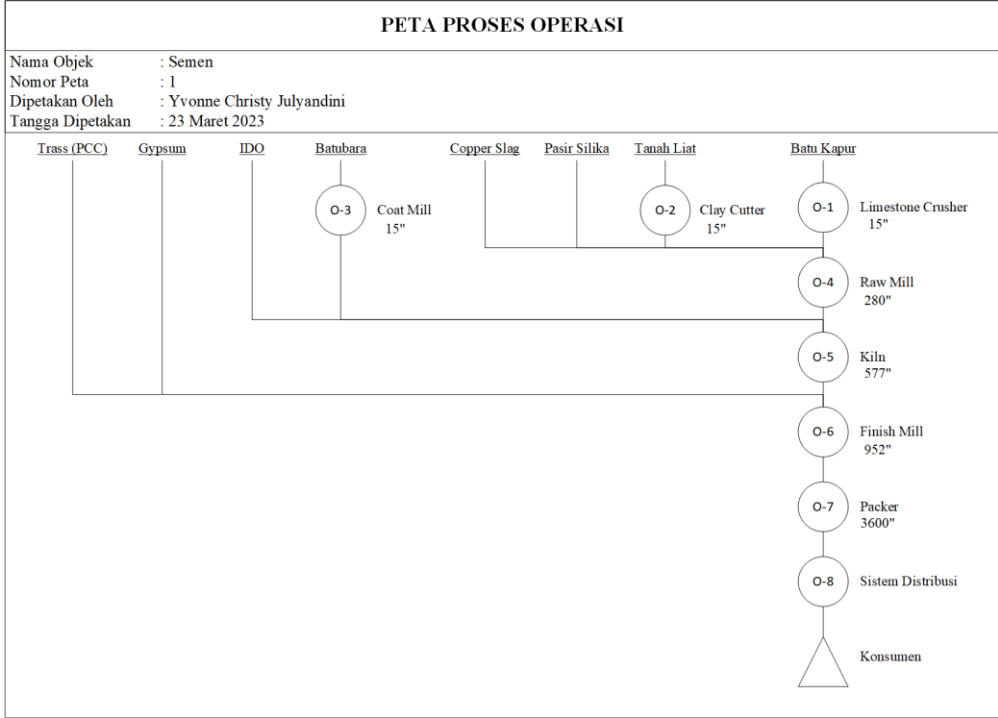


LAMPIRAN

Lampiran 1. Operation Process Chart (OPC) Pembuatan Semen



Lampiran 2. Tabel Fungsi Gamma

n	$\Gamma(n)$	n	$\Gamma(n)$	n	$\Gamma(n)$	n	$\Gamma(n)$	n	$\Gamma(n)$
1,00	1,000000	1,20	0,918169	1,40	0,887264	1,60	0,893516	1,80	0,931384
1,01	0,994326	1,21	0,915577	1,41	0,886764	1,61	0,894681	1,81	0,934076
1,02	0,988844	1,22	0,913106	1,42	0,886356	1,62	0,895924	1,82	0,936845
1,03	0,983550	1,23	0,910735	1,43	0,886036	1,63	0,897244	1,83	0,939690
1,04	0,978438	1,24	0,918521	1,44	0,885805	1,64	0,898642	1,84	0,942612
1,05	0,973504	1,25	0,916403	1,45	0,885661	1,65	0,900117	1,85	0,945611
1,06	0,968744	1,26	0,914397	1,46	0,885604	1,66	0,901668	1,86	0,948687
1,07	0,964152	1,27	0,912503	1,47	0,885633	1,67	0,903296	1,87	0,951840
1,08	0,959725	1,28	0,910719	1,48	0,885747	1,68	0,905001	1,88	0,955071
1,09	0,955459	1,29	0,899042	1,49	0,885945	1,69	0,906782	1,89	0,958380
1,10	0,951351	1,30	0,897471	1,50	0,886227	1,70	0,908639	1,90	0,961766
1,11	0,947395	1,31	0,896004	1,51	0,886592	1,71	0,910572	1,91	0,965231
1,12	0,943590	1,32	0,894640	1,52	0,887039	1,72	0,912580	1,92	0,968774
1,13	0,939931	1,33	0,893378	1,53	0,887568	1,73	0,914665	1,93	0,972397
1,14	0,936416	1,34	0,892215	1,54	0,888178	1,74	0,916826	1,94	0,976099
1,15	0,933041	1,35	0,891151	1,55	0,888869	1,75	0,919062	1,95	0,979881
1,16	0,929803	1,36	0,890184	1,56	0,889639	1,76	0,921375	1,96	0,983742
1,17	0,926700	1,37	0,889313	1,57	0,890490	1,77	0,923763	1,97	0,987685
1,18	0,923728	1,38	0,888537	1,58	0,891420	1,78	0,926227	1,98	0,991708
1,19	0,920885	1,39	0,887854	1,59	0,892428	1,79	0,928767	1,99	0,995813
1,20	0,918169	1,40	0,887264	1,60	0,893516	1,80	0,931384	2,00	1,000000

Lampiran 3. Hasil *Output* Penggantian Komponen *Spring Load Cell* Menggunakan *Statgraphics 18*

The top screenshot shows the Statgraphics 18 interface with a data table. The table has the following data:

	PENGANTIAN SPRING LOAD CELL	PENGANTIAN CYLINDER BAG STOOD	Col_3	Col_4	Col_5	Col_6	Col_7	Col_8	Col_9	Col_10
1	5	31								
2	6	4								
3	1	6								
4	8	5								
5	1	2								
6	2	6								
7	17	2								
8	3	4								
9	3	2								
10	3	12								
11	2	3								
12	4	4								
13	4	30								
14	4	22								
15	1	3								
16	7	3								
17	1	10								
18	1	8								
19	6	2								
20	12	5								
21	1	5								
22	2	12								
23	11	3								
24	1	41								

The bottom screenshot shows the same data table with a menu open for 'Distribution Fitting'. The menu options are:

- Numeric Data
- Categorical Data
- Distribution Fitting
- Life Data
- Multivariate Methods
- Time Series
- Point Processes

The 'Distribution Fitting' menu is expanded, showing the following options:

- Probability Distributions...
- Probability Plots...
- Fitting Uncensored Data...
- Fitting Censored Data...

The status bar at the bottom of the window reads: "Distribution fitting for numeric data | Distribution Fitting".

The screenshot shows the STATGRAPHICS Centurion interface. The main window displays a data table with columns labeled 'PENGANTIAN SPRING LOAD CELL', 'PENGANTIAN CYLINDER BAG STOOL', and 'Col_3' through 'Col_10'. The data rows contain numerical values. A dialog box titled 'Distribution Fitting (Uncensored Data)' is open, showing a list of data sources. The 'Data:' field is set to 'PENGANTIAN SPRING LOAD CELL'. There are buttons for 'OK', 'Cancel', 'Delete', 'Transform...', and 'Help'.

