

THE ROLE OF GEOTECHNICAL PARAMETERS ON THE IMPULSE GENERATED BY BURIED CHARGES

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It has recently been shown that the variation in moisture content independently from bulk density can lead to an increase in impulse from a buried charge. This implies that water has a greater effect on the enhancement of buried charges than its mass alone would suggest. This has brought into question a number of aspects regarding common assumptions made when designing numerical and physical experiments that incorporate buried charges, most notably the role of moisture content in conjunction with the particle size distribution. The latest work done by the authors is attempting to differentiate between the direct effects of mass confinement and the unique relationships that exist in soils between the interrelated phases, which can be defined in terms of their geotechnical properties.