DATA HASIL PENGUJIAN PENDEKATAN SPEKTRUM

NO	JENIS	UMUR	FREKUENSI			
			Fm	Fp(dB)	Bw	Fmax
1	K150	17 hari	416.87	0.213	828.13	1245
2			426.54	0.122	812.26	1238.8
3			412.1	0.15	835.28	1247.38
4			426.58	0.125	810.42	1237
5			501.18	0.625	746.92	1248.1
6			501.18	0.25	743.82	1245
7			489.78	0.702	755.3	1245.08
8			489.78	0.77	740.25	1230.03
9			512.86	0.478	733.14	1246
10			512.86	0.39	733.14	1246
rata-rata			**468.973**	**0.3825**	**773.866**	**1242.839**
11	K175	18 hari	588.84	0.023	655.67	1244.51
12			660.7	0.111	580.95	1241.65
13			630.96	0.415	616.42	1247.38
14			512.86	0.348	735.24	1248.1
15			630.96	0.18	619.3	1250.26
16			660.7	0.182	586.68	1247.38
17			588.84	0.494	649.96	1238.8
18			640.96	0.3	606.42	1247.38
19			588.84	0.192	652.81	1241.65
20			512.86	0.152	734.52	1247.38
rata-rata			**601.652**	**0.2397**	**643.797**	**1245.449**
21	K200	19 hari	501.187	0.085	749.063	1250.25
22			630.957	0.29	616.423	1247.38
23			707.94	0.191	536.57	1244.51
24			660.693	0.485	583.817	1244.51
25			562.34	0.122	685.04	1247.38
26			645.654	0.717	601.726	1247.38
27			549.54	0.181	700.72	1250.26
28			758.58	0.128	488.8	1247.38
29			630.96	0.18	616.42	1247.38
30			640.96	0.214	606.42	1247.38
rata-rata			**628.8811**	**0.2593**	**618.4999**	**1247.381**

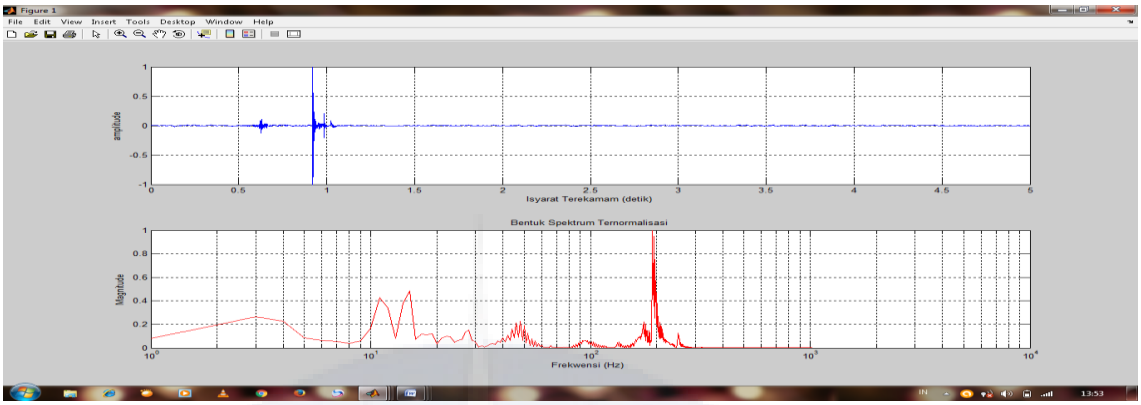
NO	JENIS	UMUR	FREKUENSI			
			Fm	Fp(dB)	Bw	Fmax
31	K275	18 hri	630.96	0.244	619.29	1250.25
32			660.7	0.591	586.68	1247.38
33			707.94	0.108	545.2	1253.14
34			575.43	0.343	671.95	1247.38
35			630.96	0.584	619.3	1250.26
36			660.69	0.66	586.69	1247.38
37			758.58	0.419	491.68	1250.26
38			660.69	0.556	586.69	1247.38
39			575.43	0.545	674.83	1250.26
40			630.96	0.46	616.42	1247.38
	rata-rata		**649.234**	**0.451**	**599.873**	**1249.107**
41	K250(1)	7 hari	426.58	0.067	793.69	1220.27
42			446.68	0.12	773.67	1220.35
43			630.95	0.083	599.31	1230.26
44			436.51	0.255	787.7	1224.21
45			520.51	0.083	703.84	1224.35
46			446.58	3.975	800.77	1247.35
47			537.03	0.034	697.47	1234.5
48			446.58	0.149	800.8	1247.38
49			520.68	0.345	726.7	1247.38
50			520.68	0.124	718.12	1238.8
	rata-rata		**493.278**	**0.5235**	**740.207**	**1233.485**
51	K250(2)	7hari	524.8	0.06	722.58	1247.38
52			478.63	0.12	751.63	1230.26
53			512.86	0.26	725.93	1238.79
54			645.65	0.3	581.73	1227.38
55			478.63	0.06	748.75	1227.38
56			520.51	0.12	715.44	1235.95
57			512.86	0.8	717.4	1230.26
58			467.73	0.4	759.65	1227.38
59			489.78	0.3	740.48	1230.26
60			436.51	0.01	810.87	1247.38
	rata-rata		**506.796**	**0.243**	**727.446**	**1234.242**

NO	JENIS	UMUR	FREKUENSI			
			Fm	Fp(dB)	Bw	Fmax
61	K250(3)	14 hari	645.65	0.45	601.73	1247.38
62			537.03	0.04	710.35	1247.38
63			407.38	0.05	828.57	1235.95
64			416.87	0.54	830.51	1247.38
65			426.58	0.45	820.8	1247.38
66			851.13	0.178	396.25	1247.38
67			416.87	0.43	813.39	1230.26
68			1047.13	0.12	200.25	1247.38
69			467.73	0.26	759.65	1227.38
70			676.08	0.18	571.3	1247.38
rata-rata			**589.245**	**0.2698**	**653.28**	**1242.525**
71	K250(4)	14 hari	645.65	0.068	601.73	1247.38
72			537.03	0.173	698.92	1235.95
73			467.73	0.266	776.78	1244.51
74			851.13	0.929	390.52	1241.65
75			446.68	0.165	800.7	1247.38
76			524.8	0.046	722.58	1247.38
77			1124.6	0.022	122.78	1247.38
78			467.73	0.28	779.65	1247.38
79			512.86	0.525	725.94	1238.8
80			478.63	0.231	768.75	1247.38
rata-rata			**605.684**	**0.2705**	**638.835**	**1244.519**
81	K250(5)	28 hari	758.57	0.218	488.81	1247.38
82			851.13	0.051	396.25	1247.38
83			707.94	0.067	545.2	1253.14
84			758.57	0.13	490.25	1248.82
85			864.97	0.423	382.41	1247.38
86			851.13	0.167	399.13	1250.26
87			758.57	0.009	488.81	1247.38
88			707.94	0.345	545.2	1253.14
89			758.57	0.13	491.69	1250.26
90			851.13	0.303	397.69	1248.82
rata-rata			**786.852**	**0.1843**	**462.544**	**1249.396**

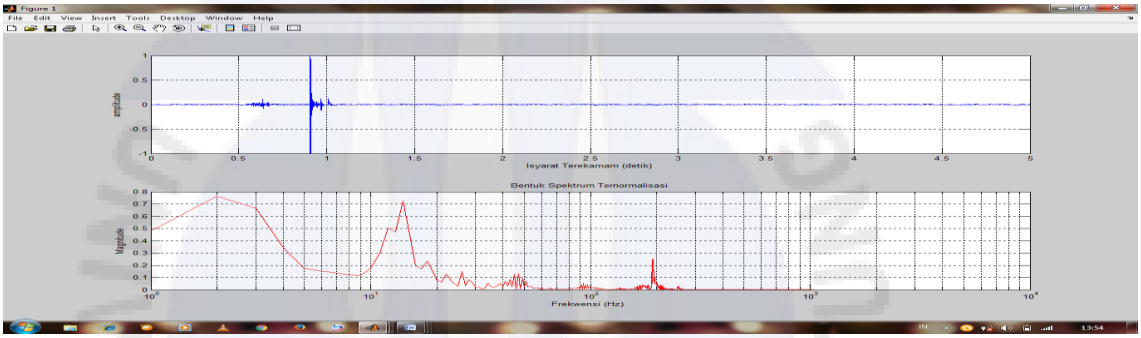
NO	JENIS	UMUR	FREKUENSI			
			Fm	Fp(dB)	Bw	Fmax
91	K250(6)	28 hari	864.97	0.091	389.63	1254.6
92			1047.13	0.02	200.25	1247.38
93			1148.15	0.056	100.67	1248.82
94			866.96	0.08	383.3	1250.26
95			851.13	0.15	396.27	1247.4
96			1047.13	0.14	203.13	1250.26
97			758.57	0.031	488.83	1247.4
98			1148.15	0.193	104.99	1253.14
99			864.97	0.738	382.41	1247.38
100			851.13	0.14	399.13	1250.26
	rata-rata		**944.829**	**0.1639**	**304.861**	**1249.69**

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON JENIS K150

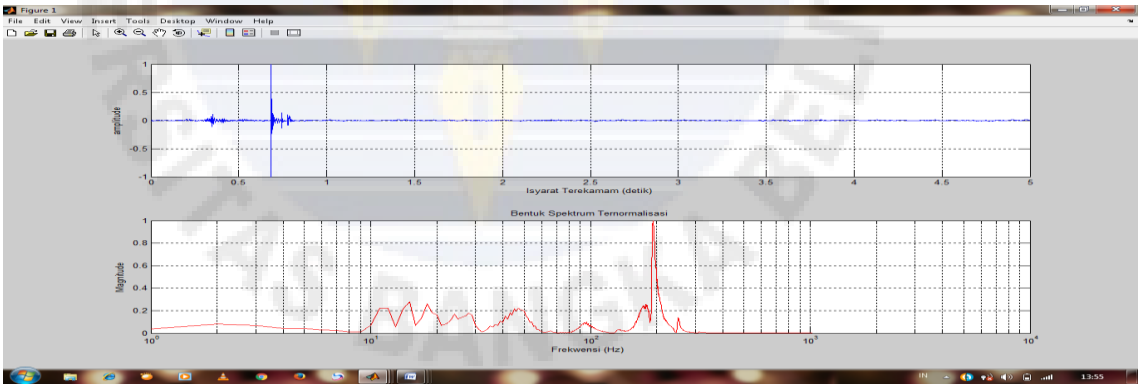
1. 01



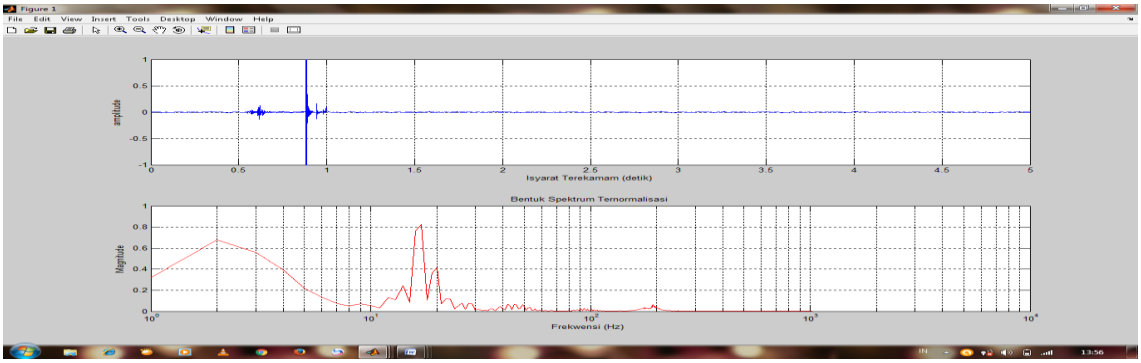
2. 02



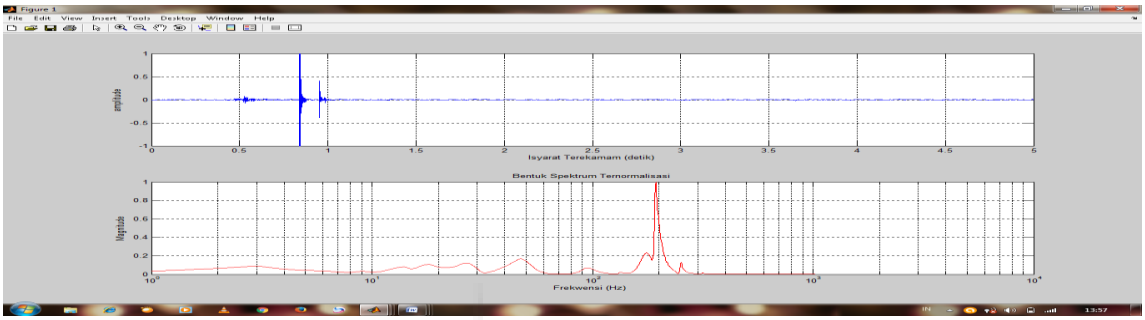
3. 03



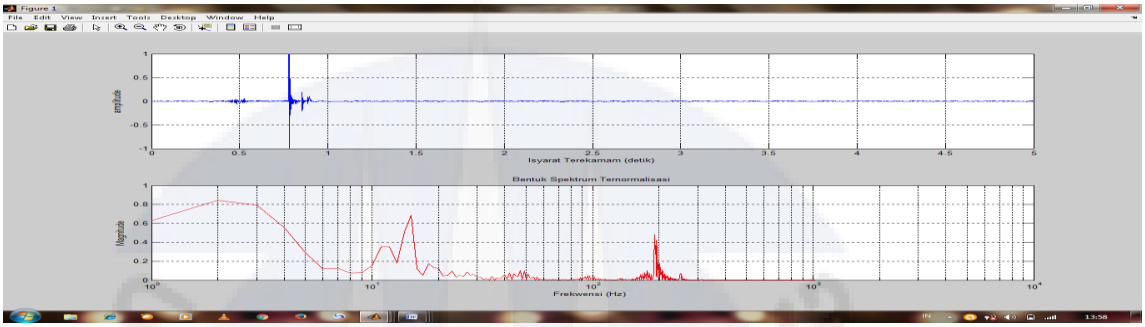
4. 04



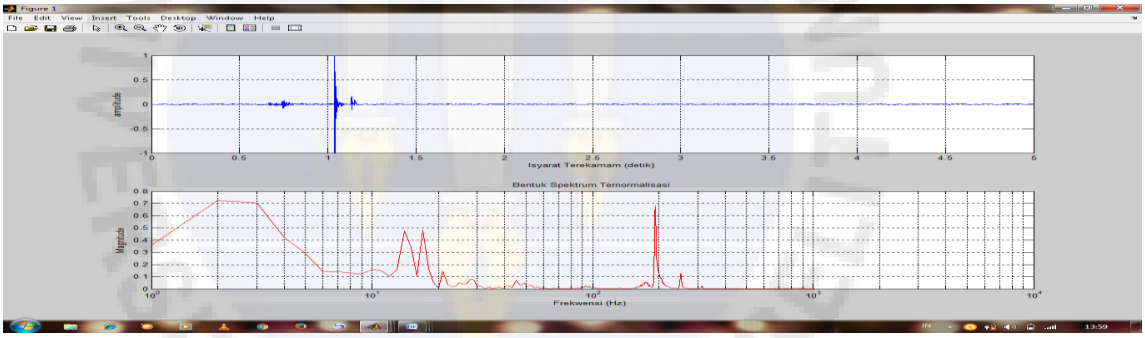
5. 05



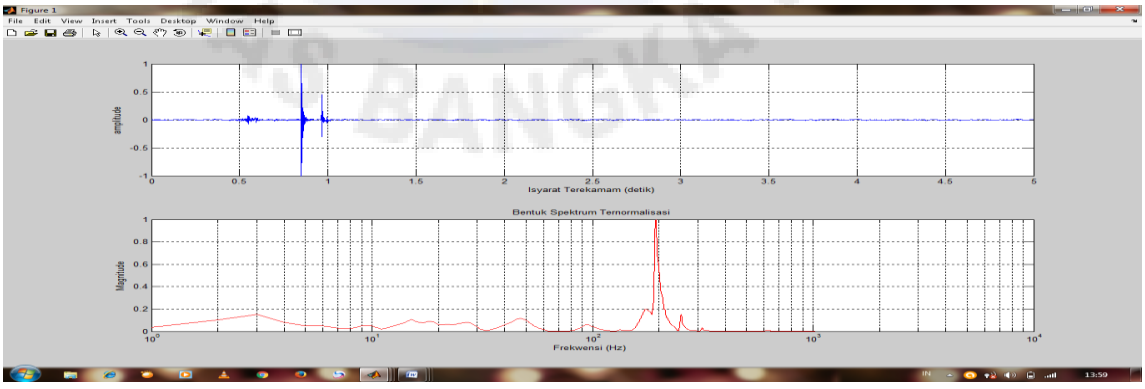
6. 06



7. 07



8. 08



9. 09

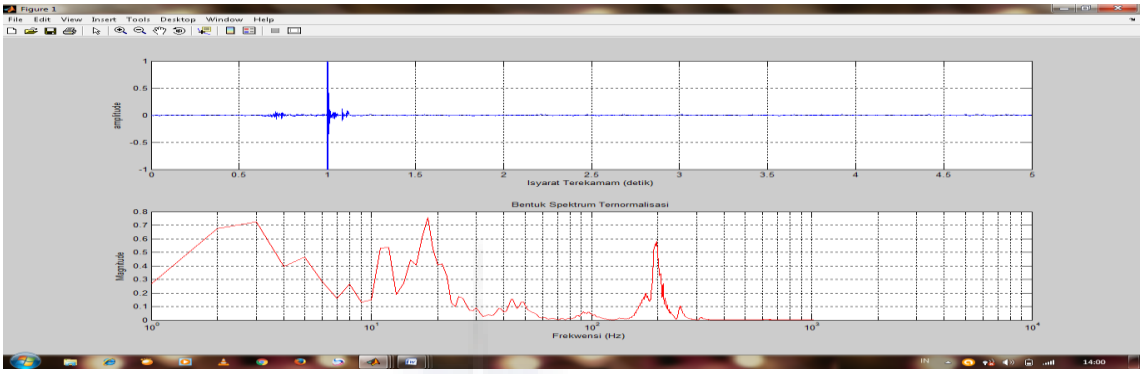


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

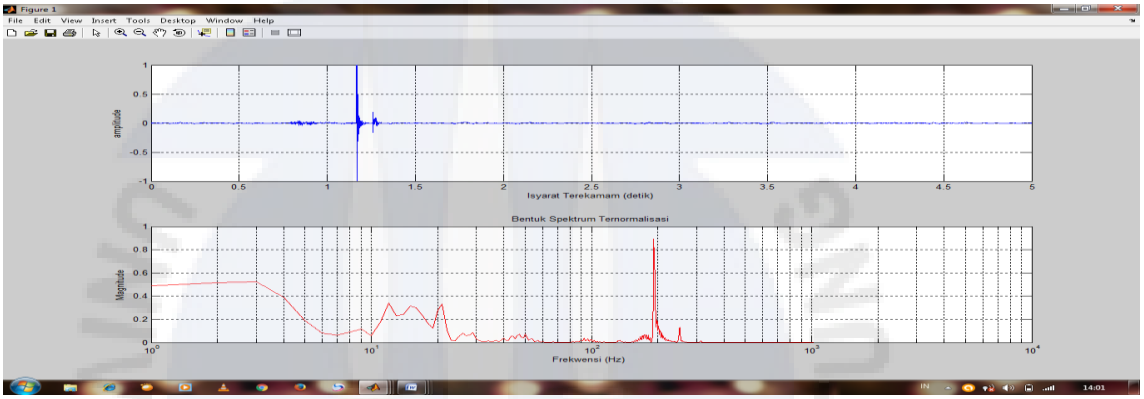
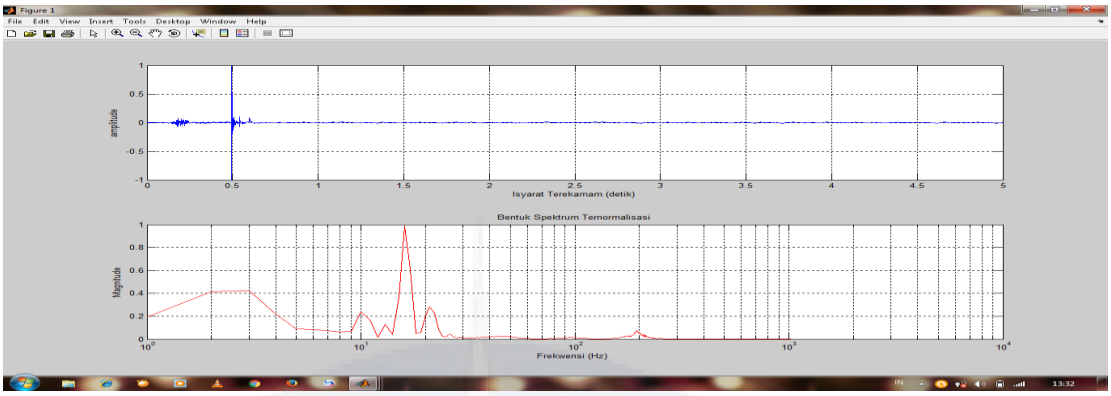


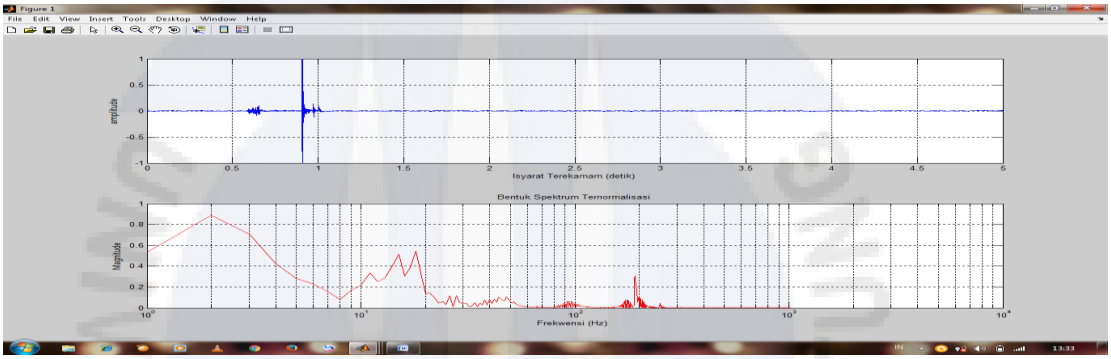
Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON JENIS K175

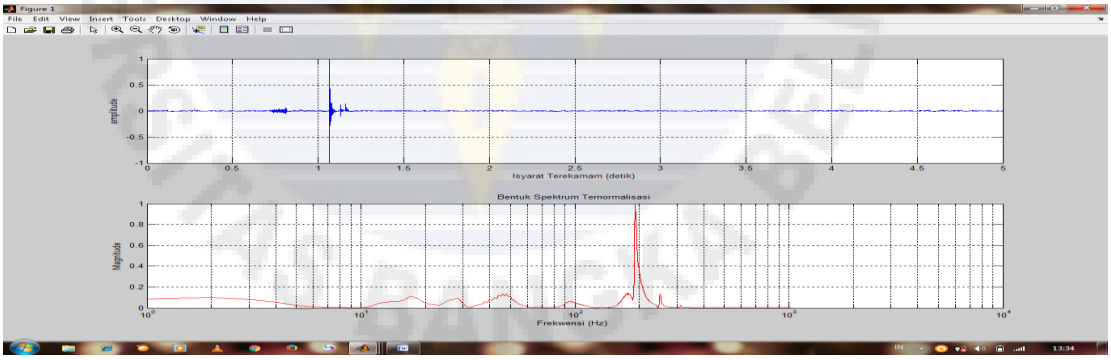
1. 01



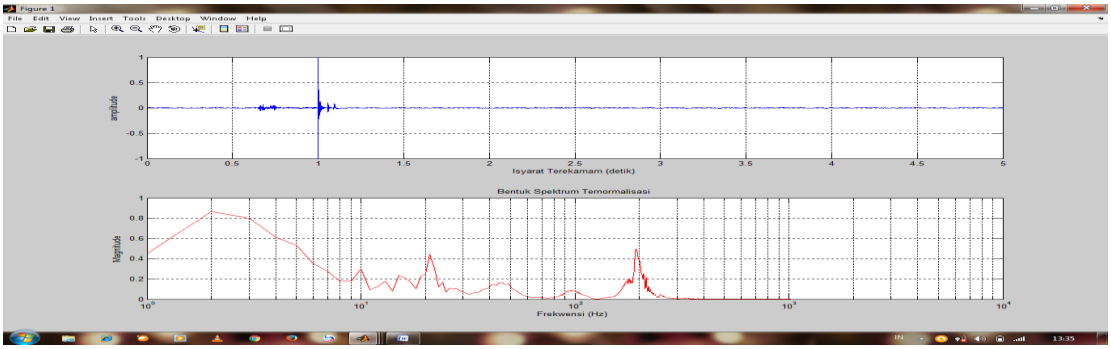
2. 02



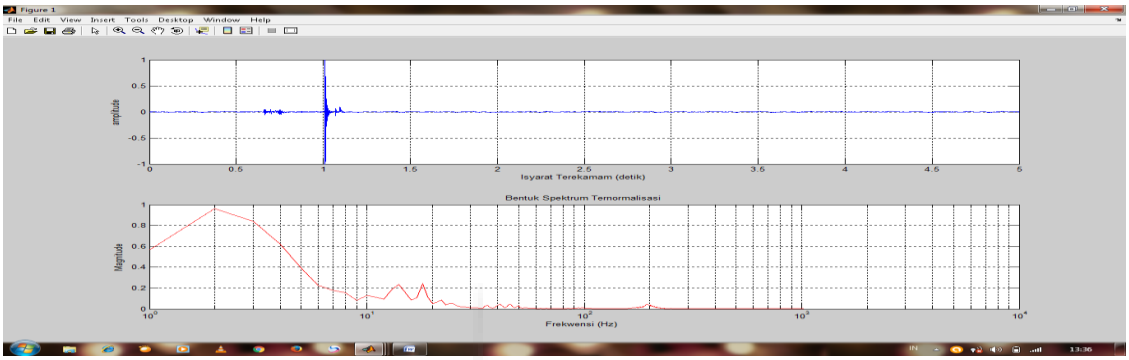
3. 03



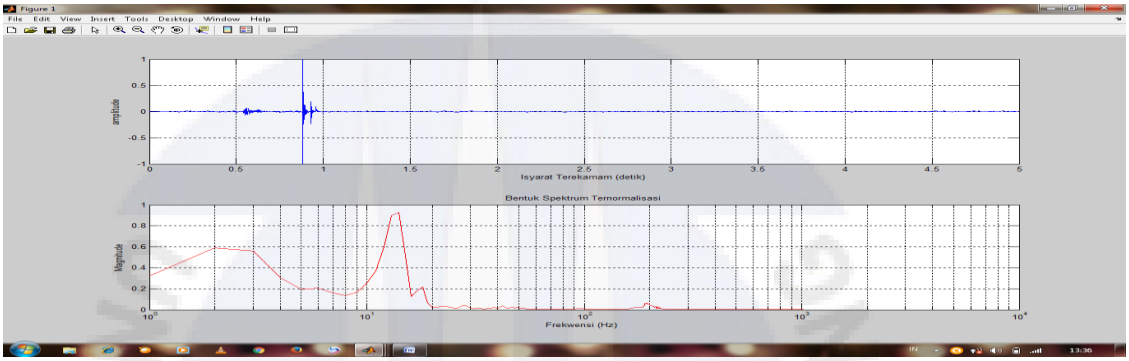
4. 04



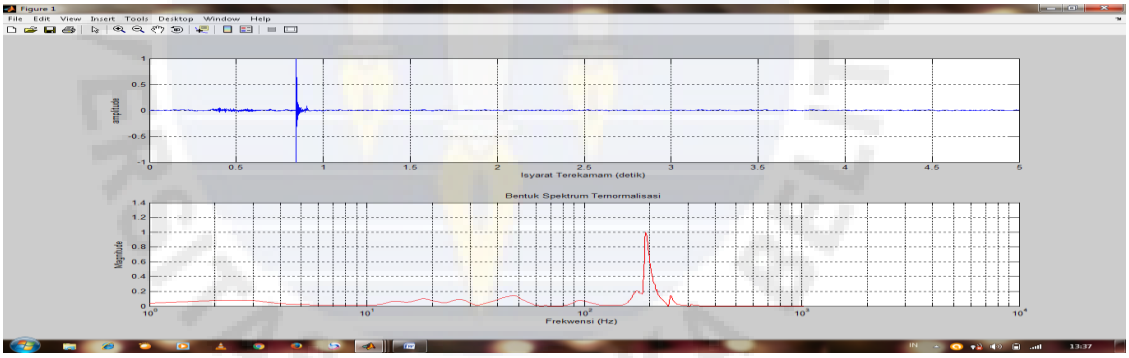
5. 05



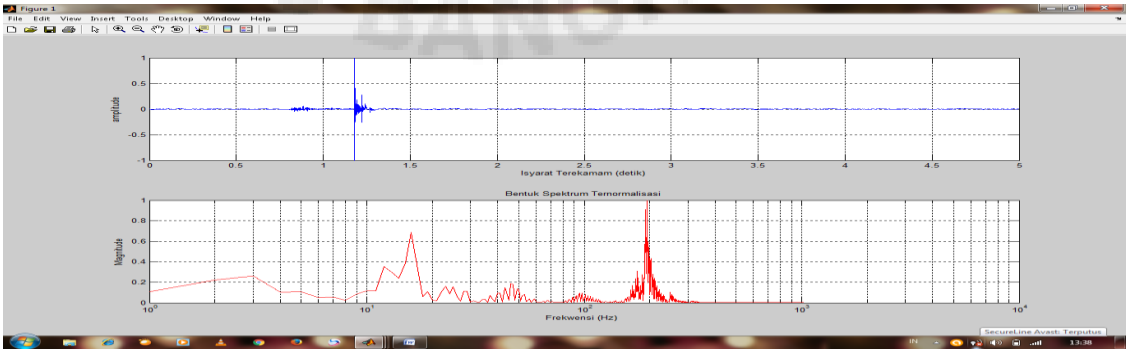
6. 06



7. 07



8. 08



9. 09

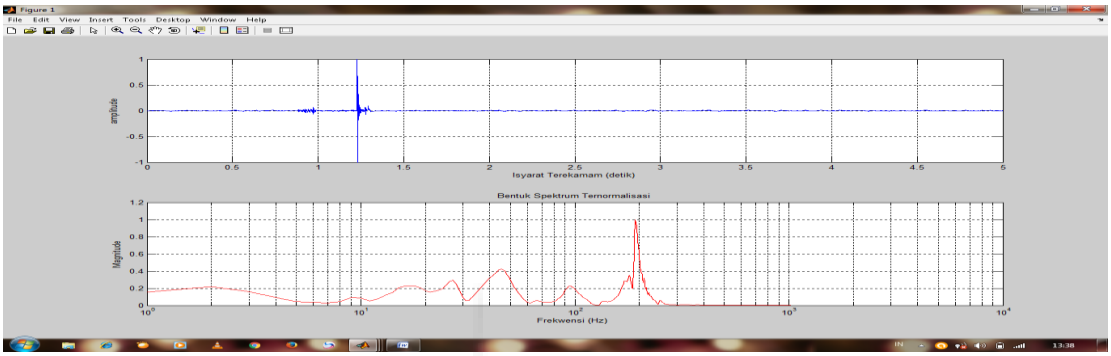


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

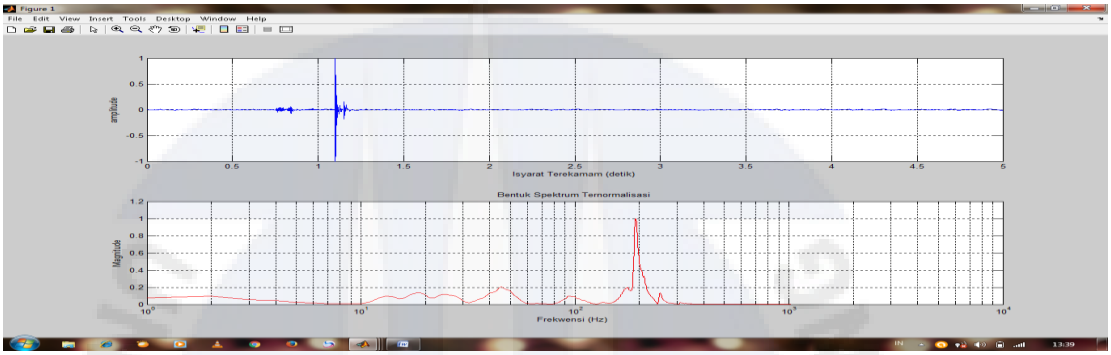
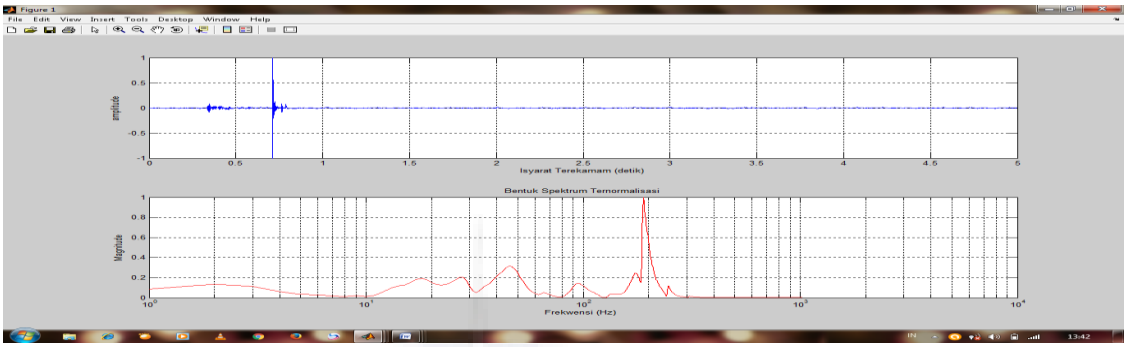


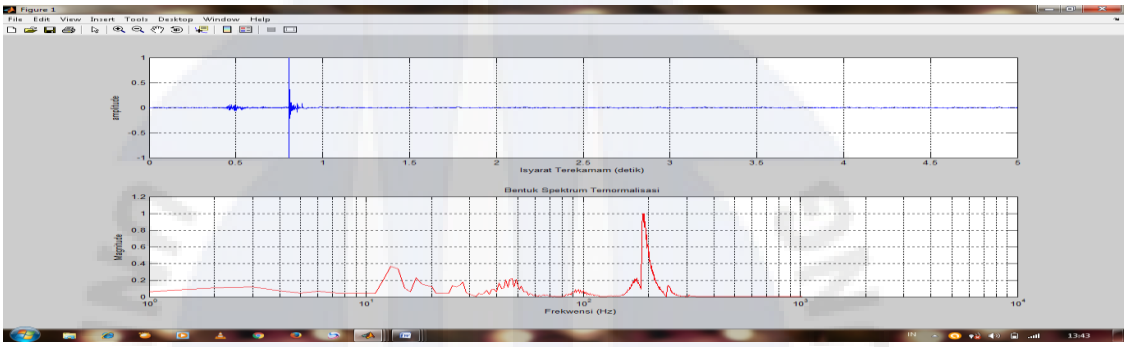
Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON K200

