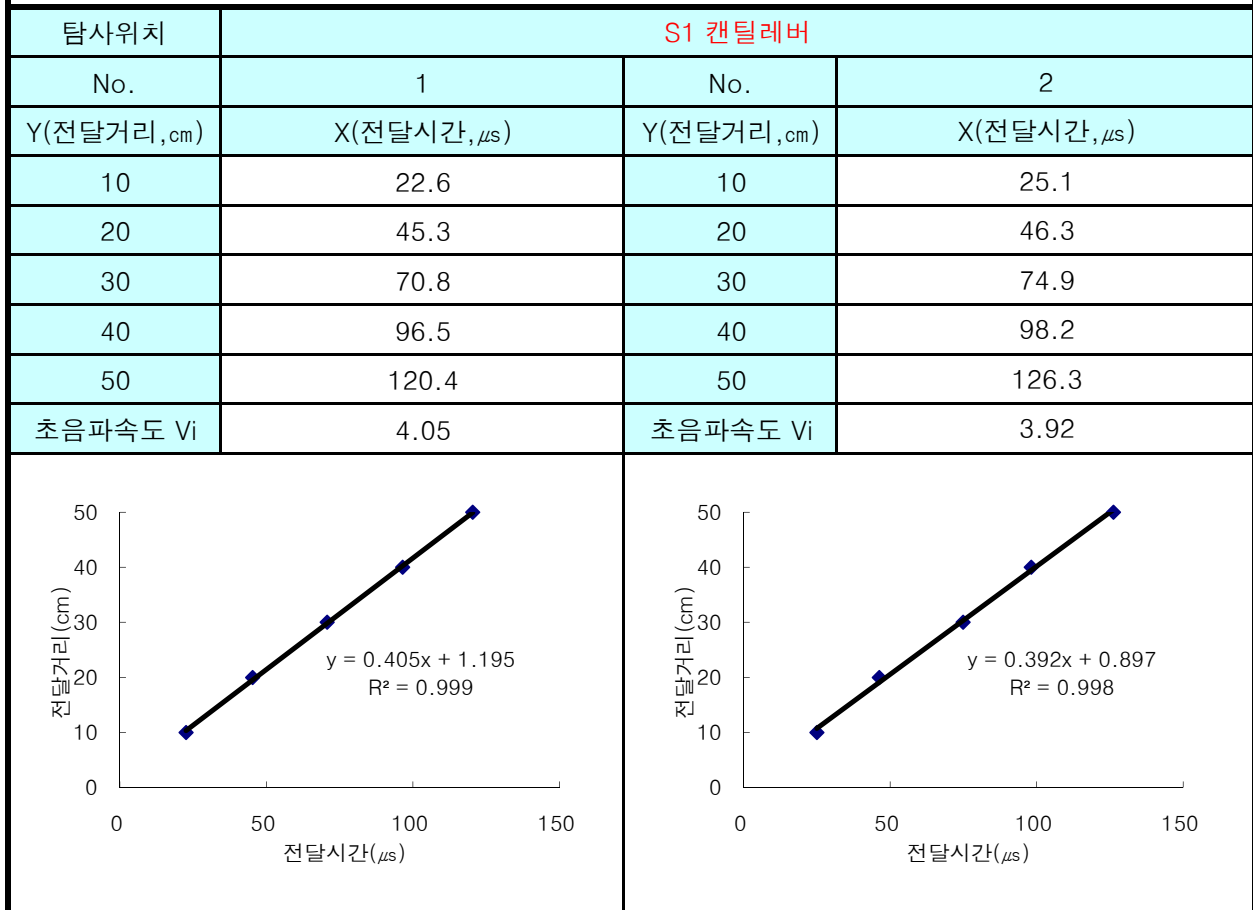
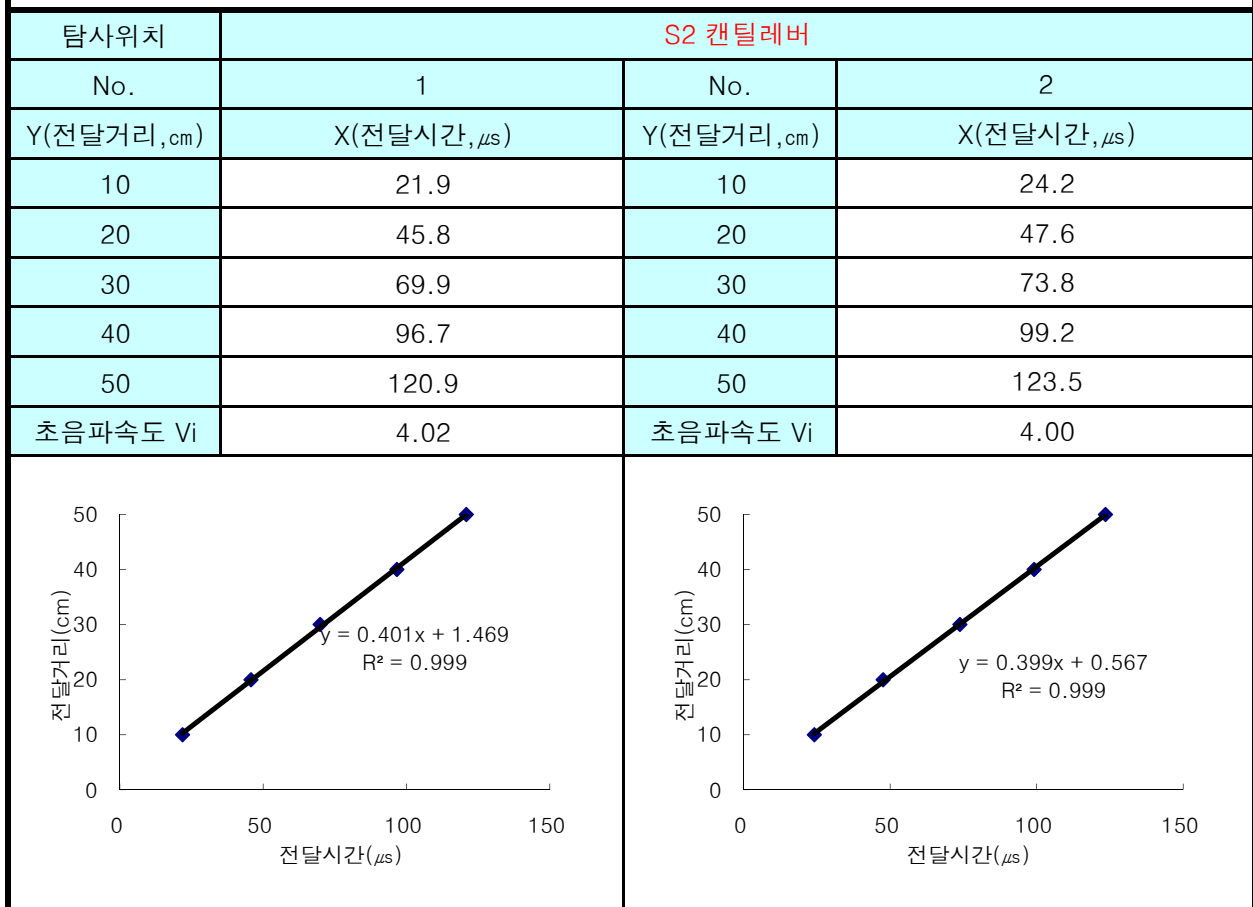


