

LAMPIRAN



Lampiran 1. Dokumentasi Kegiatan Penelitian



Abu sekam padi



Proses Furnace



Larutan HCl dan NaOH



Proses Autoklaf



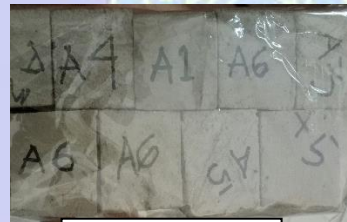
Memasukkan sampel ke ballmill



Proses Ballmill



Proses Oven



Cadas Buatan



Pengukuran massa



Perendaman cadas



Uji Kuat Tekan

Lampiran 2. Hasil Analisis Uji Anava dan Tukey

Tests of Normality

	Komposisi Cadas	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Uji Kuat	A1	.230	5	.200*	.900	5	.412
Tekan	A2	.320	5	.104	.802	5	.085
	A3	.225	5	.200*	.891	5	.364
	A4	.219	5	.200*	.886	5	.338
	A5	.146	5	.200*	.987	5	.967

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Descriptives

Uji Kuat Tekan

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
A1	5	11.76293	1.502943	.672136	9.89678	13.62908	10.321	13.903
A2	5	14.62080	.744609	.332999	13.69625	15.54535	13.405	15.170
A3	5	16.17293	.835833	.373796	15.13511	17.21076	15.070	16.962
A4	5	16.52367	.730962	.326896	15.61606	17.43128	15.772	17.393
A5	5	7.63447	1.190249	.532296	6.15658	9.11236	6.001	9.084
Total	25	13.34296	3.512245	.702449	11.89318	14.79274	6.001	17.393

Test of Homogeneity of Variances

Uji Kuat Tekan

Levene Statistic	df1	df2	Sig.
1.081	4	20	.392

ANOVA

Uji Kuat Tekan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	274.209	4	68.552	62.744	.000
Within Groups	21.852	20	1.093		
Total	296.061	24			

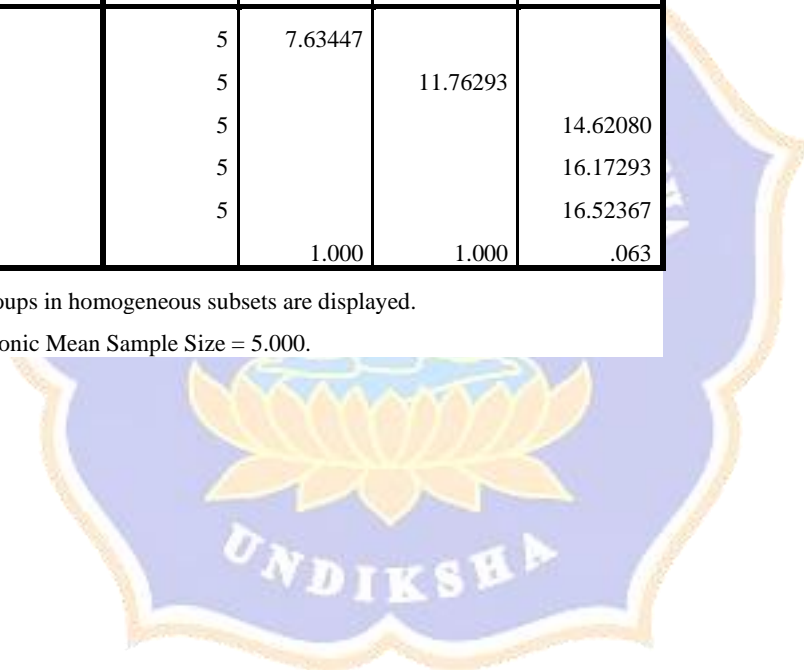
Uji Kuat Tekan

Tukey HSD^a

Komposisi Cadas	N	Subset for alpha = 0.05		
		1	2	3
A5	5	7.63447		
A1	5		11.76293	
A2	5			14.62080
A3	5			16.17293
A4	5			16.52367
Sig.		1.000	1.000	.063

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.



Multiple Comparisons

Dependent Variable: Uji Kuat Tekan

Tukey HSD

(I) Komposisi Cadas	(J) Komposisi Cadas	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
A1	A2	-2.857867*	.661084	.003	-4.83608	-.87966
	A3	-4.410000*	.661084	.000	-6.38821	-2.43179
	A4	-4.760733*	.661084	.000	-6.73894	-2.78252
	A5	4.128460*	.661084	.000	2.15025	6.10667
A2	A1	2.857867*	.661084	.003	.87966	4.83608
	A3	-1.552133	.661084	.171	-3.53034	.42608
	A4	-1.902867	.661084	.063	-3.88108	.07534
	A5	6.986327*	.661084	.000	5.00812	8.96454
A3	A1	4.410000*	.661084	.000	2.43179	6.38821
	A2	1.552133	.661084	.171	-.42608	3.53034
	A4	-.350733	.661084	.983	-2.32894	1.62748
	A5	8.538460*	.661084	.000	6.56025	10.51667
A4	A1	4.760733*	.661084	.000	2.78252	6.73894
	A2	1.902867	.661084	.063	-.07534	3.88108
	A3	.350733	.661084	.983	-1.62748	2.32894
	A5	8.889193*	.661084	.000	6.91098	10.86740
A5	A1	-4.128460*	.661084	.000	-6.10667	-2.15025
	A2	-6.986327*	.661084	.000	-8.96454	-5.00812
	A3	-8.538460*	.661084	.000	-10.51667	-6.56025
	A4	-8.889193*	.661084	.000	-10.86740	-6.91098

*. The mean difference is significant at the 0.05 level.

