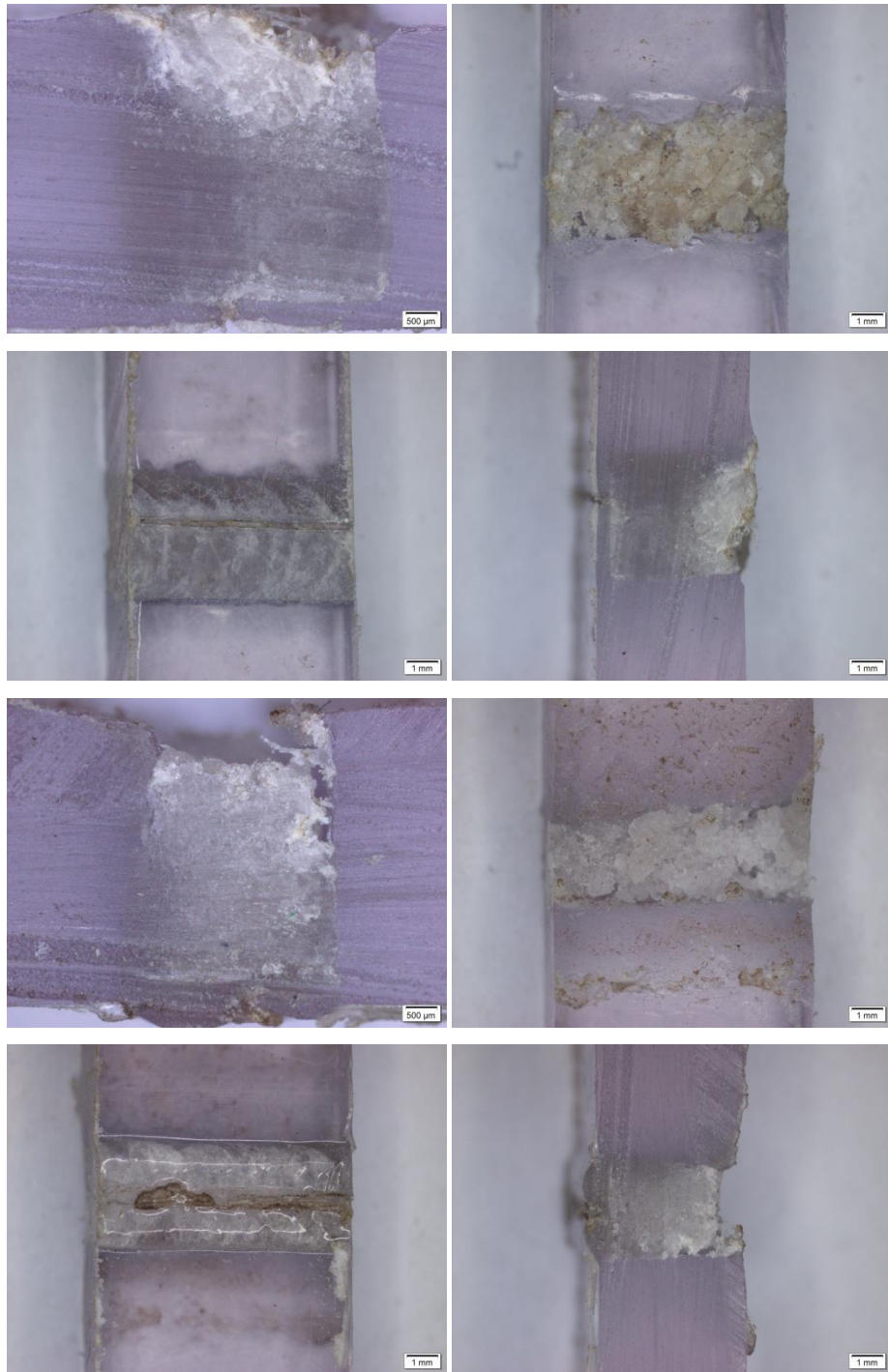
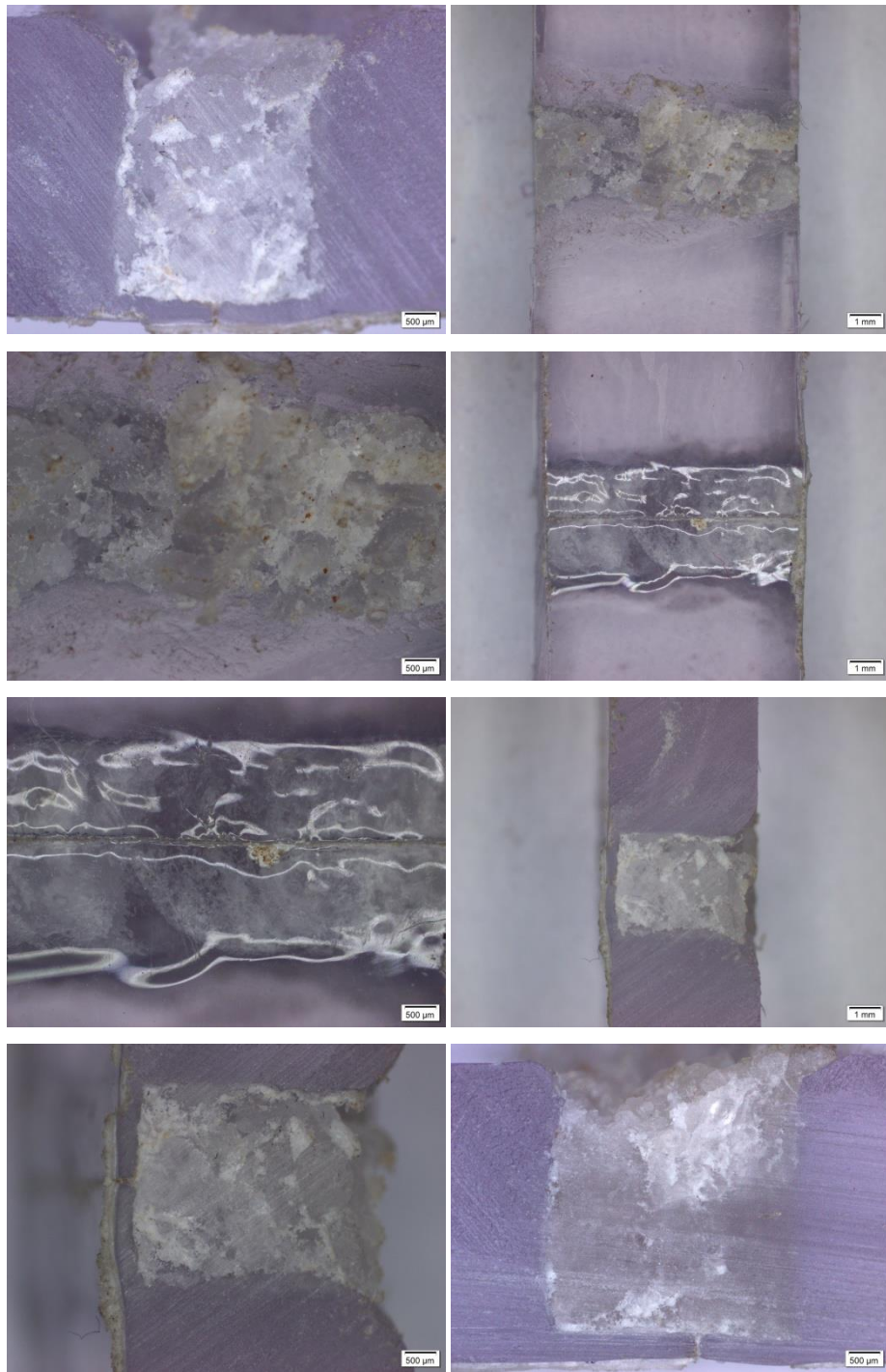
