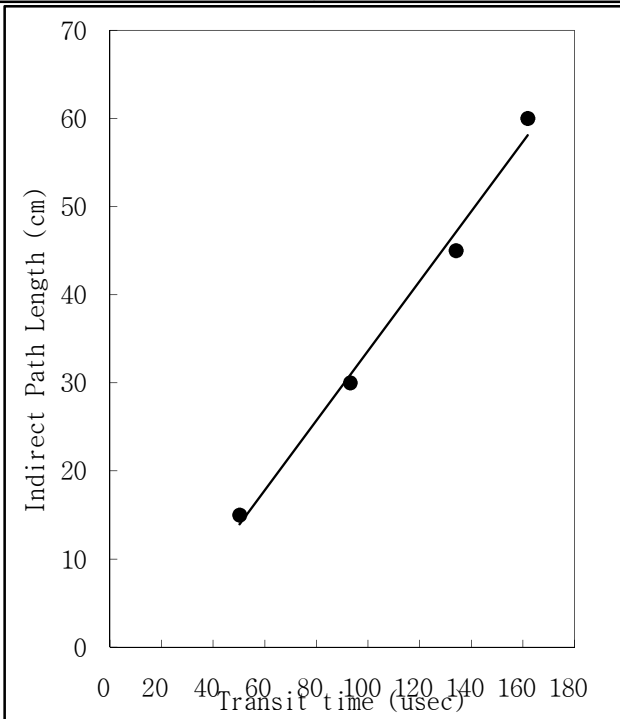
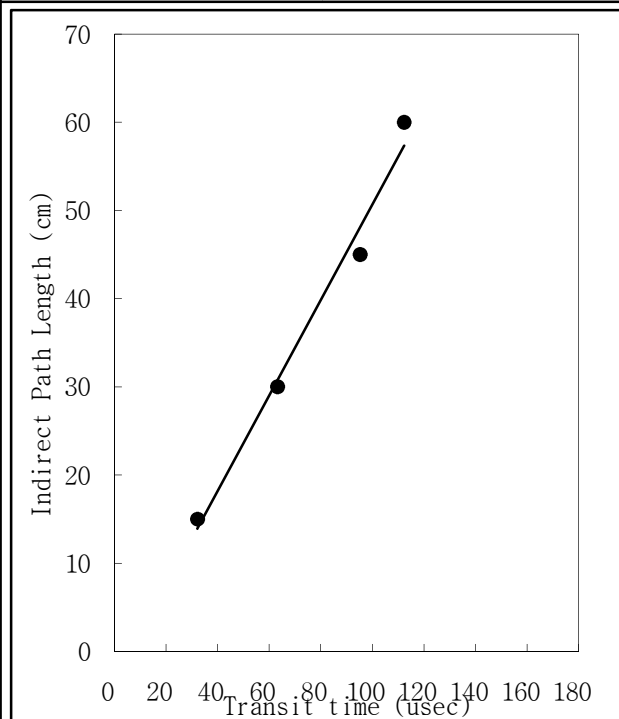


PUNDIT		(구)남한강교 초음파속도 상부구조 DATA	
PROJECT TITLE :		(구)남한강교 정밀안전진단 용역	
Company	 (사)대한산업안전협회  (주)명성엔지니어링	Client	 경기도 여주시
		Method	초음파법
Pulse Velocity Data (Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)			
부 재 명	S1(건전부)	부 재 명	S2-G2(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
50.3	15	32.2	15
93.1	30	63.2	30
134.1	45	95.2	45
161.9	60	112.3	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.956 X - 59.603		Y = 5.420 X - 35.395	
Vi (km/s)	3.956	Vi (km/s)	5.420
Correction Ration (Vi → Vd)	4.154	Correction Ration (Vi → Vd)	5.691
압축강도(F')	26.8	압축강도(F')	59.3
			

Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S3-G3(건전부)	부 재 명	S3(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
40.1	15	48.3	15
72.3	30	93.2	30
91.1	45	129.3	45
136.2	60	151.0	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 4.763 X - 29.48$		$Y = 4.260 X - 74.221$	
Vi (km/s)	4.763	Vi (km/s)	4.260
Correction Ration (Vi → Vd)	5.001	Correction Ration (Vi → Vd)	4.473
압축강도(F')	44.6	압축강도(F')	33.6

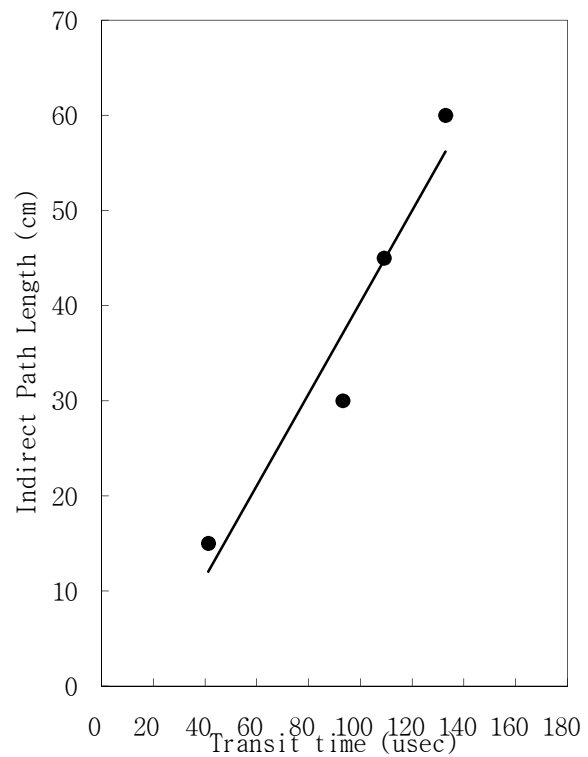
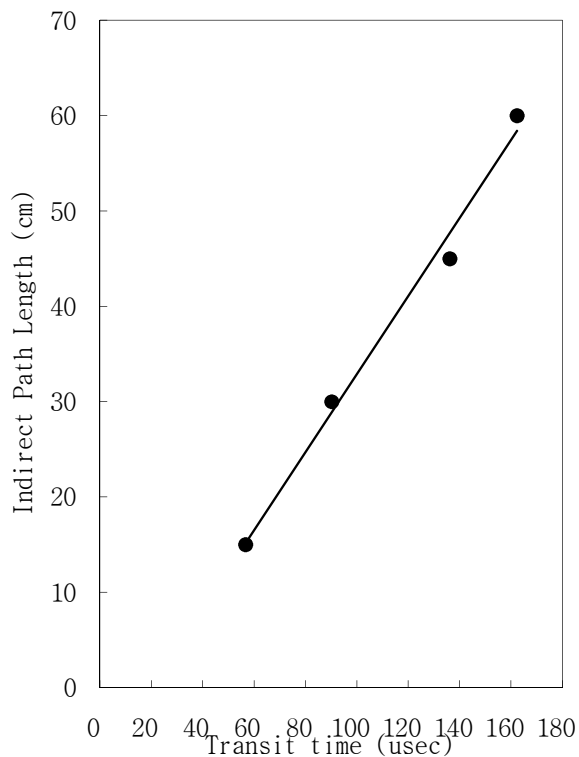
S3-G3(건전부)

