

LAMPIRAN

Lampiran 1. Hasil uji validitas (Descriptive Statistics)

Descriptive Statistics			
	Mean	Std. Deviation	N
P1	3,40	,770	30
P2	2,67	,884	30
P3	2,90	,759	30
P4	3,00	,643	30
P5	2,87	,776	30
P6	2,90	,759	30
P7	3,03	,718	30
P8	2,80	,805	30
P9	2,83	,950	30
P10	2,80	,761	30
P11	3,27	,583	30
P12	2,77	,858	30
P13	3,27	,450	30
P14	3,00	,695	30
P15	3,03	,669	30
P16	2,93	,785	30
P17	3,07	,691	30
P18	2,90	,607	30
P19	2,83	,699	30
P20	3,33	,606	30
P21	3,30	,596	30
P22	2,87	,730	30
TOTAL	65,77	8,307	30

Lampiran 2. Hasil rekap uji validitas (Pearson Corellation)

		Correlations																						
		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	TOTAL
P1	Pearson Correlation	1	.203	.248	.209	.265	.169	.162	.133	.141	.435	-.015	.355	-.119	.193	.174	.160	.142	.088	.256	1.000	.180	.098	.414
	Sig. (2-tailed)		.263	.167	.268	.156	.318	.392	.462	.456	.016	.936	.054	.530	.306	.358	.399	.453	.642	.172	0.000	.340	.606	.023
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P2	Pearson Correlation	.203	1	.308	.121	-.117	.154	.072	.194	.178	.564	.111	.621	.145	.056	.019	.166	.038	.193	.186	.150	.262	-.018	.426
	Sig. (2-tailed)	.283		.097	.523	.537	.416	.704	.305	.347	.001	.558	.000	.446	.768	.919	.382	.844	.308	.325	.429	.162	.926	.019
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P3	Pearson Correlation	.248	.308	1	-.141	.035	.162	.196	-.090	-.024	.382	.218	.386	.283	.131	.075	.220	.145	.127	.293	.075	.069	.348	.390
	Sig. (2-tailed)	.187	.097		.456	.854	.393	.299	.635	.900	.037	.247	.035	.130	.491	.695	.243	.446	.503	.117	.694	.719	.059	.033
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P4	Pearson Correlation	.209	.121	-.141	1	.484	.353	.373	.466	.282	.070	.000	.062	.000	.386	.481	.205	.310	.353	.230	.000	.090	-.147	.452
	Sig. (2-tailed)	.268	.523	.456		.007	.056	.042	.009	.131	.712	1.000	.743	1.000	.035	.007	.277	.095	.056	.221	1.000	.636	.439	.012
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P5	Pearson Correlation	.265	-.117	.035	.484	1	.328	.379	.563	.437	.187	-.071	.366	-.191	.384	.474	.438	.595	.336	.339	.098	-.060	.272	.594
	Sig. (2-tailed)	.156	.537	.854	.007		.077	.039	.001	.016	.323	.709	.047	.312	.036	.008	.016	.001	.069	.067	.608	.754	.146	.001
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P6	Pearson Correlation	.189	.154	.162	.353	.328	1	.892	.135	.072	.203	.296	.122	.283	.916	.890	.857	.736	.800	.488	-.075	.069	.037	.756
	Sig. (2-tailed)	.318	.416	.393	.056	.077		.000	.475	.706	.282	.112	.522	.130	.000	.000	.000	.000	.000	.006	.694	.719	.845	.000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P7	Pearson Correlation	.162	.072	.196	.373	.379	.892	1	.131	.109	.202	.390	.125	.292	.967	.931	.738	.759	.798	.492	-.026	.056	.140	.776
	Sig. (2-tailed)	.392	.704	.299	.042	.039	.000		.490	.565	.285	.033	.511	.118	.000	.000	.000	.000	.000	.006	.890	.767	.460	.000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P8	Pearson Correlation	.133	.194	-.090	.466	.563	.135	.131	1	.586	.214	-.250	.279	-.038	.123	.205	.142	.211	.310	.490	.071	.201	.188	.488
	Sig. (2-tailed)	.482	.305	.635	.009	.001	.475	.460		.001	.257	.183	.135	.842	.516	.277	.455	.264	.095	.006	.711	.286	.321	.006
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P9	Pearson Correlation	.141	.178	-.024	.282	.437	.072	.109	.586	1	.288	-.290	.331	.108	.052	.118	.123	.175	.090	.528	.160	-.091	.414	.458