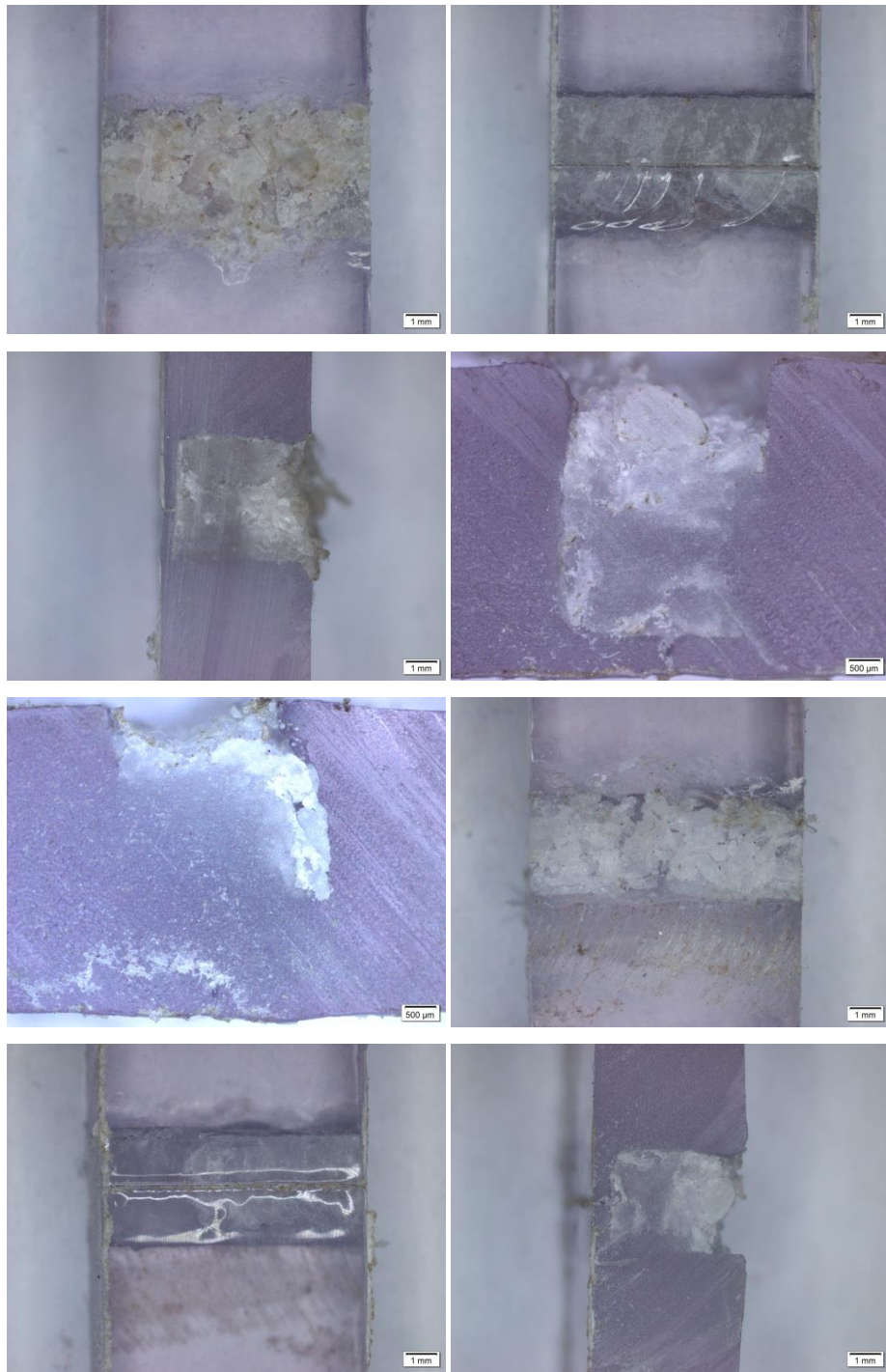


