

## Cyclic Liquefaction Resistance of Reinforced Sand

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**Abstract :** Liquefaction phenomenon in sand is nowadays a classical soil mechanics subject. Using a cyclic triaxial test apparatus, we use non-woven geotextile reinforcement to improve the liquefaction resistance of sand. The layer configurations used are zero, one, two and three horizontal reinforcing layers in a triaxial test sample. The influences of the number of geotextile layers, and cyclic stress ratio (CSR) were studied and described. The results illustrated that the geotextile inclusion increases liquefaction resistance.

**Keywords :** liquefaction resistance, geotextile, sand, cyclic triaxial test, cyclic stress ratio

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