

강합성 철도교와 콘크리트 철도교의 구조소음 성능비교 A Comparison of Structure Borne Noise between Steel Composite and Concrete Railway Bridge

김병화(RIST) · 이상엽(LMS) · 성택룡 · 윤태양(RIST)

Byeong Hwa Kim, Sang-Yeop Lee, Taek-Ryong Seong and Tae-Yang Yoon

Key Words : Structural Borne Noise, Steel Composite Railway Bridge, Concrete Railway Bridge

Abstract : A structure borne noise of a steel composite railway bridge has been compared with that of a concrete railway bridge. Developing two 3D finite element models for the selected structures, the 3D acoustic simulations surrounding the structures have been conducted for the passing trains. The predicted sound pressure levels have been compared with respect to the frequency bands and locations. Finally, the performance of two types of bridges has been judged.