	Sig. (2-tailed)	.456	.347	.800	.131	.016	.706	.565	.001		.125	.119	.074	.571	.784	.536	.516	.355	.638	.003	.399	.631	.023	.011
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P10	Pearson Correlation	.435	.564	.382	.070	.187	.203	.202	.214	.286	1	.047	.454	.161	.130	.081	.150	.026	.179	.259	-.149	-.091	.261	.472
	Sig. (2-tailed)	.016	.001	.037	.712	.323	.282	.285	.257	.125		.807	.012	.395	.492	.669	.429	.891	.344	.166	.431	.632	.164	.008
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P11	Pearson Correlation	-.015	.111	.218	.000	-.071	.296	.390	-.250	-.290	.047	1	-.078	.245	.340	.242	.191	.125	.273	-.056	-.065	.258	.005	.213
	Sig. (2-tailed)	.936	.558	.247	1.000	.709	.112	.033	.183	.119	.807		.682	.191	.066	.198	.313	.509	.145	.767	.733	.169	.977	.259
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P12	Pearson Correlation	.355	.621	.386	.062	.366	.122	.125	.279	.331	.454	-.078	1	-.012	.116	.134	.181	.201	.152	.450	.221	.142	.224	.548
	Sig. (2-tailed)	.054	.000	.035	.743	.047	.522	.511	.135	.074	.012	.682		.950	.543	.480	.339	.286	.422	.013	.241	.456	.235	.002
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P13	Pearson Correlation	-.119	.145	.283	.000	-.191	.283	.292	-.038	.108	.161	.245	-.012	1	.221	.199	.150	.052	.227	.146	-.084	.208	.217	.266
	Sig. (2-tailed)	.530	.446	.130	1.000	.312	.130	.118	.842	.571	.395	.191	.950		.241	.292	.430	.786	.227	.441	.658	.275	.249	.155
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P14	Pearson Correlation	.193	.056	.131	.386	.384	.916	.967	.123	.052	.130	.340	.116	.221	1	.965	.759	.789	.817	.497	.000	.083	.068	.759
	Sig. (2-tailed)	.306	.768	.491	.035	.036	.000	.000	.516	.784	.492	.066	.543	.241		.000	.000	.000	.000	.005	1.000	.662	.721	.000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P15	Pearson Correlation	.174	.019	.075	.481	.474	.890	.931	.205	.118	.081	.242	.134	.199	.965	1	.727	.815	.773	.465	.057	.061	.080	.759
	Sig. (2-tailed)	.358	.919	.695	.007	.008	.000	.000	.277	.536	.669	.198	.480	.292	.000		.000	.000	.000	.012	.766	.751	.674	.000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P16	Pearson Correlation	.160	.166	.220	.205	.438	.857	.738	.142	.123	.150	.191	.181	.150	.759	.727	1	.898	.781	.356	-.097	.118	.104	.722
	Sig. (2-tailed)	.399	.382	.243	.277	.016	.000	.000	.455	.516	.429	.313	.339	.430	.000	.000		.000	.000	.053	.612	.535	.583	.000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P17	Pearson Correlation	.142	.038	.145	.310	.595	.736	.759	.211	.175	.026	.125	.201	.052	.789	.815	.898	1	.755	.309	.027	.117	.155	.723
	Sig. (2-tailed)	.453	.844	.446	.095	.001	.000	.000	.264	.355	.891	.509	.286	.786	.000	.000	.000		.000	.096	.886	.538	.414	.000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P18	Pearson Correlation	.088	.193	.127	.353	.336	.800	.798	.310	.090	.179	.273	.152	.227	.817	.773	.781	.755	1	.528	-.187	.276	.124	.747
	Sig. (2-tailed)	.642	.308	.503	.056	.069	.000	.000	.095	.638	.344	.145	.422	.227	.000	.000	.000	.000		.003	.322	.139	.513	.000
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P19	Pearson Correlation	.256	.186	.293	.230	.339	.488	.492	.490	.528	.259	-.056	.450	.146</										

Lampiran 3. Hasil iterasi uji validitas (Pearson Corellation)