	PENGANTIAN SPRING LOAD CELL	PENGANTIAN CYLINDER BAG STOOL	Col_3	Col_4	Col_5	Col_6	Col_7	Col_8	Col_9	Col_10
1	6	21								
2	6	4								
3	1	6								
4	8	5								
5	1	2								
6	2	6								
7	17	2								
8	3	4								
9	3	2								
10	3	12								
11	2	3								
12	4	4								
13	4	30								
14	4	22								
15	1	3								
16	7	3								
17	1	10								
18	1	8								
19	6	2								
20	12	5								
21	1	5								
22	2	12								
23	11	3								
24	1	41								

For Help, press F1

The screenshot shows the same data table as above, but with the 'Distribution Fitting Options' dialog box open. The dialog lists various probability distributions with checkboxes for selection. The 'Weibull' distribution is selected. There are also sections for 'Binomial Trials', 'Hypergeometric Trials', and 'Negative Binomial Trials' with their respective parameters.

Distribution	<input type="checkbox"/>	Distribution	<input type="checkbox"/>	Distribution	<input type="checkbox"/>
Benoulli	<input type="checkbox"/>	Exponential Power	<input type="checkbox"/>	Lognormal (3-parameter)	<input type="checkbox"/>
Binomial	<input type="checkbox"/>	F (Variance Ratio)	<input type="checkbox"/>	Maxwell (2-parameter)	<input type="checkbox"/>
Discrete Uniform	<input type="checkbox"/>	Folded Normal	<input type="checkbox"/>	Noncentral Chi-Square	<input type="checkbox"/>
Geometric	<input type="checkbox"/>	Gamma	<input type="checkbox"/>	Noncentral F	<input type="checkbox"/>
Hypergeometric	<input type="checkbox"/>	Gamma (3-parameter)	<input type="checkbox"/>	Noncentral t	<input type="checkbox"/>
Negative Binomial	<input type="checkbox"/>	Generalized Gamma	<input type="checkbox"/>	Normal	<input type="checkbox"/>
Poisson	<input type="checkbox"/>	Generalized Logistic	<input type="checkbox"/>	Pareto	<input type="checkbox"/>
Beta	<input type="checkbox"/>	Half Normal (2-parameter)	<input type="checkbox"/>	Pareto (2-parameter)	<input type="checkbox"/>
Beta (4-parameter)	<input type="checkbox"/>	Inverse Gaussian	<input type="checkbox"/>	Rayleigh (2-parameter)	<input type="checkbox"/>
Birnbaum-Saunders	<input type="checkbox"/>	Laplace	<input type="checkbox"/>	Smallest Extreme Value	<input type="checkbox"/>
Cauchy	<input type="checkbox"/>	Largest Extreme Value	<input type="checkbox"/>	Student's t	<input type="checkbox"/>
Chi-Square	<input type="checkbox"/>	Logistic	<input type="checkbox"/>	Triangular	<input type="checkbox"/>
Erlang	<input type="checkbox"/>	Loglogistic	<input type="checkbox"/>	Uniform	<input type="checkbox"/>
Exponential	<input type="checkbox"/>	Loglogistic (3-parameter)	<input checked="" type="checkbox"/>	Weibull	<input checked="" type="checkbox"/>
Exponential (2-parameter)	<input type="checkbox"/>	Lognormal	<input type="checkbox"/>	Weibull (3-parameter)	<input type="checkbox"/>

