LAMPIRAN

Lampiran 1. Data Hasil Pengujian Sifat Mekanik

Data Hasil Pengujian Kekerasan

Ukuran Mesh Filler	Pengujian 1	Pengujian 2	Pengujian 3	Pengujian 4	Pengujian 5	HRR Rata-Rata
0	81.5	81.7	82.2	82.1	82	81.90
12	92.8	92.2	93.4	94.4	93.6	93.28
18	95.9	94.4	96.7	93.39	92.6	94.60
40	95.2	97	93.8	96.6	98.1	96.14
60	96.5	96.2	95.9	96.4	97.2	96.44

Data Hasil Pengujian Izod Impact

Ukuran Mesh Filler	Pengujian 1	Pengujian 2	Pengujian 3	Pengujian 4	Energi Absorb rata-rata (J)
0	0.08509	0.08636	0.08382	0.08128	0.084
12	0.04677	0.05209	0.05209	0.0628	0.053
18	0.05743	0.04148	0.04412	0.07361	0.054
40	0.05743	0.05476	0.07632	0.04412	0.058
60	0.04412	0.05476	0.04412	0.04412	0.047

Data Hasil Pengujian Tensile at Yiled

Ukuran Mesh Filler	Pengujian 1	Pengujian 2	Pengujian 3	Tensile at Yield Rata-Rata (MPa)
0	29.7	32.2	29.8	30.57
12	30.5	31.63	34.24	32.12
18	33.4	33.2	33.2	33.27
40	33.4	34.24	34.22	33.95
60	33.8	34.03	34.07	33.97

Data Hasil Pengujian Fleksural

Ukuran Mesh Filler (Mesh)	Pengujian 1	Pengujian 2	Pengujian 3	Fleksural Rata-Rata (MPa)
0	1110	1100	1170	1126.67
12	1410	1530	1360	1433.33
18	1530	1510	1520	1520.00
40	1629	1631	1630	1630.00
60	1780	1690	1680	1716.67

Lampiran 2. Data Hasil Pengujian Temperatur Melting dan Temperatur Kristalisasi

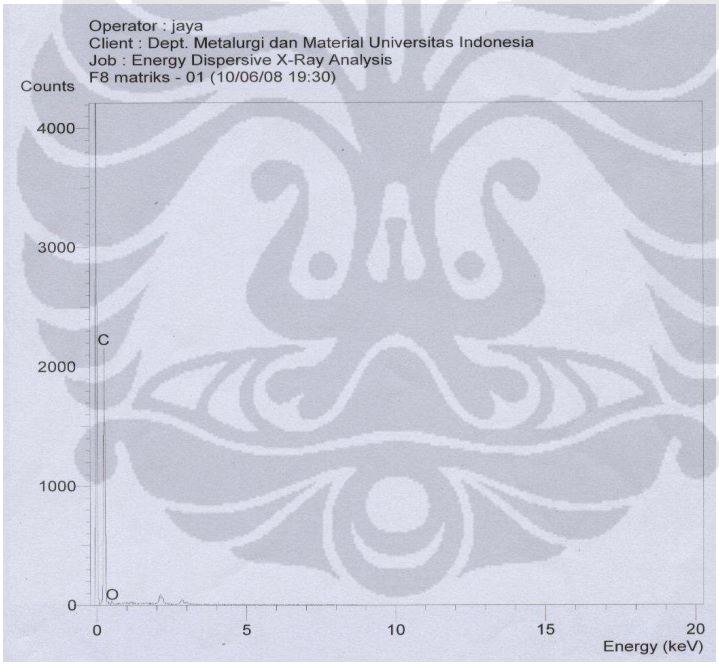
Ukuran Mesh Filler	Temperatur Melting (°C)	Temperatur Kristalisasi (°C)
0	156.17	108.33
12	157.2	112.01
18	159.4	116.84
40	158.31	115.11
60	159.8	117.11

Lampiran 3. Data Hasil Pengujian MFR

Ukuran Mesh Filler	MFR (gr/10 menit)
0	8.1
12	9.06
18	8.8
40	11.4
60	11.5

Lampiran 4. Data Hasil Pengujian EDX Sampel F5

```
SEMQuant results. Listed at 19:31:56 on 10/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: F8 matriks - 01

System resolution =  59 eV

Quantitative method: ZAF ( 2 iterations).
 Analysed all elements and normalised results.

 2 peaks possibly omitted: 2.14, 2.84 keV

Standards :
 C  K      Carbon Low 13/09/06
 O  K      AL2O3 22/03/06


Elmt    Spect.  Element  Atomic
         Type      %        %
C  K      ED     81.14    85.14
O  K      ED     18.86    14.86
Total           100.00   100.00

* = <2 Sigma
```



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SEMQuant results. Listed at 19:34:37 on 10/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: F8 serat - 02