		Correlations																			TOTAL
		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P12	P14	P15	P16	P17	P18	P19	P22	TOTAL	
P1	Pearson Correlation	1	.203	.248	.209	.265	.189	.162	.133	.141	.435*	.355	.193	.174	.160	.142	.088	.256	.098	.414*	
	Sig. (2-tailed)		.283	.187	.268	.156	.318	.392	.482	.456	.016	.054	.306	.358	.399	.453	.642	.172	.606	.023	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P2	Pearson Correlation	.203	1	.308	.121	-.117	.154	.072	.194	.178	.564**	.621**	.056	.019	.166	.038	.193	.186	-.018	.426*	
	Sig. (2-tailed)	.283		.097	.523	.537	.416	.704	.305	.347	.001	.000	.768	.919	.382	.844	.308	.325	.926	.019	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
P3	Pearson Correlation	.248	.308	1	-.141	.035	.162	.196	-.090	-.024	.382*	.386*	.131	.075	.220	.145	.127	.293	.348	.390*	
	Sig. (2-tailed)	.187	.097		.456	.854	.393	.299	.635	.900	.037	.035	.491	.695	.243	.446	.503	.117	.059	.033	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P4	Pearson Correlation	.209	.121	-.141	1	.484**	.353	.373	.466**	.282	.070	.062	.386*	.481**	.205	.310	.353	.230	-.147	.452*	
	Sig. (2-tailed)	.268	.523	.456		.007	.056	.042	.009	.131	.712	.743	.035	.007	.277	.095	.056	.221	.439	.012	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P5	Pearson Correlation	.265	-.117	.035	.484**	1	.328	.379	.563**	.437*	.187	.366*	.384	.474**	.438	.595**	.336	.339	.272	.594**	
	Sig. (2-tailed)	.156	.537	.854	.007		.077	.039	.001	.016	.323	.047	.036	.008	.016	.001	.069	.067	.146	.001	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P6	Pearson Correlation	.189	.154	.162	.353	.328	1	.892**	.135	.072	.203	.122	.916**	.890**	.857**	.736**	.800**	.488**	.037	.756**	
	Sig. (2-tailed)	.318	.416	.393	.056	.077		.000	.475	.706	.282	.522	.000	.000	.000	.000	.000	.006	.845	.000	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P7	Pearson Correlation	.162	.072	.196	.373	.379	.892**	1	.131	.109	.202	.125	.967**	.931**	.738*	.759**	.798**	.492**	.140	.776**	
	Sig. (2-tailed)	.392	.704	.299	.042	.039	.000		.490	.565	.285	.511	.000	.000	.000	.000	.000	.006	.460	.000	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P8	Pearson Correlation	.133	.194	-.090	.466**	.563**	.135	.131	1	.586**	.214	.279	.123	.205	.142	.211	.310	.490**	.188	.488**	
	Sig. (2-tailed)	.482	.305	.635	.009	.001	.475	.490		.001	.257	.135	.516	.277	.455	.264	.095	.006	.321	.006	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P9	Pearson Correlation	.141	.178	-.024	.282	.437*	.072	.109	.586**	1	.286	.331	.052	.118	.123	.175	.090	.528**	.414	.458*	
	Sig. (2-tailed)	.456	.347	.900	.131	.016	.706	.565	.001		.125	.074	.784	.536	.516	.355	.638	.003	.023	.011	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P10	Pearson Correlation	.435*	.564**	.382*	.070	.187	.203	.202	.214	.286	1	.454*	.130	.081	.150	.026	.179	.259	.261	.472**	
