Seismic Response Analysis of Piers with Foundation Composed of Micropiles and Soilbags

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In this paper, the authors propose a new type of foundation, which is a combination of micropiles and soilbags. The proposed foundation is characterized by laying soilbags on the pile head and constructing structures on the soilbags. The effects by the adoption of the new foundation are expected to result in the omission of joint between piles and a footing, a reduction of diameter of piles, and a reduction of response acceleration of structures. In this study, seismic response evaluation method for the proposed structure with actual size was constructed to compare the seismic responses of the proposed foundation with those of pile foundation under the different conditions of input acceleration.