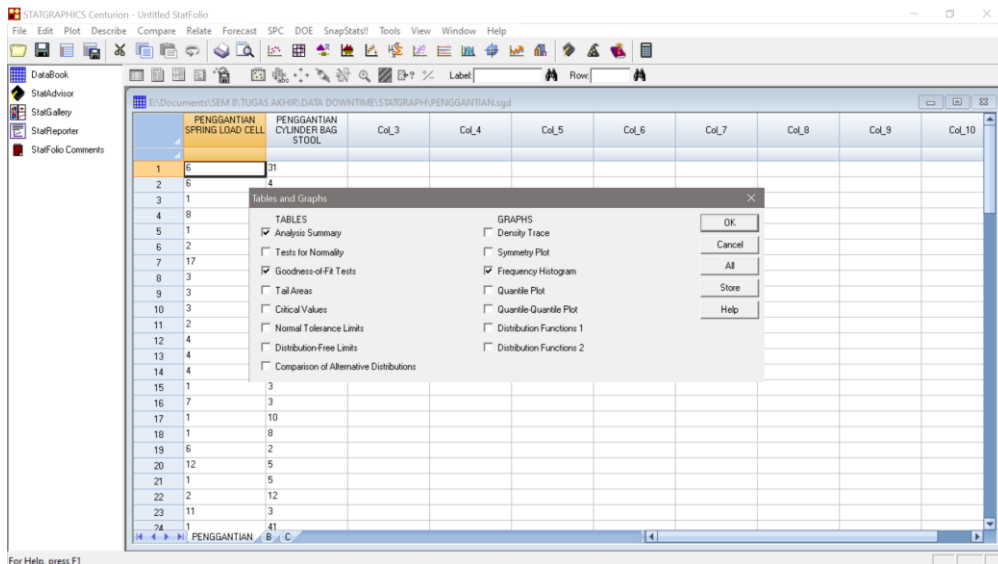
Binomial Trials: Sample Size n: 100

Hypergeometric Trials: Sample Size n: 100, Estimate N: Specify N: 1000

Negative Binomial Trials: Estimate k: Specify k: 10

Extended Threshold Parameters: Estimate: Specify lower/Upper: 0.0 / 1.0

For Help, press F1



Uncensored Data - PENGANTIAN SPRING LOAD CELL

Data variable: PENGANTIAN SPRING LOAD CELL

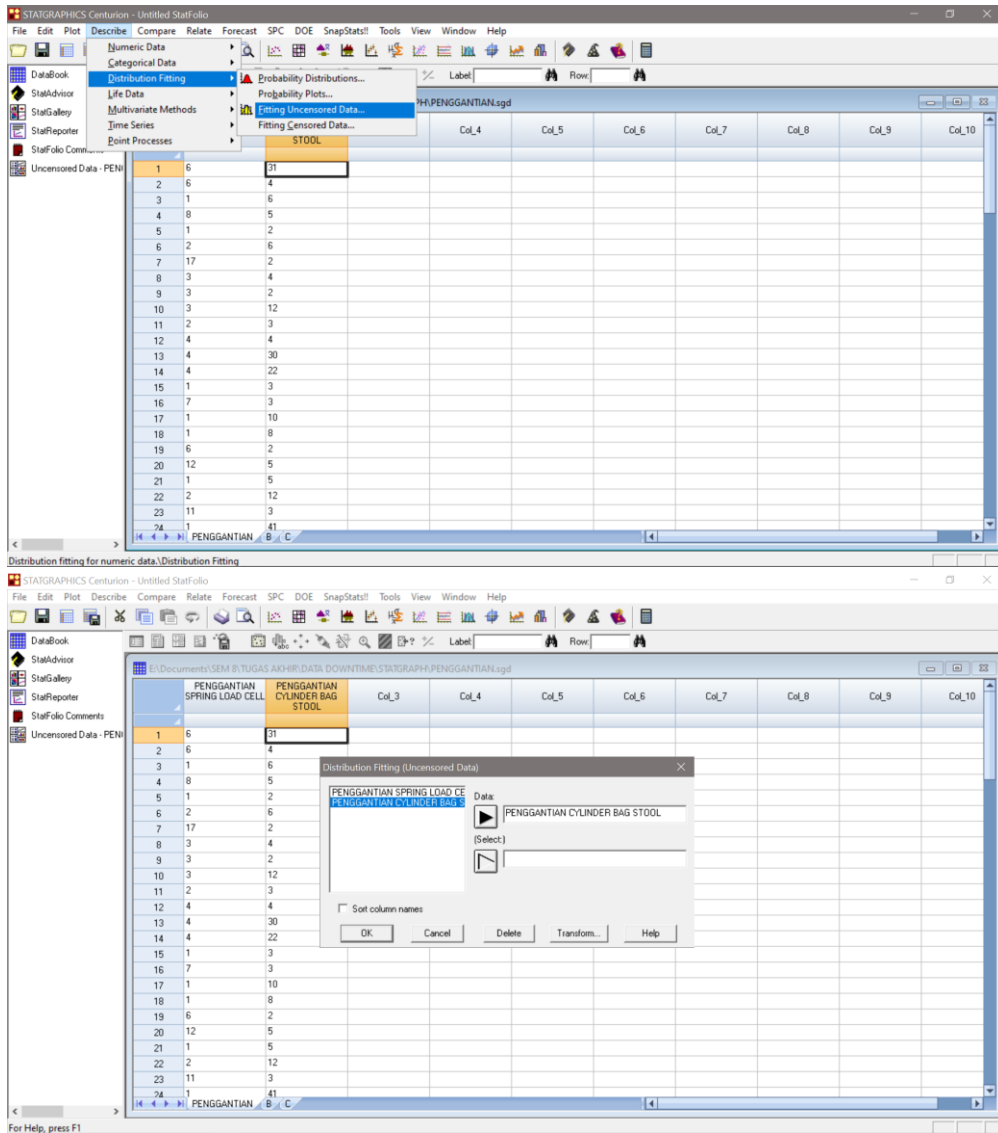
86 values ranging from 1.0 to 17.0

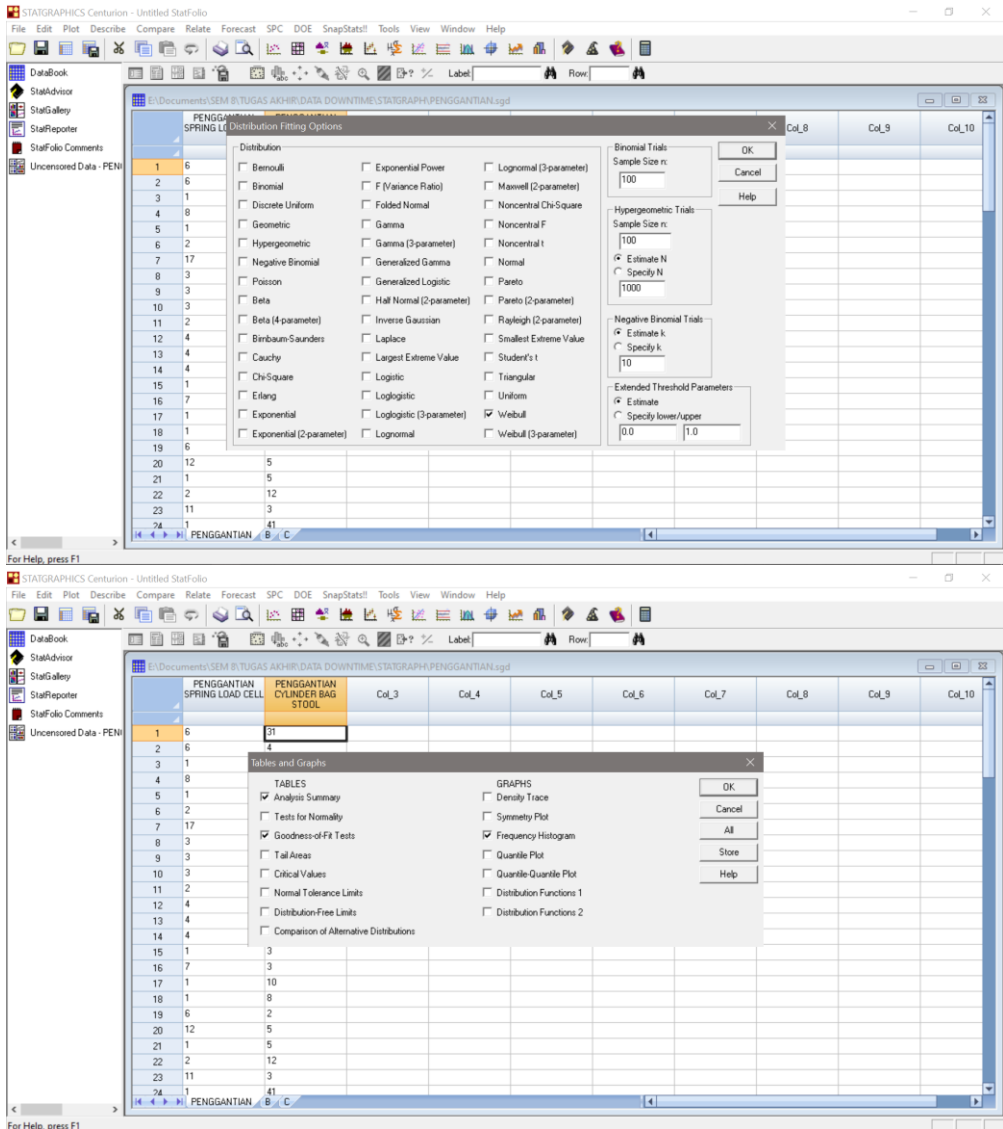
Fitted Distributions

<i>Weibull</i>
shape = 1.23277
scale = 4.50998

The StatAdvisor

This analysis shows the results of fitting a Weibull distribution to the data on PENGANTIAN SPRING LOAD CELL. The estimated parameters of the fitted distribution are shown above. You can test whether the Weibull distribution fits the data adequately by selecting Goodness-of-Fit Tests from the list of Tabular Options. You can also assess visually how well the Weibull distribution fits by selecting Frequency Histogram from the list of Graphical Options. Other options within the procedure allow you to compute and display tail areas and critical values for the distribution. To select a different distribution, press the alternate mouse button and select Analysis Options.





