

BLAST PARAMETERS FROM EXPLOSIONS IN MODEL EARTH COVERED MUNITION MAGAZINES

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This report contains the results obtained from a test series of high explosive test designed to determine the blast parameters propagating from a 1/50 scale model of an earth covered munition storage magazine.

Small hemi-cylindrical pentolite charges were detonated in the scaled model to simulate the blast effects of an accidental explosion occurring in a standard munition magazine when filled with 45,360, 136,080, and 226,800 kilograms of explosive. The thickness of the earth cover was varied from standard, to on-half, and to double the standard thickness. Excellent correlation was obtained with limited data from one full-size storage magazine test.