System resolution =  59 eV

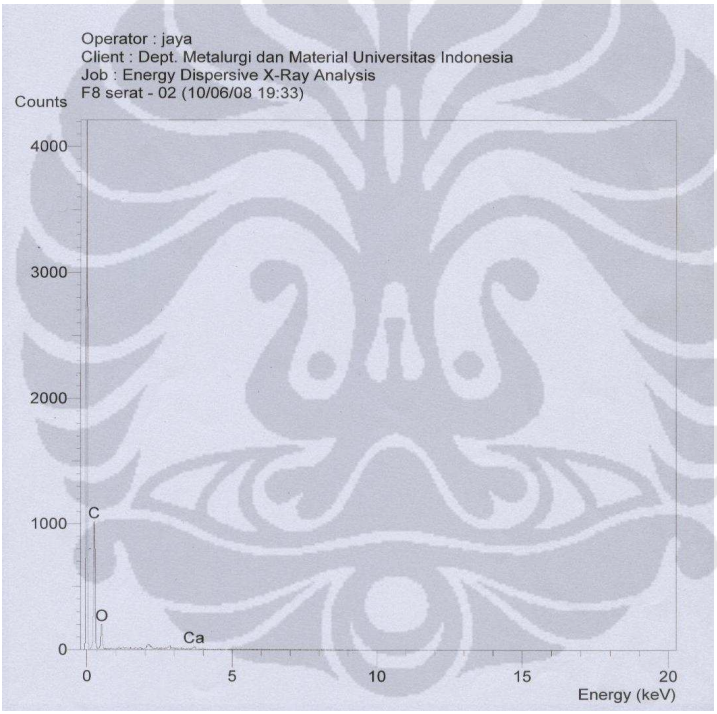
Quantitative method: ZAF ( 3 iterations).
 Analysed all elements and normalised results.

 2 peaks possibly omitted: 2.14, 2.82 keV

Standards :
 C  K      Carbon Low 13/09/06
 O  K      AL2O3 22/03/06
 Ca K      Orthoclase 22/03/06


Elmt    Spect.  Element  Atomic
        Type      %        %
C  K      ED     33.98    44.09
O  K      ED     51.67    50.33
Ca K      ED     14.35     5.58
Total           100.00   100.00

* = <2 Sigma
```



Sampel F2

```
SEMQuant results. Listed at 18:09:44 on 10/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: F6 matriks - 01

System resolution =  59 eV

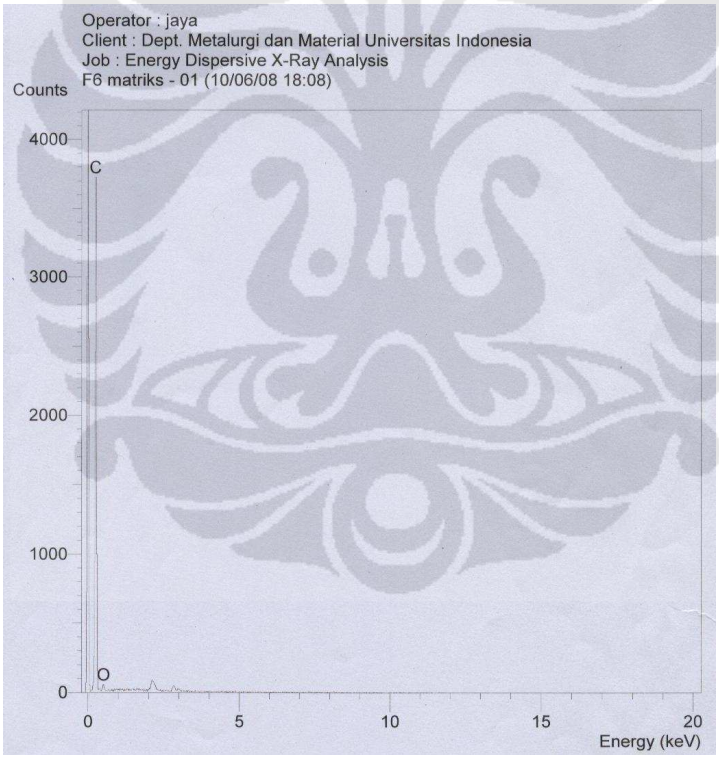
Quantitative method: ZAF ( 2 iterations).
 Analysed all elements and normalised results.

 2 peaks possibly omitted: 2.14, 2.84 keV

Standards :
 C  K      Carbon Low 13/09/06
 O  K      AL2O3 22/03/06


Elmt    Spect.  Element  Atomic
         Type      %        %
C  K      ED     74.22    79.32
O  K      ED     25.78    20.68
Total           100.00   100.00