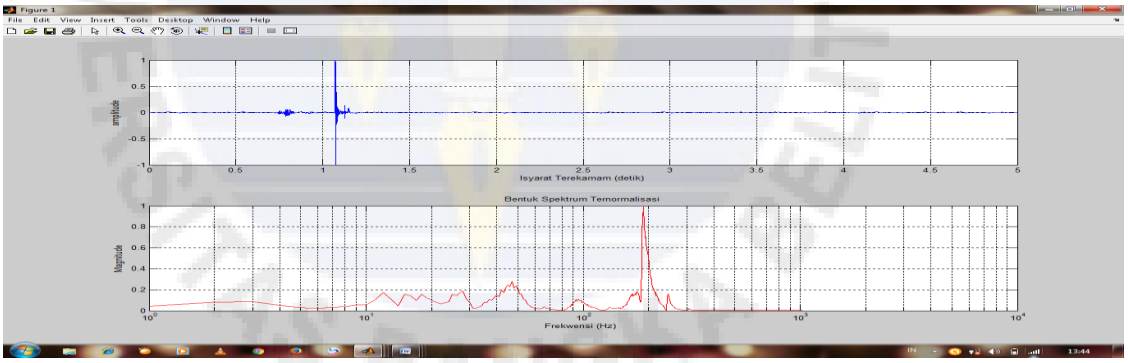
1. 01



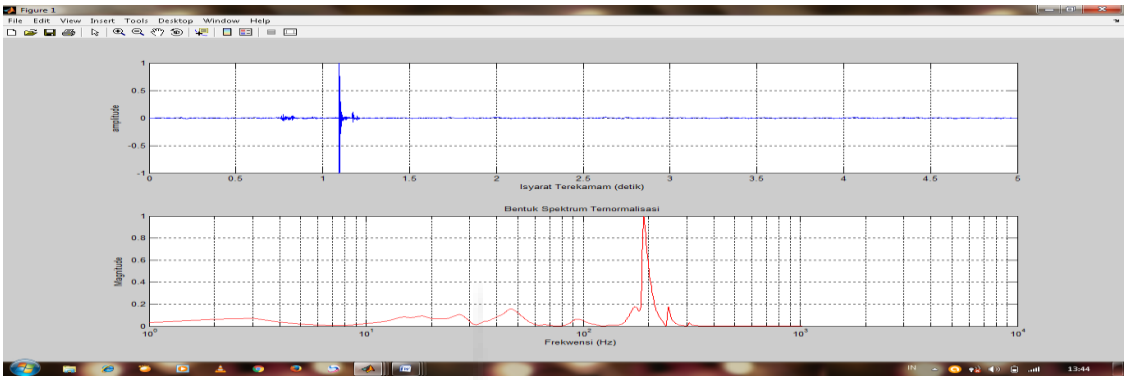
2. 02



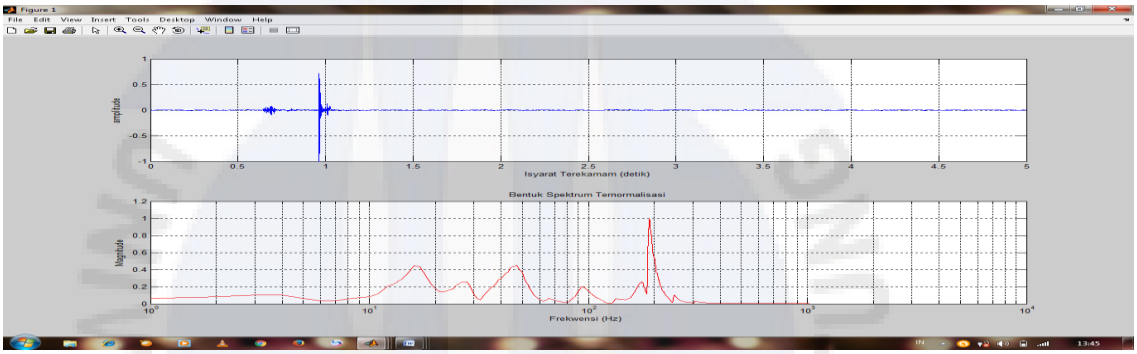
3. 03



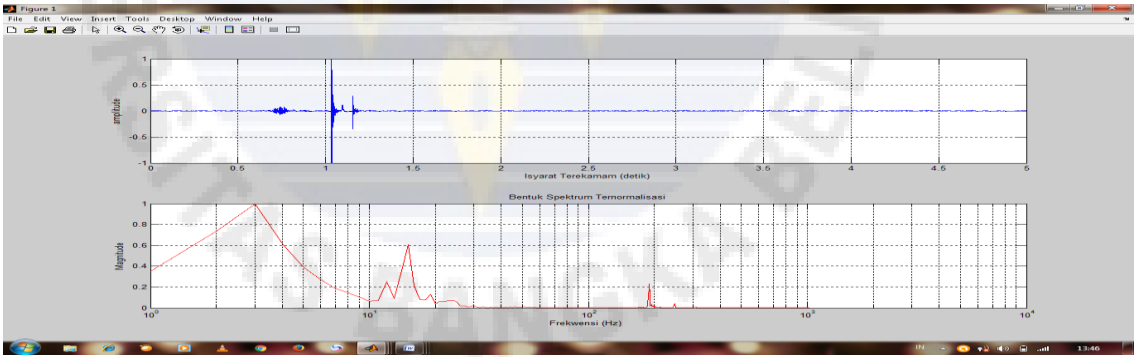
4. 04



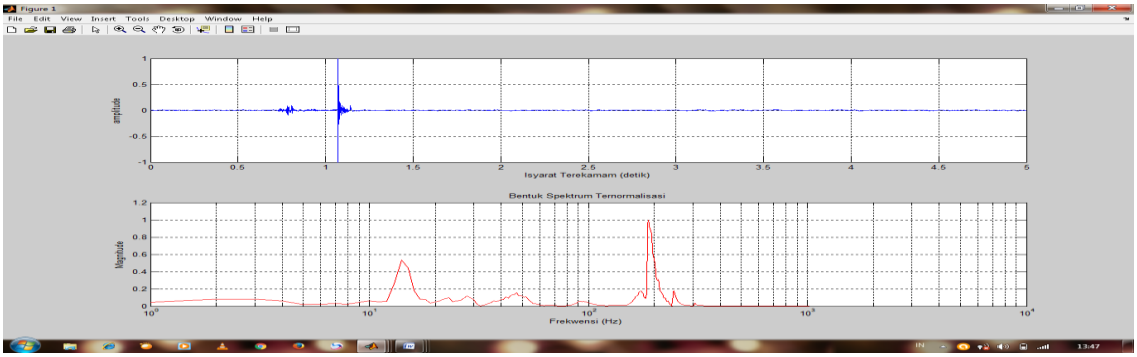
5. 05



6. 06



7. 07



8. 08

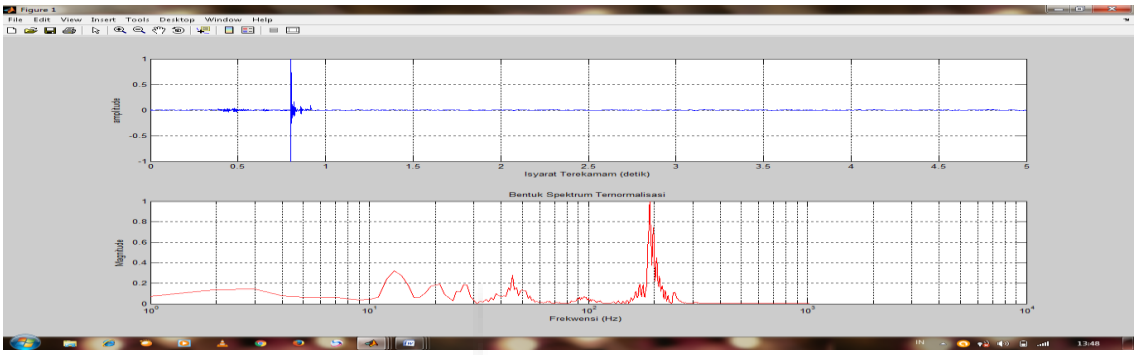


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

9. 09

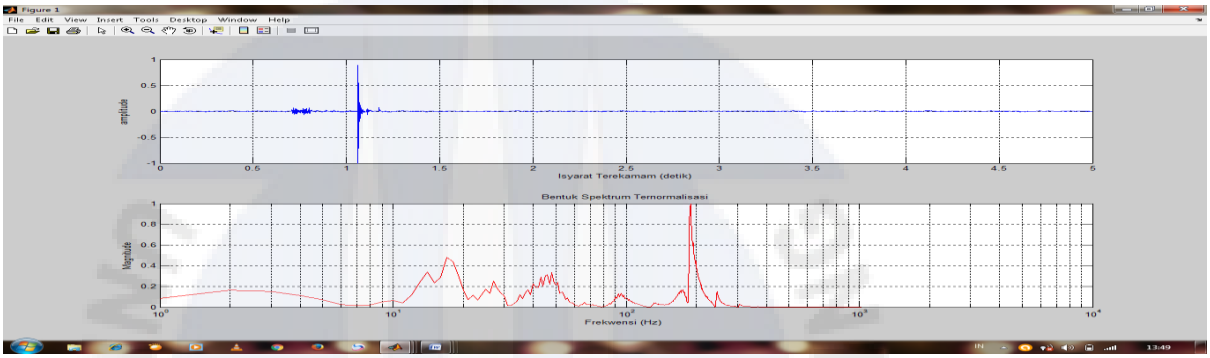


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

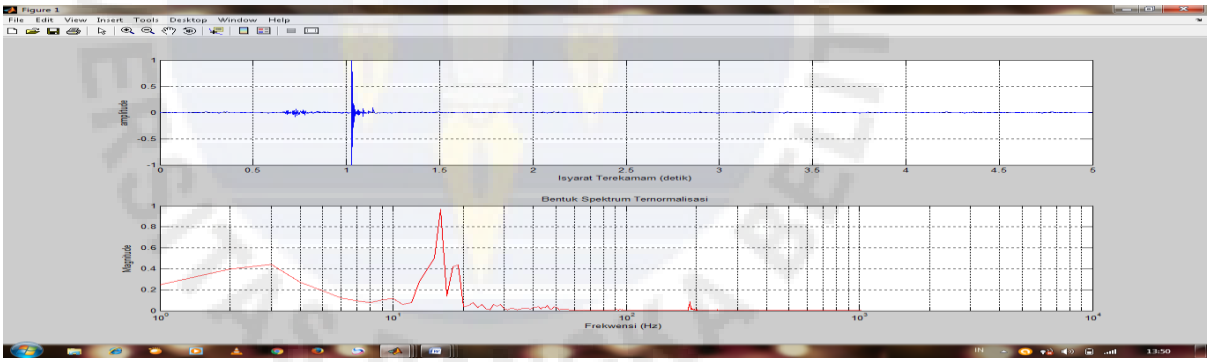
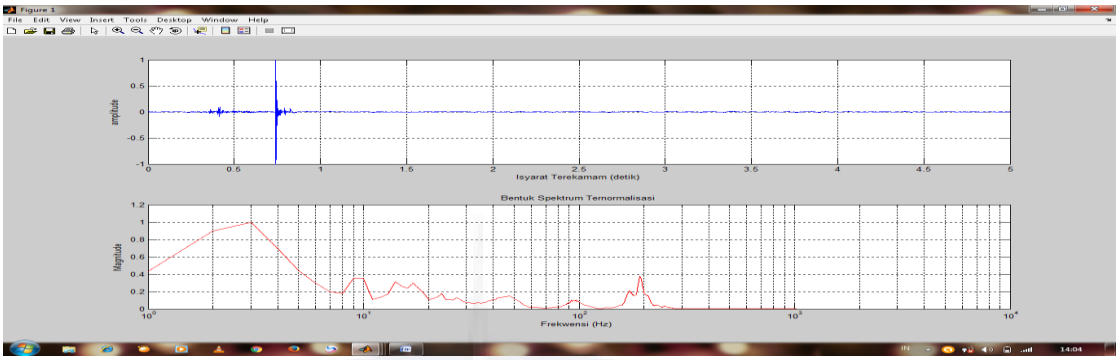


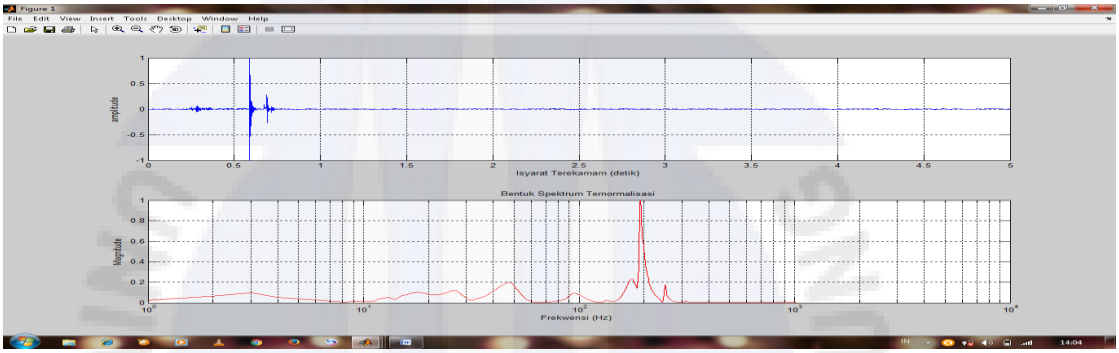
Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON JENIS K275

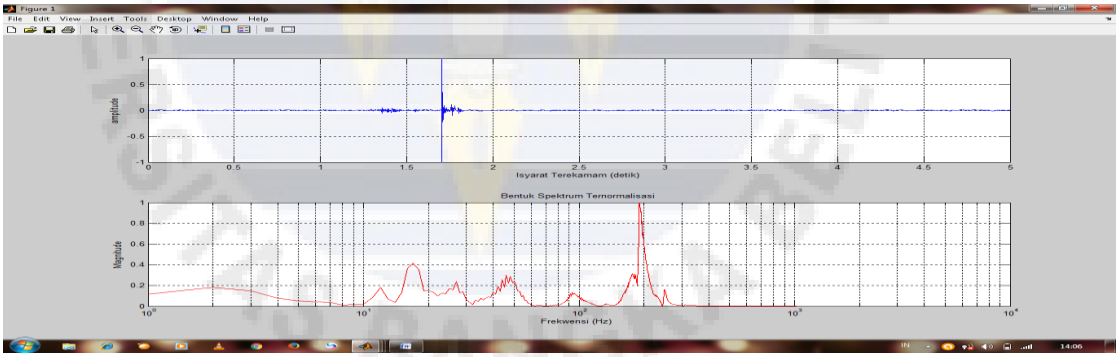
1. 01



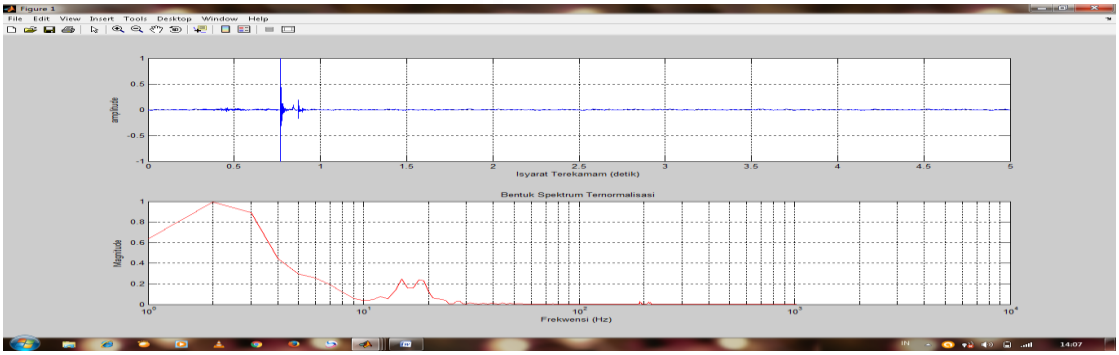
2. 02



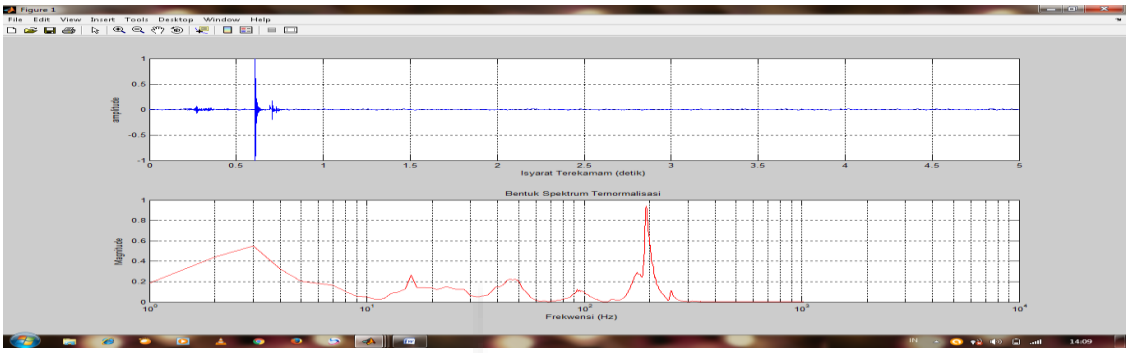
3. 03



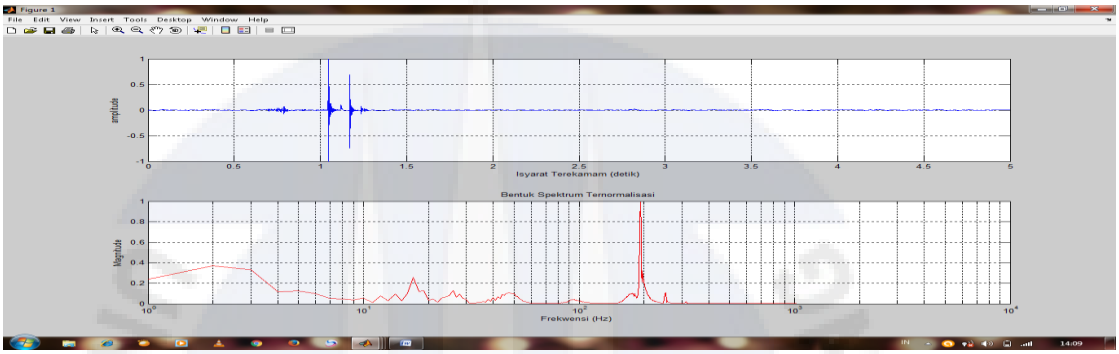
4. 04



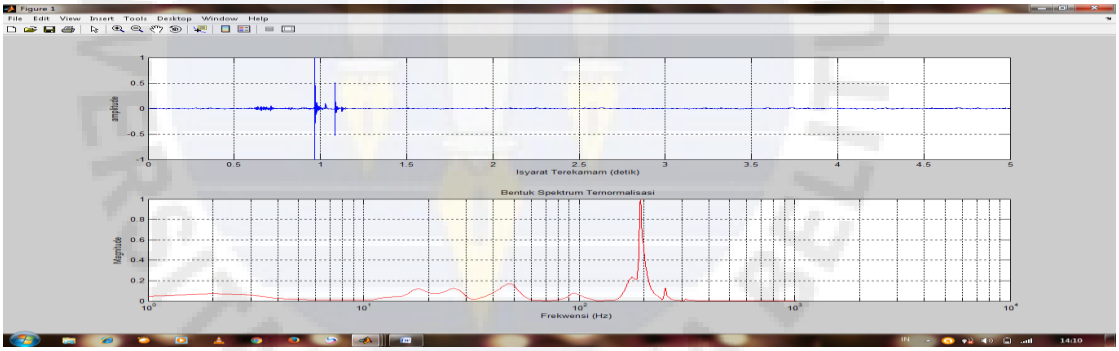
5. 05



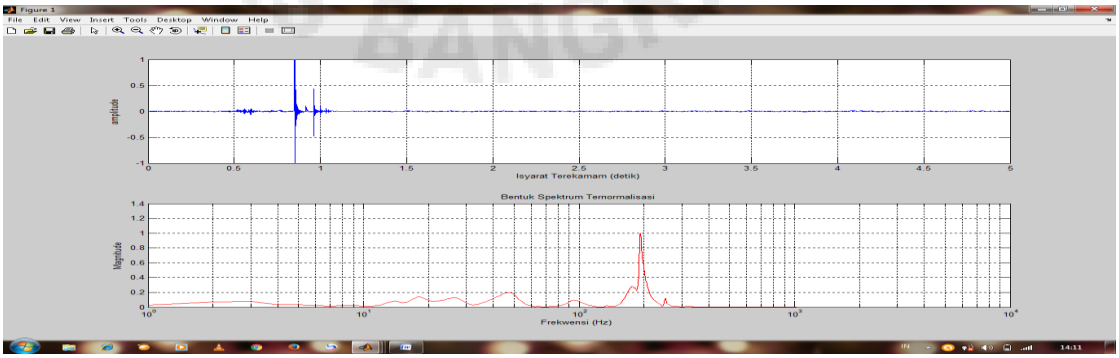
6. 06



7. 07



8. 08



9. 09

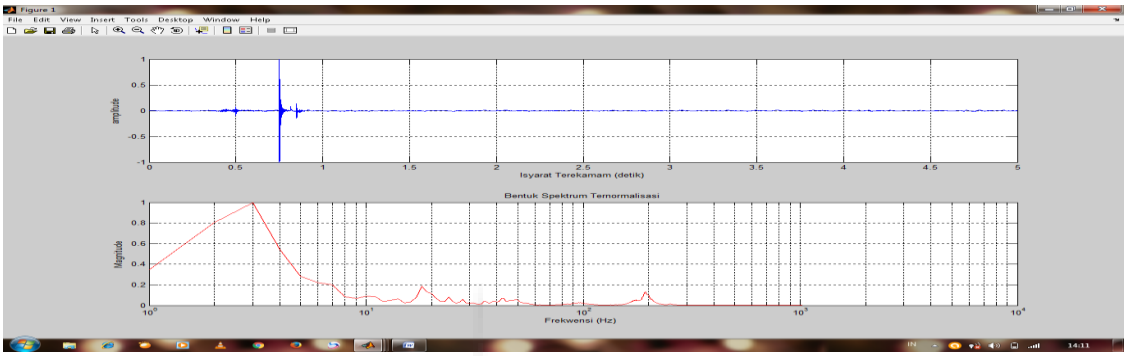


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

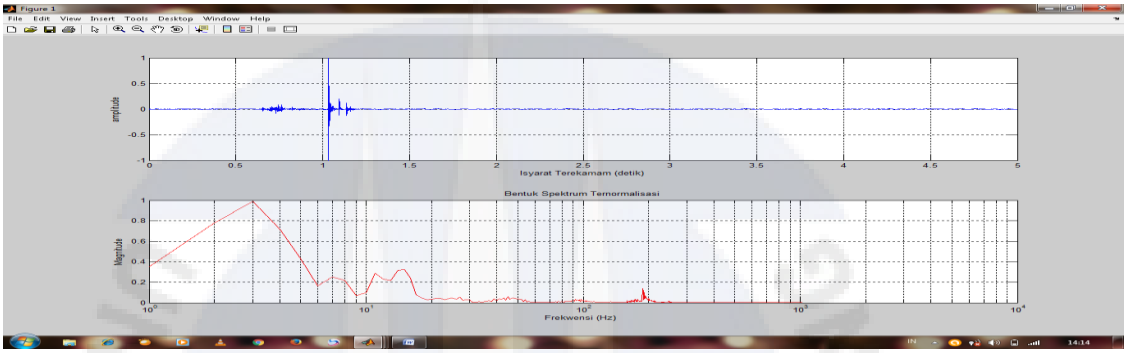
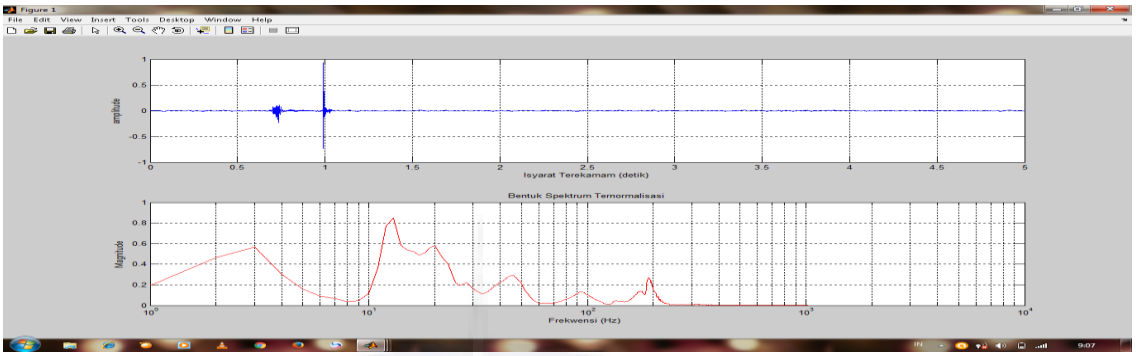


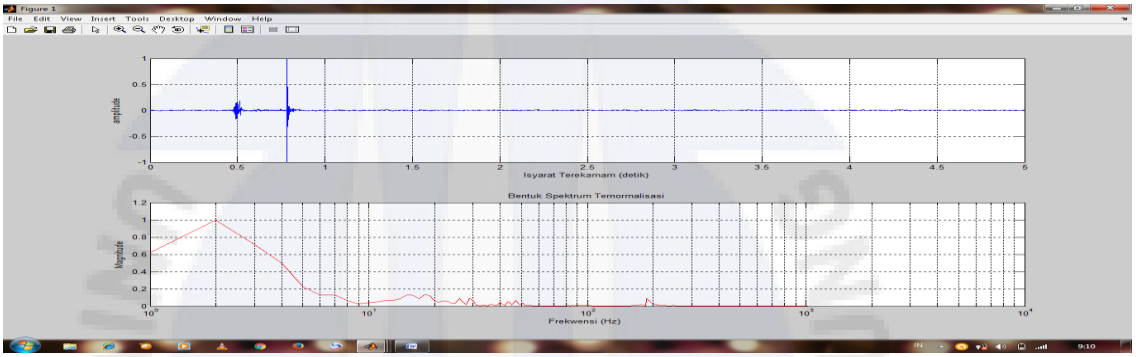
Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON JENIS K250(1)

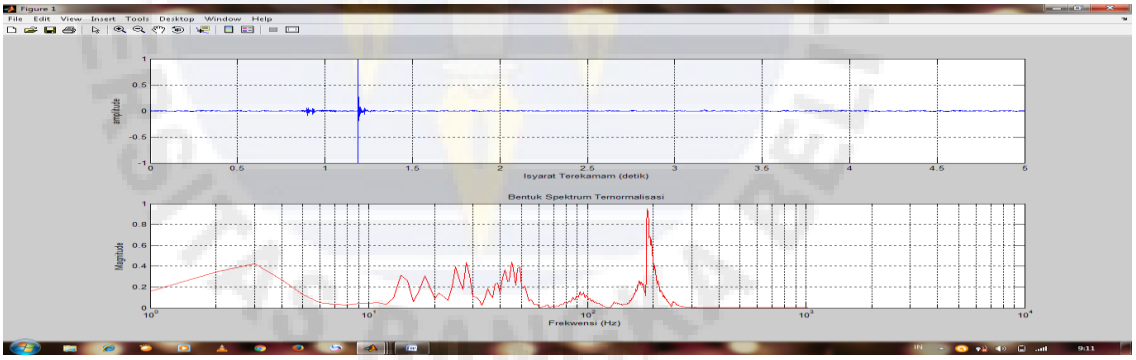
1. 01



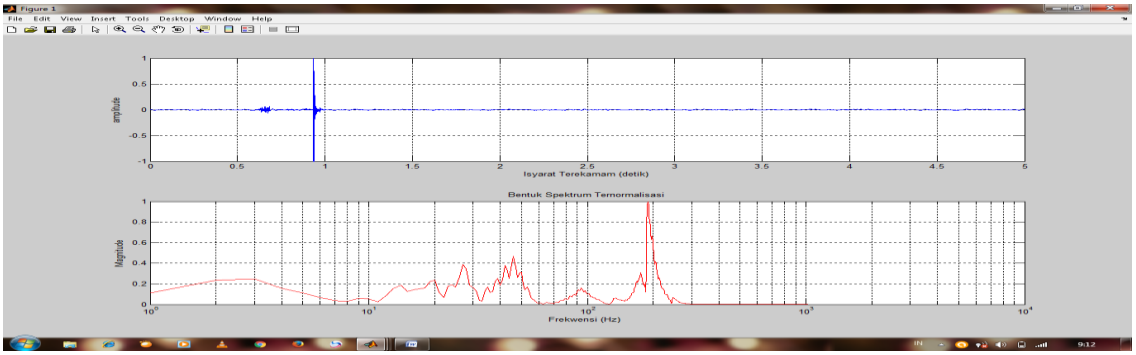
2. 02



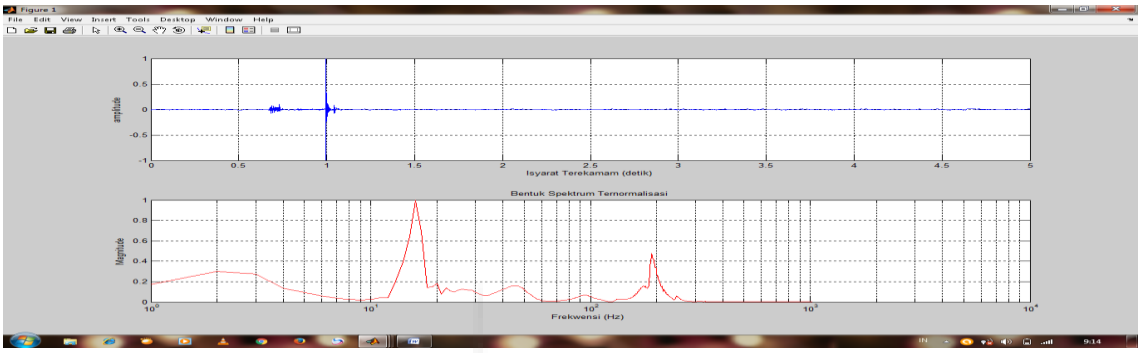
3. 03



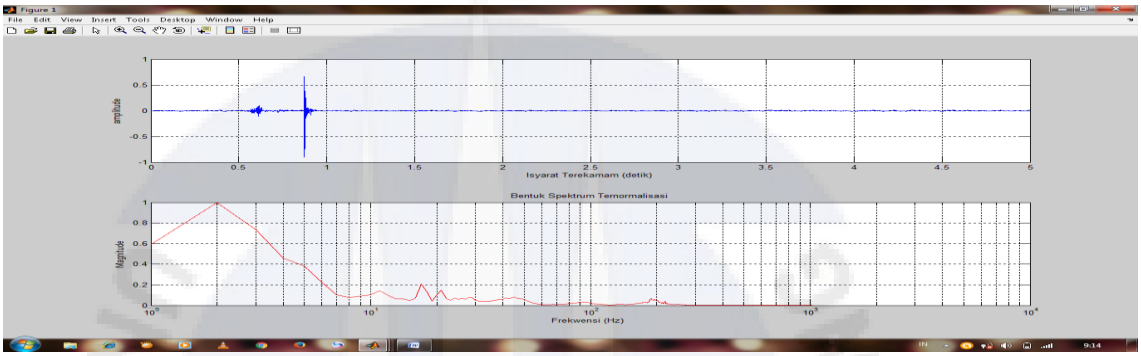
4. 04



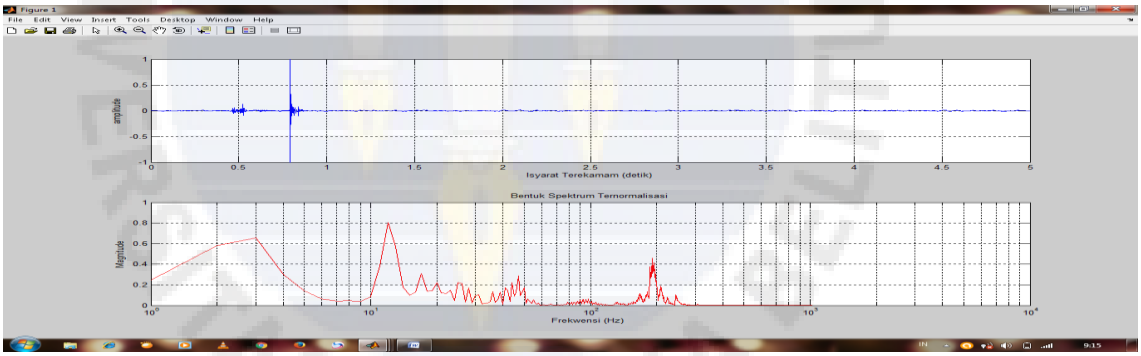
5. 05



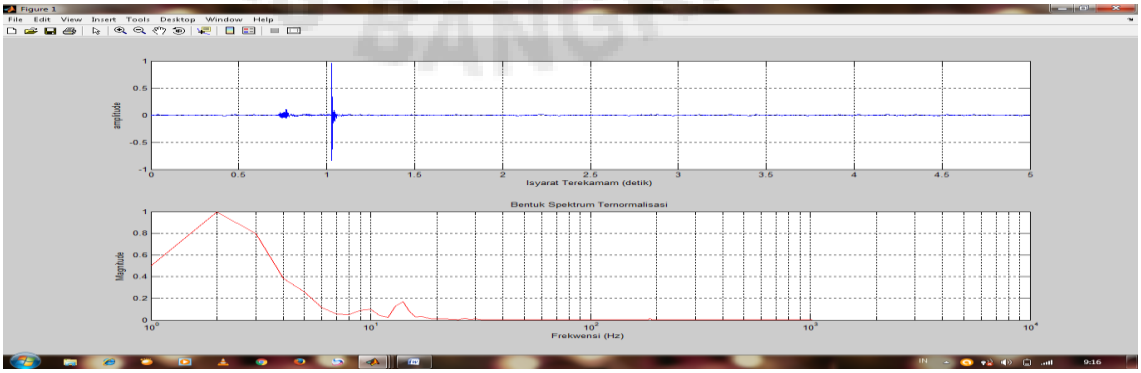
6. 06



7. 07



8. 08



9. 09

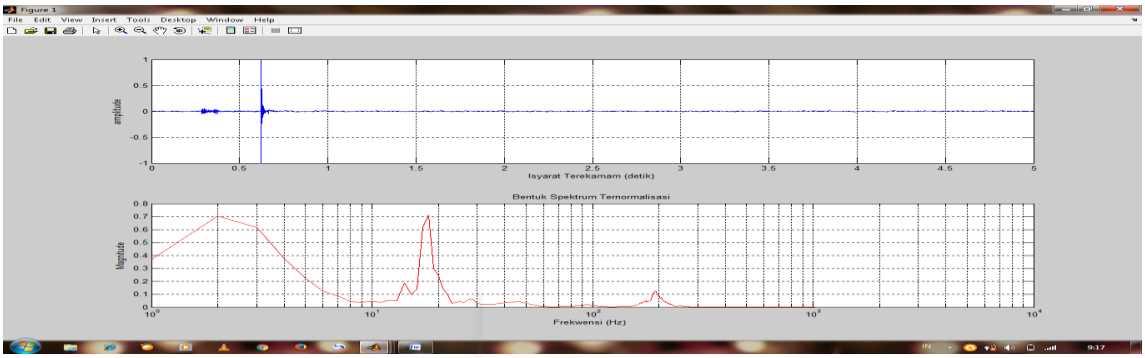


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

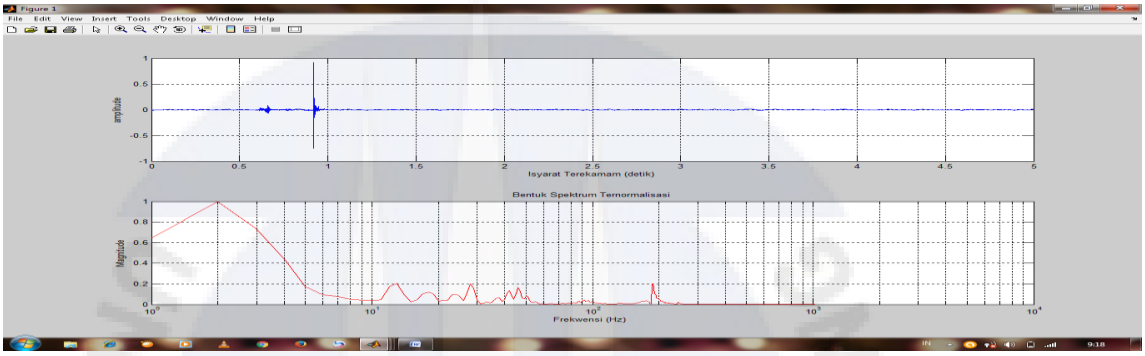
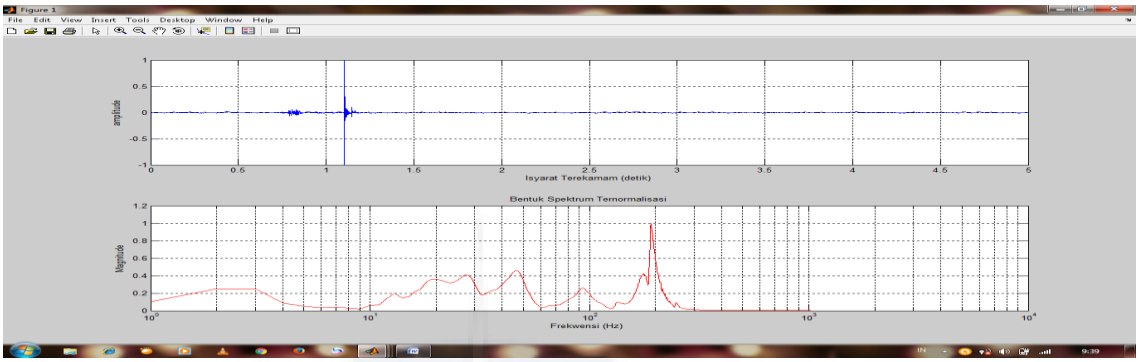


