World Academy of Science, Engineering and Technology
International Journal of Structural and Construction Engineering
Vol:9, No:05, 2015

Fatigue Evaluation of Link Slab for Continuous Girder-Type Precast Modular Bridges

Authors : Jae-Joon Song, Sang-Yoon Lee, Bong-Chul Joo

Abstract : The girder-type precast modular bridge has been developed as a simply supported bridge. The girder-type precast modular bridge could be applied to the multi-span bridges through the continuity method. The continuity of the girder-type precast modular bridge is achieved by using the link slab which is easy to construction and appropriate to the rapid construction. In this study, the link slab with transition zone was used for the continuity of the precast modular bridges, and the construction detail of link slab was modified. In addition, the modified iterative design method of link slab was proposed in this study. To verify the proposed design method, the fatigue test using the mock-up specimen was conducted with cycle loading condition up to two million cycles.

Keywords : precast, modular bridge, link slab
Conference Title : ICSCE 2015 : International Conference on Structural and Construction Engineering
Conference Location : Berlin, Germany
Conference Dates : May 21-22, 2015