

Abstract Submitted
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The Response of Concrete to Shock-Loading TONY ANDREWS, QinetiQ, UK, DAVID CHAPMAN, WILLIAM PROUD, University of Cambridge, UK — A series of plate impact experiments has been performed to assess the dynamic behaviour of dry and water saturated concrete. Information was obtained on the Hugoniot curve and dynamic shear properties using manganin gauges. This extends our previous data obtained on cement paste, mortar, and micro-concrete to full-size concrete. Despite the varying heterogeneous composition of concrete it has been found that all materials Hugoniot curves lie within a close range in pressure – particle-velocity space.

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