EARLY DETECTION
OF CONCRETE STRUCTURES RIFT WITH
PLASTIC OPTIC FIBER

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Abstract

A plastic optical fiber systems are developed to detect cracks in the concrete with two principles, strain and bending loss. Two models of plastic optical fiber are with total length of 50 cm and 10 cm without jacket in the middle. First model with the principle of strain that is aligned just below the surface of the concrete. While second model with principle of bending loss. The process of adding the load carried 20 kg per 10 seconds. The result of this study that the concrete test first model is better than second model who lost voltage on the load 740 kg – 760 kg

Keyword: plastic optical fiber, crack of concrete