

ภาคผนวก ก.
ผลการทดสอบแรงดึง

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
Gum	1	1	1.71	1.68	1.68	1.68	6.00	275.5	645.0	22.01	46.95
		2	1.76	1.77	1.77	1.77	6.00	291.1	625.2	23.96	51.39
		3	1.76	1.74	1.73	1.74	6.00	276.3	619.8	22.92	48.98
		4	1.75	1.77	1.77	1.77	6.00	313.7	623.0	25.06	55.69
		5	1.79	1.77	1.77	1.77	6.00	290.6	632.9	23.51	51.51
	2	1	1.78	1.79	1.80	1.79	6.00	351.6	645.0	26.22	58.63
		2	1.74	1.75	1.75	1.75	6.00	320.9	646.5	24.85	54.01
		3	1.72	1.74	1.74	1.74	6.00	311.2	617.1	25.37	56.84
		4	1.77	1.78	1.77	1.77	6.00	325.3	634.8	25.33	56.15
		5	1.75	1.77	1.78	1.77	6.00	280.4	601.8	25.21	55.92
AF 10	1	1	1.80	1.85	1.87	1.85	6.00	208.0	548.2	25.67	56.37
		2	1.86	1.92	1.94	1.92	6.00	234.7	567.5	26.29	56.96
		3	1.84	1.85	1.87	1.85	6.00	209.4	558.0	25.14	54.66
		4	1.82	1.84	1.82	1.82	6.00	205.9	550.2	25.10	54.63
		5	1.83	1.85	1.84	1.84	6.00	218.7	566.0	24.73	53.80
	2	1	1.83	1.86	1.86	1.86	6.00	193.2	536.6	26.27	57.08
		2	1.80	1.84	1.87	1.84	6.00	178.0	512.5	26.82	59.09
		3	1.80	1.81	1.81	1.81	6.00	205.3	549.0	25.57	55.97
		4	1.84	1.88	1.94	1.88	6.00	209.9	540.4	26.78	58.54
		5	1.83	1.89	1.92	1.89	6.00	216.1	549.0	27.27	59.43

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
AF 30	1	1	1.70	1.70	1.68	1.70	6.00	151.6	528.6	22.20	47.15
		2	1.67	1.72	1.74	1.72	6.00	135.3	499.1	22.58	48.36
		3	1.70	1.74	1.77	1.74	6.00	162.4	532.8	23.05	48.83
		4	1.68	1.70	1.70	1.70	6.00	158.9	534.1	21.82	46.46
		5	1.62	1.61	1.61	1.61	6.00	143.5	520.2	21.30	45.86
	2	1	1.59	1.59	1.60	1.59	6.00	139.8	533.6	19.68	42.02
		2	1.64	1.61	1.58	1.61	6.00	127.6	528.6	18.92	39.94
		3	1.64	1.62	1.63	1.63	6.00	149.6	546.4	19.84	42.45
		4	1.63	1.62	1.62	1.62	6.00	140.3	527.2	20.46	43.85
		5	1.66	1.68	1.67	1.67	6.00	140.2	532.2	20.29	43.15
AF 50	1	1	1.54	1.57	1.59	1.57	6.00	89.95	493.3	16.25	34.67
		2	1.58	1.56	1.55	1.56	6.00	96.36	509.9	16.07	33.96
		3	1.55	1.57	1.55	1.55	6.00	100.1	505.4	16.92	35.96
		4	1.54	1.55	1.54	1.54	6.00	96.51	499.9	16.78	35.86
		5	1.54	1.54	1.55	1.54	6.00	104.1	517.9	16.48	34.87
	2	1	1.61	1.60	1.58	1.60	6.00	107.1	515.9	17.20	36.22
		2	1.56	1.56	1.56	1.56	6.00	101.3	514.1	16.64	34.91
		3	1.57	1.55	1.55	1.55	6.00	99.72	501.3	17.19	36.41
		4	1.57	1.58	1.56	1.57	6.00	95.90	492.7	17.30	36.56
		5	1.55	1.54	1.54	1.54	6.00	91.17	474.5	18.23	38.69

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
AF 70	1	1	1.52	1.50	1.51	1.51	6.00	76.37	484.4	15.17	31.58
		2	1.53	1.56	1.54	1.54	6.00	79.35	481.7	15.26	32.32
		3	1.53	1.52	1.51	1.52	6.00	74.54	485.1	15.09	31.38
		4	1.52	1.54	1.52	1.52	6.00	79.96	495.5	15.18	31.60
		5	1.52	1.52	1.51	1.52	6.00	80.26	489.0	14.89	31.81
	2	1	1.55	1.54	1.53	1.54	6.00	77.13	481.6	15.18	32.31
		2	1.48	1.48	1.48	1.48	6.00	73.78	470.8	14.80	32.05
		3	1.52	1.51	1.50	1.51	6.00	72.40	471.5	15.26	32.12
		4	1.47	1.47	1.48	1.47	6.00	71.26	468.3	14.99	32.00
		5	1.48	1.49	1.48	1.48	6.00	76.29	472.2	14.78	32.61
AF-Si 10	1	1	1.52	1.52	1.51	1.52	6.00	188.0	525.5	26.21	59.13
		2	1.51	1.51	1.50	1.51	6.00	174.3	505.4	26.06	59.28
		3	1.55	1.54	1.53	1.54	6.00	199.0	533.3	26.52	59.20
		4	1.54	1.55	1.57	1.55	6.00	183.3	514.8	27.29	60.90
		5	1.52	1.53	1.56	1.53	6.00	167.3	495.3	26.60	59.82
	2	1	1.51	1.50	1.48	1.50	6.00	187.2	522.7	25.54	57.78
		2	1.50	1.49	1.49	1.49	6.00	171.6	507.9	25.59	56.98
		3	1.53	1.52	1.51	1.52	6.00	194.9	533.2	26.09	58.30
		4	1.55	1.54	1.53	1.54	6.00	190.3	526.2	26.70	59.53
		5	1.52	1.52	1.51	1.52	6.00	183.1	521.8	25.94	57.73

កម្រិត	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
AF-Si 30	1	1	1.49	1.48	1.46	1.48	6.00	143.5	487.7	24.92	55.01
		2	1.52	1.51	1.50	1.51	6.00	138.5	478.1	25.41	56.00
		3	1.55	1.52	1.51	1.52	6.00	154.4	495.1	25.99	57.02
		4	1.56	1.54	1.52	1.54	6.00	125.0	456.3	26.32	57.59
		5	1.52	1.51	1.50	1.51	6.00	149.8	496.8	25.31	55.25
	2	1	1.45	1.47	1.48	1.47	6.00	140.4	491.0	24.11	53.11
		2	1.47	1.48	1.51	1.48	6.00	127.8	470.5	24.53	53.79
		3	1.49	1.50	1.53	1.50	6.00	149.7	497.3	24.95	54.48
		4	1.55	1.53	1.51	1.53	6.00	146.6	491.4	25.37	55.16
		5	1.55	1.53	1.52	1.53	6.00	143.3	488.5	25.37	55.08
AF-Si 50	1	1	1.55	1.53	1.52	1.53	6.00	123.3	475.5	25.60	54.39
		2	1.52	1.51	1.50	1.51	6.00	117.4	467.3	25.18	53.33
		3	1.49	1.49	1.49	1.49	6.00	116.5	466.8	25.02	53.40
		4	1.47	1.47	1.47	1.47	6.00	99.4	442.3	24.03	51.19
		5	1.58	1.56	1.55	1.56	6.00	103.1	438.1	25.98	55.39
	2	1	1.55	1.53	1.51	1.53	6.00	114.7	457.1	25.22	54.16
		2	1.52	1.51	1.50	1.51	6.00	110.9	458.7	24.62	52.50
		3	1.48	1.49	1.47	1.48	6.00	119.1	476.4	23.95	51.11
		4	1.52	1.50	1.49	1.50	6.00	110.6	461.5	24.34	51.89
		5	1.54	1.55	1.57	1.55	6.00	122.5	474.6	25.23	53.79

កម្រិត	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
AF-Si 70	1	1	1.54	1.54	1.55	1.54	6.00	101.7	445.2	24.14	51.44
		2	1.55	1.53	1.50	1.53	6.00	92.3	443.3	23.68	50.38
		3	1.53	1.52	1.51	1.52	6.00	85.7	428.7	23.91	50.85
		4	1.53	1.53	1.53	1.53	6.00	93.5	450.5	23.47	51.61
		5	1.50	1.51	1.50	1.50	6.00	92.1	446.6	24.04	50.42
	2	1	1.52	1.52	1.51	1.52	6.00	92.7	451.2	23.25	51.02
		2	1.54	1.53	1.56	1.54	6.00	98.9	456.8	23.48	50.59
		3	1.50	1.53	1.53	1.53	6.00	85.5	436.5	23.11	49.65
		4	1.50	1.52	1.54	1.52	6.00	102.6	460.8	23.71	49.24
		5	1.48	1.50	1.51	1.50	6.00	94.3	449.9	23.34	49.78
SF 10	1	1	1.54	1.54	1.55	1.54	6.00	247.3	580.5	26.06	58.45
		2	1.52	1.52	1.53	1.52	6.00	220.8	545.0	25.82	58.38
		3	1.49	1.51	1.50	1.50	6.00	237.3	558.1	25.25	57.15
		4	1.49	1.48	1.46	1.48	6.00	241.9	568.5	24.99	56.69
		5	1.55	1.53	1.50	1.53	6.00	240.8	560.0	26.17	59.15
	2	1	1.54	1.52	1.51	1.52	6.00	208.8	535.4	25.33	57.44
		2	1.47	1.48	1.49	1.48	6.00	240.3	567.7	24.22	55.41
		3	1.53	1.52	1.51	1.52	6.00	204.3	532.5	24.54	56.16
		4	1.50	1.51	1.53	1.51	6.00	203.1	527.6	25.98	59.20
		5	1.52	1.51	1.53	1.52	6.00	226.5	552.3	26.06	58.82