* = <2 Sigma
```



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SEMQuant results. Listed at 18:06:07 on 10/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: F6 serat - 02

System resolution =  59 eV

Quantitative method: ZAF ( 3 iterations).
 Analysed all elements and normalised results.

 3 peaks possibly omitted: 2.14, 2.60, 2.84 keV

Standards :
 C  K      Carbon Low 13/09/06
 O  K      AL2O3 22/03/06


Elmt   Spect.  Element  Atomic
       Type      %        %
C  K     ED     31.19    37.65
O  K     ED     68.81    62.35
Total           100.00   100.00

* = <2 Sigma
```
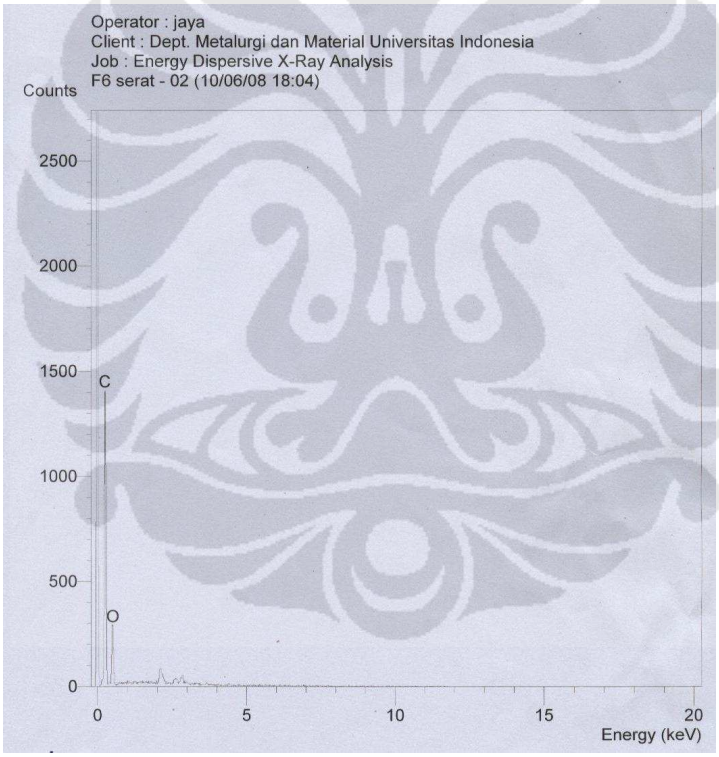



SEMQuant results. Listed at 18:17:13 on 10/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: F6 matriks - 03

System resolution = 59 eV

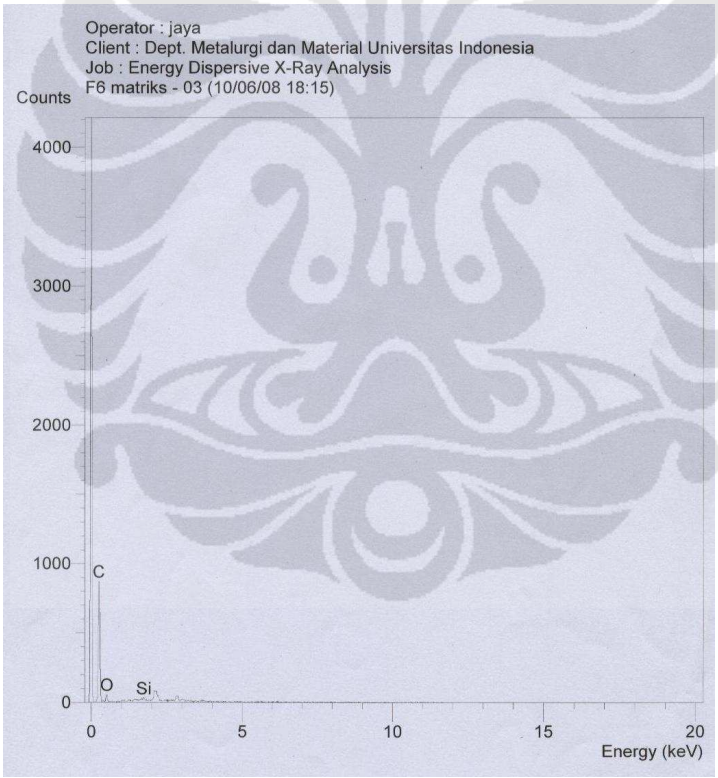
Quantitative method: ZAF (3 iterations).
Analysed all elements and normalised results.

2 peaks possibly omitted: 2.14, 2.84 keV

Standards :
C K Carbon Low 13/09/06
O K AL2O3 22/03/06
Si K Low Carbon Steel 13/09/06

