75% knit 25% welt	.198	10	.200 [*]	.884	10	.144
	50% knit 25% tuck 25% welt	.139	10	.200 [*]	.950	10	.665

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Test of Homogeneity of Variances					
Ketebalan Kain		Levene Statistic		df2	Sig.
		Statistic	df1		
Ketebalan Kain	Based on Mean	1.010	5	54	.421
	Based on Median	.951	5	54	.456
	Based on Median and with adjusted df	.951	5	45.829	.457
	Based on trimmed mean	.999	5	54	.427

ANOVA					
Ketebalan Kain					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.389	5	.278	586.192	.000
Within Groups	.026	54	.000		
Total	1.415	59			

Lampiran 17 Uji statistika ketebalan kain (lanjutan)

Ketebalan Kain						
Student-Newman-Keuls ^a						
Variasi	N	Subset for alpha = 0.05				
		1	2	3	4	5
75% knit 25% welt	10	1.1300				
100% knit	10		1.1540			
75% knit 25% tuck	10			1.4200		
50% knit 50% tuck	10			1.4320	1.4320	
50% knit 50% welt	10				1.4440	
50% knit 25% tuck 25% welt	10					1.5280
Sig.		1.000	1.000	.223	.223	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 10.000.



Lampiran 18 Uji statistika daya tembus udara

Tests of Normality							
Variasi	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Daya Tembus Udara	100% knit	.166	10	.200*	.939	10	.537
	50% knit 50% tuck	.221	10	.180	.873	10	.107
	50% knit 50% welt	.173	10	.200*	.914	10	.312
	75% knit 25% tuck	.199	10	.200*	.899	10	.213
	75% knit 25% welt	.137	10	.200*	.943	10	.591
	50% knit 25% tuck 25% welt	.127	10	.200*	.977	10	.945

*. This is a lower bound of the true significance.
a. Lilliefors Significance Correction

Test of Homogeneity of Variances						
Daya Tembus Udara		Levene Statistic				
		Statistic	df1	df2	Sig.	
Daya Tembus Udara	Based on Mean	.862	5	54	.513	
	Based on Median	.732	5	54	.602	
	Based on Median and with adjusted df	.732	5	46.968	.603	
	Based on trimmed mean	.847	5	54	.523	

ANOVA					
Daya Tembus Udara					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11739.883	5	2347.977	376.781	.000
Within Groups	336.510	54	6.232		
Total	12076.393	59			

Lampiran 19 Uji statistika daya tembus udara (lanjutan)

Daya Tembus Udara							
Student-Newman-Keuls ^a							
Variasi	N	Subset for alpha = 0.05					
		1	2	3	4	5	6
50% knit 25% tuck 25% welt	10	95.250					
50% knit 50% welt	10		101.850				
100% knit	10			112.500			
75% knit 25% welt	10				122.400		
75% knit 25% tuck	10					124.900	
50% knit 50% tuck	10						136.300
Sig.		1.000	1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.
a. Uses Harmonic Mean Sample Size = 10.000.