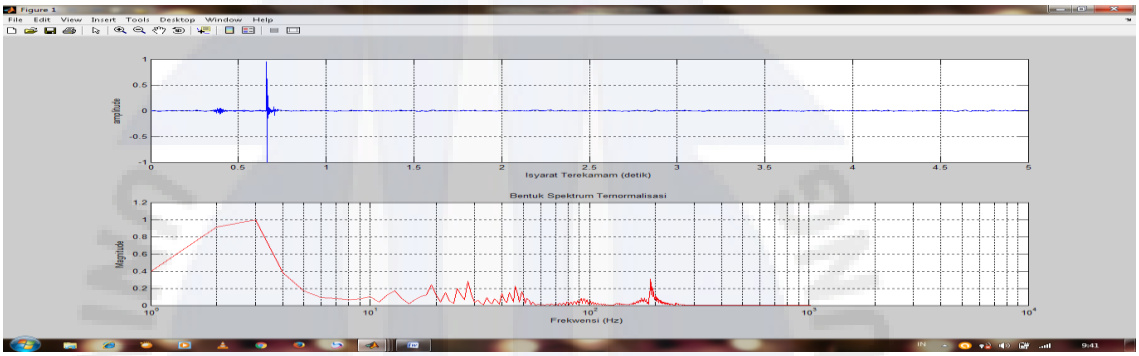
Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON JENIS K250(2)

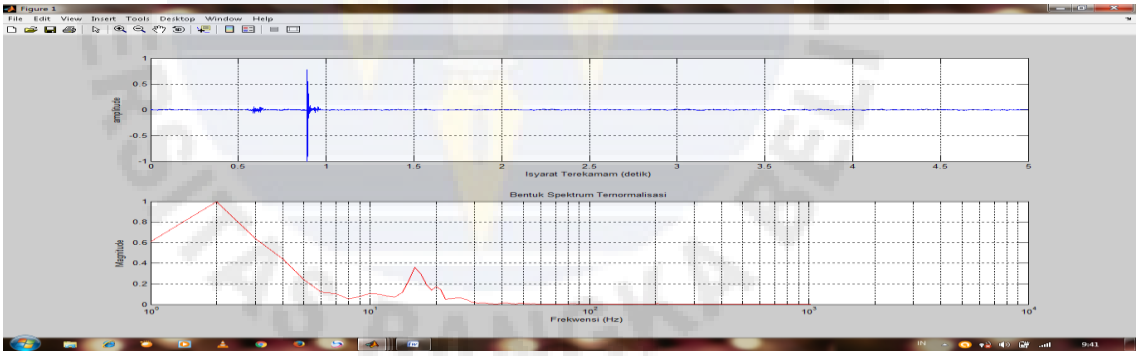
1. 01



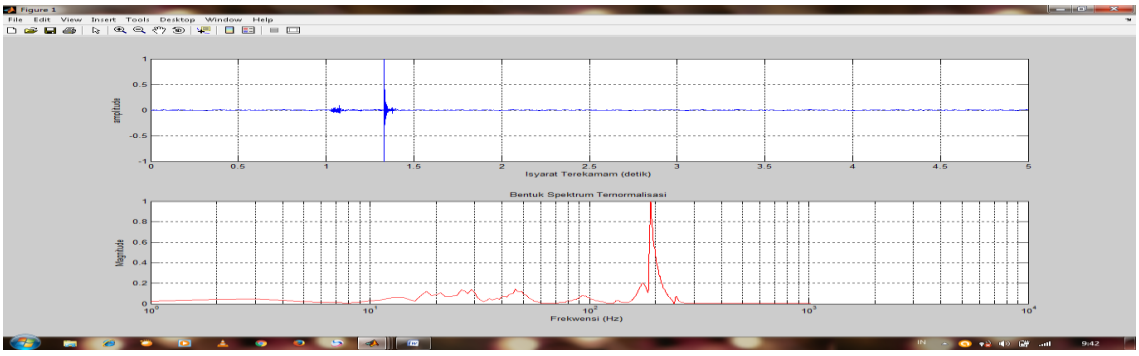
2. 02



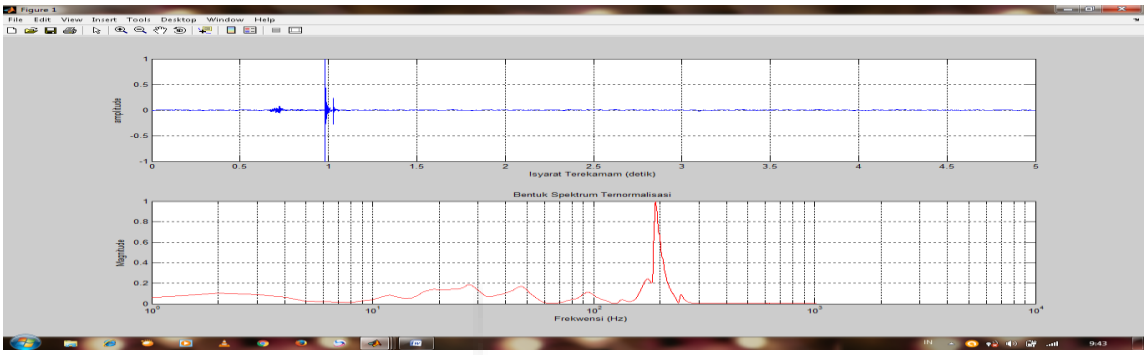
3. 03



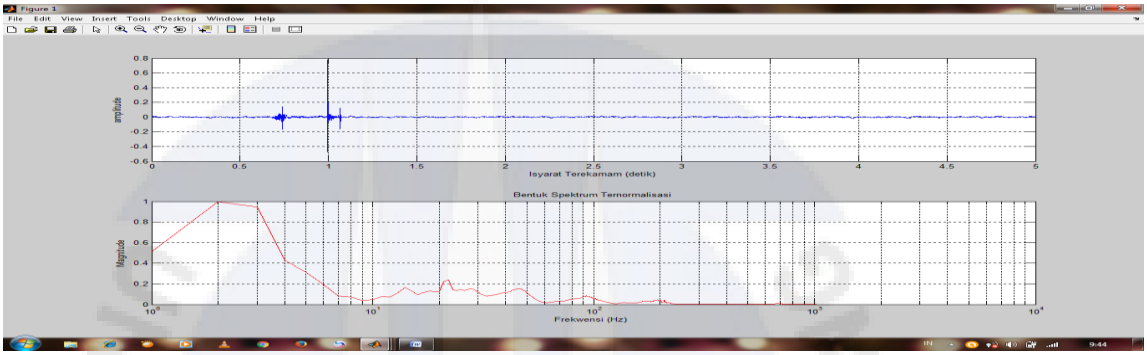
4. 04



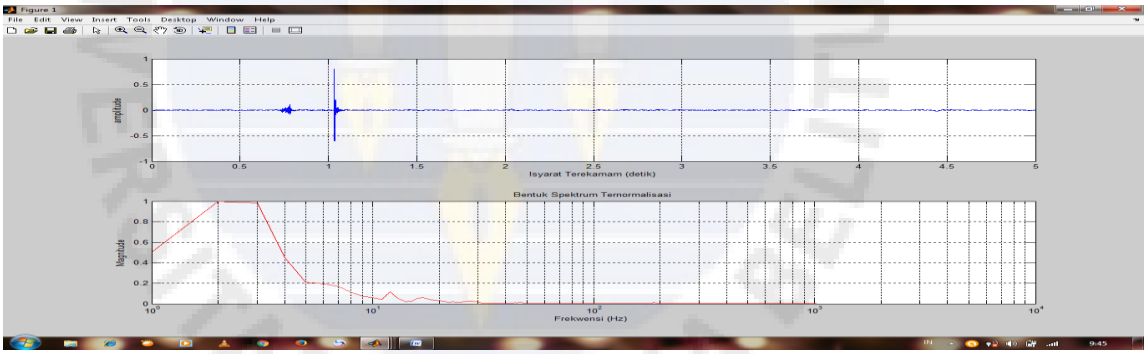
5. 05



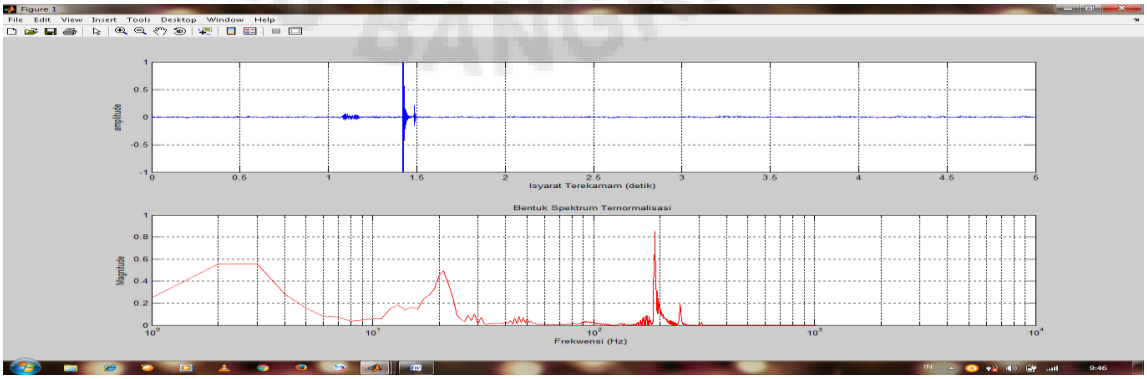
6. 06



7. 07



8. 08



9. 09

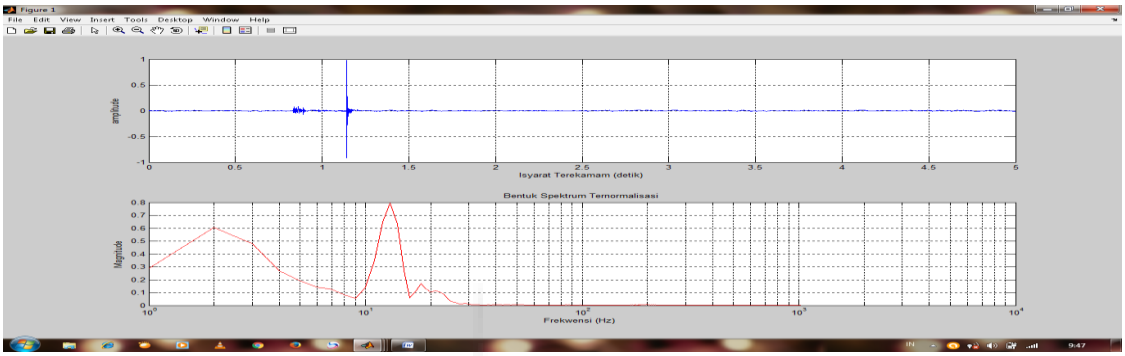


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

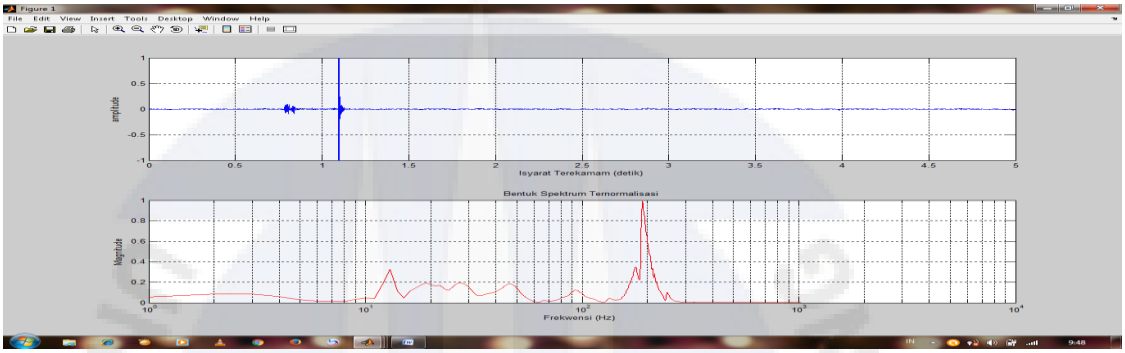
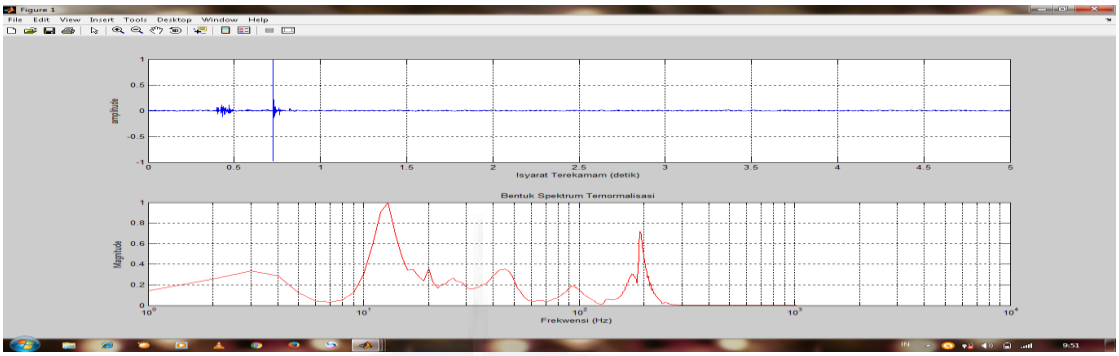


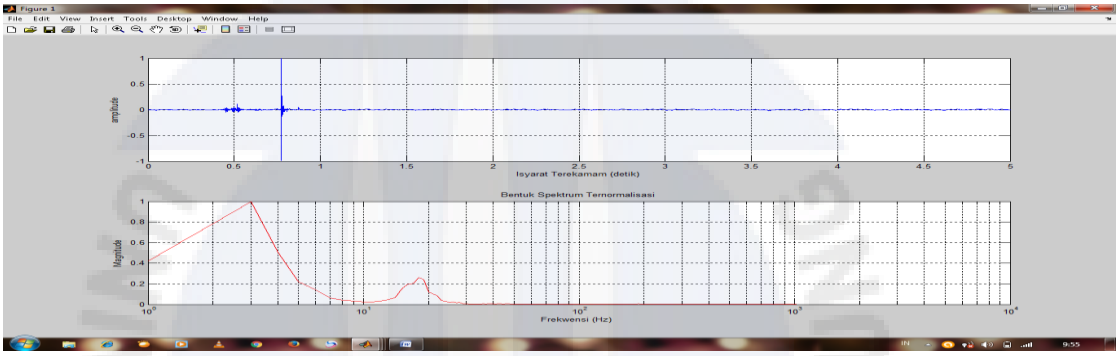
Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON K250(3)

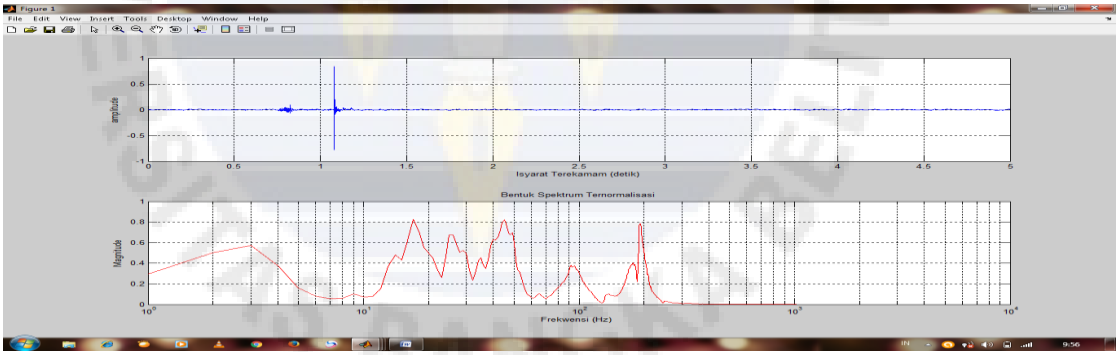
1. 01



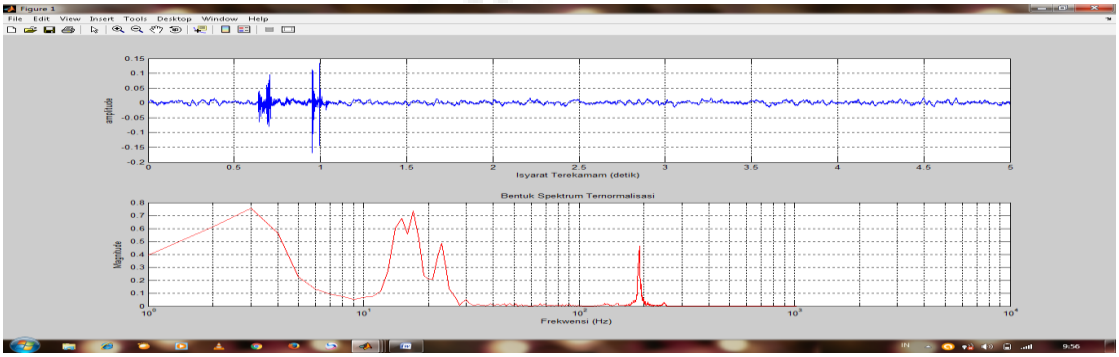
2. 02



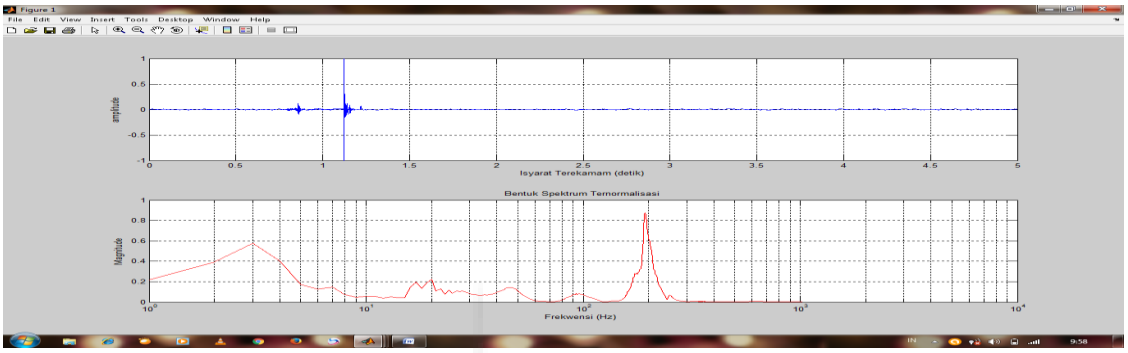
3. 03



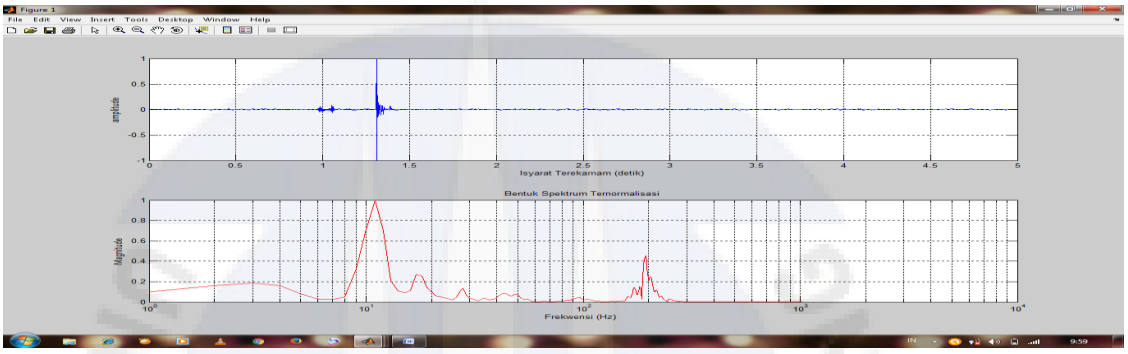
4. 04



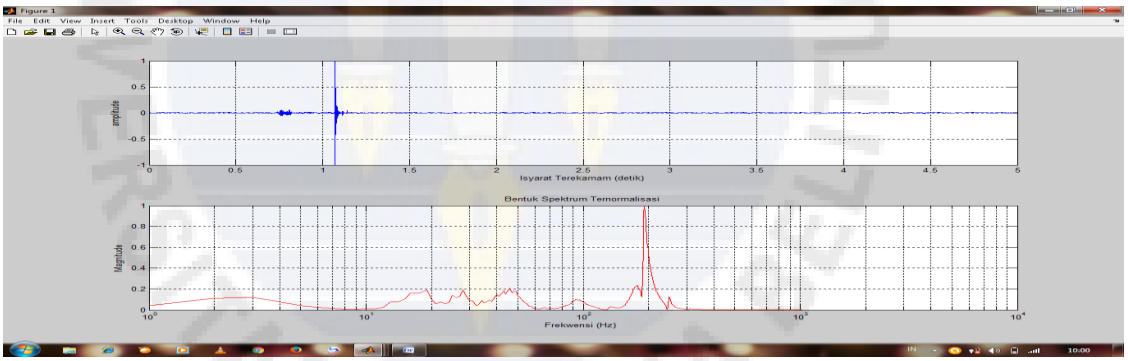
5. 05



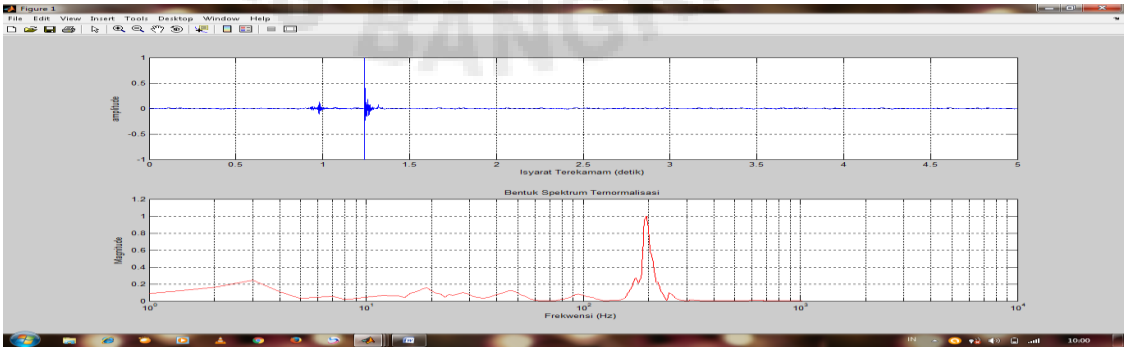
6. 06



7. 07



8. 08



9. 09

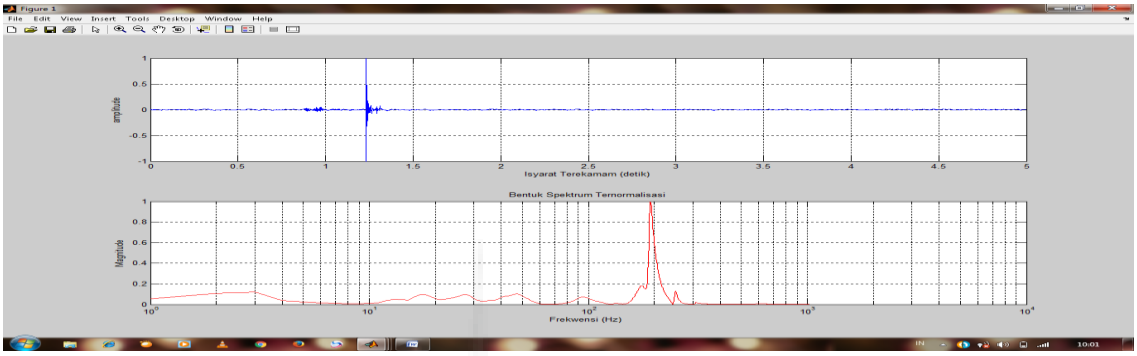


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

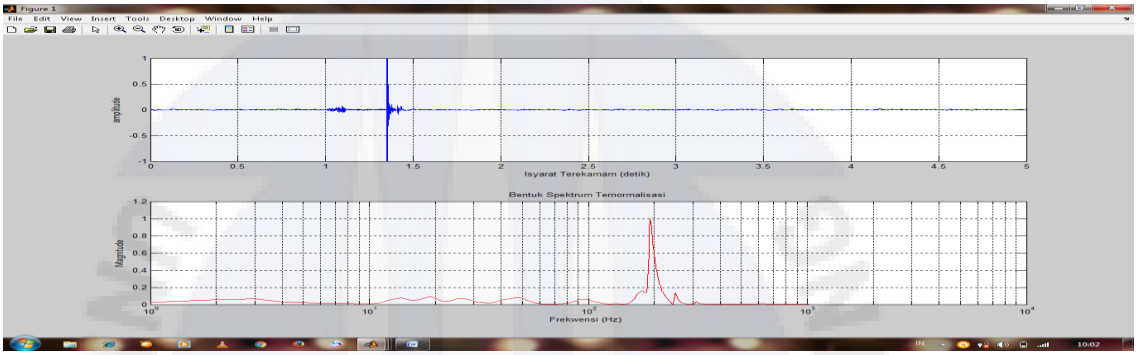
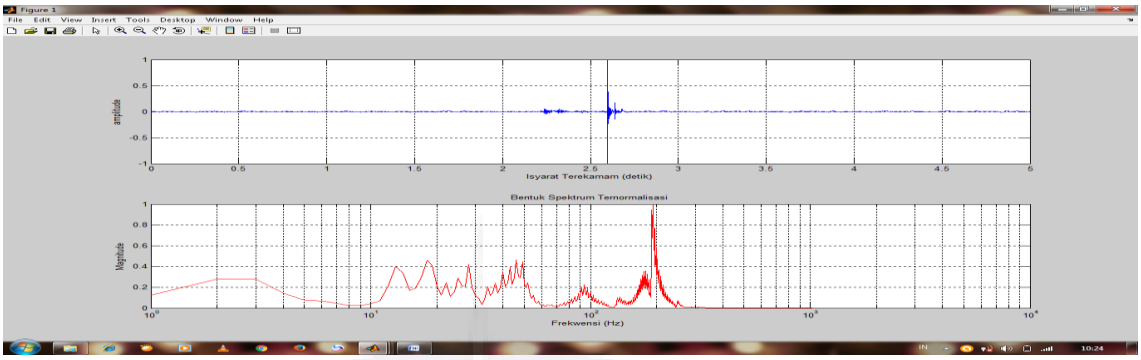


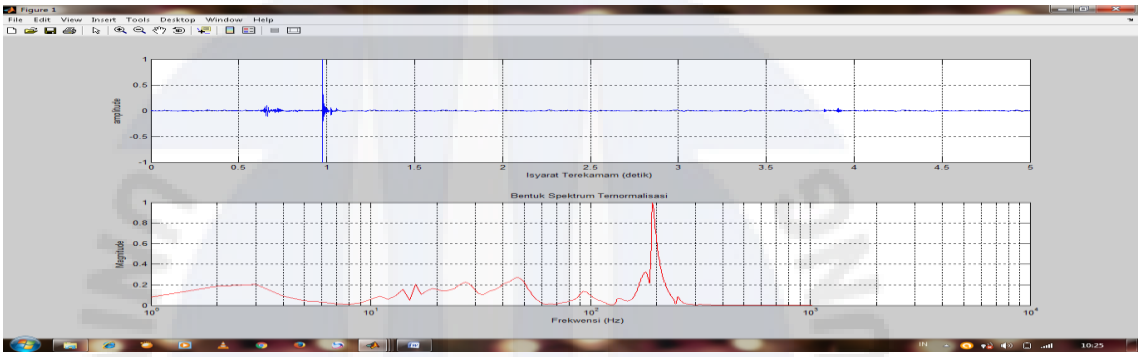
Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON K 250(4)