S3(건전부)

Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

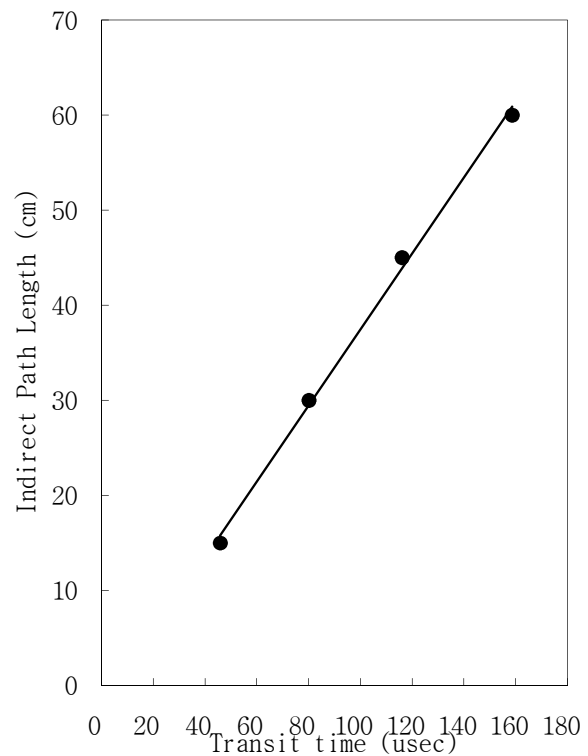
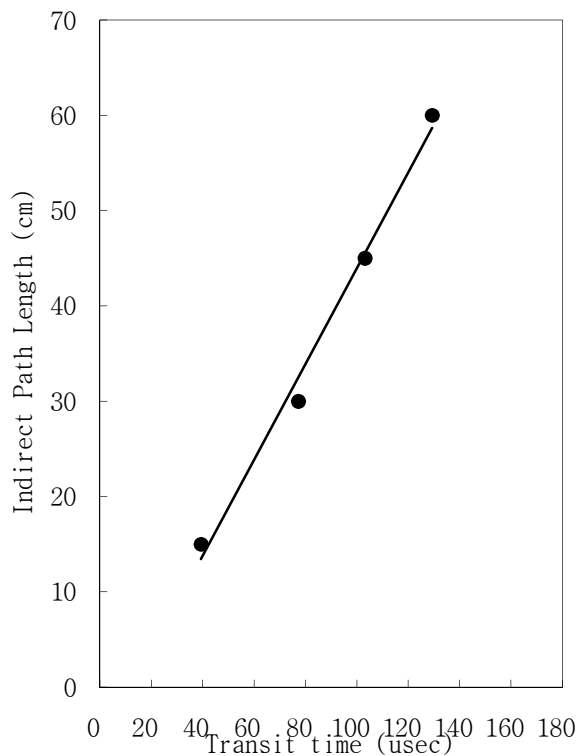
부 재 명	S4(건전부)	부 재 명	S5-G2(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
56.7	15	41.3	15
90.2	30	93.2	30
136.1	45	109.2	45
162.3	60	132.9	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 4.095 X - 80.907$		$Y = 4.823 X - 79.085$	
Vi (km/s)	4.095	Vi (km/s)	4.823
Correction Ration (Vi → Vd)	4.300	Correction Ration (Vi → Vd)	5.064
압축강도(F')	29.9	압축강도(F')	46.0



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

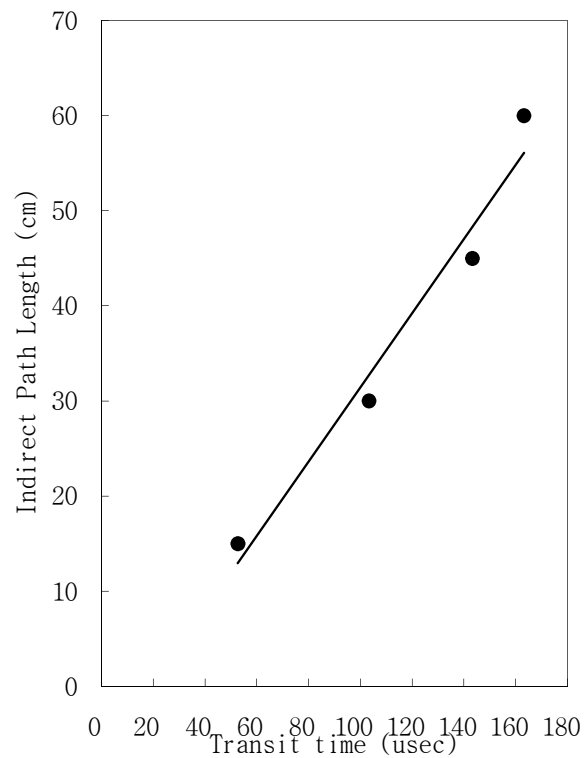
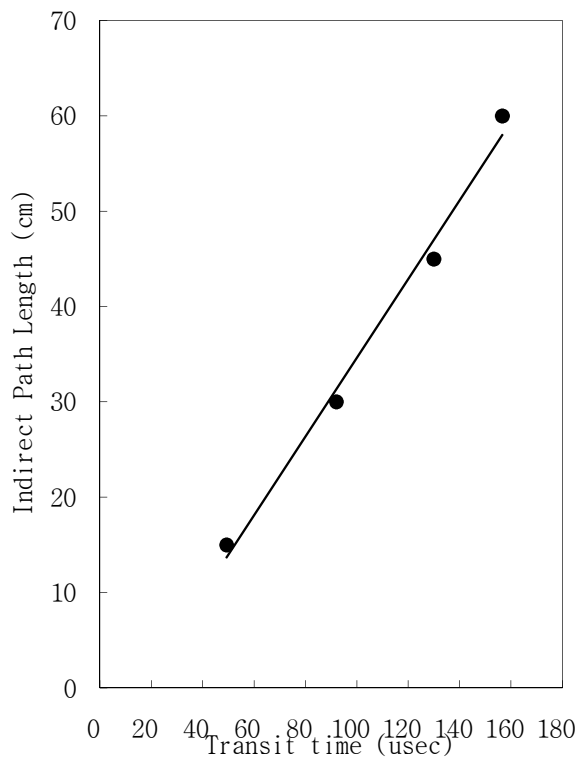
부 재 명	S6-G2(건전부)	부 재 명	S7(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
39.4	15	45.9	15
77.2	30	80.1	30
103.1	45	116.1	45
129.3	60	158.6	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 5.027 X - 63.619$		$Y = 3.999 X - 25.615$	
Vi (km/s)	5.027	Vi (km/s)	3.999
Correction Ration (Vi → Vd)	5.278	Correction Ration (Vi → Vd)	4.199
압축강도(F')	50.5	압축강도(F')	27.8