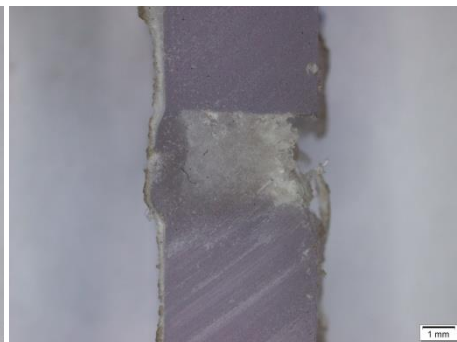
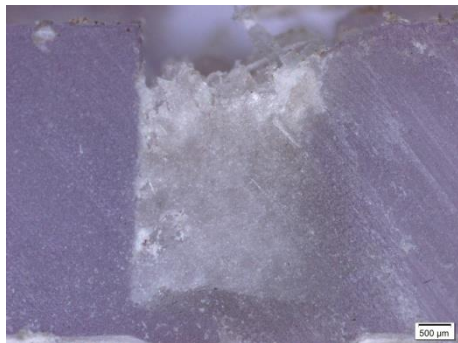
**LAMPIRAN 1**











**LAMPIRAN 2**


**POLITEKNIK ATMI SURAKARTA**

Kampus I : Jl. Mojo No. 1, Karangasem, Laweyan, Surakarta 57145. Phone : +62 271 714466 • Fax : +62 271 714390  
 Kampus II : Jl. Adi Sucipto Km 9.5, Blulukan, Colomadu, Karanganyar 57174. Phone: +62 271 7686220  
 E-mail: [politeknik@atmi.ac.id](mailto:politeknik@atmi.ac.id) • Website: <http://www.atmi.ac.id>  
 Jawa Tengah, Indonesia

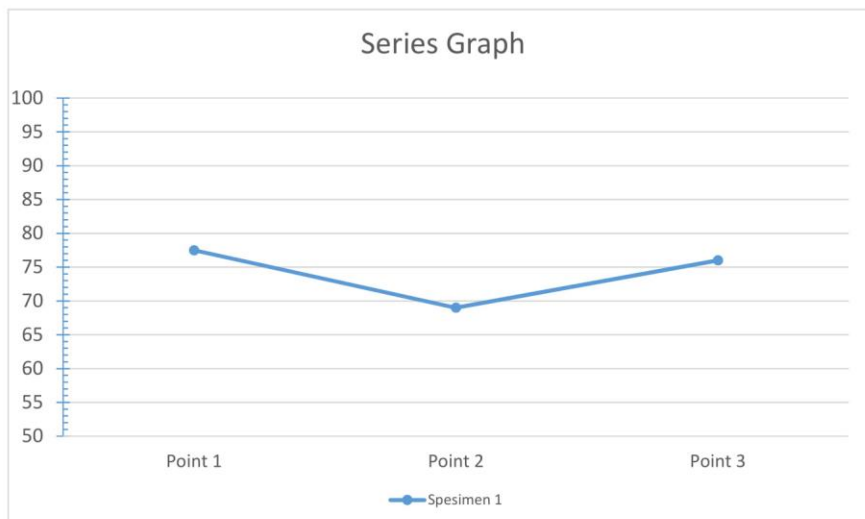


## Hardness Test Report

Customer : Abdul Maulana  
 Material : Polycarbonate  
 Note : 985-3mm  
 Standart : Shore D

### Result

	Point 1	Point 2	Point 3
Spesimen 1	77,5	69	76



### Statistics:

Series	Shore D
x	74,17
s	7,75
v [%]	10,45


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 E-mail: [politeknik@atmi.ac.id](mailto:politeknik@atmi.ac.id) • Website: <http://www.atmi.ac.id>  
 Jawa Tengah, Indonesia