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
SF 30	1	1	1.56	1.56	1.57	1.56	6.00	209.1	541.5	26.12	58.65
		2	1.50	1.50	1.52	1.50	6.00	229.5	566.9	26.28	58.60
		3	1.52	1.52	1.52	1.52	6.00	185.3	523.4	26.29	58.68
		4	1.48	1.48	1.49	1.48	6.00	212.0	557.1	26.68	59.22
		5	1.48	1.48	1.49	1.48	6.00	208.5	552.8	26.10	58.23
	2	1	1.48	1.48	1.49	1.48	6.00	218.2	587.9	26.48	58.69
		2	1.49	1.50	1.51	1.50	6.00	214.2	586.3	26.19	58.85
		3	1.49	1.52	1.51	1.51	6.00	212.8	548.5	26.63	58.37
		4	1.53	1.55	1.55	1.55	6.00	216.7	549.3	26.65	59.39
		5	1.51	1.52	1.53	1.52	6.00	180.1	517.7	26.77	58.47
SF 50	1	1	1.56	1.56	1.56	1.56	6.00	199.0	544.8	28.53	63.54
		2	1.53	1.53	1.53	1.53	6.00	196.5	553.1	28.46	62.50
		3	1.54	1.53	1.53	1.53	6.00	188.4	540.5	28.69	62.95
		4	1.54	1.55	1.55	1.55	6.00	205.0	553.0	28.35	63.72
		5	1.49	1.49	1.49	1.49	6.00	208.7	571.0	27.97	62.50
	2	1	1.50	1.51	1.50	1.50	6.00	194.5	549.2	27.72	61.00
		2	1.53	1.53	1.52	1.53	6.00	197.1	554.1	27.85	60.96
		3	1.55	1.55	1.54	1.55	6.00	209.9	561.9	28.85	62.71
		4	1.53	1.52	1.51	1.52	6.00	203.5	554.3	28.35	62.10
		5	1.53	1.51	1.50	1.51	6.00	207.1	562.0	28.51	62.14

ក្រុម	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
SF 70	1	1	1.53	1.51	1.52	1.52	6.00	188.4	555.2	29.16	64.37
		2	1.48	1.52	1.50	1.50	6.00	196.2	552.9	29.37	63.52
		3	1.54	1.52	1.51	1.52	6.00	179.6	543.7	29.63	64.71
		4	1.53	1.51	1.52	1.52	6.00	198.3	559.3	29.12	62.58
		5	1.50	1.51	1.49	1.50	6.00	182.2	549.1	28.67	63.68
	2	1	1.52	1.50	1.49	1.50	6.00	178.6	547.2	29.04	63.86
		2	1.52	1.52	1.53	1.52	6.00	170.4	539.5	29.33	64.04
		3	1.50	1.48	1.50	1.50	6.00	182.7	550.1	29.58	64.46
		4	1.50	1.51	1.52	1.51	6.00	189.3	560.8	29.41	64.61
		5	1.52	1.52	1.53	1.52	6.00	184.7	544.7	29.84	64.97
SF-Si 10	1	1	1.52	1.53	1.55	1.53	6.00	231.4	568.1	27.59	61.27
		2	1.52	1.52	1.51	1.52	6.00	221.9	556.0	27.31	61.21
		3	1.53	1.53	1.54	1.53	6.00	199.7	525.3	27.60	62.50
		4	1.53	1.52	1.53	1.53	6.00	244.6	573.9	27.54	61.73
		5	1.49	1.52	1.49	1.49	6.00	214.5	546.7	26.52	59.74
	2	1	1.55	1.54	1.53	1.53	6.00	203.6	535.9	27.66	61.57
		2	1.54	1.53	1.51	1.53	6.00	231.6	569.5	27.20	60.04
		3	1.50	1.51	1.51	1.51	6.00	220.5	554.6	27.08	60.22
		4	1.54	1.53	1.56	1.54	6.00	250.0	580.2	28.08	62.71
		5	1.55	1.54	1.57	1.55	6.00	234.9	555.5	28.73	64.62

កម្រិត	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
SF-Si 30	1	1	1.55	1.56	1.56	1.56	6.00	218.2	548.7	30.31	67.32
		2	1.56	1.57	1.57	1.57	6.00	237.3	563.5	30.76	68.76
		3	1.53	1.54	1.54	1.54	6.00	227.4	556.7	29.14	66.02
		4	1.53	1.54	1.54	1.54	6.00	217.4	542.9	30.02	67.44
		5	1.54	1.54	1.54	1.54	6.00	241.5	561.9	30.09	67.83
	2	1	1.56	1.57	1.59	1.57	6.00	230.3	547.7	31.05	69.67
		2	1.54	1.54	1.55	1.54	6.00	220.9	540.7	30.52	68.51
		3	1.50	1.53	1.53	1.53	6.00	202.6	526.9	29.80	66.83
		4	1.52	1.53	1.54	1.53	6.00	185.3	504.7	30.36	68.06
		5	1.52	1.52	1.53	1.52	6.00	197.4	523.7	29.72	66.53
SF-Si 50	1	1	1.55	1.55	1.55	1.55	6.00	210.3	521.2	33.01	74.48
		2	1.53	1.56	1.57	1.56	6.00	219.6	527.9	33.73	76.29
		3	1.50	1.52	1.54	1.52	6.00	198.1	511.0	32.68	73.57
		4	1.47	1.47	1.49	1.47	6.00	186.6	499.0	31.66	72.10
		5	1.48	1.50	1.51	1.50	6.00	176.7	487.7	32.16	72.56
	2	1	1.55	1.56	1.57	1.56	6.00	214.5	535.5	31.97	71.77
		2	1.53	1.53	1.54	1.53	6.00	197.1	521.5	31.13	69.09
		3	1.51	1.53	1.56	1.53	6.00	199.6	519.5	31.97	72.49
		4	1.46	1.48	1.49	1.48	6.00	171.7	493.9	29.86	67.45
		5	1.50	1.53	1.53	1.53	6.00	178.9	503.1	30.25	68.20

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
SF-Si 70	1	1	1.54	1.52	1.51	1.52	6.00	169.3	493.0	33.76	75.53
		2	1.49	1.49	1.47	1.49	6.00	150.5	471.7	32.47	73.11
		3	1.52	1.50	1.49	1.50	6.00	169.1	505.1	32.54	72.94
		4	1.53	1.52	1.54	1.53	6.00	166.3	479.5	34.91	78.83
		5	1.51	1.51	1.52	1.51	6.00	171.5	492.5	34.20	76.70
	2	1	1.52	1.53	1.54	1.53	6.00	166.4	479.5	35.29	79.14
		2	1.51	1.51	1.52	1.51	6.00	155.7	466.3	34.60	77.67
		3	1.48	1.50	1.49	1.49	6.00	161.7	481.9	33.99	76.60
		4	1.52	1.53	1.54	1.53	6.00	163.1	475.7	35.29	78.91
		5	1.54	1.53	1.53	1.53	6.00	172.4	488.1	35.57	79.59
MF 10	1	1	1.55	1.55	1.55	1.55	6.00	174.9	572.7	18.98	40.84
		2	1.55	1.54	1.54	1.54	6.00	160.4	566.8	18.74	40.19
		3	1.53	1.55	1.52	1.53	6.00	164.6	575.4	18.23	38.65
		4	1.54	1.53	1.53	1.53	6.00	179.4	592.0	17.62	37.92
		5	1.53	1.52	1.53	1.53	6.00	166.7	580.0	18.23	38.75
	2	1	1.51	1.51	1.51	1.51	6.00	176.8	588.0	17.70	38.46
		2	1.53	1.51	1.52	1.52	6.00	177.1	576.8	18.62	40.51
		3	1.53	1.53	1.52	1.53	6.00	160.8	556.6	18.92	41.12
		4	1.48	1.52	1.50	1.50	6.00	155.9	566.1	16.94	37.77
		5	1.49	1.47	1.51	1.49	6.00	161.5	560.6	18.23	39.98

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
MF 30	1	1	1.50	1.52	1.49	1.50	6.00	140.5	564.0	17.24	36.42
		2	1.49	1.49	1.51	1.49	6.00	132.2	547.2	17.85	37.84
		3	1.48	1.49	1.52	1.49	6.00	135.0	555.7	17.40	37.23
		4	1.54	1.52	1.51	1.52	6.00	150.1	557.9	18.62	40.13
		5	1.49	1.48	1.48	1.48	6.00	140.6	567.1	16.71	36.11
	2	1	1.53	1.51	1.52	1.52	6.00	147.6	558.0	18.31	39.36
		2	1.50	1.51	1.49	1.50	6.00	133.8	552.4	17.61	37.14
		3	1.47	1.47	1.48	1.47	6.00	138.9	561.5	17.01	36.16
		4	1.43	1.44	1.44	1.44	6.00	125.4	563.0	15.91	33.35
		5	1.45	1.43	1.44	1.44	6.00	133.8	561.4	16.71	35.17
MF 50	1	1	1.49	1.49	1.46	1.49	6.00	108.9	535.9	15.79	33.48
		2	1.49	1.50	1.46	1.49	6.00	109.2	547.2	15.26	32.12
		3	1.48	1.49	1.49	1.49	6.00	109.3	547.9	15.00	31.78
		4	1.53	1.51	1.52	1.52	6.00	122.3	558.6	15.98	33.97
		5	1.51	1.49	1.48	1.49	6.00	119.9	551.5	16.02	33.95
	2	1	1.47	1.50	1.49	1.49	6.00	110.7	541.3	15.95	33.42
		2	1.46	1.45	1.47	1.46	6.00	108.6	545.2	15.56	32.73
		3	1.52	1.50	1.49	1.50	6.00	115.6	560.2	15.71	32.43
		4	1.52	1.52	1.50	1.52	6.00	106.7	536.1	16.05	33.66
		5	1.48	1.48	1.50	1.48	6.00	104.9	551.3	15.20	31.42

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
MF 70	1	1	1.47	1.47	1.49	1.47	6.00	116.9	543.2	15.95	34.71
		2	1.49	1.48	1.50	1.49	6.00	121.0	554.6	15.64	34.05
		3	1.52	1.52	1.53	1.52	6.00	118.3	540.9	16.29	35.36
		4	1.50	1.51	1.51	1.51	6.00	124.4	553.3	16.10	34.75
		5	1.50	1.48	1.50	1.50	6.00	122.4	546.2	16.02	35.02
	2	1	1.47	1.47	1.47	1.47	6.00	92.85	537.0	13.50	29.02
		2	1.50	1.51	1.52	1.51	6.00	95.60	541.4	14.37	30.35
		3	1.54	1.54	1.54	1.54	6.00	132.1	567.7	16.24	34.77
		4	1.52	1.52	1.52	1.52	6.00	112.3	541.4	15.64	33.80
		5	1.52	1.52	1.53	1.52	6.00	120.0	550.8	16.04	34.38
MF-Si 10	1	1	1.51	1.52	1.53	1.52	6.00	232.2	561.9	26.06	58.57
		2	1.53	1.54	1.56	1.54	6.00	252.8	584.4	26.40	58.36
		3	1.50	1.51	1.52	1.51	6.00	232.0	568.9	25.72	57.37
		4	1.57	1.54	1.54	1.54	6.00	234.5	564.6	26.07	58.82
		5	1.52	1.53	1.55	1.53	6.00	250.5	591.1	25.46	56.38
	2	1	1.54	1.52	1.51	1.52	6.00	235.1	567.8	25.69	57.17
		2	1.51	1.49	1.47	1.49	6.00	224.5	565.3	24.61	54.94
		3	1.54	1.53	1.52	1.53	6.00	238.6	575.5	25.96	57.30
		4	1.50	1.52	1.54	1.52	6.00	223.7	561.8	25.61	56.35
		5	1.49	1.48	1.48	1.48	6.00	228.4	571.6	24.77	54.78

