عنوان مقاله:

Performance of the integrated and semi – integrated and simple bridges influenced by thermal loads

محل انتشار:

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خلاصه مقاله:

Integrated bridges are bridges that, unlike ordinary bridges, are built without expansion joints. In them, the abutment and deck are connected continuously. These bridges act as a rigid frame. Due to the lack of expansion joints, these bridges cost less to build and maintain. Therefore, in recent years the construction of these bridges has increased significant in the world. The most important part in the design of these bridges is the interaction of the structural soil behind the abutment and around the piles. The purpose of this study was to investigate the behavior of integrated bridges and different parameters affecting the behavior of these bridges and also to investigate the distribution of force in different parts of the bridge and to compare it with the semi-integrated and simple deck to abutment connection mode. Studies have shown that despite the advantages of integrated bridges with simple bridges, they also have some design problems. Since semi-integrated bridges have both the advantages of integrated bridges and have less problems than integrated bridges, they can be a good alternative to fully integrated bridges.

کلمات کلیدی:

Integrated Bridge, Semi - Integrated Bridge, Simple Bridge, Thermal loads