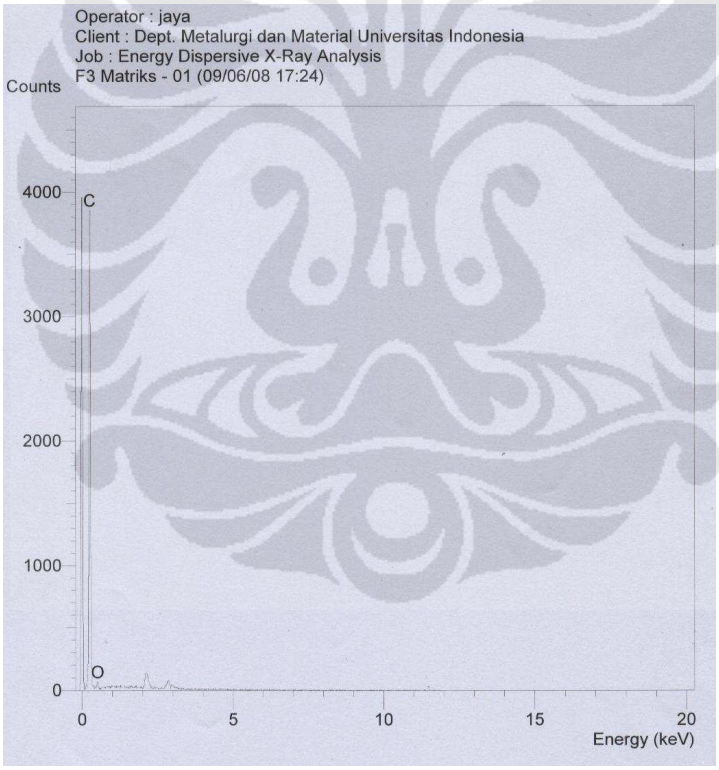
Elmt	Spect. Type	Element %	Atomic %
C K	ED	56.10	64.10
O K	ED	39.15	33.58
Si K	ED	4.75	2.32
Total		100.00	100.00

* = <2 Sigma

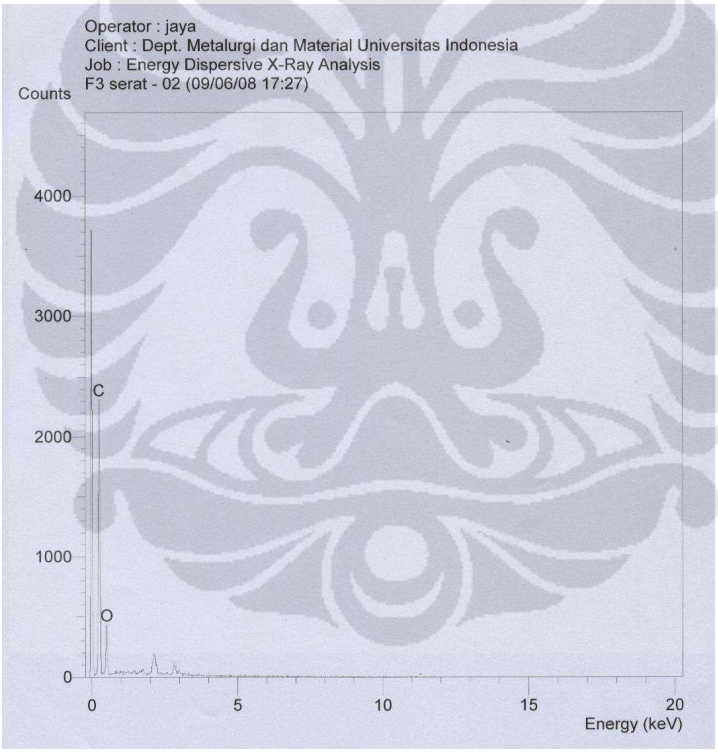


Sampel F3

```
SEMQuant results. Listed at 17:25:49 on 09/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: F3 Matriks - 01

System resolution =  59 eV

Quantitative method: ZAF ( 2 iterations).
 Analysed all elements and normalised results.

 2 peaks possibly omitted: 2.14, 2.84 keV

Standards :
 C  K      Carbon Low 13/09/06
 O  K      AL2O3 22/03/06


Elmt    Spect.  Element  Atomic
         Type      %        %
C  K      ED     74.66    79.70
O  K      ED     25.34    20.30
Total           100.00   100.00

* = <2 Sigma
```



```
SEMQuant results. Listed at 17:30:56 on 09/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: F3 serat - 02

System resolution =  59 eV

Quantitative method: ZAF ( 3 iterations).
 Analysed all elements and normalised results.

 3 peaks possibly omitted: 1.74, 2.14, 2.82 keV

Standards :
 C  K      Carbon Low 13/09/06
 O  K      AL2O3 22/03/06


Elmt   Spect.  Element  Atomic
       Type      %        %
C  K     ED     32.52    39.10
O  K     ED     67.48    60.90
Total           100.00   100.00

* = <2 Sigma
```



SEMQuant results. Listed at 17:33:43 on 09/06/08
Operator: jaya
Client: Dept. Metalurgi dan Material Universitas Indonesia
Job: Energy Dispersive X-Ray Analysis
Spectrum label: F3 matriks - 03

