

## **Crack Detection Method for Concrete Structure Based on Image Analysis Method**

Shintaro MINOURA    Tsutomu WATANABE    Keiichi GOTO  
Munemasa TOKUNAGA    Fumiaki UEHAN

With the speeding up of trains, there is concern about excessive response due to resonance caused by a train running on a railway concrete bridge. In order to maintain concrete bridge structures properly, it is important to measure the location and the width of cracks generated during trains running. In this study, a crack detection method for concrete structures based on an image analysis method called Sampling Moiré Method was developed. In addition, as a result of experiments conducted using a model bridge, PC sleepers and PRC specimens, it was confirmed that the width and the location of fine cracks generated in concrete structures can be measured with high accuracy and dynamically using this method.