

## Modeling of Oblique Impact of Yawed Projectiles on Ceramic Targets

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The investigation of three-dimensional problem of oblique interaction of yawed projectiles with ceramic plates in a velocity range up to 4000 m/s was carried out by the finite element method. The paper presents an advanced constitutive model of AD995 Alumina. The model of damaged medium is used; it is characterized with possibility of crack initiation and propagation under impact loading. A kinetic fracture model of the active type developed earlier for the simulation of fracture in various materials is used for numerical modeling of ceramic failure at high velocity impact. Temperature effects are taken into account in the constitutive model.

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