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

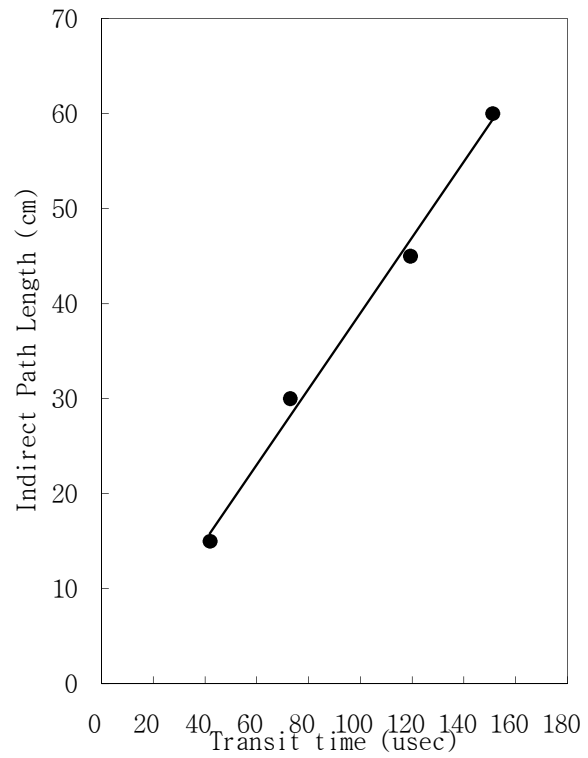
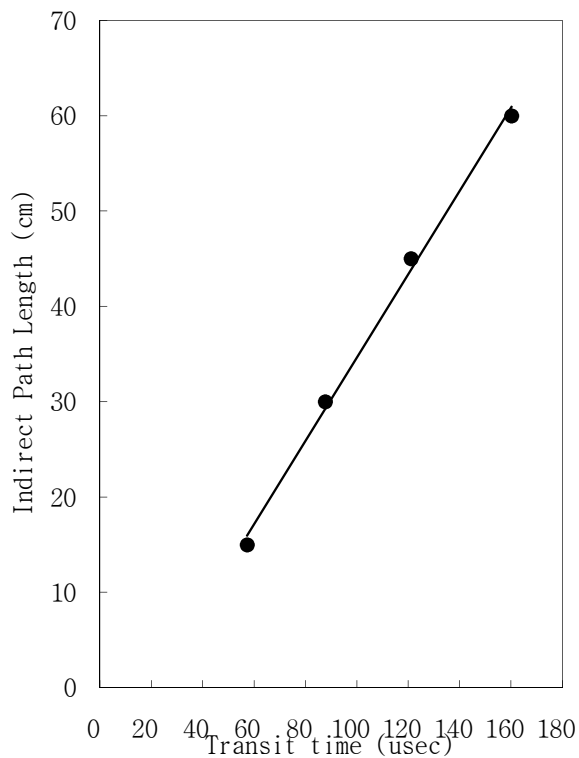
부 재 명	S8(건전부)	부 재 명	S9(비건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
49.3	15	52.7	15
92.0	30	103.3	30
129.9	45	143.2	45
156.6	60	163.1	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 4.127 X - 66.369$		$Y = 3.906 X - 76.428$	
Vi (km/s)	4.127	Vi (km/s)	3.906
Correction Ration (Vi → Vd)	4.333	Correction Ration (Vi → Vd)	4.101
압축강도(F')	30.6	압축강도(F')	25.7



