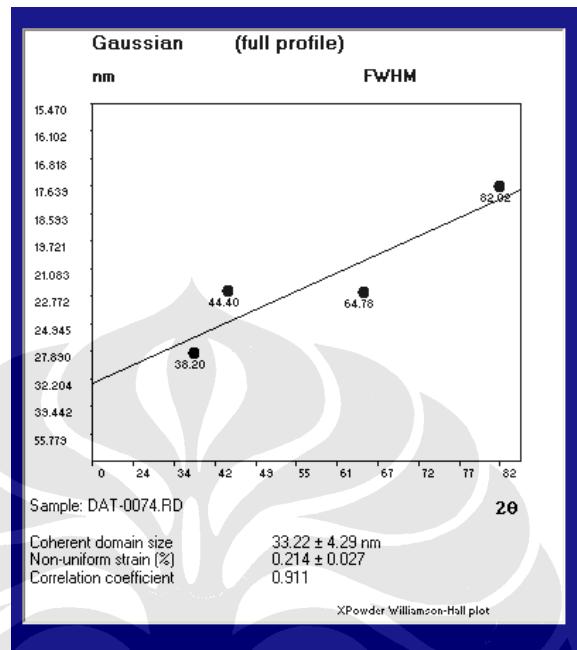


LAMPIRAN A

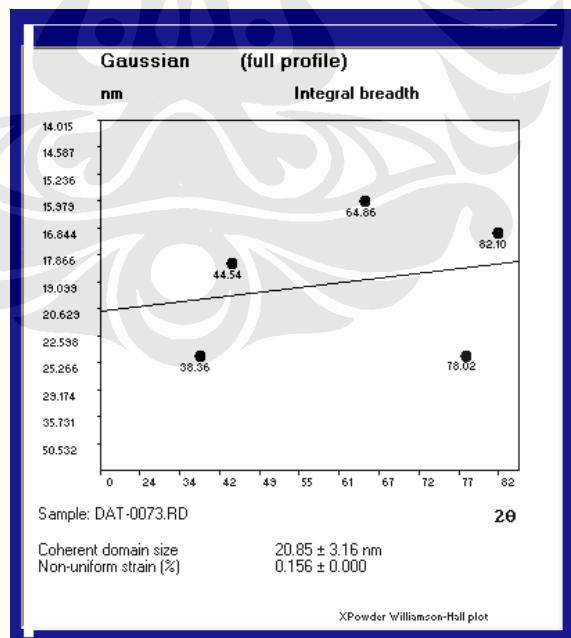
Data Hasil Pengukuran Ukuran Kristalit



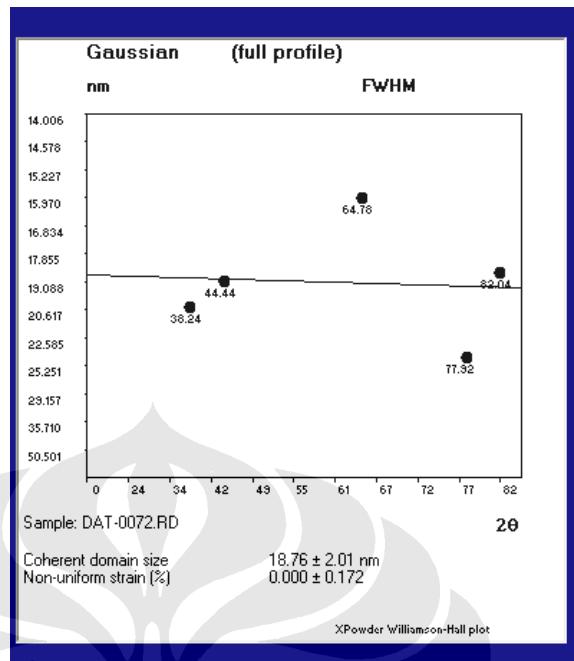
Perhitungan ukuran Kristalit serbuk Fe-30%at.Al