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
MF-Si 30	1	1	1.53	1.52	1.54	1.53	6.00	199.8	537.9	26.49	58.68
		2	1.51	1.51	1.53	1.51	6.00	191.5	537.5	26.29	57.83
		3	1.55	1.56	1.57	1.56	6.00	196.7	533.9	26.89	59.33
		4	1.50	1.50	1.51	1.50	6.00	182.3	527.0	25.58	56.55
		5	1.52	1.51	1.53	1.52	6.00	192.7	534.2	26.21	57.98
	2	1	1.57	1.57	1.57	1.57	6.00	199.4	543.8	26.78	58.52
		2	1.53	1.53	1.52	1.53	6.00	192.3	538.6	25.76	56.38
		3	1.53	1.54	1.54	1.54	6.00	180.5	525.8	26.06	56.92
		4	1.53	1.53	1.53	1.53	6.00	198.5	545.2	25.79	56.70
		5	1.57	1.57	1.56	1.57	6.00	199.6	540.0	26.52	58.28
MF-Si 50	1	1	1.47	1.49	1.51	1.49	6.00	155.9	517.2	25.08	54.42
		2	1.49	1.51	1.54	1.51	6.00	154.6	507.9	25.63	55.93
		3	1.50	1.50	1.52	1.50	6.00	155.9	515.6	24.84	54.41
		4	1.51	1.51	1.54	1.51	6.00	158.5	517.6	25.52	54.86
		5	1.53	1.52	1.51	1.52	6.00	168.4	526.4	25.37	55.16
	2	1	1.55	1.53	1.54	1.54	6.00	158.5	514.5	25.48	55.32
		2	1.57	1.55	1.55	1.55	6.00	169.0	529.0	25.53	55.47
		3	1.57	1.57	1.57	1.57	6.00	174.6	525.6	26.87	57.75
		4	1.55	1.56	1.55	1.55	6.00	164.6	521.2	26.20	56.17
		5	1.56	1.54	1.55	1.55	6.00	163.7	535.8	25.02	53.31

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
MF-Si 70	1	1	1.53	1.51	1.50	1.51	6.00	117.5	481.9	24.24	51.36
		2	1.54	1.52	1.52	1.52	6.00	135.2	509.9	24.78	52.04
		3	1.54	1.52	1.52	1.52	6.00	128.4	496.1	24.64	51.96
		4	1.54	1.52	1.51	1.52	6.00	126.9	496.8	24.64	52.11
		5	1.54	1.53	1.52	1.53	6.00	125.0	490.9	24.80	52.27
	2	1	1.53	1.51	1.50	1.51	6.00	133.8	504.6	24.26	51.88
		2	1.54	1.51	1.50	1.51	6.00	132.2	499.6	24.34	52.19
		3	1.53	1.51	1.50	1.51	6.00	131.1	499.4	24.24	51.89
		4	1.53	1.53	1.52	1.53	6.00	133.2	502.5	24.23	51.42
		5	1.54	1.54	1.53	1.54	6.00	123.1	486.0	24.46	51.96
LF 10	1	1	1.51	1.52	1.53	1.52	6.00	171.3	567.2	19.23	41.84
		2	1.50	1.51	1.53	1.51	6.00	162.2	552.4	18.86	41.35
		3	1.51	1.53	1.54	1.53	6.00	167.7	556.1	19.38	42.41
		4	1.50	1.52	1.53	1.52	6.00	170.1	563.3	19.07	42.13
		5	1.51	1.52	1.53	1.52	6.00	175.8	570.5	19.74	42.77
	2	1	1.49	1.50	1.52	1.50	6.00	150.2	542.6	18.78	40.74
		2	1.50	1.52	1.53	1.52	6.00	159.5	554.3	19.25	41.53
		3	1.50	1.51	1.53	1.51	6.00	156.9	552.4	19.03	41.06
		4	1.52	1.53	1.54	1.53	6.00	170.4	568.6	19.97	42.48
		5	1.51	1.53	1.55	1.53	6.00	164.5	562.7	19.54	41.94

අගය	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
LF 30	1	1	1.49	1.50	1.52	1.50	6.00	134.4	541.5	17.71	36.37
		2	1.50	1.52	1.53	1.52	6.00	132.1	539.1	17.94	36.46
		3	1.51	1.52	1.53	1.52	6.00	135.7	544.4	18.26	36.98
		4	1.50	1.50	1.51	1.50	6.00	124.6	528.3	17.54	36.34
		5	1.49	1.51	1.50	1.50	6.00	137.9	549.7	18.77	37.48
	2	1	1.50	1.52	1.54	1.52	6.00	132.4	542.6	18.56	37.25
		2	1.50	1.50	1.51	1.50	6.00	121.8	525.4	17.32	36.44
		3	1.53	1.53	1.53	1.53	6.00	129.2	538.8	18.18	36.98
		4	1.53	1.52	1.51	1.52	6.00	126.8	533.4	17.75	35.92
		5	1.52	1.50	1.51	1.51	6.00	124.3	530.7	17.63	36.58
LF 50	1	1	1.52	1.51	1.50	1.51	6.00	98.4	526.9	16.65	34.72
		2	1.52	1.53	1.56	1.53	6.00	93.7	513.7	16.11	35.61
		3	1.52	1.52	1.51	1.52	6.00	102.4	532.5	16.94	35.27
		4	1.49	1.50	1.53	1.5	6.00	100.2	529.7	16.83	36.03
		5	1.55	1.53	1.52	1.53	6.00	95.5	518.4	16.34	35.11
	2	1	1.52	1.50	1.49	1.5	6.00	102.7	506.3	16.03	35.42
		2	1.52	1.52	1.53	1.52	6.00	97.1	500.2	15.74	36.53
		3	1.50	1.51	1.53	1.51	6.00	105.8	515.4	16.34	35.77
		4	1.50	1.50	1.52	1.5	6.00	112.3	523.6	16.98	34.98
		5	1.52	1.52	1.52	1.52	6.00	106.1	513.1	16.38	35.47

วัสดุ	Batch	specimen No.	thickness (mm)				width (mm)	load @ break (N)	extention @ break (mm)	load @ 300% elongation (N)	load @ 500% elongation (N)
			1	2	3	median					
LF 70	1	1	1.53	1.54	1.56	1.54	6.00	86.0	482.7	16.19	34.86
		2	1.52	1.53	1.55	1.53	6.00	96.7	492.3	15.21	34.63
		3	1.50	1.52	1.54	1.52	6.00	89.9	488.1	16.38	34.15
		4	1.51	1.51	1.53	1.51	6.00	99.3	511.4	16.06	33.54
		5	1.52	1.51	1.53	1.52	6.00	93.8	495.5	16.35	34.12
	2	1	1.49	1.51	1.54	1.51	6.00	94.2	493.6	15.77	33.96
		2	1.53	1.52	1.51	1.52	6.00	84.3	486.5	15.61	34.30
		3	1.55	1.53	1.54	1.54	6.00	88.7	487.3	16.19	33.62
		4	1.54	1.52	1.52	1.52	6.00	80.4	476.4	14.88	33.97
		5	1.53	1.53	1.52	1.53	6.00	97.6	509.7	15.53	33.36
Carbon black	1	1	1.51	1.52	1.53	1.52	6.00	296.4	381.4	64.92	142.4
		2	1.53	1.52	1.51	1.52	6.00	281.6	401.1	65.07	143.6
		3	1.50	1.53	1.53	1.53	6.00	308.7	393.7	65.14	143.1
		4	1.52	1.51	1.50	1.51	6.00	288.3	387.5	65.78	141.4
		5	1.52	1.52	1.51	1.52	6.00	291.2	389.2	65.48	142.8
	2	1	1.53	1.52	1.51	1.52	6.00	287.1	390.8	66.11	139.7
		2	1.53	1.53	1.53	1.53	6.00	304.5	403.6	65.64	140.5
		3	1.52	1.51	1.53	1.52	6.00	294.8	388.2	66.95	140.8
		4	1.52	1.52	1.51	1.52	6.00	282.9	394.3	66.78	140.4
		5	1.52	1.51	1.50	1.51	6.00	291.6	382.5	66.27	141.5

ภาคผนวก ข.