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

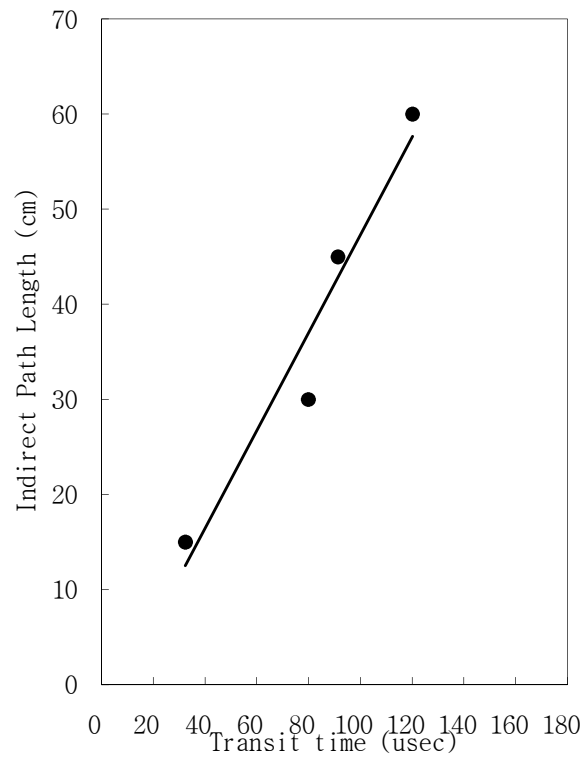
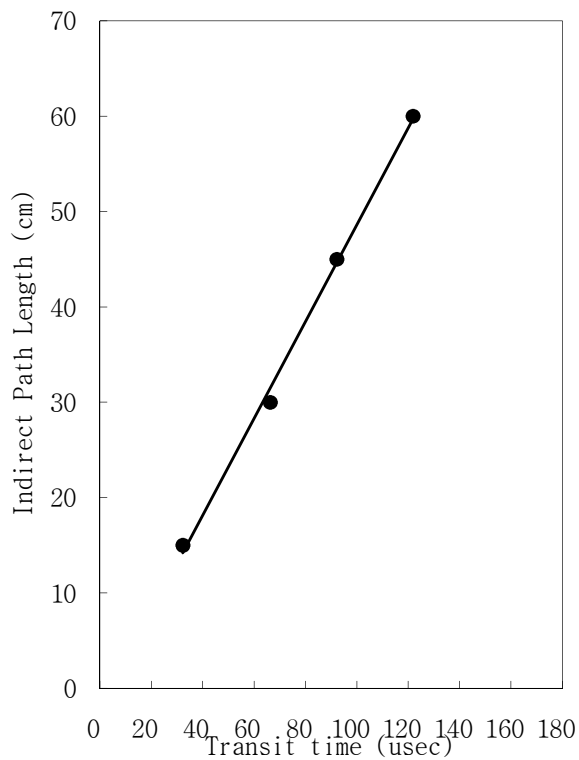
부 재 명	S10(건전부)	부 재 명	S11(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
57.3	15	41.9	15
87.7	30	72.9	30
121.1	45	119.3	45
160.2	60	151.1	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 4.370 X - 90.762$		$Y = 3.985 X - 8.752$	
Vi (km/s)	4.370	Vi (km/s)	3.985
Correction Ration (Vi → Vd)	4.589	Correction Ration (Vi → Vd)	4.184
압축강도(F')	36.0	압축강도(F')	27.5



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

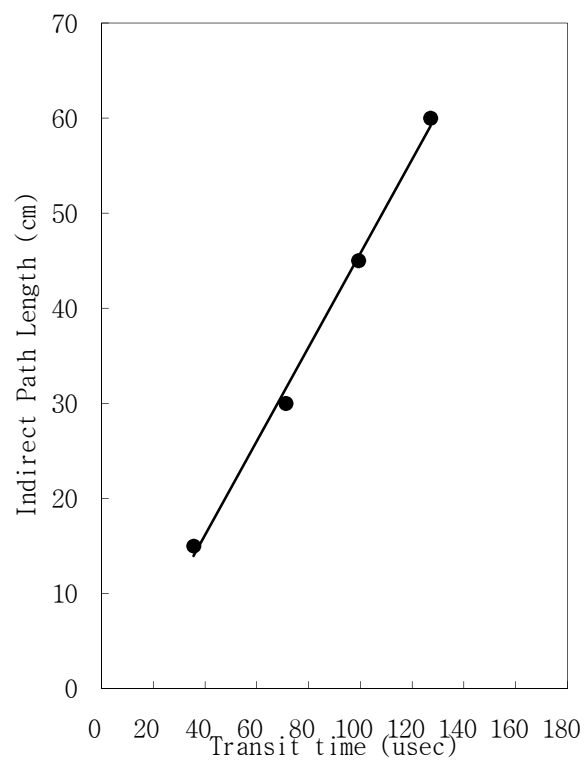
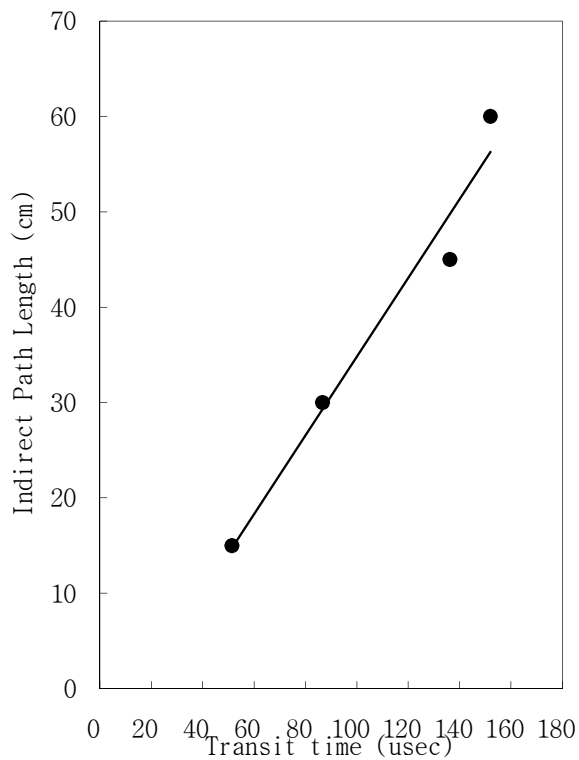
부 재 명	S11-G2(건전부)	부 재 명	S12-G5(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
32.3	15	32.4	15
66.3	30	79.9	30
92.2	45	91.3	45
121.8	60	120.1	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 5.081 X - 22.101$		$Y = 5.149 X - 41.714$	
Vi (km/s)	5.081	Vi (km/s)	5.149
Correction Ration (Vi → Vd)	5.335	Correction Ration (Vi → Vd)	5.406
압축강도(F')	51.7	압축강도(F')	53.2