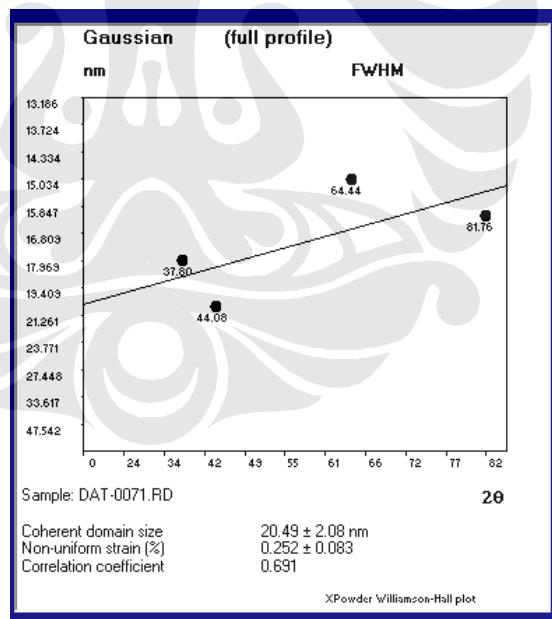
4 jam milling



8 jam milling

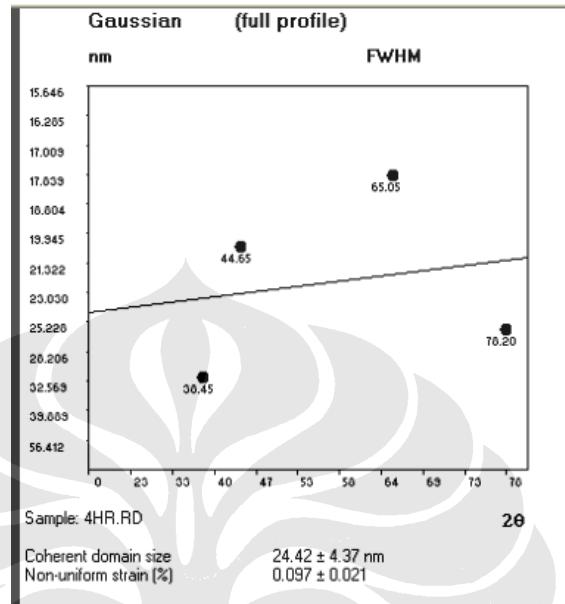


16 jam jam milling

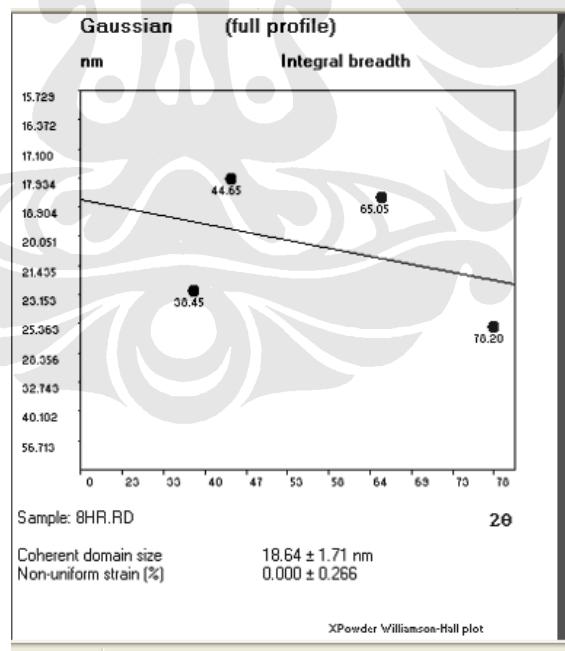


32 jam jam milling

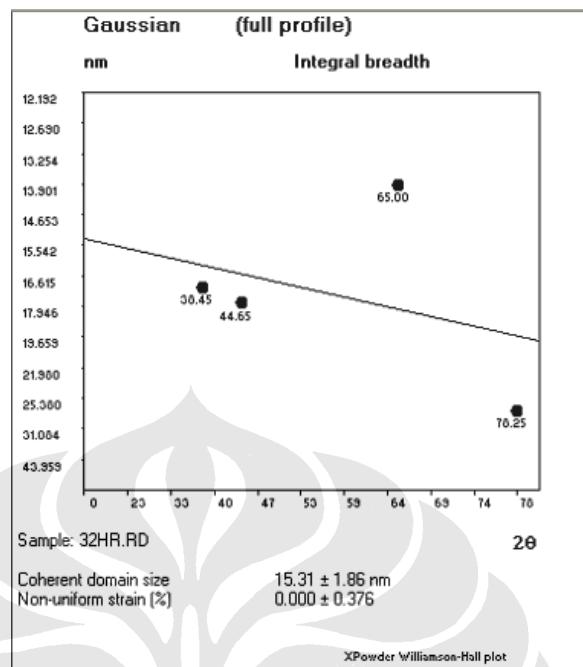
Perhitungan ukuran Kristalit serbuk Fe-40%at.Al



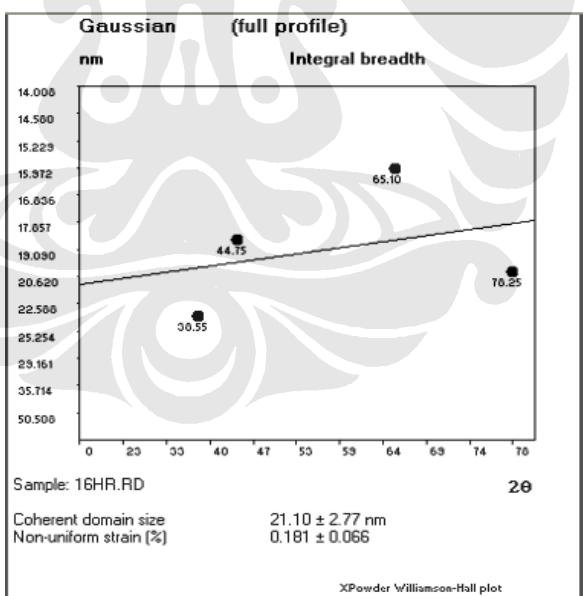
4 jam milling



8 jam milling

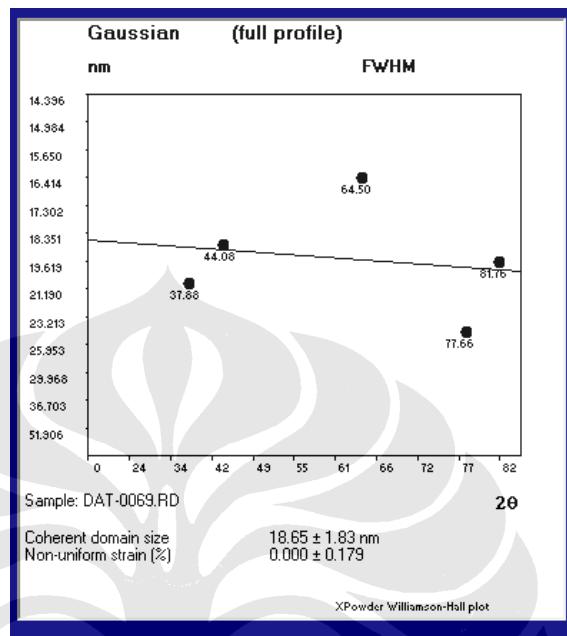


16 jam milling

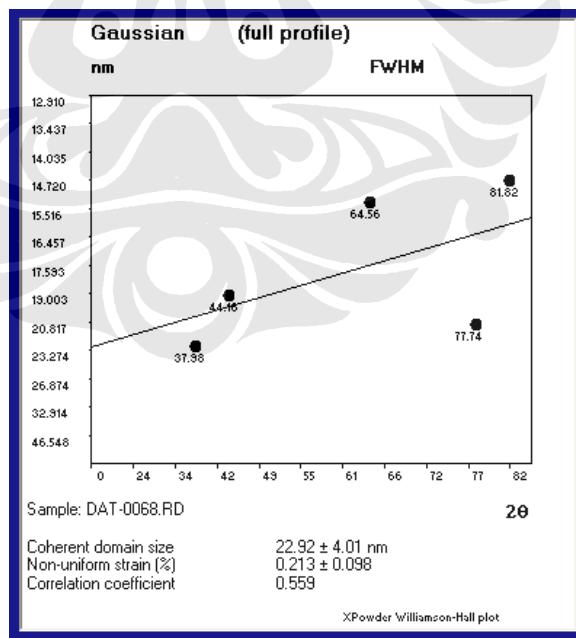


32 jam milling

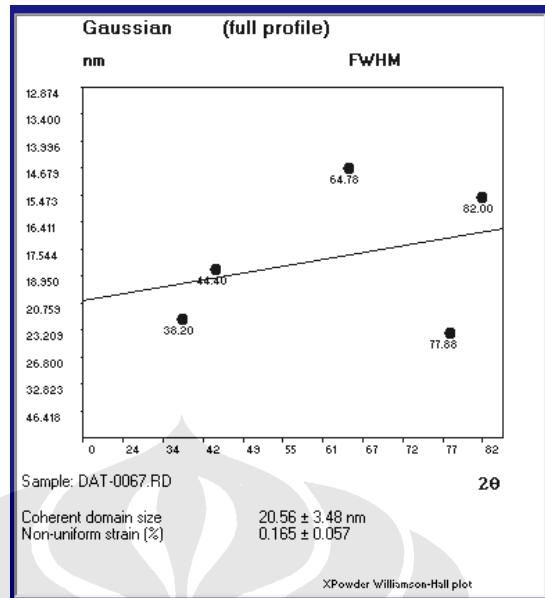
Perhitungan ukuran Kristalit serbuk Fe-50%at.Al