ผลการทดสอบความต้านทานต่อการฉีกขาด

குதிர	Batch	Specimen No.	thickness (mm)				force (N)	tear resistance (kN/m)	tear resistance (kN/m)
			1	2	3	median			
Gum	1	1	1.74	1.75	1.74	1.74	62.94	36.17	36.17
		2	1.72	1.73	1.72	1.72	61.19	35.58	
		3	1.75	1.76	1.78	1.76	65.46	37.19	
	2	1	1.78	1.76	1.76	1.76	67.73	38.48	37.89
		2	1.76	1.79	1.76	1.76	66.68	37.89	
		3	1.77	1.77	1.77	1.77	65.31	36.90	
AF 10	1	1	1.87	1.85	1.85	1.85	58.14	31.43	31.00
		2	1.89	1.89	1.85	1.89	58.59	31.00	
		3	1.80	1.80	1.85	1.8	54.93	30.52	
	2	1	1.85	1.81	1.82	1.82	61.80	33.96	32.04
		2	1.87	1.86	1.85	1.86	59.59	32.04	
		3	1.87	1.90	1.94	1.9	60.81	32.01	
AF 30	1	1	1.74	1.75	1.74	1.74	47.15	27.10	26.18
		2	1.74	1.78	1.80	1.78	46.08	25.89	
		3	1.72	1.74	1.79	1.74	45.55	26.18	
	2	1	1.64	1.65	1.67	1.65	46.01	27.88	26.29
		2	1.65	1.64	1.63	1.64	43.11	26.29	
		3	1.61	1.61	1.61	1.61	35.48	22.04	
AF 50	1	1	1.54	1.54	1.54	1.54	33.87	21.99	22.05
		2	1.54	1.58	1.54	1.54	33.95	22.05	
		3	1.55	1.56	1.56	1.56	34.79	22.30	
	2	1	1.58	1.59	1.57	1.58	39.22	24.82	22.26
		2	1.58	1.58	1.58	1.58	35.17	22.26	
		3	1.58	1.57	1.60	1.58	35.10	22.22	
AF 70	1	1	1.49	1.48	1.49	1.49	28.99	19.46	20.43
		2	1.49	1.51	1.49	1.49	30.98	20.79	
		3	1.49	1.49	1.49	1.49	30.44	20.43	
	2	1	1.51	1.52	1.53	1.52	29.83	19.63	19.70
		2	1.51	1.53	1.51	1.51	29.75	19.70	
		3	1.52	1.53	1.52	1.52	31.66	20.83	

ຊຸດ	Batch	Specimen No.	thickness (mm)				force (N)	tear resistance (kN/m)	tear resistance (kN/m)
			1	2	3	median			
AF-Si 10	1	1	1.55	1.56	1.57	1.56	55.83	35.79	35.79
		2	1.50	1.52	1.52	1.52	54.32	35.74	
		3	1.54	1.54	1.56	1.54	55.67	36.15	
	2	1	1.51	1.50	1.50	1.50	55.60	37.07	37.07
		2	1.52	1.51	1.51	1.51	51.27	33.95	
		3	1.50	1.49	1.48	1.49	56.76	38.09	
AF-Si 30	1	1	1.50	1.50	1.49	1.50	43.95	29.30	29.56
		2	1.53	1.50	1.51	1.51	44.63	29.56	
		3	1.51	1.49	1.49	1.49	45.17	30.32	
	2	1	1.56	1.55	1.54	1.55	48.22	31.11	31.11
		2	1.52	1.49	1.50	1.50	45.85	30.57	
		3	1.52	1.51	1.50	1.51	48.75	32.28	
AF-Si 50	1	1	1.49	1.49	1.50	1.49	39.52	26.52	26.52
		2	1.52	1.53	1.55	1.53	41.89	27.38	
		3	1.47	1.47	1.49	1.47	37.46	25.48	
	2	1	1.57	1.56	1.55	1.56	41.05	26.31	26.31
		2	1.54	1.53	1.51	1.53	42.50	27.78	
		3	1.54	1.54	1.51	1.54	39.52	25.66	
AF-Si 70	1	1	1.52	1.50	1.51	1.51	33.61	22.26	22.26
		2	1.53	1.52	1.51	1.52	31.84	20.95	
		3	1.52	1.52	1.51	1.52	34.75	22.86	
	2	1	1.52	1.51	1.50	1.51	31.74	21.02	21.76
		2	1.51	1.51	1.50	1.51	34.82	23.06	
		3	1.52	1.53	1.56	1.53	33.29	21.76	
SF 10	1	1	1.51	1.52	1.54	1.52	50.96	33.53	33.53
		2	1.53	1.53	1.54	1.53	50.43	32.96	
		3	1.51	1.53	1.55	1.53	51.50	33.66	
	2	1	1.56	1.55	1.55	1.55	50.20	32.39	33.83
		2	1.53	1.52	1.51	1.52	51.42	33.83	
		3	1.57	1.56	1.55	1.56	54.02	34.63	

สูตร	Batch	Specimen No.	thickness (mm)				force (N)	tear resistance (kN/m)	tear resistance (kN/m)
			1	2	3	median			
SF 30	1	1	1.53	1.53	1.55	1.53	46.54	30.42	30.81
		2	1.51	1.52	1.53	1.52	46.92	30.87	
		3	1.53	1.54	1.55	1.54	47.45	30.81	
	2	1	1.58	1.58	1.58	1.58	47.84	30.28	30.28
		2	1.54	1.53	1.53	1.53	45.85	29.97	
		3	1.54	1.54	1.54	1.54	48.98	31.81	
SF 50	1	1	1.51	1.50	1.51	1.51	45.24	29.96	29.96
		2	1.51	1.51	1.52	1.51	45.47	30.11	
		3	1.51	1.50	1.52	1.51	45.03	29.82	
	2	1	1.48	1.49	1.51	1.49	44.63	29.95	29.78
		2	1.49	1.48	1.47	1.48	44.07	29.78	
		3	1.53	1.50	1.51	1.51	44.76	29.64	
SF 70	1	1	1.51	1.50	1.48	1.50	42.88	28.59	29.39
		2	1.53	1.52	1.51	1.52	42.22	27.78	
		3	1.52	1.52	1.51	1.52	43.16	28.39	
	2	1	1.52	1.51	1.50	1.51	42.33	28.03	28.03
		2	1.56	1.54	1.52	1.54	43.73	28.40	
		3	1.49	1.50	1.53	1.50	41.99	27.99	
SF-Si 10	1	1	1.49	1.52	1.53	1.52	52.34	34.43	34.51
		2	1.49	1.50	1.52	1.50	52.34	34.89	
		3	1.51	1.53	1.54	1.53	52.80	34.51	
	2	1	1.51	1.51	1.52	1.51	51.27	33.95	34.06
		2	1.54	1.55	1.56	1.55	52.80	34.06	
		3	1.54	1.53	1.54	1.54	53.02	34.43	
SF-Si 30	1	1	1.50	1.51	1.52	1.51	52.34	34.66	34.02
		2	1.57	1.56	1.57	1.57	53.41	34.02	
		3	1.55	1.52	1.54	1.54	50.58	32.84	
	2	1	1.49	1.48	1.51	1.49	48.37	32.46	32.46
		2	1.49	1.48	1.48	1.48	51.96	35.11	
		3	1.54	1.54	1.57	1.54	49.67	32.25	

วัสดุ	Batch	Specimen No.	thickness (mm)				force (N)	tear resistance (kN/m)	tear resistance (kN/m)
			1	2	3	median			
SF-Si 50	1	1	1.53	1.51	1.54	1.53	48.60	31.76	31.92
		2	1.52	1.51	1.52	1.52	50.20	33.03	
		3	1.52	1.52	1.53	1.52	48.52	31.92	
	2	1	1.52	1.51	1.52	1.52	47.23	31.07	31.61
		2	1.49	1.48	1.48	1.48	48.37	32.68	
		3	1.55	1.54	1.54	1.54	48.68	31.61	
SF-Si 70	1	1	1.56	1.53	1.51	1.53	48.12	31.45	31.79
		2	1.49	1.49	1.50	1.49	47.85	32.11	
		3	1.49	1.50	1.52	1.50	47.68	31.79	
	2	1	1.53	1.52	1.54	1.53	48.04	31.40	31.40
		2	1.52	1.54	1.55	1.54	47.56	30.88	
		3	1.50	1.51	1.51	1.51	47.78	31.64	
MF 10	1	1	1.55	1.55	1.56	1.55	43.18	27.86	26.88
		2	1.53	1.53	1.53	1.53	41.12	26.88	
		3	1.55	1.52	1.52	1.52	40.66	26.75	
	2	1	1.48	1.49	1.50	1.49	39.14	26.27	26.88
		2	1.52	1.50	1.49	1.50	41.12	27.41	
		3	1.51	1.50	1.52	1.51	40.59	26.88	
MF 30	1	1	1.52	1.50	1.52	1.52	34.56	22.74	22.84
		2	1.47	1.46	1.44	1.46	33.34	22.84	
		3	1.49	1.49	1.49	1.49	35.17	23.60	
	2	1	1.49	1.47	1.48	1.48	33.26	22.47	22.89
		2	1.47	1.46	1.48	1.47	33.65	22.89	
		3	1.47	1.49	1.48	1.48	34.79	23.51	
MF 50	1	1	1.52	1.52	1.51	1.52	29.07	19.13	20.05
		2	1.48	1.48	1.48	1.48	29.68	20.05	
		3	1.53	1.54	1.53	1.53	32.04	20.94	
	2	1	1.50	1.51	1.52	1.51	33.57	22.23	22.17
		2	1.48	1.49	1.49	1.49	29.75	19.97	
		3	1.50	1.51	1.50	1.5	33.26	22.17	

คู่อุตร	Batch	Specimen No.	thickness (mm)				force (N)	tear resistance (kN/m)	tear resistance (kN/m)
			1	2	3	median			
MF 70	1	1	1.48	1.48	1.50	1.48	29.83	20.16	20.16
		2	1.51	1.51	1.54	1.51	31.51	20.87	
		3	1.54	1.52	1.52	1.52	28.84	18.97	
	2	1	1.49	1.49	1.50	1.49	31.59	21.20	19.71
		2	1.49	1.49	1.49	1.49	29.07	19.51	
		3	1.48	1.52	1.49	1.49	29.37	19.71	
MF-Si 10	1	1	1.54	1.54	1.54	1.54	50.96	33.09	33.19
		2	1.54	1.55	1.54	1.54	51.12	33.19	
		3	1.54	1.53	1.53	1.53	51.42	33.61	
	2	1	1.55	1.55	1.55	1.55	51.27	33.08	31.81
		2	1.54	1.55	1.54	1.54	48.98	31.81	
		3	1.52	1.52	1.53	1.52	47.61	31.32	
MF-Si 30	1	1	1.53	1.51	1.51	1.51	43.87	29.05	28.97
		2	1.49	1.50	1.51	1.50	43.33	28.89	
		3	1.48	1.48	1.49	1.48	42.88	28.97	
	2	1	1.53	1.51	1.52	1.52	43.33	28.51	28.94
		2	1.54	1.53	1.54	1.54	46.01	29.88	
		3	1.54	1.53	1.54	1.54	44.56	28.94	
MF-Si 50	1	1	1.56	1.55	1.55	1.55	41.73	26.92	26.92
		2	1.51	1.50	1.51	1.51	41.12	27.23	
		3	1.50	1.49	1.50	1.50	37.08	24.72	
	2	1	1.55	1.53	1.51	1.53	42.19	27.58	27.58
		2	1.55	1.53	1.54	1.54	42.72	27.74	
		3	1.53	1.53	1.50	1.53	40.59	26.53	
MF-Si 70	1	1	1.54	1.54	1.52	1.54	37.61	24.42	23.69
		2	1.55	1.54	1.53	1.54	36.42	23.65	
		3	1.53	1.52	1.50	1.52	36.01	23.69	
	2	1	1.54	1.54	1.54	1.54	37.61	24.42	23.63
		2	1.53	1.53	1.53	1.53	36.16	23.63	
		3	1.55	1.55	1.54	1.55	35.32	22.79	