## 송읍교(부산) 초음파탐사 1



## 송읍교(부산) 초음파탐사 2



## 송읍교(부산) 초음파탐사 3

| 탐사위치       | S3 캔틸레버           |            |                   |
|------------|-------------------|------------|-------------------|
| No.        | 1                 | No.        | 2                 |
| Y(전달거리,cm) | X(전달시간, $\mu s$ ) | Y(전달거리,cm) | X(전달시간, $\mu s$ ) |
| 10         | 26.5              | 10         | 25.4              |
| 20         | 51.7              | 20         | 52.3              |
| 30         | 75.3              | 30         | 76.3              |
| 40         | 100.9             | 40         | 103.5             |
| 50         | 124.8             | 50         | 127.1             |
| 초음파속도 Vi   | 4.07              | 초음파속도 Vi   | 3.93              |

$y = 0.406x - 0.850$   
 $R^2 = 0.999$

$y = 0.392x - 0.196$   
 $R^2 = 0.999$

## 송읍교(부산) 초음파탐사 4

| 탐사위치       | S4 캔틸레버           |            |                   |
|------------|-------------------|------------|-------------------|
| No.        | 1                 | No.        | 2                 |
| Y(전달거리,cm) | X(전달시간, $\mu s$ ) | Y(전달거리,cm) | X(전달시간, $\mu s$ ) |
| 10         | 19.3              | 10         | 22.8              |
| 20         | 40.5              | 20         | 46.3              |
| 30         | 66.1              | 30         | 73.5              |
| 40         | 92.3              | 40         | 96.9              |
| 50         | 117.5             | 50         | 121.7             |
| 초음파속도 Vi   | 4.02              | 초음파속도 Vi   | 4.02              |

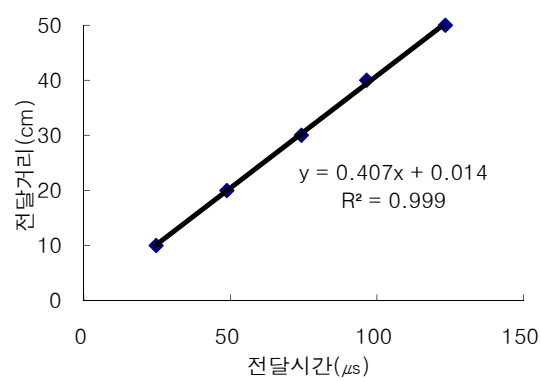
  

$y = 0.402x + 2.985$   
 $R^2 = 0.998$

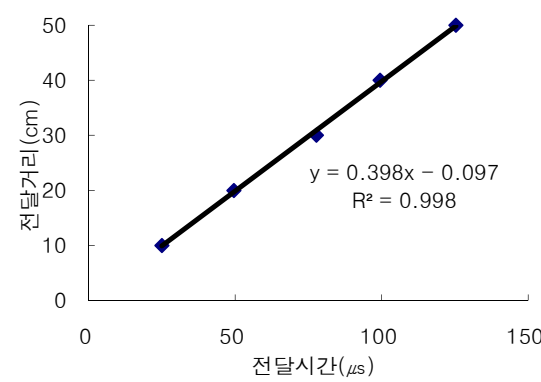
$y = 0.402x + 0.931$   
 $R^2 = 0.999$

## 송읍교(부산) 초음파탐사 5

| 탐사위치       | S4 캔틸레버           |            |                   |
|------------|-------------------|------------|-------------------|
| No.        | 1                 | No.        | 2                 |
| Y(전달거리,cm) | X(전달시간, $\mu s$ ) | Y(전달거리,cm) | X(전달시간, $\mu s$ ) |
| 10         | 24.7              | 10         | 25.1              |
| 20         | 48.8              | 20         | 49.6              |
| 30         | 74.3              | 30         | 77.8              |
| 40         | 96.5              | 40         | 99.5              |
| 50         | 123.4             | 50         | 125.4             |
| 초음파속도 Vi   | 4.08              | 초음파속도 Vi   | 3.99              |



