

**Evaluation of Sectional Force Reduction Effect on Piers Founded Deep in the Ground
by Using Isolation Bearings**

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In this study, to investigate the effect of overburden depth on the reduction effect of the sectional force of piers founded deep in the ground brought about the use of isolation bearings, we conducted dynamic analysis considering overburden depth and bearing structure as parameters, and evaluated the response plasticity rate and the degree of shear allowance of the body. As a result, under the analysis conditions of this study, the sectional forces of the body are effectively reduced by the isolation bearings when the overburden depth is less than about half of the height of the pier. On the other hand, when the most of the body is buried in the ground, the effect on the reduction of the sectional force brought about by the use of the isolation bearings decreases due to both an increase in the kinematic interaction effect caused by the large overburden depth and a decrease in the inertial interaction effect caused by the reduction of the ground surface acceleration.