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

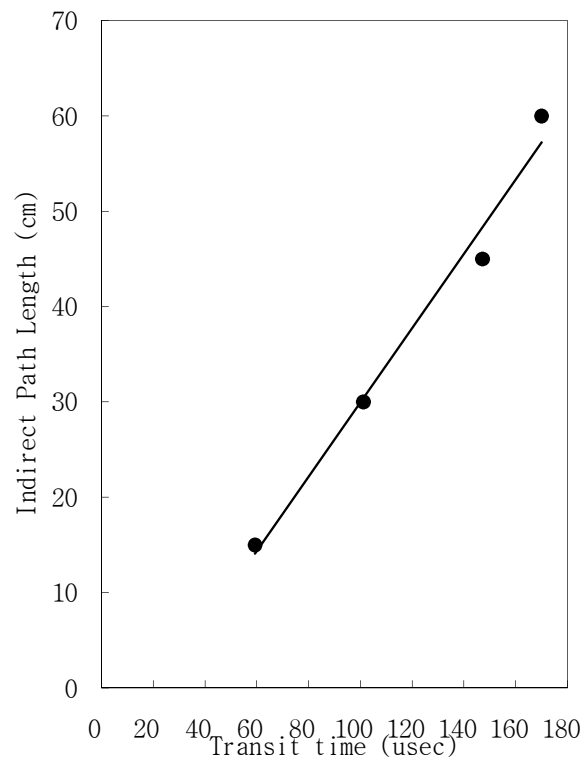
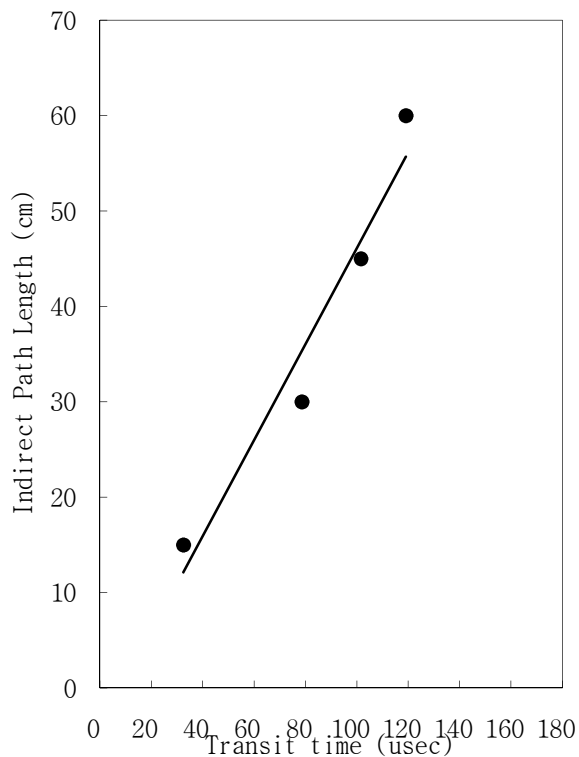
부 재 명	S13(비건전부)	부 재 명	S13-G3(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
51.3	15	35.6	15
86.6	30	71.2	30
136.1	45	99.3	45
151.9	60	127.1	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 4.129 X - 64.685$		$Y = 4.938 X - 36.322$	
Vi (km/s)	4.129	Vi (km/s)	4.938
Correction Ration (Vi → Vd)	4.335	Correction Ration (Vi → Vd)	5.185
압축강도(F')	30.6	압축강도(F')	48.6



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

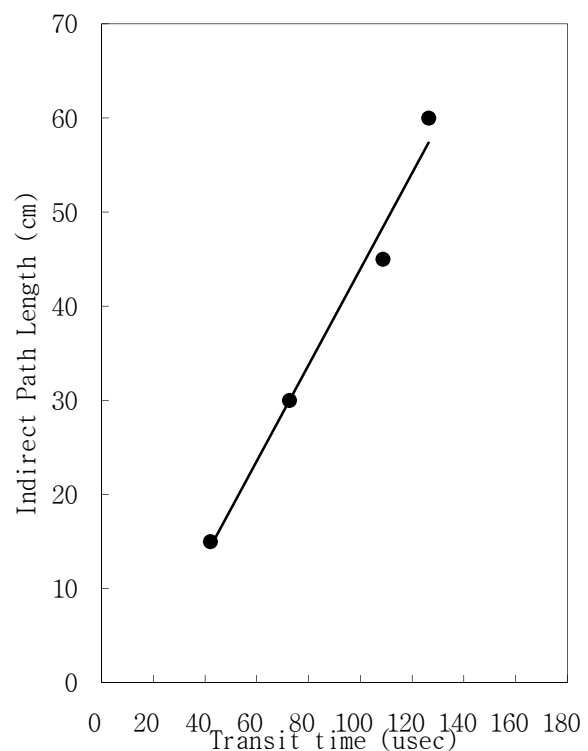
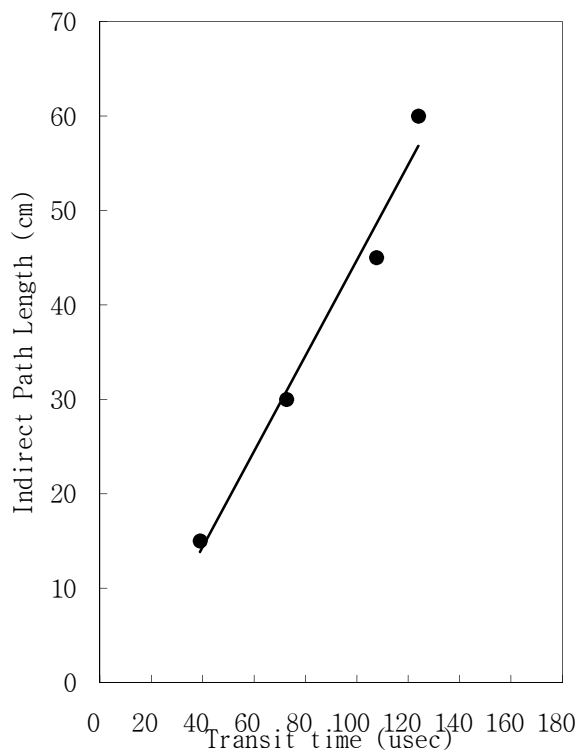
부 재 명	S14-G5(건전부)	부 재 명	S15(비건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
32.5	15	59.3	15
78.6	30	101.1	30
101.6	45	147.1	45
119.1	60	169.9	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 5.028 X - 42.034$		$Y = 3.901 X - 90.526$	
Vi (km/s)	5.028	Vi (km/s)	3.901
Correction Ration (Vi → Vd)	5.279	Correction Ration (Vi → Vd)	4.096
압축강도(F')	50.5	압축강도(F')	25.6