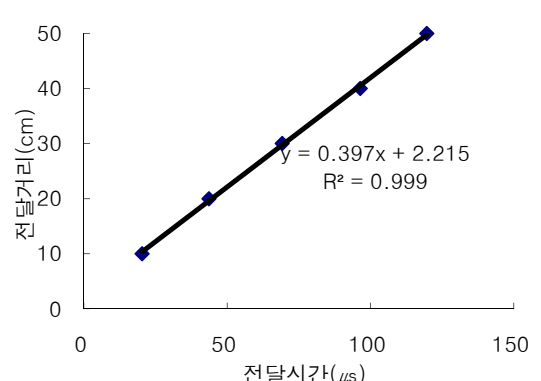
$y = 0.407x + 0.014$   
 $R^2 = 0.999$



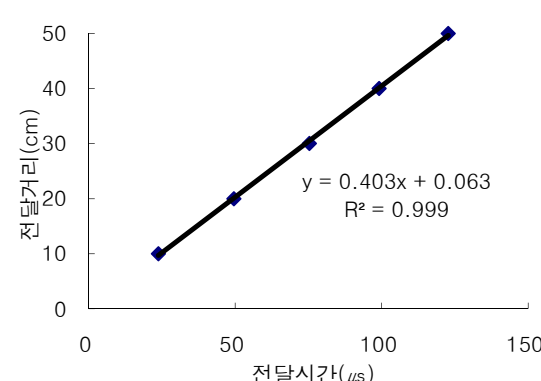
$y = 0.398x - 0.097$   
 $R^2 = 0.998$

## 송읍교(부산) 초음파탐사 6

| 탐사위치       | S5 캔틸레버           |            |                   |
|------------|-------------------|------------|-------------------|
| No.        | 1                 | No.        | 2                 |
| Y(전달거리,cm) | X(전달시간, $\mu s$ ) | Y(전달거리,cm) | X(전달시간, $\mu s$ ) |
| 10         | 20.4              | 10         | 23.8              |
| 20         | 43.7              | 20         | 49.6              |
| 30         | 69.2              | 30         | 75.4              |
| 40         | 96.5              | 40         | 99.2              |
| 50         | 119.7             | 50         | 122.8             |
| 초음파속도 Vi   | 3.97              | 초음파속도 Vi   | 4.04              |

