

Calibration of the eos of dp based on tatb on experiments on the flying of copper tubes with a diameter of 20 mm

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A comparison of various DP equations of state used in calculations VNIIEF. A comparison of experimental and calculated data obtained with accounting for "ideal" detonation and taking into account the kinetics of detonation of MK using the numerical LEGAK technique. A set of parameters of a new EOS for explosives based on TATB. It is shown that the proposed URS allows to describe experimental data at large degrees of expansion of DP. The paper presents the results of calibrating a new equation of state for explosion products for an explosive composition based on TATB. For this purpose, ILFI's experimental data on radial and end-on throwing of 20 mm diameter copper tubes were used. Numerical modeling of experiments was performed using the LEGAC method with the use of "ideal" detonation and MK detonation kinetics. A comparison of various DP equations of state used in VNIIEF calculations was performed. On calculations made with the "ideal" detonation taken into account, all considered EOS give a deviation from the experience.