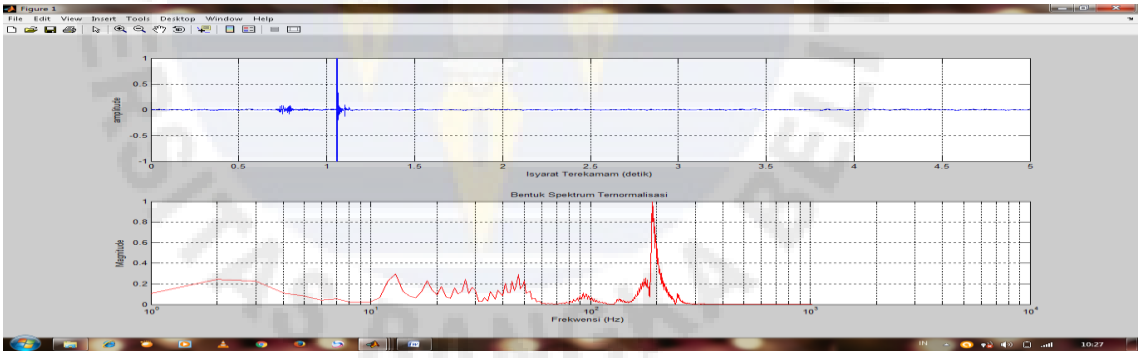
1. 01



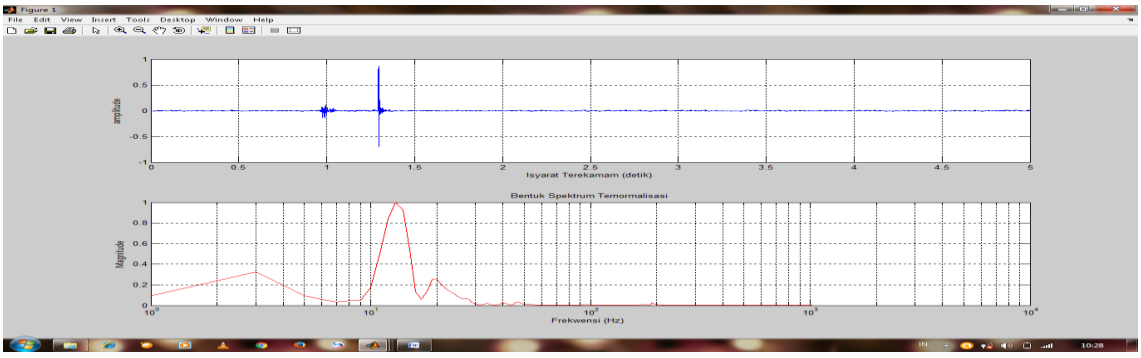
2. 02



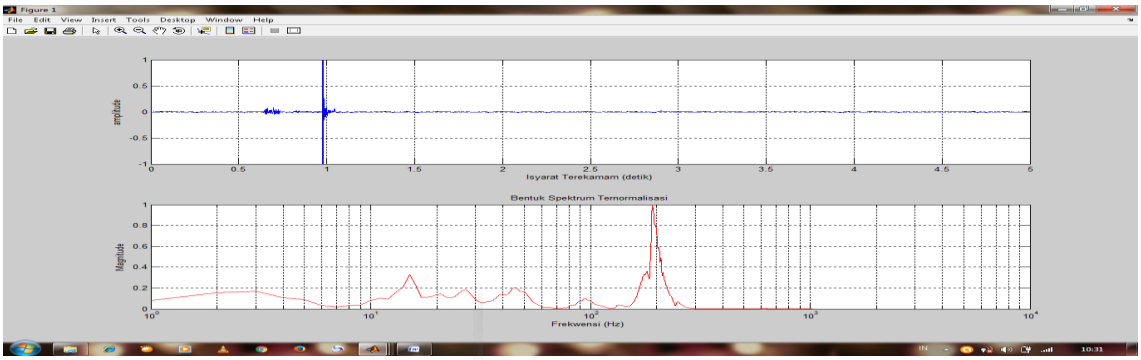
3. 03 oke



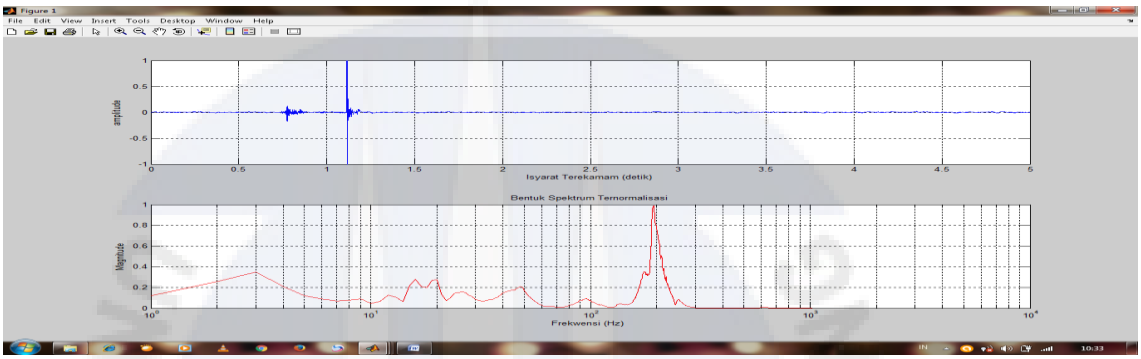
4. 04



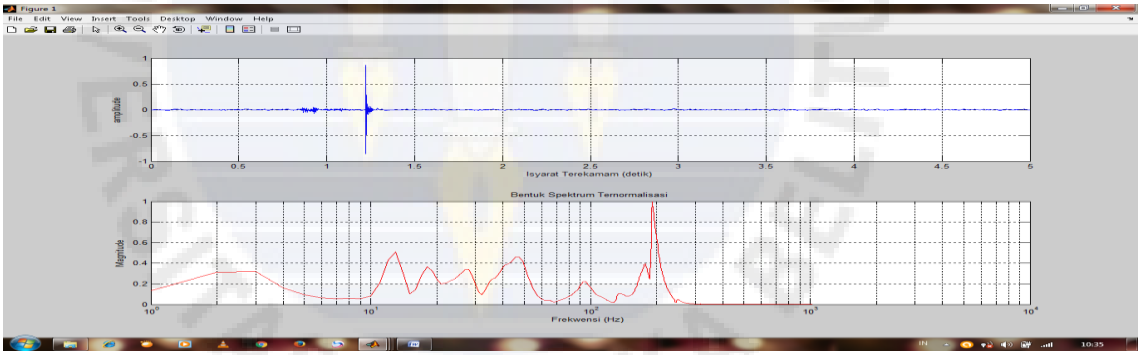
5. 05



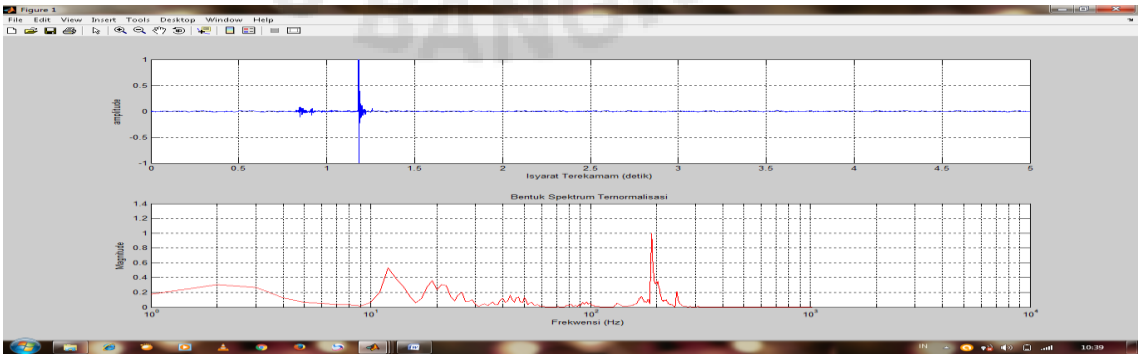
6. 06



7. 07



8. 08



9. 09

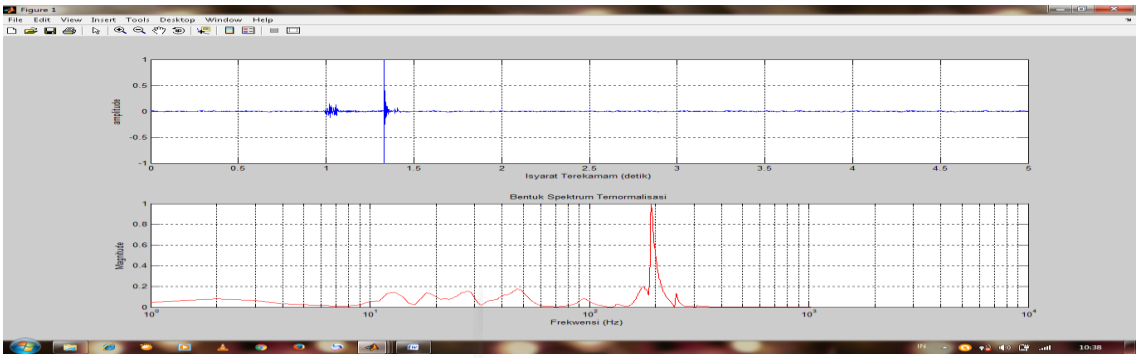


Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

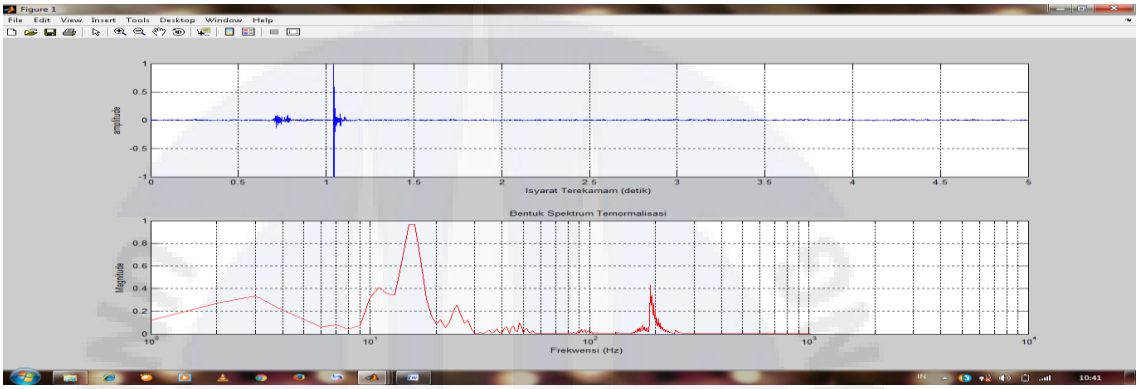
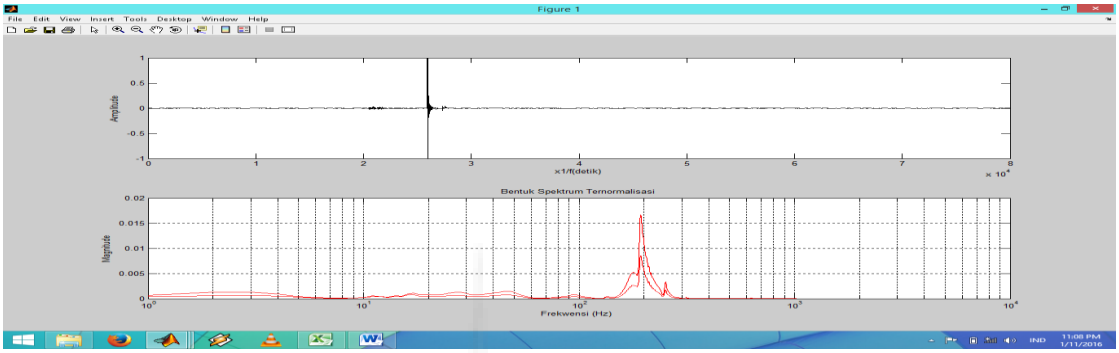


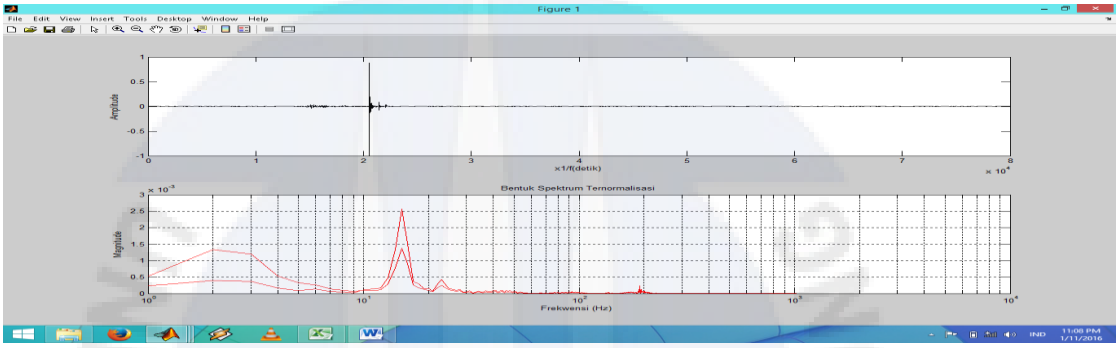
Figure 1
File Edit View Insert Tools Desktop Window Help
amplitude
Isyarat Terekamam (detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON JENIS K250 (5)

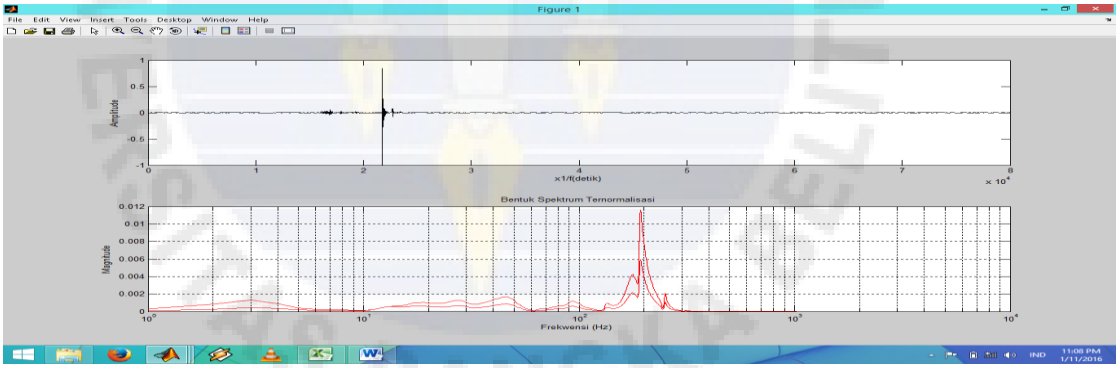
1. 01



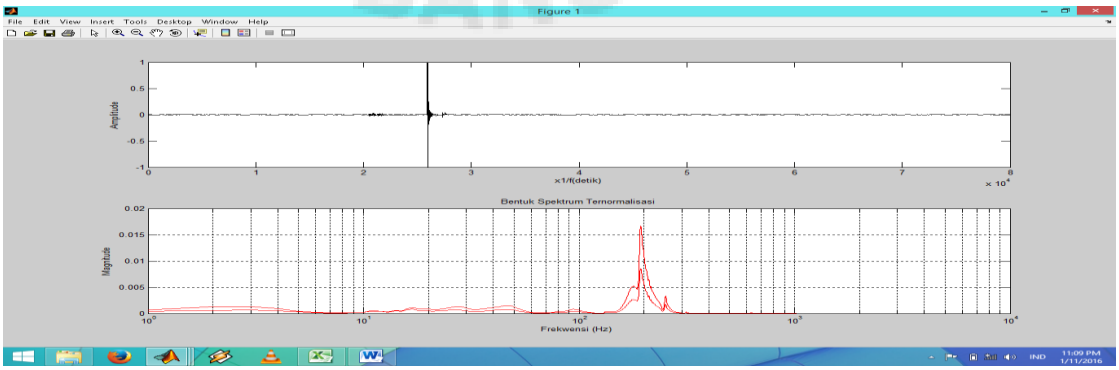
2. 02



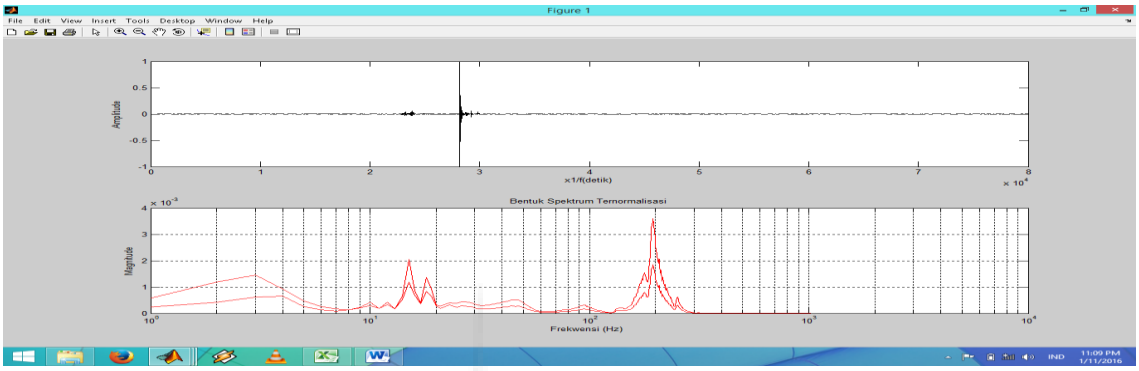
3. 03



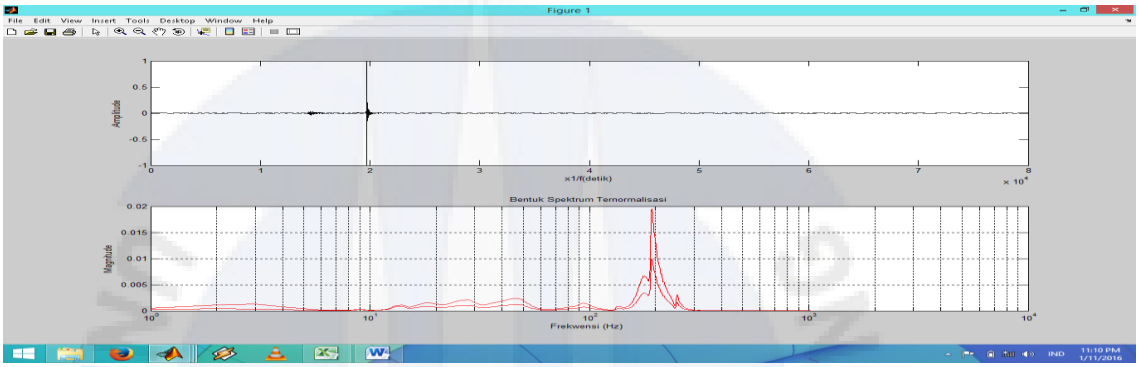
4. 04



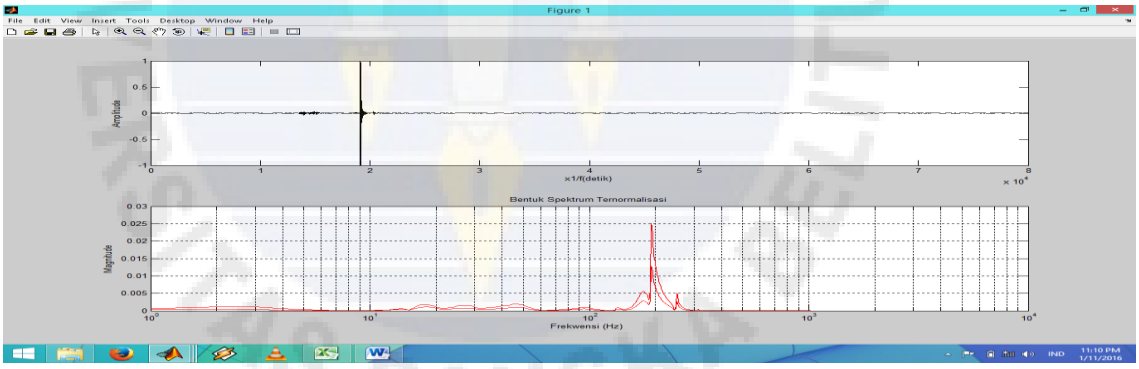
5. 05



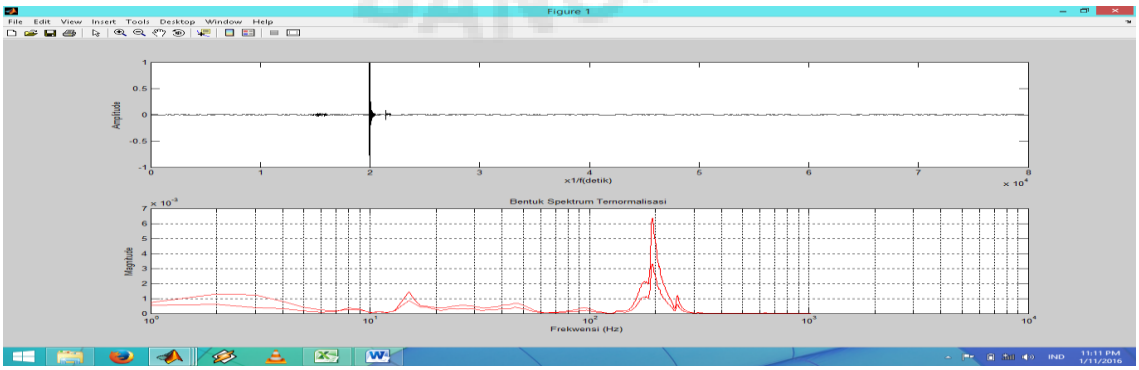
6. 06



7. 07



8. 08



9. 09

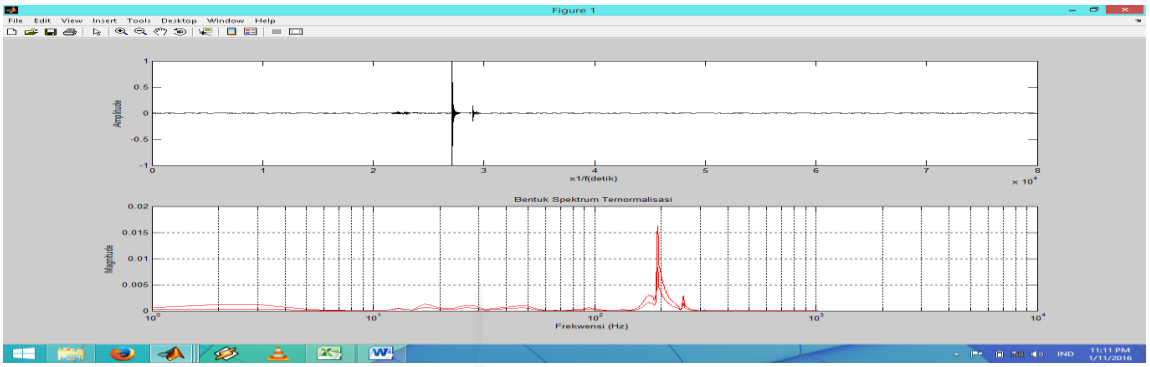


Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/fs(detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

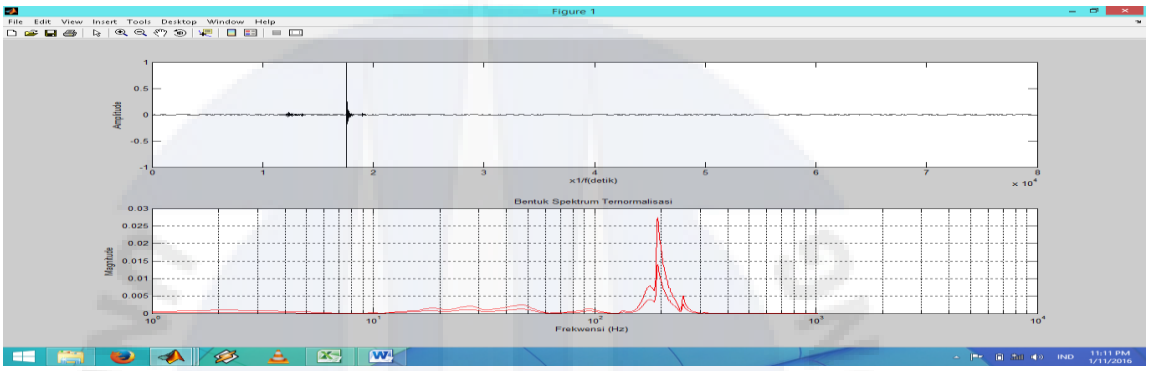
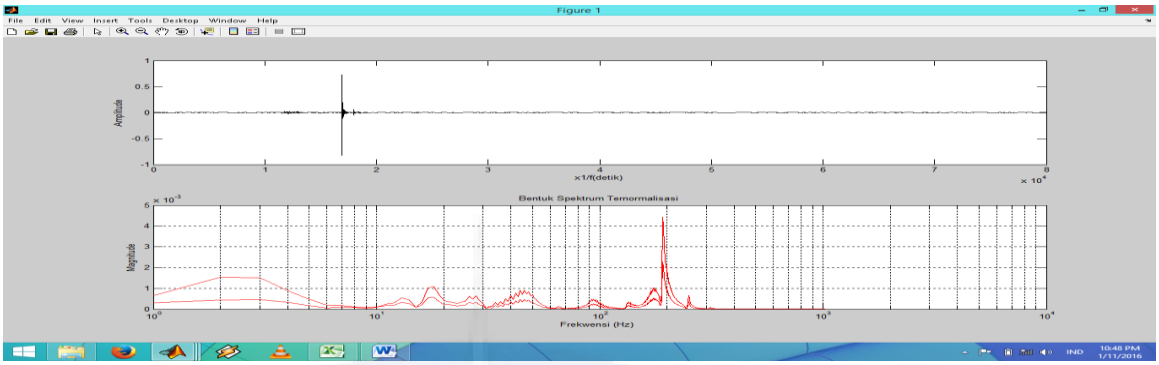


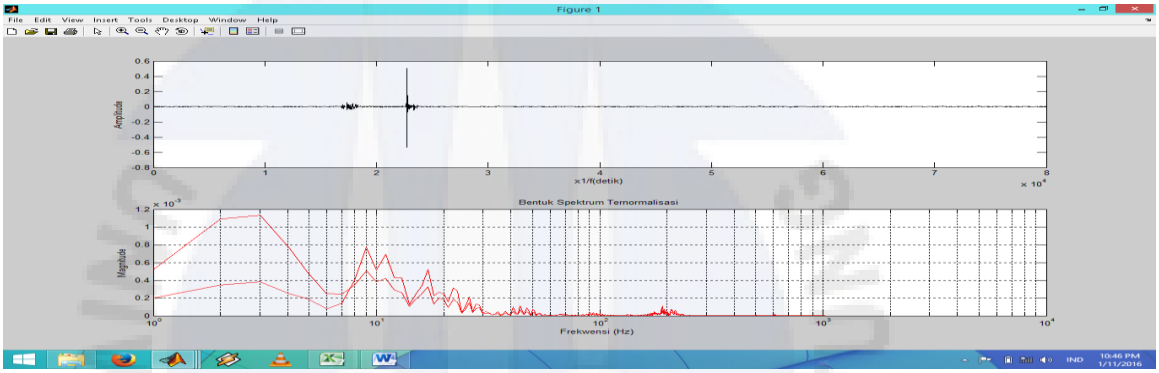
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/fs(detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

ISYARAT SPEKTRUM REKAMAN DARI SAMPEL BETON JENIS K250(6)

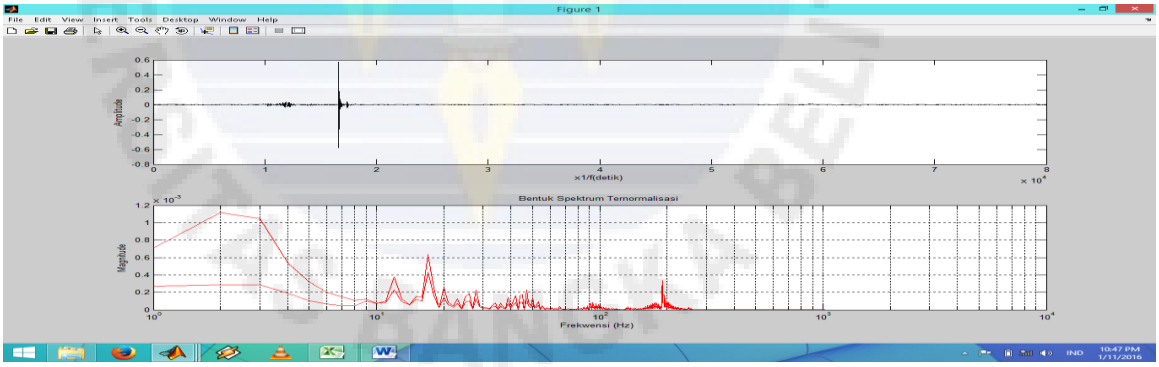
1. 01



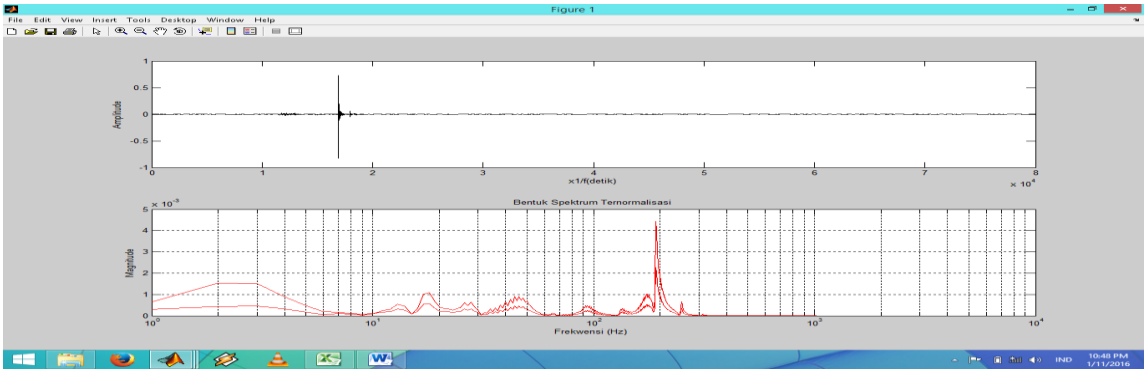
2. 02



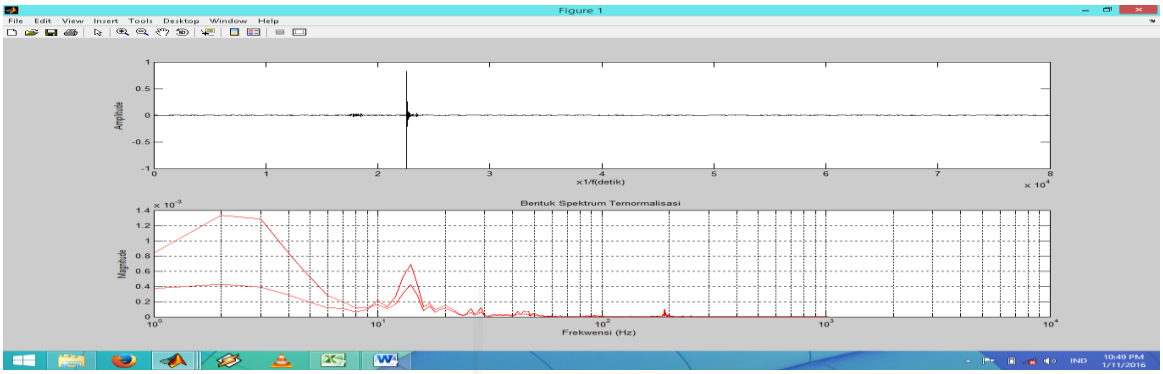
3. 03



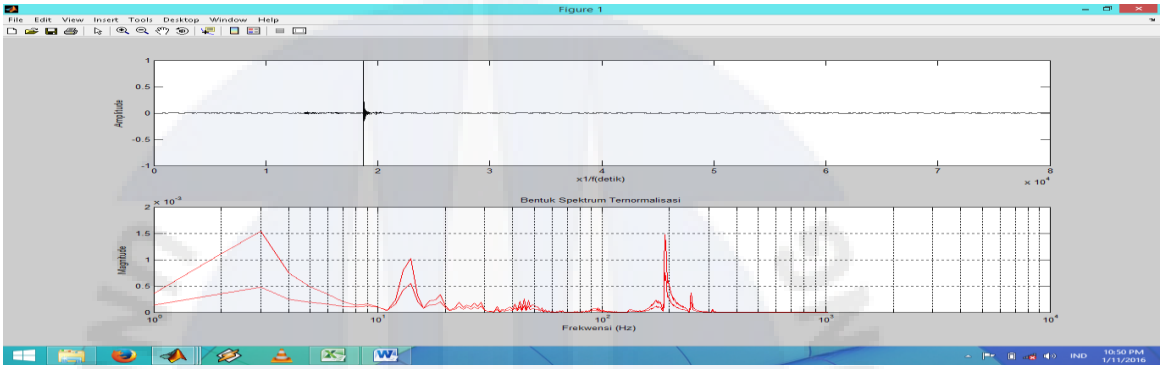
4. 04



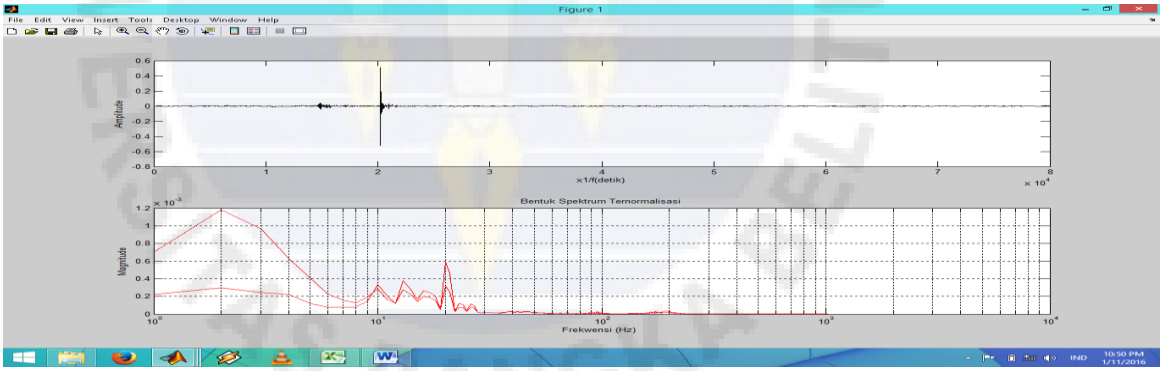
5. 05



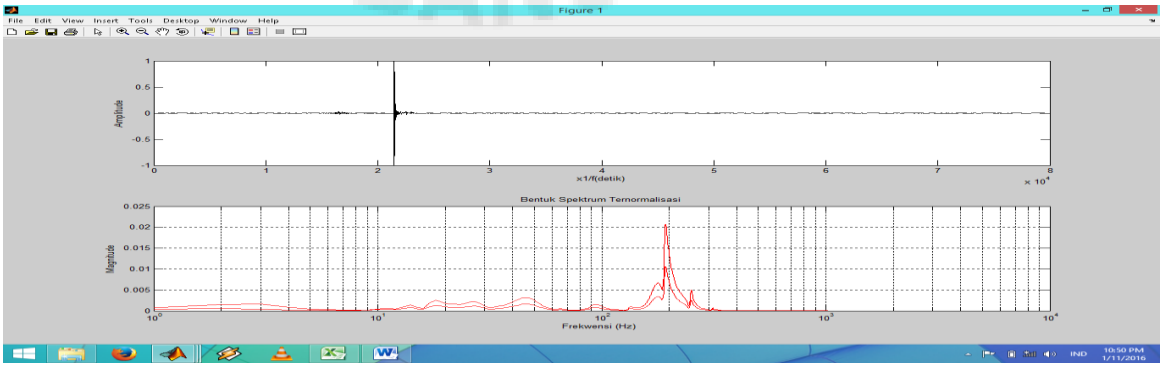
6. 06



7. 07



8. 08



9. 09

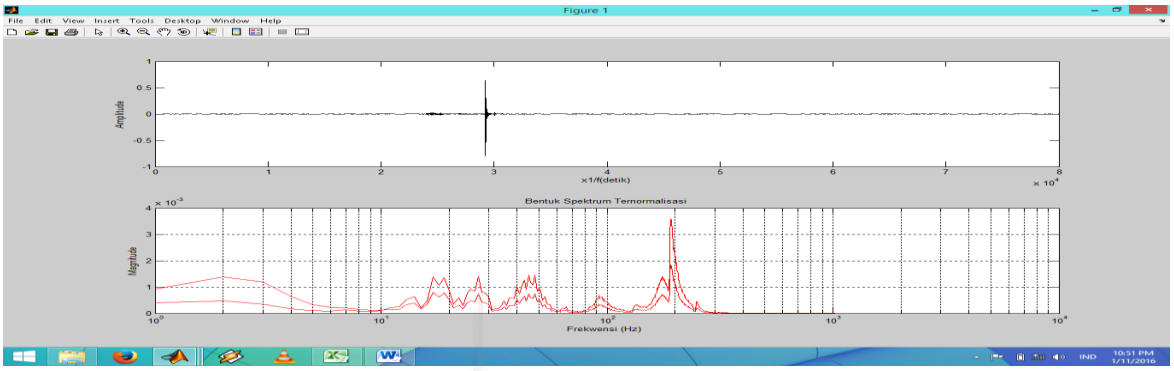


Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/(detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

10. 10

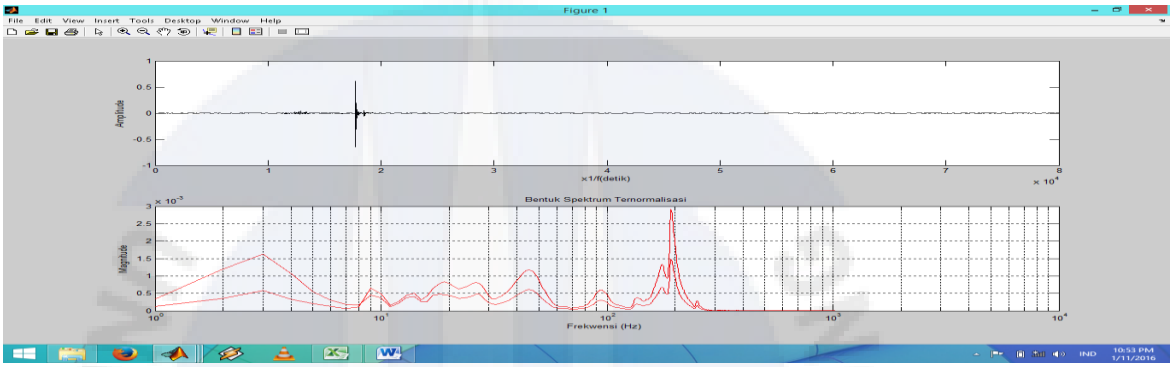
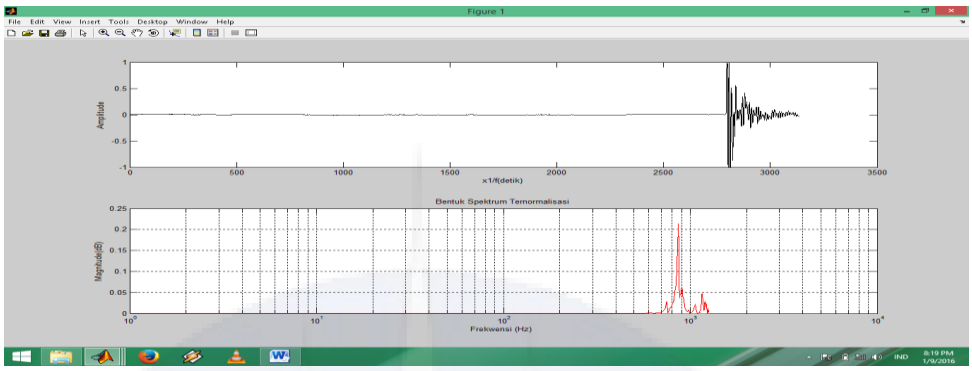


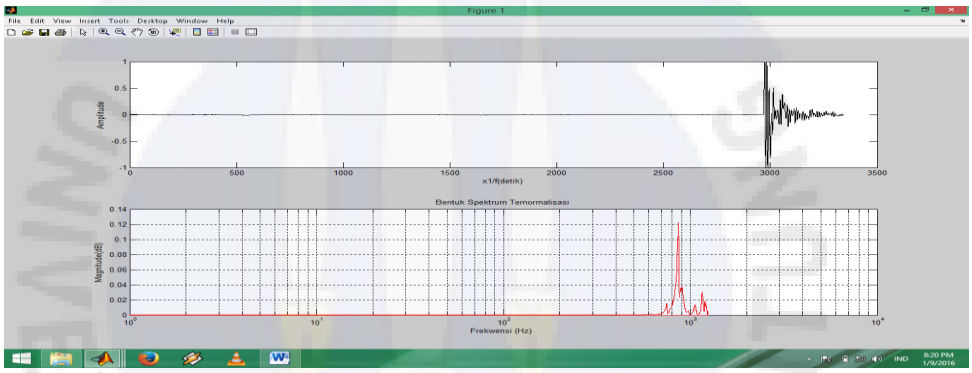
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/(detik)
Bentuk Spektrum Ternormalisasi
Magnitude
Frekwensi (Hz)