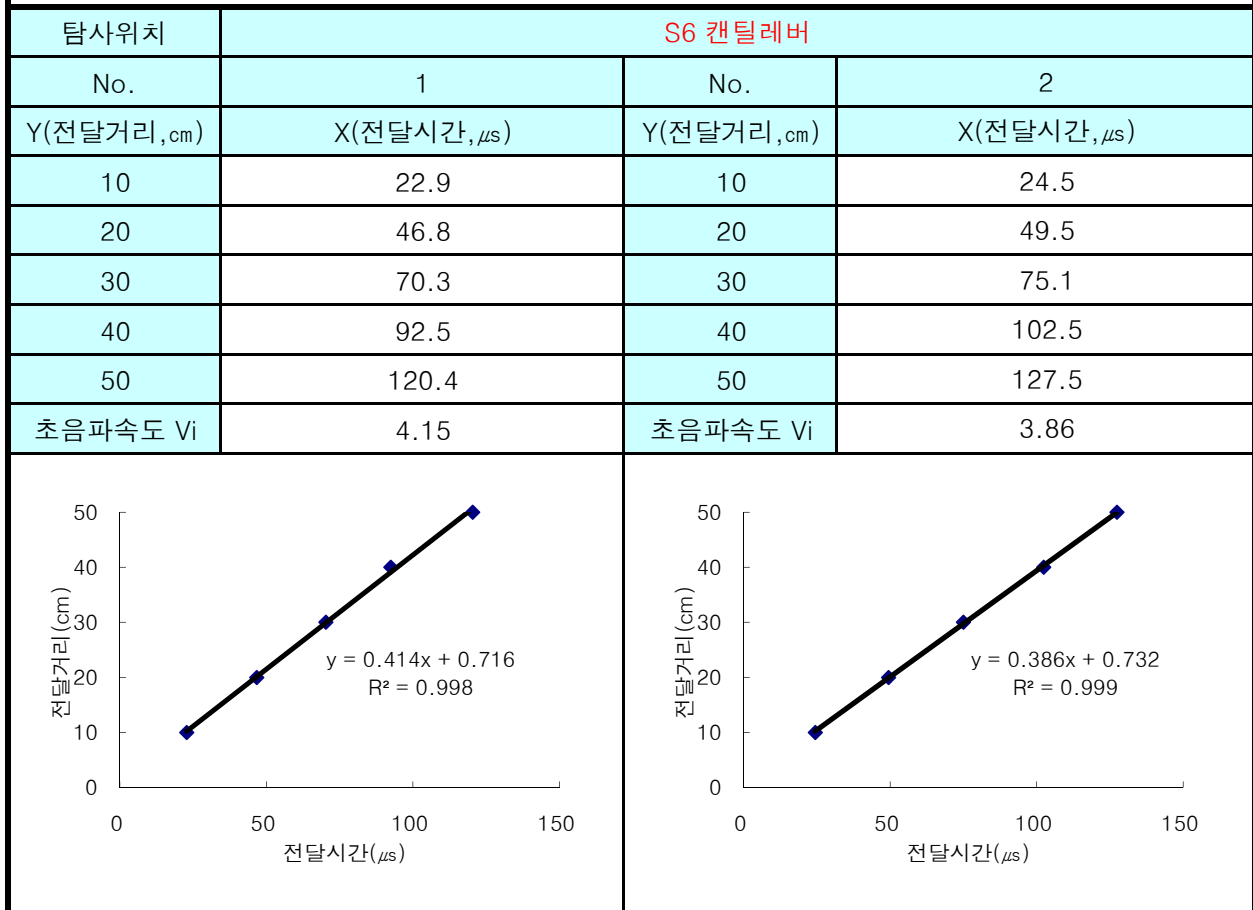


$y = 0.397x + 2.215$   
 $R^2 = 0.999$

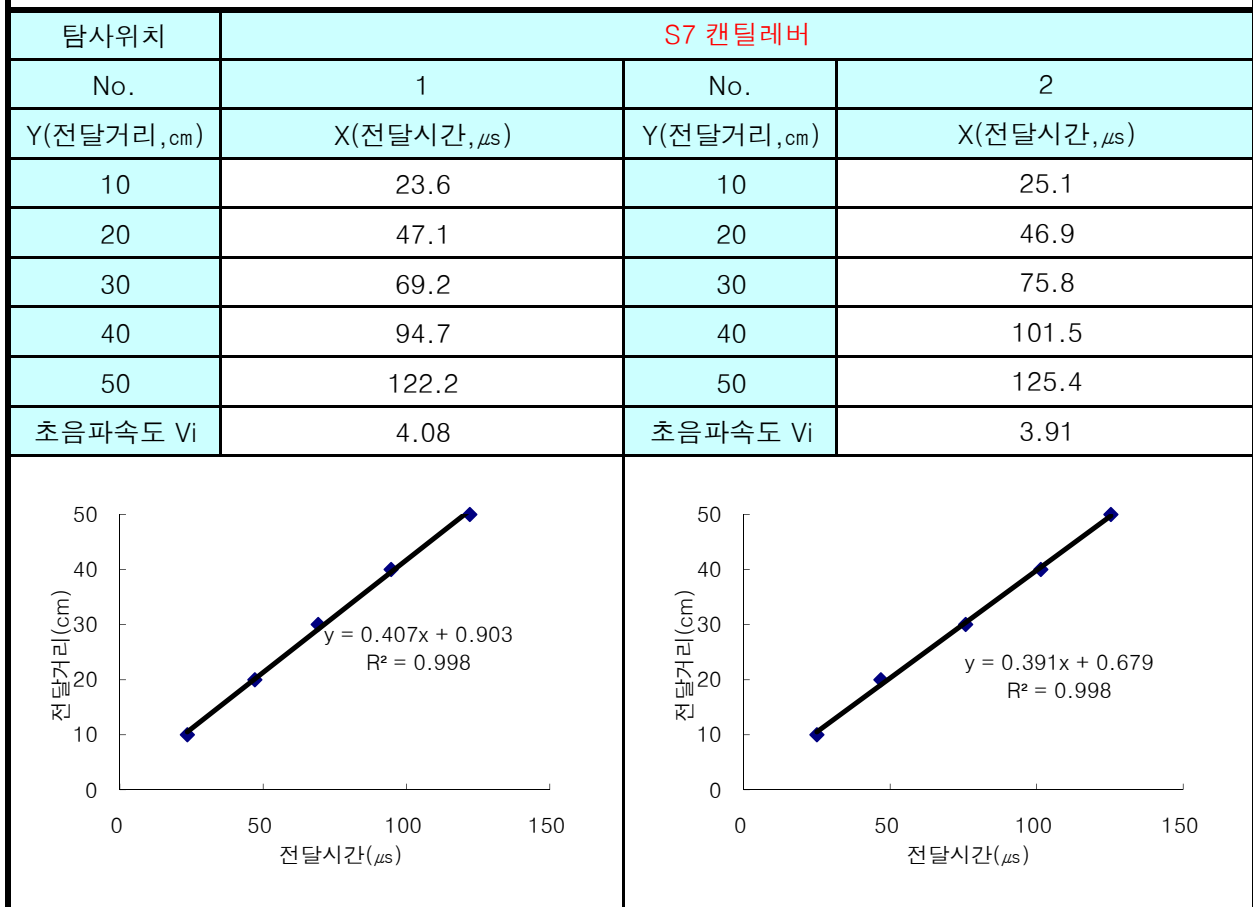


$y = 0.403x + 0.063$   
 $R^2 = 0.999$

## 송읍교(부산) 초음파탐사 7

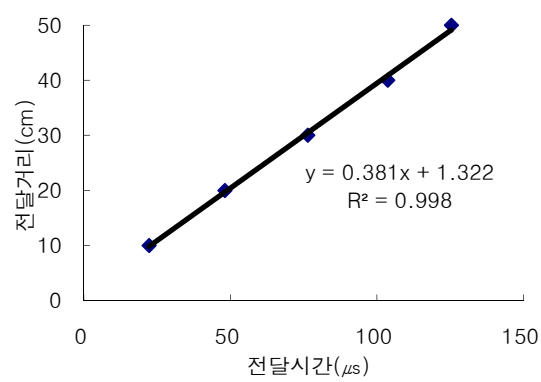


## 송읍교(부산) 초음파탐사 8

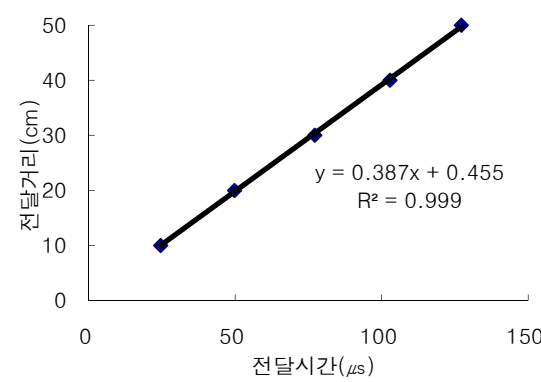


## 송읍교(부산) 초음파탐사 1

| 탐사위치       | A1 구체            |            |                  |
|------------|------------------|------------|------------------|
| No.        | 1                | No.        | 2                |
| Y(전달거리,cm) | X(전달시간, $\mu$ s) | Y(전달거리,cm) | X(전달시간, $\mu$ s) |
| 10         | 22.3             | 10         | 24.6             |
| 20         | 48.2             | 20         | 49.8             |
| 30         | 76.5             | 30         | 77.2             |
| 40         | 103.7            | 40         | 102.9            |
| 50         | 125.5            | 50         | 127.2            |
