

REFLECTED PRESSURES FROM EXPLOSIVES BURIED IN IDEALISED COHESIVE SOILS

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ABSTRACT

Recent work has concentrated on the characterisation of the temporal and spatial impulse distribution of blast form buried charges. A new soil container preparation methodology has been created to allow for the generation of highly repeatable, tightly controlled clay beds which will allow clays of different undrained strengths to be generated. Tests using these well controlled beds has allowed for an improved understanding into which geotechnical parameters govern the impulse delivered by a buried charge. Namely in the current programme of work this is an investigation into the 'undrained strength' of a cohesive material as an indicator of potential impulse output.

Initial results are compared against previously published work on cohesionless soils (sands) to try to establish the full range of loading which can be generated by a buried charge.