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

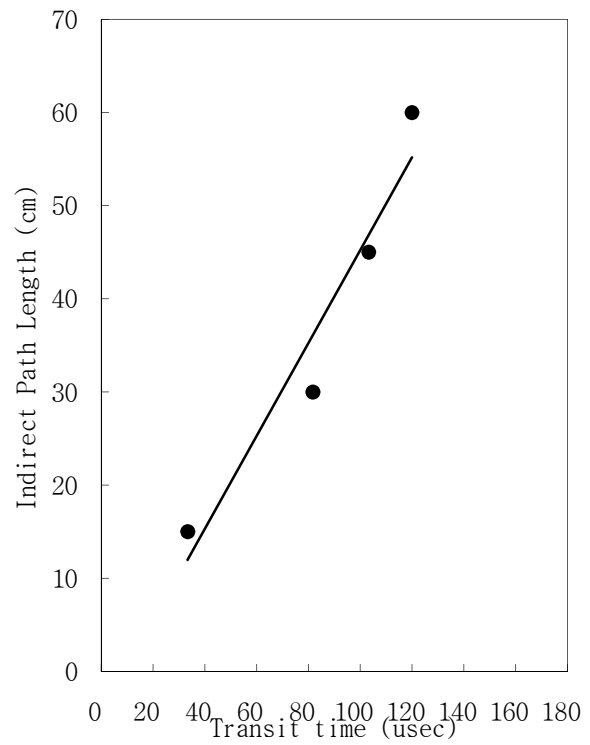
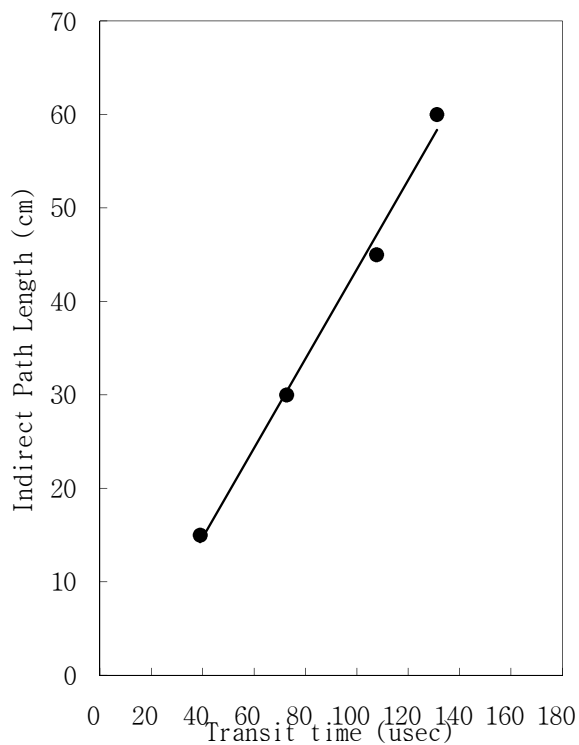
부 재 명	S15-G5(건전부)	부 재 명	S16-G5(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
39.0	15	42.1	15
72.6	30	72.6	30
107.6	45	108.7	45
123.9	60	126.3	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 5.063 X - 59.289$		$Y = 5.109 X - 71.663$	
Vi (km/s)	5.063	Vi (km/s)	5.109
Correction Ration (Vi → Vd)	5.316	Correction Ration (Vi → Vd)	5.364
압축강도(F')	51.3	압축강도(F')	52.3

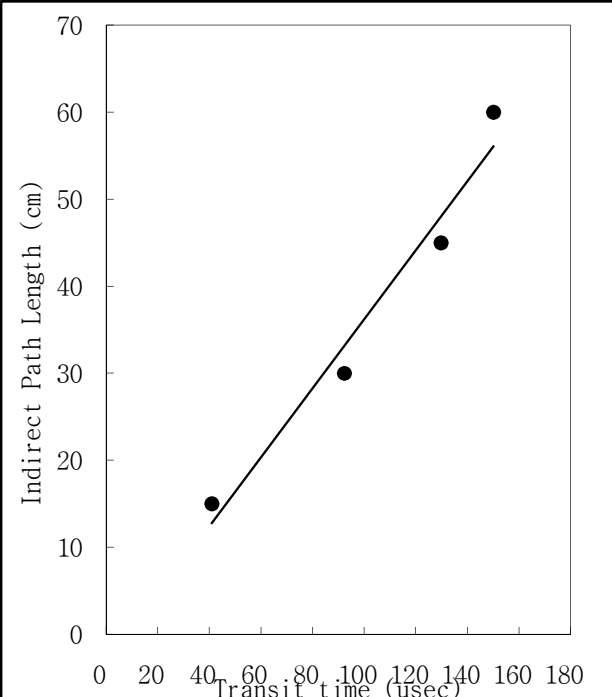
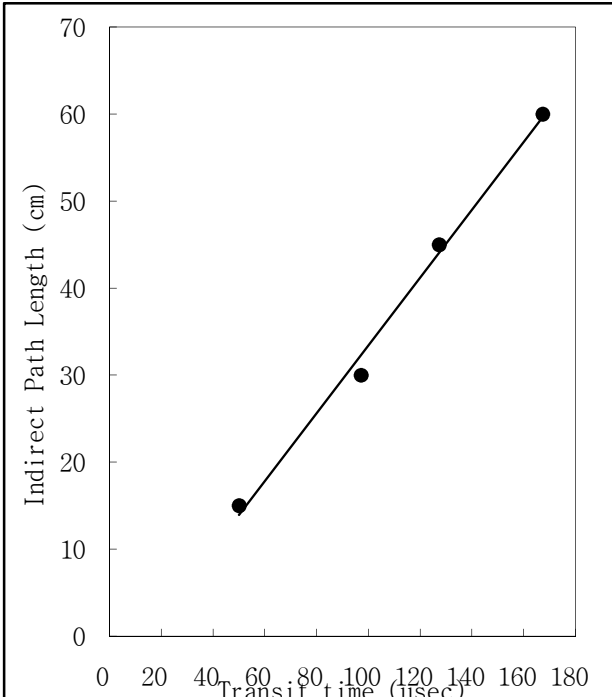


Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S17-G5(건전부)	부 재 명	S18-G5(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
39.0	15	33.3	15
72.6	30	81.6	30
107.6	45	103.2	45
131.1	60	119.9	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 4.785 X - 44.055$		$Y = 4.986 X - 46.332$	
Vi (km/s)	4.785	Vi (km/s)	4.986
Correction Ration (Vi → Vd)	5.024	Correction Ration (Vi → Vd)	5.235
압축강도(F')	45.1	압축강도(F')	49.6