System resolution = 59 eV

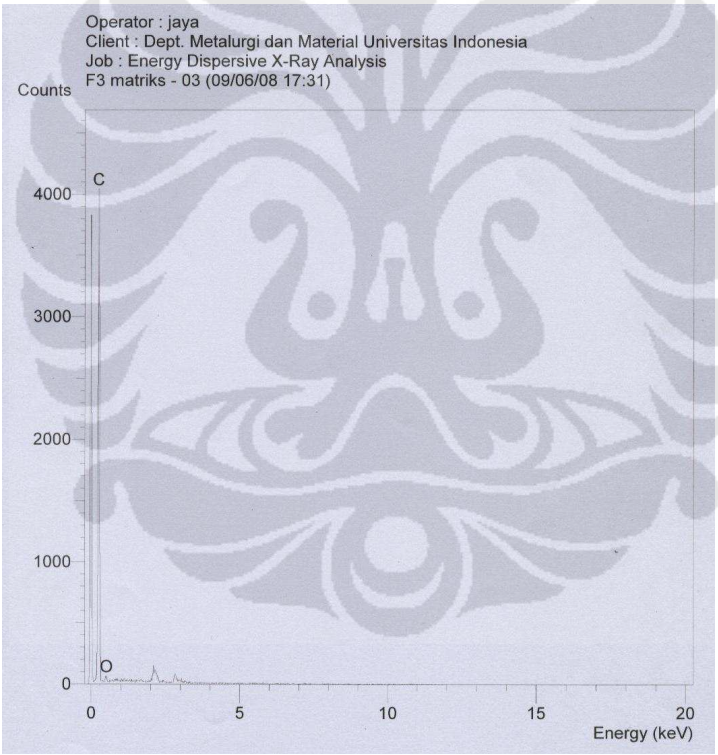
Quantitative method: ZAF (2 iterations).
Analysed all elements and normalised results.

2 peaks possibly omitted: 2.14, 2.84 keV

Standards :
C K Carbon Low 13/09/06
O K AL2O3 22/03/06

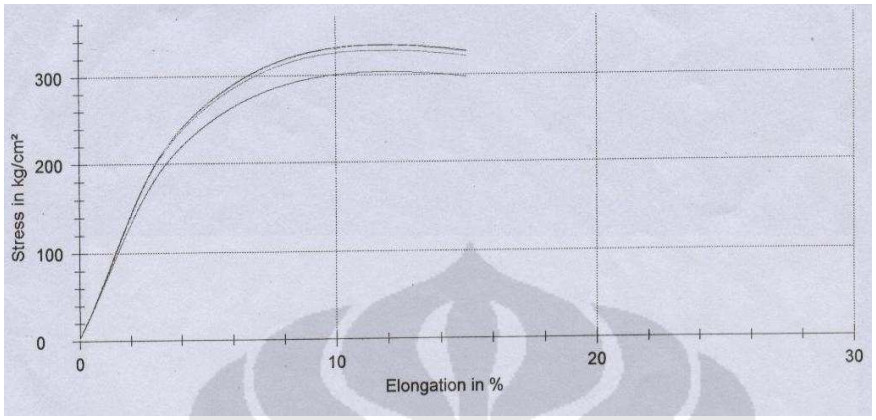
Elmt	Spect. Type	Element %	Atomic %
C K	ED	73.62	78.80
O K	ED	26.38	21.20
Total		100.00	100.00