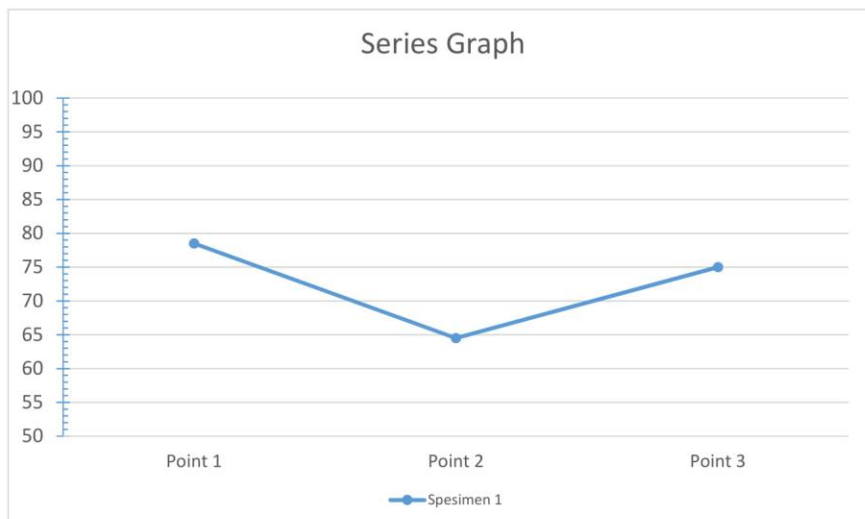


## Hardness Test Report

Customer : Abdul Maulana  
 Material : Polycarbonate  
 Note : 985-4mm  
 Standart : Shore D

### Result

	Point 1	Point 2	Point 3
Spesimen 1	78,5	64,5	75



### Statistics:

Series	Shore D
x	72,67
s	12,25
v [%]	16,86




**POLITEKNIK ATMI SURAKARTA**

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 E-mail: [politeknik@atmi.ac.id](mailto:politeknik@atmi.ac.id) • Website: <http://www.atmi.ac.id>  
 Jawa Tengah, Indonesia

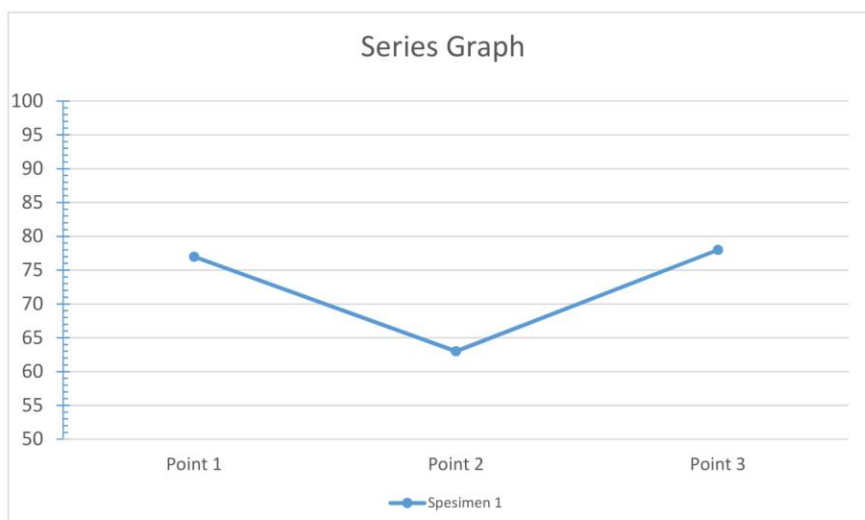


## Hardness Test Report

Customer : Abdul Maulana  
 Material : Polycarbonate  
 Note : 1660-3mm  
 Standart : Shore D

### Result

	Point 1	Point 2	Point 3
Spesimen 1	77	63	78



### Statistics:

Series	Shore D
x	72,67
s	14,5
v [%]	19,95


**POLITEKNIK ATMI SURAKARTA**

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 E-mail: [politeknik@atmi.ac.id](mailto:politeknik@atmi.ac.id) • Website: <http://www.atmi.ac.id>  
 Jawa Tengah, Indonesia

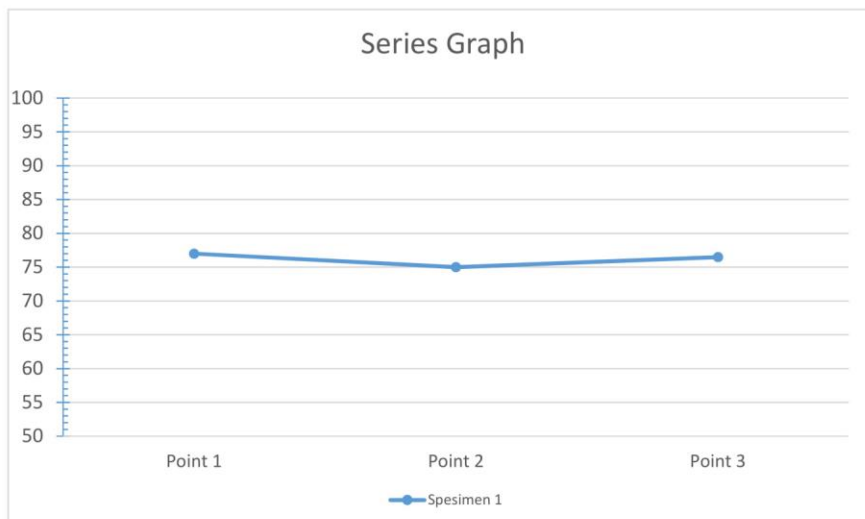


## Hardness Test Report

Customer : Abdul Maulana  
 Material : Polycarbonate  
 Note : 1660-4mm  
 Standart : Shore D