	Sig. (2-tailed)	.016	.001	.037	.712	.323	.282	.285	.257	.125		.012	.492	.669	.429	.891	.344	.166	.164	.008	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P12	Pearson Correlation	.355	.621**	.386*	.062	.366*	.122	.125	.279	.331	.454*	1	.116	.134	.181	.201	.152	.450	.224	.548**	
	Sig. (2-tailed)	.054	.000	.035	.743	.047	.522	.511	.135	.074	.012		.543	.480	.339	.286	.422	.013	.235	.002	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P14	Pearson Correlation	.193	.056	.131	.386*	.384*	.916**	.967**	.123	.052	.130	.116	1	.965**	.759**	.789**	.817**	.497**	.068	.759**	
	Sig. (2-tailed)	.306	.768	.491	.035	.036	.000	.000	.516	.784	.492	.543		.000	.000	.000	.000	.005	.721	.000	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P15	Pearson Correlation	.174	.019	.075	.481**	.474**	.890**	.931**	.205	.118	.081	.134	.965**	1	.727**	.815**	.773**	.455*	.080	.759**	
	Sig. (2-tailed)	.358	.919	.695	.007	.008	.000	.000	.277	.536	.669	.480	.000		.000	.000	.000	.012	.674	.000	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P16	Pearson Correlation	.160	.166	.220	.205	.438*	.857**	.738*	.142	.123	.150	.181	.759**	.727**	1	.898**	.781**	.356	.104	.722**	
	Sig. (2-tailed)	.399	.382	.243	.277	.016	.000	.000	.455	.516	.429	.339	.000	.000		.000	.000	.053	.583	.000	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P17	Pearson Correlation	.142	.038	.145	.310	.595**	.736**	.759**	.211	.175	.026	.201	.789**	.815**	.898**	1	.755**	.309	.155	.723**	
	Sig. (2-tailed)	.453	.844	.446	.095	.001	.000	.000	.264	.355	.891	.286	.000	.000	.000		.000	.096	.414	.000	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P18	Pearson Correlation	.088	.193	.127	.353	.336	.800**	.798**	.310	.090	.179	.152	.817**	.773**	.781**	.755**	1	.528**	.124	.747**	
	Sig. (2-tailed)	.642	.308	.503	.056	.069	.000	.000	.095	.638	.344	.422	.000	.000	.000	.000		.003	.513	.000	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P19	Pearson Correlation	.256	.186	.293	.230	.339	.488**	.492**	.490**	.528**	.259	.450	.497**	.455	.356	.309	.528**	1	.428*	.694**	
	Sig. (2-tailed)	.172	.325	.117	.221	.067	.006	.006	.006	.003	.166	.013	.005	.012	.053	.096	.003		.018	.000	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
P22	Pearson Correlation	.098	-.018	.348	-.147	.272	.037	.140	.188	.414*	.261	.224	.068	.080	.104	.155	.124	.428*	1	.376*	
	Sig. (2-tailed)	.606	.926	.059	.439	.146	.845	.460	.321	.023	.164	.235	.721	.674	.583	.414	.513	.018		.041	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
TOTAL	Pearson Correlation	.414*	.426*	.390*	.452*	.584**	.756**	.776**	.488**	.458*	.472**	.548**	.759**	.759**	.722**	.723**	.747**	.694**	.376*	1	
	Sig. (2-tailed)	.023	.019	.033	.012	.001	.000	.000	.006	.011	.008	.002	.000	.000	.000	.000	.000	.000	.000	.041	
	N	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	

*. Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Lampiran 4. Perhitungan keseragaman data Panjang Siku

a. Nilai rata-rata

$$\bar{X} = \frac{\sum X}{N}$$

$$\bar{X} = \frac{710}{16}$$

$$\bar{X} = 44,38$$

b. Standar deviasi

$$Sd = \sqrt{\frac{\sum (X_n - \bar{X})^2}{(N-1)}}$$

$$Sd = \sqrt{\frac{(46-44,38)^2 + (42-44,38)^2 + \dots + (44-44,38)^2}{(16-1)}}$$

$$Sd = \sqrt{\frac{107,75}{15}}$$

$$Sd = 2,68$$

c. Derajat ketelitian

$$S = \frac{SD}{X} \times 100\%$$

$$S = \frac{2,68}{44,38} \times 100\%$$

$$S = 6,0393\% = 0,0604$$

d. Tingkat kepercayaan

$$K = 100 - 0,0604 = 99,94 \Rightarrow 3$$

$$BKA = \text{Nilai rata-rata} + (K \cdot Sd)$$

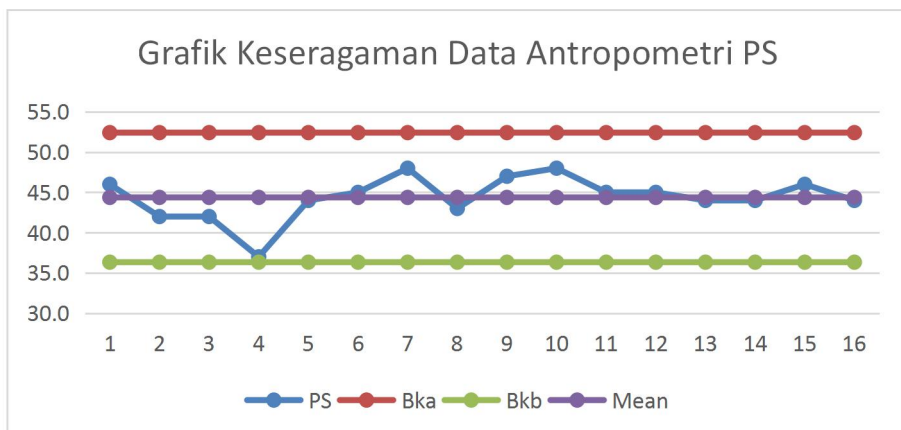
$$BKA = 44,38 + (3 \cdot 2,68)$$

$$BKA = \mathbf{52,42}$$

$$BKB = \text{Nilai rata-rata} - (K \cdot Sd)$$

$$BKB = 44,38 - (3 \cdot 2,68)$$

$$BKB = \mathbf{36,33}$$



Lampiran 5. Perhitungan kecukupan data Panjang Siku

$$N' = \left(\frac{k/s \sqrt{N \sum xi^2 - (\sum xi)^2}}{\sum xi} \right)^2$$

$$N' = \left(\frac{3/0,0604 \sqrt{(16)(31614) - (504100)}}{710} \right)^2$$

$$N' = \left(\frac{49,67 \sqrt{(505824) - (504100)}}{710} \right)^2$$

$$N' = \left(\frac{49,67 \sqrt{(1724)}}{710} \right)^2$$

$$N' = \left(\frac{(49,67)(41,52)}{710} \right)^2$$

$$N' = (2,90)^2$$

$$N' = 8,44$$

Karena $N > N'$ maka data dianggap cukup

Lampiran 6. Perhitungan Uji keseragaman data Tinggi Siku

a. Nilai rata-rata

$$\bar{X} = \frac{\sum X}{N}$$
$$\bar{X} = \frac{1703}{16}$$
$$\bar{X} = \mathbf{106,44}$$

b. Standar deviasi

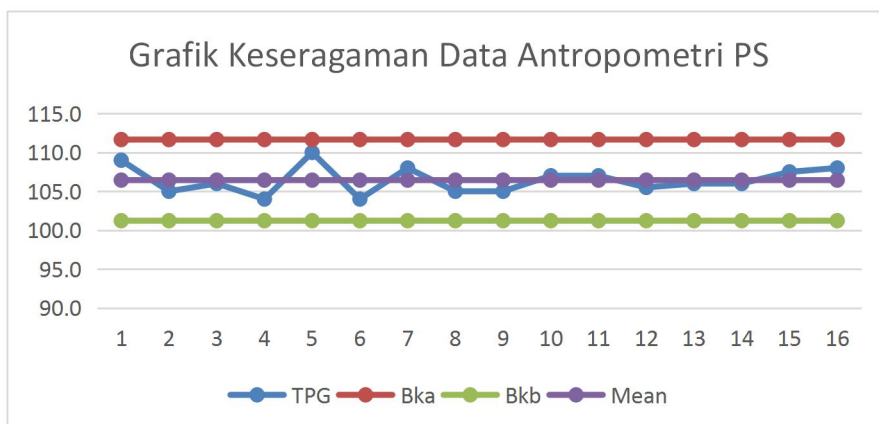
$$Sd = \sqrt{\frac{\sum(X_n - \bar{X})^2}{(N-1)}}$$
$$Sd = \sqrt{\frac{(109-106,44)^2 + (105-106,44)^2 + \dots + (106-106,44)^2}{(16-1)}}$$
$$Sd = \sqrt{\frac{45,44}{15}}$$
$$Sd = \mathbf{1,74}$$

c. Derajat ketelitian

$$S = \frac{SD}{\bar{X}} \times 100\%$$
$$S = \frac{1,74}{106,44} \times 100\%$$
$$S = \mathbf{0,02}$$

d. Tingkat kepercayaan

$$K = 100 - 0,02 = 99,98 \Rightarrow 3$$
$$BKA = \text{Nilai rata-rata} + (K \cdot Sd)$$
$$BKA = 106,44 + (3 \cdot 1,74)$$
$$BKA = \mathbf{111,66}$$
$$BKB = \text{Nilai rata-rata} - (K \cdot Sd)$$
$$BKB = 106,44 - (3 \cdot 1,74)$$
$$BKB = \mathbf{101,22}$$



