

Study of Deflection at Junction in the Precast on Cyclic Loading

Authors : Jongho Park, Ui-Cheol Shin, Jinwoong Choi, Sungnam Hong, Sun-Kyu Park

Abstract : While the numerous structures built the industrialization are aging, the effort for the maintenance is concentrated in many countries. However, the traffic jam, environmental damage, and enormous maintenance cost, and etc become a problem. So, in order to solve this, the modular bridge has been studied. This bridge is the structure which utilizes and assembles the standard precast member. Through this, the substitution of the existing bridge and advantage of the easy maintenance will be achieved. However, the reliability in the long-term behavior is insufficient due to the junction part between modular precast members. Therefore, in this research, the cyclic load loading experiment was performed on the junction and deflection was analyzed by long-term service in modular slab connection. The deflection of modular slab with junction was mostly generated when initial and final test.

Keywords : modular bridge, deflection, cyclic loading, junction

Conference Title : ICCIUE 2015 : International Conference on Civil, Infrastructure and Urban Engineering

Conference Location : Prague, Czechia

Conference Dates : March 23-24, 2015