### Result

	Point 1	Point 2	Point 3
Spesimen 1	77	75	76,5



### Statistics:

Series	Shore D
x	76,17
s	1,75
v [%]	2,30


**POLITEKNIK ATMI SURAKARTA**

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 E-mail: [politeknik@atmi.ac.id](mailto:politeknik@atmi.ac.id) • Website: <http://www.atmi.ac.id>  
 Jawa Tengah, Indonesia

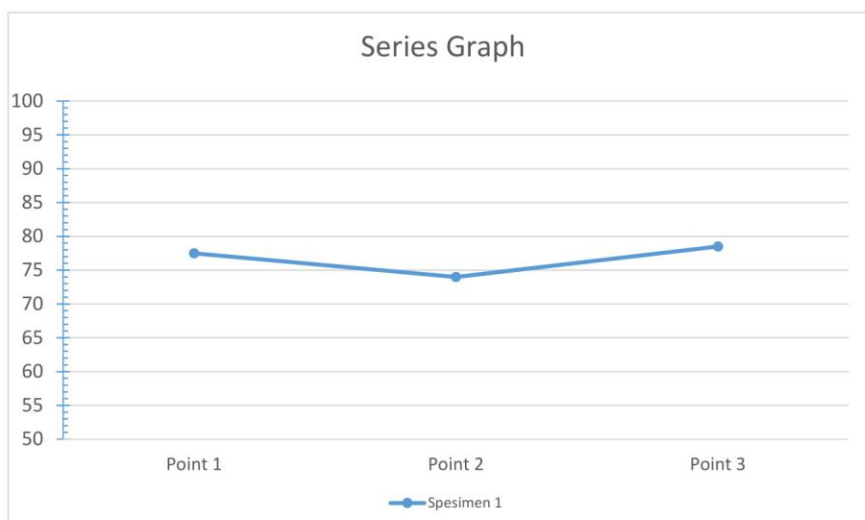


## Hardness Test Report

Customer : Abdul Maulana  
 Material : Polycarbonate  
 Note : 2350-3mm  
 Standart : Shore D

### Result

	Point 1	Point 2	Point 3
Spesimen 1	77,5	74	78,5



### Statistics:

Series	Shore D
x	76,67
s	4
v [%]	5,22


**POLITEKNIK ATMI SURAKARTA**

Kampus I : Jl. Mojo No. 1, Karangasem, Laweyan, Surakarta 57145. Phone : +62 271 714466 • Fax : +62 271 714390  
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 E-mail: [politeknik@atmi.ac.id](mailto:politeknik@atmi.ac.id) • Website: <http://www.atmi.ac.id>  
 Jawa Tengah, Indonesia

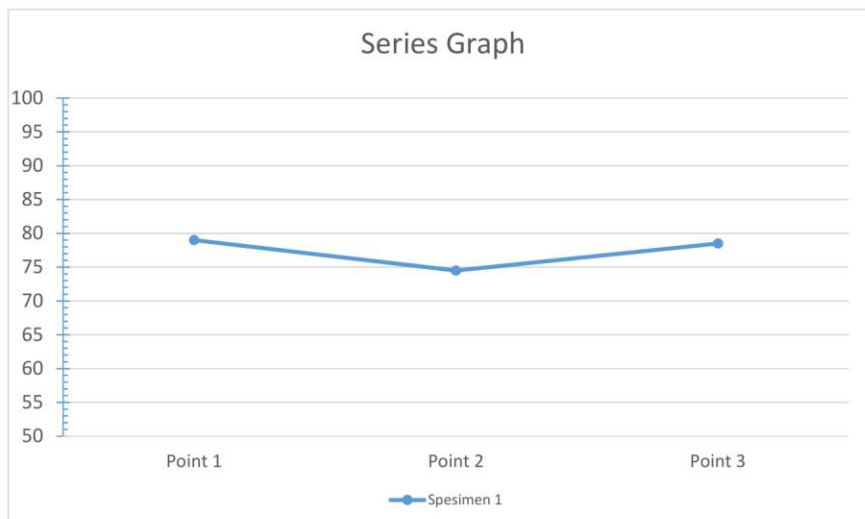


## Hardness Test Report

Customer : Abdul Maulana  
 Material : Polycarbonate  
 Note : 2350-4mm  
 Standart : Shore D