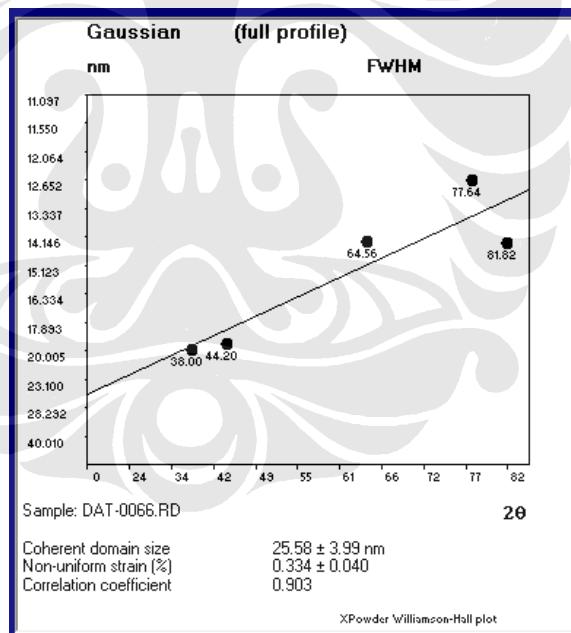
4 jam milling



8 jam milling

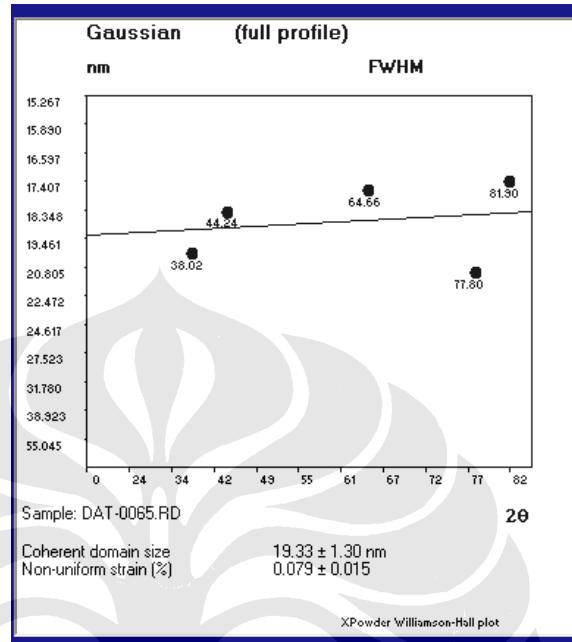


16 jam milling

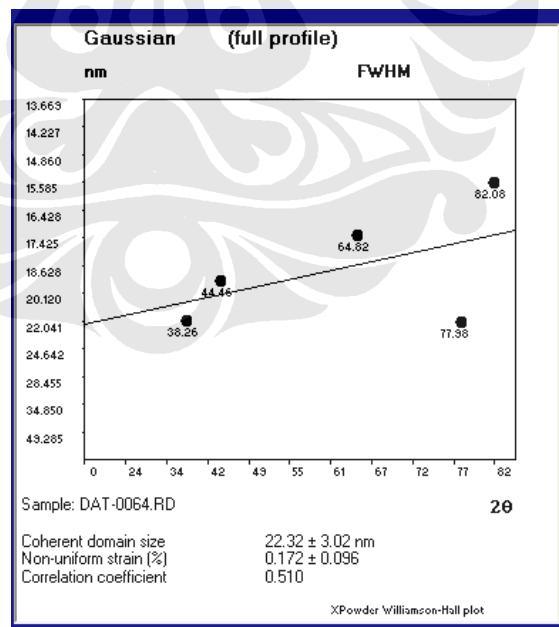


32 jam milling

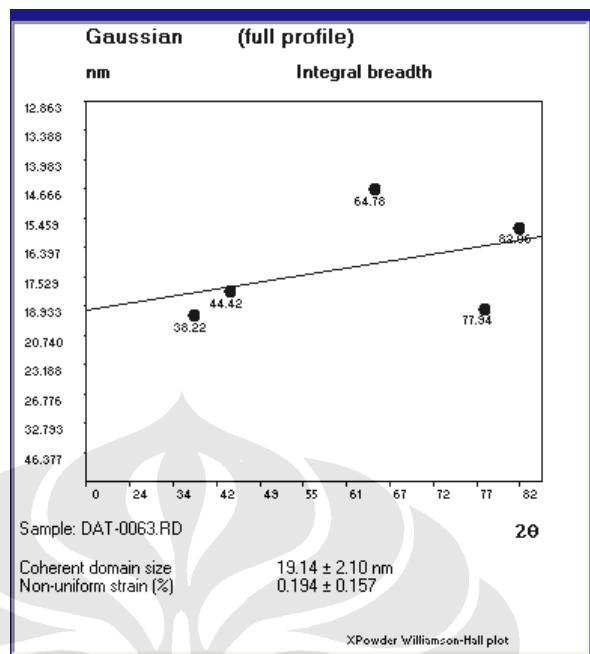
Perhitungan ukuran Kristalit serbuk Fe-60%at.Al



