

## **SETTLEMENTS DUE TO CONTAINED EXPLOSIONS IN WATER-SATURATED SANDS**

KOK,L.

Contained explosions in water-saturated sands can create pore water pressure and consequently liquefaction phenomena. If this cohesionless material tends towards a more dense state, settlements occur in the soil mass.

From extensive free field tests the settlement behavior (densification process) was studied to compile a relation between settlement, charge size and distance. The outcome of the evaluation is given in dimensionless form and can be used to assess the settlements of buried structures and life-lines due to (partial) liquefaction caused by transient loading of high explosives.