| 초음파속도 Vi   | 3.81             | 초음파속도 Vi   | 3.87             |



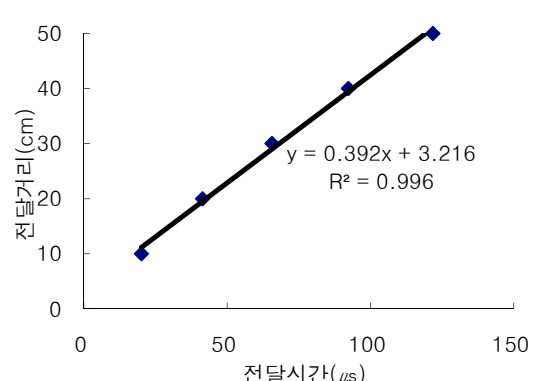
$y = 0.381x + 1.322$   
 $R^2 = 0.998$



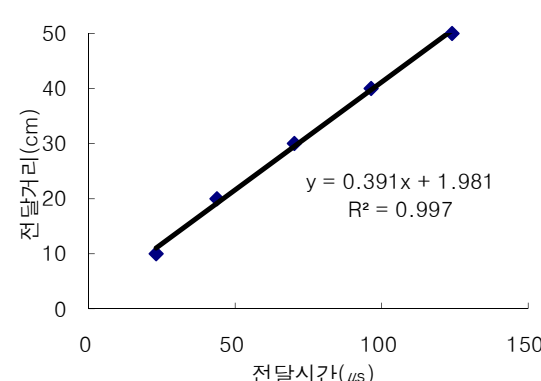
$y = 0.387x + 0.455$   
 $R^2 = 0.999$

## 송읍교(부산) 초음파탐사 2

| 탐사위치       | A2 구체            |            |                  |
|------------|------------------|------------|------------------|
| No.        | 1                | No.        | 2                |
| Y(전달거리,cm) | X(전달시간, $\mu$ s) | Y(전달거리,cm) | X(전달시간, $\mu$ s) |
| 10         | 20.2             | 10         | 23.1             |
| 20         | 41.5             | 20         | 43.8             |
| 30         | 65.7             | 30         | 70.2             |
| 40         | 92.4             | 40         | 96.5             |
| 50         | 121.8            | 50         | 124.1            |
| 초음파속도 Vi   | 3.92             | 초음파속도 Vi   | 3.92             |