SPEKTRUM HASIL PEMOTONGAN DARI SAMPEL BETON `r150`

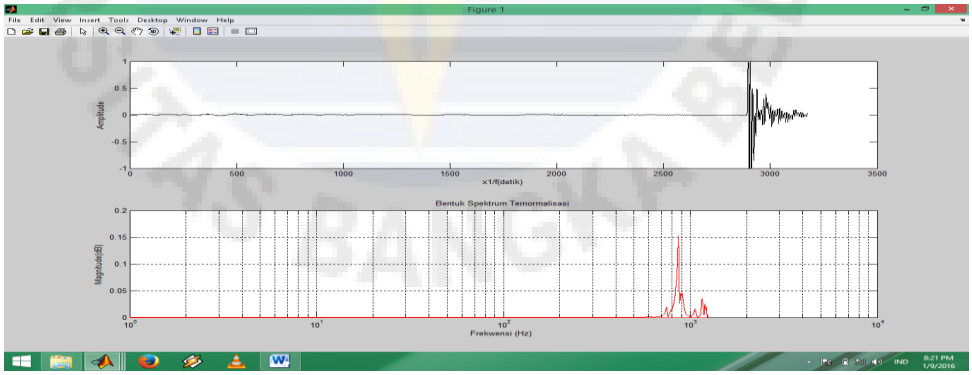
1. `r150-01`



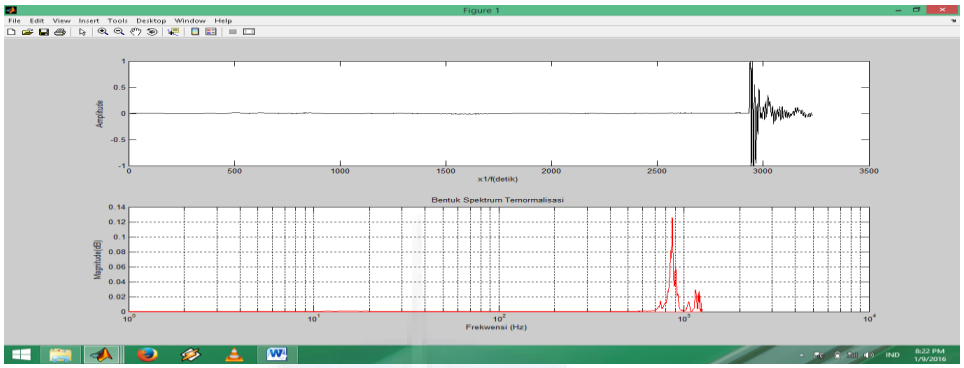
2. `r150-02`



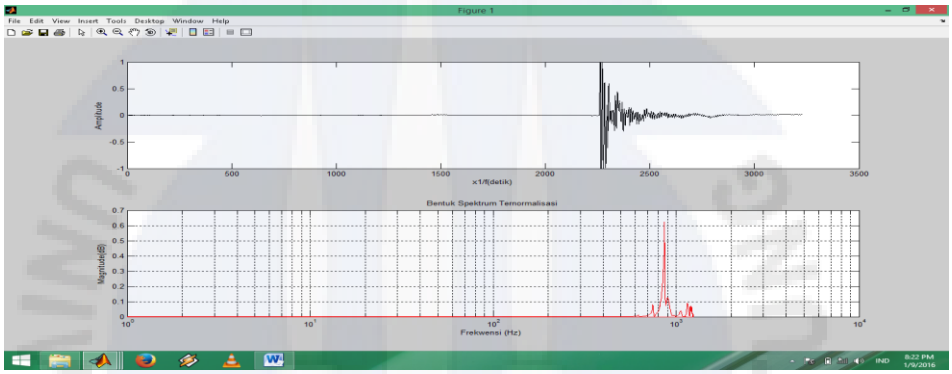
3. `r150-03`



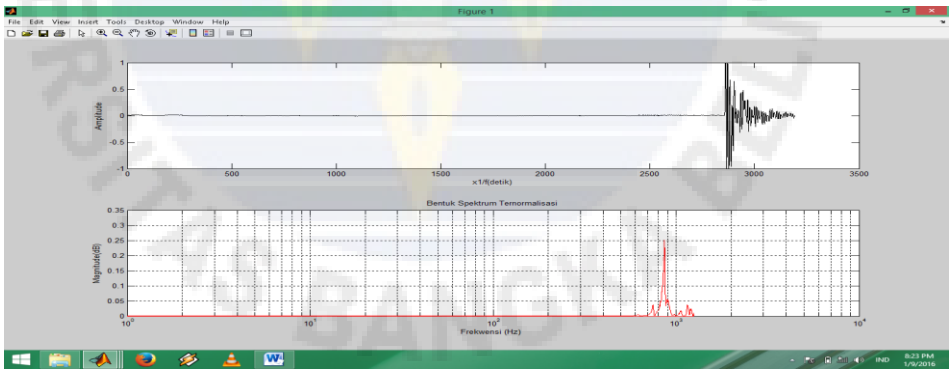
4. r150-04



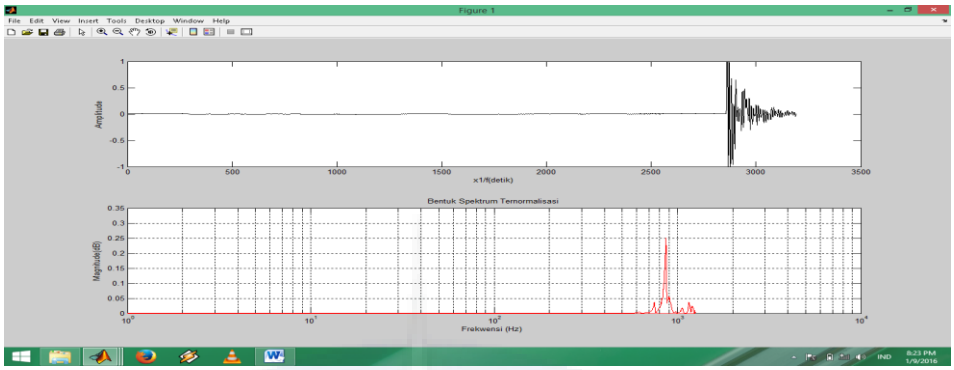
5. r150-05



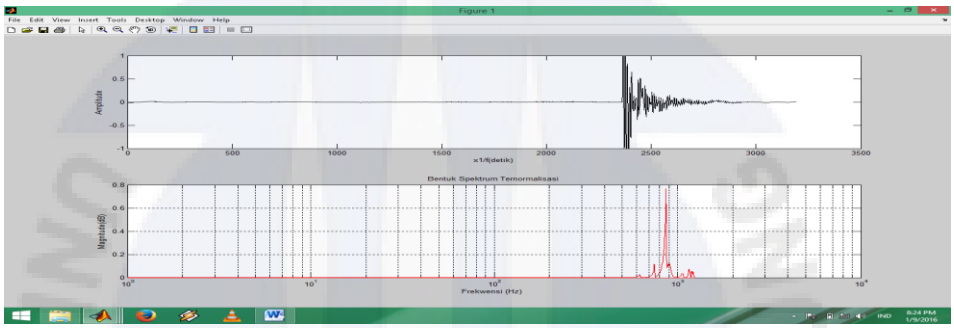
6. r150-06



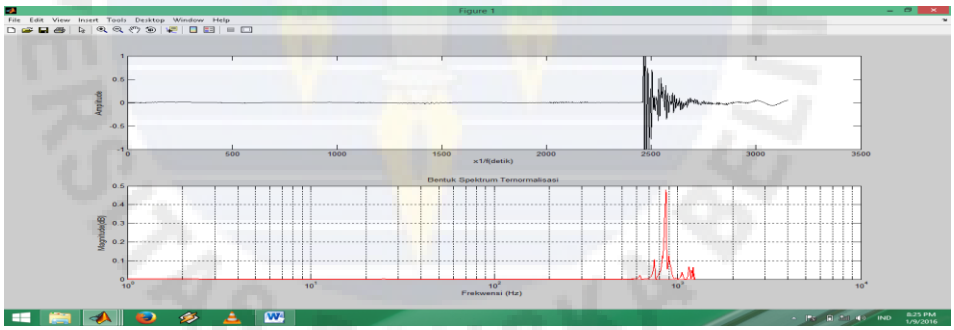
7. r150-07



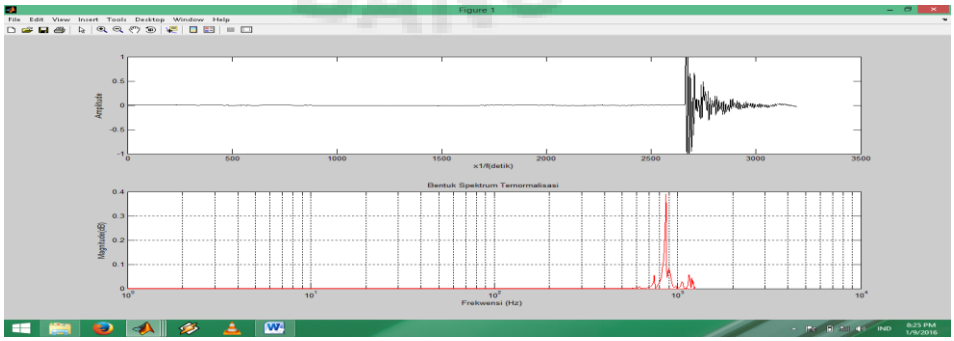
8. r150-08



9. r150-09

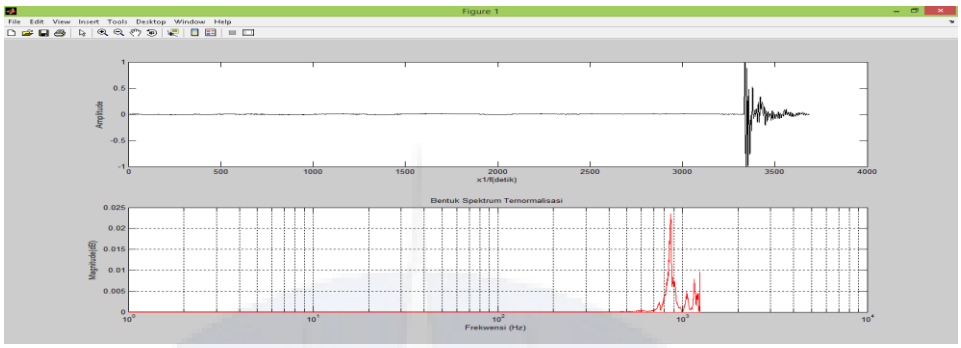


10. r150-10

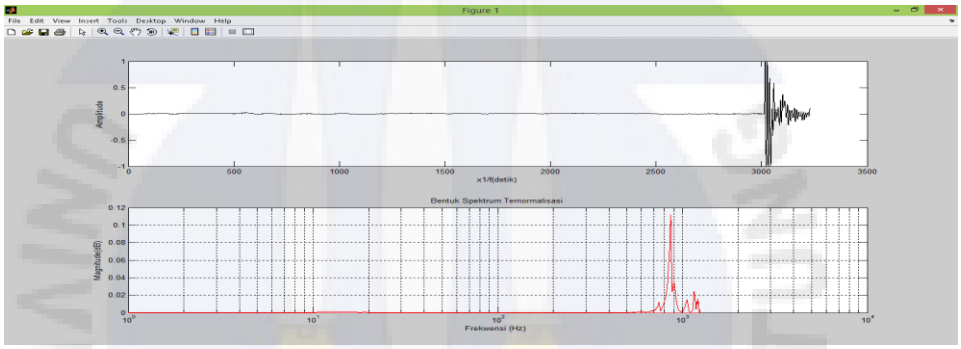


SPEKTRUM PEMOTONGAN HASIL DARI SAMPEL BETON r175

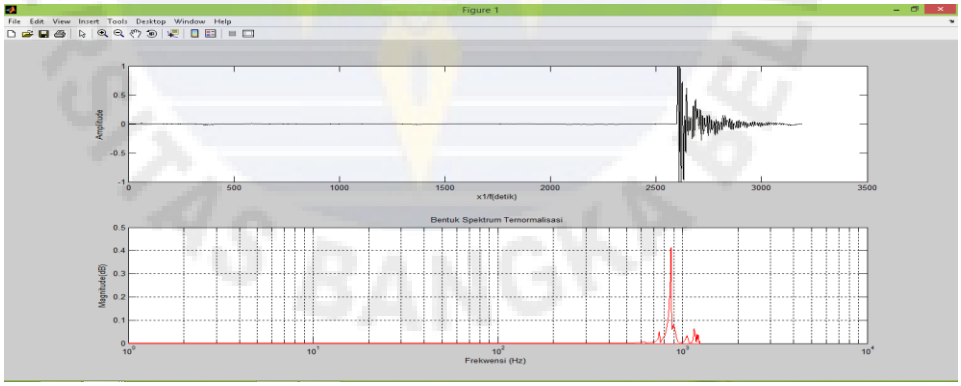
1. r175-01



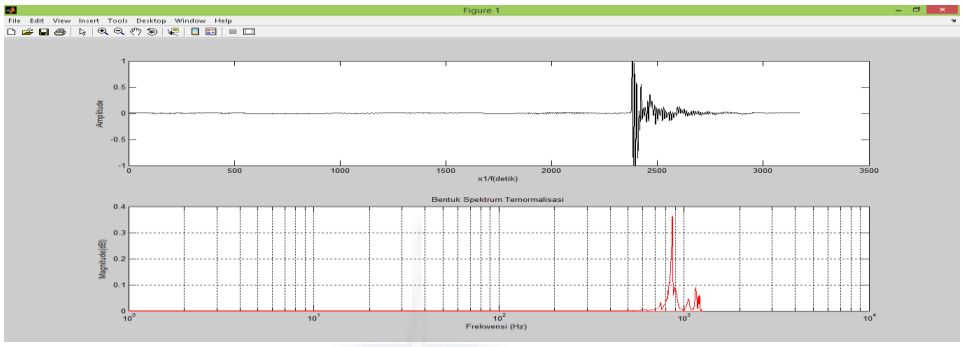
2. r175-02



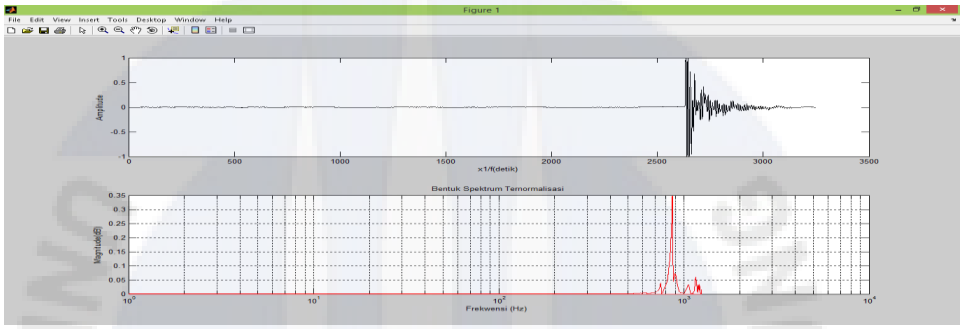
3. r175-03



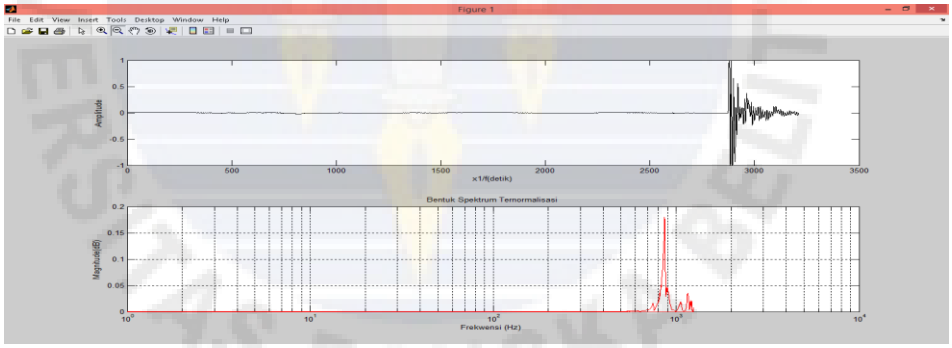
4. r175-04



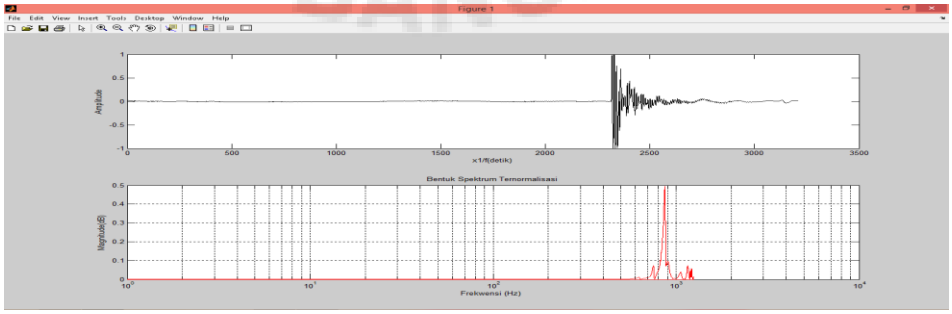
5. r175-05



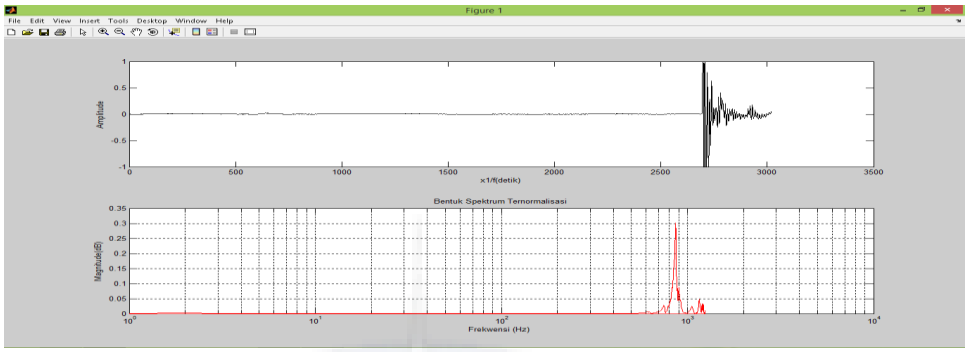
6. r175-06



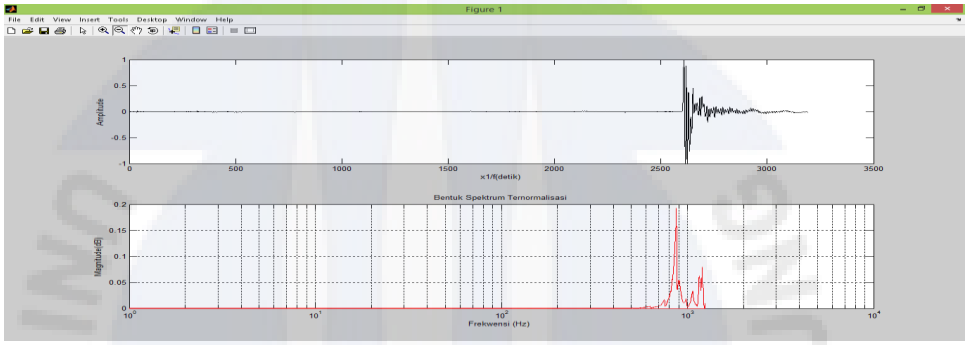
7. r175-07



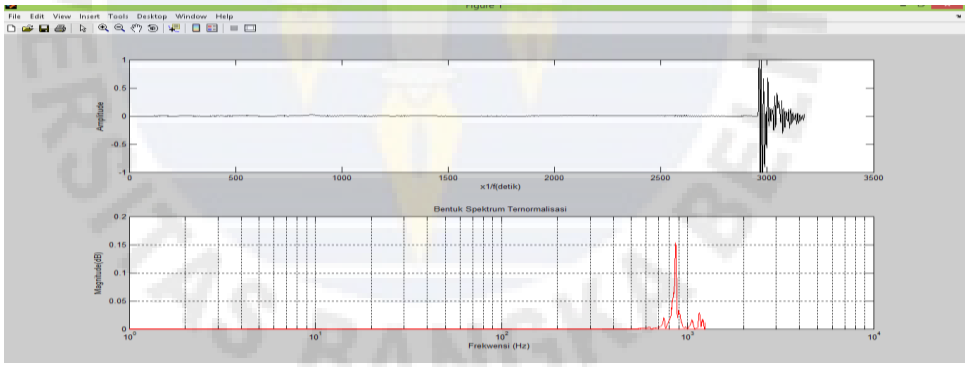
8. r175-08



9. r175-09

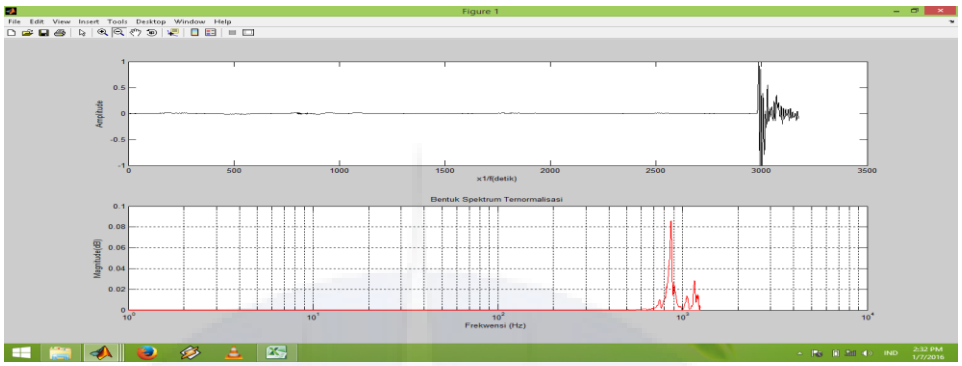


10. r175-10

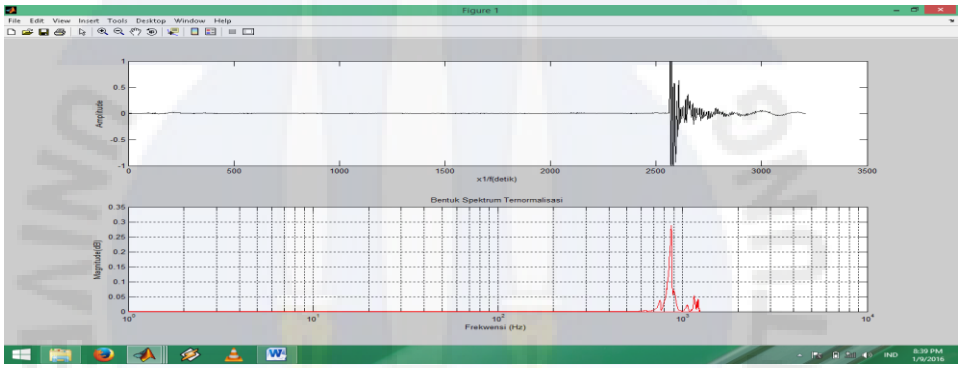


SPEKTRUM HASIL DARI SAMPEL BETON r200

1. r200-01

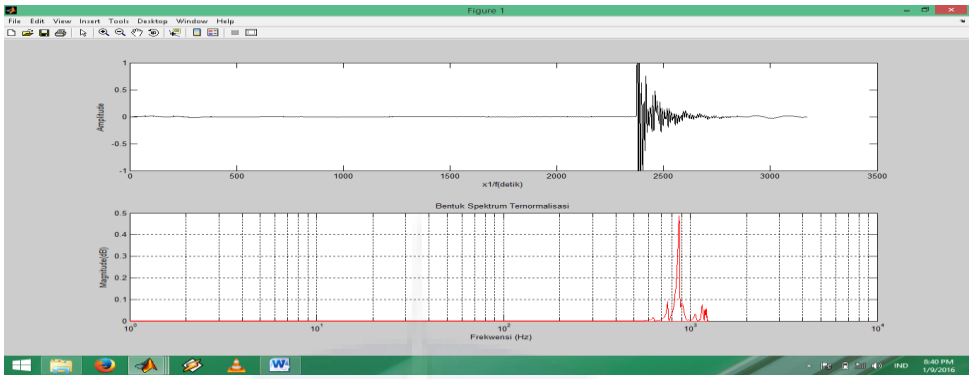


2. r200-02

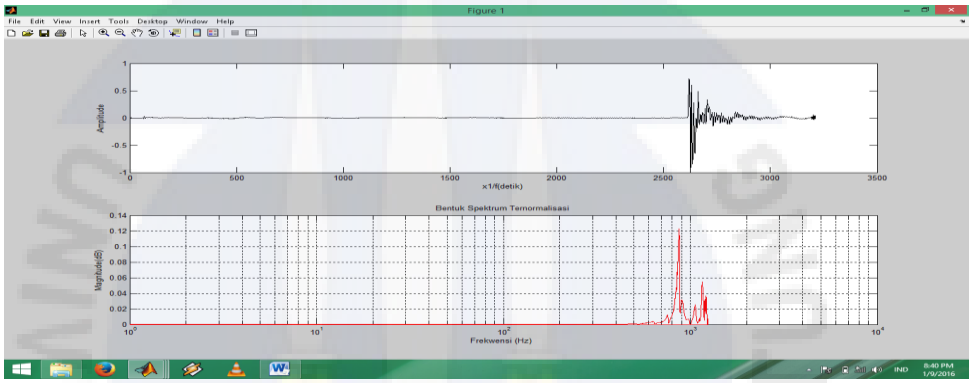


3. r200-03

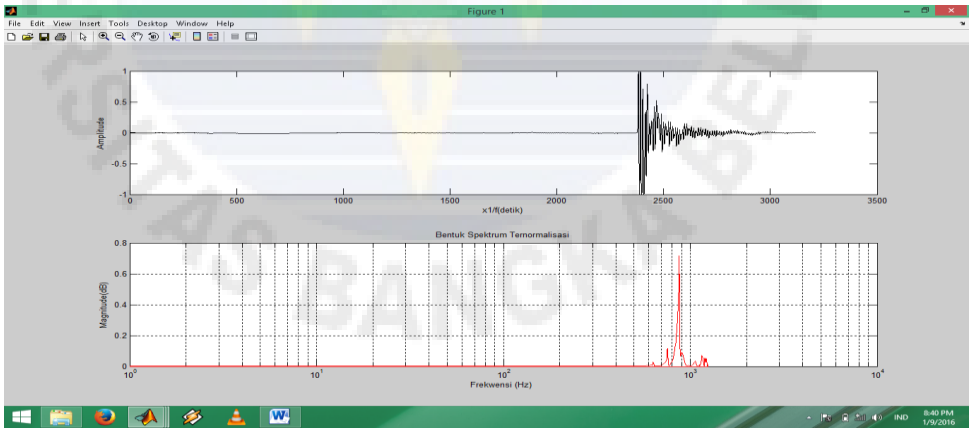
4. r200-04



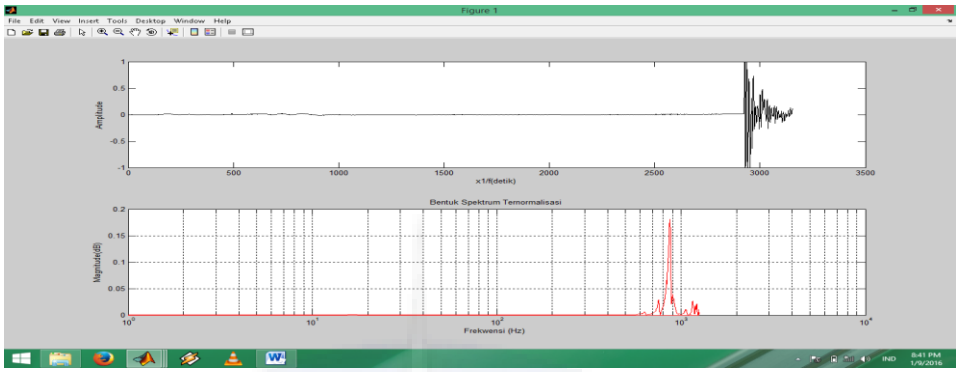
5. r200-05



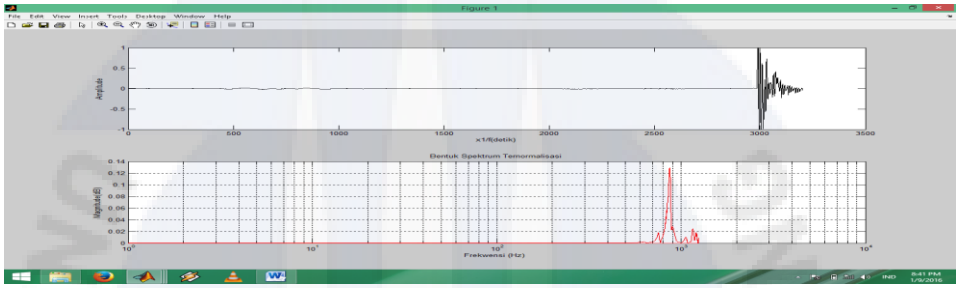
6. r200-06



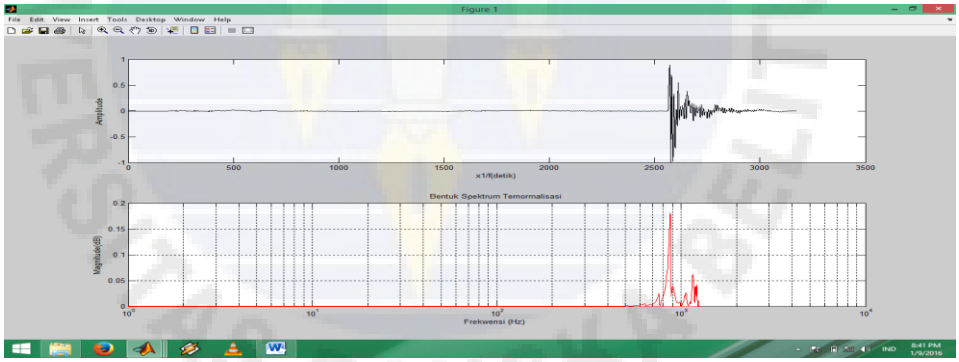
7. r200-07



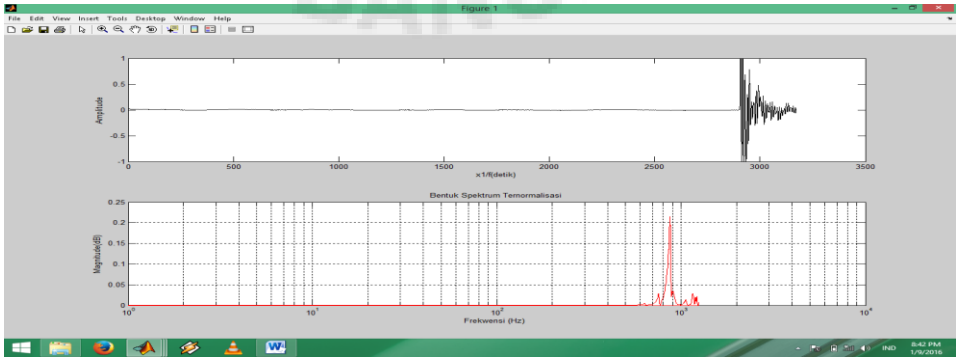
8. r200-08



9. r200-09

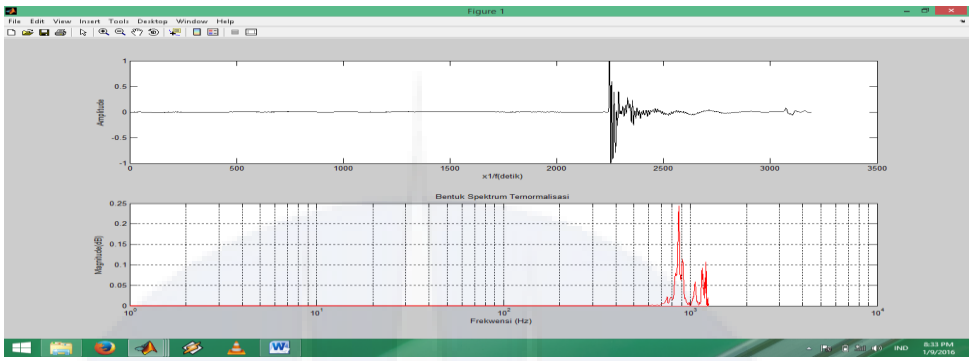


10. r200-10

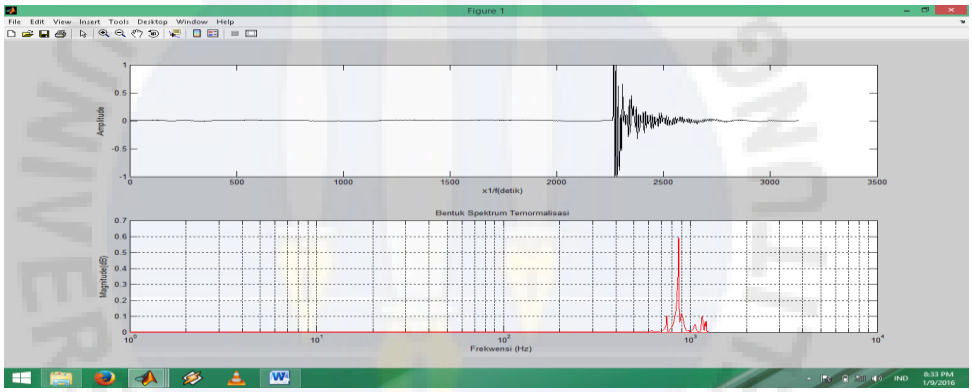


SPEKTRUM HASIL DARI SAMPEL BETON r275

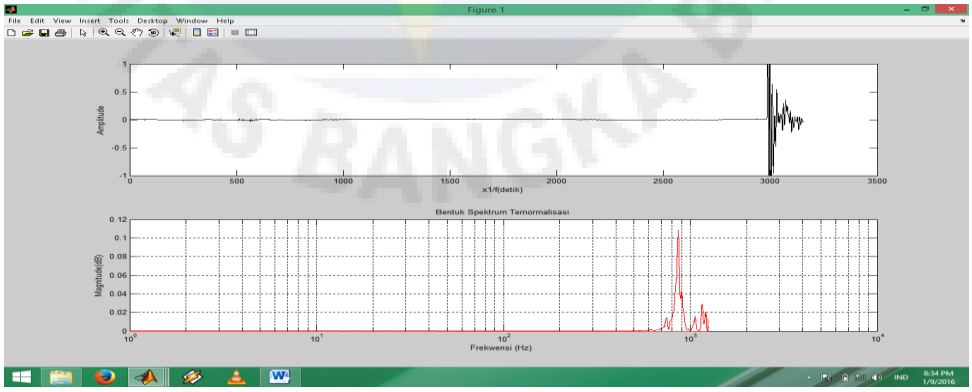
1. r275-01



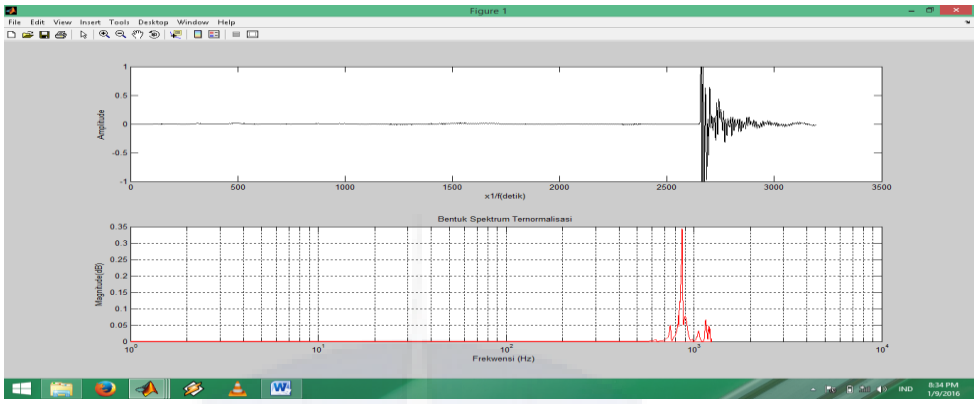
2. r275-02



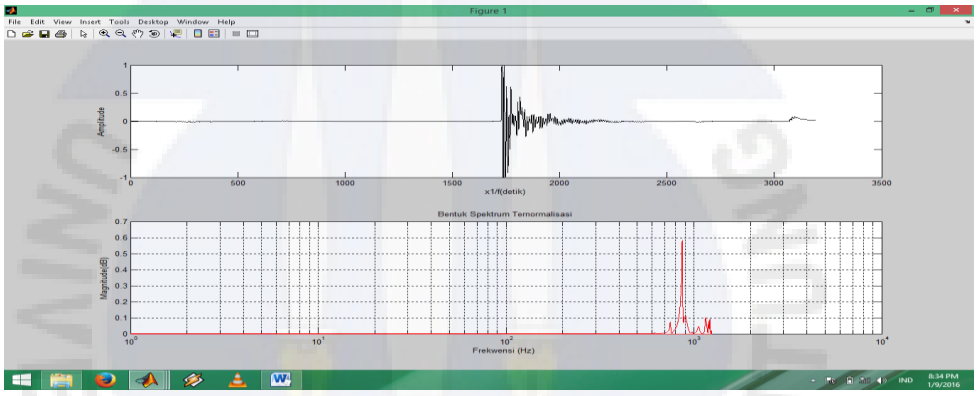
3. r275-03



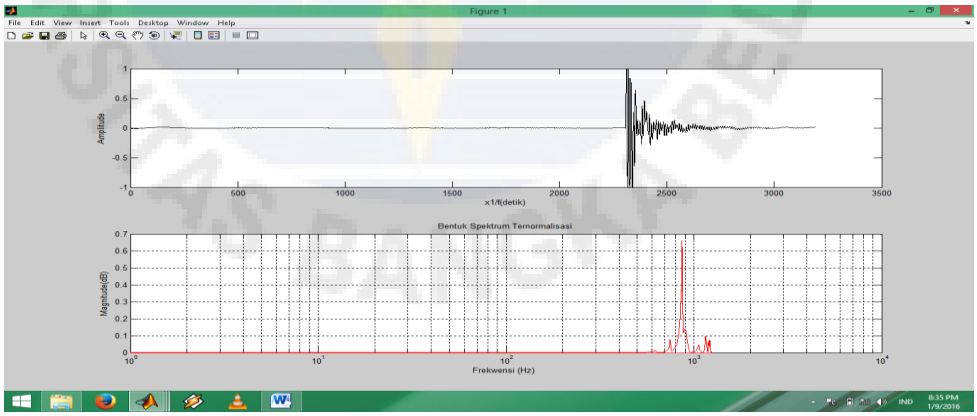
4. r275-04



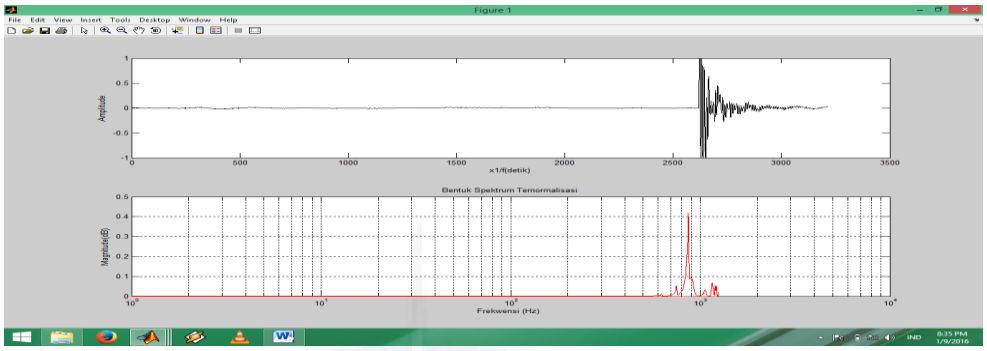
5. r275-05



