

가 가

(Resonant Frequency)
 , Oscilloscope
 CW Laser

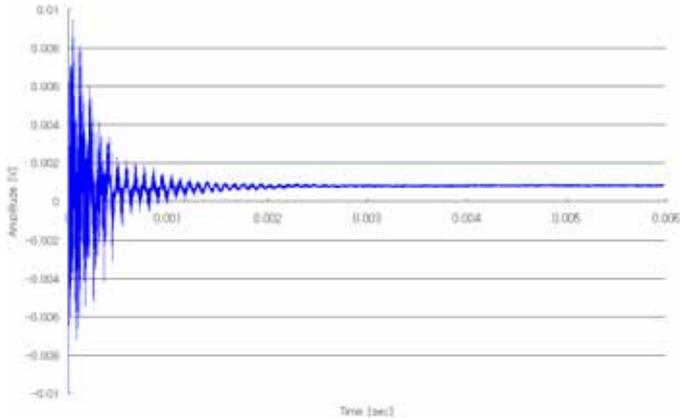
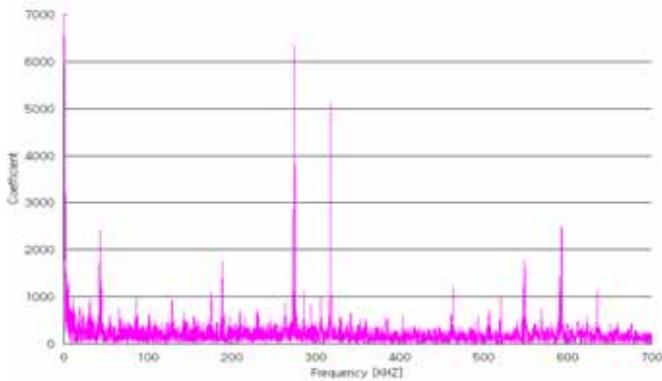
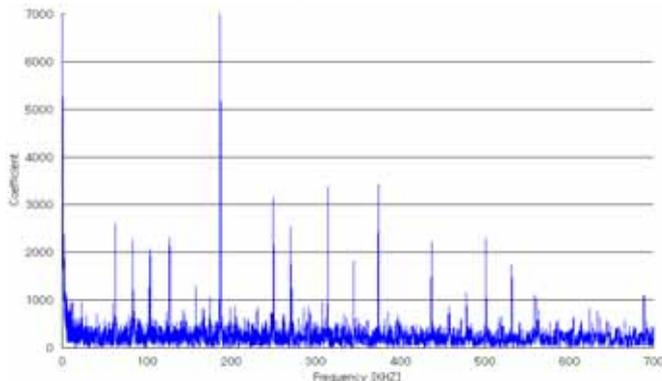


Fig. 4 Received L-RUS signal



<a> Sample of defect free



 Sample of crack (1mm)

Fig. 5 Measured frequency spectrum

Fig. 5
 , 0~700 KHZ

Fig 4

Table 1

Table 2

0.5~1% 가 가

Table 2 Resonant frequency of Specimen (unit : KHZ)

Defect Free		Crack	
FEM	Experiment	FEM	Experiment
85.3	86.2	82.5	83.09
143	143.5	143	145.5
175	175.9	172	174.4
188	188.7	219	219.8
264	264.1	289	293.5
272	272.9	373	374.4
293	293.9	387	385.9
305	305.7	396	398.9
400	403	479	478.4
468	463.8	499	501.5
496	494.3	541	542.1
500	506.5	557	558.7
517	520	615	615
564	568.9	623	624.2
594	592.6	633	633.5
632	635.5	651	649
-	-	664	666
-	-	688	688

5.

L-RUS

(1) L-RUS

(2) L-RUS

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