* = <2 Sigma

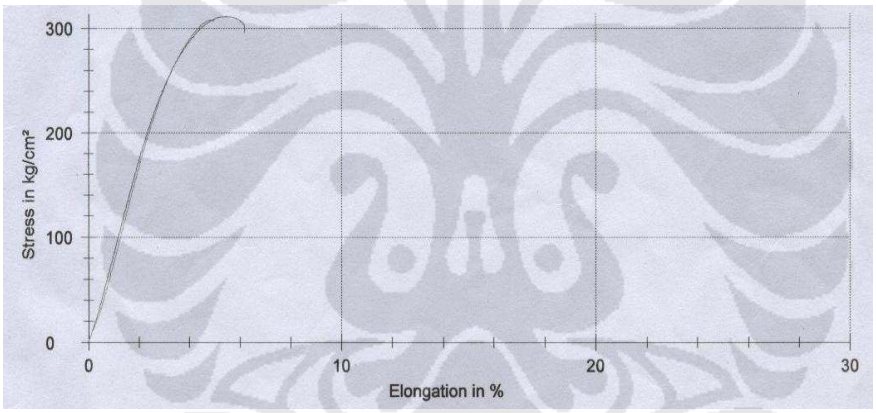


Lampiran 5. Grafik Hasil Pengujian Kekuatan Tarik dan Tensile at Yield

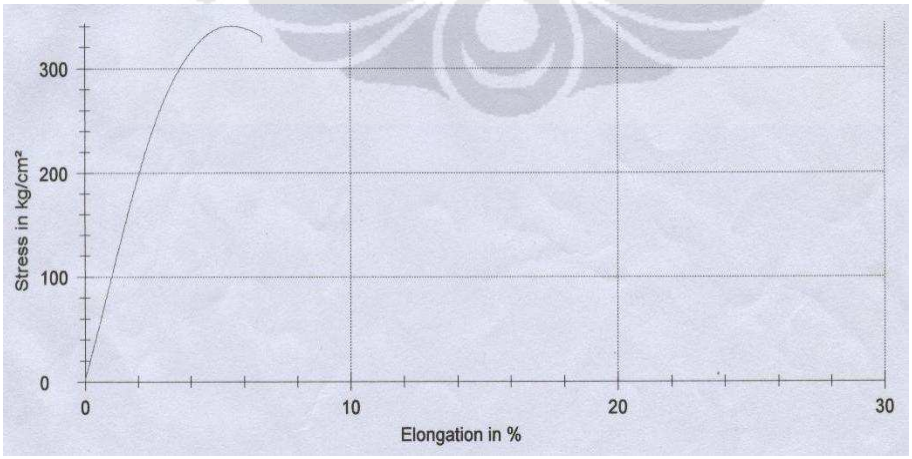
Sampel F1

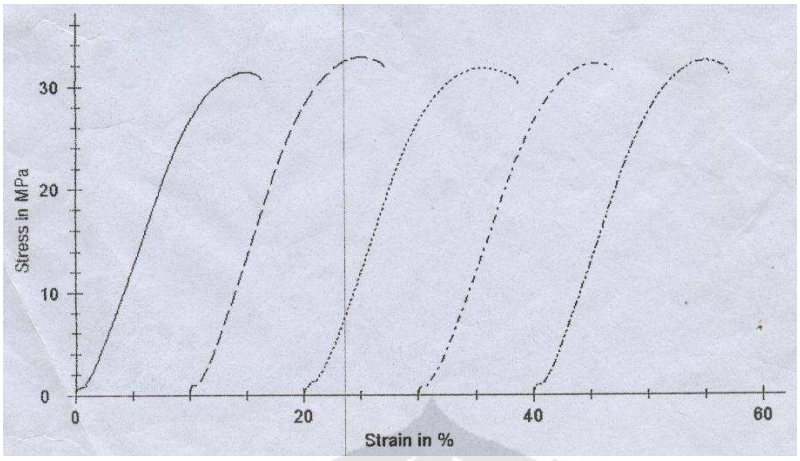


Sampel F2

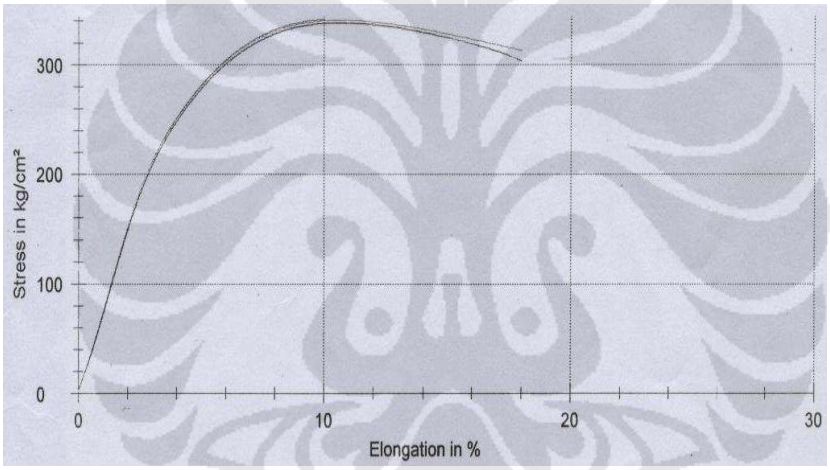