Penguncensored Data - PENGGANTIAN CYLINDER BAG STOOL

Data variable: PENGGANTIAN CYLINDER BAG STOOL

35 values ranging from 2.0 to 41.0

Fitted Distributions

<i>Weibull</i>
shape = 1.15773
scale = 10.5971

The StatAdvisor

This analysis shows the results of fitting a Weibull distribution to the data on PENGANTIAN CYLINDER BAG STOOL. The estimated parameters of the fitted distribution are shown above. You can test whether the Weibull distribution fits the data adequately by selecting Goodness-of-Fit Tests from the list of Tabular Options. You can also assess visually how well the Weibull distribution fits by selecting Frequency Histogram from the list of Graphical Options. Other options within the procedure allow you to compute and display tail areas and critical values for the distribution. To select a different distribution, press the alternate mouse button and select Analysis Options.

Goodness-of-Fit Tests for PENGANTIAN CYLINDER BAG STOOL

Kolmogorov-Smirnov Test

	<i>Weibull</i>
DPLUS	0.143346
DMINUS	0.135051
DN	0.143346
P-Value	0.477798

The StatAdvisor

This pane shows the results of tests run to determine whether PENGANTIAN CYLINDER BAG STOOL can be adequately modeled by a Weibull distribution. Since the smallest P-value amongst the tests performed is greater than or equal to 0.05, we can not reject the idea that PENGANTIAN CYLINDER BAG STOOL comes from a Weibull distribution with 95% confidence.

The screenshot shows the STATGRAPHICS Centurion interface with a data table and a dialog box. The data table contains two columns: 'PERBAIKAN SPRING LOAD CELL' and 'PERBAIKAN CYLINDER BAG STOOD'. The dialog box is titled 'Distribution Fitting (Uncensored Data)' and has a 'Data' field containing 'PERBAIKAN SPRING LOAD CELL'. There are 'OK', 'Cancel', 'Delete', 'Transform...', and 'Help' buttons at the bottom of the dialog.

	PERBAIKAN SPRING LOAD CELL	PERBAIKAN CYLINDER BAG STOOD	Col_3	Col_4	Col_5	Col_6	Col_7	Col_8	Col_9	Col_10
1	5	2								
2	5	2								
3	6	1								
4	15	6								
5	1	8								
6	6	5								
7	41	1								
8	1	5								
9	19	1								
10	2	3								
11	30	5								
12	55	8								
13	17	6								
14	2	2								
15	1	3								
16	3	1								
17	14	6								
18	16	10								
19	10	5								
20	3	1								
21	2	3								
22	20	1								
23	7	2								
24	11	10								

For Help, press F1

The screenshot shows the STATGRAPHICS Centurion interface with a data table and a 'Distribution Fitting Options' dialog box. The dialog box lists various probability distributions with checkboxes. The 'Weibull' distribution is selected. There are 'OK', 'Cancel', and 'Help' buttons at the bottom right of the dialog.

	PERBAIKAN SPRING LOAD CELL	PERBAIKAN CYLINDER BAG STOOD	Col_8	Col_9	Col_10
1	5	2			
2	5	2			
3	6	1			
4	15	6			
5	1	8			
6	6	5			
7	41	1			
8	1	5			
9	19	1			
10	2	3			
11	30	5			
12	55	8			
13	17	6			
14	2	2			
15	1	3			
16	3	1			
17	14	6			
18	16	10			
19	10	5			
20	3	1			
21	2	3			
22	20	1			
23	7	2			
24	11	10			

For Help, press F1

STATGRAPHICS Centurion - Untitled StatFolio

File Edit Plot Describe Compare Relate Forecast SPC DOE SnapStats! Tools View Window Help

PERBAIKAN SPRING LOAD CELL PERBAIKAN CYLINDER BAG STUOL Col_3 Col_4 Col_5 Col_6 Col_7 Col_8 Col_9 Col_10

1 6 2
2 5 2
3 6
4 15
5 1
6 6
7 41
8 1
9 19
10 2
11 30
12 55
13 17
14 2
15 1
16 3
17 14
18 16
19 10
20 3
21 2
22 20
23 7
24 11

TABLES
 Analysis Summary
 Tests for Normality
 Goodness-of-Fit Tests
 Tail Areas
 Critical Values
 Normal Tolerance Limits
 Distribution-Free Limits
 Comparison of Alternative Distributions

GRAPHS
 Density Trace
 Symmetry Plot
 Frequency Histogram
 Quantile Plot
 Quantile-Quantile Plot
 Distribution Functions 1
 Distribution Functions 2

OK Cancel All Store Help

For Help, press F1

Uncensored Data - PERBAIKAN SPRING LOAD CELL

Data variable: PERBAIKAN SPRING LOAD CELL

31 values ranging from 1.0 to 55.0

Fitted Distributions

<i>Weibull</i>
shape = 0.997947
scale = 11.2472

The StatAdvisor

This analysis shows the results of fitting a Weibull distribution to the data on PERBAIKAN SPRING LOAD CELL. The estimated parameters of the fitted distribution are shown above. You can test whether the Weibull distribution fits the data adequately by selecting Goodness-of-Fit Tests from the list of Tabular Options. You can also assess visually how well the Weibull distribution fits by selecting Frequency Histogram from the list of Graphical Options. Other options within the procedure allow you to compute and display tail areas and critical values for the distribution. To select a different distribution, press the alternate mouse button and select Analysis Options.

The image shows two screenshots of the STATGRAPHICS Centurion software interface. The top screenshot shows the 'Distribution Fitting' menu with 'Fitting Uncensored Data...' selected. The bottom screenshot shows the 'Distribution fitting for numeric data: Distribution Fitting' window with a dialog box for selecting data.

Top Screenshot: Distribution Fitting Menu

- File Edit Plot Describe Compare Relate Forecast SPC DOE SnapStats! Tools View Window Help
- Menu: Distribution Fitting
 - Probability Distributions...
 - Probability Plots...
 - Fitting Uncensored Data... (Selected)
 - Fitting Censored Data...