Lampiran 7. Perhitungan Uji kecukupan data Tinggi Siku

$$N' = \left(\frac{k/s \sqrt{N \sum (xi^2) - (\sum xi)^2}}{\sum xi} \right)^2$$

$$N' = \left(\frac{3/0,02 \sqrt{(16)(181308,5) - (2900209)}}{1703} \right)^2$$

$$N' = \left(\frac{150 \sqrt{(2900936) - (2900209)}}{1703} \right)^2$$

$$N' = \left(\frac{150 \sqrt{(727)}}{1703} \right)^2$$

$$N' = \left(\frac{(150)(727)}{1703} \right)^2$$

$$N' = (2,37)^2$$

$$N' = 5,64$$

Karena $N > N'$ maka data dianggap cukup

Lampiran 8. Perhitungan Uji keseragaman data Lebar Bahu

a. Nilai rata-rata

$$\bar{X} = \frac{\sum X}{N}$$

$$\bar{X} = \frac{677}{16}$$

$$\bar{X} = 43,63$$

b. Standar deviasi

$$Sd = \sqrt{\frac{\sum (X_n - \bar{X})^2}{(N-1)}}$$

$$Sd = \sqrt{\frac{(45-43,63)^2 + (41-43,63)^2 + \dots + (43-43,63)^2}{(16-1)}}$$

$$Sd = \sqrt{\frac{187,75}{15}}$$

$$Sd = 3,54$$

c. Derajat ketelitian

$$S = \frac{SD}{X} \times 100\%$$

$$S = \frac{3,54}{43,63} \times 100\%$$

$$S = 0,08$$

d. Tingkat kepercayaan

$$K = 100 - 0,08 = 99,92 \Rightarrow 3$$

$$BKA = \text{Nilai rata-rata} + (K \cdot Sd)$$

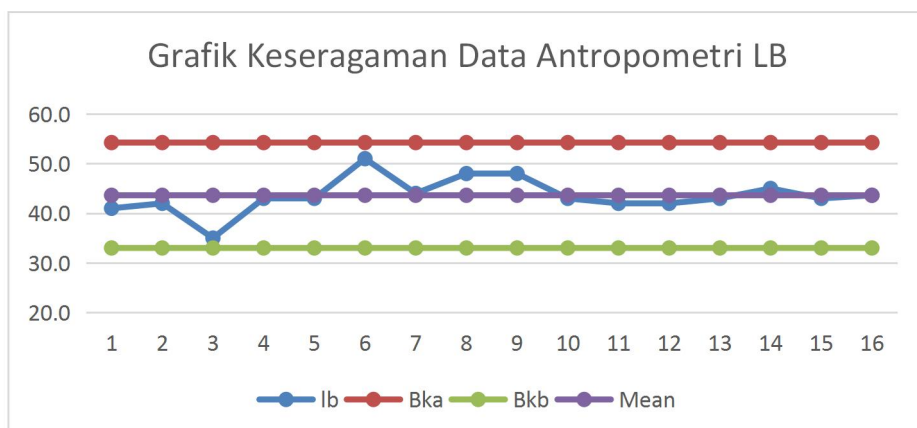
$$BKA = 43,63 + (3 \cdot 3,54)$$

$$BKA = \mathbf{54,24}$$

$$BKB = \text{Nilai rata-rata} - (K \cdot Sd)$$

$$BKB = 43,63 - (3 \cdot 3,54)$$

$$BKB = \mathbf{33,01}$$



Lampiran 9. Perhitungan Uji kecukupan data Lebar Bahu

$$N' = \left(\frac{k/s\sqrt{N \sum xi^2 - (\sum xi)^2}}{\sum xi} \right)^2$$
$$N' = \left(\frac{3/0,08\sqrt{(16)(30638) - (487204)^2}}{698} \right)^2$$
$$N' = \left(\frac{37,50\sqrt{(490208) - (487204)^2}}{698} \right)^2$$
$$N' = \left(\frac{37,50\sqrt{(3004)}}{698} \right)^2$$
$$N' = \left(\frac{(37,50)(54,81)}{698} \right)^2$$
$$N' = (2,94)^2$$
$$N' = 8,67$$

