

## Univariate Analysis of Variance

### Between-Subjects Factors

		Value Label	N
Material	1	Material tipe 1	12
	2	Material tipe 2	12
	3	Material Tipe 3	12
Temperatur	1	15F	12
	2	70F	12
	3	125F	12

### Levene's Test of Equality of Error Variances<sup>a</sup>

Dependent Variable: Daya

F	df1	df2	Sig.
.902	8	27	.529

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Material + Temperatur + Material \* Temperatur

### Tests of Between-Subjects Effects

Dependent Variable: Daya

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	59416.222 <sup>a</sup>	8	7427.028	11.000	.000
Intercept	400900.028	1	400900.028	593.739	.000
Material	10683.722	2	5341.861	7.911	.002
Temperatur	39118.722	2	19559.361	28.968	.000
Material * Temperatur	9613.778	4	2403.444	3.560	.019
Error	18230.750	27	675.213		
Total	478547.000	36			
Corrected Total	77646.972	35			

a. R Squared = .765 (Adjusted R Squared = .696)

## Estimated Marginal Means

### 1. Material

Dependent Variable: Daya

Material	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Material tipe 1	83.167	7.501	67.776	98.558
Material tipe 2	108.333	7.501	92.942	123.724
Material Tipe 3	125.083	7.501	109.692	140.474

### 2. Temperatur

Dependent Variable: Daya

Temperatur	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
15F	144.833	7.501	129.442	160.224
70F	107.583	7.501	92.192	122.974
125F	64.167	7.501	48.776	79.558

### 3. Material \* Temperatur

Dependent Variable: Daya

Material	Temperatur	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Material tipe 1	15F	134.750	12.992	108.092	161.408
	70F	57.250	12.992	30.592	83.908
	125F	57.500	12.992	30.842	84.158
Material tipe 2	15F	155.750	12.992	129.092	182.408
	70F	119.750	12.992	93.092	146.408
	125F	49.500	12.992	22.842	76.158
Material Tipe 3	15F	144.000	12.992	117.342	170.658
	70F	145.750	12.992	119.092	172.408
	125F	85.500	12.992	58.842	112.158

## Post Hoc Tests

### Material

### Multiple Comparisons

Dependent Variable: Daya

Bonferroni

(I) Material	(J) Material	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Material tipe 1	Material tipe 2	-25.17	10.608	.075	-52.24	1.91
	Material Tipe 3	-41.92*	10.608	.002	-68.99	-14.84
Material tipe 2	Material tipe 1	25.17	10.608	.075	-1.91	52.24
	Material Tipe 3	-16.75	10.608	.378	-43.83	10.33
Material Tipe 3	Material tipe 1	41.92*	10.608	.002	14.84	68.99
	Material tipe 2	16.75	10.608	.378	-10.33	43.83

Based on observed means.

The error term is Mean Square(Error) = 675.213.

\*. The mean difference is significant at the .05 level.

## Homogeneous Subsets

### Temperatur

### Multiple Comparisons

Dependent Variable: Daya

Bonferroni

(I) Temperatur	(J) Temperatur	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
15F	70F	37.25*	10.608	.005	10.17	64.33
	125F	80.67*	10.608	.000	53.59	107.74
70F	15F	-37.25*	10.608	.005	-64.33	-10.17
	125F	43.42*	10.608	.001	16.34	70.49
125F	15F	-80.67*	10.608	.000	-107.74	-53.59
	70F	-43.42*	10.608	.001	-70.49	-16.34

Based on observed means.

The error term is Mean Square(Error) = 675.213.

\*. The mean difference is significant at the .05 level.

## Profile Plots

