BLAST LOADS OF NON - SPHERICAL CHARGES IN FREE AIR

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The impulse method of the author allows to measure the impulsive load of non-spherical charges in free air with high polar angle resolutions.

Besides quantified impulsive outputs of different charge types also the influence of confinements on the angle distribution of blast waves was measured. A surprising result was the drastically reduced blast momentum with increased distance where the impulse of the positive phase is remarkably diminished by the following suction wave.

Besides the diagnostic technique and the background theory the different achieved results will be presented and discussed.