PUNDIT		(구)남한강교 하부구조 초음파속도 DATA			
PROJECT TITLE :		(구)남한강교 정밀안전진단 용역			
Company		 (사)대한산업안전협회  (주)명성엔지니어링		Client	 경기도 여주시
				Method	초음파법
Pulse Velocity Data (Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)					
부재명	P1 코핑(건전부)		부재명	P2 코핑(건전부)	
X	Transit Time (usec)		X	Transit Time (usec)	
Y	Indirect Path Length (cm)		Y	Indirect Path Length (cm)	
X	Y		X	Y	
40.9	15		50.1	15	
92.3	30		97.2	30	
129.7	45		127.3	45	
150.1	60		167.3	60	
Best fit line (Equation)			Best fit line (Equation)		
Y = 3.966 X - 34.517			Y = 3.904 X - 56.255		
Vi (km/s)	3.966		Vi (km/s)	3.904	
Correction Ration (Vi → Vd)	4.164		Correction Ration (Vi → Vd)	4.099	
압축강도(F')	27.0		압축강도(F')	25.6	
					

Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	P4 코펑(건전부)	부 재 명	P6 코펑(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
57.3	15	63.1	15
97.3	30	108.2	30
131.6	45	139.9	45
169.6	60	176.2	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 4.038 X - 85.104$		$Y = 4.022 X - 115.122$	
Vi (km/s)	4.038	Vi (km/s)	4.022
Correction Ration (Vi → Vd)	4.240	Correction Ration (Vi → Vd)	4.223
압축강도(F')	28.6	압축강도(F')	28.3

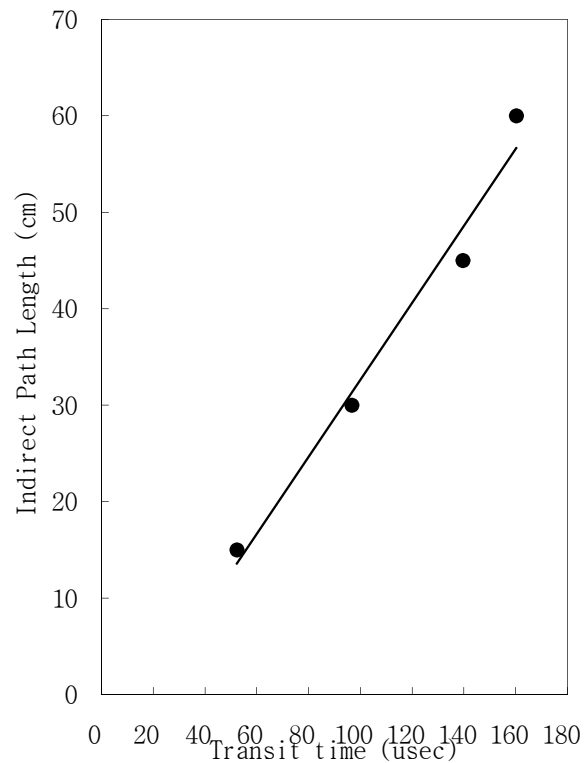
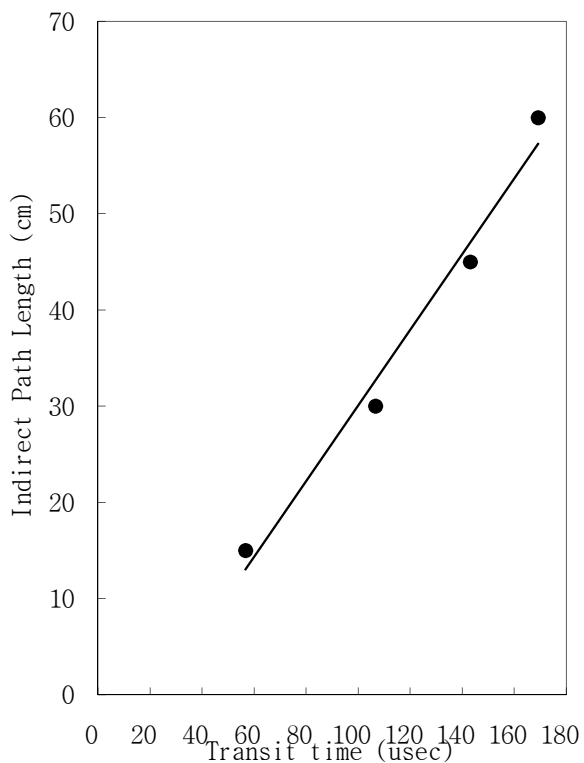
Indirect Path Length (cm) vs Transit time (usec) for P4