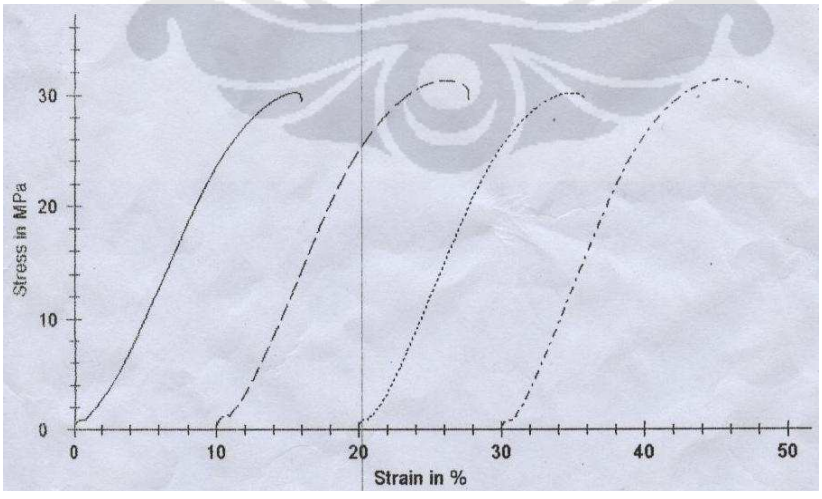
Sampel F3



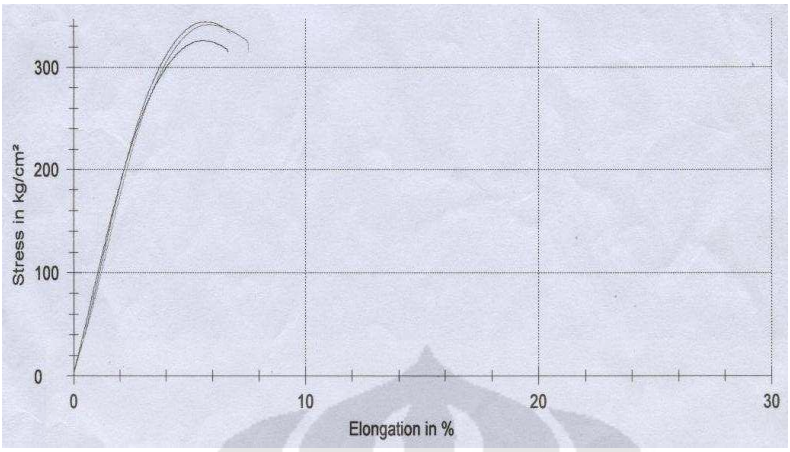


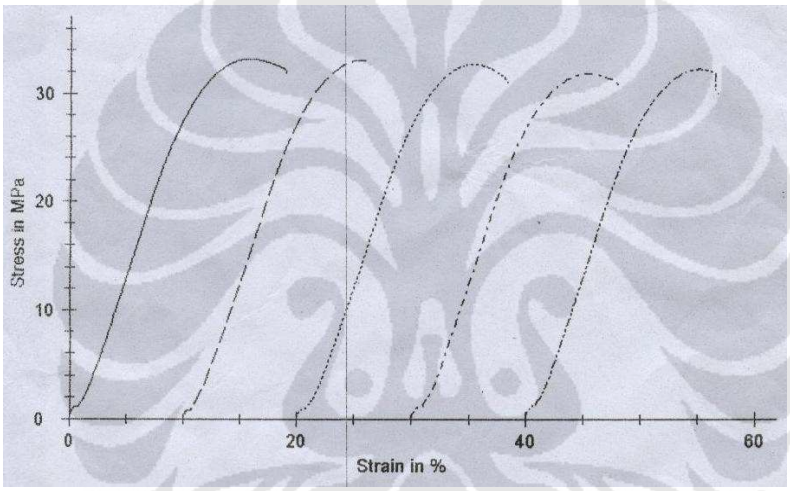
Sampel F4





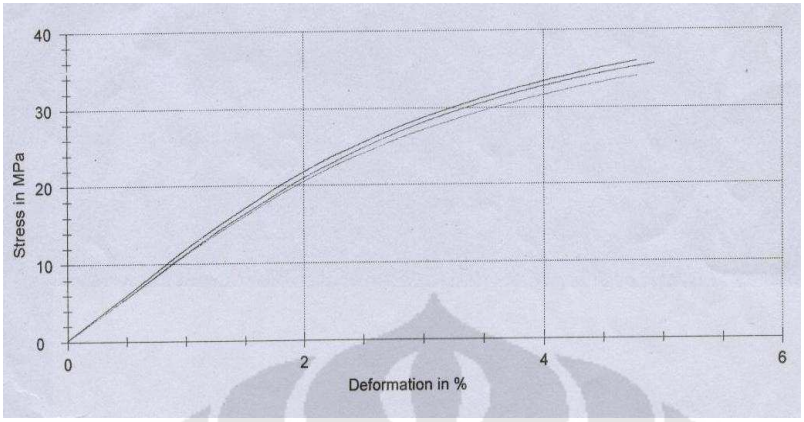
Sampel F5



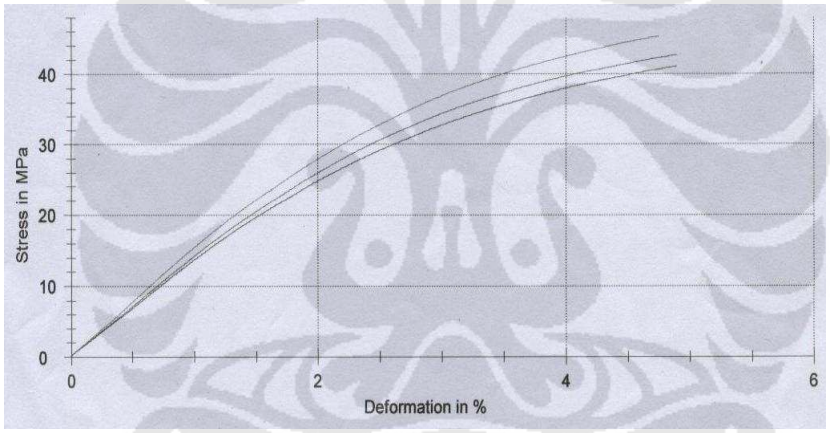