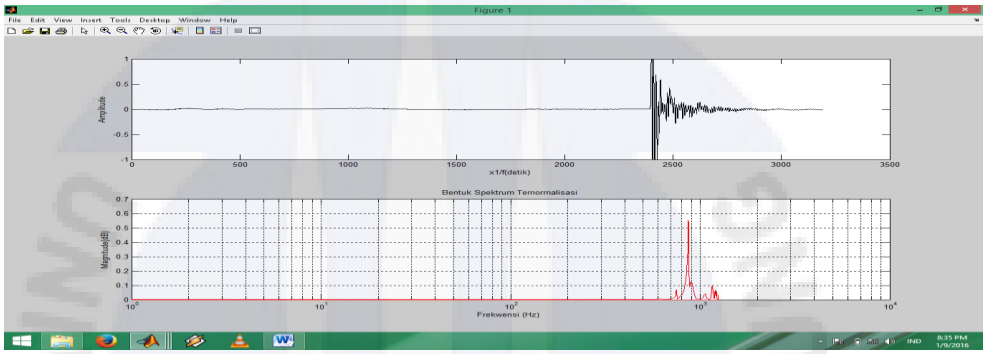
6. r275-06



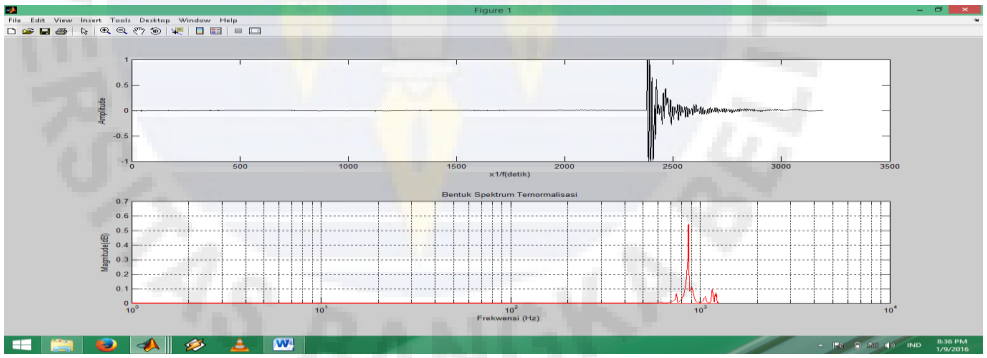
7. r275-07



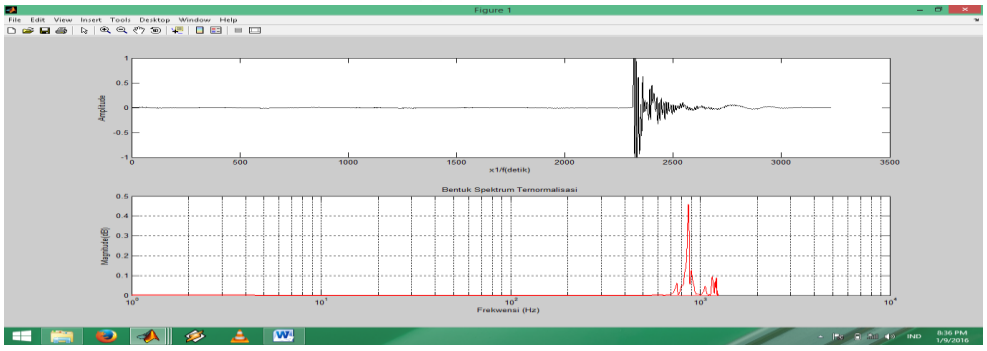
8. r275-08



9. r275-09

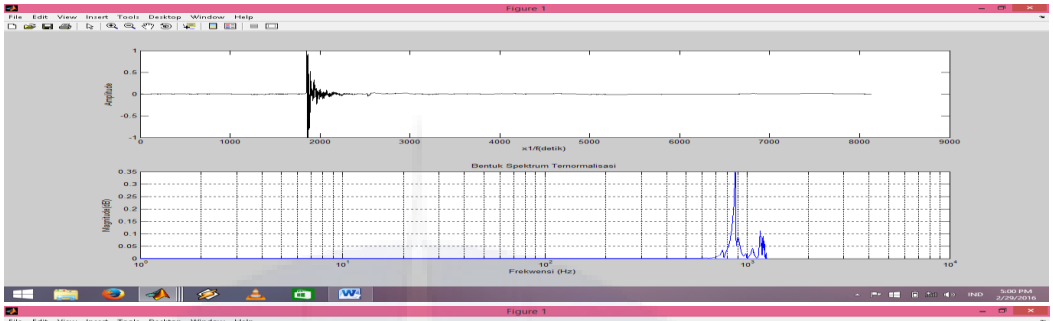


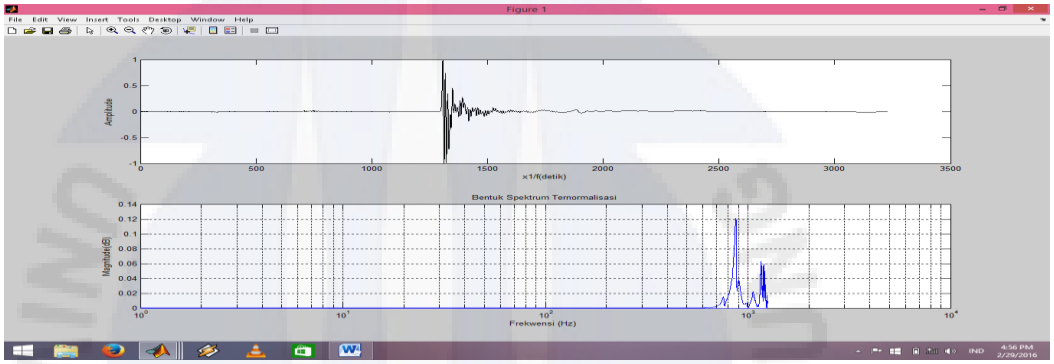
10. r275-10

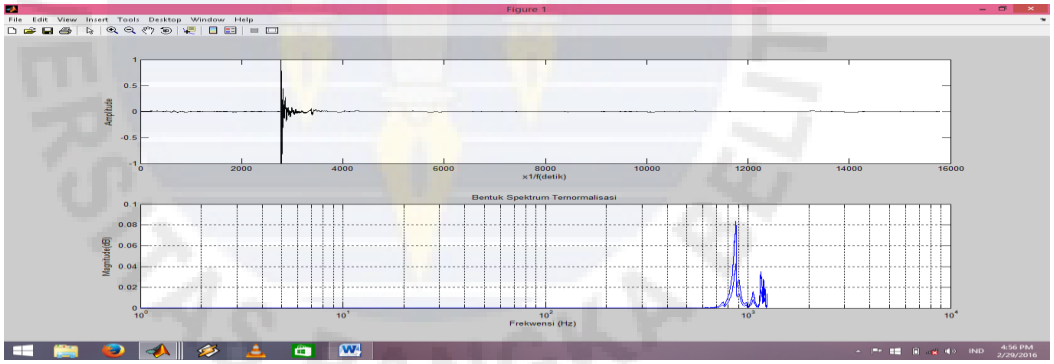


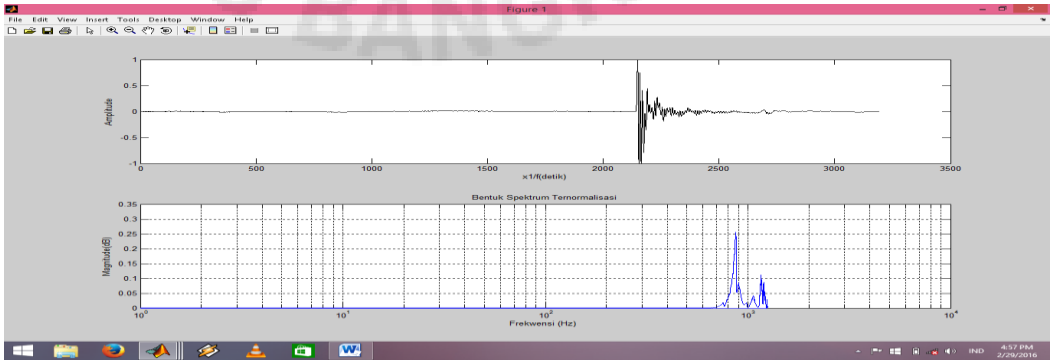
SPEKTRUM HASIL DARI SAMPEL BETON r250

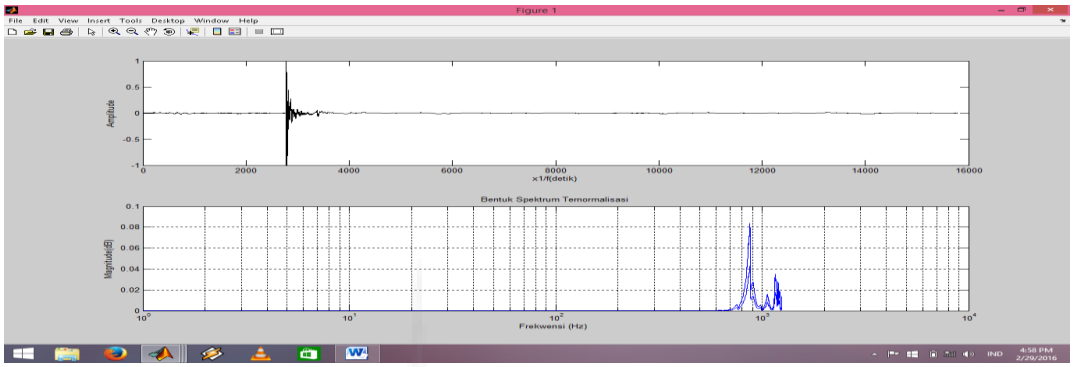
r250 (1) umur 7 hari

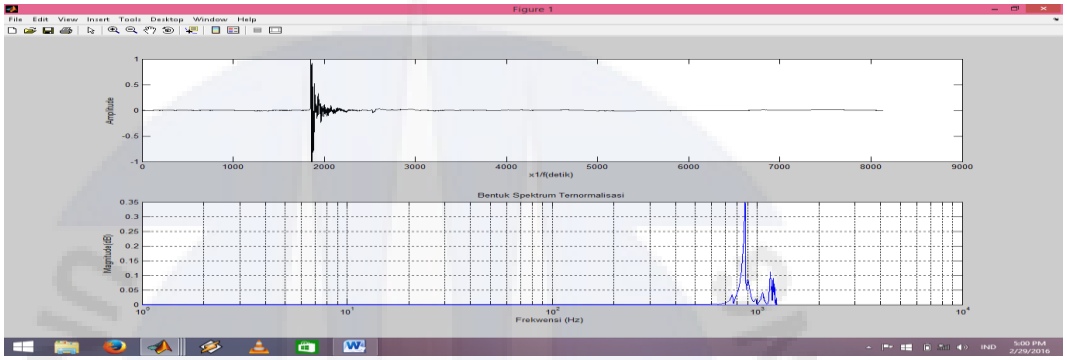
1. 

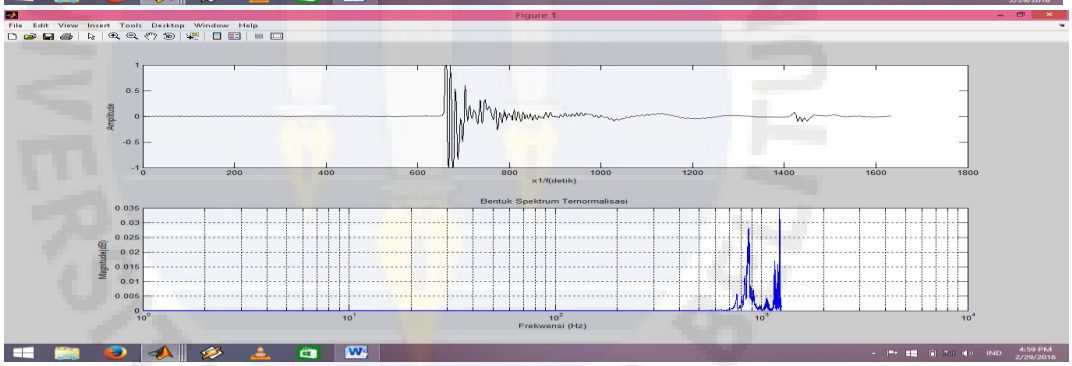
2. 

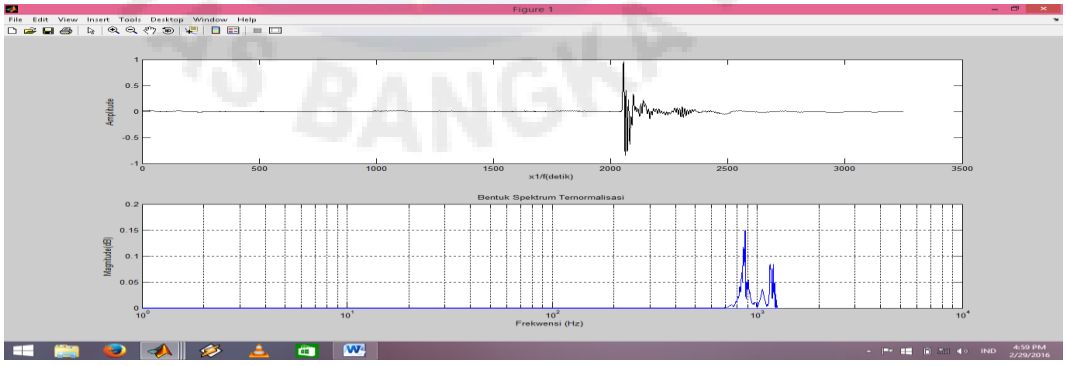
3. 

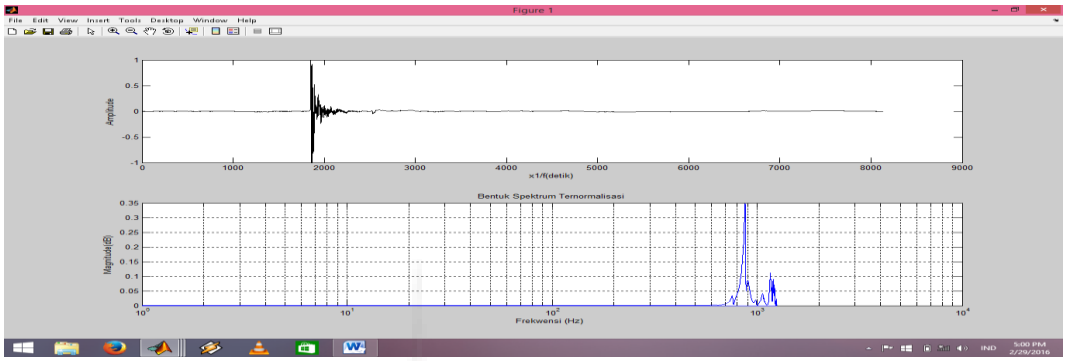
4. 

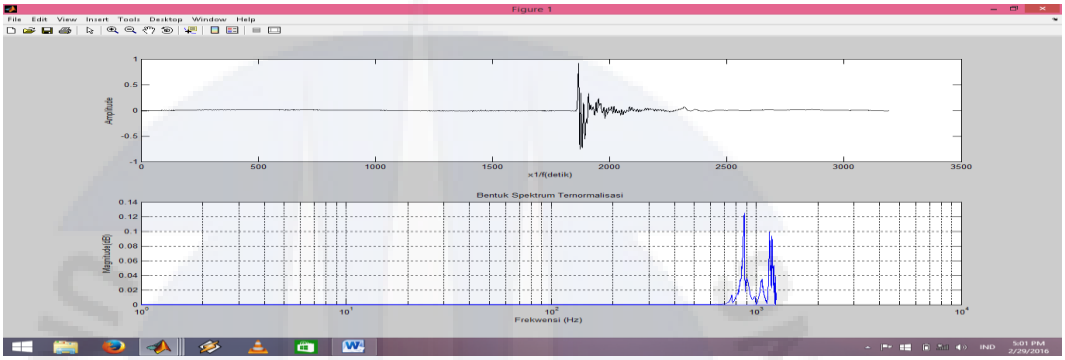
5. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

6. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

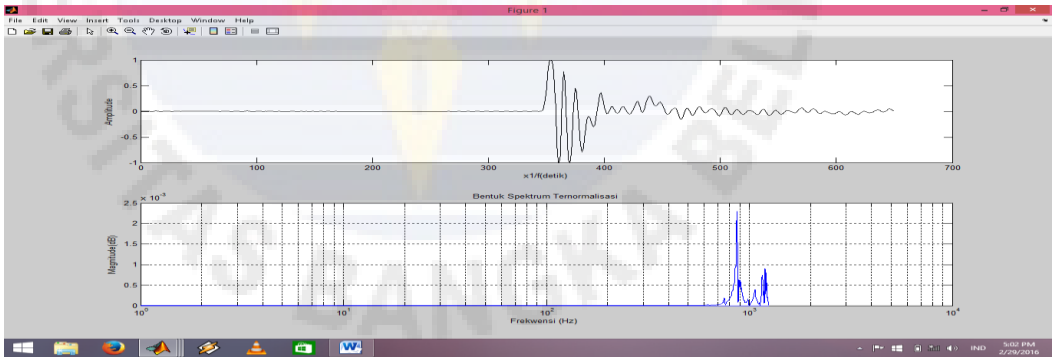
7. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

8. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

9. 

10. 

r250-02 umur 7 hari

1. 

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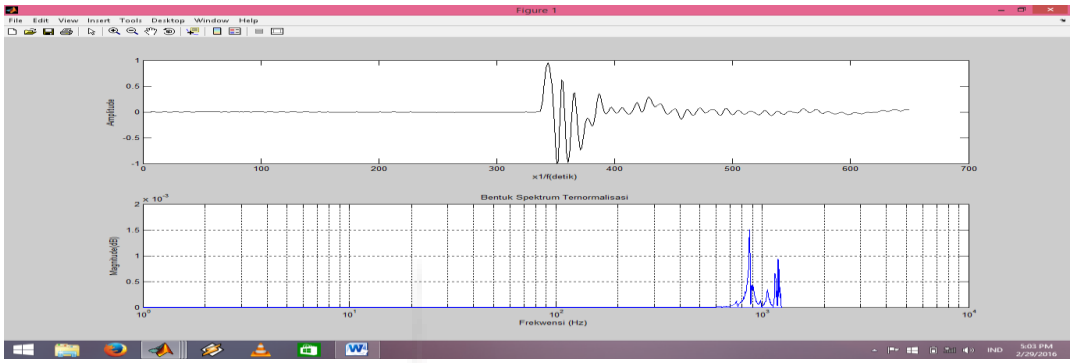


Figure 1
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

3.

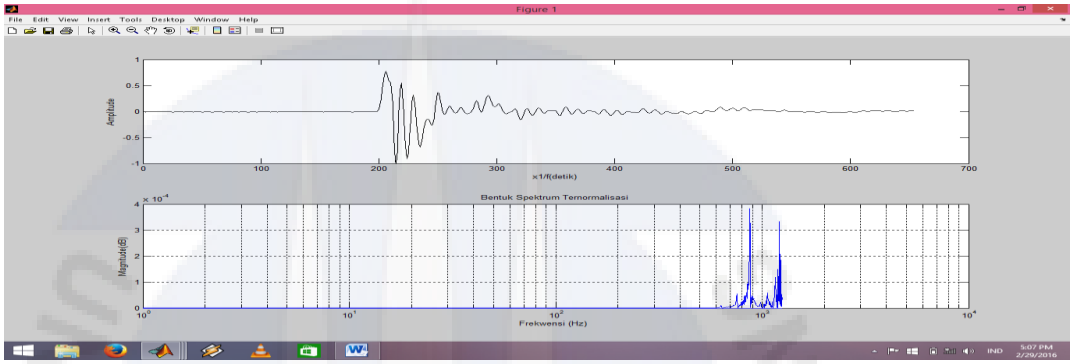


Figure 1
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

4.

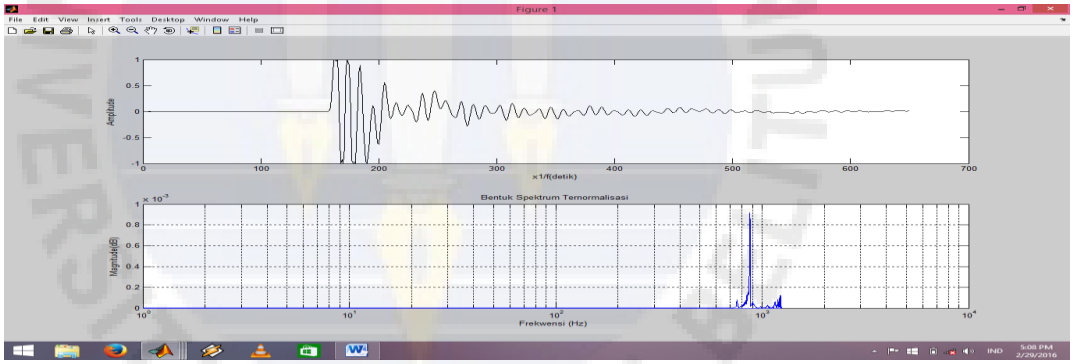


Figure 1
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

5.

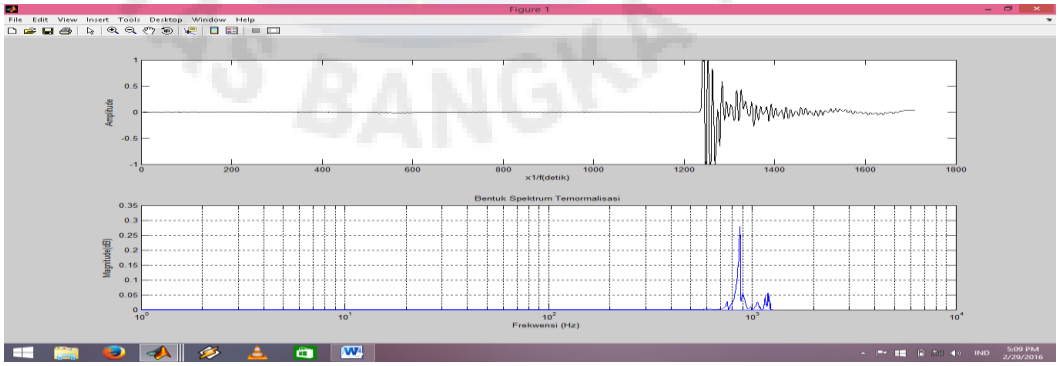
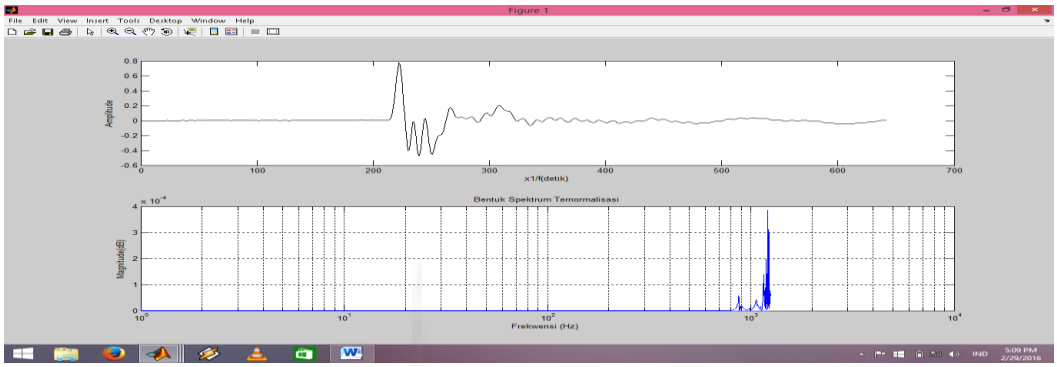
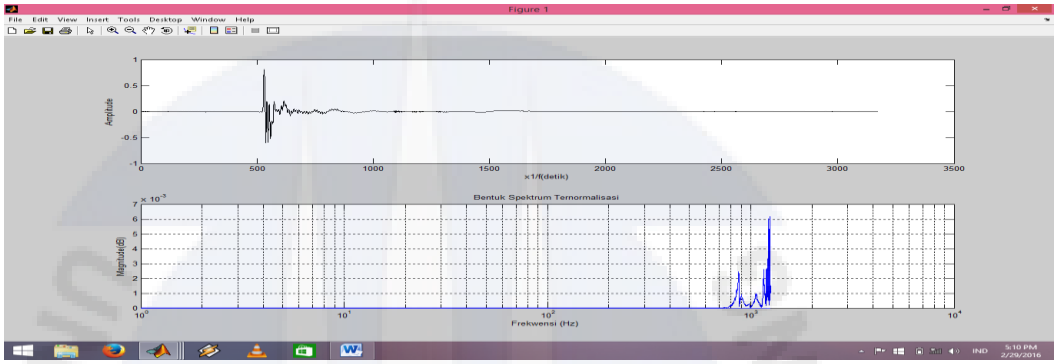
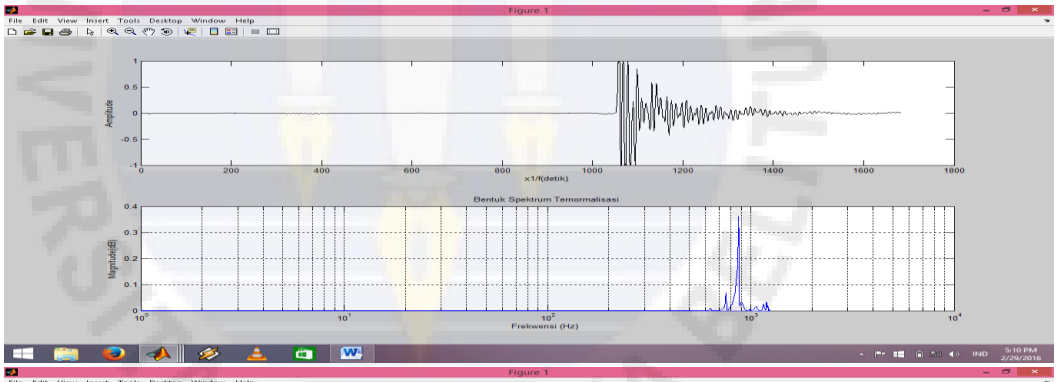
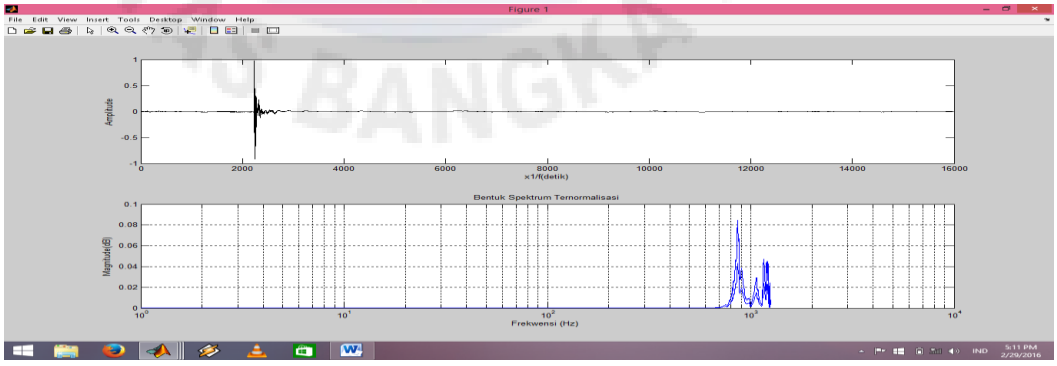


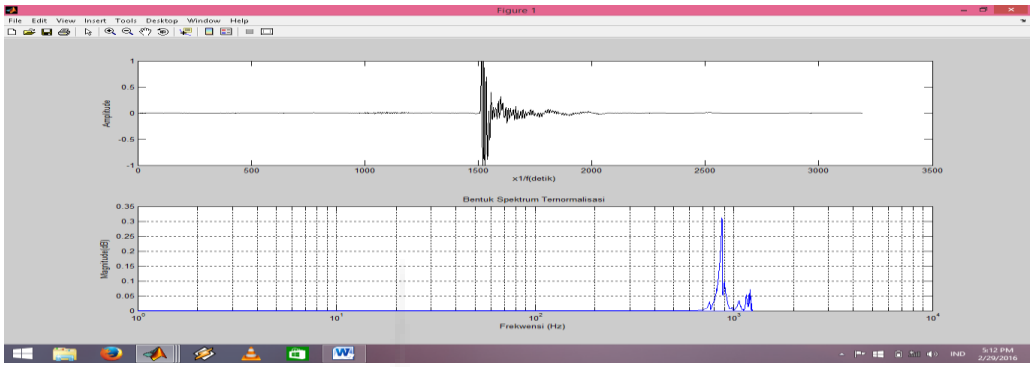
Figure 1
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

6. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

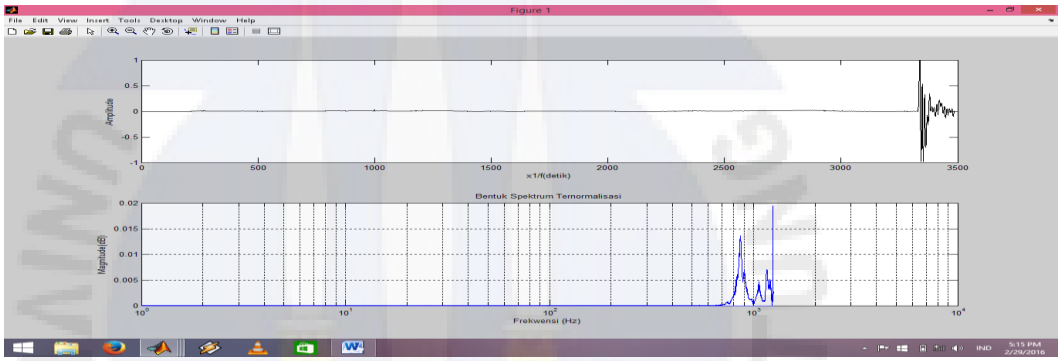
7. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

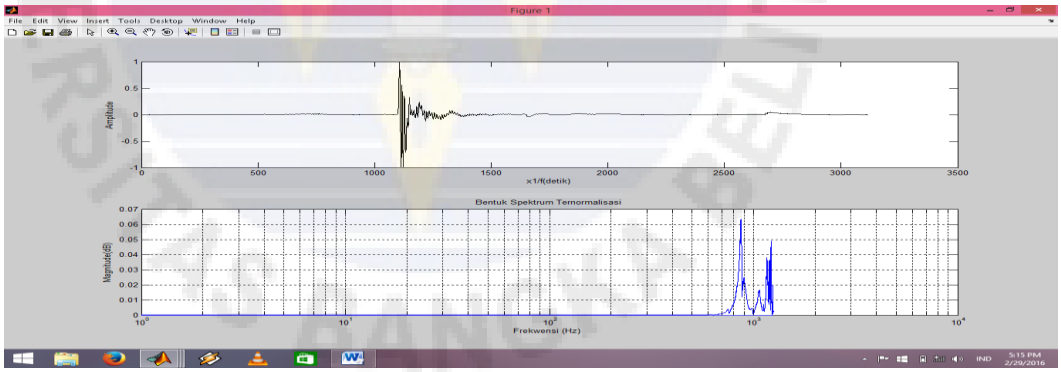
8. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

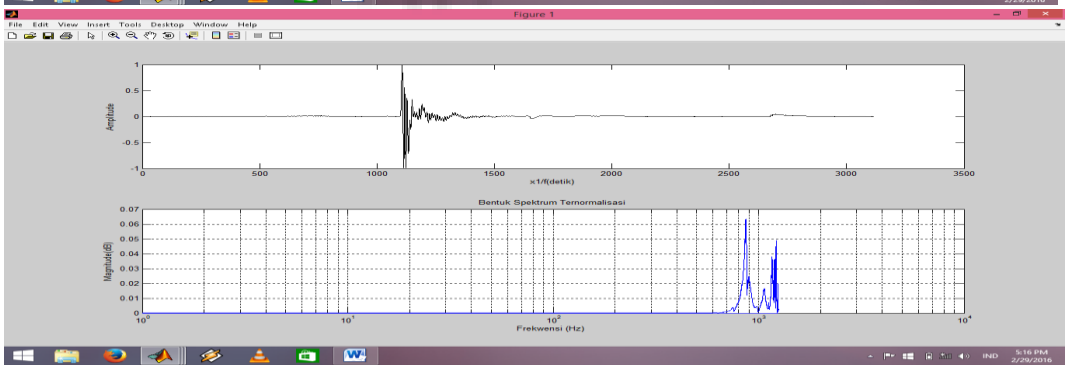
9. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

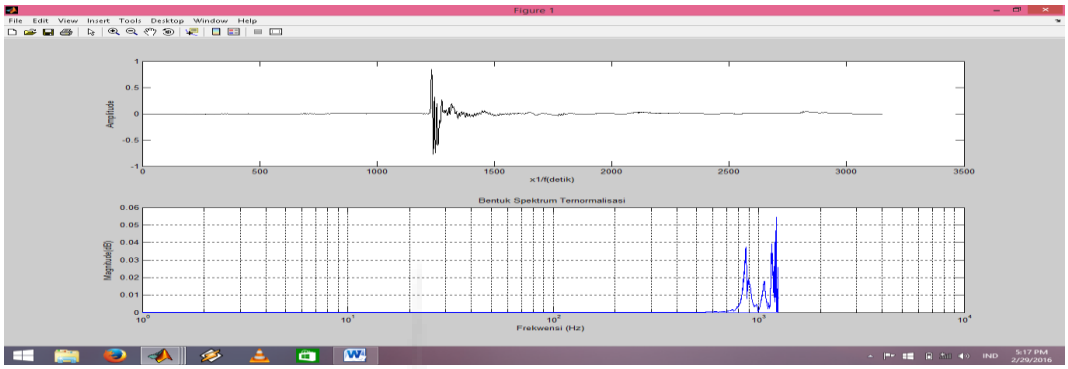
10. 