Lampiran 3. Hasil Analisis Image J

	Area	Mean	Min	Max	Angle	Length
1	345.451	83.246	72.003	103.483	-21.801	112.191
2	203.727	76.337	61.909	89	-33.69	64.385
3	230.3	91.524	77.792	109.222	-25.56	75.878
4	274.589	89.405	75.4	102.5	23.962	87.936
5	407.455	61.578	47.369	74.6	-9.039	132.599
6	318.878	79.256	61.464	95.728	-21.501	105.56
7	132.866	106.577	99.286	114	-17.103	40.481
8	194.87	75.679	61.277	92	-14.036	61.356



Lampiran 4. Hasil Perhitungan Komposisi Terbaik daya Absorpsi-Desorpsi

Absorpsi Total				
komposisi	Berat basah	Berat Kerin	Hasil	Colum
A5	8.94	6.8	2.14	31%
A1	8.99	7	1.99	28,4%
A2	6.72	5.24	1.48	28%
A3	9.36	7.9	1.46	18%
A4	8.5	7.23	1.27	17%

Absorpsi Alami Tempat Teduh				Absorpsi Tempat Kering		
Komposisi	Berat Kering A	Berat Kerin	Hasil	Bka	Berat Kerin	Hasil
A5	7.76	6.8	0.96	7.69	6.8	0.89
A1	7.62	7	0.62	7.55	7	0.55
A2	5.68	5.24	0.44	5.59	5.24	0.35
A3	8.29	7.9	0.39	8.23	7.9	0.33
A4	7.61	7.23	0.38	7.55	7.23	0.32

Desorpsi Tempat Teduh				Desorpsi Tempat Kering		
Komposisi	Berat basah H1	Bka	Hasil	Berat basah H1	Bka	Hasil
A5	8.64	7.76	0.88	8.3	7.69	0.61
A1	8.095	7.62	0.475	8.075	7.55	0.525
A2	6.1	5.68	0.42	5.9	5.59	0.31
A3	8.68	8.29	0.39	8.5	8.23	0.27
A4	7.98	7.61	0.37	7.82	7.57	0.25



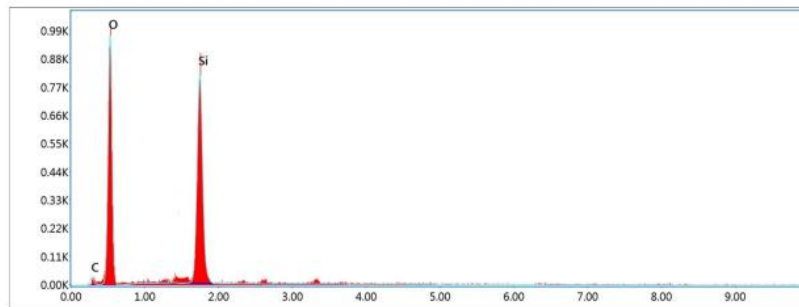
Lampiran 5. Hasil Pengujian EDS

EDAX APEX

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Full Area 1

kV: 15 Mag: 1000 Takeoff: 22.9 Live Time(s): 100 Amp Time(μs): 3.84 Resolution:(eV) 133.6



Smart Quant Results

Element	Weight %	Atomic %	Net Int.	Error %	Kratio	Z	A	F
C K	7.21	10.94	2.03	18.76	0.0126	1.0815	0.1612	1.0000
O K	58.75	66.95	68.33	8.09	0.2650	1.0297	0.4382	1.0000
Si K	34.05	22.11	74.61	3.98	0.2735	0.9266	0.8661	1.0010



Lampiran 6. Hasil Pengujian Kuat Tekan

1. Kuat Tekan A1

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	3684.9	14483

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	3594.1	23234
2	3096.4	22666
3	4170.8	17645
4	3098.2	11198

2. Kuat Tekan A2

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	4021.4	14217

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	4516.5	12004

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	4551	12019

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	4521	17310
2	4321.3	12040

3. Kuat Tekan A3

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	4931.9	17647

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	4659.6	23640
2	5058.3	18916

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	5088.6	20564

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	4521	23275

4. Kuat Tekan A4

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	5218	15366

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	5157.2	14158

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	4892.5	41379
2	4731.5	75357

5. Kuat Tekan A5 (Kontrol)

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	1800.2	15083

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	2526.5	13865

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	2134.91	25002

Test No	Maximum point	Elastic modulus
	Load	
	N	MPa
1	2725.3	11702
2	2264.8	46567

Lampiran 7. SNI 03-0349-1989

4.3 Syarat Fisis

Bata beton harus memenuhi syarat-syarat fisis sesuai dengan tabel II.

Tabel II
Syarat-syarat fisis bata beton

Syarat fisis	Sa- tu- an.	Tingkat mutu bata beton pejal				Tingkat mutu bata beton berlobang			
		I	II	III	IV	I	II	III	IV
1. Kuat tekan bruto* ra- ta-rata min.	kg/ cm ²	100	70	40	25	70	50	35	20
2. Kuat-tekan bruto masing- masing ben- da uji min.	kg/ cm ²	90	65	35	21	65	45	30	17
3. Penyerapan air rata-rata, maks.	%	25	35	—	—	25	35	—	—

- Kuat tekan bruto - adalah beban tekan keseluruhan pada waktu benda coba pecah, dibagi dengan luas ukuran nyata dari bata termasuk luas lubang serta cekungan tepi.