วัสดุ	Batch	Specimen No.	thickness (mm)				force (N)	tear resistance (kN/m)	tear resistance (kN/m)
			1	2	3	median			
LF 10	1	1	1.52	1.53	1.52	1.52	46.85	30.82	30.09
		2	1.51	1.52	1.53	1.52	45.74	30.09	
		3	1.52	1.53	1.55	1.53	45.62	29.82	
	2	1	1.52	1.53	1.54	1.53	45.43	29.69	30.25
		2	1.51	1.53	1.54	1.53	46.28	30.25	
		3	1.50	1.52	1.53	1.52	46.72	30.74	
LF 30	1	1	1.52	1.53	1.52	1.52	37.59	24.73	25.09
		2	1.50	1.51	1.52	1.51	38.34	25.39	
		3	1.50	1.50	1.52	1.50	37.64	25.09	
	2	1	1.51	1.52	1.52	1.52	37.13	24.43	24.43
		2	1.50	1.52	1.53	1.52	36.34	23.91	
		3	1.52	1.53	1.53	1.53	38.68	25.28	
LF 50	1	1	1.51	1.51	1.52	1.51	33.75	22.35	21.80
		2	1.50	1.52	1.52	1.52	33.14	21.80	
		3	1.50	1.51	1.53	1.51	31.97	21.17	
	2	1	1.52	1.54	1.53	1.53	33.87	22.14	21.42
		2	1.53	1.52	1.51	1.52	32.56	21.42	
		3	1.50	1.52	1.52	1.52	32.27	21.23	
LF 70	1	1	1.55	1.53	1.50	1.53	30.98	20.25	19.75
		2	1.50	1.51	1.53	1.51	29.82	19.75	
		3	1.50	1.50	1.52	1.50	29.26	19.51	
	2	1	1.49	1.52	1.51	1.51	29.54	19.56	20.22
		2	1.51	1.52	1.53	1.52	31.75	20.89	
		3	1.54	1.53	1.53	1.53	30.93	20.22	
Carbon black	1	1	1.52	1.50	1.52	1.52	67.38	44.33	44.33
		2	1.50	1.51	1.52	1.51	65.45	43.34	
		3	1.51	1.50	1.51	1.51	68.14	45.13	
	2	1	1.51	1.51	1.52	1.51	65.41	43.32	43.53
		2	1.51	1.52	1.52	1.52	68.06	44.78	
		3	1.51	1.52	1.53	1.52	66.16	43.53	

ภาคผนวก ค.
ผลการทดสอบความแข็ง

วัสดุ	Batch	Hardness (Shore A)					
		1	2	3	4	5	mean
Gum	1	40	40	40	41	40	40.2
	2	40	40	41	40	41	40.4
AF 10	1	44	44	44	43	44	43.8
	2	45	45	44	45	44	44.6
AF 30	1	47	48	47	48	47	47.4
	2	47	46	46	47	47	46.6
AF 50	1	48	48	49	49	49	48.6
	2	49	50	49	49	50	49.4
AF 70	1	52	52	52	53	52	52.2
	2	52	53	52	52	53	52.4
AF-Si 10	1	44	43	43	43	44	43.4
	2	44	44	43	44	43	43.6
AF-Si 30	1	46	46	46	45	46	45.8
	2	46	46	46	46	46	46.0
AF-Si 50	1	48	48	47	47	48	47.6
	2	48	48	48	47	48	47.8
AF-Si 70	1	51	51	50	51	51	50.8
	2	51	51	51	51	50	50.8
SF 10	1	42	42	43	43	43	42.6
	2	43	43	43	44	43	43.2
SF 30	1	46	46	46	46	46	46.0
	2	46	46	46	46	46	46.0
SF 50	1	47	48	48	48	47	47.6
	2	48	48	48	47	48	47.8
SF 70	1	50	51	50	50	51	50.4
	2	50	51	50	51	50	50.4
SF-Si 10	1	43	43	44	43	44	43.4
	2	44	44	44	44	44	44.0
SF-Si 30	1	46	46	46	46	46	46.0
	2	47	47	48	47	47	47.2

วัสดุ	Batch	Hardness (Shore A)					
		1	2	3	4	5	mean
SF-Si 50	1	48	47	48	48	48	47.8
	2	48	48	48	48	48	48.0
SF-Si 70	1	49	49	50	49	49	49.2
	2	49	49	49	50	49	49.2
MF 10	1	43	43	43	43	43	43.0
	2	42	42	43	42	42	42.2
MF 30	1	45	46	46	45	45	45.4
	2	45	46	46	45	45	45.4
MF 50	1	47	47	48	47	48	47.4
	2	47	46	47	46	47	46.6
MF 70	1	50	50	50	50	50	50.0
	2	49	49	49	49	50	49.2
MF-Si 10	1	43	43	43	44	43	43.2
	2	43	43	43	43	43	43.0
MF-Si 30	1	46	46	45	46	46	45.8
	2	46	46	46	45	46	45.8
MF-Si 50	1	47	47	47	47	47	47.0
	2	47	47	47	47	47	47.0
MF-Si 70	1	49	49	49	49	49	49.0
	2	50	50	50	50	50	50.0
LF 10	1	44	43	43	44	44	43.6
	2	44	43	43	44	43	43.4
LF 30	1	46	46	46	46	47	46.2
	2	46	47	47	46	46	46.4
LF 50	1	48	48	48	47	48	47.8
	2	48	48	48	48	48	48.0
LF 70	1	51	51	51	51	51	51.0
	2	51	51	51	51	51	51.0
Carbon black	1	53	53	53	54	53	53.2
	2	53	53	53	53	53	53.0

අගය	Batch	No.	m (g)	V (mm ³)	v (cm ³ /g)	loss mass at 1000 cycles (g)					loss volume at 1000 cycles (cm ³)					loss vol. at 1000 cycles
						1	2	3	4	5	1	2	3	4	5	
AF-Si 10	1	1	37.3246	35967.4	0.9636	1.0224	0.9928	1.0464	1.0104	0.9888	0.9852	0.9567	1.0084	0.9737	0.9528	0.9745
		2	37.4277	36122.7	0.9651	1.0184	1.0520	0.9984	0.9960	0.9792	0.9829	1.0153	0.9636	0.9613	0.9451	
	2	1	37.4577	36122.7	0.9644	1.0440	0.9976	1.0200	1.0816	1.0048	1.0068	0.9620	0.9836	1.0431	0.9690	0.9985
		2	37.3888	35979.9	0.9623	1.0848	1.0536	1.0296	1.0464	1.0024	1.0439	1.0139	0.9908	1.0070	0.9646	
AF-Si 30	1	1	40.9123	36183.9	0.8844	1.4528	1.4248	1.4048	1.3504	1.4008	1.2849	1.2601	1.2424	1.1943	1.2389	1.2446
		2	40.9821	36040.9	0.8794	1.4664	1.4296	1.4152	1.3688	1.3984	1.2896	1.2572	1.2446	1.2038	1.2298	
	2	1	40.9582	36122.7	0.8819	1.4456	1.4120	1.3472	1.4040	1.4152	1.2749	1.2453	1.1882	1.2382	1.2481	1.2240
		2	41.0382	36252.9	0.8834	1.3936	1.3528	1.3832	1.3192	1.3944	1.2311	1.1951	1.2219	1.1654	1.2318	
AF-Si 50	1	1	44.2514	36306.5	0.8205	1.8960	1.8120	1.7432	1.7400	1.7056	1.5556	1.4867	1.4302	1.4276	1.3994	1.4551
		2	44.2916	36232.7	0.8180	1.8664	1.7968	1.7496	1.7856	1.6664	1.5268	1.4699	1.4313	1.4607	1.3632	
	2	1	44.2036	36294.0	0.8211	1.8800	1.8072	1.7992	1.7592	1.6712	1.5436	1.4838	1.4773	1.4444	1.3722	1.4860
		2	44.1532	36388.5	0.8241	1.9320	1.8872	1.8024	1.8008	1.7248	1.5922	1.5553	1.4854	1.4841	1.4215	
AF-Si 70	1	1	47.1564	35979.9	0.7630	2.1744	2.1936	2.0960	2.2616	2.0480	1.6590	1.6737	1.5992	1.7256	1.5626	1.6560
		2	47.2518	36122.7	0.7645	2.2296	2.1856	2.2992	2.0736	2.1208	1.7045	1.6708	1.7577	1.5852	1.6213	
	2	1	47.2372	36232.7	0.7670	2.2096	2.1448	2.1672	2.1272	2.0568	1.6948	1.6451	1.6623	1.6316	1.5776	1.6331
		2	47.1844	35897.9	0.7608	2.1232	2.1456	2.184	2.1184	2.1016	1.6153	1.6324	1.6616	1.6117	1.5989	
SF 10	1	1	37.2970	35897.9	0.9625	1.0480	0.9864	1.0256	0.9936	1.0208	1.0087	0.9494	0.9871	0.9563	0.9825	0.9847
		2	37.3626	35837.2	0.9592	1.0448	1.0488	1.0944	0.9840	1.0024	1.0021	1.0060	1.0497	0.9438	0.9615	
	2	1	37.3636	35849.6	0.9595	1.1208	1.0744	1.1112	1.0424	1.0320	1.0754	1.0309	1.0662	1.0002	0.9902	1.0310
		2	37.3557	35979.9	0.9632	1.1008	1.0664	1.0808	1.0696	1.0264	1.0603	1.0271	1.0410	1.0302	0.9886	