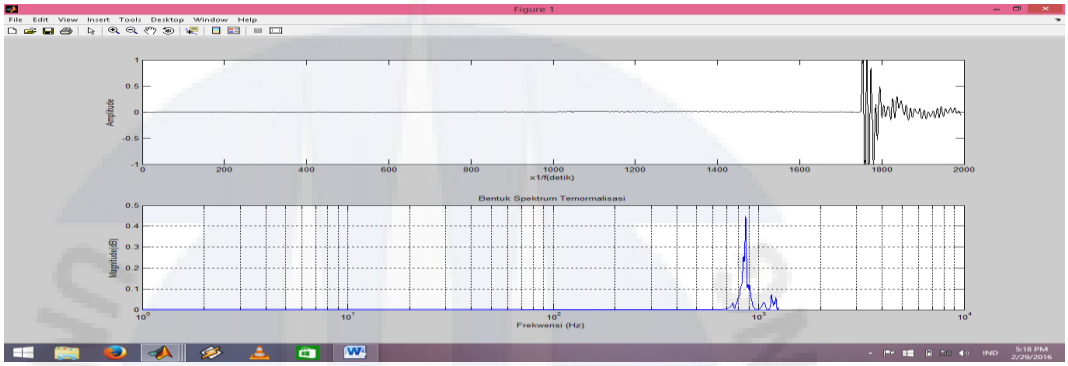
r250-3 usia 14 hari

1. 

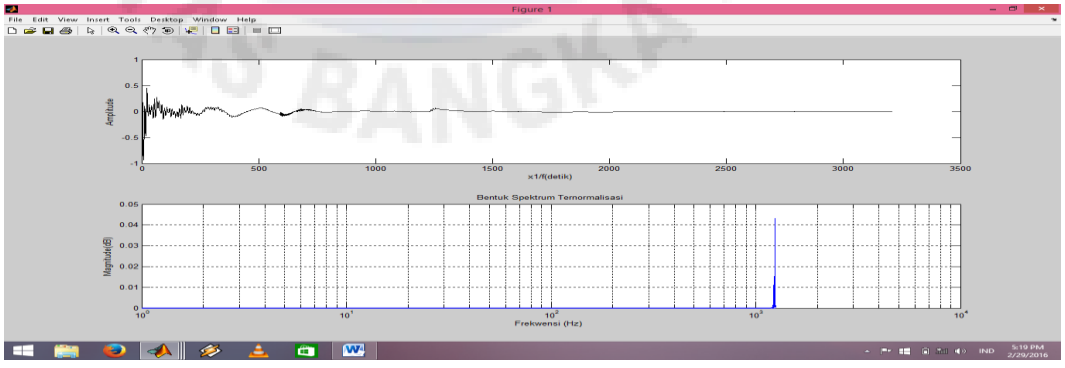
2. 

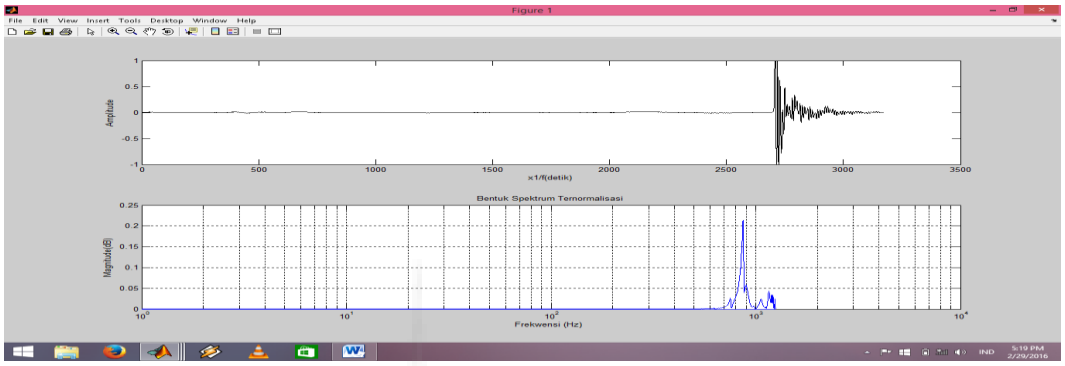
3. 

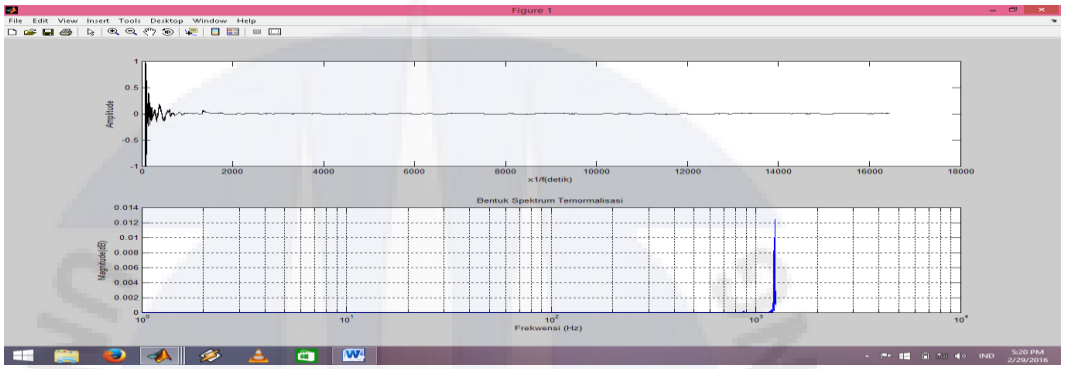
4. 
Figure 1
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

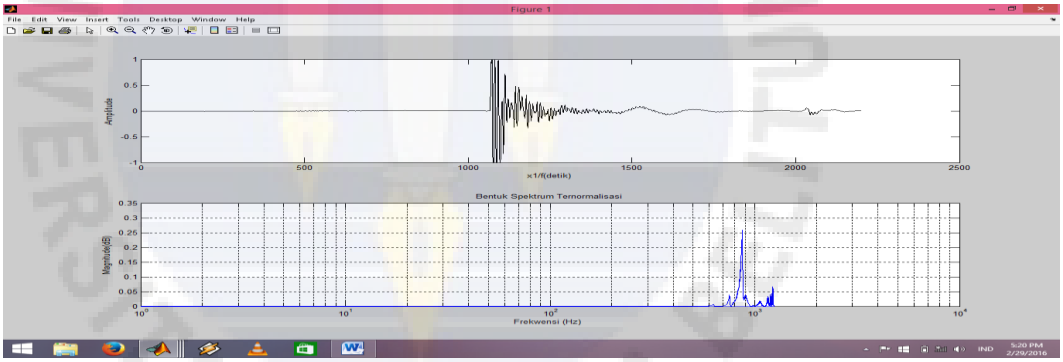
5. 
Figure 1
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

6. 
Figure 1
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

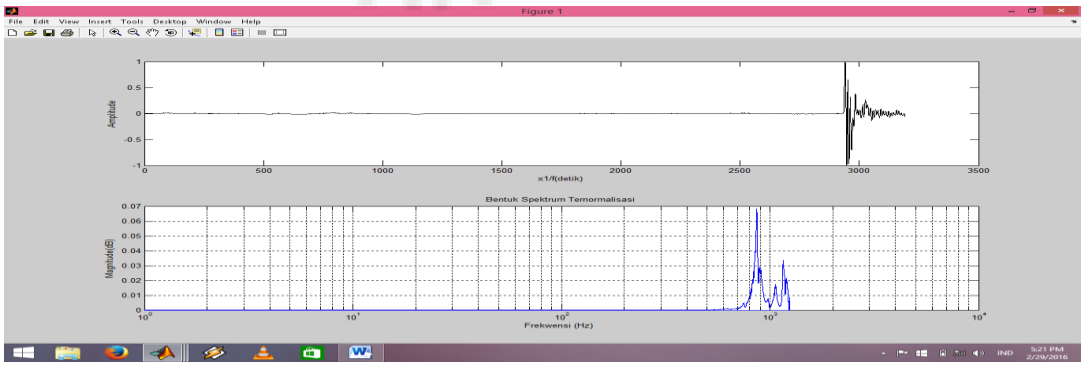
7. 
Figure 1
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

8. 

9. 

10. 

r250-4 usia 14 hari

1. 

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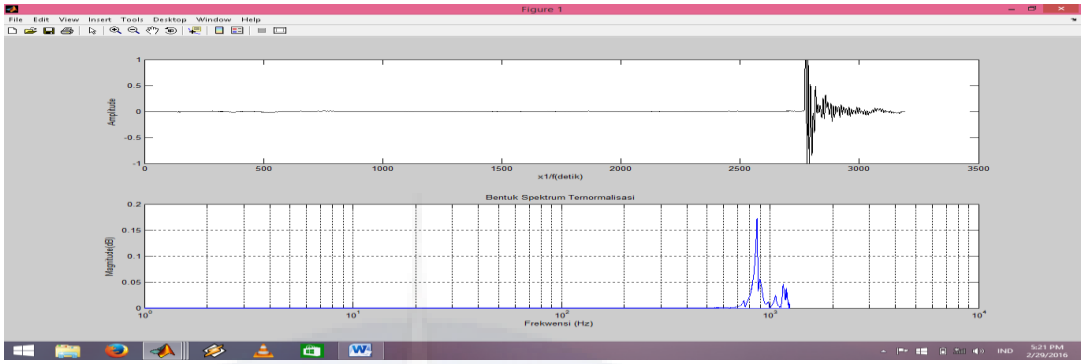


Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

3.

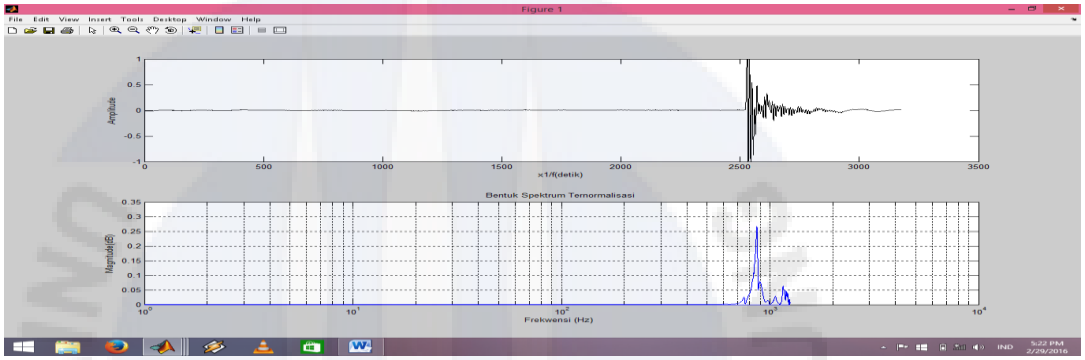


Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

4.

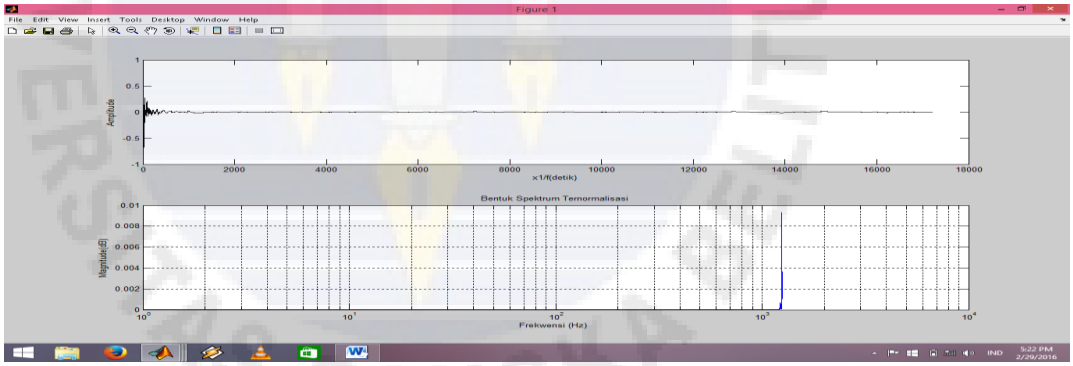


Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

5.

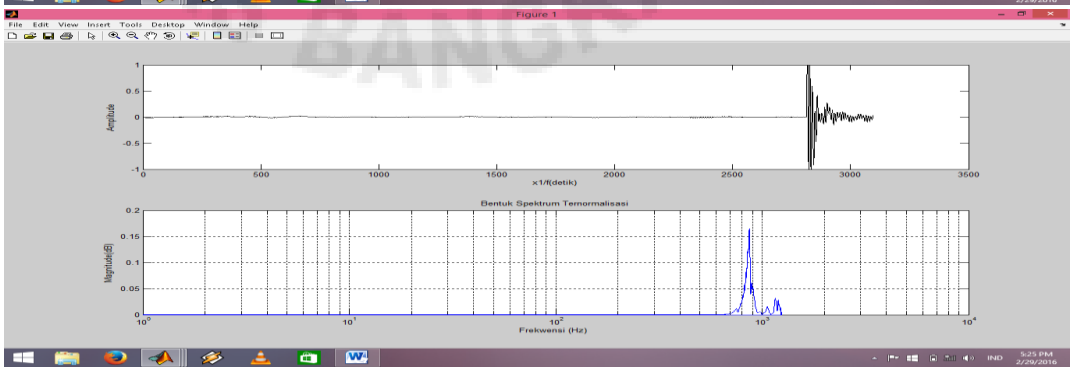
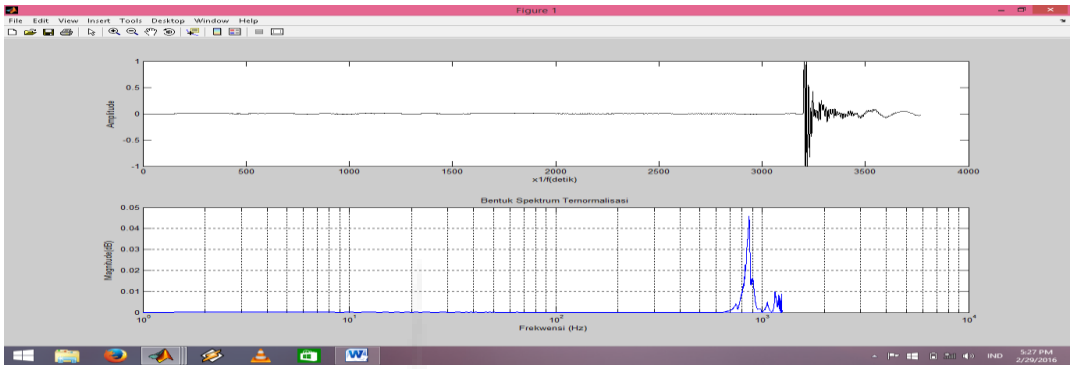
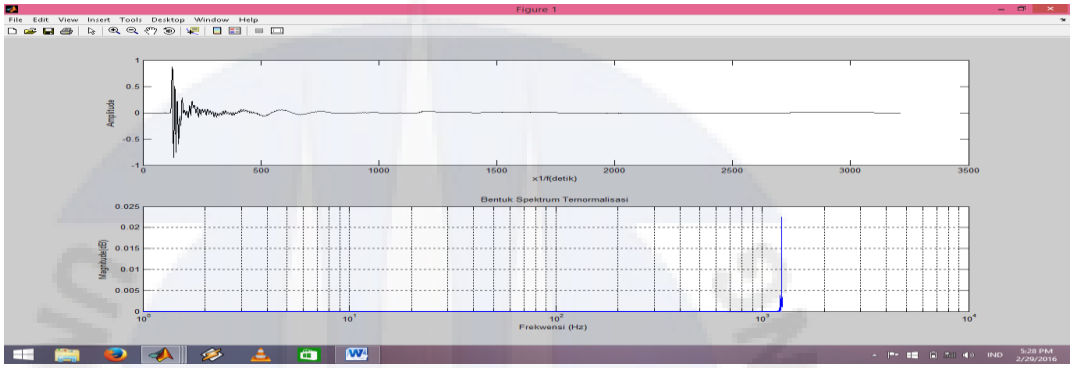
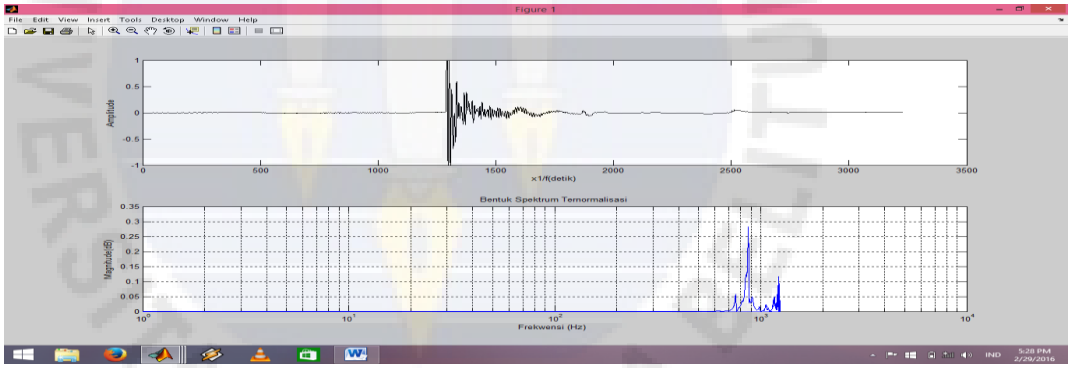
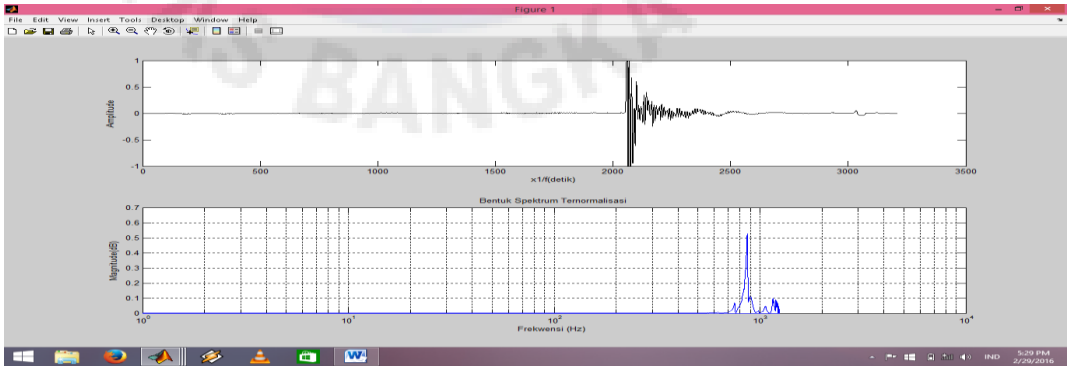


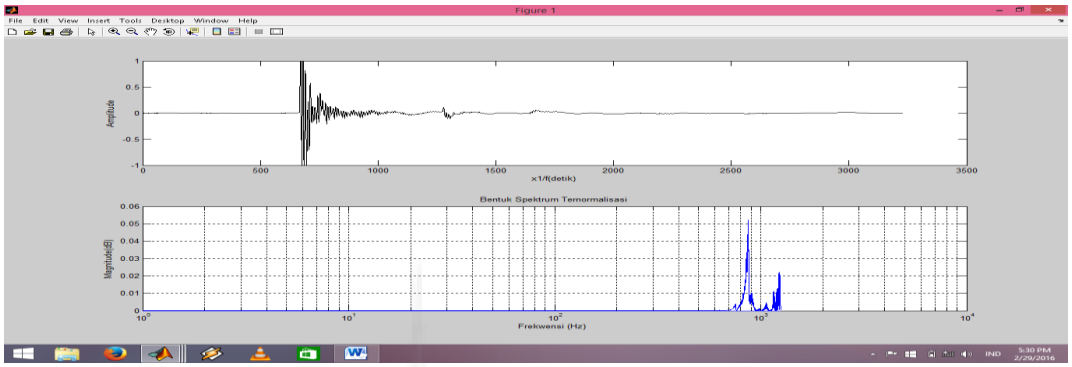
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

6. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

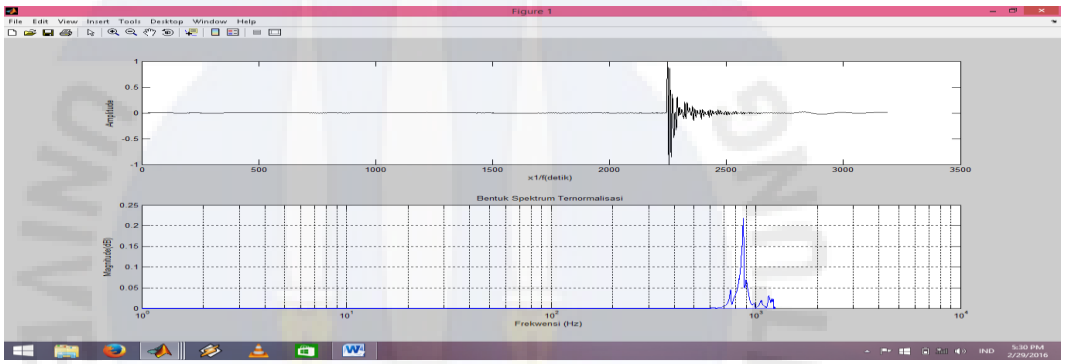
7. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

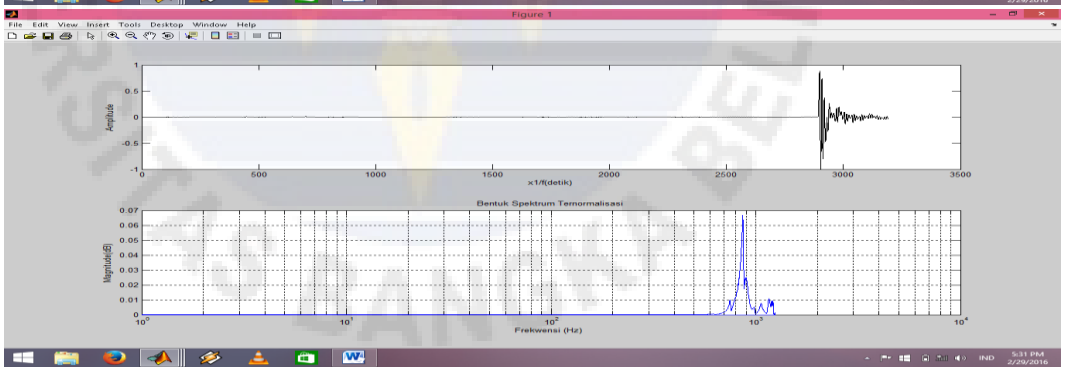
8. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

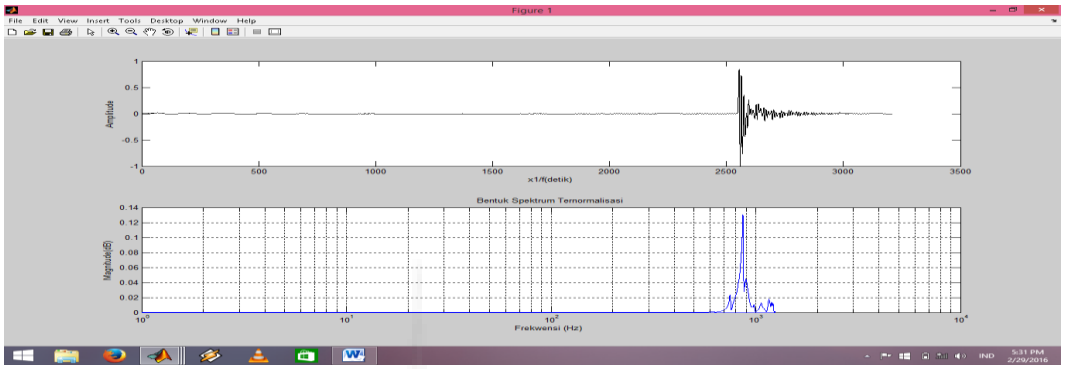
9. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

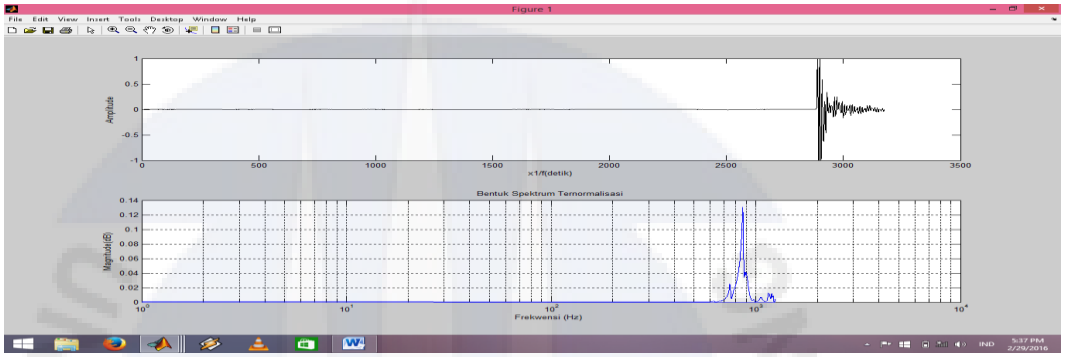
10. 

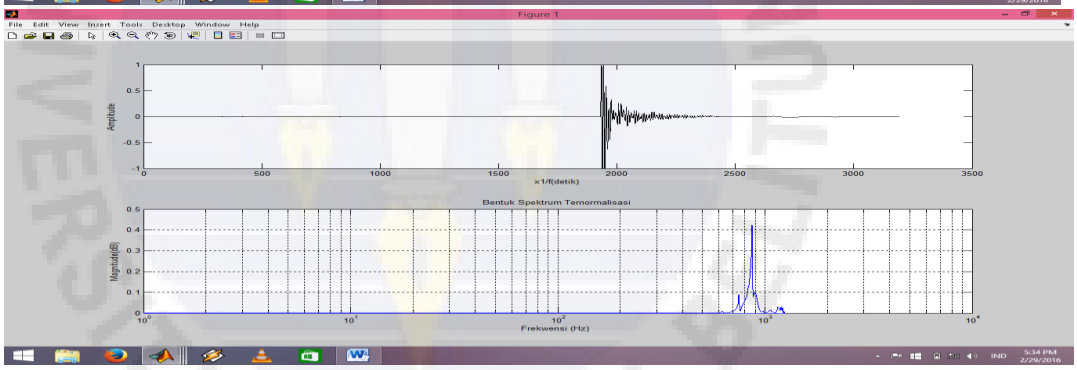
r250-5 umur 28 hari

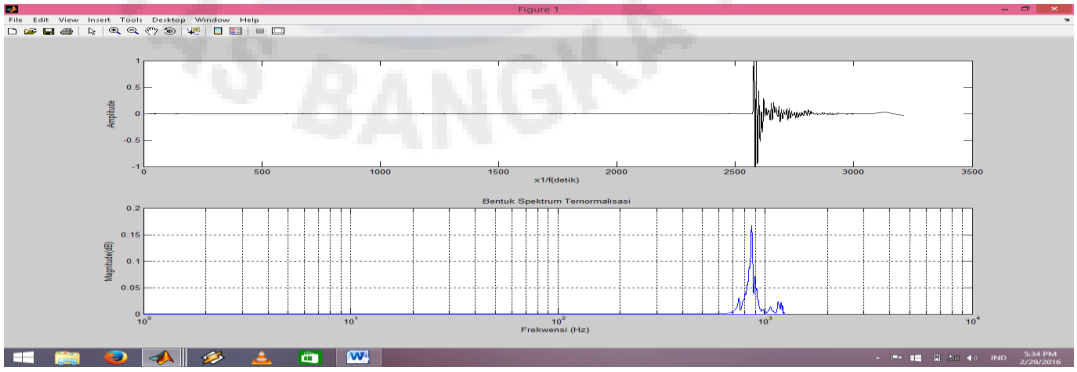
1. 

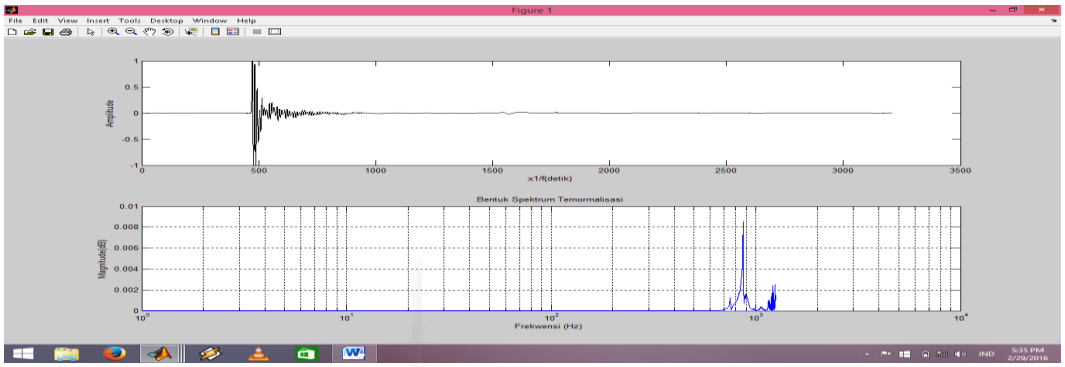
2. 