Lampiran 6. Grafik Hasil Pengujian Fleksural

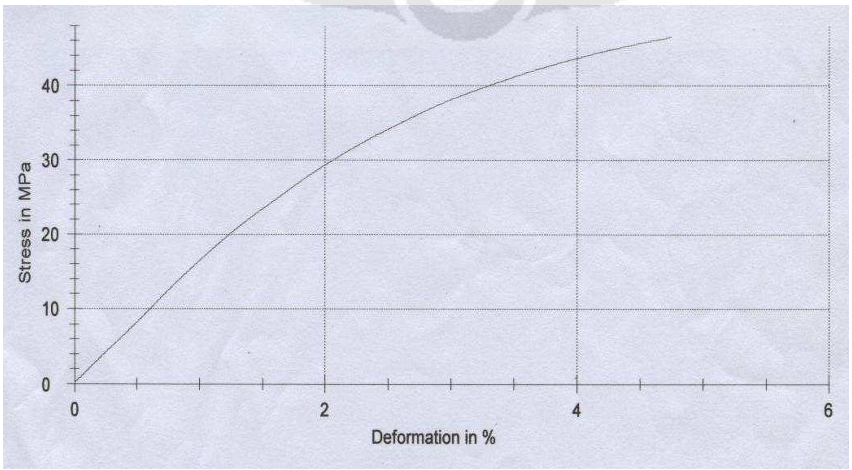
Sampel F1

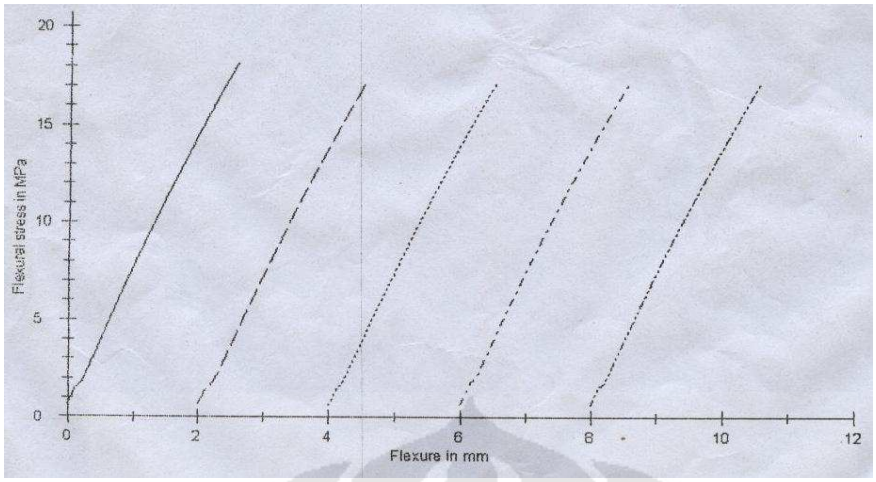


Sampel F2

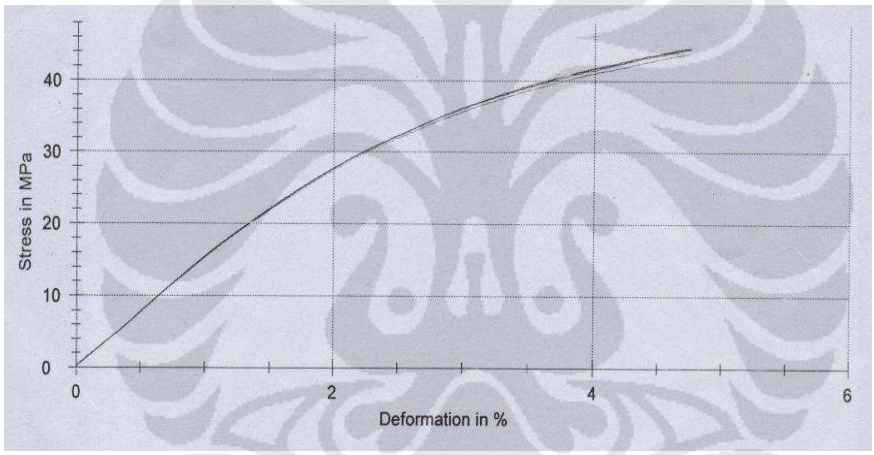


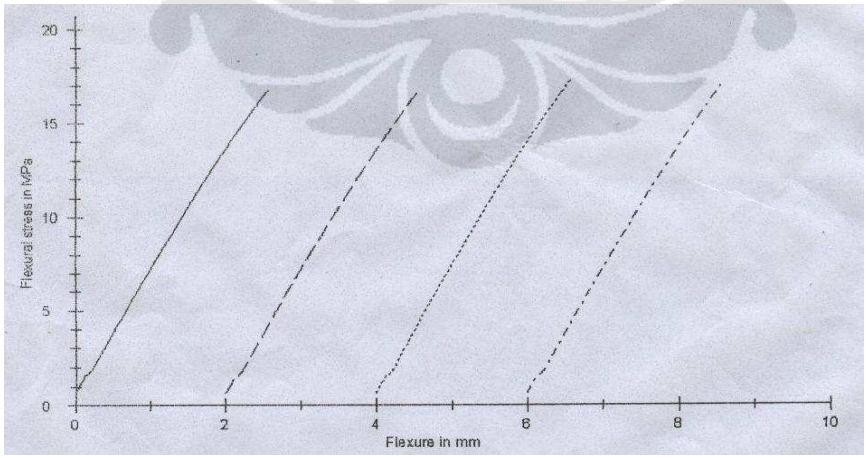
Sampel F3





Sampel F4





Sampel F5