Indirect Path Length (cm) vs Transit time (usec) for P6

Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

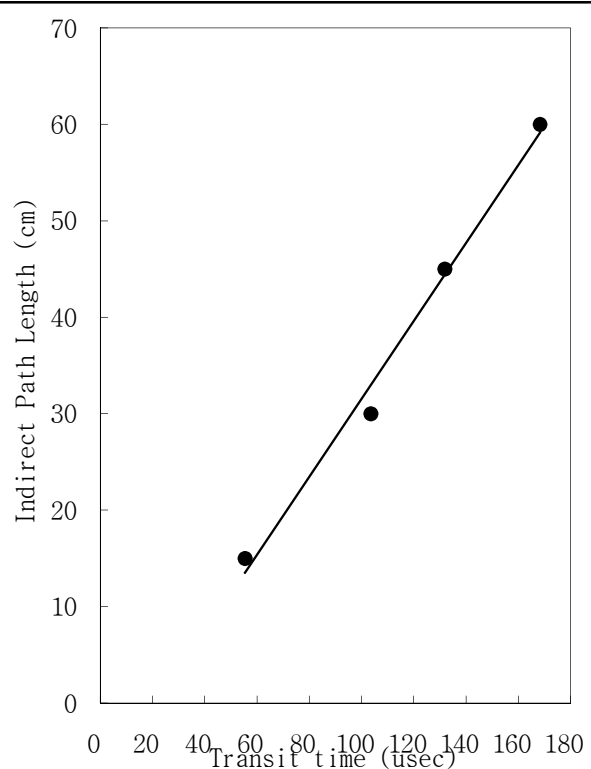
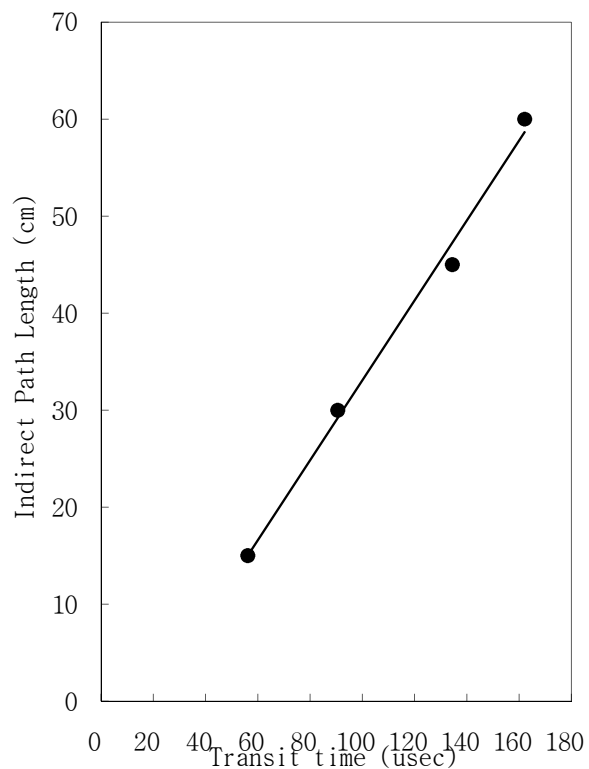
부 재 명	P8 코핑(비건전부)	부 재 명	P10 기둥(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
56.7	15	52.3	15
106.7	30	96.7	30
143.1	45	139.6	45
169.2	60	160.2	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 3.931 X - 92.512$		$Y = 3.995 X - 73.196$	
Vi (km/s)	3.931	Vi (km/s)	3.995
Correction Ration (Vi → Vd)	4.128	Correction Ration (Vi → Vd)	4.195
압축강도(F')	26.3	압축강도(F')	27.7



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

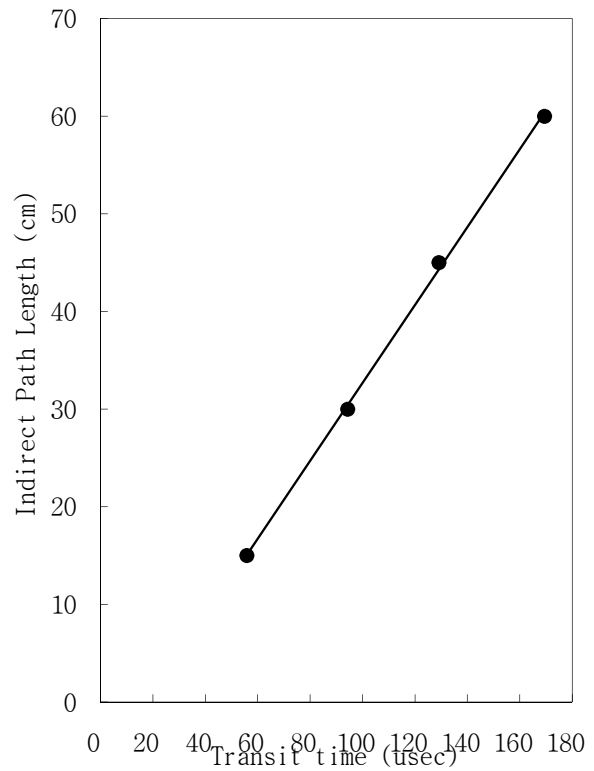
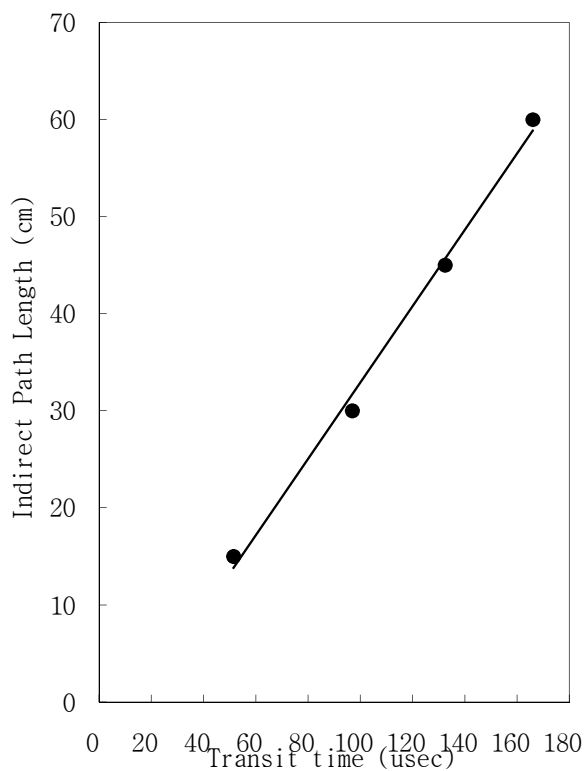
부 재 명	P11 코핑(건전부)	부 재 명	P15 기둥(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
56.1	15	55.4	15
90.6	30	103.5	30
134.5	45	131.8	45
162.2	60	168.3	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 4.114 X - 80.988$		$Y = 4.043 X - 88.987$	
Vi (km/s)	4.114	Vi (km/s)	4.043
Correction Ration (Vi → Vd)	4.320	Correction Ration (Vi → Vd)	4.245
압축강도(F')	30.3	압축강도(F')	28.7



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	P16 기둥(건전부)	부 재 명	P17 기둥(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
51.5	15	55.9	15
96.9	30	94.3	30
132.5	45	129.1	45
166.1	60	169.4	60
Best fit line (Equation)		Best fit line (Equation)	
$Y = 3.933 X - 64.505$		$Y = 3.994 X - 73.021$	
Vi (km/s)	3.933	Vi (km/s)	3.994
Correction Ration (Vi → Vd)	4.130	Correction Ration (Vi → Vd)	4.194
압축강도(F')	26.3	압축강도(F')	27.7



Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	A2(건전부)	부 재 명	
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)
X	Y	X	Y
49.3	15		
95.6	30		
132.5	45		
161.1	60		
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.984 X - 61.741			
Vi (km/s)	3.984	Vi (km/s)	
Correction Ration (Vi → Vd)	4.183	Correction Ration (Vi → Vd)	
압축강도(F')	27.4	압축강도(F')	