Karena $N > N'$ maka data dianggap cukup

Lampiran 10. Perhitungan Uji keseragaman data Tinggi Pinggang

a. Nilai rata-rata

$$\bar{X} = \frac{\sum X}{N}$$

$$\bar{X} = \frac{1646}{16}$$

$$\bar{X} = 102,88$$

b. Standar deviasi

$$Sd = \sqrt{\frac{\sum (X_n - \bar{X})^2}{(N-1)}}$$

$$Sd = \sqrt{\frac{(99-102,88)^2 + (96-102,88)^2 + \dots + (102-102,88)^2}{(16-1)}}$$

$$Sd = \sqrt{\frac{347,75}{15}}$$

$$Sd = 4,81$$

c. Derajat ketelitian

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

$$S = \frac{4,81}{102,88} \times 100\%$$

$$S = 0,05$$

d. Tingkat kepercayaan

$$K = 100 - 0,05 = 99,95 \Rightarrow 3$$

$$BKA = \text{Nilai rata-rata} + (K \cdot Sd)$$

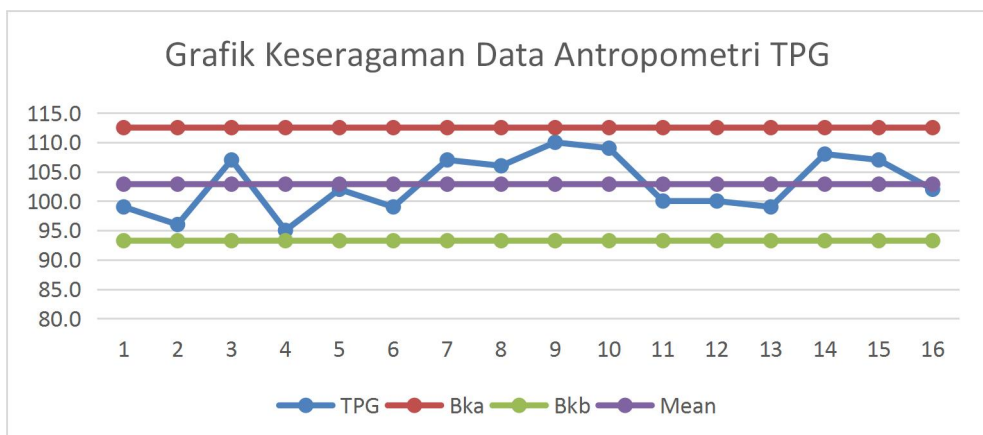
$$BKA = 102,88 + (3 \cdot 4,81)$$

$$BKA = \mathbf{112,50}$$

$$BKB = \text{Nilai rata-rata} - (K \cdot Sd)$$

$$BKB = 102,88 - (3 \cdot 4,81)$$

$$BKB = \mathbf{93,25}$$



Lampiran 11. Perhitungan Uji kecukupan data Tinggi Pinggang

$$N' = \left(\frac{k/s\sqrt{N \sum xi^2 - (\sum xi)^2}}{\sum xi} \right)^2$$

$$N' = \left(\frac{3/0,05\sqrt{(16)(169680) - (2709316)^2}}{1646} \right)^2$$

$$N' = \left(\frac{60\sqrt{(2714880) - (2709136)^2}}{1646} \right)^2$$

$$N' = \left(\frac{60\sqrt{(5564)}}{1646} \right)^2$$

$$N' = \left(\frac{(60)(74,95)}{1646} \right)^2$$

$$N' = (2,72)^2$$

$$N' = 7,39$$

Karena $N > N'$ maka data dianggap cukup

Lampiran 12. Perhitungan Uji keseragaman data Tinggi Mata

a. Nilai rata-rata

$$\bar{X} = \frac{\sum X}{N}$$

$$\bar{X} = \frac{2463}{16}$$

$$\bar{X} = 153,94$$

b. Standar deviasi

$$Sd = \sqrt{\frac{\sum (X_n - \bar{X})^2}{(N-1)}}$$

$$Sd = \sqrt{\frac{(159-153,94)^2 + (150-153,94)^2 + \dots + (154-153,94)^2}{(16-1)}}$$