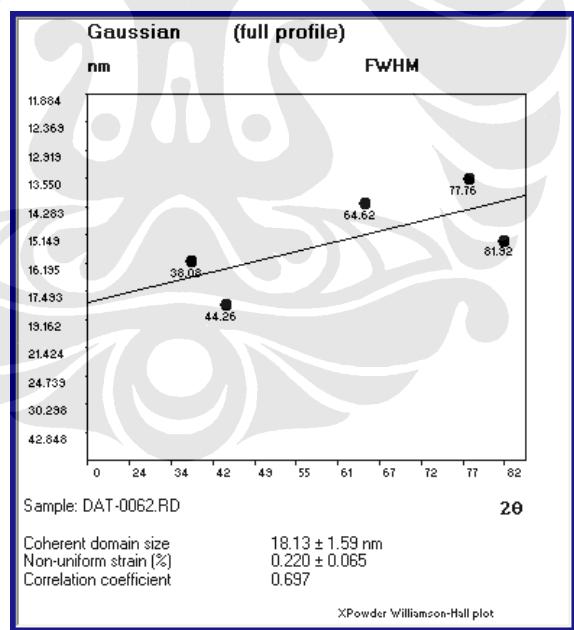
4 jam milling



8 jam milling



16 jam milling



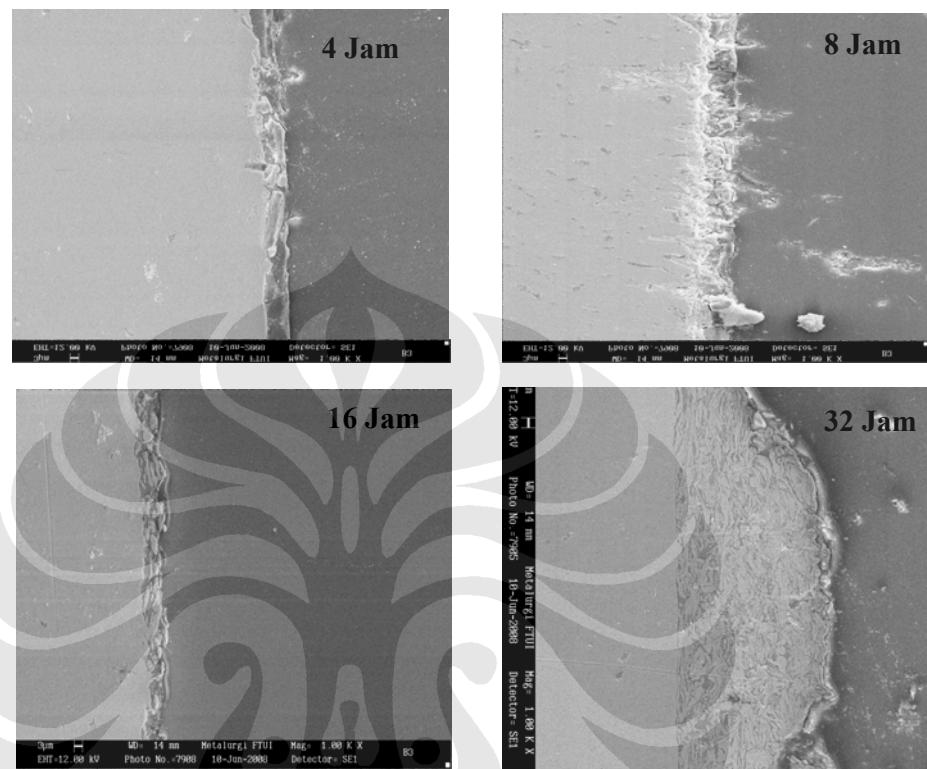
32 jam milling

LAMPIRAN B

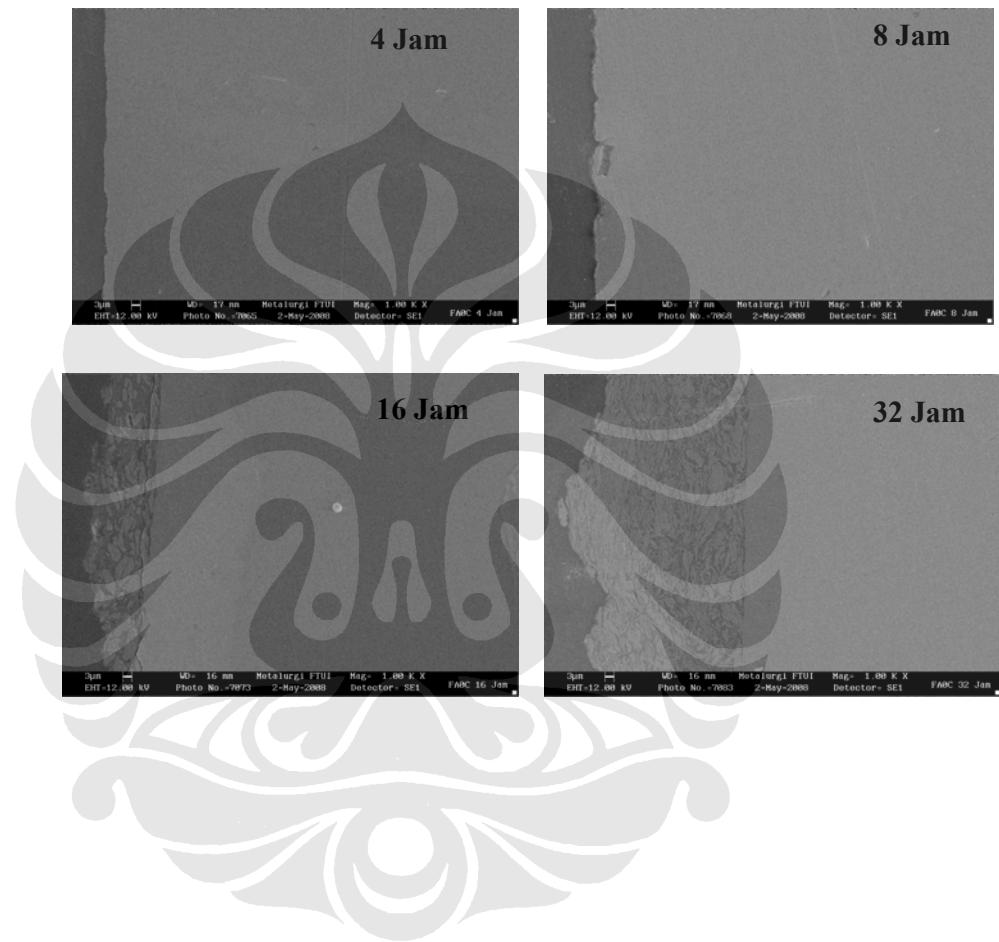
Data Hasil SEM Substrat dan Serbuk



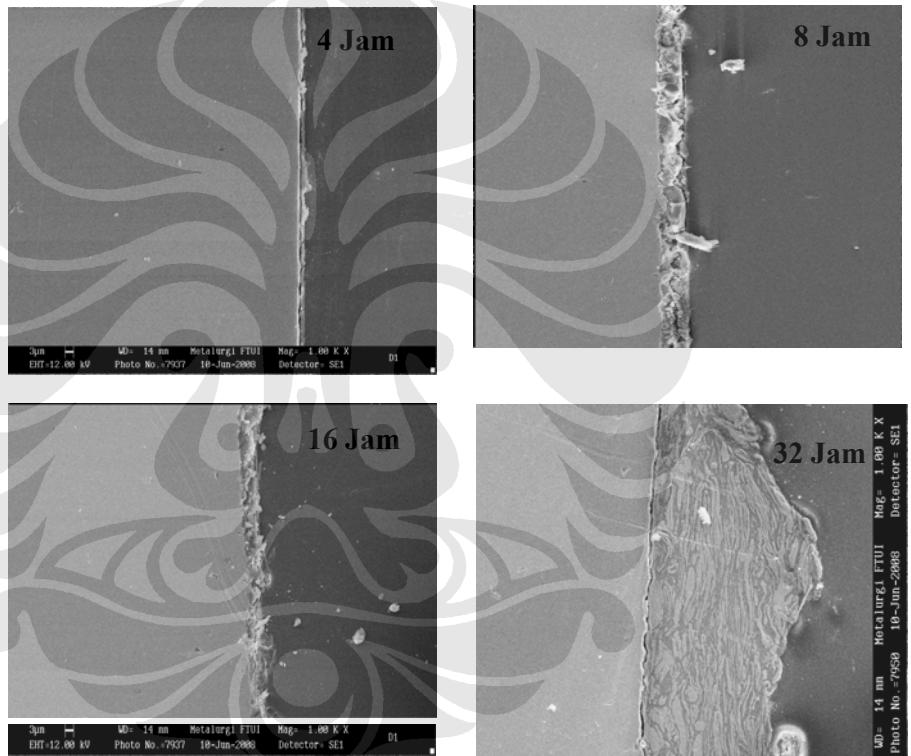
LAPISAN Fe-30%at.Al



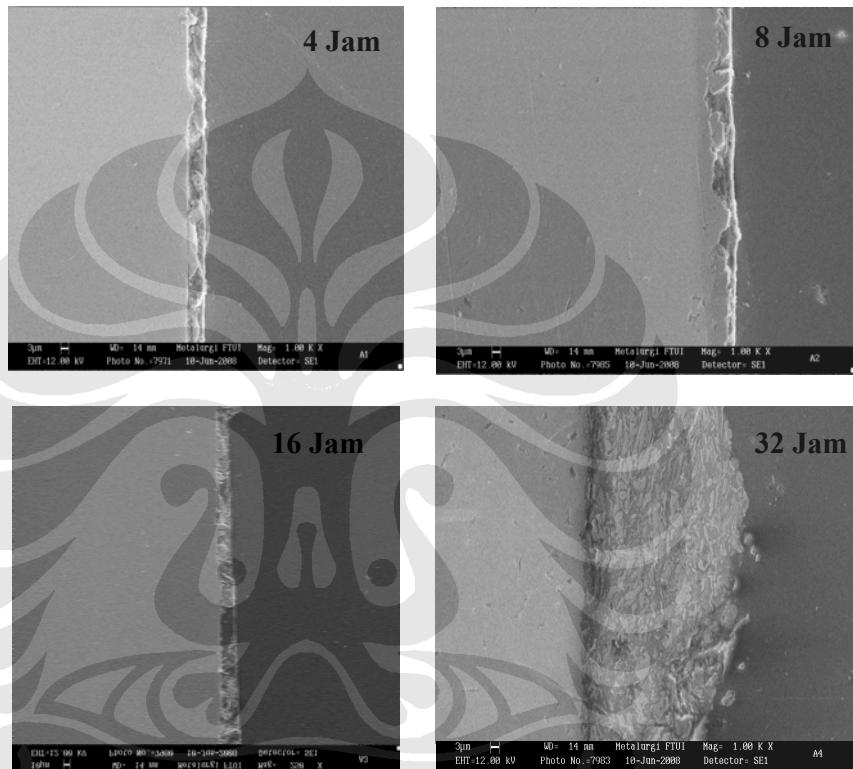