วัสดุ	Batch	No.	m (g)	V (mm ³)	v (cm ³ /g)	loss mass at 1000 cycles (g)					loss volume at 1000 cycles (cm ³)					loss vol. at 1000 cycles
						1	2	3	4	5	1	2	3	4	5	
SF 30	1	1	41.2808	35958.7	0.8711	1.5456	1.4952	1.4816	1.4320	1.3704	1.3463	1.3024	1.2906	1.2474	1.1937	1.2829
		2	41.2988	36163.0	0.8756	1.5392	1.5024	1.4704	1.4448	1.4080	1.3478	1.3156	1.2875	1.2651	1.2329	
	2	1	41.3372	36114.4	0.8737	1.5136	1.4952	1.4520	1.4016	1.4064	1.3224	1.3063	1.2685	1.2245	1.2287	1.2558
		2	41.2131	36007.1	0.8737	1.5080	1.4288	1.4568	1.3872	1.3248	1.3175	1.2483	1.2728	1.2120	1.1575	
SF 50	1	1	44.7688	36236.6	0.8094	1.7800	1.7936	1.7080	1.6984	1.7504	1.4408	1.4518	1.3825	1.3747	1.4168	1.4311
		2	44.6781	36019.5	0.8062	1.9200	1.7864	1.7792	1.7584	1.7416	1.5479	1.4402	1.4344	1.4176	1.4041	
	2	1	44.9744	36224.2	0.8054	2.0376	1.7848	1.8904	1.8592	1.7936	1.6412	1.4375	1.5226	1.4975	1.4446	1.4927
		2	44.6366	36175.5	0.8104	1.9928	1.7704	1.8424	1.7248	1.7800	1.6151	1.4348	1.4932	1.3979	1.4426	
SF 70	1	1	47.7638	35849.6	0.7506	2.1488	2.2072	2.1296	2.1840	2.1616	1.6128	1.6566	1.5984	1.6392	1.6224	1.6173
		2	47.8325	36114.4	0.7550	2.1544	2.1128	2.1464	2.1328	2.1064	1.6266	1.5952	1.6206	1.6103	1.5904	
	2	1	47.7261	35910.3	0.7524	2.1984	2.1472	2.1568	2.1624	2.0800	1.6541	1.6156	1.6228	1.6270	1.5650	1.6269
		2	47.7044	35767.2	0.7498	2.2432	2.2032	2.1800	2.1552	2.1336	1.6819	1.6519	1.6345	1.6159	1.5997	
SF-Si 10	1	1	37.4309	36163.0	0.9661	1.0080	0.9680	1.0040	0.9976	0.9616	0.9739	0.9352	0.9700	0.9638	0.9290	0.9610
		2	37.2740	35910.3	0.9634	1.0304	1.0072	1.0144	0.9800	0.9896	0.9927	0.9704	0.9773	0.9441	0.9534	
	2	1	37.4248	35971.1	0.9612	1.0184	0.9232	1.0264	0.9856	0.9792	0.9788	0.8873	0.9865	0.9473	0.9412	0.9611
		2	37.3048	35767.2	0.9588	1.0632	1.0120	1.0416	1.0272	0.9352	1.0194	0.9703	0.9987	0.9849	0.8967	
SF-Si 30	1	1	41.2622	36175.5	0.8767	1.3912	1.3416	1.3488	1.4072	1.3280	1.2197	1.1762	1.1825	1.2337	1.1643	1.1615
		2	41.1900	35897.9	0.8715	1.3432	1.2664	1.3096	1.2872	1.2632	1.1706	1.1037	1.1413	1.1218	1.1009	
	2	1	41.1804	36114.4	0.8770	1.4080	1.3680	1.3448	1.3104	1.2984	1.2348	1.1997	1.1794	1.1492	1.1387	1.1838
		2	41.1922	36102.0	0.8764	1.3920	1.3672	1.3272	1.3408	1.3464	1.2200	1.1983	1.1632	1.1751	1.1800	

วัสดุ	Batch	No.	m (g)	V (mm ³)	v (cm ³ /g)	loss mass at 1000 cycles (g)					loss volume at 1000 cycles (cm ³)					loss vol. at 1000 cycles
						1	2	3	4	5	1	2	3	4	5	
SF-Si 50	1	1	44.6081	36019.5	0.8075	1.8952	1.6824	1.7256	1.6920	1.6864	1.5303	1.3585	1.3934	1.3662	1.3617	1.4347
		2	44.5955	36102.0	0.8095	1.8344	1.8432	1.7560	1.9216	1.7080	1.4850	1.4921	1.4216	1.5556	1.3827	
	2	1	44.7336	36102.0	0.8070	1.7848	1.7520	1.6960	1.7392	1.6808	1.4404	1.4139	1.3687	1.4036	1.3565	1.3569
		2	44.6903	36294.0	0.8121	1.6024	1.6920	1.6208	1.6648	1.5296	1.3013	1.3741	1.3163	1.3520	1.2422	
SF-Si 70	1	1	47.6872	36163.0	0.7583	1.9792	1.9456	2.0592	1.8336	1.8808	1.5009	1.4754	1.5616	1.3905	1.4263	1.4698
		2	47.6012	36163.0	0.7597	2.0552	1.8216	2.0352	1.8656	1.8888	1.5614	1.3839	1.5462	1.4173	1.4349	
	2	1	47.7349	36319.0	0.7608	1.9920	1.9312	2.0288	1.9408	1.8880	1.5156	1.4694	1.5436	1.4767	1.4365	1.4614
		2	47.6310	36175.5	0.7595	1.9592	1.8848	1.9168	1.8768	1.8064	1.4880	1.4315	1.4558	1.4254	1.3720	
MF 10	1	1	34.1916	33263.8	0.9729	0.6828	0.7512	0.6616	0.6612	0.6724	0.6643	0.7308	0.6436	0.6433	0.6542	0.7159
		2	33.9373	32700.1	0.9635	0.8264	0.8352	0.7776	0.7456	0.7824	0.7963	0.8048	0.7493	0.7184	0.7539	
	2	1	33.9316	32953.1	0.9712	0.7400	0.7000	0.6596	0.6704	0.6864	0.7187	0.6798	0.6406	0.6511	0.6666	0.7292
		2	33.8390	32744.2	0.9676	0.8560	0.8312	0.7832	0.7568	0.8392	0.8283	0.8043	0.7579	0.7323	0.8120	
MF 30	1	1	37.3219	33024.9	0.8849	1.2408	1.1168	1.1200	1.1232	1.1440	1.0979	0.9882	0.9911	0.9939	1.0123	1.0248
		2	37.2084	32895.2	0.8841	1.1472	1.1472	1.1344	1.2616	1.1512	1.0142	1.0142	1.0029	1.1154	1.0178	
	2	1	37.1733	33024.9	0.8884	1.1840	1.2176	1.1112	1.0496	1.1688	1.0519	1.0817	0.9872	0.9325	1.0384	1.0386
		2	37.1752	32883.2	0.8845	1.3016	1.1856	1.0896	1.1120	1.2968	1.1513	1.0487	0.9638	0.9836	1.1471	
MF 50	1	1	40.5064	33405.2	0.8247	1.4672	1.4112	1.3920	1.4104	1.4232	1.2100	1.1638	1.1480	1.1631	1.1737	1.2033
		2	40.3645	33348.5	0.8262	1.5344	1.5488	1.4840	1.4992	1.4072	1.2677	1.2796	1.2261	1.2386	1.1626	
	2	1	40.2851	33279.8	0.8261	1.3224	1.4592	1.3480	1.4464	1.3848	1.0924	1.2055	1.1136	1.1949	1.1440	1.2214
		2	40.2085	33279.8	0.8277	1.6224	1.5344	1.6168	1.5136	1.5216	1.3428	1.2700	1.3382	1.2528	1.2594	

วัสดุ	Batch	No.	m (g)	V (mm ³)	v (cm ³ /g)	loss mass at 1000 cycles (g)					loss volume at 1000 cycles (cm ³)					loss vol. at 1000 cycles
						1	2	3	4	5	1	2	3	4	5	
MF 70	1	1	42.7681	33491.0	0.7831	1.7184	1.6752	1.5640	1.5352	1.6256	1.3457	1.3118	1.2247	1.2022	1.2730	1.3562
		2	43.2884	33678.5	0.7780	1.9320	1.8744	1.8272	1.8456	1.7808	1.5031	1.4583	1.4216	1.4359	1.3855	
	2	1	42.7539	33422.0	0.7817	1.8656	1.8288	1.5976	1.6416	1.7064	1.4584	1.4296	1.2489	1.2833	1.3339	1.3554
		2	42.7761	33478.9	0.7827	1.8856	1.8576	1.6144	1.6944	1.6360	1.4758	1.4539	1.2635	1.3261	1.2804	
MF-Si 10	1	1	37.1351	35790.6	0.9638	0.8624	0.8324	0.8580	0.8100	0.8052	0.8312	0.8023	0.8269	0.7807	0.7760	0.8000
		2	37.2424	35885.5	0.9636	0.8148	0.8200	0.8556	0.8228	0.8204	0.7851	0.7901	0.8244	0.7928	0.7905	
	2	1	37.1904	35958.7	0.9669	0.8344	0.8456	0.8016	0.8116	0.7952	0.8068	0.8176	0.7751	0.7847	0.7689	0.8073
		2	37.0340	35742.5	0.9651	0.8844	0.8572	0.8568	0.8408	0.8296	0.8536	0.8273	0.8269	0.8115	0.8007	
MF-Si 30	1	1	40.9300	35983.4	0.8791	1.4184	1.3616	1.3808	1.3304	1.3456	1.2470	1.1970	1.2139	1.1696	1.1830	1.1411
		2	37.2793	33007.3	0.8854	1.2176	1.2528	1.2600	1.2080	1.1608	1.0781	1.1092	1.1156	1.0696	1.0278	
	2	1	40.7384	36053.4	0.8850	1.2888	1.2624	1.2440	1.2440	1.2168	1.1406	1.1172	1.1009	1.1009	1.0769	1.0757
		2	40.6114	35849.6	0.8827	1.1312	1.2080	1.2192	1.2312	1.1240	0.9986	1.0664	1.0762	1.0868	0.9922	
MF-Si 50	1	1	43.2955	35767.2	0.8261	1.7328	1.7456	1.7936	1.7280	1.7112	1.4315	1.4421	1.4817	1.4275	1.4137	1.4466
		2	43.2654	35840.1	0.8284	1.7632	1.7848	1.7288	1.7280	1.7712	1.4606	1.4785	1.4321	1.4314	1.4672	
	2	1	43.9567	36080.4	0.8208	1.7816	1.8248	1.8024	1.7960	1.7320	1.4624	1.4978	1.4794	1.4742	1.4217	1.4387
		2	43.7509	36019.5	0.8233	1.7616	1.7056	1.6912	1.7136	1.6928	1.4503	1.4042	1.3923	1.4108	1.3937	
MF-Si 70	1	1	46.6149	36211.7	0.7768	2.2472	2.0880	2.1536	2.1672	2.1000	1.7457	1.6220	1.6730	1.6835	1.6313	1.6780
		2	46.5904	36224.2	0.7775	2.2520	2.1800	2.1616	2.1208	2.1208	1.7509	1.6950	1.6807	1.6489	1.6489	
	2	1	46.6440	36211.7	0.7763	2.348	2.3216	2.2256	2.24	2.1928	1.8229	1.8024	1.7278	1.7390	1.7024	1.7109
		2	46.7214	36272.9	0.7764	2.204	2.176	2.132	2.1168	2.0808	1.7111	1.6894	1.6552	1.6434	1.6155	