$$Sd = \sqrt{\frac{174,94}{15}}$$

$$Sd = 3,42$$

c. Derajat ketelitian

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

$$S = \frac{3,42}{153,94} \times 100\%$$

$$S = 0,02$$

d. Tingkat kepercayaan

$$K = 100 - 0,02 = 99,98 \Rightarrow 3$$

$$BKA = \text{Nilai rata-rata} + (K \cdot Sd)$$

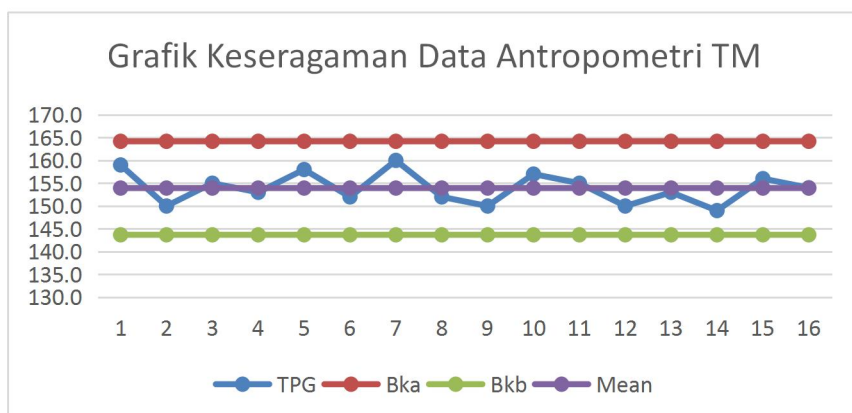
$$BKA = 153,94 + (3 \cdot 3,42)$$

$$BKA = \mathbf{164,18}$$

$$BKB = \text{Nilai rata-rata} - (K \cdot Sd)$$

$$BKB = 153,94 - (3 \cdot 3,42)$$

$$BKB = \mathbf{143,69}$$



Lampiran 13. Perhitungan Uji kecukupan data TM (tinggi mata)

$$N' = \left(\frac{k/s\sqrt{N \sum xi^2 - (\sum xi)^2}}{\sum xi} \right)^2$$

$$N' = \left(\frac{3/0,02\sqrt{(16)(89970) - (1435204)}}{1198} \right)^2$$

$$N' = \left(\frac{150\sqrt{(1439520) - (1435204)}}{1198} \right)^2$$

$$N' = \left(\frac{150\sqrt{(4316)}}{1198} \right)^2$$

$$N' = \left(\frac{(150)(65,70)}{1198} \right)^2$$

$$N' = (3,22)^2$$

$$N' = 10,38$$

Karena $N > N'$ maka data dianggap cukup

Lampiran 14. Monitoring kadar air proses

Tanggal produksi	Monitoring Kadar air per jam																Standart kadar air 27%-30%
	Jam pengambilan																
	08.00	09.35	11.35	12.40	13.35	14.30	15.40	16.40	18.15	20.15	22.00	23.25	1.00	2.30	3.50	4.55	
07 Maret 2018	26.01	27.56	27.80	28.90	27.76	25.56	28.87	28.12	27.09	28.79	28.32	28.02	27.74	29.09	28.32	28.34	28.32
10 Maret 2018	28.30	27.30	27.56	27.80	28.90	27.76	27.33	28.87	28.12	26.45	28.90	27.76	27.33	27.09	28.79	26.00	28.02
12 Maret 2018	27.30	25.62	27.80	29.90	27.76	27.33	24.98	28.12	27.09	28.32	28.20	27.47	24.54	28.12	27.90	29.92	29.13
15 Maret 2018	27.30	27.56	27.80	28.90	27.17	27.33	27.09	28.79	28.32	27.56	27.80	28.90	27.76	27.33	27.45	26.00	27.61
16 Maret 2018	27.09	28.79	28.32	28.02	27.74	29.09	25.55	27.09	27.09	28.32	28.02	27.74	29.09	28.12	28.27	28.79	25.14
19 Maret 2018	25.76	28.90	27.56	27.80	28.90	27.76	27.33	27.09	28.32	27.56	27.80	28.90	27.76	27.33	27.09	25.23	27.72
21 Maret 2018	26.98	28.79	28.79	28.32	28.02	27.74	25.89	28.12	28.79	28.79	28.32	29.12	26.62	29.09	28.12	28.02	27.74
22 Maret 2018	26.34	27.09	28.00	28.09	28.02	28.88	24.54	27.09	28.79	28.79	28.32	28.02	27.74	29.09	27.09	27.80	26.94
23 Maret 2018	26.07	25.54	28.79	27.18	28.02	28.81	25.00	28.79	28.32	28.02	26.23	29.09	28.88	28.83	27.72	28.02	27.74