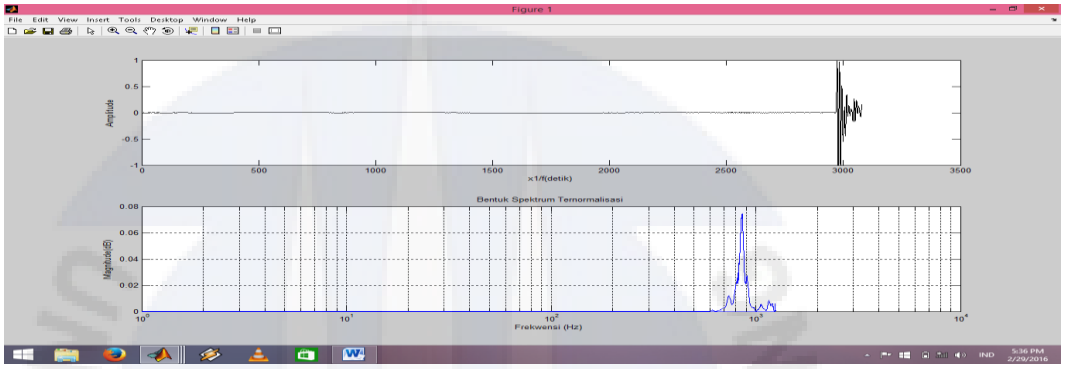
3. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

4. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

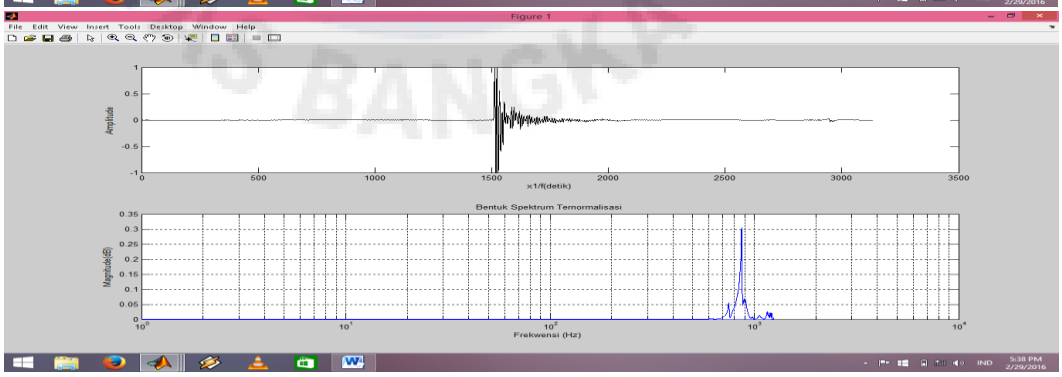
5. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

6. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

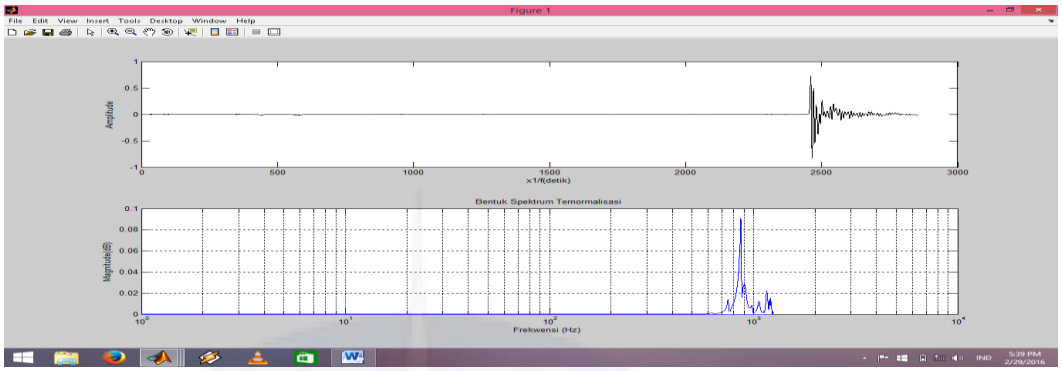
7. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

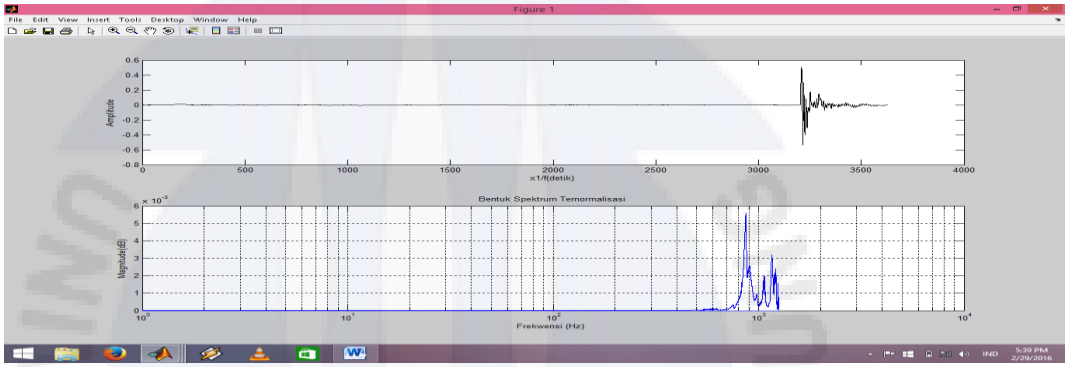
8. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

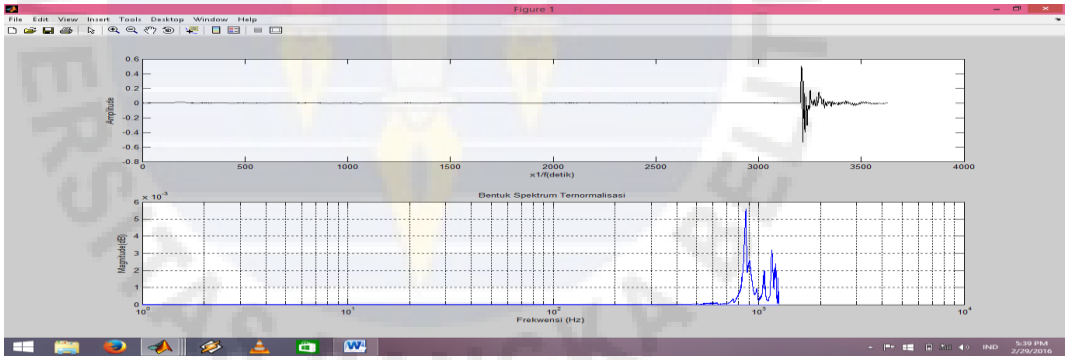
9. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

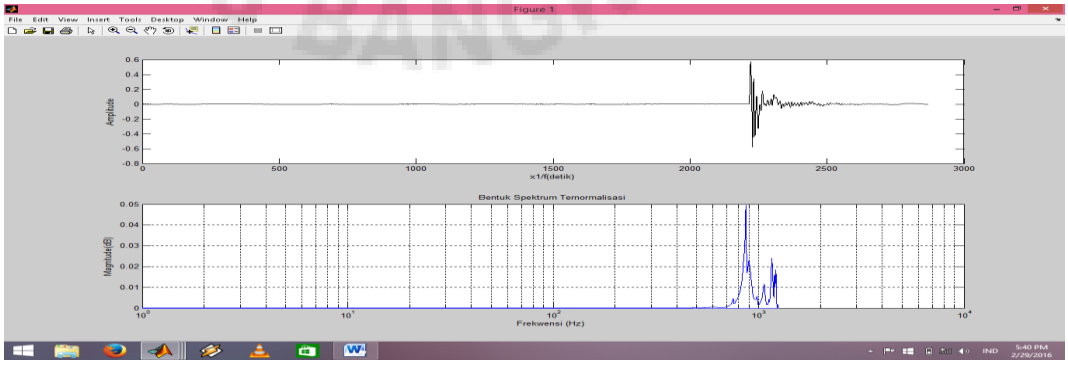
10. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

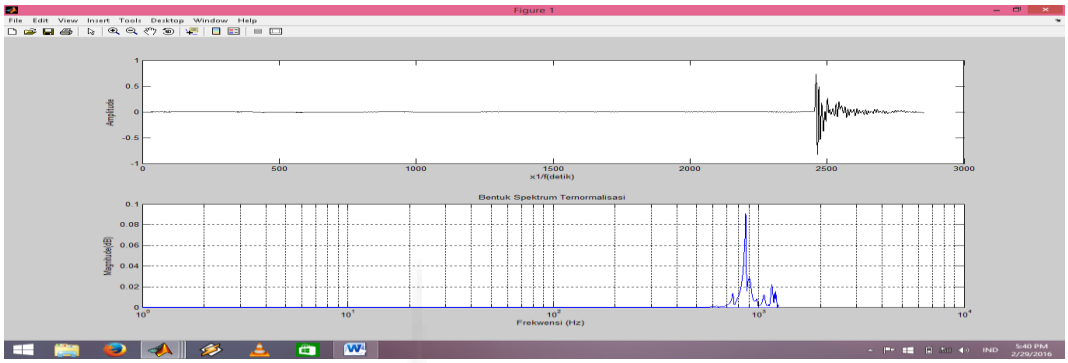
r250-06 umur 28 hari

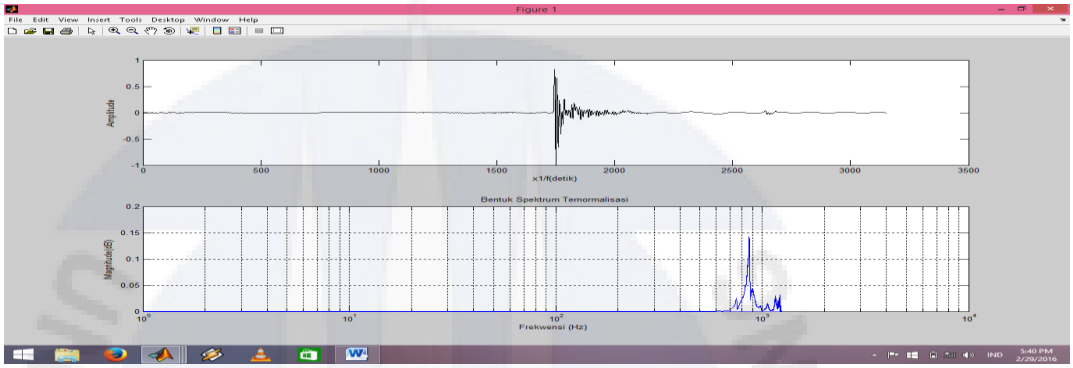
1. 

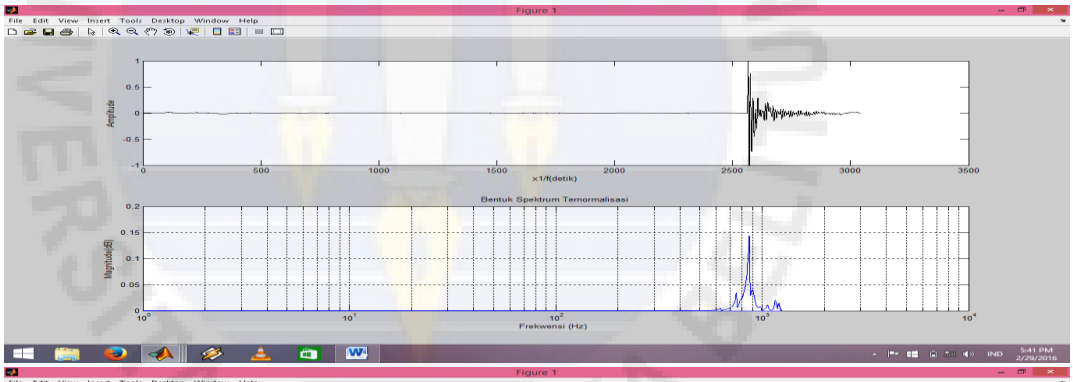
2. 

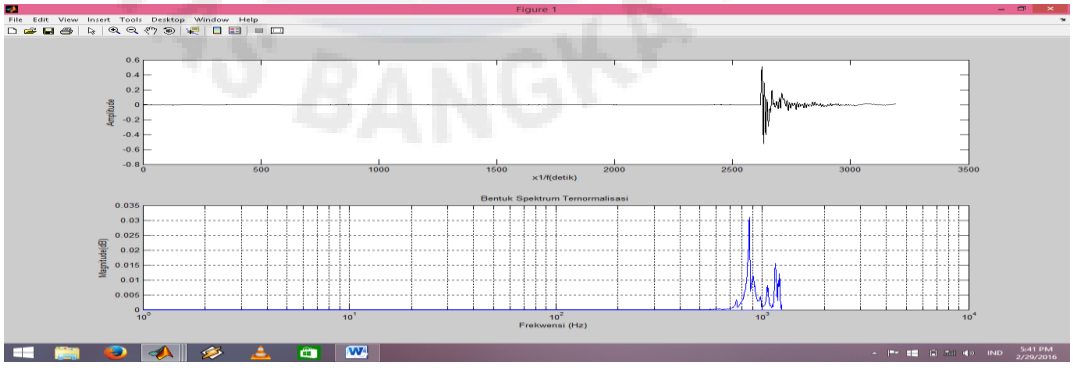
3. 

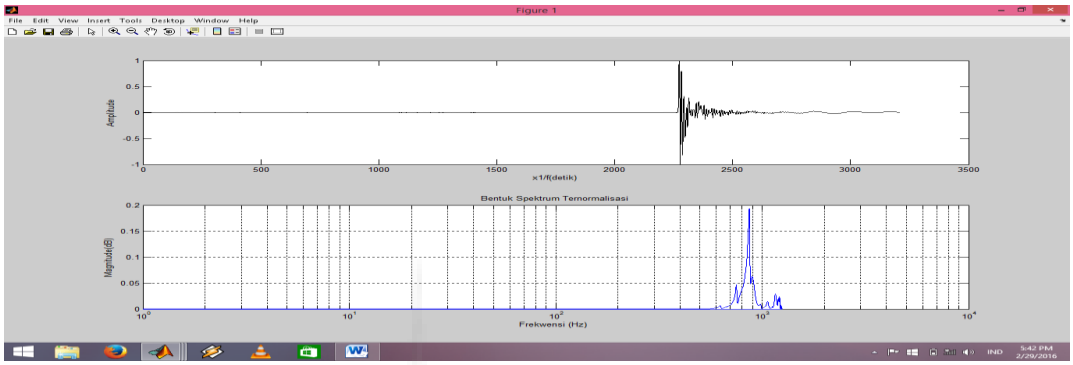
4. 

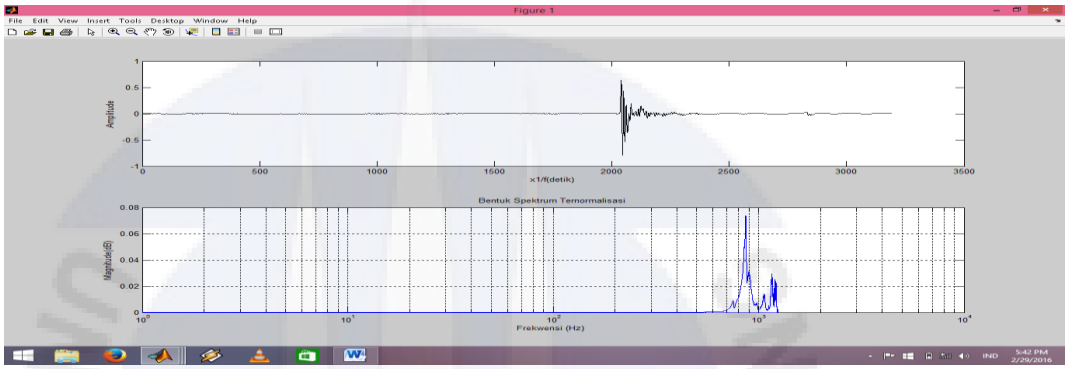
5. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

6. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

7. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

8. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

9. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

10. 
Figure 1
File Edit View Insert Tools Desktop Window Help
Amplitude
x1/f(detik)
Bentuk Spektrum Ternormalisasi
Magnitude(dB)
Frekwensi (Hz)

DATA KAPASITAS MEMORI SPEKTRUM SUARA MUTU BETON

No	Nama Asli Mutu Beton	Nama File Yang Telah dipotong	Usia Mutu Beton	Kapasitas Memori Sebelum Pemotongan (kb)	Durasi Sebelum Pemotongan (detik)	Kapasitas memori sesudah Pemotongan (Kb)	Durasi Sesudah Pemotongan (Detik)
1	K150	r150-01	17 Hari	156	5	6.16	1
2	K150	r150-02	17 Hari	156	5	6.57	1
3	K150	r150-03	17 Hari	156	5	6.24	1
4	K150	r150-04	17 Hari	156	5	6.36	1
5	K150	r150-05	17 Hari	156	5	6.37	1
6	K150	r150-06	17 Hari	156	5	6.27	1
7	K150	r150-07	17 Hari	156	5	6.24	1
8	K150	r150-08	17 Hari	156	5	6.27	1
9	K150	r150-09	17 Hari	156	5	6.20	1
10	K150	r150-10	17 Hari	156	5	6.28	1
11	K175	r175-01	18 Hari	156	5	7.24	1
12	K175	r175-02	18 Hari	156	5	6.35	1
13	K175	r175-03	18 Hari	156	5	6.27	1
14	K175	r175-04	18 Hari	156	5	6.24	1
15	K175	r175-05	18 Hari	156	5	6.39	1
16	K175	r175-06	18 Hari	156	5	6.31	1
17	K175	r175-07	18 Hari	156	5	6.31	1
18	K175	r175-08	18 Hari	156	5	5.94	1
19	K175	r175-09	18 Hari	156	5	6.27	1
20	K175	r175-10	18 Hari	156	5	6.24	1
21	K200	r200-01	19 Hari	156	5	6.24	1
22	K200	r200-02	19 Hari	156	5	6.31	1
23	K200	r200-03	19 Hari	156	5	6.24	1
24	K200	r200-04	19 Hari	156	5	6.24	1
25	K200	r200-05	19 Hari	156	5	6.31	1
26	K200	r200-06	19 Hari	156	5	6.31	1
27	K200	r200-07	19 Hari	156	5	6.20	1
28	K200	r200-08	19 Hari	156	5	6.29	1
29	K200	r200-09	19 Hari	156	5	6.24	1
30	K200	r200-10	19 Hari	156	5	6.24	1

NO	Nama Asli Mutu Beton	Nama File Yang Telah dipotong	Usia Mutu Beton	Kapasitas Memori Sebelum Pemotongan (kb)	Durasi Sebelum Pemotongan (detik)	Kapasitas memori sesudah Pemotongan (Kb)	Durasi Sesudah Pemotongan (Detik)
31	K250(01)	r250-1-01	7 Hari	156	5	21.3	1
32	K250(01)	r250-1-02	7 Hari	156	5	6.35	1
33	K250(01)	r250-1-03	7 Hari	156	5	30.8	1
34	K250(01)	r250-1-04	7 Hari	156	5	6.27	1
35	K250(01)	r250-1-05	7 Hari	156	5	1.32	1
36	K250(01)	r250-1-06	7 Hari	156	5	4.26	1
37	K250(01)	r250-1-07	7 Hari	156	5	1.32	1
38	K250(01)	r250-1-08	7 Hari	156	5	6.39	1
39	K250(01)	r250-1-09	7 Hari	156	5	6.27	1
40	K250(01)	r250-1-10	7 Hari	156	5	1.31	1
41	K250(02)	r250-2-01	7 Hari	156	5	1.31	1
42	K250(02)	r250-2-02	7 Hari	156	5	1.32	1
43	K250(02)	r250-2-03	7 Hari	156	5	1.31	1
44	K250(02)	r250-2-04	7 Hari	156	5	1.31	1
45	K250(02)	r250-2-05	7 Hari	156	5	3.38	1
46	K250(02)	r250-2-06	7 Hari	156	5	1.29	1
47	K250(02)	r250-2-07	7 Hari	156	5	6.24	1
48	K250(02)	r250-2-08	7 Hari	156	5	3.33	1
49	K250(02)	r250-2-09	7 Hari	156	5	3.62	1
50	K250(02)	r250-2-10	7 Hari	156	5	6.27	1
51	K250(03)	r250-3-01	14 Hari	156	5	6.84	1
52	K250(03)	r250-3-02	14 Hari	156	5	6.13	1
53	K250(03)	r250-3-03	14 Hari	156	5	6.20	1
54	K250(03)	r250-3-04	14 Hari	156	5	3.94	1
55	K250(03)	r250-3-05	14 Hari	156	5	6.24	1
56	K250(03)	r250-3-06	14 Hari	156	5	6.31	1
57	K250(03)	r250-3-07	14 Hari	156	5	6.24	1
58	K250(03)	r250-3-08	14 Hari	156	5	3.21	1
59	K250(03)	r250-3-09	14 Hari	156	5	4.34	1
60	K250(03)	r250-3-10	14 Hari	156	5	3.27	1

NO	Nama Asli Mutu Beton	Nama File Yang Telah dipotong	Usia mutu beton	Kapasitas Memori Sebelum Pemotongan (kb)	Durasi sebelum pemotongan Detik)	Kapasitas memori sesudah Pemotongan (Kb)	Durasi setelah pemotongan Detik)
61	K250(04)	r250-4-01	14 Hari	156	5	6.27	1
62	K250(04)	r250-4-02	14 Hari	156	5	6.27	1
63	K250(04)	r250-4-03	14 Hari	156	5	6.24	1
64	K250(04)	r250-4-04	14 Hari	156	5	3.26	1
65	K250(04)	r250-4-05	14 Hari	156	5	6.09	1
66	K250(04)	r250-4-06	14 Hari	156	5	7.40	1
67	K250(04)	r250-4-07	14 Hari	156	5	6.31	1
68	K250(04)	r250-4-08	14 Hari	156	5	6.35	1
69	K250(04)	r250-4-09	14 Hari	156	5	6.31	1
70	K250(04)	r250-4-10	14 Hari	156	5	6.35	1
71	K250(05)	r250-5-01	28 Hari	156	5	6.27	1
72	K250(05)	r250-5-02	28 Hari	156	5	6.27	1
73	K250(05)	r250-5-03	28 Hari	156	5	6.31	1
74	K250(05)	r250-5-04	28 Hari	156	5	6.27	1
75	K250(05)	r250-5-05	28 Hari	156	5	6.37	1
76	K250(05)	r250-5-06	28 Hari	156	5	6.31	1
77	K250(05)	r250-5-07	28 Hari	156	5	6.31	1
78	K250(05)	r250-5-08	28 Hari	156	5	6.05	1
79	K250(05)	r250-5-09	28 Hari	156	5	6.24	1
80	K250(05)	r250-5-10	28 Hari	156	5	6.16	1
81	K250(06)	r250-6-01	28 Hari	156	5	5.62	1
82	K250(06)	r250-6-02	28 Hari	156	5	7.13	1
83	K250(06)	r250-6-03	28 Hari	156	5	5.64	1
84	K250(06)	r250-6-04	28 Hari	156	5	5.62	1
85	K250(06)	r250-6-05	28 Hari	156	5	6.20	1
86	K250(06)	r250-6-06	28 Hari	156	5	5.98	1
87	K250(06)	r250-6-07	28 Hari	156	5	6.28	1
88	K250(06)	r250-6-08	28 Hari	156	5	6.31	1
89	K250(06)	r250-6-09	28 Hari	156	5	6.27	1
90	K250(06)	r250-6-10	28 Hari	156	5	6.35	1

No	Nama Asli Mutu Beton	Nama File Yang Telah dipotong	Usia Mutu Beton	Kapasitas Memori Sebelum Pemotongan (kb)	Durasi Sebelum pemotongan	Kapasitas memori sesudah Pemotongan (Kb)	Durasi Setelah pemotongan (Detik)
91	K275	r275-01	20 Hari	156	5	6.27	1
92	K275	r275-02	20 Hari	156	5	6.16	1
93	K275	r275-03	20 Hari	156	5	6.20	1
94	K275	r275-04	20 Hari	156	5	6.28	1
95	K275	r275-05	20 Hari	156	5	6.28	1
96	K275	r275-06	20 Hari	156	5	6.28	1
97	K275	r275-07	20 Hari	156	5	6.28	1
98	K275	r275-08	20 Hari	156	5	6.31	1
99	K275	r275-09	20 Hari	156	5	6.27	1
100	K275	r275-10	20 Hari	156	5	6.35	1

'PROGRAM MEREKAM'

' DWI LESTARI(102 11 11 013)'

'FAKULTAS TEKNIK, JURUSAN TEKNIK ELEKTRO, UNIVERSITAS BANGKA BELITUNG'

'%**********----------**********'

'%Program ini digunakan untuk merekam isyarat masukan suara untuk mutu beton '

```
clear;
clc;
%mengosongkan halaman command window
clf;
%memanggil suara
s=input('Masukkan Nama  suara :','s');
a=input('Durasi Rekaman (detik)  :');
%alamat untuk menyimpan nama file  yang akan diberikan
fs=16000;
%batas frekuensi sampling
WR=wavrecord(a*fs,fs,1);
%sintak untuk merekam suara
wavwrite(WR,fs,s)
%membaca hasil rekam dengan memasukan nama file yang disimpan, dengan
%frekuensi sampling 16000
t=1:length(WR);
%lama waktu untuk melakukan perekaman
subplot(211)
```

```
k=t/fs;
plot(k,WR)
grid on
xlabel('Isyarat Terekamam (detik)')
ylabel('amplitude')
%memainkan hasil rekaman
wavplay(WR,fs)

%Spectrum belum dinormalisasi
ol=0;
f=2048;
p=spectrum(WR,f,ol);
('P= Koefisien FFT=(NFFT/2)+1');

('d=P maksimum');
d=max(p);
('B=P ternormalisasi') ;
%suara=L/d;
B=p/d
M=max(B);
%suara

subplot(2,1,2);
%plot(,'b')
%plot(B,'b')
```

```
semilogx(B,'r')
n=length(B);
xlabel('Frekwensi (Hz) ')
ylabel('Magnitude')
title('Bentuk Spektrum Ternormalisasi')
%pemberian Label
grid on
%menampilkan gambar spektrum


  fprintf('\n============================================================')
  fprintf('\n=TERIMAKASIH ANDA TELAH MENGGUNAKAN PROGRAM INI =');
  fprintf('\n=Tekan ENTER Untuk Melanjutkan, dan  0 untuk mengakhiri  =\n');
  fprintf('\n============================================================')
  kont = input( ' STOP:' );
  if kont == 0, break; end
end
 %mengakhiri program
 clf;
```

' MEMANGGIL SPEKTRUM FAST FOURIER TRANSFORM'

```
' DWI LESTARI(102 11 11 013)'

'FAKULTAS TEKNIK, JURUSAN TEKNIK ELEKTRO, UNIVERSITAS BANGKA BELITUNG'

'%************************----------**********'

'%Program ini digunakan untuk melihat bentuk sinyal spektrum dari sempel beton '

clc;

clf;


window_start=100; window_length=1024; N=window_length;

addpath d:\data\

addpath d:\data1\

%spec=input('Jumlah FFT :');%Koefisien FFT=(NFFT/2)+1

%ol=input('Jumlah Overlapping :');

%penggalan-penggalan dari suatu spectrum

colormap(1-pink)


s=input('input suara :','s');

[suara]=wavread(s);

%nfft=2049

j=4096 %spec=input('Jumlah FFT :');%Koefisien FFT=(NFFT/2)+1

fs=22000 %Frekuensi Sampling

sound(suara,fs);

title('Bentuk Gelombang')

subplot(2,1,1); plot(suara,'k')

xlabel('x1/f(detik)');%untuk 1 rad/detik =1/2phi=0,159 Hz'

ylabel('Amplitude');
```

```
p=spectrum(suara,j,10);


d=flipud(p);
size(d)%untuk mengetahui jumlah elemen matriks W
%c=d([2 3],:)=[]
%sinyal yang bersal dari hasil rekaman mengalami perubahan dikarenakan
%adanya komponen elektronik yang berfungsi sebagai tapis sehingga perlu
%dilakukan kalibrasi.dengan cara memasukan sinyal 1 kHz dan dengan cara
%melalukan komponen matriks nya sehingga sinyal spectrum 1 kHz tersebut
%berada pada garis yang sesuai dengan diagram semilox yang dihasilkan oleh
%spectral.

d([1:800],:)=[];% Melakukan kalibrasi dengan tujuan mengurangi sebagian matriks d
e=d*1;
size(e)%untuk mengetahui ukuran elemen matriks e
e
%u=e;
%plot(e,u)

%C = textscan(str,'%f');
%e= outputSingleScan(s,[1 10]);
%M=repmat(a,[2 1])%menggandakan baris dan kolom pada elemen matriks
%h=d([1 2 3],:)=[]%menghapus elemen matriks d pada kolom 123
subplot(2,1,2); plot(e,'k')
'NILAI FREKUENSI MAKSIMUM='
```

```
max(p)

'NILAI FREKUENSI TERENDAH='

min(p)


%N=bar(e);


semilogx(e,'r')

%bar(e)


n=length(e);

xlabel('Frekwensi (Hz) ')

ylabel('Magnitude(dB)')

title('Bentuk Spektrum Ternormalisasi')

grid on
```

1) Mutu Beton K150

Diket :

Kuat Tekan Rencana = 15 MPa

Berat = 7,6 Kg

Umur = 17 hari

$P = 500\ KN$

A = 15 cm^2

Faktor Koreksi = 0,91 / 17 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{500}{15^2}$$

$$= \frac{500}{225}$$

$$= 2{,}222\ {}^{KN}/_{cm^2}$$

$$= \frac{2{,}222 \times 10^3}{10^2}$$

$$= 22{,}22\ N/mm^2$$

Faktor koreksi = 0,91 / 17 hari

Jadi $= \frac{22{,}22}{0{,}91}$

$$= 24{,}41\ N/mm^2$$

2) Mutu Beton K175

Diket :

Kuat Tekan Rencana = 17,5 MPa

Berat = 7,6 Kg

Umur = 18 hari

$P = 460\ KN$

A = 15 cm^2

Faktor Koreksi = 0,92 / 18 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{460}{15^2}$$

$$= \frac{460}{225}$$

$$= 2{,}04\ {}^{KN}/_{cm^2}$$

$$= \frac{2{,}04 \times 10^3}{10^2}$$

$$= 20{,}44\ N/mm^2$$

Faktor koreksi = 0,92 / 18 hari

Jadi $= \frac{20{,}44}{0{,}92}$

$$= 22{,}21\ N/mm^2$$

3) Mutu Beton K200

Diket :

Kuat Tekan Rencana = 20 MPa

Berat = 6,8 Kg

Umur = 19 hari

$P = 460\ KN$

A = 15 cm^2

Faktor Koreksi = 0,93 / 19 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{460}{15^2}$$

$$= \frac{460}{225}$$

$$= 20{,}44\ {}^{KN}/_{cm^2}$$

$$= \frac{20{,}44 \times 10^3}{10^2}$$

$$= 20{,}44\ N/mm^2$$

Faktor koreksi = 0,93 / 19 hari

$$\text{Jadi} = \frac{20{,}44}{0{,}93}$$

$$= 21{,}97\ N/mm^2$$

4) Mutu Beton K250 (01)

Diket :

Kuat Tekan Rencana = 25 Mpa

Berat = 7,8 Kg

Umur = 7 hari

$P = 420\ KN$

A = 15 cm^2

Faktor Koreksi = 0,65 / 7 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{420}{15^2}$$

$$= \frac{420}{225}$$

$$= 1{,}866\ {}^{KN}/_{cm^2}$$

$$= \frac{1{,}866 \times 10^3}{10^2}$$

$$= 18{,}66\ N/mm^2$$

Faktor koreksi = 0,65 / 7 hari

$$\text{Jadi} = \frac{18{,}66}{0{,}65}$$

$$= 28{,}70\ N/mm^2$$

5) Mutu Beton K250 (02)

Diket :

Kuat Tekan Rencana = 25 Mpa

Berat = 7,8 Kg

Umur = 7 hari

$P = 420\ KN$

A = 15 cm^2

Faktor Koreksi = 0,65 / 7 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{420}{15^2}$$

$$= \frac{420}{225}$$

$$= 1{,}866\ {}^{KN}/_{cm^2}$$

$$= \frac{1{,}866 \times 10^3}{10^2}$$

$$= 18{,}66\ N/mm^2$$

Faktor koreksi = 0,65 / 7 hari

Jadi $= \frac{18{,}66}{0{,}65}$

$$= 28{,}70\ N/mm^2$$

6) Mutu Beton K250 (03)

Diket :

Kuat Tekan Rencana = 25 Mpa

Berat = 8 Kg

Umur = 14 hari

$P = 480\ KN$

A = 15 cm^2

Faktor Koreksi = 0,88 / 14 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{420}{15^2}$$

$$= \frac{480}{225}$$

$$= 2{,}133\ {}^{KN}/_{cm^2}$$

$$= \frac{2{,}133 \times 10^3}{10^2}$$

$$= 21{,}33\ N/mm^2$$

Faktor koreksi = 0,88 / 14 hari

Jadi $= \frac{21{,}33}{0{,}88}$

$$= 24{,}23\ N/mm^2$$

7) Mutu Beton K250 (04)

Diket :

Kuat Tekan Rencana = 25 Mpa

Berat = 7,8 Kg

Umur = 14 hari

$P = 485\ KN$

A = 15 cm^2

Faktor Koreksi = 0,88 / 14 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{485}{15^2}$$

$$= \frac{485}{225}$$

$$= 2{,}156\ {}^{KN}/_{cm^2}$$

$$= \frac{2{,}156 \times 10^3}{10^2}$$

$$= 21{,}56\ N/mm^2$$

Faktor koreksi = 0,88 / 14 hari

Jadi $= \frac{21{,}56}{0{,}88}$

$$= 24{,}50\ N/mm^2$$

8) Mutu Beton K250 (05)

Diket :

Kuat Tekan Rencana = 25 Mpa

Berat = 8 Kg

Umur = 28 hari

$P = 565\ KN$

A = 15 cm^2

Faktor Koreksi = 1 / 28 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{420}{15^2}$$

$$= \frac{565}{225}$$

$$= 2{,}511\ {}^{KN}/_{cm^2}$$

$$= \frac{2{,}511 \times 10^3}{10^2}$$

$$= 25{,}11\ N/mm^2$$

Faktor koreksi = 1 / 28 hari

Jadi $= \frac{25{,}11}{1}$

$$= 25{,}11\ N/mm^2$$

9) Mutu Beton K250 (06)

Diket :

Kuat Tekan Rencana = 25 Mpa

Berat = 7,8 Kg

Umur = 28 hari

$P = 595\ KN$

A = 15 cm^2

Faktor Koreksi = 1 / 28 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{595}{15^2}$$

$$= \frac{595}{225}$$

$$= 2{,}644\ {}^{KN}/_{cm^2}$$

$$= \frac{2{,}644 \times 10^3}{10^2}$$

$$= 26{,}44\ N/mm^2$$

Faktor koreksi = 1 / 28 hari

Jadi $= \frac{26{,}44}{1}$

$$= 26{,}44\ N/mm^2$$

10) Mutu Beton K275

Diket :

Kuat Tekan Rencana = 27,5 Mpa

Berat = 7,8 Kg

Umur = 7 hari

$P = 480\ KN$

A = 15 cm^2

Faktor Koreksi = 0,94 / 20 hari

Ditanya : Kuat Tekan?

Penyelesaian :

$$V = \frac{P}{a}$$

$$= \frac{480}{15^2}$$

$$= \frac{480}{225}$$

$$= 2{,}133\ {}^{KN}/_{cm^2}$$

$$= \frac{2{,}133 \times 10^3}{10^2}$$

$$= 21{,}33\ N/mm^2$$

Faktor koreksi = 0,94 / 20 hari

Jadi $= \frac{21{,}33}{0{,}94}$

$$= 22{,}69\ N/mm^2$$

UNIVERSITAS BANGKA BELITUNG
LABORATORIUM JURUSAN TEKNIK SIPIL

DESA BALUNIJUK, KECAMATAN MERAWANG, KABUPATEN BANGKA
PROVINSI BANGKA BELITUNG

Uji Tekan Beton
Tugas Akhi : Analisis Kekuatan Beton Dengan Menggunakan Suara Berbasis Fast Fourier Transpormation
Benda Uji : Kubus 15 X 15 x 15 CM

Dikerjakan : Lab.Jur.Tek.Sipil

No/kode Benda Uji	DIBUAT TANGGAL	DI UJI TANGGAL	UMUR (Hari)	Koreksi	LUAS (mm^2)	BERAT (Kg)	ISI (Dm3)	BERAT ISI (Kg / Dm^3)	BEBAN Kn	BEBAN N	KUAT TEKAN (N / mm^2)	KUAT TEKAN 28 HARI (N / mm^2)	KUAT TEKAN RATA-RATA (N / mm^2)	KETERANGAN MUTU BETON
1	09/12/2015	16/12/2015	7	0,65	22500	7,800	3,375	2,311	420	420000,00	18,67	28,72	28,72	K 250
	Benda Uji 1													
2	09/12/2015	16/12/2015	7	0,65	22500	7,800	3,375	2,311	420	420000,00	18,67	28,72		
	Benda Uji 2													
3	09/12/2015	23/12/2015	14	0,88	22500	8,000	3,375	2,370	480	480000,00	21,33	24,24	24,37	K 250
	Benda Uji 1													
4	09/12/2015	23/12/2015	14	0,88	22500	7,800	3,375	2,311	485	485000,00	21,56	24,49		
	Benda Uji 2													
5	09/12/2015	06/01/2016	28	1,00	22500	8,400	3,375	2,489	565	565000,00	25,11	25,11	25,78	K 250
	Benda uji 1													
6	09/12/2015	06/01/2016	28	1,00	22500	8,300	3,375	2,459	595	595000,00	26,44	26,44		
	Benda uji 2													
7	24/11/2015	14/12/2015	20	0,94	22500	7,800	3,375	2,311	480	480000,00	21,33	22,70	22,70	K 275
	Benda uji 1													
8	25/11/2015	14/12/2015	19	0,93	22500	6,800	3,375	2,015	460	460000,00	20,44	21,98	21,98	K 200
	Benda uji 1													
9	26/11/2015	14/12/2015	18	0,92	22500	7,600	3,375	2,252	460	460000,00	20,44	22,22	22,22	K 175
	Benda uji 1													
10	27/11/2015	14/12/2015	17	0,91	22500	7,600	3,375	2,252	500	500000,00	22,22	24,42	24,42	K 150
	Benda uji 1													

Catatan :
Benda Uji Dibuat dilokasi

Balunijuk, 2 Februari 2016
Ka.Lab. Jurusan T.Sipil UBB

Donny F.Manalu,S.T.,M.T

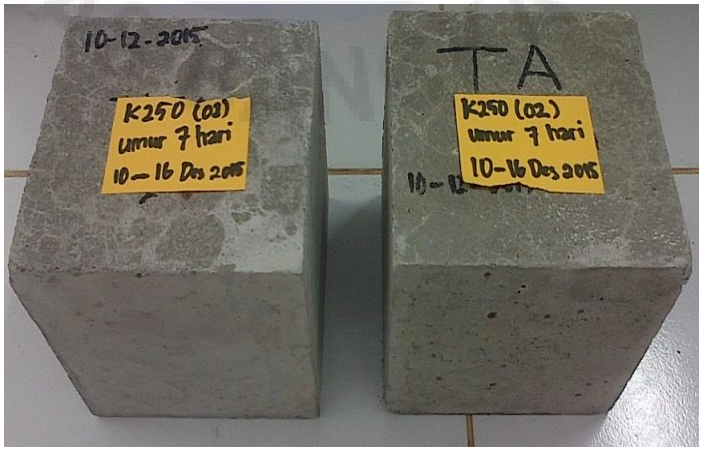
TAHAPAN PEMBUATAN SAMPEL BETON

1. Pelaksanaan Campuran

2. Melakukan Uji *slumop* Beton

3. Pembuatan dan Persiapan Benda Uji


10-12-2015
TA
25 Mpa
TA
25 Mpa
10-12-2015


10-12-2015
K250 (03)
Umur 7 hari
10-16 Des 2015
TA
K250 (02)
Umur 7 hari
10-16 Des 2015

4. Pengujian Kuat Tekan Beton