วัสดุ	Batch No.	m (g)	V (mm ³)	v (cm ³ /g)	loss mass at 1000 cycles (g)					loss volume at 1000 cycles (cm ³)					loss vol. at 1000 cycles	
					1	2	3	4	5	1	2	3	4	5		
LF 10	1	1	37.2538	35767.2	0.9601	0.9440	0.9872	0.9672	0.9952	0.9528	0.9063	0.9478	0.9286	0.9555	0.9148	0.9207
		2	37.4341	35910.3	0.9593	0.9944	0.9240	0.9798	0.9450	0.9040	0.9539	0.8864	0.9400	0.9065	0.8672	
	2	1	37.4279	35827.8	0.9572	0.9360	0.9080	1.0408	0.9128	0.9392	0.8960	0.8692	0.9963	0.8738	0.8990	0.9110
		2	37.1368	35767.2	0.9631	0.9816	0.9216	0.9296	0.9800	0.9384	0.9454	0.8876	0.8953	0.9439	0.9038	
LF 30	1	1	40.6853	35754.9	0.8788	1.3440	1.3552	1.3192	1.2456	1.2728	1.1811	1.1910	1.1593	1.0947	1.1186	1.1480
		2	40.9572	35971.1	0.8783	1.3392	1.2864	1.3304	1.3128	1.2616	1.1762	1.1298	1.1684	1.1530	1.1080	
	2	1	40.5341	35910.3	0.8859	1.3168	1.2744	1.2504	1.2904	1.3416	1.1666	1.1290	1.1078	1.1432	1.1886	1.1439
		2	41.0384	36114.4	0.8800	1.2784	1.3232	1.2632	1.2816	1.3352	1.1250	1.1644	1.1116	1.1278	1.1750	
LF 50	1	1	44.2438	35958.7	0.8127	1.7264	1.7400	1.7704	1.7400	1.7176	1.4031	1.4142	1.4389	1.4142	1.3960	1.4144
		2	44.0196	35897.9	0.8155	1.7424	1.7312	1.7112	1.7560	1.7376	1.4209	1.4118	1.3955	1.4320	1.4170	
	2	1	44.1257	35910.3	0.8138	1.7400	1.7224	1.7536	1.7136	1.7304	1.4160	1.4017	1.4271	1.3946	1.4082	1.4026
		2	44.4387	35910.3	0.8081	1.7472	1.6944	1.7312	1.7208	1.7424	1.4119	1.3692	1.3990	1.3906	1.4080	
LF 70	1	1	47.2157	36114.4	0.7649	2.0344	2.0720	2.0488	2.0032	2.0912	1.5561	1.5848	1.5671	1.5322	1.5995	1.5788
		2	47.1583	35885.5	0.7610	2.0568	2.1048	2.0736	2.1216	2.0888	1.5651	1.6017	1.5779	1.6144	1.5895	
	2	1	47.1296	35742.5	0.7584	2.0464	2.1144	2.0736	2.088	2.0584	1.5520	1.6035	1.5726	1.5835	1.5611	1.5672
		2	47.1767	35849.6	0.7599	2.0176	2.0448	2.0968	2.056	2.0488	1.5332	1.5538	1.5934	1.5624	1.5569	
Carbon	1	1	38.1273	35767.2	0.9381	0.3492	0.3350	0.3436	0.3318	0.3386	0.3276	0.3143	0.3223	0.3113	0.3176	0.3217
		2	37.9644	35910.3	0.9459	0.3546	0.3464	0.3366	0.3450	0.3338	0.3354	0.3277	0.3184	0.3263	0.3157	
Black	2	1	38.0538	35827.8	0.9415	0.3480	0.3312	0.3518	0.3352	0.3416	0.3276	0.3118	0.3312	0.3156	0.3216	0.3228
		2	37.9351	35767.2	0.9429	0.3358	0.3380	0.3488	0.3452	0.3502	0.3166	0.3187	0.3289	0.3255	0.3302	

ภาคผนวก ง.

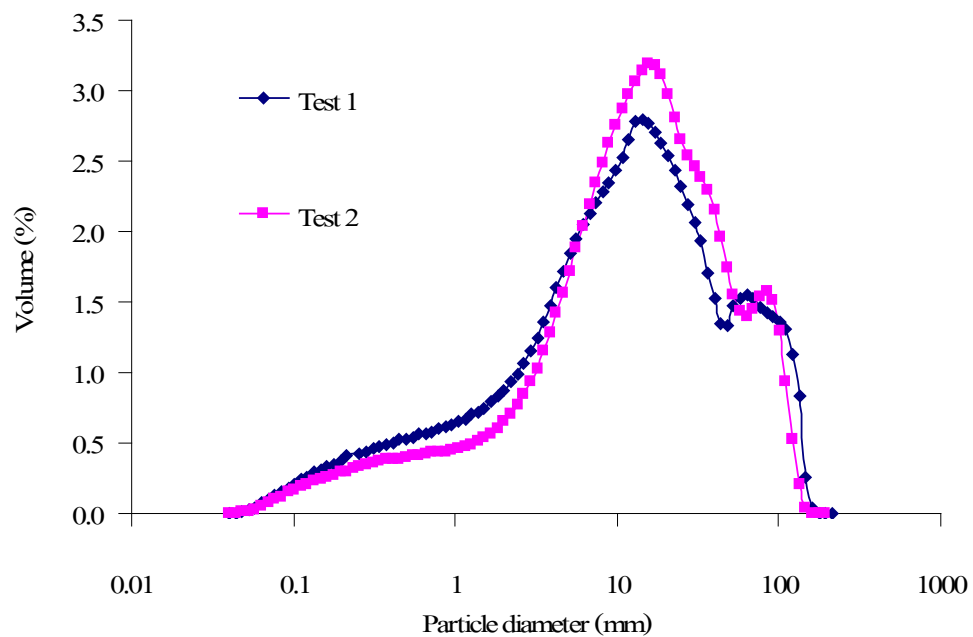
ผลการทดสอบความต้านทานต่อการสึกหรอ

કુટ્ટી	Batch	No.	m (g)	V (mm ³)	v (cm ³ /g)	loss mass at 1000 cycles (g)					loss volume at 1000 cycles (cm ³)					loss vol. at 1000 cycles
						1	2	3	4	5	1	2	3	4	5	
Standard	-	1	39.8864	35910.3	0.9003	0.1976	0.2022	0.1941	0.2073	0.2015	0.1779	0.1820	0.1748	0.1866	0.1814	0.1788
		2	39.6355	35849.6	0.9045	0.1946	0.1893	0.1954	0.1961	0.2031	0.1760	0.1712	0.1767	0.1774	0.1837	
S	1	1	33.08	33895.4	1.0246	0.8712	0.7416	0.7352	0.8128	0.8304	0.8927	0.7599	0.7533	0.8328	0.8509	0.8124
		2	33.05	33697.7	1.0196	0.8584	0.7368	0.8304	0.7216	0.8096	0.8752	0.7512	0.8467	0.7357	0.8255	
	2	1	33.5216	34009.3	1.0145	0.8712	0.8456	0.8320	0.9072	0.7904	0.8839	0.8579	0.8441	0.9204	0.8019	0.8669
		2	32.5672	32892.3	1.0100	0.8728	0.8064	0.8936	0.8760	0.8688	0.8815	0.8144	0.9025	0.8847	0.8775	
AF 10	1	1	34.25	32840.5	0.9588	1.0136	1.0296	0.9464	0.8984	0.8832	0.9719	0.9872	0.9075	0.8614	0.8469	0.8923
		2	34.16	32840.5	0.9614	0.9680	0.9240	0.8680	0.9328	0.8296	0.9306	0.8883	0.8345	0.8968	0.7976	
	2	1	34.2767	33065.8	0.9647	1.0352	1.0496	1.0224	0.9992	1.0184	0.9986	1.0125	0.9863	0.9639	0.9824	0.9830
		2	34.3589	32688.1	0.9514	1.0664	1.0504	1.0000	1.0320	0.9872	1.0145	0.9993	0.9514	0.9818	0.9392	
AF 30	1	1	37.49	33263.8	0.8873	1.3528	1.2192	1.1640	1.3176	1.2520	1.2003	1.0818	1.0328	1.1691	1.1109	1.0678
		2	37.33	33009.4	0.8843	1.2360	1.1856	1.0648	1.0480	1.2144	1.0929	1.0484	0.9416	0.9267	1.0738	
	2	1	38.2494	33739.6	0.8821	1.3560	1.2968	1.3424	1.2656	1.1632	1.1961	1.1439	1.1841	1.1164	1.0261	1.1685
		2	38.0027	34129.7	0.8981	1.4328	1.3672	1.3968	1.2416	1.2632	1.2868	1.2279	1.2544	1.1151	1.1345	
AF 50	1	1	41.2875	34757.1	0.8418	1.8096	1.7984	1.6680	1.6544	1.6040	1.5234	1.5140	1.4042	1.3927	1.3503	1.3902
		2	41.3322	34469.9	0.8340	1.6592	1.7360	1.4952	1.6376	1.5264	1.3837	1.4478	1.2470	1.3657	1.2730	
	2	1	41.1697	34599.1	0.8404	1.7144	1.6640	1.5960	1.5784	1.6120	1.4408	1.3984	1.3413	1.3265	1.3547	1.3769
		2	41.1695	34442.6	0.8366	1.7432	1.6848	1.6848	1.6264	1.5176	1.4584	1.4095	1.4095	1.3607	1.2696	
AF 70	1	1	43.2775	34553.1	0.7984	1.7448	1.8512	1.7736	1.8016	1.8288	1.3931	1.4780	1.4161	1.4384	1.4601	1.4388
		2	43.2501	34207.2	0.7909	1.9624	1.9648	1.7944	1.7128	1.6720	1.5521	1.5540	1.4192	1.3547	1.3224	
	2	1	43.1184	34384.4	0.7974	2.0704	2.016	2.0792	1.9768	1.9664	1.6510	1.6076	1.6580	1.5764	1.5681	1.6141
		2	42.9448	34326.3	0.7993	2.056	2.0352	1.9448	2.0624	2.0096	1.6434	1.6268	1.5545	1.6485	1.6063	