LAPISAN Fe-40%at.Al



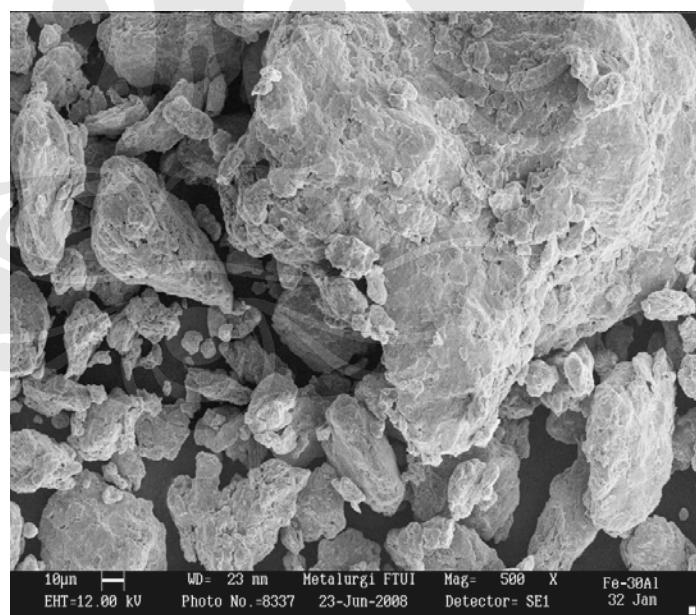
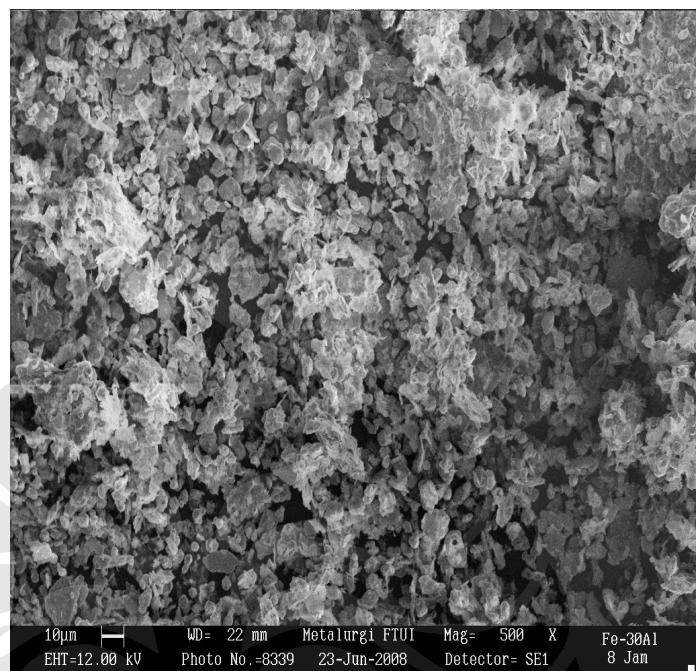
LAPISAN Fe-50%at.Al



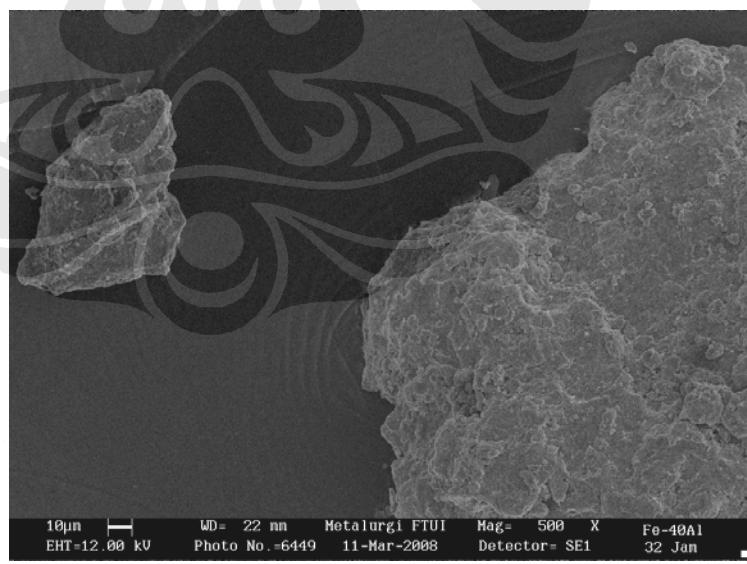
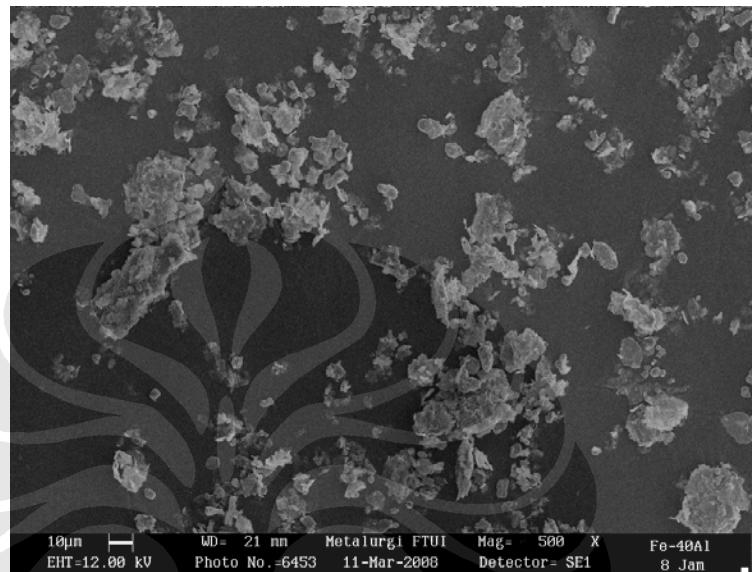
LAPISAN Fe-60%at.Al



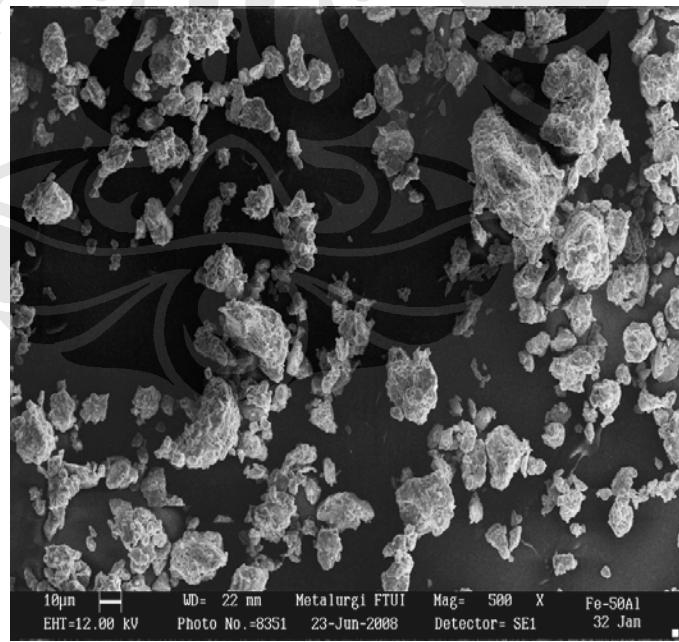
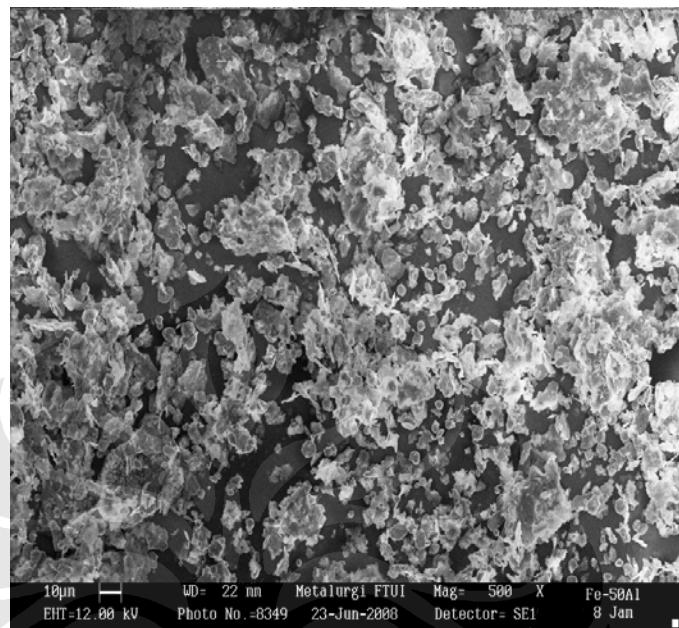
Serbuk Fe-30%atAl