Bottom Screenshot: Distribution Fitting (Uncensored Data) Dialog

The dialog box is titled "Distribution Fitting (Uncensored Data)". It contains a list of data sources:

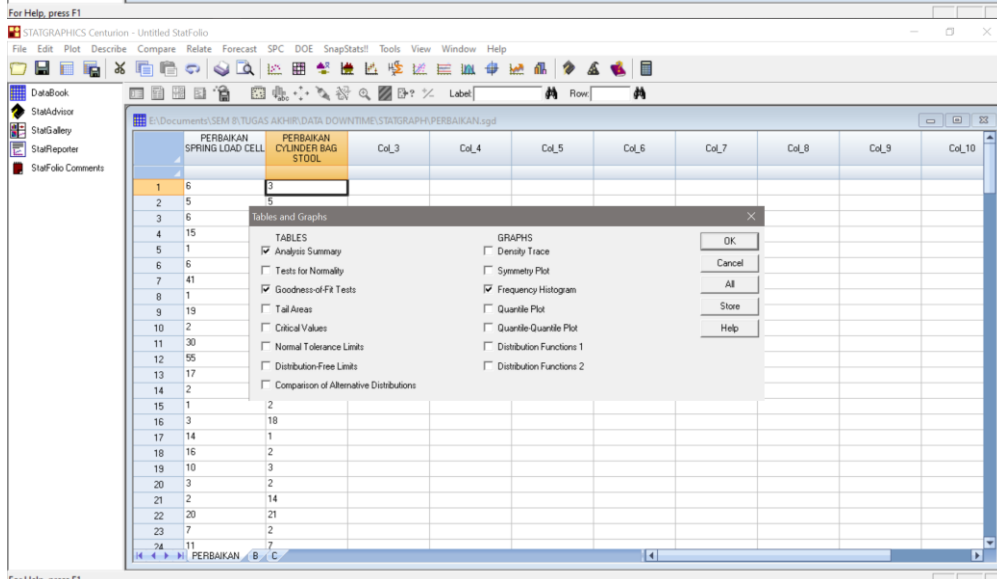
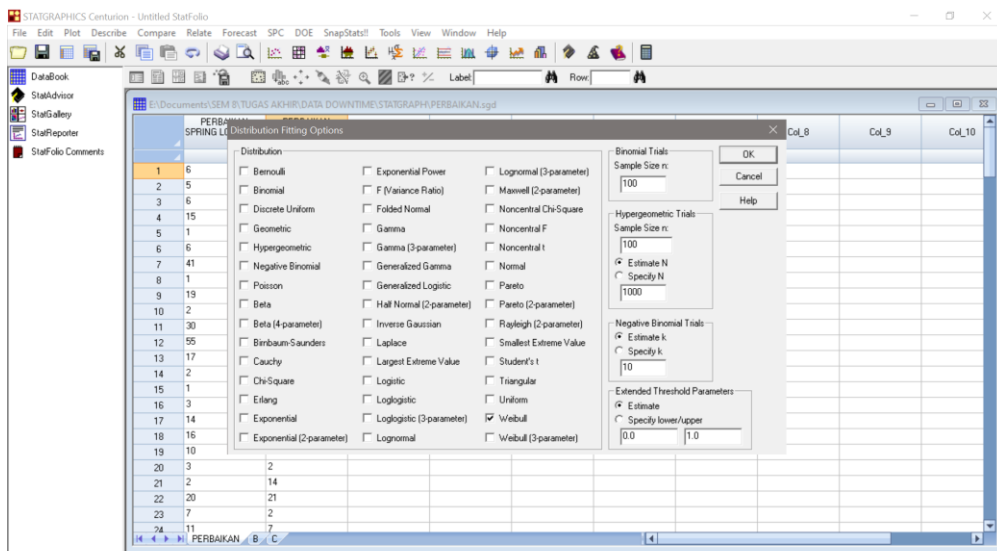
- PERBAIKAN SPRING LOAD CELL
- PERBAIKAN WINDEN BAG STIOL
- PERBAIKAN CYLINDER BAG STOOL (Selected)

Buttons at the bottom: OK, Cancel, Delete, Transform..., Help.

Data Table (from both screenshots):

Row	Col_1	Col_2	Col_3	Col_4	Col_5	Col_6	Col_7	Col_8	Col_9	Col_10
1	6	2								
2	5	5								
3	6	14								
4	15	8								
5	1	3								
6	6	5								
7	41	8								
8	1	14								
9	19	4								
10	2	1								
11	30	4								
12	55	2								
13	17	2								
14	2	4								
15	1	2								
16	3	18								
17	14	1								
18	16	2								
19	10	3								
20	3	2								
21	2	14								
22	20	21								
23	7	2								
24	11	7								

For Help, press F1



Uncensored Data - PERBAIKAN CYLINDER BAG STOOL

Data variable: PERBAIKAN CYLINDER BAG STOOL

57 values ranging from 1.0 to 22.0

Fitted Distributions

<i>Weibull</i>
shape = 1.06586
scale = 6.3633

The StatAdvisor

This analysis shows the results of fitting a Weibull distribution to the data on PERBAIKAN CYLINDER BAG STOOL. The estimated parameters of the fitted

distribution are shown above. You can test whether the Weibull distribution fits the data adequately by selecting Goodness-of-Fit Tests from the list of Tabular Options. You can also assess visually how well the Weibull distribution fits by selecting Frequency Histogram from the list of Graphical Options. Other options within the procedure allow you to compute and display tail areas and critical values for the distribution. To select a different distribution, press the alternate mouse button and select Analysis Options.

Goodness-of-Fit Tests for PERBAIKAN CYLINDER BAG STOOL

Kolmogorov-Smirnov Test

	<i>Weibull</i>
DPLUS	0.128119
DMINUS	0.129875
DN	0.129875
P-Value	0.292824

The StatAdvisor

This pane shows the results of tests run to determine whether PERBAIKAN CYLINDER BAG STOOL can be adequately modeled by a Weibull distribution. Since the smallest P-value amongst the tests performed is greater than or equal to 0.05, we can not reject the idea that PERBAIKAN CYLINDER BAG STOOL comes from a Weibull distribution with 95% confidence.