### Result

	Point 1	Point 2	Point 3
Spesimen 1	79	74,5	78,5



### Statistics:

Series	Shore D
x	77,33
s	4,25
v [%]	5,50

**LAMPIRAN 3**

27.06.2019

## KUAT TARIK

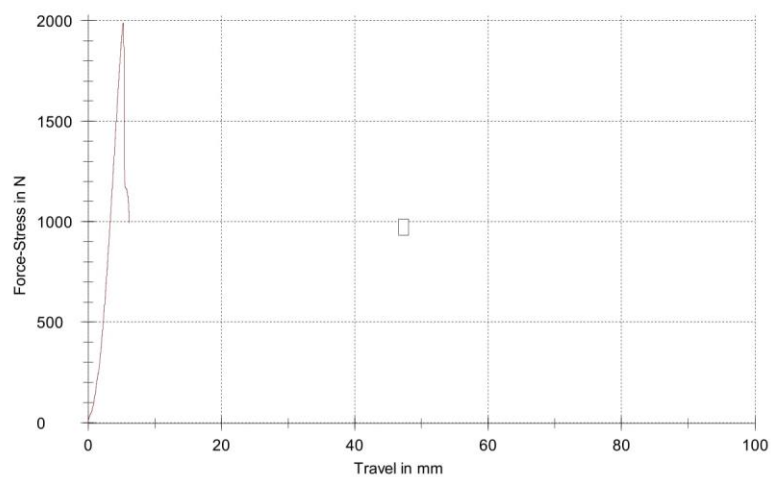
### Parameter table:

Headline	: KUAT TARIK	Evaluat. method	: M (Automatic A, B or C)
Customer	: 1571/LUPKPP-PLASTIK /V/19	Specimen holders:	
Tester	: L.TRIYONO + SUPRIYANTO	Extensometer	:
Material	: POLYCARBONATE	Load cell	:
Test standard	: ASTM D 638		

### Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
	1	202,806	5,59

### Series graph:



### Statistics:

Series n = 1	Fmax Lm kgf	Measurement travel end mm
x	202,806	5,59
s	-	-
v	-	-



29.04.2019

## KUAT TARIK (985/3)

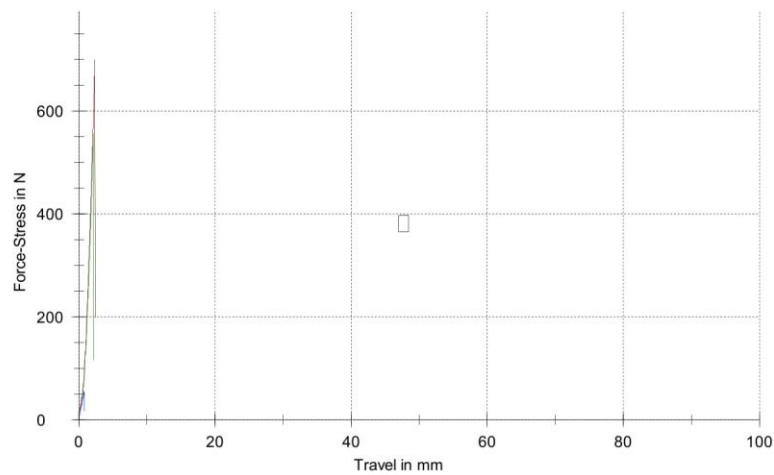
### Parameter table:

Headline	: KUAT TARIK (985/3)	Evaluat. method	: M (Automatic A, B or C)
Customer	: 934/LUPKKP-PLASTIK/IV/19	Specimen holders	:
Tester	: L.TRIYONO	Extensometer	:
Material	: POLYCARBONATE	Load cell	:
Test standard	: ASTM D 638		

### Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
	1	71,442	2,38
	2	56,833	2,14
	3	4,912	0,69

### Series graph:



- 29.04.2019

**Statistics:**

Series n = 3	Fmax Lm kgf	Measurement travel end mm
x	44,395	1,73
s	34,965	0,92
v	78,76	52,80

29.04.2019

## KUAT TARIK (985/4 )

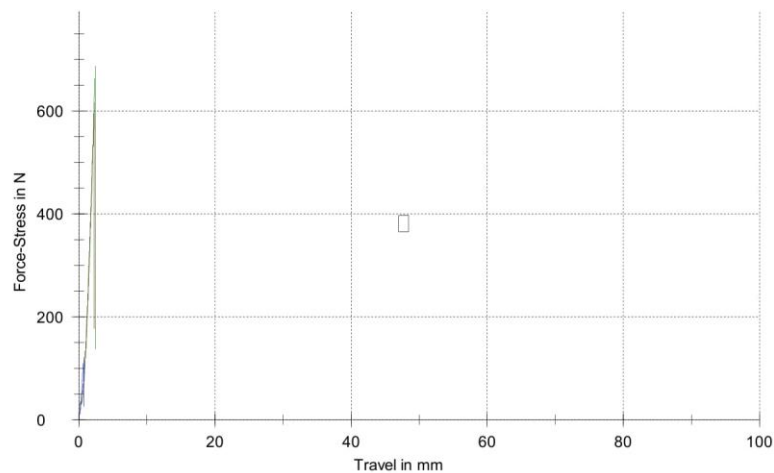
### Parameter table:

Headline	: KUAT TARIK (985/4 )	Evaluat. method	: M (Automatic A, B or C)
Customer	: 934/LUPKKP-PLASTIK/IV/19	Specimen holders:	:
Tester	: L.TRIYONO	Extensometer	:
Material	: POLYCARBONATE	Load cell	:
Test standard	: ASTM D 638		

### Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
<span style="background-color: red; width: 20px; height: 10px; display: inline-block;"></span>	1	62,941	2,28
<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>	2	70,063	2,43
<span style="background-color: blue; width: 20px; height: 10px; display: inline-block;"></span>	3	12,394	0,73

### Series graph:



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29.04.2019

**Statistics:**

Series n = 3	Fmax Lm kgf	Measurement travel end mm
x	48,466	1,81
s	31,441	0,94
v	64,87	52,07

29.04.2019

## KUAT TARIK (1660/3 )

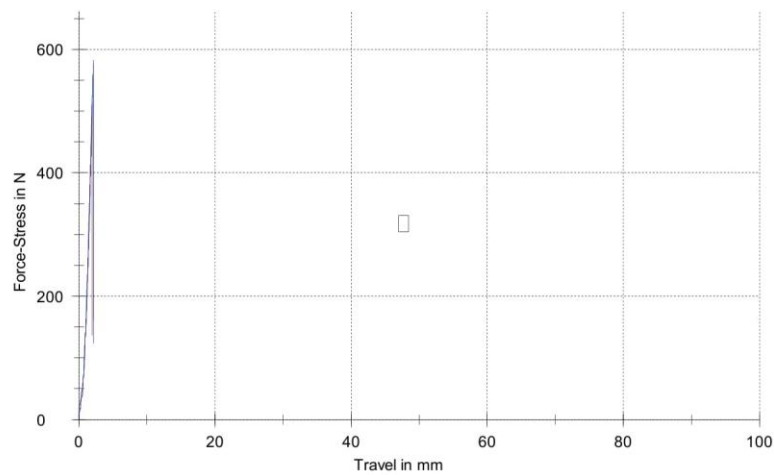
### Parameter table:

Headline	: KUAT TARIK (1660/3 )	Evaluat. method	: M (Automatic A, B or C)
Customer	: 935/LUPKKP-PLASTIK/IV/19	Specimen holders	:
Tester	: L.TRIYONO	Extensometer	:
Material	: POLYCARBONATE	Load cell	:
Test standard	: ASTM D 638		

### Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
	1	52,595	1,95
	2	58,870	2,13
	3	59,410	2,15

### Series graph:



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29.04.2019

**Statistics:**

Series n = 3	Fmax Lm kgf	Measurement travel end mm
x	56,958	2,07
s	3,788	0,11
v	6,65	5,24



29.04.2019

## KUAT TARIK (1660/4 )

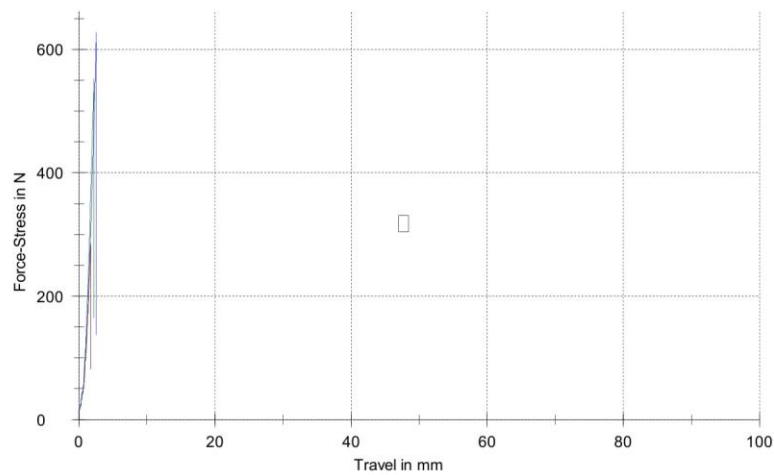
### Parameter table:

Headline	: KUAT TARIK (1660/4 )	Evaluat. method	: M (Automatic A, B or C)
Customer	: 935/LUPKKP-PLASTIK/IV/19	Specimen holders	:
Tester	: L.TRIYONO	Extensometer	:
Material	: POLYCARBONATE	Load cell	:
Test standard	: ASTM D 638		

### Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
	1	29,095	1,73
	2	47,919	2,00
	3	64,050	2,57

### Series graph:



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29.04.2019

**Statistics:**

Series n = 3	Fmax Lm kgf	Measurement travel end mm
x	47,021	2,10
s	17,495	0,43
v	37,21	20,42

29.04.2019

## KUAT TARIK (2350/3 )

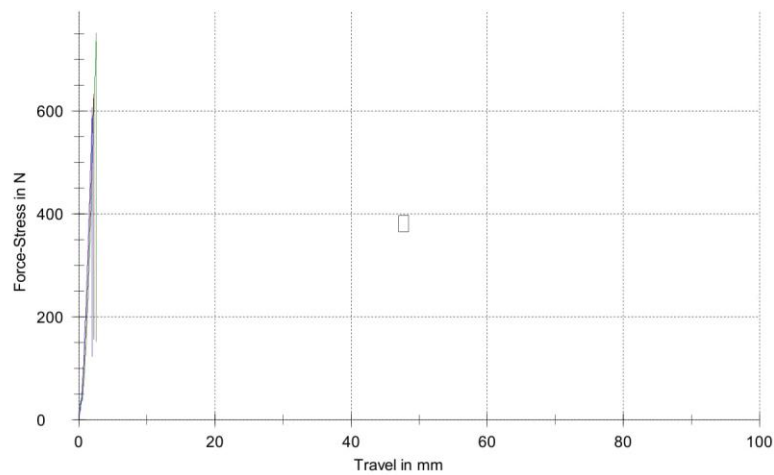
### Parameter table:

Headline	: KUAT TARIK (2350/3 )	Evaluat. method	: M (Automatic A, B or C)
Customer	: 936/LUPKKP-PLASTIK/IV/19	Specimen holders:	:
Tester	: L.TRIYONO	Extensometer	:
Material	: POLYCARBONATE	Load cell	:
Test standard	: ASTM D 638		

### Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
<span style="background-color: red; width: 20px; height: 10px; display: inline-block;"></span>	1	55,179	1,97
<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>	2	65,106	2,31
<span style="background-color: blue; width: 20px; height: 10px; display: inline-block;"></span>	3	52,834	1,78

### Series graph:



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29.04.2019

**Statistics:**

Series n = 3	Fmax Lm kgf	Measurement travel end mm
x	57,706	2,02
s	6,515	0,27
v	11,29	13,32

29.04.2019

## KUAT TARIK (2350/4 )

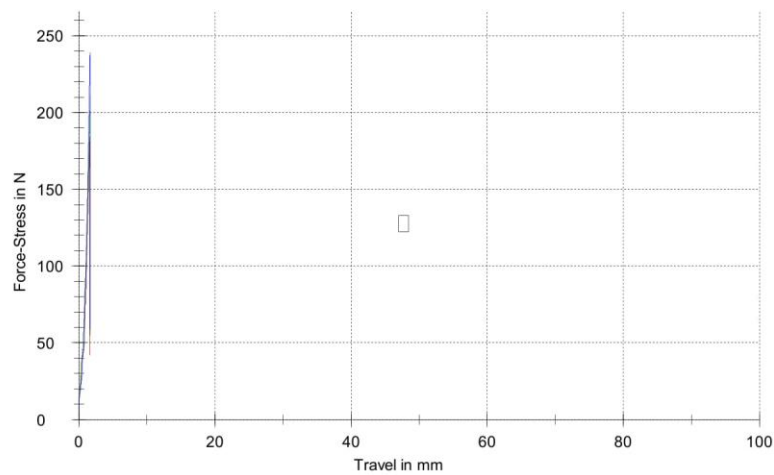
### Parameter table:

Headline	: KUAT TARIK (2350/4 )	Evaluat. method	: M (Automatic A, B or C)
Customer	: 936/LUPKKP-PLASTIK/IV/19	Specimen holders	:
Tester	: L.TRIYONO	Extensometer	:
Material	: POLYCARBONATE	Load cell	:
Test standard	: ASTM D 638		

### Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
	1	18,795	1,58
	2	21,539	1,70
	3	24,386	1,65

### Series graph:



- 29.04.2019

**Statistics:**

Series n = 3	Fmax Lm kgf	Measurement travel end mm
x	21,573	1,64
s	2,796	0,06
v	12,96	3,56



29.04.2019

## KUAT TARIK (LEM G)

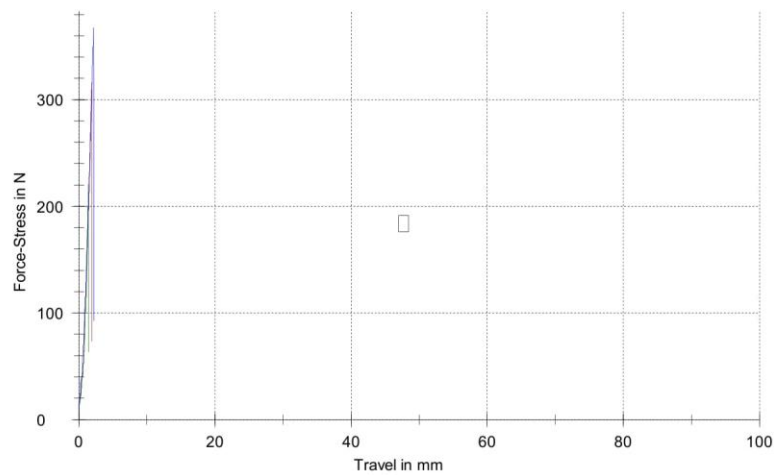
### Parameter table:

Headline	: KUAT TARIK (LEM G)	Evaluat. method	: M (Automatic A, B or C)
Customer	: 936/LUPKKP-PLASTIK/IV/19	Specimen holders	:
Tester	: L.TRIYONO	Extensometer	:
Material	: POLYCARBONATE	Load cell	:
Test standard	: ASTM D 638		

### Results:

Legends	Nr	Fmax Lm kgf	Measurement travel end mm
<span style="background-color: red; width: 20px; height: 10px; display: inline-block;"></span>	1	32,281	1,89
<span style="background-color: green; width: 20px; height: 10px; display: inline-block;"></span>	2	18,553	1,27
<span style="background-color: blue; width: 20px; height: 10px; display: inline-block;"></span>	3	37,468	2,16

### Series graph:



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29.04.2019

**Statistics:**

Series n = 3	Fmax Lm kgf	Measurement travel end mm
x	29,434	1,77
s	9,773	0,45
v	33,20	25,64