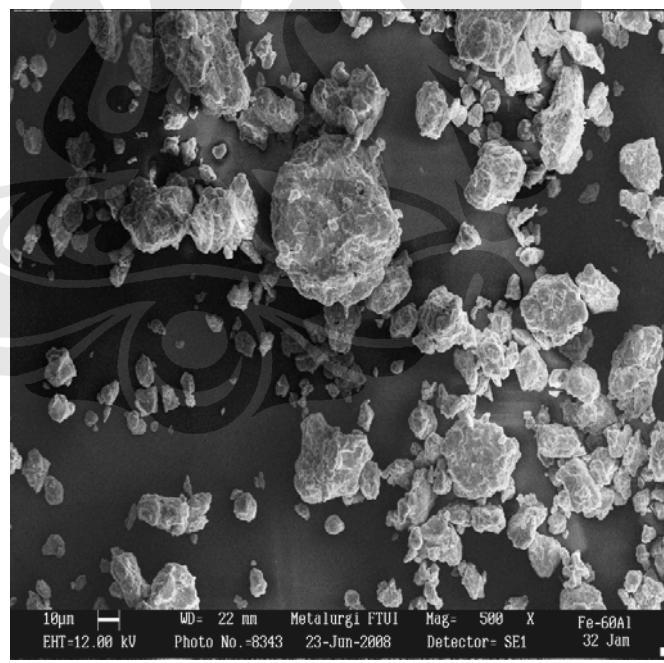
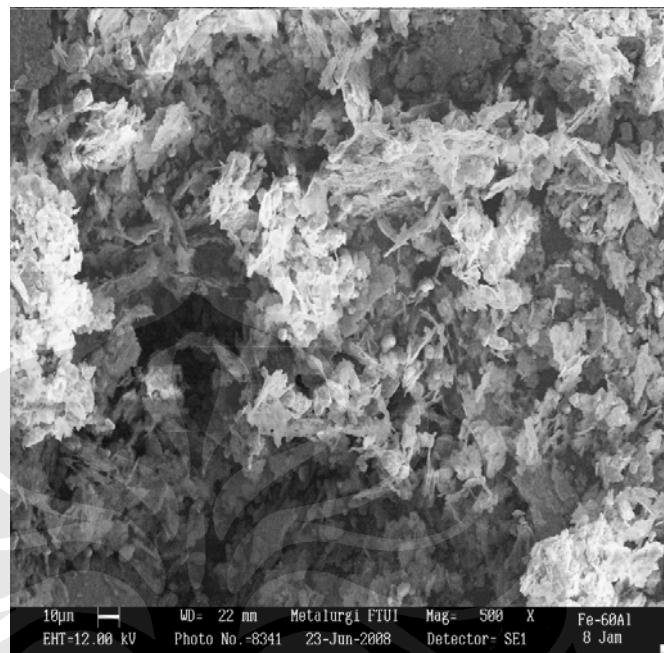
Serbuk Fe-40%atAl



Serbuk Fe-50%atAl



Serbuk Fe-60%atAl



LAMPIRAN C

Data Hasil Pengukuran Kekerasan Lapisan



Tabel Nilai kekerasan

Sampel	Peletakan jejak	d1 (μm)	d2 (μm)	D2 (μ2)	F (gr)	HV	HV rata2
Fe- 50%Al	Substrat	18.5	18.2	336.7225	10	55.06018	47.20605
		23.5	22.45	527.8506	10	35.12357	
		18.3	18.3	334.89	10	55.36146	
		23.5	22.45	527.8506	10	35.12357	
		18.3	18.3	334.89	10	55.36146	
	Antar muka						
		19.8	20.9	414.1225	10	44.76936	53.97914
		17.3	19.1	331.24	10	55.9715	
		19.8	16.4	327.61	10	56.59168	
		17.3	19.1	331.24	10	55.9715	
	Lapisan	19.8	16.4	327.61	10	56.59168	
		19.75	18.8	371.5256	10	49.90235	55.12441
		19.75	17.65	349.69	10	53.01839	
		16.8	15.8	265.69	10	69.78057	
Fe- 60%Al	Substrat	19.75	18.8	371.5256	10	49.90235	
		19.75	17.65	349.69	10	53.01839	
		17.5	16.5	289	10	64.15225	64.28906
		16	17.1	273.9025	10	67.68832	
	Antar muka	17	18	306.25	10	60.53878	
		17.5	16.5	289	10	64.15225	
		15.9	17.9	285.61	10	64.91369	
		19.1	18.1	345.96	10	53.59001	48.40076
	Lapisan	20	21.9	438.9025	10	42.24173	
		21.5	20.3	436.81	10	42.44408	
		18.8	16.8	316.84	10	58.51534	
		20.6	19.9	410.0625	10	45.21262	
	Lapisan	16	17.4	278.89	10	66.47782	68.1517
		15.5	16	248.0625	10	74.73923	
		16.8	17.9	301.0225	10	61.59008	
		16.7	15	251.2225	10	73.79912	
		17.5	16.5	289	10	64.15225	

LAMPIRAN D

Data Hasil Pengukuran Ketebalan Lapisan

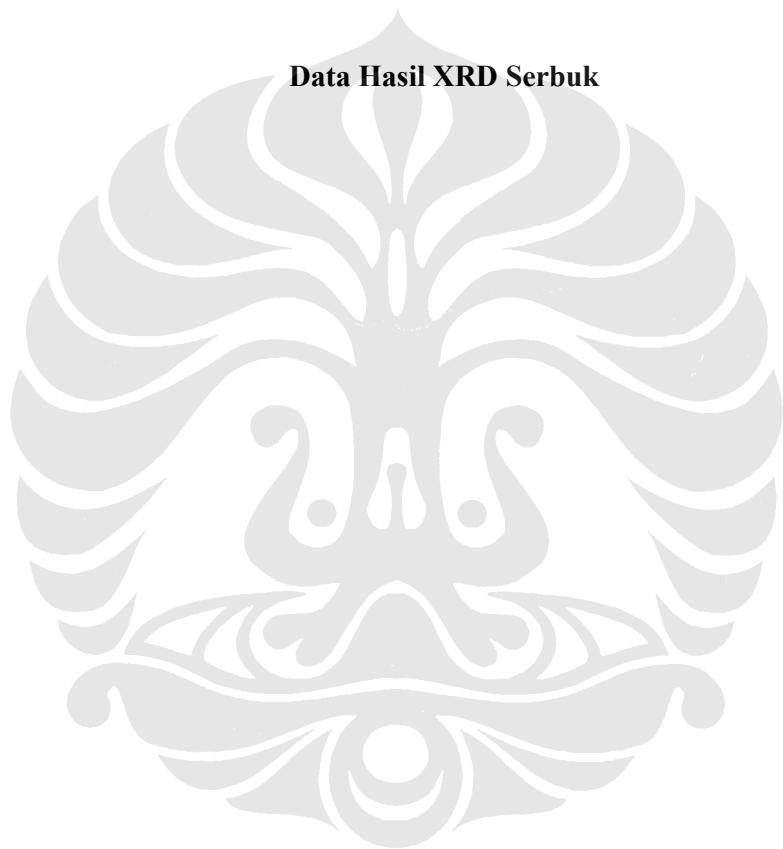
	tebal (μm)	tebal rata2 (μm)
4 jam	9.99	9.444
	9.99	
	9.99	
	9	
	8.25	
8 jam	13.32	11.608
	13.32	
	10.25	
	11.25	
	9.9	
16 jam	23.31	16.658
	19.98	
	19	
	10.5	
	10.5	
32 jam	26	26.57
	19.9	
	32.8	
	37.5	
	16.65	

	tebal (μm)	tebal rata2 (μm)
4 jam	0	0
	0	
	0	
	0	
	0	
8 jam	0	3.6
	0	
	0	
	0	
	9	
16 jam	9	17.025
	15	
	18	
	19.5	
	17.25	
32 jam	15.375	
	20	29.25
	22.5	
	43	
	18.75	
	42	