Lampiran 7. Data Penggantian dan Perbaikan Komponen *Spring Load Cell*

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
03/01/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
03/01/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
04/01/2022	STANG SPRING LOAD CELL PUTUS	30 MENIT
09/01/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
10/01/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
15/01/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
16/01/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
16/01/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
16/01/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
21/01/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
23/01/2022	STANG SPRING LOAD CELL RUSAK	1 JAM
24/01/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
25/01/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
26/01/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
27/01/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
27/01/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
11/02/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
12/02/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
13/02/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT
13/02/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
16/02/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
18/02/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
19/02/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
19/02/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
20/02/2022	STANG SPRING LOAD CELL PUTUS	30 MENIT
22/02/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
22/02/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
24/02/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
28/02/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
02/03/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
04/03/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
08/03/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
09/03/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
13/03/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
16/03/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
17/03/2022	STANG SPRING LOAD CELL RUSAK	1 JAM
17/03/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
18/03/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
23/03/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
24/03/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
24/03/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
31/03/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
01/04/2022	STANG SPRING LOAD CELL RUSAK	30 MENIT
01/04/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
03/04/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
05/04/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
06/04/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
07/04/2022	BAUT SUPPORT SPRING LOAD CELL MIRING	1 JAM
07/04/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
08/04/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
10/04/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
19/04/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
20/04/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
20/04/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
20/04/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
22/04/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
22/04/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
26/04/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
28/04/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
07/05/2022	STANG SPRING LOAD CELL PUTUS	1,5 JAM
09/05/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
09/05/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
11/05/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
13/05/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
14/05/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
17/05/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
21/05/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
22/05/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
23/05/2022	STANG SPRING LOAD CELL PUTUS	30 MENIT
23/05/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
28/05/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
28/05/2022	STANG SPRING LOAD CELL RUSAK	1 JAM
30/05/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
30/05/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
30/05/2022	BAUT SUPPORT SPRING LOAD CELL MIRING	1 JAM

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
31/05/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
06/06/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
08/06/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
08/06/2022	PLAT SPRING LOAD CELL PUTUS	2 JAM
11/06/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
11/06/2022	BAUT STANG SPRING LOAD CELL PUTUS	30 MENIT
12/06/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
13/06/2022	STANG SPRING LOAD CELL PUTUS	30 MENIT
15/06/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT
16/06/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
25/06/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
26/06/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
28/06/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
06/07/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
08/07/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
09/07/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
11/07/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
14/07/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT
15/07/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
16/07/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
16/07/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
16/07/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
28/07/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
29/07/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
29/07/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
30/07/2022	STANG SPRING LOAD CELL PUTUS	30 MENIT
02/08/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
02/08/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
03/08/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT
04/08/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
04/08/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
05/08/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
05/08/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT
08/08/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
13/08/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
15/08/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
15/08/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
16/08/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
17/08/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
18/08/2022	BAUT STANG SPRING LOAD CELL PUTUS	30 MENIT
18/08/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT
18/08/2022	PLAT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
21/08/2022	PLAT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
22/08/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
22/08/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
24/08/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
24/08/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
30/08/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
31/08/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
01/09/2022	PLAT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
01/09/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
07/09/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
07/09/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
07/09/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
14/09/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
14/09/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
15/09/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
16/09/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
16/09/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
17/09/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
18/09/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
20/09/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
20/09/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
21/09/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
21/09/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
22/09/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
23/09/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
24/09/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
26/09/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
27/09/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
02/10/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
05/10/2022	PLAT SPRING LOAD CELL PUTUS	15 MENIT
06/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
09/10/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
12/10/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
12/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
12/10/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
13/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
13/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
15/10/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
15/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
17/10/2022	BAUT STANG SPRING LOAD CELL PUTUS	30 MENIT
17/10/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
18/10/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
19/10/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
20/10/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
21/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
23/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
23/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
26/10/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
30/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
30/10/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
30/10/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
07/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
07/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
07/11/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
10/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
10/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
11/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
11/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
12/11/2022	PLAT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT
12/11/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
13/11/2022	BAUT STANG SPRING LOAD CELL PUTUS	30 MENIT
13/11/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	30 MENIT
14/11/2022	BAUT STANG SPRING LOAD CELL PUTUS	30 MENIT
17/11/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
21/11/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
21/11/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
22/11/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
23/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
24/11/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
26/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
27/11/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
29/11/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
29/11/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
02/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
02/12/2022	PLAT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
04/12/2022	STANG SPRING LOAD CELL PUTUS	1,5 JAM
07/12/2022	BAUT SUPPORT SPRING LOAD CELL MIRING	30 MENIT

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
07/12/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
08/12/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
08/12/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
08/12/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
08/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
08/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
09/12/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
10/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
10/12/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
13/12/2022	PLAT SPRING LOAD CELL PUTUS	1,5 JAM
13/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
14/12/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
15/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
15/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
17/12/2022	STANG SPRING LOAD CELL PUTUS	1 JAM
18/12/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM
18/12/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
19/12/2022	PLAT SPRING LOAD CELL PUTUS	30 MENIT
19/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
22/12/2022	STANG SPRING LOAD CELL PUTUS	30 MENIT
22/12/2022	BAUT SPRING LOAD CELL LONGGAR	30 MENIT
23/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
23/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
24/12/2022	BAUT STANG SPRING LOAD CELL PUTUS	1 JAM
25/12/2022	BAUT SPRING LOAD CELL LONGGAR	1 JAM
29/12/2022	PLAT SPRING LOAD CELL PUTUS	1 JAM
31/12/2022	BAUT SUPPORT SPRING LOAD CELL PUTUS	1 JAM

Sumber: Rekap Data Pemeliharaan Mesin *Packer* Tuban, 2022

Lampiran 8. Data Penggantian dan Perbaikan Komponen *Cylinder Bag Stool*

Tanggal Kerusakan	Keterangan	Waktu Penggantian/ Perbaikan Komponen
05/01/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
05/01/2022	PLATE SUPPORT KNUCKLE BAG STOOL PATAH	30 MENIT
10/01/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
13/01/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
17/01/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
17/01/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
18/01/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
01/02/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
03/02/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
05/02/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
05/02/2022	BAUT SUPPORT CYLINDER BAG STOOL PATAH	30 MENIT
09/02/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
09/02/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
12/02/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
15/02/2022	MOUNTING CYLINDER BAG STOOL AUS	2 JAM
15/02/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
17/02/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
20/02/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
22/02/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
25/02/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
25/02/2022	PANGKON CYLINDER BAG STOOL RUSAK	30 MENIT
28/02/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
01/03/2022	SELANG CYLINDER BAG STOOL RUSAK	30 MENIT
02/03/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM

02/03/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
04/03/2022	SUPPORT KNUCKLE CYLINDER BAG STOOL RUSAK	1 JAM
06/03/2022	BAUT SUPPORT CYLINDER BAG STOOL AUS	30 MENIT
06/03/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
08/03/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
11/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
11/03/2022	SUPPORT KNUCKLE CYLINDER BAG STOOL RUSAK	1 JAM
11/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
15/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
15/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
16/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
16/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
20/03/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
20/03/2022	BAUT SUPPORT CYLINDER BAG STOOL PATAH	30 MENIT
20/03/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
20/03/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
22/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
23/03/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
24/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
27/03/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
28/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
30/03/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
01/04/2022	MOUNTING CYLINDER BAG STOOL RUSAK	30 MENIT
17/04/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
18/04/2022	AIR CYLINDER BAG STOOL MACET	30 MENIT
18/04/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
20/04/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
20/04/2022	SUPPORT KNUCKLE CYLINDER BAG STOOL RUSAK	2 JAM

21/04/2022	MOUNTING CYLINDER BAG STOOL RUSAK	1 JAM
23/04/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
25/04/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
26/04/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
09/05/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
09/05/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
11/05/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
14/05/2022	SUPPORT KNUCKLE CYLINDER BAG STOOL RUSAK	1 JAM
18/05/2022	BAUT SUPPORT CYLINDER BAG STOOL PATAH	30 MENIT
18/05/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
21/05/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
21/05/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
22/05/2022	SUPPORT CYLINDER BAG STOOL MIRING	1 JAM
24/05/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
24/05/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
24/05/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
30/05/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
31/05/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
01/06/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
01/06/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
02/06/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
03/06/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
04/06/2022	MOUNTING CYLINDER BAG STOOL RUSAK	1 JAM
04/06/2022	REGULATOR CYLINDER BAG STOOL RUSAK	1 JAM
08/06/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
11/06/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
13/06/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM

13/06/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
13/06/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
18/06/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
23/06/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
01/07/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
05/07/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
05/07/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
05/07/2022	BAUT SUPPORT CYLINDER BAG STOOL PATAH	30 MENIT
05/07/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
08/07/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
15/07/2022	REGULATOR CYLINDER BAG STOOL RUSAK	30 MENIT
22/07/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
23/07/2022	SEAL CYLINDER BAG STOOL BOCOR	5 JAM
23/07/2022	ULIR KNUCKLE CYLINDER BAG STOOL AUS	30 MENIT
25/07/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
25/07/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
11/08/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
11/08/2022	REGULATOR CYLINDER BAG STOOL RUSAK	30 MENIT
18/08/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
20/08/2022	AIR CYLINDER BAG STOOL MACET	30 MENIT
23/08/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
30/08/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
03/09/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
05/09/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
06/09/2022	PLATE SUPPOTT CYLINDER BAG STOOL RUSAK	30 MENIT
06/09/2022	MOUNTING CYLINDER BAG STOOL RUSAK	30 MENIT
08/09/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM

09/09/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
09/09/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
14/09/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
15/09/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
16/09/2022	MOUNTING CYLINDER BAG STOOL RUSAK	30 MENIT
18/09/2022	ULIR KNUCKLE CYLINDER BAG STOOL AUS	1 JAM
20/09/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
20/09/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
26/09/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
27/09/2022	AIR CYLINDER BAG STOOL MACET	30 MENIT
06/10/2022	PLATE SUPPORT KNUCKLE BAG STOOL PATAH	30 MENIT
06/10/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
10/10/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
12/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
16/10/2022	PLATE SUPPOTT CYLINDER BAG STOOL RUSAK	30 MENIT
16/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
16/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
17/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
17/10/2022	PLATE SUPPOTT CYLINDER BAG STOOL RUSAK	1 JAM
18/10/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
18/10/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
19/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
19/10/2022	AIR CYLINDER BAG STOOL MACET	30 M
20/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
20/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
21/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
22/10/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
24/10/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
25/10/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT

26/10/2022	REGULATOR CYLINDER BAG STOOL RUSAK	1 JAM
05/11/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
10/11/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
11/11/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
12/11/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
16/11/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
16/11/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
23/11/2022	ULIR KNUCKLE CYLINDER BAG STOOL AUS	1 JAM
02/12/2022	MOUNTING CYLINDER BAG STOOL PATAH	30 MENIT
04/12/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
06/12/2022	SUPPORT KNUCKLE CYLINDER BAG STOOL RUSAK	30 MENIT
09/12/2022	MOUNTING CYLINDER BAG STOOL AUS	30 MENIT
09/12/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
10/12/2022	AIR CYLINDER BAG STOOL MACET	30 MENIT
11/12/2022	REGULATOR CYLINDER BAG STOOL RUSAK	30 MENIT
15/12/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
16/12/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
19/12/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
20/12/2022	AIR CYLINDER BAG STOOL MACET	1 JAM
21/12/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM
21/12/2022	MOUNTING CYLINDER BAG STOOL PATAH	1 JAM
22/12/2022	SEAL CYLINDER BAG STOOL BOCOR	30 MENIT
24/12/2022	PLATE SUPPOTT CYLINDER BAG STOOL RUSAK	1 JAM
29/12/2022	SEAL CYLINDER BAG STOOL BOCOR	1 JAM

Sumber: Rekap Data Pemeliharaan Mesin *Packer* Tuban, 2022

Lampiran 9. Surat Izin Penelitian dari Perusahaan



R/74203200/002-3

Nomor : 3020/SM.15/SUP/50056664/2000/03.2023
 Lamp. : -
 Perihal : **Panggilan Penelitian**

Kepada Yth.
 Dr. Ir. Sajjo, M. Kes., IPU., ASEAN Eng
 Dekan
 Universitas 17 Agustus 1945 Surabaya

Menunjuk Surat Saudara No: 722/K/FT/Akd/III/2023 tanggal 10 March 2023, Perihal: Permohonan Ijin Penelitian, dengan ini kami beritahukan bahwa kami dapat menerima mahasiswa/siswa saudara atas nama:

No.	NAMA	NIM	JURUSAN
1.	Dwi Nur Aliyah Firdasafitri	1411900198	Teknik Industri
2.	Yvonne Christy Julyandini	1411900029	Teknik Industri

Untuk melakukan Penelitian di PT Semen Indonesia (Persero) Tbk, Penempatan Pabrik Tuban di unit kerja Group of Packer Autonomous dengan ketentuan sbb :


1. Setiap mahasiswa/siswa yang melakukan Penelitian harus diikutsertakan dalam Asuransi Kecelakaan kerja oleh Institusi ybs.
2. Penelitian dilaksanakan mulai tanggal 01 April 2023 s.d. 30 June 2023
3. Perusahaan tidak menyediakan sarana akomodasi (penginapan) & transportasi.
4. Mahasiswa/siswa tersebut di atas diharapkan kehadirannya pada :
 - Hari/Tanggal : Sabtu, 01 April 2023
 - Pukul : 07.30 WIB sd. Selesai
 - Tempat : Teams Meeting
(informasi link dan ID Teams menyusul)
 - Acara : Pengarahan online dari Perusahaan
- Mengirimkan email dengan melampirkan :
 1. Kartu Tanda Pelajar/Mahasiswa (KTP) sebanyak 1 (satu) lembar.
 2. Polis Asuransi Kecelakaan Kerja/Kesehatan sebanyak 1 (satu) lembar.
 3. Surat Keterangan Sehat dari Rumah Sakit dan menyatakan bebas COVID-19.
 4. Pas foto berwarna ukuran 2x3 sebanyak 2 (dua) lembar.
 5. Surat Panggilan dan Dokumen Pendukung.