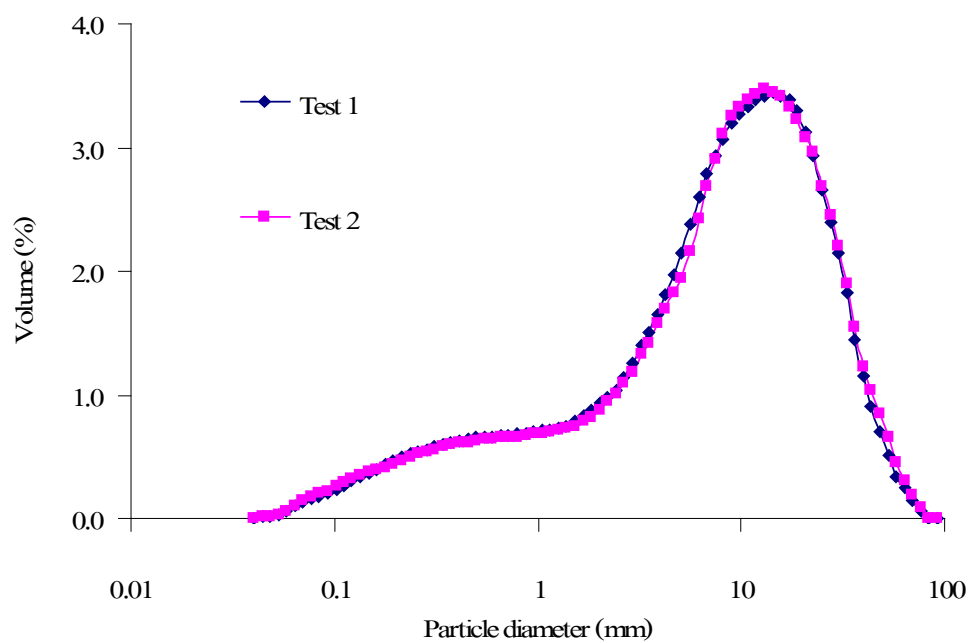
ଶୂନ୍ୟ	Batch No.	m (g)	V (mm ³)	v (cm ³ /g)	loss mass at 1000 cycles (g)					loss volume at 1000 cycles (cm ³)					loss vol. at 1000 cycles
					1	2	3	4	5	1	2	3	4	5	
AF-Si 10	1	37.3246	35967.4	0.9636	1.0224	0.9928	1.0464	1.0104	0.9888	0.9852	0.9567	1.0084	0.9737	0.9528	0.9745
	2	37.4277	36122.7	0.9651	1.0184	1.0520	0.9984	0.9960	0.9792	0.9829	1.0153	0.9636	0.9613	0.9451	
AF-Si 10	1	37.4577	36122.7	0.9644	1.0440	0.9976	1.0200	1.0816	1.0048	1.0068	0.9620	0.9836	1.0431	0.9690	0.9985
	2	37.3888	35979.9	0.9623	1.0848	1.0536	1.0296	1.0464	1.0024	1.0439	1.0139	0.9908	1.0070	0.9646	
AF-Si 30	1	40.9123	36183.9	0.8844	1.4528	1.4248	1.4048	1.3504	1.4008	1.2849	1.2601	1.2424	1.1943	1.2389	1.2446
	2	40.9821	36040.9	0.8794	1.4664	1.4296	1.4152	1.3688	1.3984	1.2896	1.2572	1.2446	1.2038	1.2298	
AF-Si 30	1	40.9582	36122.7	0.8819	1.4456	1.4120	1.3472	1.4040	1.4152	1.2749	1.2453	1.1882	1.2382	1.2481	1.2240
	2	41.0382	36252.9	0.8834	1.3936	1.3528	1.3832	1.3192	1.3944	1.2311	1.1951	1.2219	1.1654	1.2318	
AF-Si 50	1	44.2514	36306.5	0.8205	1.8960	1.8120	1.7432	1.7400	1.7056	1.5556	1.4867	1.4302	1.4276	1.3994	1.4551
	2	44.2916	36232.7	0.8180	1.8664	1.7968	1.7496	1.7856	1.6664	1.5268	1.4699	1.4313	1.4607	1.3632	
AF-Si 50	1	44.2036	36294.0	0.8211	1.8800	1.8072	1.7992	1.7592	1.6712	1.5436	1.4838	1.4773	1.4444	1.3722	1.4860
	2	44.1532	36388.5	0.8241	1.9320	1.8872	1.8024	1.8008	1.7248	1.5922	1.5553	1.4854	1.4841	1.4215	
AF-Si 70	1	47.1564	35979.9	0.7630	2.1744	2.1936	2.0960	2.2616	2.0480	1.6590	1.6737	1.5992	1.7256	1.5626	1.6560
	2	47.2518	36122.7	0.7645	2.2296	2.1856	2.2992	2.0736	2.1208	1.7045	1.6708	1.7577	1.5852	1.6213	
AF-Si 70	1	47.2372	36232.7	0.7670	2.2096	2.1448	2.1672	2.1272	2.0568	1.6948	1.6451	1.6623	1.6316	1.5776	1.6331
	2	47.1844	35897.9	0.7608	2.1232	2.1456	2.184	2.1184	2.1016	1.6153	1.6324	1.6616	1.6117	1.5989	
SF 10	1	37.2970	35897.9	0.9625	1.0480	0.9864	1.0256	0.9936	1.0208	1.0087	0.9494	0.9871	0.9563	0.9825	0.9847
	2	37.3626	35837.2	0.9592	1.0448	1.0488	1.0944	0.9840	1.0024	1.0021	1.0060	1.0497	0.9438	0.9615	
SF 10	1	37.3636	35849.6	0.9595	1.1208	1.0744	1.1112	1.0424	1.0320	1.0754	1.0309	1.0662	1.0002	0.9902	1.0310
	2	37.3557	35979.9	0.9632	1.1008	1.0664	1.0808	1.0696	1.0264	1.0603	1.0271	1.0410	1.0302	0.9886	

ภาคผนวก จ.

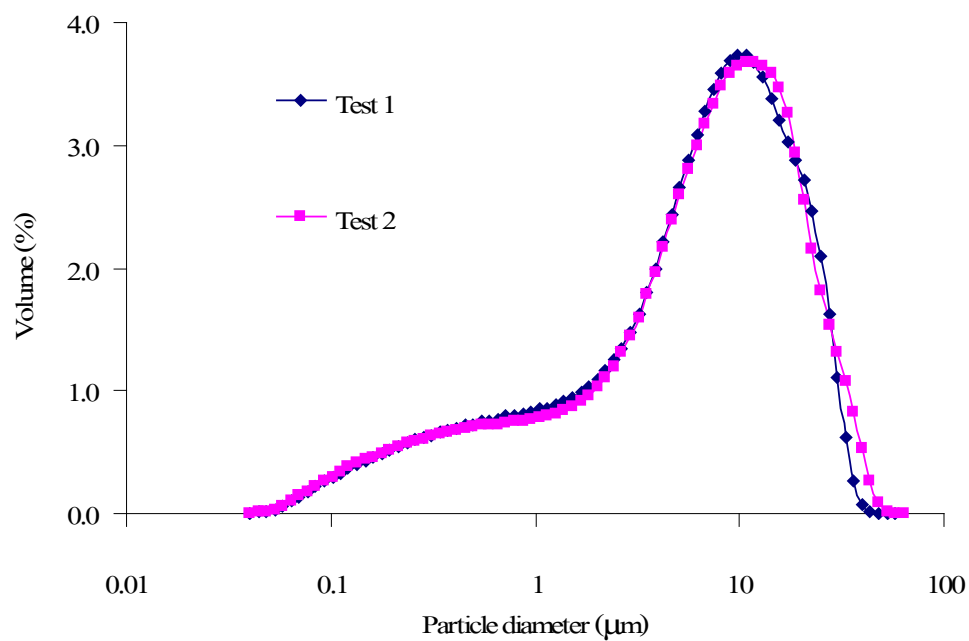
กราฟแสดงการกระจายตัวของขนาดอนุภาคของถ้ำลอยลิกันต์



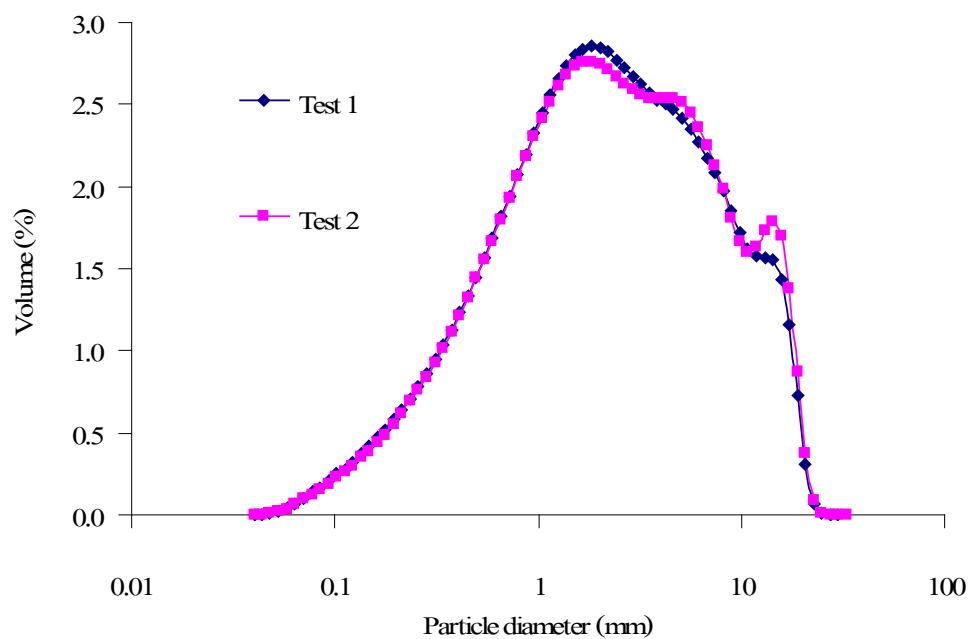
กราฟแสดงการกระจายตัวของขนาดอนุภาคของเม็ดลอยลิกไนต์ที่รับมา



กราฟแสดงการกระจายตัวของขนาดอนุภาคของเม็ดลอยลิกไนต์หยาบ



กราฟแสดงการกระจายตัวของขนาดอนุภาคของแก้วลอยติกในตั้ละเอียดปานกลาง



กราฟแสดงการกระจายตัวของขนาดอนุภาคของแก้วลอยติกในตั้ละเอียดมาก