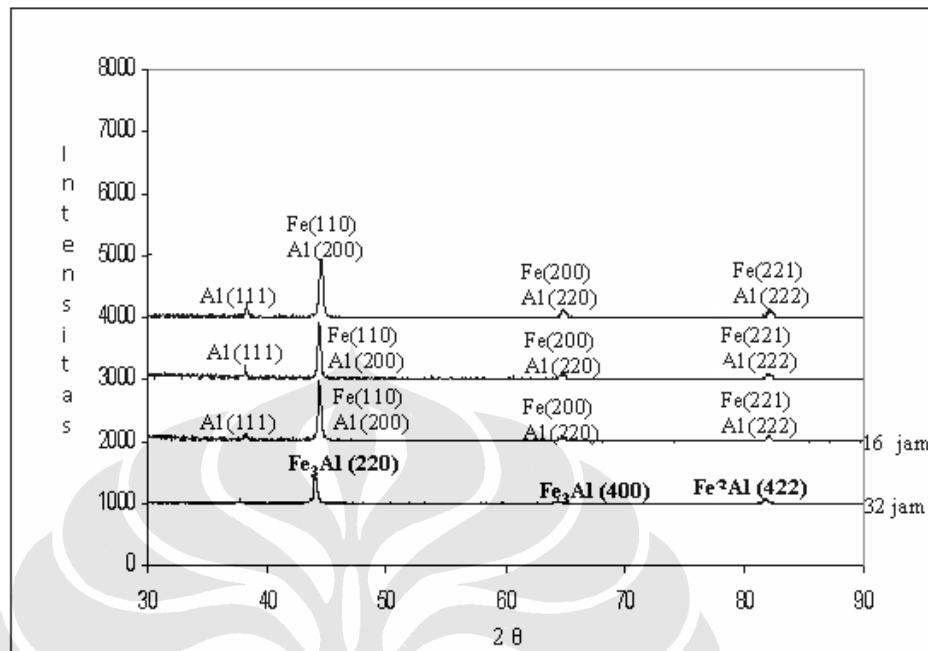
	tebal (μm)		tebal rata2 (μm)
		2.625	
Fe- 50at.%Al	4 jam	3.75	
		1.5	
		2.25	
		1.875	
		6	6.3
	8 jam	7.5	
		6.75	
		6	
		5.25	
		8.25	6.0375
	16 jam	5.625	
		6	
		4.6875	
		5.625	
		30	27.45
	32 jam	29.25	
		39	
		23.25	
		15.75	tebal rata2
			tebal (μm)
Fe- 60at.%Al	4 jam	7.5	8.25
		8.25	
		9	
		9	
		7.5	
	8 jam	10.5	
		9.75	
		9.75	
		7.5	
		7.5	
	16 jam	15	
		15	
		15.75	
		14.25	
		15	
	32 jam	25	
		27	
		24	
		27.75	
		25	

