Evaluation of the Influence of Installing Continuous Welded Rail on Existing Steel Bridges

Yusuke KOBAYASHI Yuya NISHIKAWA Mamoru FUKUMOTO Yoshihisa BANDAI Hiroo KATAOKA

The new installation of continuous welded rail (CWR) on the existing steel bridges is often restricted by rea son that the bearing of those bridges doesn't have enough capacity against the longitudinal axial force which CWR loads to the bridges. On the other hand, the capacity is mainly based on design calculation which has not been verified actually. In this research, the actual behavior and performance of the axial force and the bearing capacity were evaluated by the field measurement and the laboratory experiment with a view to promoting of the CWR installation on the existing steel bridges.