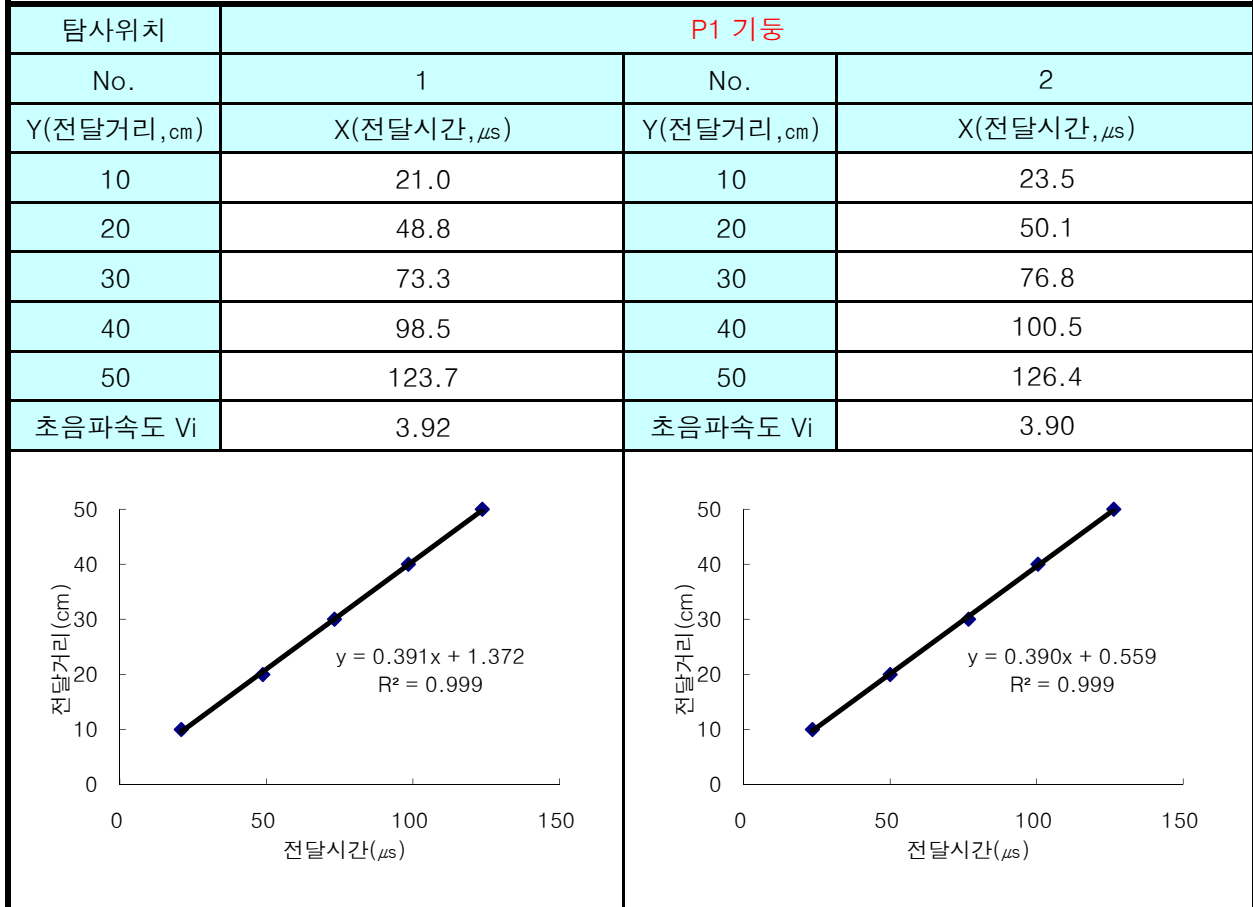


$y = 0.392x + 3.216$   
 $R^2 = 0.996$

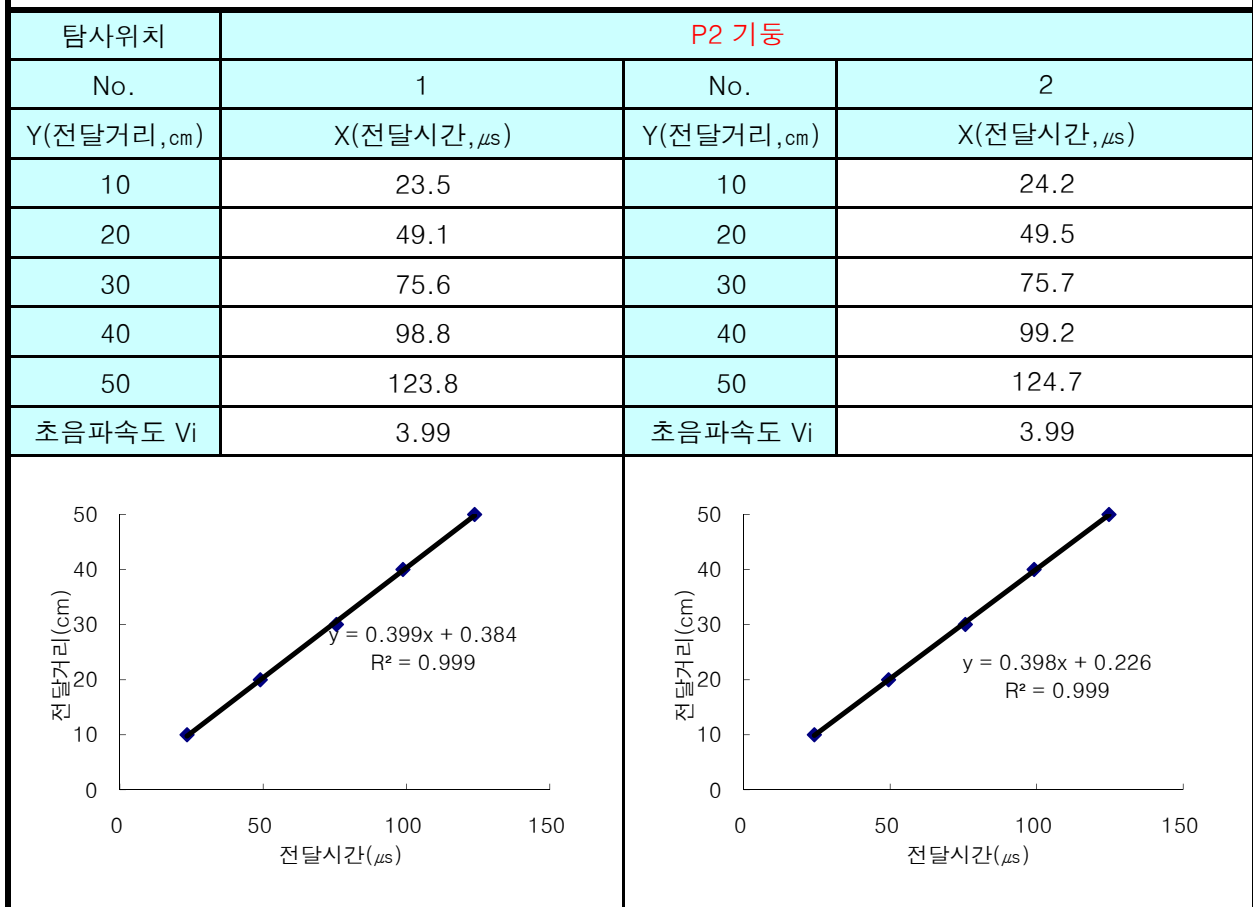


$y = 0.391x + 1.981$   
 $R^2 = 0.997$

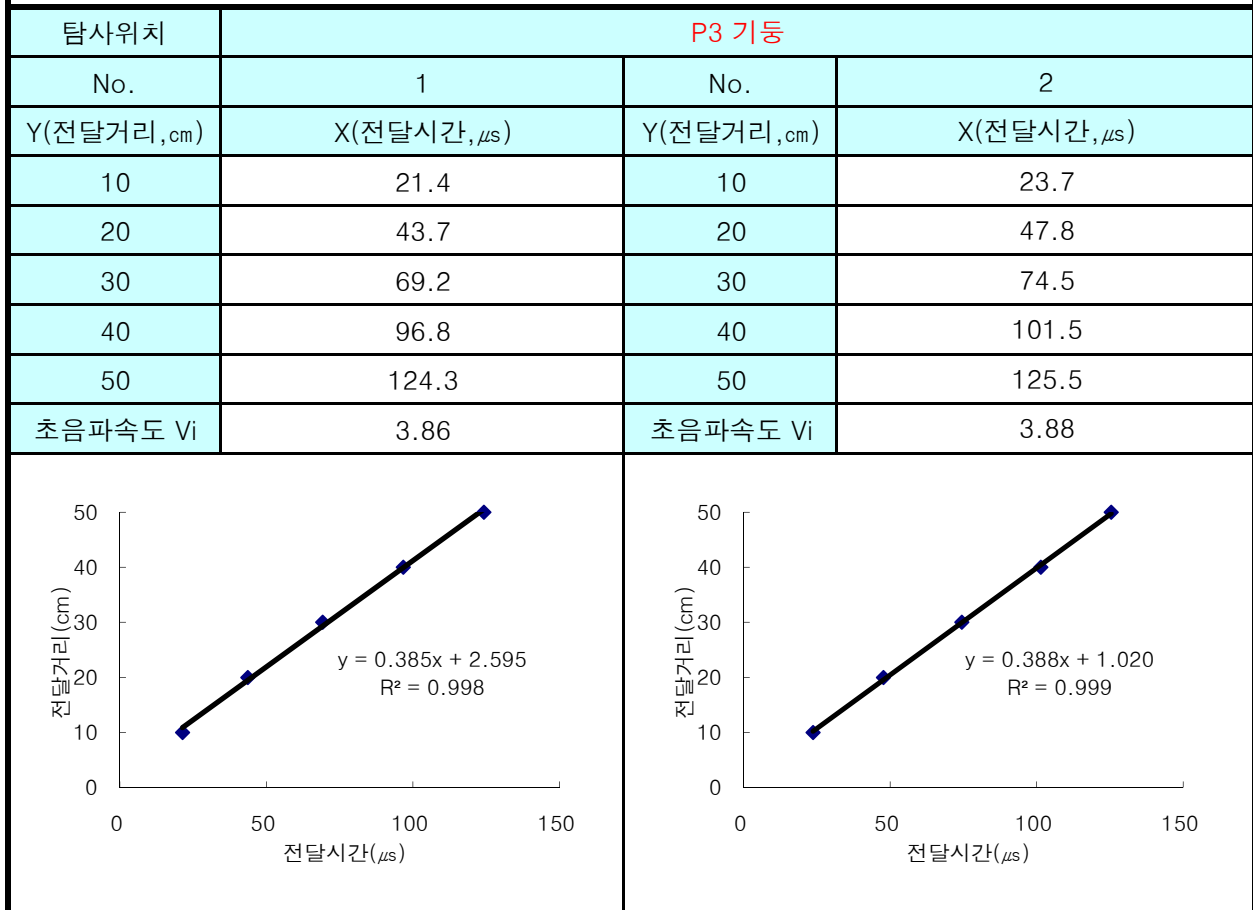
## 송읍교(부산) 초음파탐사 3



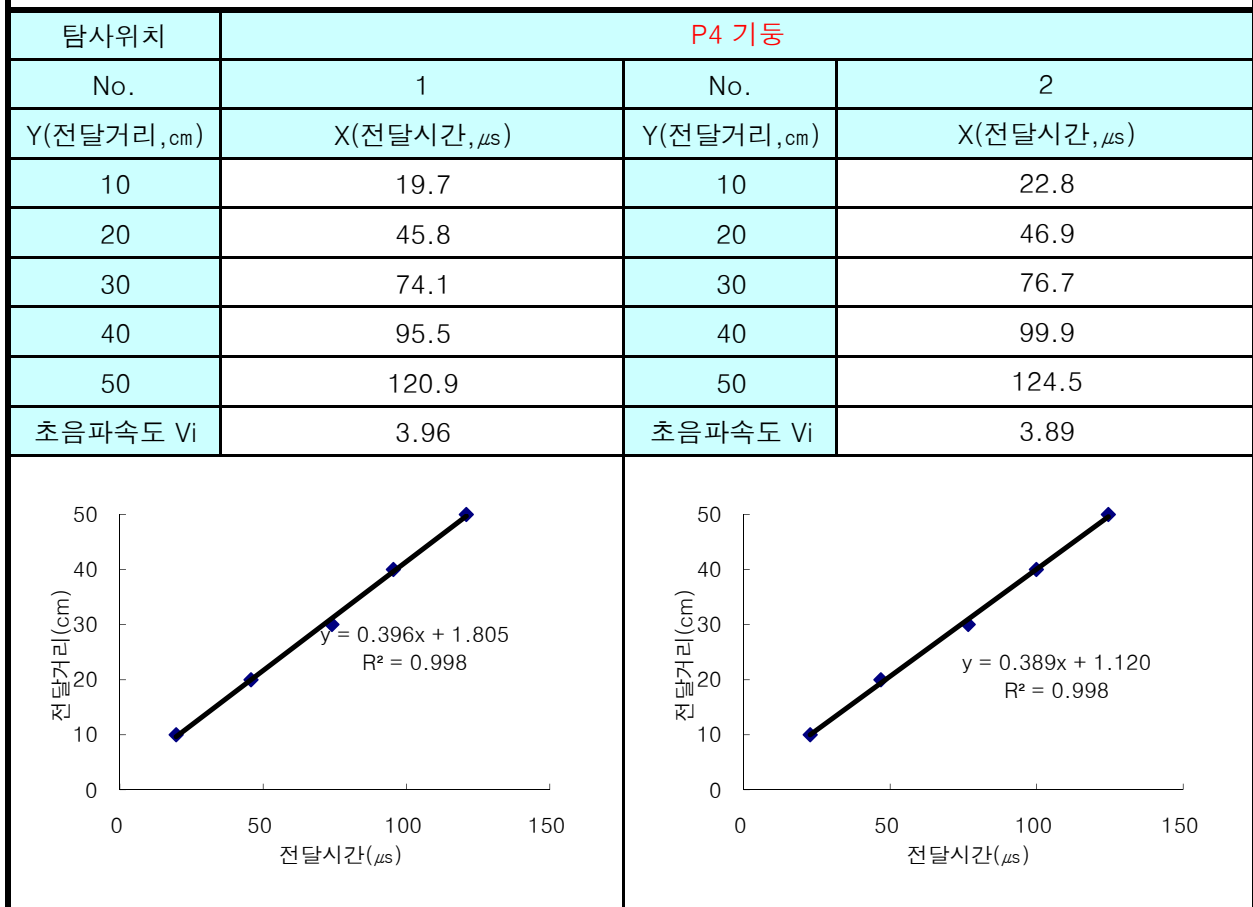
## 송읍교(부산) 초음파탐사 4



## 송읍교(부산) 초음파탐사 5



## 송읍교(부산) 초음파탐사 6



## 송읍교(부산) 초음파탐사 7

| 탐사위치       | P5 기둥             |            |                   |  |
|------------|-------------------|------------|-------------------|--|
| No.        | 1                 | No.        | 2                 |  |
| Y(전달거리,cm) | X(전달시간, $\mu s$ ) | Y(전달거리,cm) | X(전달시간, $\mu s$ ) |  |
