
Fundamental investigation on measurement of crack width and deflection for tensile fatigue specimen and RC girder with train passing by means of videography

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The measurement of crack widths and deflections is required in the inspection of concrete structures. In the present investigation, in-house and in-situ experiments were conducted to measure these values by means of videography. Concretely, the measurement of crack widths under the tensile fatigue experiment is performed by using methods to obtain the positions and widths of cracks by the luminance and geometric parameters from images. Furthermore, a fundamental investigation was conducted for the measurement of crack widths and deflections for RC girders during train passing by using the above method and the digital image correlation method.