Demikian atas perhatian Saudara kami sampaikan terima kasih.

Gresik, 21 March 2023
 PT Semen Indonesia (Persero) Tbk
 An. Direksi,
SM of L&D Operational & Certification


SIG
ANDI ANINDA ANWAR, S.Psi., MM.

Lampiran 10. Kartu Bimbingan Tugas Akhir




JURNAL BIMBINGAN TUGAS AKHIR
PRODI TEKNIK INDUSTRI
SEMESTER GENAP 2022/2023

Nama : YVONNE CHRISTY JULYANDINI

NBI : 1411900029

Judul Penelitian : ANALISIS PEMELIHARAAN KOMPONEN SPRING LOAP CELL DAN CYLINDER BAG MOOL PADA AREA BACKBETURAN IU (MUKAWARU) PT. SEMEN INDONESIA PERLETO (Tbk)

Dosen Pembimbing : Dr. Ir. I Nyoman Lakajaya, ST, MM



No.	Tanggal	Materi Bimbingan	Catatan Pembimbing	Paraf Pembimbing
1	9/3/2023	BAB I	Perbaiki judul dan data awal	<i>[Signature]</i>
2	10/3/2023	BAB I	Perbaiki data awal dan pendahuluan	<i>[Signature]</i>
3	13/3/2023	BAB I	Perbaikan pendahuluan	<i>[Signature]</i>
4	13/3/2023	BAB I & 3	Perbaikan pendahuluan dan penelitian ^{tahap}	<i>[Signature]</i>
5	14/3/2023	BAB I & 3	Perbaikan tahapan penelitian dan ^{tujuan} _{pernyataan}	<i>[Signature]</i>
6	15/3/2023	BAB II	Perbaikan tujuan pustaka	<i>[Signature]</i>
7	5/4/2023	BAB IV	Perbaiki data, ^(waktu antar kerusakan + perbaikan) melengkapi data yg diolah	<i>[Signature]</i>
8	10/5/2023	BAB IV	Perbaikan pengumpulan data lebih spesifik	<i>[Signature]</i>
9	12/5/2023	BAB IV	Perbaikan pengumpulan data ^{kerusakan komponen} pilih salah 1 yg sama	<i>[Signature]</i>
10	15/5/2023	BAB IV	Perbaikan pengolahan dan pengolahan data pada ^{statistik} _{diambilkan semua kerusakannya}	<i>[Signature]</i>
11	17/5/2023	BAB IV	Perbaikan pengolahan data pada statigraph dan perhitungan rata-rata ^{komponen} _{silinder}	<i>[Signature]</i>
12	19/5/2023	BAB IV	Perbaikan pengolahan data pada ^{komponen} _{spring load cell dan ditunjukkan perhitungannya}	<i>[Signature]</i>
13	20/5/2023	BAB IV	Perbaikan pengolahan data, tambahkan data yg perbaikan komponen kemudian bandingkan dg ^{penggantian} _{komponen}	<i>[Signature]</i>
14	24/5/2023	BAB IV	lanjutkan pengolahan data pada statigraph dan perhitungan selanjutnya	<i>[Signature]</i>
15	27/5/2023	BAB IV & V	buat perbandingan dan tabel perbandingan ^{penggantian} _{perbaikan} (analisis data), kesimpulan	<i>[Signature]</i>
16	31/5/2023	BAB IV & V	lanjutkan pengolahan data ^{sampai} _{selesai}	<i>[Signature]</i>


Lampiran 11. Lembar Revisi Sidang Tugas Akhir


UNIVERSITAS 17 AGUSTUS 1945 SURABAYA
 FAKULTAS TEKNIK
 PROGRAM STUDI TEKNIK INDUSTRI


REVISI SIDANG TUGAS AKHIR

NAMA : Yvonne Christy Juliyandini
 NBI : 1411900029
 JUDUL : ANALISIS PEMELIHARAAN KOMPONEN SPRING LOAD CELL DAN CYLINDER BAG STOOL PADA AREA PACKER TUBAN IV
 (STUDI KASUS : OADA PT. SEWEN INDONESIA (PERSERO) TBK DI TUBAN).
 BATAS BIMBINGAN REVISI : 1 Minggu setelah Sidang

NO	URAIAN	BAB	HALAMAN	NO	URAIAN	BAB	HALAMAN
1.	Tambahkan komponen biaya perawatan yg sdh dilakukan perusahaan dan yang saudara teliti	9		1.	tujuan penelitian dan metode = kuantitatif	1	ACC
2.	Pendalaman ditambahkan jenis kerusakan + Foto.	9		2.	pendekatan, terdapat 1, 2 dan 3	2	ACC
				3.	gandum dihapus	3	ACC
				4.	kesimpulan	5	ACC

Telah Direvisi,
 Dosen Penguji 1,

 12/1/2023
 Dr. Ir. Zairal Arief, MT

Dosen Penguji 2,

 13/1/6
 Wiwin Widiasih, ST.,MT

Surabaya, 08 Juni 2023
 Mengetahui
 Dosen Pembimbing,

 Dr. Ir. I Nyoman Lokajaya, ST.,MM

BIOGRAFI



Yvonne Christy Julyandini, dilahirkan di Surabaya, 12 Juli 1999. Merupakan anak kedua dari 3 bersaudara dan dari pasangan Bapak Rudy Widjaya dan Ibu Lilin Kristiyani. Riwayat pendidikan peneliti dimulai dari SDN Airlangga III Surabaya yang selesai pada tahun 2011. Kemudian peneliti melanjutkan pendidikan di SMP Negeri 43 Surabaya yang selesai pada tahun 2014. Setelah itu peneliti melanjutkan ke jenjang berikutnya yaitu SMA Negeri 7 Surabaya, yang tamat pada tahun 2017. Pada tahun 2019 peneliti melanjutkan pendidikan di perguruan tinggi di Universitas 17 Agustus 1945 Surabaya dengan mengambil jurusan Teknik Industri dan berhasil lulus tepat 8 semester di tahun 2023.

Penulis dapat dihubungi melalui email yvonnechristy39@gmail.com