| 10         | 24.4              | 10         | 25.6              |  |
| 20         | 47.9              | 20         | 48.7              |  |
| 30         | 71.1              | 30         | 76.8              |  |
| 40         | 98.5              | 40         | 102.5             |  |
| 50         | 123.5             | 50         | 124.5             |  |
| 초음파속도 Vi   | 4.02              | 초음파속도 Vi   | 3.97              |  |

$y = 0.401x + 0.655$   
 $R^2 = 0.999$

$y = 0.396x - 0.010$   
 $R^2 = 0.998$

## 송읍교(부산) 초음파탐사 8

| 탐사위치       | P6 기둥             |            |                   |  |
|------------|-------------------|------------|-------------------|--|
| No.        | 1                 | No.        | 2                 |  |
| Y(전달거리,cm) | X(전달시간, $\mu s$ ) | Y(전달거리,cm) | X(전달시간, $\mu s$ ) |  |
| 10         | 22.3              | 10         | 23.9              |  |
| 20         | 49.2              | 20         | 48.7              |  |
| 30         | 75.6              | 30         | 76.6              |  |
| 40         | 101.8             | 40         | 100.5             |  |
| 50         | 124.5             | 50         | 125.3             |  |
| 초음파속도 Vi   | 3.89              | 초음파속도 Vi   | 3.93              |  |

$y = 0.388x + 0.969$   
 $R^2 = 0.999$

$y = 0.392x + 0.558$   
 $R^2 = 0.999$