LAMPIRAN E

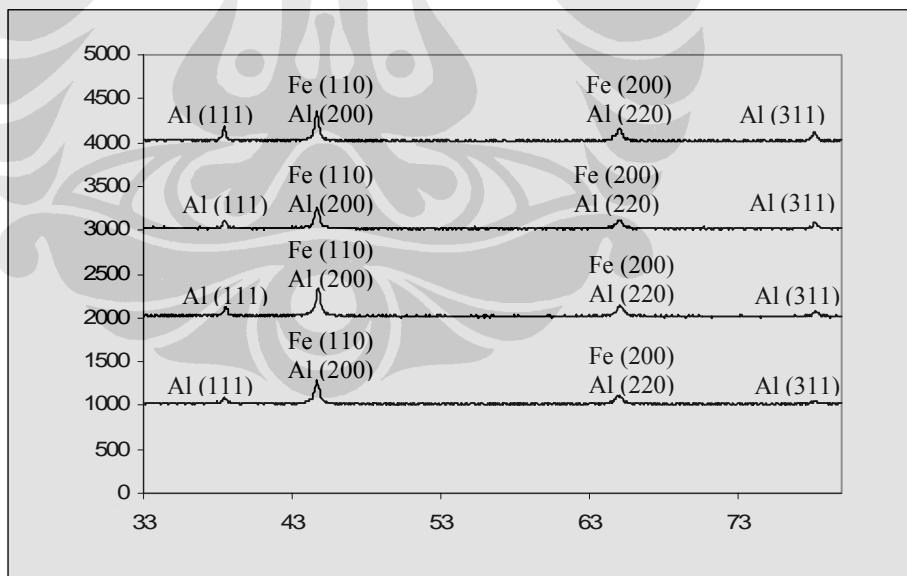
Data Hasil XRD Serbuk



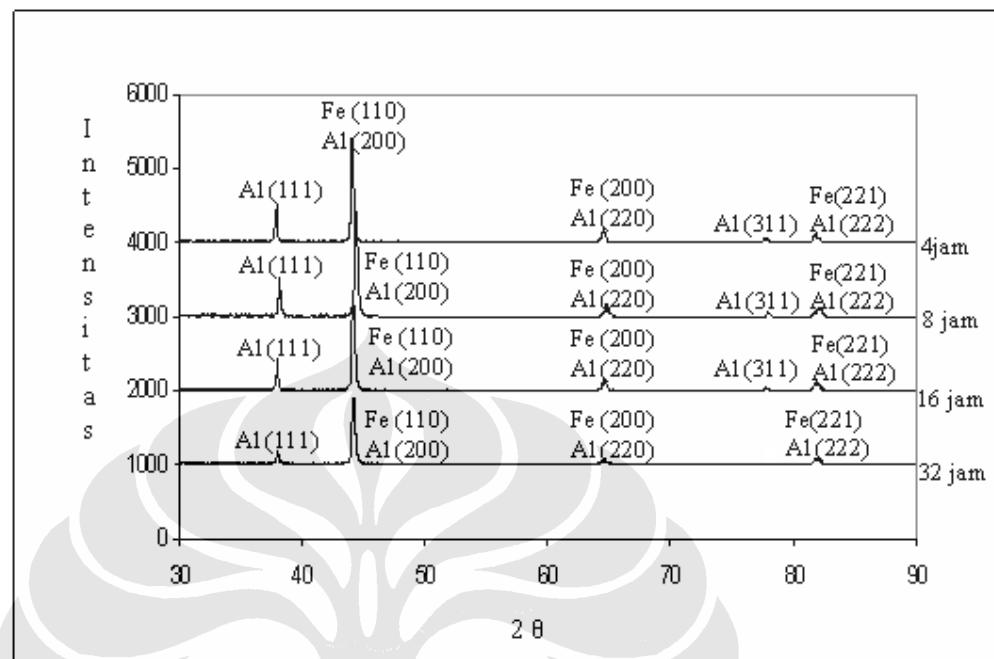
Serbuk Fe-30%atAl



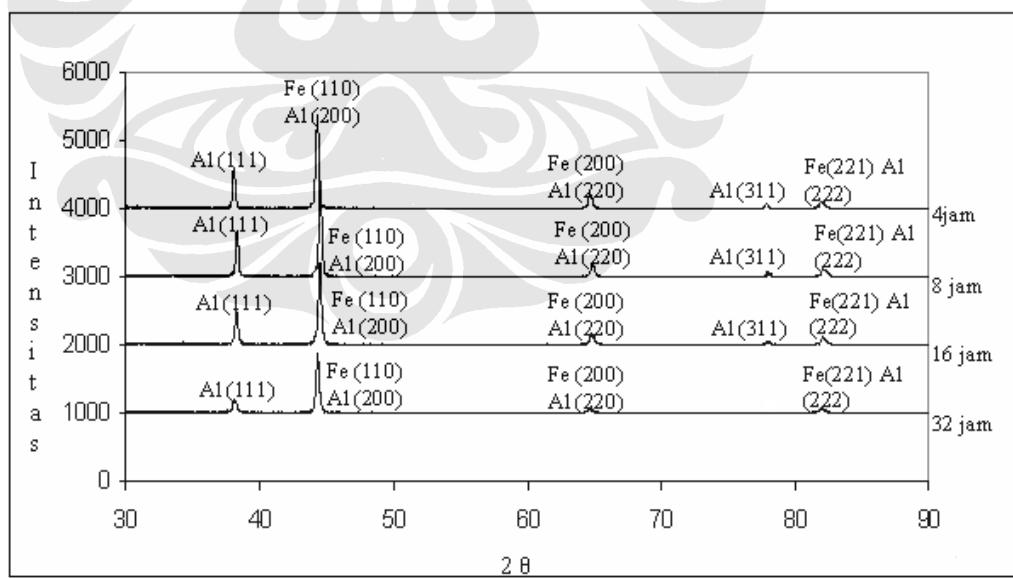
Serbuk Fe-40%atAl



Serbuk Fe-50%atAl



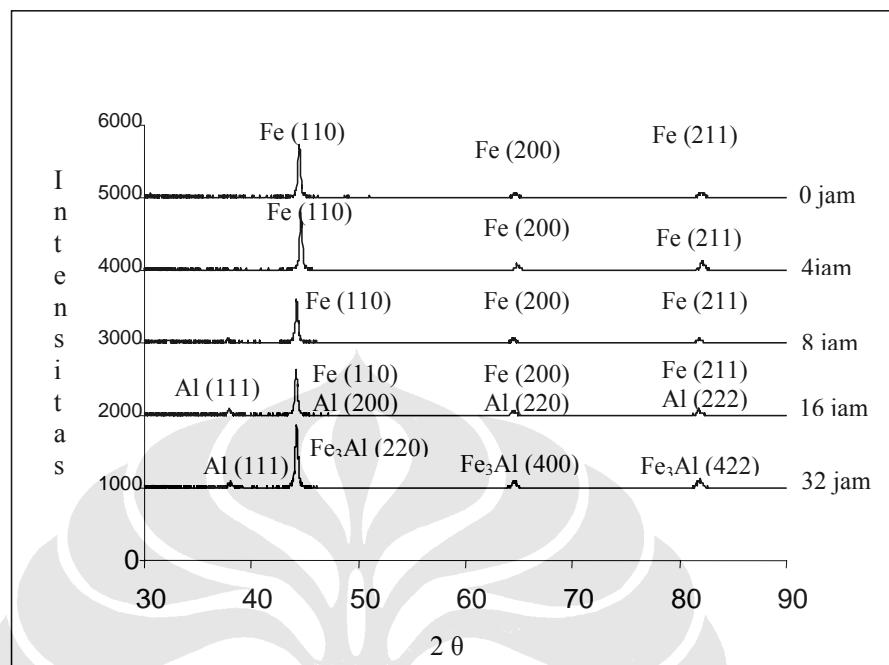
Serbuk Fe-60%atAl



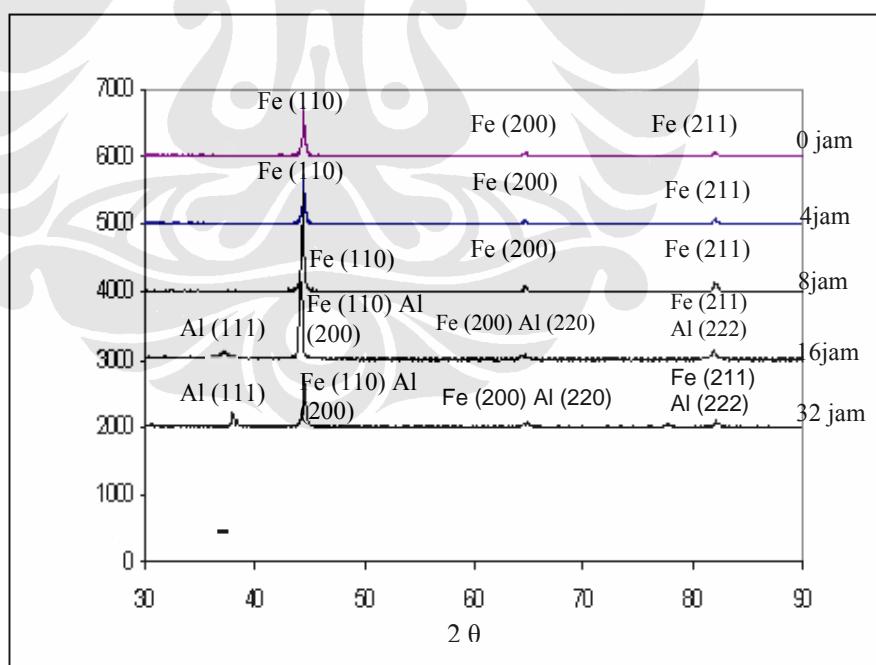
LAMPIRAN F



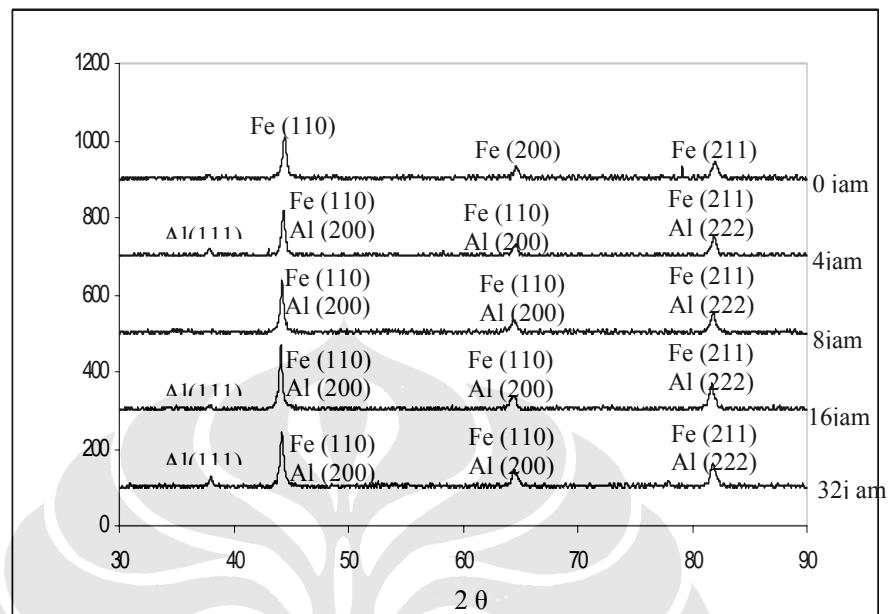
Substrat Fe-30%atAl



Substrat Fe-40%atAl



Substrat Fe-50%at.Al



Substrat Fe-60%at.Al

